

# EUROPEAN MOBILITY WEEK

16-22 SEPTEMBER 2021

*Move Sustainably. Stay Healthy.*



THEMATIC  
GUIDELINES



#MobilityWeek



# Table of Contents

## 1. Safe and Healthy with Sustainable Mobility

EUROPEANMOBILITYWEEK is alive and kicking  
How can you participate?  
20 years of EUROPEANMOBILITYWEEK  
Connection with other EU initiatives  
This year's topics

## 2. Mental health

### Facts & Figures

Active mobility has essential impact on health  
Affordable transport for social integration & participation  
Recreational areas in urban environments (parks, green spaces, pedestrian- and car-free zones)  
Tackling Noise & Air Pollution

### Best Practice

Providing Space  
The 15-minute city  
Traffic Noise & Air Pollution Reduction Strategies

## 3. Physical health

### Facts & Figures

Air quality  
Active mobility  
Micro-mobility

### Best Practice

Reducing emissions in inner cities  
Limiting car access to inner cities  
Combining measures within a Sustainable Urban Mobility Plan (SUMP)  
Liberating space for active mobility  
Encouraging active mobility

## 4. Safety Measures

### Facts & Figures

Enhancing security for people with disabilities  
Stepping up road safety  
Cyclist and pedestrian safety  
E-scooter safety regulation

### Best Practice

Attention to vulnerable groups  
Raising awareness by shifting perspectives  
Open exchange with people with disabilities to foster empathy  
Pedestrianisation  
Traffic calming and lowering urban speed limits

## 5. COVID-19 Response

### Facts & Figures

Restoring confidence in public transport  
Shift towards active mobility  
Improvements in air quality

### Best Practice

Safety measures in public transport  
Active mobility during COVID-19  
Fast-tracking of Sustainable Urban Mobility Plans (SUMPs)

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# 1 Safe and Healthy with Sustainable Mobility

EUROPEANMOBILITYWEEK's annual theme for 2021 is 'Safe and Healthy with Sustainable Mobility'. The choice of this year's theme pays tribute to the hardships felt by Europe - and the world - throughout the COVID-19 pandemic. It also reflects on the opportunities for change resulting from this unprecedented health crisis in Europe.

Cities and urban administrations have established creative, resilient responses to the pandemic. This year, EUROPEANMOBILITYWEEK celebrates the resilience of cities and their achievements, while seeking to sustain this momentum. Trends that began last year, such as increased active mobility and the use of low- or zero-emission mobility, require further promotion.



## EUROPEANMOBILITYWEEK is alive and kicking

Although COVID-19 concerns were a major preoccupation for transport agencies, city officials, regional administrations and private enterprises, EUROPEANMOBILITYWEEK saw its second highest registration numbers ever in 2020, with the participation of nearly 3000 towns and cities, across 53 countries. The campaign now seeks to motivate all former and future participants to join the 20th Year of EUROPEANMOBILITYWEEK under this year's slogan 'Move Sustainably. Stay Healthy'. People are encouraged to keep fit physically and mentally, while exploring the beauty of their city, region, or country; and to show consideration for the environment and the health of others when choosing their transport mode.

### How can you participate?

Local authorities, educational institutes, businesses and non-governmental organizations (NGOs) can join EUROPEANMOBILITYWEEK in numerous ways. You can take part during the main week of the campaign between 16-22 September and submit your **MOBILITYACTION** related to sustainable mobility initiatives throughout the year. No matter what you are doing in the area of healthy, safe and sustainable transport, please share your news on social media and tag the campaign secretariat to keep us informed. Check the campaign website ([www.mobilityweek.eu](http://www.mobilityweek.eu)) and the official social media channels of **Facebook** and **Twitter** and **Instagram**.

Follow the campaign:   

Has your town, city, business, or NGO achieved something exemplary and outstanding in sustainable urban mobility? You can receive an award for your excellent work through the EUROPEANMOBILITYWEEK campaign. Your **MOBILITYACTION** could be included in an EU-level webinar and a social media competition, to reach an even wider audience.

We also encourage you to apply for the annual Sustainable Urban Mobility Awards: the **EUROPEANMOBILITYWEEK Awards for smaller and larger Municipalities**, the **Award for Sustainable Urban Mobility Planning (SUMP Award)** and the **EU Urban Road Safety Award**. The EUROPEAN **MOBILITYWEEK** Awards for smaller and larger Municipalities celebrate outstanding achievements by towns and cities during the main campaign week (16-22 September). The SUMP Award recognises excellence in Sustainable Urban Mobility Planning, based on the European Commission's SUMP Guidelines. The EU Urban Road Safety Award honours exemplary and innovative achievements by local authorities in creating a safer urban environment. Further information is available on the campaign website.



This year, we look back at two successful decades of a pan-European campaign that continues to support local initiatives in their efforts to make cities safer, greener, more inclusive, and more accessible.

Since the beginning of the millennium, thousands of institutions, businesses, NGOs, towns, and cities have joined EUROPEANMOBILITYWEEK to help make the urban environment a better place.

At the start of this journey, the EU had just 15 Member States. Buying train tickets online was a novel concept and smartphones or mobile internet existed only in our wildest dreams. 20 years later, we can travel across cities with a single payment using Mobility-as-a-Service solutions or book a taxi with the click of a button through a smartphone app. Alternatively, we can hop on a shared e-scooter. We can navigate with a GPS-enabled map app, while streaming music through wireless earbuds throughout the entire European Union for a fraction of the former cost. Even though technology has changed everybody's lives concerning urban mobility, the challenges of pollution and safe and sustainable mobility remain the same.

## Connection with other EU initiatives

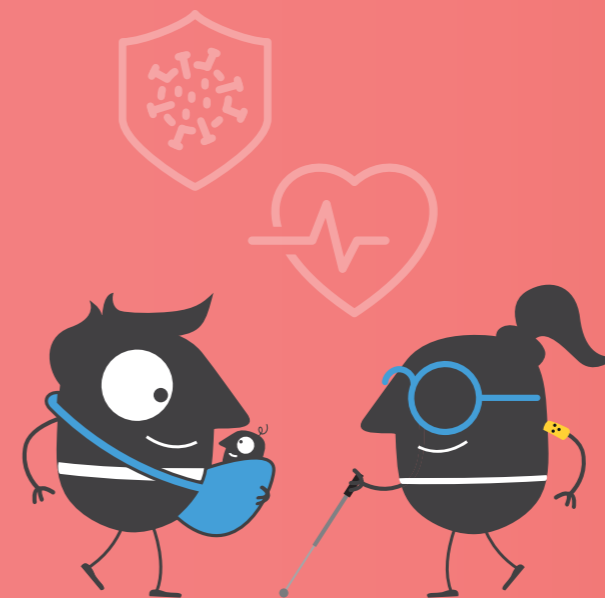
While EUROPEANMOBILITYWEEK is held between 16-22 September every year, other major EU initiatives also form an integral part of the European annual cycle, including EU Green Week, EU Sustainable Energy Week, European Research & Innovation Days, the European Year of Rail, the European Week of Sport and related HealthyLifestyle4All campaign and the European Week of Active and Healthy Ageing. EUROPEANMOBILITYWEEK will publish exemplary **MOBILITYACTIONS** on the campaign homepage and social media channels related to these EU thematic campaigns.

This European initiative supports the use of public transport as an efficient, affordable, and low-emission mobility solution for everybody. This firm belief was illustrated with the **#LovePublicTransport video** at the height of the COVID-19 pandemic. Therefore, EUROPEANMOBILITYWEEK is closely connected with the **European Year of Rail 2021** as the common goal is to encourage people to move sustainably. Rail is one of the safest and most sustainable modes of transport across the continent. EUROPEANMOBILITYWEEK encourages participating towns and cities to link with the European Year of Rail and promote rail travel during the week of the campaign.

Our campaign also encourages towns and cities to sign the **European Climate Pact** and build a greener Europe together. As part of the European Green Deal, the Pact provides a platform for sharing information, debating, and acting on climate crisis and providing support for European initiatives and climate movements to grow and consolidate.

## This year's topics

In line with this year's theme 'Safe and Healthy with Sustainable Mobility', the four focal topics are **mental & physical health, safety and COVID-19 response**. In the following document, you will find a brief outline of facts and figures as well as best practice examples relating to each of these topics. It is no coincidence that **mental health** is a priority topic, as EUROPEANMOBILITYWEEK advocates a stronger focus on the relationship between mental health and urban mobility, an issue that has become increasingly important during the pandemic. Another priority topic is **physical health**, which includes the impact of air and noise pollution and the benefit of active mobility. The topic on safety highlights recent developments concerning transport **safety**, the integration of people with reduced mobility and extensive road safety measures in the urban environment. The response of urban administrations to the **COVID-19** pandemic is also flagged in this section, focusing on the positives of the pandemic around urban mobility and on the importance of **restoring confidence in public transport**.



# 2 Mental Health

## FACTS & FIGURES

Mental health is one of the core topics of this year's theme and emphasises an aspect that is often neglected: transport can significantly influence the state of people's mental health and well-being.

It allows people to connect and maintain relationships with others, access professional and educational opportunities and leisure activities outside their homes and gives them more flexibility. It enables an active lifestyle for older people within their community and research shows that age-friendly transportation policies (such as free bus travel passes) are associated with an increase in public transport use among older people and reduce depressive symptoms and the feeling of loneliness. This has been highlighted as an important factor during the **European Week of Active and Healthy Ageing**. Moreover, it has been shown that shorter travel times improve wellbeing, while commutes lasting between 60 and 90 minutes<sup>1</sup> have the most negative impact on wellbeing.

Anxiety due to large crowds of people or insufficient travel information can lead to a deteriorating mental state. Being able to move around has always played a substantial role in living a healthy and fulfilling life. In the wake of the pandemic, cities must work even harder to create urban areas where residents can move sustainably and safely whenever they like.



**Commutes** lasting between **60' & 90'** have the most **negative impact on wellbeing**



## Active mobility has essential impact on health

Besides boosting people's health, cycling and walking are also incredibly beneficial for the mind. Several studies indicate that active mobility reduces depression, anxiety, and other mental health issues. Getting exercise by walking or cycling increases blood flow, releases endorphins and reduces overall stress levels. Even a 30-minute walk<sup>2</sup> or bike trip a day can help to enhance mental health. It can improve the overall mood as well as the sleep quality, and reduce stress, anxiety, and fatigue. Physically active people have up to a 30% reduced risk<sup>3</sup> of becoming depressed and staying active helps those who are depressed recover.

Cities<sup>4</sup> that support cycling and walking campaigns tend to be happy, healthy, educated and economically stable. These indicators mainly relate to the lifestyle of people who frequently use sustainable and healthy modes of transport in their daily life. Most local authorities that understand the importance of integrating active mobility within the local mobility plan also adopt other innovative social approaches. Residents in cities where cycling and walking are popular can connect and engage with like-minded people. Cycling and walking help to foster a community spirit and feeling of unity.

02. <https://www.peoplepoweredmovement.org/benefits-of-biking-walking/>

03. <https://www.walkingforhealth.org.uk/get-walking/why-walk/healthy-minds>

04. <https://www.peoplepoweredmovement.org/benefits-of-biking-walking/>

05. <http://bic.asn.au/information-for-moving-people/social-inclusion-and-public-transport>

06. [https://www.c40knowledgehub.org/s/article/How-to-make-public-transport-an-attractive-option-in-your-city?language=en\\_US](https://www.c40knowledgehub.org/s/article/How-to-make-public-transport-an-attractive-option-in-your-city?language=en_US)

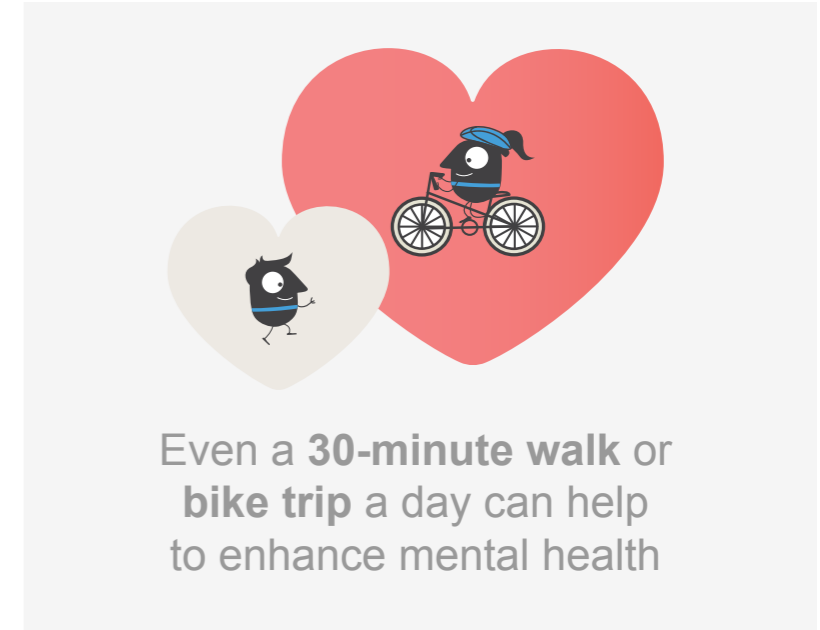
07. Access to Transport and Life Opportunities (publishing.service.gov.uk)

08. [https://www.researchgate.net/publication/315864757\\_Urban\\_Design\\_and\\_Mental\\_Health](https://www.researchgate.net/publication/315864757_Urban_Design_and_Mental_Health)

## Affordable transport for social integration & participation

The growing unaffordability of cities leads to the gentrification of metropolitan territories and their surroundings. Suburbs that depend solely on cars for access can marginalise those without cars – particularly the young and older people. Social isolation<sup>5</sup> and a lack of community interaction are associated with poorer health. Research reveals clear and significant association between trip/activity levels and the risk of social exclusion. Improving mobility is likely to reduce the risk of social exclusion. Public transport improvements enabling new trips to be undertaken are under-rated and the overall community value of public transport deserves higher recognition. As recommended<sup>6</sup> by C40 Cities (a worldwide network of cities with a common climate approach to limit global warming) cities should take a networked approach to establish an affordable and accessible public transport system, examining physical planning, integrated fare policy and integrated operations. Research<sup>7</sup> identifies that people who rate public transport as 'good' are nearly three times more likely than those who rate it as 'poor' to be able to access public services such as health care, supermarkets or education. They are also less likely to report feeling under strain, being dissatisfied with life or experiencing mental health problems.

Beyond mass public transport, active and non-motorised public transport has a role to play in enhancing social inclusion and wellbeing. Pedestrian-friendly neighbourhoods encourage walking and cycling, allowing for more interaction



between neighbours and increasing the sense of community in residents, thereby producing both mental and physical health benefits.

## Recreational areas in urban environments

(parks, green spaces, pedestrian- & car-free zones)

Research<sup>8</sup> consistently finds links between green spaces and positive mental health and wellbeing. A survey of 10,000 people in the UK found that communities living in greener urban areas were more likely to report lower mental distress and higher levels of wellbeing after adjusting for socioeconomic variation at the individual and regional level.

The Centre for Mental Health and Urban Design in the UK identifies four key opportunity topics for mental health, summarised by the acronym GAPS: Green places, Active places, Prosocial places, and Safe places. There is a clear link between accessible green spaces and positive mental health and wellbeing. Green areas in the proximity of one's residence can improve mood and serve as motivation to exercise and initiate natural interactions<sup>9</sup>. People should have consistent, regular exposure to urban nature during their daily routine, with such features as low-emission zones, reduction of parking spaces by turning them into green areas, and larger, walkable spaces where one can exercise and socialise.



09. [https://www.researchgate.net/publication/315864757\\_Urban\\_Design\\_and\\_Mental\\_Health](https://www.researchgate.net/publication/315864757_Urban_Design_and_Mental_Health)

10. <https://www.euro.who.int/en/health-topics/environment-and-health/noise/noise>

11. <https://www.eea.europa.eu/articles/noise-pollution-is-a-major>

12. <https://www.eugreenweek.eu/>

13. CE Delft 2020, *Air pollution and transport policies at the city level, Module 2: policy perspectives*, Delft: CE Delft.

14. <https://www.sciencedirect.com/science/article/pii/S0160412018305932>

15. [https://ec.europa.eu/environment/news/second-clean-air-outlook-report-full-implementation-clean-air-measures-could-reduce-premature\\_en](https://ec.europa.eu/environment/news/second-clean-air-outlook-report-full-implementation-clean-air-measures-could-reduce-premature_en)

## Tackling Noise & Air Pollution

“Excessive<sup>10</sup> noise seriously harms human health and interferes with people’s daily activities at school, at work, at home and during leisure time. It can disturb sleep, cause cardiovascular and psychophysiological effects, reduce performance, and provoke annoyance responses and changes in social behaviour” – according to the World Health Organization. 20% of Europe’s<sup>11</sup> population is exposed to long-term noise levels that are harmful to their health. This corresponds to more than 100 million people within Europe. Over 1.6 million healthy years of life are lost each year due to noise pollution - the second biggest environmental burden in Europe after air pollution. One in five Europeans is regularly exposed to sound levels at night that could significantly damage health. European initiatives, such as the **EU Green Week**, which takes place from 3 May to 13 June this year across various European countries, aims to raise awareness of these significant health hazards<sup>12</sup>.

Currently, road traffic<sup>13</sup> contributes substantially to concentrations of air pollutants in European cities. Even though European emission standards for vehicles (Euronorms) reduce exhaust emissions, which will positively affect the air quality between now and 2030, concentrations of NO<sub>2</sub> and PM will continue to have a negative impact. Exposure levels to these pollutants is relatively high in cities, which is where we see the highest impact on public health by air pollution. Air pollutants<sup>14</sup>, mainly particulate matter and nitric oxides, have been associated with poor mental health

causing the onset of depressive symptoms and the worsening of excessive depressive conditions in case of long exposure. EU institutions are aiming to review the Air Quality Directive, EU legislation that dates to the year 2004. As part of the European Green Deal, a revision of the thresholds for emissions is being discussed, to align them more closely with WHO recommendations. This review will be based on the **Second Clean Air Outlook report** that was published at the beginning of 2021. It will have the potential to significantly reduce the emission thresholds in Europe over the coming years<sup>15</sup>.



# 20%

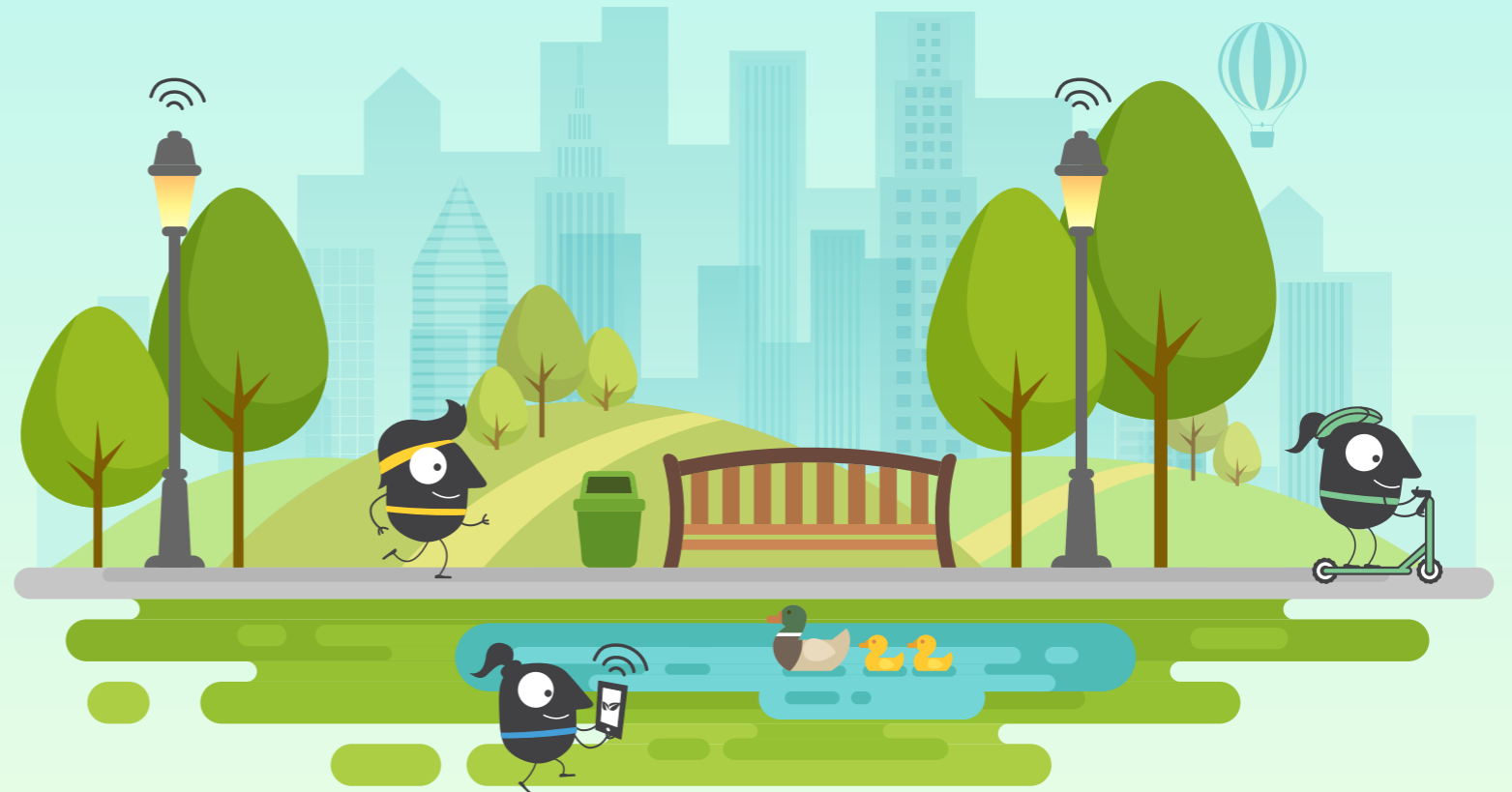
of Europe’s population is exposed to long-term harmful noise levels



## BEST PRACTICE

There are multiple opportunities to design cities in ways that integrate physical activity into people's daily lives to boost our mental state. From facilitating accessible, convenient, safe, active transport to placing outdoor gyms, action can be taken to help integrate exercise and social interaction to promote mental health.

People benefit from feeling safe and comfortable moving around their neighbourhood, and urban design has a great deal to contribute. Appropriate street lighting and surveillance, distinct landmarks that help people with dementia navigate their neighbourhood, and human-centred design of residential, commercial, and industry routes are good examples of important urban design intervention.



## Providing Space

During the EUROPEAN **MOBILITY WEEK** campaign over the past 20 years, a broad range of local activities has been organised to promote walking and cycling in urban areas. Local authorities organise Car-Free Days by closing part of the city centre to private vehicles and using the freed-up space for various events to promote sustainable urban mobility. The city of Varna in Bulgaria organised a Car-Free Day in 2020, where traffic was banned from the main promenade for a day, and the streets became entertainment areas for locals to enjoy active time together. Together with the Bulgarian city, thousands of cities across Europe and beyond organised Car-Free Days and similar traffic-reduction activities as part of the campaign to highlight the lack of space for active mobility and social interaction.

The Horizon 2020 Research and Innovation project MORE is developing design concepts that encourage street activity and reduce traffic dominance by considering the needs of all road users, including active mobility users and pedestrians. MORE<sup>16</sup> views the streets as “ecosystems” in pilot cities such as Budapest, Constanta, and Lisbon, and tests its road space design tools for various purposes, such as moving around, as well as shopping, socialising and recreational activities.

## The 15-minute city

A “15-minute city”<sup>17</sup> gives people the opportunity to meet their needs within a short walk or bike ride from their home. It means reconnecting people with their local area and decentralising city life and services. The 15-minute city concept originated in Paris, as the city administrations aims to offer Parisians what they need on or near their doorstep to ensure an “ecological transformation” of the capital into a collection of neighbourhoods. This would reduce pollution and stress, creating socially and economically mixed districts, to improve the overall quality of life for residents and visitors.

The city of Vitoria-Gasteiz in Spain awarded the European Green Capital<sup>18</sup> in 2012 has been working for decades on creating green zones in its city centre and a Green Belt around it. 98% of residents live within 3km of the Green Belt, a large-scale project connecting green space surrounding the entire city. The Green Belt not only became a biodiversity hotspot, but also a popular recreational destination, providing space for physical activity, social gatherings, and interaction with nature, such as birdwatching and organic farming. Vitoria-Gasteiz’s greening measures go hand in hand with policies for more sustainable forms of transport.



Some cities in Sweden plan to go even further and become 1-minute cities. The idea<sup>19</sup> started in Stockholm, but other cities in the country plan to join the initiative, which involves placing prefabricated wooden furniture in vacant parking spots on the streets. The local community even has a say in the design and development process of the furniture. This activity fosters a sense of belonging to a community and helps to shape the neighbourhood by reclaiming the streets from motorised traffic.

16. <https://www.roadspace.eu/>

17. <https://www.theguardian.com/world/2020/feb/07/paris-mayor-unveils-15-minute-city-plan-in-re-election-campaign>

18. [https://ec.europa.eu/environment/europeangreencapital/applying-for-the-award/egcn-human-scale-toolkit/Human%20scale%20toolkit\\_final.pdf](https://ec.europa.eu/environment/europeangreencapital/applying-for-the-award/egcn-human-scale-toolkit/Human%20scale%20toolkit_final.pdf)

19. Swedish cities aim to become 1-minute cities | TheMayor.EU

## Traffic Noise & Air Pollution Reduction Strategies

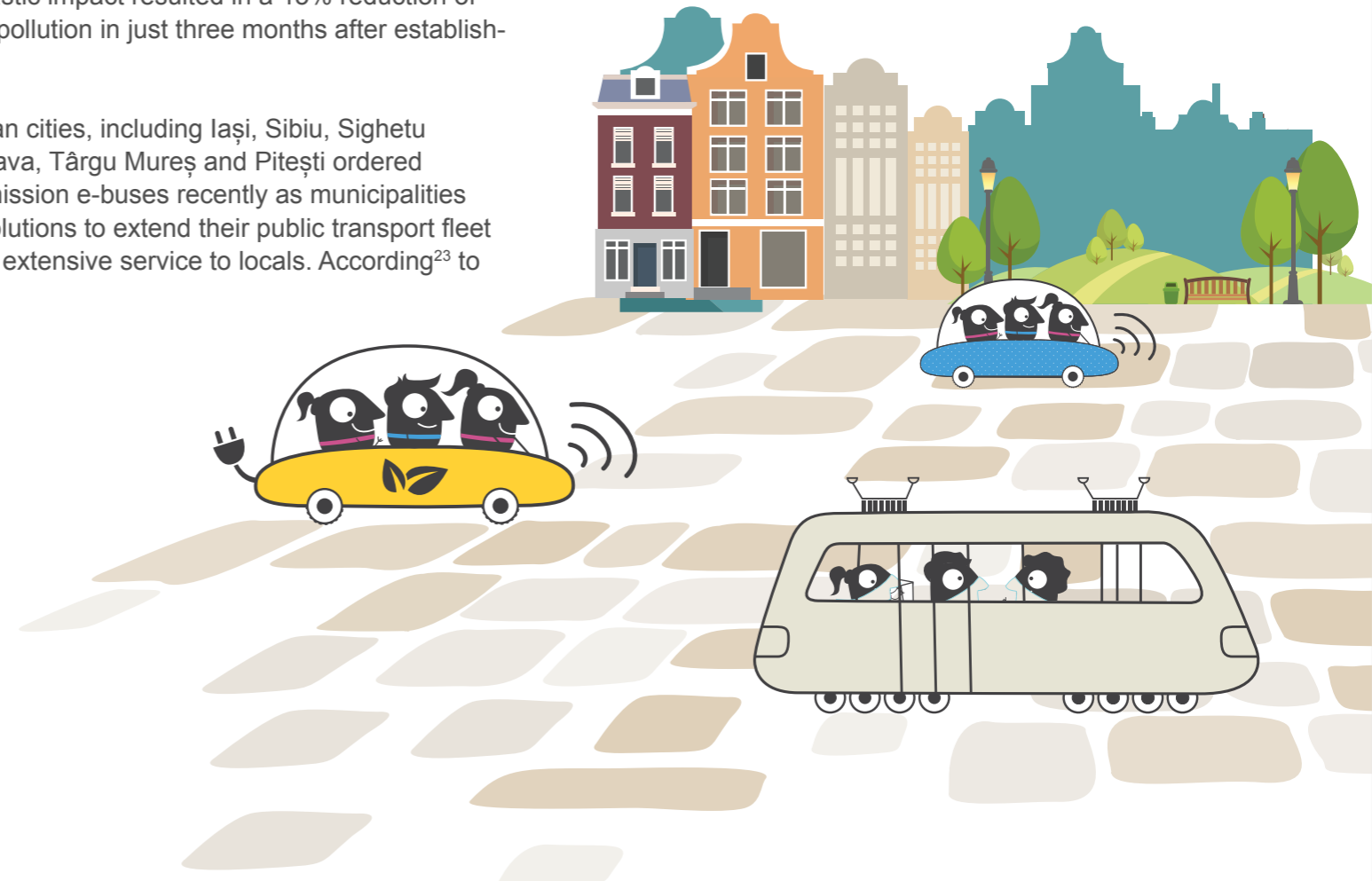
The EU-funded project, Phenomena (Assessment of Potential Health Benefits of Noise Abatement Measures in the EU) is working to identify measures<sup>20</sup> that reduce the health burden of environmental noise. Their initial findings suggest the effects of excessive noise pollution should be integrated into urban planning. Potential solutions include speed reduction strategies for entire urban areas or using commercial buildings as noise barriers. The shift towards noise-prevention, such as supporting sustainable modes of transport like walking and cycling, is crucial to achieve the necessary long-term noise reduction. Solutions include Urban Vehicle Access Regulations, pedestrian zones, reduction of speed limits in urban areas and enabling the use of active mobility.

The EU-funded Interreg project CHIPS (Cycle Highways Innovation for smarter People Transport and Spatial Planning) developed and promoted cycle highways as an effective and cost-efficient low carbon solution for commuting to and from urban employment poles. The project developed solutions that can help cities and regions to establish cycle highways as a new mobility product. Such solutions can overcome the physical and behavioural barriers that prevent commuters from using cycle highways and maximise synergies between cycle highways and other means of transport<sup>21</sup>. Reducing air pollution derived from transport in urban areas is mainly achieved by limiting or banning polluting traffic.

Barcelona's "superblocks" concept of carving out islands of car-free space by redirecting traffic around multi-block areas, shows significant reductions in noise and air pollution in the city since their introduction in 2016. The local authority now plans a major extension of the concept, and over the next decade Barcelona plans to convert its entire central area into a greener, pedestrian and cycle-friendly area almost totally cleared of private vehicles. Other efforts were made in the Spanish capital of Madrid by implementing a low-emission zone (LEZ), as part of its Sustainable Urban Mobility Plan (SUMP). The drastic impact resulted in a 15% reduction of nitrogen dioxide pollution in just three months after establishing the LEZ<sup>22</sup>.

Several Romanian cities, including Iași, Sibiu, Sighetu Marmăției, Suceava, Târgu Mureș and Pitești ordered modern, zero-emission e-buses recently as municipalities adopt greener solutions to extend their public transport fleet and offer a more extensive service to locals. According<sup>23</sup> to

newly released research from C40, substantial green investments in public transport can reduce air pollution derived from transport by up to 45% and cut urban transport emissions by more than half by 2030. Based on the European Commission's new Sustainable and Smart Mobility Strategy, 100 European cities will turn climate neutral and at least 100 million zero-emission vehicles will be in operation on European roads to meet air quality and climate targets across the continent as part of the European Green Deal.



20. [https://nws.eurocities.eu/MediaShell/media/Phenomena\\_project\\_summary.pdf](https://nws.eurocities.eu/MediaShell/media/Phenomena_project_summary.pdf)

21. <https://www.nweurope.eu/projects/project-search/cycle-highways-innovation-for-smarter-people-transport-and-spatial-planning/>

22. [https://www.eltis.org/sites/default/files/sump\\_guidelines\\_2019\\_interactive\\_document\\_1.pdf](https://www.eltis.org/sites/default/files/sump_guidelines_2019_interactive_document_1.pdf) (P13)

23. <https://thefutureispublictransport.org/wp-content/uploads/2021/03/C40-The-Future-of-Public-Transport-Research.pdf>

## 3

## Physical Health

In a long tradition of promoting active mobility as part of the EUROPEAN MOBILITY WEEK agenda, physical health is another core component of sustainable urban mobility. Furthermore, the minimisation of traffic-related negative externalities like tailpipe emissions also plays a significant role.

### FACTS & FIGURES

#### Air quality

The detrimental impact of air pollution is supported by recent studies of the World Health Organisation (WHO), which estimates that 376.000 premature deaths in the EU27+UK were directly caused by fine particle pollution on an annual basis. Nevertheless, the number of pollution-related deaths was halved in the last 30 years. One can observe significant changes related to the reduction of air pollution, the use of active mobility solutions, new modes of transport, such as electric bikes, as well as efforts to increase urban pedestrian zones and green spaces. European cities, such as Copenhagen and Amsterdam, have pledged to replace the entire public transport fleet with electric vehicles by 2030. Furthermore, the city of Vienna opted for the use of alternatively fuelled buses in combination with policies encouraging the use of public transport, which raised the modal share of public transport to 39%, while it causes only 6% of the city's transport-related CO<sub>2</sub> emissions<sup>24</sup>.

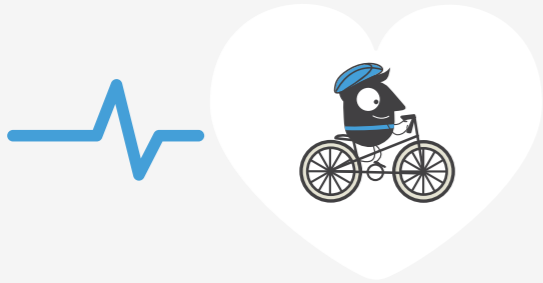


# 376k

premature deaths  
annually  
caused by fine  
particle pollution

-50% since 1990





Cycle commuters have a **46% lower risk** of developing heart disease and a **45% lower risk** of developing cancer

**6x**

Bike sales have increased six-fold in one decade

The **65-69** age group has the highest number of e-bikes

## Active mobility

Active mobility in place of passenger vehicles can have two positive effects: enhance physical health and reduce tailpipe emissions. A five-year British study concluded that cycle commuters had a 52% lower risk of dying from heart disease and a 40% lower risk of dying from cancer. Test subjects were also found to have a 46% lower risk of developing heart disease and a 45% lower risk of developing cancer at all<sup>25</sup>.

In economic terms, a sedentary lifestyle is not only detrimental to the health, but also brings an overall economic loss of over €80 billion per year to the European Union<sup>26</sup>. The **EU's Beating Cancer Plan** aims to reduce cancer deaths due to environmental pollution besides other risk factors. The Plan interacts closely with the Green Deal and its Zero Pollution Action Plan to step up actions in Member States against pollutants to achieve cleaner air by improved monitoring, modelling and targeted air quality plans<sup>27</sup>.

Reduced mobility can also have significant impact for older people, a challenge that has been identified by the **EU Week of Active and Healthy Ageing**. Furthermore, this European initiative is tackling the problem with the EU-funded '**Connected Vitality**' Project. A closer look is taken at cycling within the framework of EUROPEANMOBILITYWEEK. In addition to structural changes, technological advancement can also foster active mobility. Many older people find cycling physically more demanding, so an increase in available electric bikes at more accessible prices can

benefit this age group. An overall increase in demand can be observed as sales have increased six-fold in one decade and are predicted to double again from 2020 until 2025<sup>28</sup>. According to recent studies from Germany, the 65–69-year age group has the highest number of e-bikes with 16%. Half of all electric bike trips in Germany are made by people over 60, 29% of all e-bike trips are made by people aged 70 and over. The daily distances covered with electric bikes by the mentioned age groups are four to eight kilometres higher than with 'normal' bicycles, which is a 70% increase<sup>29</sup>.

## Micro-mobility

Besides electric bikes, another recent trend is free-floating bikes and electric scooters in inner cities across Europe – known as micro-mobility solutions. These can be considered a quick and clean solution to reduce emissions in inner cities while providing a fast alternative to get from A to B in urban environments. Interreg assessments in Bucharest indicate that the local e-scooter provider 'Flow' claims that each vehicle reduces the emissions by up to 3,500 kg of carbon during its lifecycle<sup>30</sup>. Whether or not such numbers can be achieved depends on the durability and the duration of use. According to one study, e-scooters only have an active use time of 28 days until they are scrapped. Nevertheless, it must be emphasised that e-bikes or e-scooters have zero tailpipe emissions and upgrade the mobility offer in urban environments. As long as vehicles are maintained and repaired and are collected in an eco-friendly way, these solutions<sup>31</sup> can offer a viable alternative<sup>32</sup>.

25. [https://theconversation.com/cycling-to-work-major-new-study-suggests-health-benefits-are-staggering-76292?utm\\_campaign=Echobox&utm\\_medium=Social&utm\\_source=Twitter#link\\_time=1501309241](https://theconversation.com/cycling-to-work-major-new-study-suggests-health-benefits-are-staggering-76292?utm_campaign=Echobox&utm_medium=Social&utm_source=Twitter#link_time=1501309241)

26. [https://inactivity-time-bomb.nowwemove.com/download-report/The%20Economic%20Costs%20of%20Physical%20Inactivity%20in%20Europe%20\(June%202015\).pdf](https://inactivity-time-bomb.nowwemove.com/download-report/The%20Economic%20Costs%20of%20Physical%20Inactivity%20in%20Europe%20(June%202015).pdf)

27. [https://ec.europa.eu/health/sites/health/files/non\\_communicable\\_diseases/docs/eu\\_cancer\\_plan\\_en.pdf](https://ec.europa.eu/health/sites/health/files/non_communicable_diseases/docs/eu_cancer_plan_en.pdf)

28. <https://www.statista.com/statistics/276036/unit-sales-e-bikes-europe/>

29. [https://www.researchgate.net/publication/324467512\\_Older\\_E-bike\\_Users\\_Demographic\\_Health\\_Mobility\\_Characteristics\\_and\\_Cycling\\_Levels](https://www.researchgate.net/publication/324467512_Older_E-bike_Users_Demographic_Health_Mobility_Characteristics_and_Cycling_Levels)

30. <https://www.interregeurope.eu/e-mopoli/news/news-article/10851/news-micromobility-bucharest-sustainable-transport/>

31. <https://www.umweltbundesamt.de/themen/verkehr-laerm/nachhaltige-mobilitaet/e-scooter#sind-e-scooter-umweltfreundlich>

32. <https://www.springerprofessional.de/mikromobilitaet/emissionen/co2-bilanz-von-e-scooter-sharing-ermittelt/17843334>

## BEST PRACTICE

## Reducing emissions in inner cities

Emission reduction in European inner cities is beneficial for a healthy life. One great example, which was also recognised as an exemplary **MOBILITYACTION** of EUROPEAN**MOBILITYWEEK**, is the Park & Ride initiative of Q-Park. This private Belgian parking provider offers over 50% discount on parking at 'Antwerp Berchem' train station every weekend. The parking facility is conveniently located at the ring road, to reduce passenger car use in the city centre<sup>33</sup>.

## Limiting car access to inner cities

Temporary or permanent Urban Vehicle Access Regulations (UVARs) are another measure to limit car traffic in inner cities. These range from temporary restrictions to a limitation to low-emission vehicles in certain zones or even an access ban on all private vehicles in specific areas. Whereas setting up an UVAR can be a lengthy process, smaller and quicker solutions are available. Bordeaux and Paris have set up a strategy for a car-free day the first Sunday of each month throughout 2021 by implementing car-free zones in specific areas. From January to March, the concept is tested in the Western part of the Bordeaux city centre. From April onwards, the zone is extended towards the North and South.

33. <https://www.youtube.com/watch?v=RCK5Xq3DcOk>

34. <https://www.green-zones.eu/en/blog-news/sunday-driving-bans-in-paris-and-bordeaux>

35. <https://civitas.eu/sites/default/files/CARAVEL%20D5%20-%20pt%206%20krakow.pdf>

36. [https://www.eltis.org/sites/default/files/sump\\_guidelines\\_2019\\_interactive\\_document\\_1.pdf](https://www.eltis.org/sites/default/files/sump_guidelines_2019_interactive_document_1.pdf) (P16)



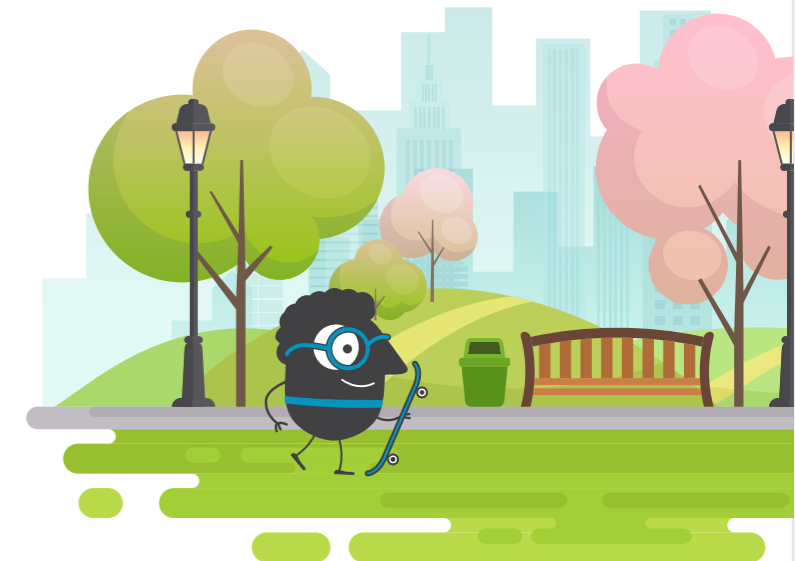
Krakow, Poland

Rules apply between 10am and 6pm or 7pm. This regular event ensures predictability and avoids significantly affecting traffic flow on a larger scale<sup>34</sup>.

The Polish city of Krakow changed its parking rules for several city squares. These changes were met with protests by shop owners and car-park operators. This hostile position changed over the course of several months as the shop and car-park owners did not encounter any significant economic losses and people tended to spend more time in the restructured area. Over 75% of people polled do not want to return to the previous scenario. They emphasised that they are 'especially happy with the absence of cars in these areas, while also enjoying the structural landscaping, historic buildings, and general atmosphere'. These examples from the above-mentioned cities are just a small share of the collective efforts made by European cities to decarbonise<sup>35</sup>.

## Combining measures within a Sustainable Urban Mobility Plan (SUMP)

The development of a SUMP, which is a long-term, all-encompassing integrated mobility plan for the entire functional urban area, provides clear long-term goals by examining the mobility challenges in a holistic way, while addressing the overall transport mix to reduce externalities that are harmful to people and the environment. The City of Budapest emphasised the importance of a SUMP as the key to a more harmonised approach by different stakeholders from municipal departments and state representatives to transport companies. This coordination guarantees the collective support needed for the implementation of a SUMP<sup>36</sup>. More information about SUMP is published on the **ELTIS** platform and within the **guidelines for developing and implementing SUMPs**.

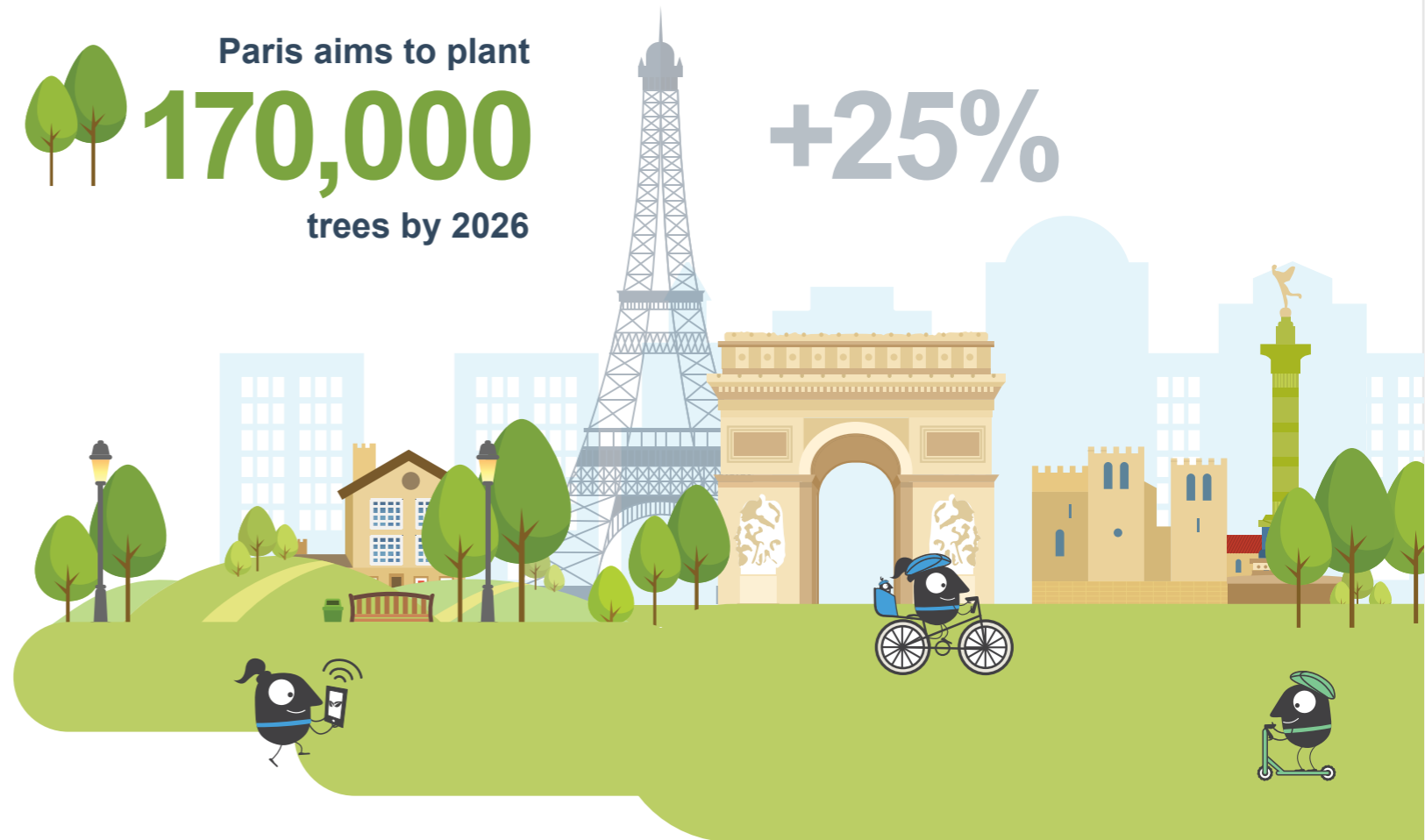


## Liberating space for active mobility

Physical activity can be encouraged by providing green urban areas that offer space for jogging, yoga or to enjoy nature and sunshine - and help to reduce the surface temperature of asphalt streets or buildings, as trees and larger bushes provide shade. Examples from Gothenburg, Sweden, show that the temperature in a city park was 4°C lower than in the built-up urban area. Furthermore, trees and other greenery reduce CO<sub>2</sub> levels, provide a natural habitat for animals, and even increase the value of the surrounding property. Another example comes from Paris. The French capital aims to capitalise on the opportunities for urban greening by planting 170,000 trees, creating a main green axis and dedicating 30 hectares to parks and gardens. Since Paris already has 500,000 trees, the plan, which should be implemented by 2026, would increase the number of trees by about 25%<sup>37</sup>.

## Encouraging active mobility

Incentivisation of active mobility can have a significant impact. In many countries, incentivization schemes have existed for a long time, like 'cycle to work' in the United Kingdom, which offers tax exemption to loan or buy bicycles and appropriate equipment. Similar examples can be found in Belgium, a country prone to car use and with a deep love of professional cycling. 'Fietserbond' (Dutch-speaking cycling advocacy group for Flanders and Brussels) created a challenge for employers to encourage active mobility by tracking kilometres through an app and encouraging cycling together, with events and prizes aiming to motivate the employees<sup>38</sup>.



37. <https://www.thelocal.fr/20201022/paris-to-plant-170000-new-trees-and-turn-key-spots-into-urban-gardens/>

38. <https://www.biketowork.be/en/news>

# 4 Safety Measures

This section of the Thematic Guidelines takes a closer look at safety measures, separated into two sections: transport safety, such as safety measures for people with reduced mobility; and road safety. The latter includes measures to counteract traffic accidents and fatalities.

## FACTS & FIGURES

### Enhancing security for people with disabilities

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Around 15% of people in the EU have disabilities, a number which is likely to rise with ageing demographics<sup>39</sup>. Therefore, the European Parliament's Transport Committee has identified various difficulties faced by people with reduced mobility or by people who are blind or visually impaired when using public transport. They relate first and foremost to major access barriers at interchanges and intermodal hubs, and to lack of information on the accessibility of local transport. Where this information is available, it is often lacking the correct medium, such as braille, or audio format<sup>40</sup>.

**~15%**  
in the EU have  
disabilities



**SAFETY  
FIRST**

39. [https://cms.uitp.org/wp/wp-content/uploads/2020/08/Accessibility-Guide\\_UITP-IRU-EDF\\_2016.pdf](https://cms.uitp.org/wp/wp-content/uploads/2020/08/Accessibility-Guide_UITP-IRU-EDF_2016.pdf)

40. [https://www.europarl.europa.eu/RegData/etudes/STUD/2018/617465/IPOL\\_STU\(2018\)617465\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2018/617465/IPOL_STU(2018)617465_EN.pdf)



## Stepping up road safety

European Member States are moving towards the goal of zero road fatalities – or ‘Vision Zero’, as outlined by the European Commission. The number of road fatalities<sup>41</sup> has decreased thanks to safety belts and other EU safety legislation, technological advancements in the automotive industry and stricter national rules on speed limits. In 2001, nearly 55,000 people died in road accidents; by 2018, the number had decreased by over 50%<sup>42</sup>.

## Cyclist and pedestrian safety

38% of all fatal accidents are on urban roads. Therefore, EUROPEANMOBILITYWEEK’s annual theme for 2021 aims to raise awareness of the tragic figure of around 9,500 fatalities in 2018<sup>43</sup>. More than 50% of these fatalities relate to cyclists or pedestrians. There is clear causality between the speed of a car and the severity of the injury of a cyclist or pedestrian. For example, pedestrians have been shown to have a 90% chance of survival when struck by a car travelling at 30 km/h or below, but less than 50% chance of surviving impact at 45 km/h and almost no chance of surviving impact of 80km/h or higher<sup>44</sup>.

Cyclists and pedestrians remain the most vulnerable groups to urban traffic. As highlighted in the European Commission Staff Working Document ‘EU Road Safety Policy Framework 2021-2030 - Next steps towards "Vision Zero"’, road infrastructure and surroundings are a contributing factor in more than 30% of crashes<sup>45</sup>. The best practice examples in the following section highlight infrastructure solutions from across Europe.

## E-scooter safety regulation

Micro-mobility solutions, such as free-floating e-scooters, have mushroomed across Europe’s inner cities. However, there are substantial variations in the regulatory frameworks. Whereas some cities impose a speed limit of 20km/h, others allow higher speeds. Several EU countries have legislation in place that obliges e-scooter drivers to use pavements, whereas others clearly indicate that e-scooters need to use the road or cycle path, if applicable. Such unclear and inconsistent legislation can cause dangerous situations and create difficulties for travellers<sup>46</sup>.

Additionally, parking rules for e-scooters can enhance the overall safety for road users. Cities like Malaga have set up dedicated parking zones to avoid rogue parking of

free-floating e-scooters on pavements. Cities across Europe are countering excessive speed by setting clear speed limits and imposing heavy fines for nonconformity. Paris introduced a fine of €135 for riding on the pavement and set a legal speed limit of 20km/h for e-scooters<sup>47</sup>.

One can observe that the abovementioned rules are needed, as safety statistics indicate the apparent danger of such mobility solutions. Danish research suggests that e-scooter injuries are eight times higher than for cyclists; while statistics from the US indicate that head injuries are twice as likely for users of electric scooters<sup>48</sup>. Solutions for these rather alarming numbers are to address drunk driving and driver training for micro-mobility users, and to increase the quality of urban roads and pavements by reducing potholes and ensuring smooth pavements where necessary<sup>49</sup>.

**-50%**

in road fatalities

2018 vs 2001

**38%**

of fatal accidents

are on urban roads

**>30%**

of crashes related to  
road infrastructure

41. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A31991L0671>

42. [https://ec.europa.eu/transport/road\\_safety/sites/roadsafety/files/pdf/scoreboard\\_2018\\_en.pdf](https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/scoreboard_2018_en.pdf)

43. <https://etsc.eu/70-of-road-deaths-in-european-cities-are-pedestrians-cyclists-and-motorcyclists/>

44. [https://www.who.int/violence\\_injury\\_prevention/publications/road\\_traffic/world\\_report/speed\\_en.pdf](https://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/speed_en.pdf)

45. [https://ec.europa.eu/transport/road\\_safety/sites/roadsafety/files/move-2019-01178-01-00-en-tra-00\\_3.pdf](https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/move-2019-01178-01-00-en-tra-00_3.pdf) (P10)

46. <https://www.sicurstrada.it/Risorse/FERSI-report-scooter-survey.pdf>

47. <https://www.europe-consommateurs.eu/en/travelling-motor-vehicles/motor-vehicles/electric-scooters-in-france.html>

48. <https://etsc.eu/itf-report-recommends-action-on-safety-of-e-scooters/>

49. [https://www.roadspace.eu/wp-content/uploads/2020/05/MORE-D2.3\\_WITHOUT-CONFIDENTIAL-ANNEXE.pdf](https://www.roadspace.eu/wp-content/uploads/2020/05/MORE-D2.3_WITHOUT-CONFIDENTIAL-ANNEXE.pdf)

## BEST PRACTICE

## Attention to vulnerable groups

As one of the metropolitan regions of Central Europe, Budapest has set up a mobility plan that pays significant attention to pedestrians, with various measures highlighted for the implementation period of 2014 to 2030. One of these is an annual review of traffic signs around kindergartens, schools, and other educational facilities. This is supported by additional traffic calming zones. These reduced speed zones should be implemented without additional signs, as the rules will be self-explanatory<sup>50</sup>. This will be achieved by changing the course of the road by increasing curb sites or 'safety islands'. These initiatives were included as packages of measures within Budapest's Sustainable Urban Mobility Plan.

The **International Association of Public Transport** (UITP) provides several suggested **guidelines**<sup>51</sup> on how to support and interact with people with reduced mobility or other disabilities in need of help. Aside from the advice to be patient, UITP suggests addressing the passenger directly, instead of talking to an accompanying person. When conversing with a person in need, body language should be adapted to the spoken content to avoid confusion. Furthermore, the personal space of people with disabilities should always be respected.

## Raising awareness by shifting perspectives



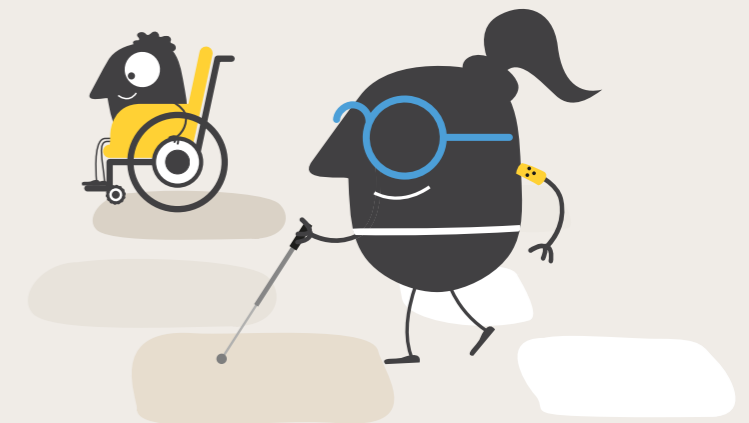
Wiener Linien, Vienna, Austria

Vienna and its transport agency 'Wiener Linien' provide a great example of the inclusion of people with reduced mobility and people who are blind or visually impaired. Exchanges took place between politicians and the respective interest groups to foster understanding of their wants and needs<sup>52</sup>. Cooperation activities, such as 'walkshops' have been established to bring together people with reduced mobility, people who are blind or visually impaired and decision makers, to walk together in the vicinity of public transport stops.

These exchanges help to raise awareness<sup>53</sup>. Flooring systems of tiles or paving stones with grooves or bumps, have been installed at 'Wiener Linien' public transport stops since 1999. These widespread systems help people who are blind or visually impaired to find the safest and quickest way in and out of public transport. Furthermore, thanks to a long-standing effort by 'Wiener Linien', all stations are accessible at ground level<sup>54</sup>.

## Open exchange with people with disabilities to foster empathy

Other practical and easily implemented solutions are awareness- raising campaigns. Best practice examples from European cities include workshops, city walks with people who are blind or visually impaired and information campaigns. These Thematic Guidelines highlight three examples from EUROPEANMOBILITYWEEK's **MOBILITYACTIONS**. A small town on the Spanish island of Mallorca organised the 'blind date city' a project to allow people to experience walking without any vision, with the help of a blind person from the local community. The joint walk through the city draws attention to all kinds of accessibility problems and raises awareness concerning certain infrastructure pitfalls<sup>55</sup>. A similar awareness-raising campaign was organised by the French town of Montargis, located 70km east of Orléans, which focused its efforts on elected officials. The officials were guided through various obstacles to experience blindness, deafness, or reduced mobility<sup>56</sup>. Another solution comes from the Turkish city of Izmir, where people with and without disabilities used tandem bicycles together. During the rides, common obstacles were identified<sup>57</sup>.



50. [http://www.sump-challenges.eu/sites/www.sump-challenges.eu/files/bmt2016\\_eng\\_v3.pdf](http://www.sump-challenges.eu/sites/www.sump-challenges.eu/files/bmt2016_eng_v3.pdf)

51. [https://cms.uitp.org/wp/wp-content/uploads/2020/08/Accessibility-Guide\\_UITP-IRU-EDF\\_2016.pdf.pdf](https://cms.uitp.org/wp/wp-content/uploads/2020/08/Accessibility-Guide_UITP-IRU-EDF_2016.pdf.pdf)

52. <https://www.blindenverband-wnb.at/wissenswertes/verkehr/taktiler-leitsystem-wien/>

53. <https://www.behindertenrat.at/2019/05/walkshop/>

54. [https://www1.wienerlinien.at/media/files/2020/barrierefrei\\_354241.pdf](https://www1.wienerlinien.at/media/files/2020/barrierefrei_354241.pdf)

55. [http://www.mobilityweek.eu/registered-actions/?action\\_uid=qe0x0dQC](http://www.mobilityweek.eu/registered-actions/?action_uid=qe0x0dQC)

56. [http://www.mobilityweek.eu/registered-actions/?action\\_uid=YwlvnTC0](http://www.mobilityweek.eu/registered-actions/?action_uid=YwlvnTC0)

57. [http://www.mobilityweek.eu/registered-actions/?action\\_uid=FDtAT8xo](http://www.mobilityweek.eu/registered-actions/?action_uid=FDtAT8xo)

## Pedestrianisation

Car-free days or weekends have a long history as part of the annual EUROPEANMOBILITYWEEK celebrations. Temporary measures that started as EUROPEANMOBILITYWEEK activities have, in many cases, become permanent solutions. Bologna, winner of the EUROPEANMOBILITYWEEK award 2011, implemented car-free zones in the historic city centre as a temporary measure. One decade later, car-free weekends have become an indispensable component of city life in Bologna<sup>58</sup>. These stories can inspire cities across Europe to begin similar transformations.

Since pedestrianisation efforts can take a significant time to implement, the example of a step-by-step approach adopted by the Slovenian capital of Ljubljana is very successful, as it led to a total pedestrianised area of more than 100 000 m<sup>2</sup> (an equivalent of more than 140 football pitches). The city started this revitalisation process after facing increased traffic levels in the city centre. These efforts were accompanied by the revitalisation of the riverbanks in the inner city and by building additional pedestrian bridges across the river. Thanks to productive exchanges with the Ljubljana inhabitants, these long-term processes to reduce car traffic in the city still enjoy an 88-95% approval rating<sup>59</sup>.

58. [https://mobilityweek.eu/fileadmin/user\\_upload/materials/participation\\_resources/2012/EMW\\_Best\\_Practice\\_Guide\\_2012.pdf](https://mobilityweek.eu/fileadmin/user_upload/materials/participation_resources/2012/EMW_Best_Practice_Guide_2012.pdf)

59. <https://www.eltis.org/resources/case-studies/pedestrianisation-ljubljana-city-centre>

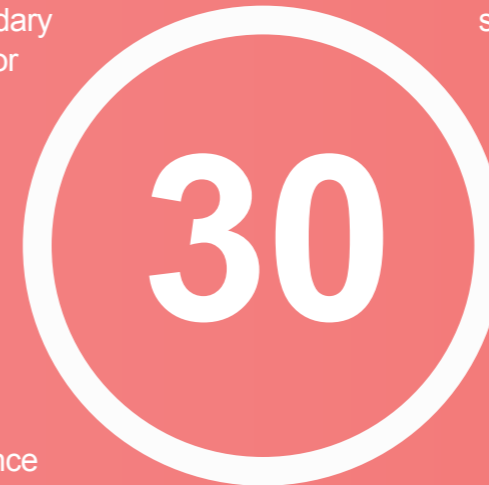
60. <https://www.sutp.org/publications/9584/>

61. <https://mobilitite-mobiliteit.brussels/fr/news/bruxelles-ville-30-premier-bilan-chiffre>

## Traffic calming and lowering urban speed limits

Pedestrianisation of entire streets is a possible measure that blocks accessibility to certain areas for passenger car traffic. However, smaller infrastructure measures can also have a significant impact on pedestrian safety. A German study has highlighted various smaller measures and their effects, such as pedestrian islands, pedestrian curb extensions, road narrowing or plantation<sup>60</sup>, to name a few. Pedestrian islands are separated areas in the middle of the road, which enable pedestrians to pause their crossing of busy primary or secondary roads – a measure particularly helpful for older people, people with reduced mobility and children. This small infrastructure measure reduces speed, alerts the drivers' attention, and shortens the distance to cross the street. The latter is also the main reason to implement road narrowing, which also serves to calm the traffic.

Another significant measure to enhance road safety for pedestrians and cyclists is the reduction of the speed limit in specific high-risk zones, or across an entire urban area. Even though various European cities have reduced the speed limit in certain areas, two recent examples are of particular interest: Bilbao in Spain and the Belgian capital of Brussels. Bilbao won the EU Urban Road Safety Award in 2020, while Brussels received the Award for Sustainable Urban Mobility Planning in 2019.



Embedded within its SUMP, Bilbao set up a safe mobility plan in 2007, which limited the road fatalities to a maximum of three victims per year since 2011. As the first city with over 300.000 inhabitants to apply a 30km/h speed limit on 87% of all its roads, Bilbao took a significant step to enhance road safety, while also reducing noise pollution and other negative externalities of passenger car traffic.

These measures received widespread approval, thanks to holistic discussions with local stakeholders and a strong communication plan to foster acceptance of the measure by residents. Expectations that the 30km/h speed limit would increase travel times and hamper the traffic flow were unfounded. Another significant transformation took place in Brussels, which also changed its speed limit to 30km/h on all roads from 1 January 2021, except for several main roads. The principal reasons for this major step are to address noise pollution and road safety. Results were already visible after one month of application, according to speed checks across a dozen locations in the European capital. Data indicates that on average the speed dropped by 9% in both 30km/h and 50 km/h zones after a single month of implementation. Contrary to popular belief, the overall travel times have remained stable during on- and off-peak hours<sup>61</sup>.

# 5 COVID-19 Response

This section highlights the various COVID-19 response measures in urban mobility, sharing statistics that have drastically influenced public life in European cities and across the globe. In particular, we focus on the positive aspects of changes implemented in response to the pandemic.

The authors would like to emphasise that other EU-funded projects, organisations, and institutions have written extensively on this topic. The SUMP Topic Guide on Planning for More Resilient and Robust Urban Mobility and the SUMP Practitioner Briefing on COVID-19<sup>62</sup> provide comprehensive guidance and best practice examples. This document provides a brief overview of a few selected measures.

The European Green Deal supports the post-COVID 19 recovery by helping to rebuild a more sustainable EU economy, creating job opportunities, and reducing social inequalities. The European Commission's **Sustainable and Smart Mobility Strategy** aims to help the European transport system to quickly recover from the severe impact of the COVID-19 crisis and become more sustainable, smart, and resilient.



62. <https://civitas.eu/document/topic-guide-planning-more-resilient-and-robust-urban-mobility>

## FACTS &amp; FIGURES

## Restoring confidence in public transport

Across Europe and worldwide, COVID-19 caused a major reduction in the use of public transport. European cities like Lyon and Nice saw a decline of 85% to 95%<sup>63</sup> in public transport use at the beginning of 2020. A similar significant drop was observed in The Netherlands. This major reduction of ridership was partly due to misplaced concerns regarding the risk of catching the virus in trains or buses. However, data from German and French government agencies for disease control indicate that only 0.2% to 1.2% of COVID-19 infections can be traced to all means of transport (land, air, and sea)<sup>64</sup>. These results are supported by a study conducted in China through the assessment of clusters related to high-speed trains. The study emphasises that public transport is very safe, provided that adequate space is available to spread out passengers and exposure is kept relatively short. Studies from France, Austria and Japan<sup>65</sup> confirm that short metro rides represent minimal risk, and a comparison is made with multi-hour train rides.

63. <https://www.tandfonline.com/doi/full/10.1080/01441647.2020.1857886>

64. <https://cms.uitp.org/wp/wp-content/uploads/2020/10/Policy-Brief-PTisCOVID-Safe.pdf>

65. <https://www.eltis.org/in-brief/news/covid-19-and-public-transport-results-early-studies-infection-risks>

66. <https://arxiv.org/pdf/2008.05883.pdf>

67. <https://www.brusselstimes.com/brussels-2/133559/how-covid-changed-brussels/>

68. <https://www.theguardian.com/world/2020/may/18/cleaner-and-greener-covid-19-prompts-worlds-cities-to-free-public-space-of-cars>

69. [https://www.europeandataportal.eu/sites/default/files/covid-19/Pollution%20Europe%20%281%29\\_0.jpg](https://www.europeandataportal.eu/sites/default/files/covid-19/Pollution%20Europe%20%281%29_0.jpg)

70. <https://www.eea.europa.eu/highlights/air-pollution-goes-down-as>

71. <https://www.sciencedirect.com/science/article/pii/S0048969720339486>

72. <https://www.sciencedirect.com/science/article/pii/S0048969720339486>

73. <https://etsc.eu/pin-briefing-the-impact-of-covid-19-lockdowns-on-road-deaths-in-april-2020/>

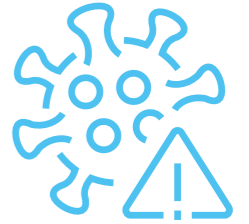
## Shift towards active mobility

Alongside the significant reduction in public transport use and commuter traffic, there was a clear shift towards active mobility, such as cycling, and walking. City administrations across Europe fostered behavioural change by establishing permanent or temporary cycle paths. A German study analysed the Europe-wide announcements regarding pop-up bike lanes throughout the pandemic. The researchers noted that 2000 kilometres of these infrastructural changes had been announced<sup>66</sup> as of July 2020. Pop-up bike lanes were set up in many larger European cities, including Berlin (23km), Brussels (40km)<sup>67</sup>, Budapest (20km), Paris (32km), and Rome (150km)<sup>68</sup>.

## Improvements in air quality

In addition to the shift in favour of active mobility, European cities observed a reduction in the pollution levels of nitrogen dioxide (NO<sub>2</sub>) and fine particulate matter (PM2.5) during the lockdown month of March 2020. Compared to the previous year, NO<sub>2</sub> emissions dropped massively in European cities, like Paris<sup>69</sup> (54%), Milan (21%), Barcelona (55%) and Lisbon (51%), according to the European Environmental Agency

Only 0.2% to 1.2%  
of COVID-19 infections  
can be traced to all  
means of transport



(EEA)<sup>70</sup>. Regarding NO<sub>2</sub>, analyses by the meteorological laboratory of the Sorbonne University in Paris, France, indicate that emissions dropped by more than 30% in urban areas of Austria, Belgium, Bulgaria, France, Italy, Spain, Switzerland, and Portugal (where reductions exceeded 50%). Emissions dropped in urban areas of all assessed European countries<sup>71</sup>. The same applies to PM2.5, as all urban areas saw a reduction except Poland. The most noticeable reductions were in France (18%), Italy (20,5%), Portugal (23,5%), and Slovenia (18,4%)<sup>72</sup>.

Reduced vehicle traffic also led to reductions in road accident fatalities. Out of 25 EU Member States, 19 saw a decline in road deaths in April 2020 in comparison to the month of April during the previous three years. 910 people lost their lives compared with the previous average of 1415 fatalities, a reduction of about 35%<sup>73</sup>.

## BEST PRACTICE

The authors recommend the information gathered by the EUROPEANMOBILITYWEEK partners, such as the resources on ‘**COVID-19 and mobility**’, ‘**reinventing cities after COVID-19**’, as well as the **SUMP Topic Guide on COVID-19 Resilience**.

## Safety measures in public transport

Several European cities opted for dedicated buses for vulnerable groups or essential workers at the height of the COVID-19 pandemic, such as the Romanian city of Iasi<sup>74</sup>. Similar measures can be found in other cities, such as Dublin, which opted to maintain the frequency of buses on existing routes, despite the decrease in public transport use. Furthermore, bus routes were adapted to avoid overcrowding at narrow bus stops and to accommodate cycle paths on the roads of the Irish capital<sup>75</sup>. Sharing of information is also of significant benefit in the action against the pandemic, for example additional occupancy information shared via smartphone applications by Deutsche Bahn (German Railway Services<sup>76</sup>) and buses in Catalonia<sup>77</sup>, Spain.

## Active mobility during COVID-19

As many people chose active mobility options like walking and cycling, various measures were taken by urban municipalities to encourage active mobility and reduce the burden on public transport infrastructure. Many cities extended their temporary alternative mobility infrastructure to create permanent solutions. At the time of the publication of this document, it remains unclear whether all temporary measures will remain, so we focus on a selection of permanent measures.

The Italian city of Milan was inspired by several cities across the globe to rethink the distribution of road space in the urban centre. The policy document ‘Strade Aperte’ (Open Roads) aims to extend bicycle lanes and pedestrian space to open up city streets to active mobility and shift the focus away from the passenger car. The Open Roads programme adopts prominent solutions from other cities such as Berlin and Barcelona to ensure the planting of trees, revamping boulevards and restructuring junctions with a significant traffic volume<sup>78</sup>. Whereas other cities defined a tangible goal of a specific number of kilometres of cycling lanes, the Milan programme aims to create a mental shift towards a focus on active mobility.

Bordeaux, an eponymous wine region with 250.000 inhabitants has set up 78 kilometres of pop-up bike lanes, temporary bike stands in the city centre and a dedicated fleet of 1000 rental bikes for students, as well as 200 additional e-bikes to boost the existing rental fleet<sup>79</sup>.

## Fast-tracking of Sustainable Urban Mobility Plans (SUMPs)

Bologna, a student city and the capital of the Italian Emilia-Romagna region, will extend its current network of 145 kilometres of cycle paths to about 500 kilometres over the coming years. Its cycling plans, developed within the framework of the Sustainable Urban Mobility Plan (SUMP), were accelerated during the COVID-19 pandemic. 60% of the plans from Bologna’s SUMP, the Bicip Metropolitana, to connect the city centre, commercial and residential areas of the metropolitan region, were due to be finished by the end of 2020 according to the mayor of Bologna<sup>80</sup>. The SUMP played a key role, as it allowed the metropolitan area and the city of Bologna to swiftly implement existing plans. A Sustainable Urban Mobility Plan has strategic, long-term objectives, but it also includes short-term targets. This flexibility has allowed other towns and cities with a SUMP, like Antwerp and Ghent (Belgium), Katowice (Poland), Lisbon (Portugal) and Szeged (Hungary), to fast-track agreed measures during the COVID-19 pandemic as circumstances and priorities change<sup>81</sup>.

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