EUROPEAN**MOBILITY**WEEK

16-22 SEPTEMBER 2020

THEMATIC GUIDELINES



#mobilityweek



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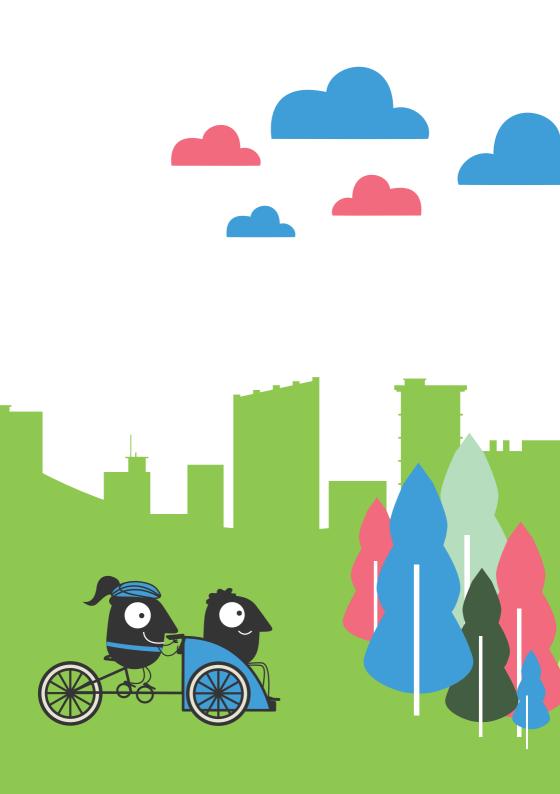
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Statement regarding COVID-19 pandemic

The present Thematic Guidelines were produced before the COVID-19 pandemic arrived in our lives. The texts included in this document don't necessarily reflect the most updated situation. During these weeks, the way we move in our towns and cities has exceptionally changed. Many cities are enlarging space for active mobility. Some have realised that a new and more sustainable approach regarding urban transport is possible.

A factsheet with the lessons learnt over the weeks of lockdown will be published later this year to complement these Thematic Guidelines and to help local campaigners get ready for the celebration of EUROPEANMOBILITYWEEK from 16-22 September 2020.

We understand that this is a difficult moment for many of the towns and cities who have participated in our campaign over the years, and we extend our solidarity to you all.

Introduction to this year's theme: 'Zero-emission mobility for all'

In 2020, the EUROPEANMOBILITYWEEK theme is 'Zero-emission mobility for all'. This reflects the ambitious targets of a carbon-neutral continent by 2050, as laid out by Ursula von der Leyen, President of the European Commission, when presenting the European Green Deal. The theme also aims to highlight the importance of accessibility to zero-emission transport and promote an inclusive framework involving everyone.

Whereas researchers identified a reduction in car journeys in major cities, and 50% of trips are foreseen to be made on public transport, by bicycle or on foot in the upcoming years¹, recent studies by the European Environmental Agency (EEA) confirm a significant rise in transport emissions in comparison with 1990 levels². Specifically, emissions from the entire transport sector increased by 28% between 1990 and 2018, which highlights the urgent need to foster carbon-neutral transport solutions in urban areas. Even though several major European metropolitan areas have adopted stringent measures, the share of renewable energy used for transport remained at 8.1% in 2018³.

Climate change and related environmental effects, such as floods, droughts or heat waves, constitute one of the most imminent threats to the wellbeing of Europeans. In accordance with the Paris Agreement, which aims to keep global warming within a 1.5-degree threshold, it is essential to achieve carbon neutrality by 2050⁴. Carbon neutrality can be reached through a combination of methods, including the reduction of carbon emissions by favouring lowand zero-emission solutions for public and individual transport, as well as walking and cycling. According to recent estimates, around 80% of the world's population will live in urban areas by 2050, so cities provide the perfect framework to put these ambitious plans into practice⁵.

^{1.} https://bit.ly/2zsPHQz

^{2.} https://www.eea.europa.eu/publications/the-first-and-last-mile/

^{3.} https://www.eea.europa.eu/highlights/walking-cycling-and-public-transport

^{4.} https://ec.europa.eu/clima/policies/strategies/2050 en

^{5.} https://bit.ly/3eNR5gM

Despite the different climatic, geographical and socio-economic conditions across Europe's urban areas, measures can be taken to promote a carbon-neutral and inclusive urban environment. Therefore, EUROPEANMOBILITYWEEK 2020 encourages people and local authorities to take steps to achieve the long-term goal of a carbon-neutral continent.

Even though the goal of the long-term strategy lies in the distant future, direct measures to tackle pollution, carbon emissions or traffic congestion can have imminent effects. Congestion in and around urban areas currently costs nearly €100 billion annually, or one percent of the EU's GDP⁶. Furthermore, over 400,000 premature deaths are directly related to air pollution⁷. Thus, the initiation of long-term measures, such as the promotion of cycling and walking, as well as low-emission and carbon-neutral public transport, will have very positive immediate effects.

This document takes a closer look at leading cities with ambitious targets for zero-emission and inclusive mobility and presents ideas for municipalities to promote the ambitious targets of the European Commission to residents as they engage in this year's EUROPEANMOBILITYWEEK.



^{6.} https://ec.europa.eu/transport/themes/urban/urban mobility en

^{7.} https://bit.ly/34Z6SF5

Cities are vital for success of the European Green Deal

Sharing best practice, as proposed by the EU Covenant of Mayors, will support local policy makers in achieving the Europe-wide targets of a climate neutral economy⁸. Even though various municipalities across Europe have ambitious initiatives, these are difficult to quantify, as mobility plans tend to focus on the long-term future. Furthermore, certain low- or zero-emission technologies, such as hydrogen buses, are not yet able to offer economies of scale. The European Commission welcomes the ambitious targets put forward by European cities, such as Amsterdam, Barcelona, Copenhagen, Prague and others, to achieve a zero-emission urban environment by 2050 or even earlier. In the following two sections, we take a closer look at leading cities with initiatives to reach zero-emission targets by 2050 or even earlier, as well as cities with infrastructure investments.



CITIES WITH AMBITIOUS ZERO-EMISSION TARGETS

Cities such as Amsterdam, Barcelona and Copenhagen, are determined to reach their own ambitious targets by using various policy measures, of which several are illustrated below. The recurring theme is that all cities have a holistic approach including various measures to reduce pollution.

Amsterdam

The Metropolitan Area of Amsterdam, home to nearly two-and-a-half million inhabitants, centrally located in the urban Randstad area, proclaimed ambitious targets to reach the objective of zero emission by 20309. Thus, the largest city in the Netherlands launched various initiatives, such as the promotion of walking and cycling, extension of public transport services and investment in charging infrastructure for electric vehicles¹⁰.

In recent years, a large part of the historic city centre has been pedestrianised and individual passenger transport by car is restricted. This initiative increases safety for cyclists and pedestrians, while creating a lively atmosphere in many streets and squares and other areas of throughout the inner city¹¹. Visitors and commuters are redirected to parking facilities outside the city centre, thanks to a holistic parking policy covering the entire urban area. Other modes of transport,



96% Expected decline of NOx emissions by 20301

400% increase of EV charging stations, powered by renewable energy²



- 1. https://bit.ly/2Kv5511
- https://bit.ly/3eOSNOL

^{9.} https://www.amsterdam.nl/en/policy/sustainability/clean-air/

^{10. &}lt;a href="https://www.amsterdam.nl/en/policy/policy-traffic/">https://www.amsterdam.nl/en/policy/policy-traffic/

^{11.} https://bit.ly/2yDsUkv



such as ferries, which connect the northern and southern parts of the city, will be electrified or replaced by hybrid models by 2022¹².

Besides its efforts to enhance safety for pedestrians and cyclists and its strong stance on the reduction of emissions, Amsterdam is increasing its investment in electric vehicle charging stations. In the coming years, the Metropolitan Area of Amsterdam has pledged to install 20,000 charging stations for electric vehicles in the City of Amsterdam and the surrounding regions of North Holland, Flevoland and Utrecht. This significant investment will more than quadruple the existing 4,600 public and semi-public charging stations¹³. All 20,000 additional charging points will be powered by renewable energy¹⁴.

^{12.} https://bit.ly/2Vwwvdg

^{13.} https://bit.ly/3eMoJUa and https://bit.ly/2xSPXYs

^{14.} https://bit.ly/3bABCi8

Barcelona

beginning of 2020¹⁵ the Barcelona Metropolitan Area took its first steps a zero-emission urban region with a stricter low emission zone (LEZ), which bans the most environmentally harmful cars (Euro II norm or lower) on working days from 7am until 8pm. This measure, which affects most of the metropolitan area of the Catalonian capital, has produced immediate impact. Only one month after its introduction, the NOx-levels dropped by 19% in comparison with the 2017 baseline. Besides the penalties of the low-emission zone, the city administration also offers incentives. An old vehicle, which would be otherwise be banned access by the LEZ, can be traded in for a threeyear public transport ticket.

Besides the envisaged reduction of private cars in the centre of Barcelona, investments by the city aim to boost access to public transport. Barcelona Metropolitan Transport invested €800 million over four years, to increase the frequency of lines 1-5 to less than four minutes during peak hours.¹⁵ Furthermore, 23 zero-emission buses have been purchased, which boosts the overall number of vehicles powered by electric, natural gas or hybrid propulsion to 266. Barcelona Metropolitan Transport aims to achieve an active fleet composed exclusively of electric, hybrid and compressed natural gas vehicles by 2030.

NOx levels dropped by 19% compared to 2017 Free public transport for three years after giving up car-use €800 million invested in the last four years

^{15.} https://bit.ly/2VWYZvt

^{16.} https://bit.ly/3aA2ltQ

Copenhagen

Whereas the European Green Deal is ambitious, the City of Copenhagen has even higher aims. Carbon-neutral transport by 2025¹⁷ is the defined goal of the Danish capital, which has introduced measures related to energy consumption and mobility. The latter focus on directly measurable targets for vehicles and individual journeys. Copenhagen aims to achieve carbon-neutral public transport with a shift from private cars to walking, cycling and public transport. In total, 75% of all trips in Copenhagen by 2025 will be made on foot, by bicycle or by public transport and thus be carbon neutral¹⁸. In all its endeavours. the municipality leads by example, thus the City of Copenhagen's vehicles run on electricity, hydrogen or biofuels.

The municipalities are capitalising on the cycling enthusiasm of the Copenhageners, as well as the flat topography of the capital. Cyclists can rely on an extensive future network of cycle paths, which even includes "super cycle highways". These highways evolved from a unique cooperation between 28 municipalities and the Copenhagen Capital Region, which aims to promote safer, faster and easier cycling and commuting by bicycle¹⁹.

Since the opening of the first route in 2012, an additional five routes were built by 2017, which was just the beginning a network of 45 routes with a total length of 746 kilometres. In addition to these highways, Copenhagen has another

20,000 tons of CO, savings per

One year of increased life expectancy

1.1 million less sick days per year



^{17.} https://bit.ly/3cBboMy

^{18.} https://bit.ly/3eQ2j4f

^{19.} https://bit.ly/2VxwxkT



400km of cycle paths²⁰. Estimates by the Danish state suggest that cycle superhighways could potentially increase the number of bicycle trips in the Capital Region by 6 million compared to 2019 figures.

In case commuting along the super cycle highways is not the preferred method for users to enter the City of Copenhagen, they can take their bicycle on the commuter trains (S-trains) for free²¹. Within a year of the introduction of this measure throughout the 170km long network, the number of transported bicycles rose from 188,000 to 630,000, i.e. over 300%²². One of the reasons for the increased number of transported bicycles is the conversion of designated bicycle carriages with folding seats.

All measures mentioned above have led to significant health benefits for residents in the Copenhagen Capital Region. According to municipal estimates, this equals around 1.1 million less sick days, as well as 20,000 tons of CO2 savings per year²³. If the Danish capital succeeds in reducing pollution levels to a similar level to rural Denmark, life expectancy will increase by one year by the year 2040²⁴.

^{20.} https://supercykelstier.dk/about/

^{21.} https://www.dsb.dk/en/travelers/bicycles/

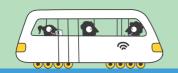
^{22.} https://bit.ly/3ay53jE

^{23.} https://bit.ly/2S4KTau and https://bit.ly/3aw7PFT

^{24.} https://bit.ly/2S3fx3Y

57% of all journeys are made by public transport. For almost 50% of public transport passengers, the metro is the fundamental public transport mode in Prague and forms the backbone of the public transport network (2017)





1. https://bit.ly/2KudrpB

INFRASTRUCTURE INVESTMENTS SUPPORT EMISSION REDUCTION

In addition to the above examples of extensive political measures taken by municipalities, there are similarities in the approach adopted by the cities of Prague, Graz and Riga to achieve behavioural change by investing heavily in infrastructure for public transport, cycling and walking.

Prague

The City of Prague, as one of the largest Central European capitals and one of the fastest growing cities in Europe, also aims to become a zero-emission city by 2050²⁵.

The Czech capital has heavily invested in public transport over recent years. In 2017 alone, €245 million were devoted to infrastructure, including the renovation of stations and the extension of tram lines²6. Efforts have been enhanced by the decision to build a fourth metro line, connecting the historic city centre with the south-eastern part of the city. The €2.7 billion investment started in the summer of 2019²7. A major new transport terminal, Praha Smichov, is being developed to connect rail, buses, metro and car travel. The new terminal will encourage the use of public transport by speeding up and facilitating the transfer between transport modes.

^{25.} https://bit.ly/352475H

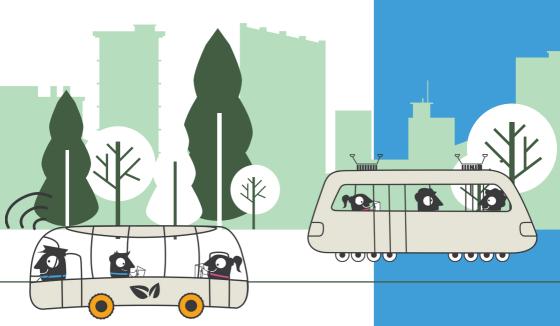
^{26.} https://ceec.uitp.org/prague-investment

^{27.} https://bit.ly/2SjQv0P

Another important upcoming construction project will create a new eight-kilometre metro line, which will link the existing metro network with a new tram line and thus reduce suburban car and bus emissions. These are two examples of ways the city is working to cut the number of conventional cars on the roads.

The city administration is also striving to strengthen electromobility and boost active transport. Walking and cycling are encouraged through the development of high quality, green public spaces.

The number of people using public transport within the city has increased from 1.03 billion trips in 2000 to 1.28 billion trips in 2016 (i.e., an increase of 24%) - 2018¹



1. https://bit.ly/2VT1nDI



300% increase of annual public transport subscriptions after subsidy



Graz

The city of Graz (Austria) has a long tradition of public opinion polls on mobility behaviour, which began in the 1980s. The latest survey shows a slight shift from motorised vehicles towards walking and cycling. Thus, roughly 20% of residents take public transport, 42% use private vehicles and about 38% either walk or cycle²⁸. The relatively high percentage of cyclists and pedestrians is because Graz has Europe's largest pedestrian zone. Additionally, the city has been active in promoting cycling, walking and public transport, particularly in recent years. Efforts were synchronised in a mobility concept for 2020. which promotes cycling and walking by investing in infrastructure, including cycle paths and pavements, especially in the suburbs of Graz.29

Additionally, an investment plan has been adopted for the coming years for the extension of tram services. The €117 million plans will reduce bottlenecks, extend the number of two-track tramways, and expand existing lines. City officials emphasise that the investment package, financed by the City of Graz and the Region of Styria, aims to improve the punctuality and frequency of trams³0. Like Vienna, Graz is promoting the purchase of an annual public transport subscription for people with their main residence in the Styrian capital. In 2016, the City of Graz decided to subsidise the annual public ticket for residents. In 2020, the annual ticket is priced at €456 for non-residents, whereas inhabitants of the Styrian capital pay

^{28.} https://bit.ly/3aA2uNG

^{29.} https://bit.ly/3buYPIL

^{30.} https://steiermark.orf.at/v2/news/stories/2893728/

only €228, or half the price. The initial price reduction resulted in a 300% increase in annual subscriptions³¹. According to latest figures, more than 10% of inhabitants have an annual ticket. Even though this figure does not seem very high at first sight, one should bear in mind that 60,000 inhabitants, are students, who have different subscription packages.³²

These efforts are especially important, since the citizens of Graz opposed the idea of a low-emission zone in a local referendum back in 2012. However, a regional low-emission zone for lorries has been operating in Graz and the Region of Styria since 2014, obliging them to comply with Euro III emission standards. Styria is located in the Alps, in a basin-shaped valley, where it is difficult to avoid the concentration of pollutants.



38% of locals walk & cycle

Reduction in pollution without low-emission zone



^{31. &}lt;a href="https://bit.ly/3bAuB0D">https://bit.ly/3bAuB0D

^{32.} https://bit.ly/3by4ffK



Urban Vehicle
Access
Regulation
introduced to
foster cycling
and walking



Riga

The Latvian capital, home to one third of the entire population, has invested in cycling, pedestrian and public transport infrastructure in recent years, especially with the financial support of the European Union. Whereas there is no indication of Latvia having exceeded European air quality standards, Riga faced pollution challenges, connected to the densely built historic city centre. Thus, a decision was taken to pedestrianise the old town over recent years, in order to reduce pollution and promote tourism.³³ Banning cars from various streets of the city centre between 12:00 and 06:00 from Monday to Saturday fosters the safety of pedestrians and cyclists³⁴.

Additional measures were taken by investing in public transport with the support of the European Investment Bank, which provided €75 million to finance the purchase of 20 low-floor trams and 20 hydrogen-powered buses, to replace older vehicles. These investments, which were part of the Juncker Plan, also include the construction and upgrade of tram and hydrogen infrastructure.³⁵

Riga, as the largest city of the three Baltic states, realised the potential of cycle paths already in the early 2000s. 13.5km of cycle paths were built in 2001 to connect the old town with one of the districts on the outskirts of Riga. In recent years, cycling infrastructure has been a high priority for the city administration. Cycle paths were constructed to connect the suburbs with the city

^{33.} https://bit.ly/2KtCyJ0

^{34. &}lt;a href="https://bit.ly/350akPy">https://bit.ly/350akPy (p15)

^{35.} https://bit.ly/2VNdkdS

centre and to provide an alternative route to reach the beaches of the Baltic Sea. Thus, cycle paths can be used to commute to and from the city, as well as for recreational purposes and longer trips to Baltic beach resorts, such as Jurmala. According to the EU-funded "CIVITAS Handshake" project, awareness of the benefits of cycling is increasing every year, and the 68 kilometres cycle network is rising in popularity.

Opportunity of European Investment Bank loans

Confidence to invest in cycling infrastructure despite harsh winter climate



^{36.} http://rdsd.lv/velosatiksme-riga/velosatiksme-riga



80% reduction in air pollution in Brussels during Car-Free Day

25% reduction of nitrous oxide in Paris

Raising awareness regarding congestion in urban areas



IMPLEMENTATION OF ZERO-EMISSION MEASURES

Besides the above-mentioned city initiatives aiming towards zero-emission levels, many smaller and larger urban areas in Europe have taken steps to reduce overall pollution and greenhouse gas levels and facilitate accessibility to transport. These examples focus on solutions related to infrastructure investments, as well as "soft solutions", such as price reduction for public transport.

Reduced air and noise pollution from limited car use

Since its introduction in the 1990's. Car-Free Day has been a successful initiative in reducing air and noise pollution, and an excellent tool for raising awareness and catching the attention of the media. A clear reduction in the main pollutants can be observed on Car-Free Day, especially in heavily congested larger urban areas. CO2 and NOx levels in Brussels dropped by 75-80%37. Other cities, such as Paris, registered a 25-30% reduction38 in pollution. Even though these measures are just for a short period, the significant reduction in pollution shows a clear correlation between traffic and emission and inspires residents to support measures reducing polluting traffic in city centres. As part of last vear's EUROPEANMOBILITYWEEK events. the Municipality of Kozani in Greece banned all car and motorcycle traffic on two main streets in the city centre for five hours and, as part of Car-Free

^{37.} https://bit.ly/2S5S16p

^{38.} https://bit.ly/3cM4jbQ



Day, it used the free space to organise the campaign's closing ceremony with community events such as sport games for kids and dance shows. PM10 and NOx levels dropped by $30\%^{39}$ compared to the next day's airquality measures. The City of Sofia also organised a Car-Free Day event and monitored the air quality during the whole day using a mobile station installed by the Executive Environment Agency. Measurement statistics showed good air-quality levels of PM10 during the whole week of the campaign.⁴⁰

^{39.} EUROPEANMOBILITYWEEK Award application of the City of Kozani (2019)

^{40.} EUROPEAN**MOBILITY**WEEK Award application of the City of Sofia (2019)



21 stations charge 164 buses in Groningen and surrounding regions

Common infrastructure serves several different bus types

90% reduction in CO₂ emission from public transport



Groningen –a new fleet of electric buses

The City of Groningen (The Netherlands) decided to completely replace its bus fleet of petrol-fuelled buses with an all-electric fleet. The entire fleet of 164 buses from three manufacturers has been operational since late 2019. Besides its investment in vehicles, 21 charging stations have been installed at bus depots and other locations in Groningen and surrounding regions. Moreover, the new electric charging infrastructure can be used by all three types of electric bus and is the largest existing regional network of e-buses in the Netherlands. Besides the reduction in noise and pollution, the extensive investment also results in a 90% reduction in CO2 emissions⁴¹.

In addition to the investments, the City of Groningen has gained the reputation of being one of the most bicycle-friendly cities in Europe. Since the first spatial planning measures to promote cycling in the 1970s, the student city in the North-East of the Netherlands has established a "bicycle first" policy. This framework has led to an impressive modal split in favour of the bicycle. Around 60% of all trips in the City of Groningen are made by bicycle, and the city continues to invest in cycling infrastructure.

Whereas many European cities build cycling infrastructure such as cycle paths, Groningen has gone a step further, with heated bicycle paths to avoid icy roads for cyclists. Additionally, several park-and-ride locations have been created in the outskirts of the Dutch city. These hubs provide the opportunity to switch from the car or the

^{41.} https://bit.ly/2VONVkc

regional train to the bicycle for the "last mile". Whereas other European cities are busy resolving bottlenecks for private cars or public transport, Groningen is reducing the bottlenecks for cyclists, such as dangerous intersections or traffic lights.⁴²

Heated cycle paths for improved safety

Park-andride scheme reduces pollution in the inner city of Groningen



^{42.} https://bit.ly/2VVtvG5



FREVUE Project - zero-emission urban freight solutions

If city centres are to remain a worthwhile shopping destination, it is essential to consider the transportation of large quantities of goods to shops, boutiques and grocery stores. Therefore, zero-emission solutions need to be found for urban freight. The EU-funded FREVUE project tested over 70 electric vehicles of various sizes in different urban environments throughout Europe. The electric vehicles, which ranged in size from 3.5 to 19 tons, operated in real-life conditions to deliver beverages, parcels, post and other goods. In this way, FREVUE took an important step towards achieving CO₂ free city logistics in major urban centres by 2030 and improving air quality in European cities⁴³.

Even this comparably small test had the potential for significant CO₂ and NOX savings. The vehicle pilot tests, which took place in several large European cities throughout the duration of the project⁴⁴, showed that their deployment alone saved up to 2000kg of NOx. According to the project's research, this is the equivalent of the total road transport NOx emissions in the city of London on any given three days in 2013.

Therefore, the comprehensive rollout of zeroemission freight solutions can have significant potential for improving air quality. Researchers of the FREVUE project also emphasised that if London alone were to electrify 10% of its freight fleet by 2021, the capital could save over €1⁴⁵.

^{43.} https://frevue.eu/

^{44.} https://cordis.europa.eu/project/id/321622

^{45.} https://bit.ly/2VU4aMT

INCLUSION IN PUBLIC TRANSPORT IS KEY FACTOR FOR CIVIL PARTICIPATION

Another aim of the annual theme 'Zero-emission mobility for all' is to highlight that low- and zero-emission mobility solutions should soon become affordable and accessible for everyone. It addresses people who are physically and mentally challenged, as well as young people, senior citizens, women, minority groups, people with special needs or the socially disadvantaged. Access to public transport promotes social and economic inclusion, access to leisure and cultural activities, and provides freedom of movement for all, without the necessity of relying on car ownership.46 The social dimension of transport has been debated by city administrations all over Europe. Some examples are highlighted in the following pages.

InfoPoints for people with special needs in Vienna

For blind people or people with reduced mobility, a short trip by metro or bus can present a considerable challenge. Therefore, accessibility of transport is essential for an inclusive society. Modern tools and infrastructure upgrades have strongly facilitated the usability of public transport. "Wiener Linien", Vienna's main transport operator, has provided several solutions to support people in need. In order to provide information, multisensory "InfoPoints" have been installed across the metro network of the Austrian capital.



Facilitating access to public transport for people in wheelchairs by switching to low-floor trams

Soon to reach 100% fleet renewal



"InfoPoints" provide news flashes and other relevant information through a text-to-speech website. These solutions have been developed, tested and upgraded by Wiener Linien in close cooperation with the Austrian Association in Support of the Blind and Visually Impaired. This cooperation has been mutually beneficial over the last 20 years and highlights the advantages of cooperation between public transport operators and civil society organisations⁴⁷.

Remodelling public transport infrastructure in Kraków

Investment in public transport is especially important for growing cities. Kraków, as one of the fastest growing cities in Europe, also took accessibility into consideration. Thanks to the financial support of the EU, the city of Kraków invested in a new fleet of 35 modern and energy-efficient low-floor trams. The outdated rolling stock of trams operating on the more than 100km-long network, are being gradually replaced by 35 new and energy-efficient low-floor trams⁴⁸. The new trams provide easy access for pushchairs and persons in wheelchairs.

^{47.} https://bit.ly/3bAmGAI (P 315)

^{48.} https://bit.ly/3eJbR10



Until all high-floor trams are replaced, staff have been trained to support people with special needs at major public transport interchanges. This was achieved in the framework of AENEAS, an EU-funded project focusing on mobility in an ageing society. Another part of the project included an awareness-raising campaign for children and young people to behave considerately towards senior citizens in public transport⁴⁹.

^{49. &}lt;a href="https://bit.ly/2W8iDoL">https://bit.ly/2W8iDoL (P 270)



30.000 rides per year / successful measure / around 80 trips per day

92% user satisfaction



Ride-hailing of public transport in South-West Netherlands

Imagine you are living in a rural area and the only bus line you can use to travel to the next city is discontinued. This idea can become a reality if transport operators face challenges, such as driver shortages, reduced revenue or economic cutbacks. Furthermore, ride-hailing or ride-sharing services, such as Uber, are often unavailable in suburban or rural areas⁵⁰.

Therefore, the Dutch Province of Zeeland, a region in the South-West of the Netherlands, created a taxi service operating in the entire province along discontinued bus routes. Users can book a trip in advance with the "Haltetaxi" service, which serves as a normal bus. The transport operator has the flexibility to stop at pre-reserved stops, instead of operating full bus lines with low utilisation rates. The service runs every day until 23:00, and includes interchange stops with conventional services.⁵¹

What's the use of a good public transport network if the fares are not affordable for all? This question was raised by the Vienna city authorities in 2011. Since May 2012 the entire Vienna network can be used for just €1 per day with the purchase of an annual subscription. Since the introduction of the €365 annual ticket, subscriptions to the Viennese public transport have doubled. The latest figures show that nearly 50% of residents in Vienna have an annual subscription.⁵² According to recent

^{50.} https://bit.ly/2VImZnw

^{51.} https://bit.ly/2Y9ObNC

^{52.} https://bit.ly/3cltuwa



estimates, nearly 40% of all trips in Vienna are made by public transport, in comparison with around 30% by car. Besides the price reductions, investments in the extension of metro and tram services have enhanced accessibility for a larger group of Viennese citizens.⁵³

^{53.} https://bit.ly/3cTYYzB



Women are a vulnerable group of public transport users, who often feel unsafe in urban environments, especially during off-peak hours. Therefore, many public transport operators in Europe have invested in security personnel, safety infrastructure or surveillance.

In Germany, various cities and public transport operators have taken initiatives to enhance security for women. Besides the 5,900 security cameras, which are already installed in vehicles and at public transport stops in Hamburg, 400 employees also ensure safe travel for women throughout the vast public transport network⁵⁴. Furthermore, a total number of 177 "emergency columns" have been installed. These emergency call systems provide a direct connection to the central security office, and can be used to summon assistance, if necessary⁵⁵.



400 permanent security staff

177 emergency call systems

5,900 cameras



^{54.} https://bit.ly/2zqED6i

^{55.} https://bit.ly/359ku0o

Warsaw - Accessibility

The Polish capital started a city-wide initiative to enhance accessibility by introducing legislation, which guaranteed that all public spaces, roads and building investments comply with accessibility standards. After the introduction of the legislation in 2017 it took several years to modify metro stations, bus stops and train stations. Public have investments considerably improved accessibility for persons with reduced mobility in buses and metro carriages. Currently, 87% of all bus stops meet accessibility standards. Warsaw's construction projects also included 40 kilometres of new cycle paths. Visually impaired people were also supported with the instalment of 64 traffic lights with sound devices.56

Besides these extensive construction projects, the City of Warsaw is also investing in new low-floor trams. Overall, the Polish capital bought 273 trams, which will enhance the speed and frequency of the public transport service. ⁵⁷ These extensive efforts were also recognised by the European Commission, which presented Warsaw with the "Access City Award 2020".

40km cycle paths

Roads, public spaces and buildings need to comply to the accessibility rules

Trains & 30 metro stations are accessible for people with reduced mobility

All buses & 87 bus stops were renovated to meet accessibility standards



^{56. &}lt;a href="https://ec.europa.eu/social/main.jsp?catId=1141">https://ec.europa.eu/social/main.jsp?catId=1141

^{57.} https://bit.ly/2Y8wVYN



Reducing the burden of the low-emission zone on low-income groups in Ghent

The Belgian city of Ghent established a lowemission zone at the beginning of 2020⁵⁸. Aside from the expected reduction in pollution levels, low-emission zones can generate a financial burden for low-income car owners. Ghent introduced a unique support scheme to reduce the financial burden on low-income groups by granting a premium of €1,000 for a diesel car and €750 for a petrol car⁵⁹. The premium was utilised by 350 residents over a period of three years and the scheme ends in June 2020. City officials expect applications to rise in 2020 with the introduction of the low-emission zone⁶⁰.

^{58.} https://www.nieuwsblad.be/cnt/dmf20190416 04334151

^{59.} https://bit.ly/2SbTd8f and https://bit.ly/2VF5XGx

^{60.} https://bit.ly/3cluCQq

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