

---

## WHY PUBLIC AND SHARED TRANSPORT MATTER

- BUILDING BACK EUROPEAN PUBLIC TRANSPORT  
AFTER COVID-19

*Annika Degen*

- HOW CAN SHARED MOBILITY CONTRIBUTE TO THE  
POST-PANDEMIC URBAN MOBILITY TRANSITION?

*Albert Gragera*



### **Annika Degen**

*Deputy Director, Europe Department,  
International Association of Public Transport (UITP)*

**T**he COVID-19 pandemic has had a major impact on the European public transport sector. In the years leading up to 2020, passenger numbers had constantly grown. The European Green Deal (EGD) further highlighted questions around daily mobility and stressed the importance of safe and efficient public transport systems for the transition to clean and sustainable mobility. Then, the COVID-19 lockdowns led to a sudden and sharp decline of public transport passenger numbers (down as much as 90% during the first wave) and enormous farebox revenue losses throughout 2020 and 2021. Yet, the pandemic has also demonstrated the vital role of public transport systems for accessing work and essential services. Across European cities, despite low passenger numbers public transport companies, often backed by local authorities, continued to operate at a next-to-normal level to provide mobility to those who rely on them.

The pandemic's economic impact on the public transport sector went beyond lost fare revenue, which was further aggravated by the need to impose capacity limits to ensure physical distancing. More frequent cleaning and disinfection, the supply of essential protective gear to staff and passengers, and the need to set up new processes and IT tools to manage passenger flows and avoid crowds have all added to the running costs of public transport companies. Several EU member states have established rescue packages to help the sector through the crisis, but often these have only eased part of the financial pressure and only for a limited time.

With lockdown measures lifted in many parts of Europe in spring 2021, ridership levels have slowly increased again. However, they have not yet returned to pre-pandemic levels. The calls by some politicians and authorities for people to avoid public transport during the pandemic has discouraged its use. It will likely take years to fully regain the trust of passengers, despite the evidence that the risk of catching COVID-19 on public transport is very low when the measures recommended by the health authorities are implemented, including the wearing of masks, disinfection of surfaces and good ventilation and air renewal (UITP, 2021). Unlike places with a much higher probability of infection – including offices, schools and universities,

health centres, cultural events, bars and other places where people gather to eat, drink and socialise for an extended period of time – the general behaviour of passengers (who interact and talk little and are forbidden to eat on board) limits the spread of droplets.

The European Green Deal highlights questions around daily mobility and stresses the importance of safe and efficient public transport systems for the transition to clean and sustainable mobility.

## **I. The role of public transport in a green and just recovery**

As vaccinations are rolled out across Europe, countries are striving to overcome the economic crisis while at the same time advancing on the implementation of global agendas like the Paris Agreement on Climate Change, the 2030 Agenda for Sustainable Development and the New Urban Agenda. To reduce greenhouse gas emissions from transport, the “avoid-shift-improve” principle remains valid and can guide government action at all levels. Cities play an important role through their management of daily mobility. Besides walking and cycling, which need to be further encouraged, public transport offers multiple environmental, social and economic benefits that can form the basis of fairer and healthier cities. Efficient local mobility systems with public transport as their backbone offer inclusive and affordable services that are accessible to anyone, independently of social standing. They also offer health benefits and encourage an active lifestyle by reducing congestion, road accidents, greenhouse gas (GHG) emissions, pollutant emissions and noise. Every kilometre travelled on public transport saves 95 grams of GHG emissions and 19 grams of NOx compared to motorised private transport (VDV, 2019).

Public transport also acts a strong lever of local economic recovery and growth by connecting businesses, people and communities to economic and social opportunities. The sector provides millions of decent local jobs at various levels of qualification, and is often amongst the largest employers in a city. The investments public transport companies and authorities make mostly benefit businesses and SMEs (small and medium-sized enterprises) within the region and positively impact the local economy. It has been demonstrated that every euro invested in public transport creates a benefit in the wider economy of over five times the initial investment (UITP, 2018). A shift to sustainable public transport thus not only brings cities and regions environmental and social benefits but also economic ones.

The EGD has initiated a fundamental transformation of many sectors, including transport. The European Commission’s Sustainable and Smart Mobility Strategy published in 2020 (see Sluiter in this volume) provides support to the energy and digital transition in transport. However, it also recognises that technological innovation alone will not be sufficient to reach the EGD objectives in the transport sector. A modal shift towards cleaner forms of transport, especially active mobility and public transport, is also needed. With 40% of road transport happening in cities, there is much potential to reduce transport emissions by addressing daily mobility and commuting habits at the local level. The Commission’s plan to support 100 European cities in their transformation towards climate-neutrality by 2030 is testimony to the leading role cities will play in Europe’s green transformation and investments in public transport will have a large role to play in this process.

## II. The public transport transformations needed to meet the EU's 2030 climate target

The EU's new 2030 climate target proposes to raise the bloc's ambition on reducing GHG emissions to at least 55% below 1990 levels. The expansion and transformation of the European public transport sector, which aims to become net climate neutral by 2050 at the latest, will be vital to making this vision a reality. The public transport sector is therefore facing the triple challenge of *decarbonisation*, *digitalisation* and *growth*.

*Decarbonisation* will require public transport authorities and operators to progressively replace their conventional bus fleets with clean and zero-emission buses. It also requires the setting up of corresponding charging or refuelling infrastructure at depots and in maintenance shops, the upgrading of workshops to enable technicians to access and repair electric vehicle components and the re- and upskilling of staff. Further developing urban rail systems (metro, tram, etc.) will also be necessary to increase the share of zero-emission public transport.

*Digitalisation* brings with it both advantages and necessary readjustments for the public transport sector. Advantages lie for example in predictive maintenance and data-based optimisation of internal processes, such as energy management. Others include better customer information based on real-time data and paperless ticketing. However, digitalisation also requires public transport companies and authorities to invest in new IT tools, infrastructure and skills, including in staff with more diversified profiles, and it has brought new competition in the form of multinational companies offering platform services. Public transport companies will have to develop data strategies and decide whether they set up their own digital customer interfaces or participate in a third-party MaaS (Mobility as a Service) platform. If such a MaaS platform is managed by a public authority, this can enhance trust between the various mobility providers and platform developers, help establish fair rules and safeguard the overall promotion of sustainable mobility.

The third and biggest challenge is to significantly *grow* the public transport offer to attract new passengers and enlarge the capacity in public transport networks within a relatively short period of time. Following the overall mobility reduction and shift towards individualised mobility during the COVID-19 pandemic, the first step must be to regain the trust of passengers. Local authorities will have a central role to play in this process, and many European cities that have set themselves ambitious climate targets are already encouraging the return to and use of public transport and active and shared mobility options as part of their broader climate and sustainability plans.

Further, and more concretely, a greater public transport offer will require more public transport vehicles (buses, trams, metros), increased frequency of services and a both denser and wider network of services. The overall mobility offer in cities, especially for the first and last mile, can be improved by better integrating public transport systems with sharing services and micro-mobility – physically at multimodal stations and digitally on MaaS platforms. More remote regions that are currently poorly served by collective transport need

Efficient local mobility systems with public transport as their backbone offer inclusive and affordable services that are accessible to anyone, independently of social standing.

The public transport sector is facing the triple challenge of decarbonisation, digitalisation and growth.

to be better connected, for example by designing a personalised and demand-responsive transport offer in areas where mass transit does not have a business case.

Each of these three transformations will require huge investments that exceed the limited support for public transport by public authorities. Unless member states have specialised funding schemes in place, public transport providers will have to focus either on expansion (based on current technologies), decarbonisation or digitalisation. Without additional funding, it will be impossible to progress on all three fronts within the short timespan that is politically (and environmentally) required. Given these conditions, it is vital for cities to assess the resilience of their public transport funding, taking into account impending needs and developments and if necessary generate new revenue streams, for example through applying the “user and polluter pays” principles. Distance-based road tolls may not be popular with residents, but they can help cities prepare for a future where fully autonomous vehicles (AVs) roam the streets, unlimited by either electricity prices or labour cost. Toll systems could put a cap on future AV mobility and reduce congestion, while generating revenue streams that can be used to advance collective and clean mobility options.

Funding from the EU may provide additional support for cities. In particular, the Recovery and Resilience Facility (RFF) flagship project on sustainable and public transport (“Recharge and Refuel”) may provide opportunities for local authorities (European Commission, 2020). The EU could further support the urban public transport sector by approving new and extended national support schemes developed in response to the COVID-19 crisis. In the upcoming years, the sector needs an enabling regulatory framework that offers possibilities for it to grow, provide cost-efficient services, decarbonise and digitalise. EU funding schemes for public transport vehicles and infrastructure should be continued and if possible increased. It is also important that the particular needs and perspective of public transport are considered in any European transport initiative, including on alternative fuels infrastructure, autonomous vehicles, MaaS and mobility data policies. The new Urban Mobility Package that will be adopted in September 2021 will present a good opportunity for the EU to further engage cities in the Green Deal agenda. With campaigns and positive communication, the EU can also use its soft power and the Climate Pact<sup>1</sup> to encourage citizens to re-discover public transport.

## References

European Commission, “NextGenerationEU: Commission presents next steps for €672.5 billion Recovery and Resilience Facility in 2021 Annual Sustainable Growth Strategy”, Press Release, Brussels, 17 September 2020 (online). [Accessed on 10.06.2021]: [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_20\\_1658](https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1658)

UITP, “Public Transport Moving Europe Forward”, 2018 (online). [Accessed on 14.06.2021]: <https://cms.uitp.org/wp/wp-content/uploads/2020/08/PUBLIC-TRANSPORT-MOVING-EUROPE-FORWARD.pdf>

1. The Climate Pact is an EU-wide initiative inviting people, communities and organisations to participate in climate action, see [https://ec.europa.eu/clima/policies/eu-climate-action/pact\\_en](https://ec.europa.eu/clima/policies/eu-climate-action/pact_en).

UITP, "Public Transport Is Covid-Safe", October 2020 (online). [Accessed on 10.06.2021]: <https://cms.uitp.org/wp/wp-content/uploads/2020/10/Policy-Brief-PTisCOVID-Safe.pdf>

VDV "Daten und Fakten", 2019 (online). [Accessed on 31 May 2021]: <https://www.vdv.de/daten-fakten.aspx>

