

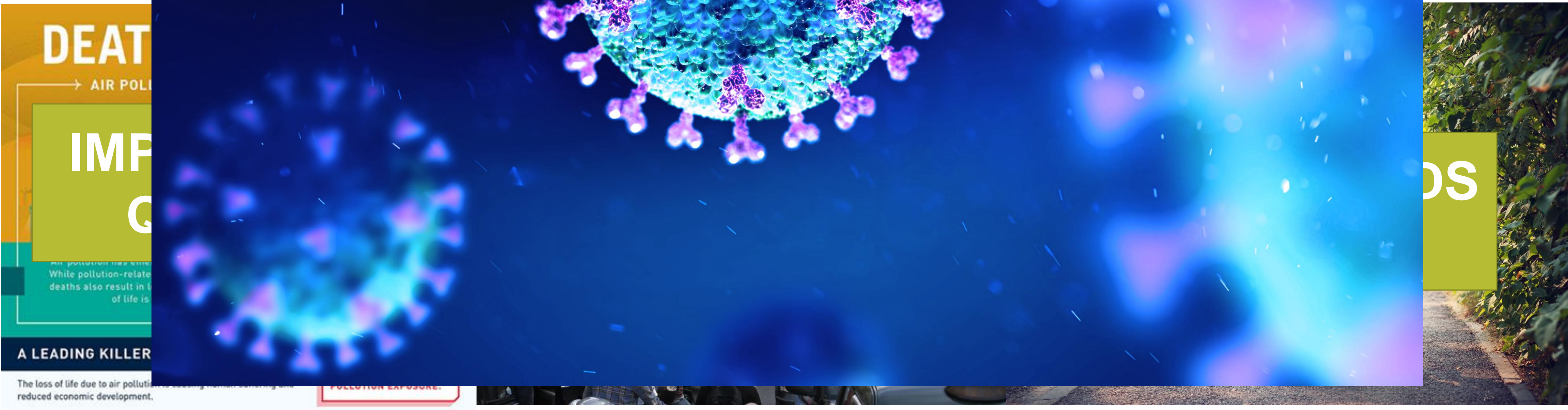
The future of public transport. The role of innovation in a green recovery

Karen Vancluysen, Secretary General, POLIS

18 November 2021



Main urban mobility challenges & policy goals



DEATH

AIR POLLUTION

IMPACT

White pollution-related deaths also result in loss of life expectancy

A LEADING KILLER

The loss of life due to air pollution has reduced economic development.

DS

From lockdown to gridlock?



**Public transport
collapse**

Car as safety bubble



**Redistributed
space**

**Active travel
boom**

Cleaner air

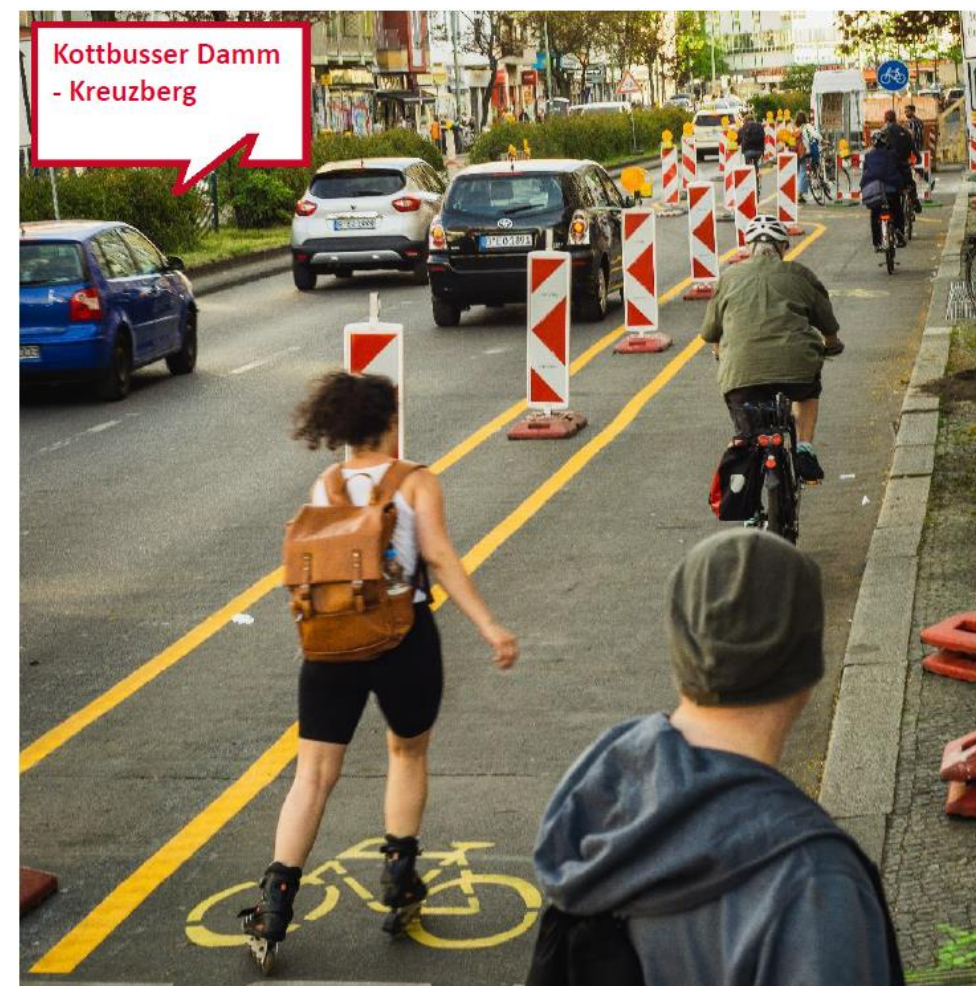
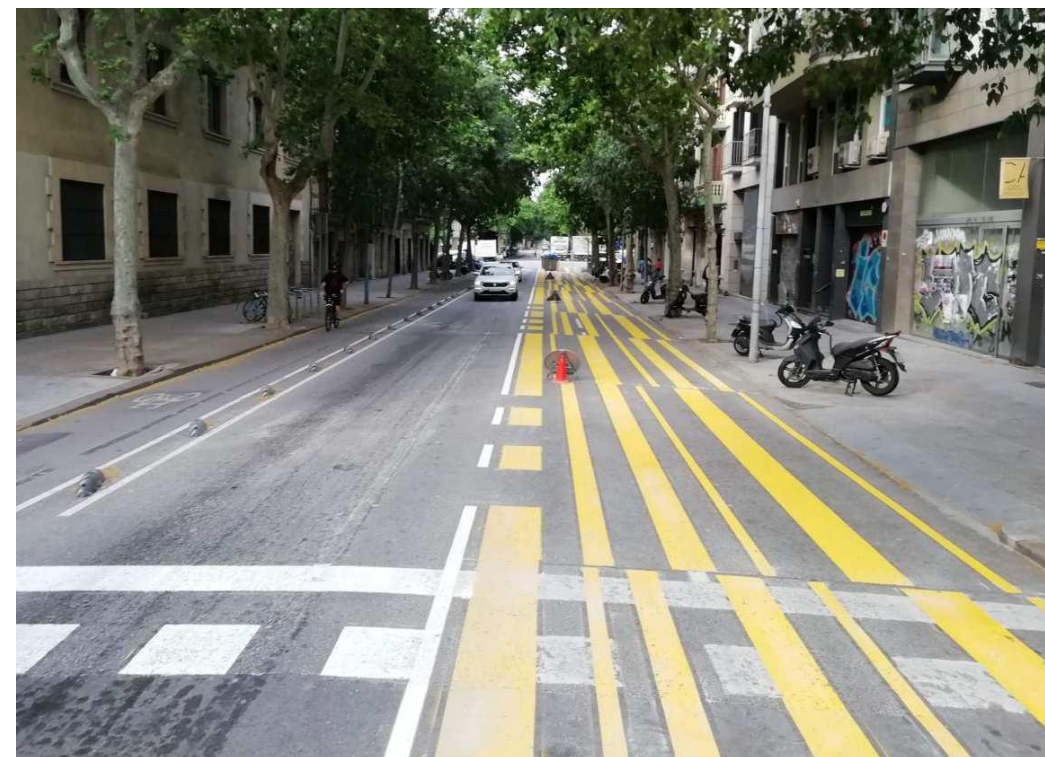
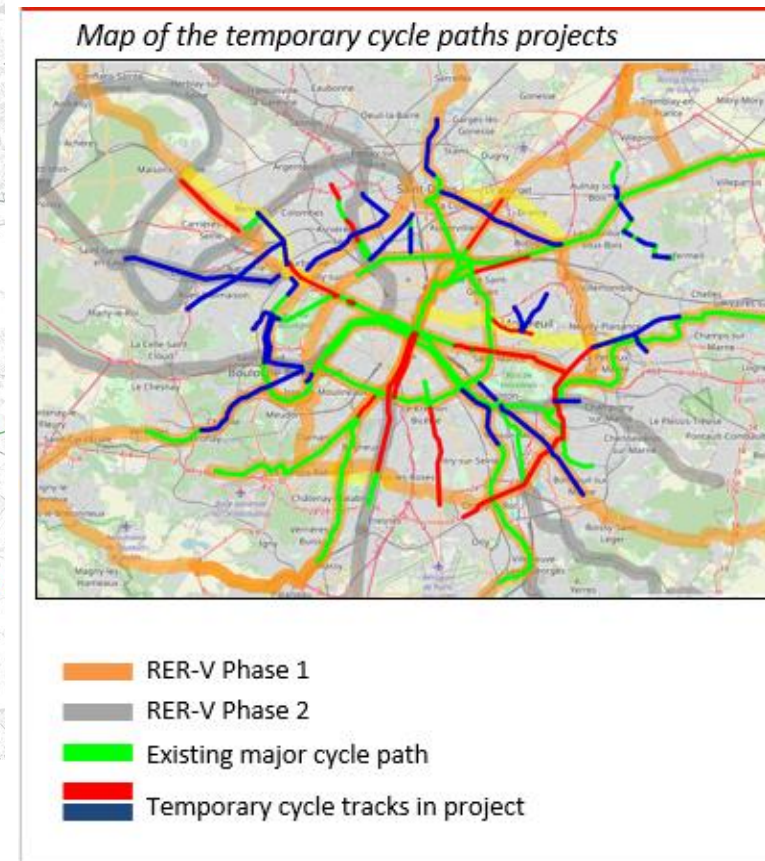
No congestion

Home-working ...



**An integrated
multimodal
sustainable urban
mobility
ecosystem**

Respacing streets – Long overdue

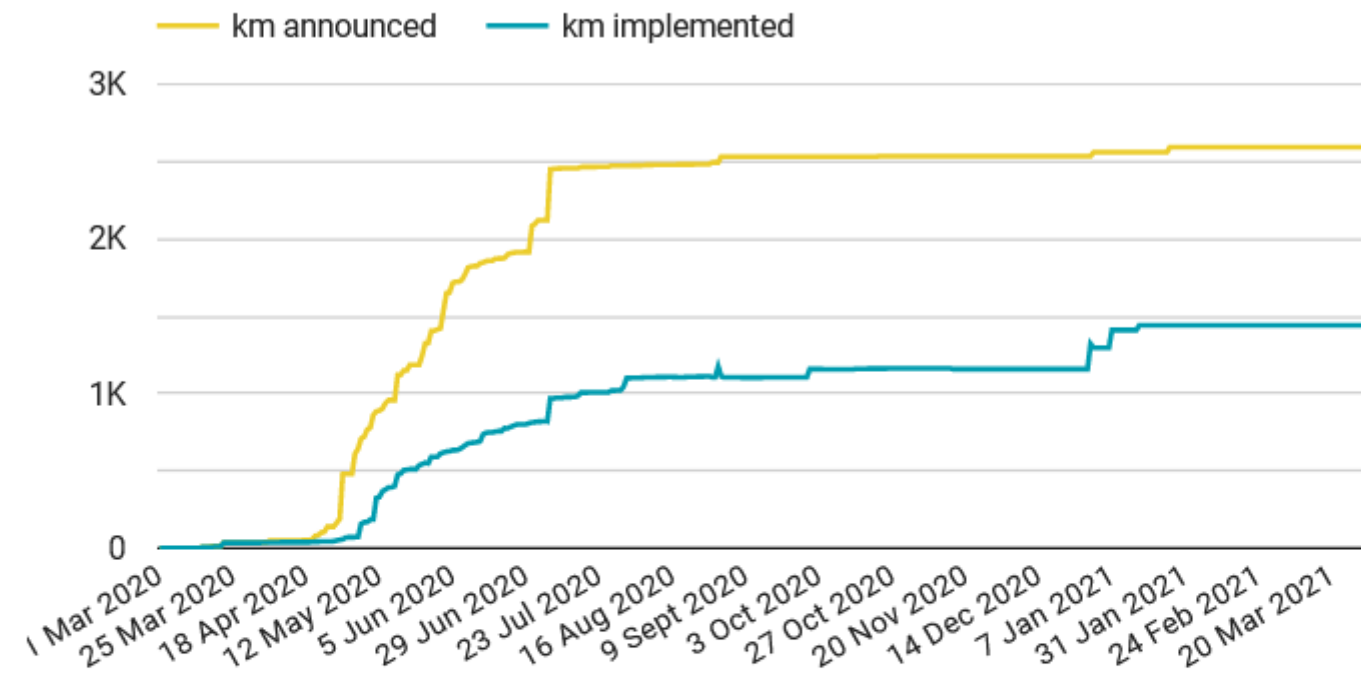


Sources: Barcelona, Berlin, Brussels, Ile-de-France, Milan, Rome

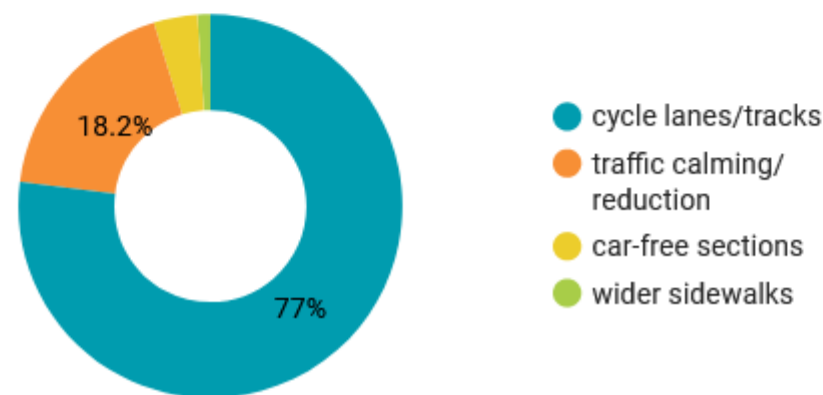


Where are we now?

Infrastructural measures progression



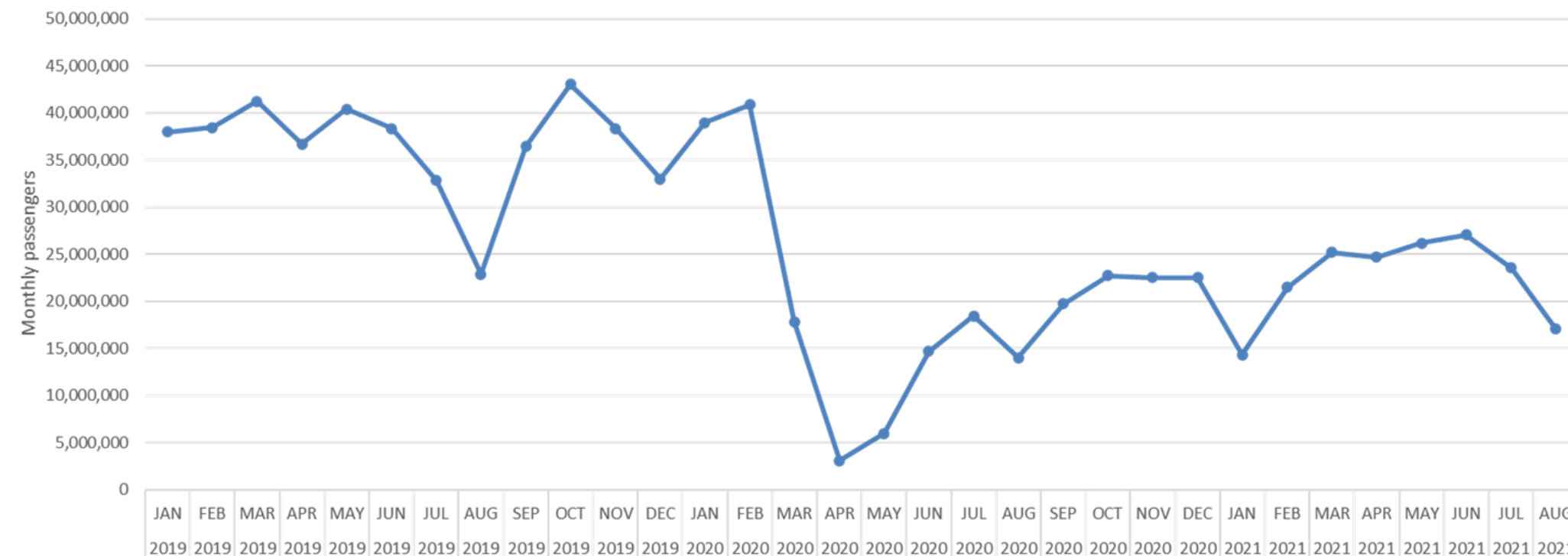
Infrastructural measures breakdown



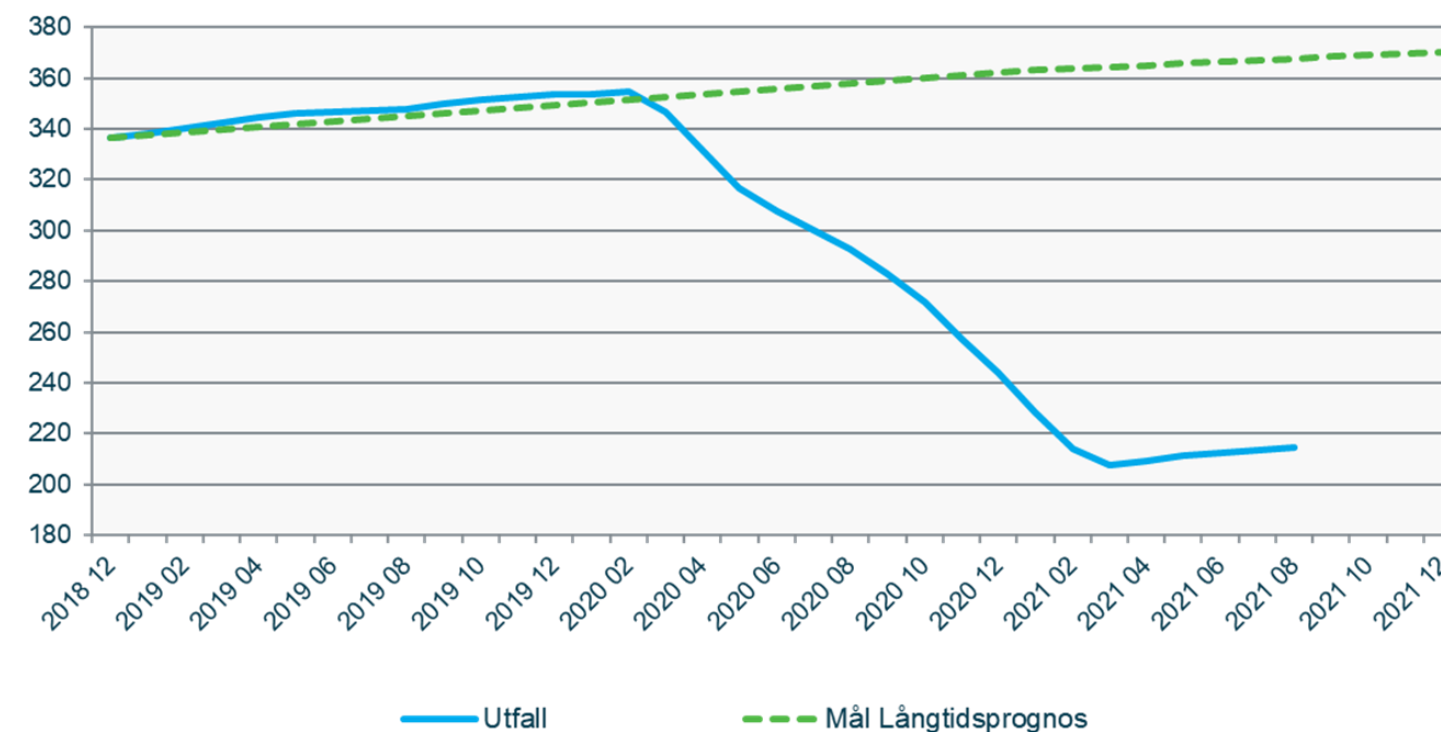
Source: ECF COVID-19 measures tracker
<https://ecf.com/dashboard>

www.polisnetwork.eu

EMT bus demand evolution



Ridership (million trips)
Rolling 12 months



Sources:

EMT Madrid

Vässtrafik

POLIS

The role of public transport

- **PT and active travel**
 - backbone of sustainable urban mobility ecosystem
- **There is no alternative to mass transit**
 - Efficiency
 - Equity, accessibility, affordability
 - Liveability, sustainability
- **Green recovery**
 - tackling congestion, air pollution, and climate change
 - improving quality of life and safety
- **Can innovation help?**



YES! WAIT, NO! WELL, ONLY IF...



Maximise opportunities
Mitigate negative externalities
Combine carrots & sticks

Need for public sector oversight
Regulate to innovate!





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**Integrating urban design and
infrastructure to accommodate public
transport**



Urban design

- **Make active travel and PT the most obvious, easiest and fastest choice through urban design and space reallocation**
- **Dedicated PT lanes**
- **Bike parking facilities at interchanges**
- **Superblocks complementing main PT networks**
- **High-quality bus stops**
- **Interchanges as city within the city**





The city as urban space manager

Land use planning -
densification

Prioritising modes
through space
reallocation

Pricing space

Parking

Dynamic kerbside
management



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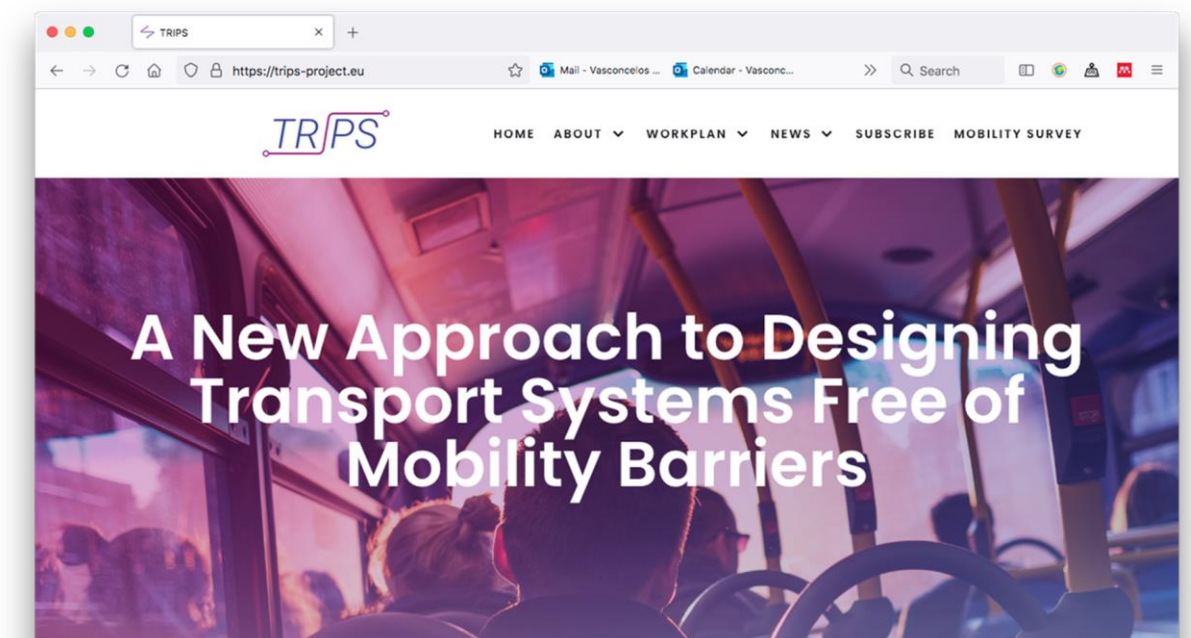
CITIES AND REGIONS FOR TRANSPORT INNOVATION

**Overcoming barriers, inclusiveness in public
transport systems**

Embracing Equity

**Transport is a gateway to social and economic inclusion:
access to mobility, determines citizens' access to
employment, healthcare, education...**

**If we are serious about addressing disparities
and creating inclusive cities,
we must begin with our trains, buses and trams.**





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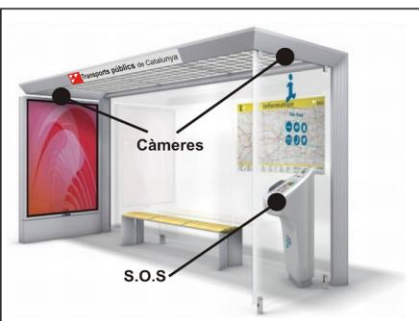
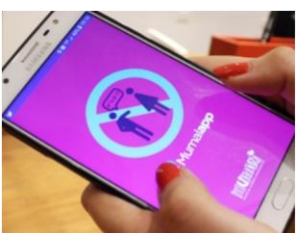
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Sexual Harassment in public transport



Survey on
Barcelona

Fourth step (in execution)



Generalitat de Catalunya

women make up (more than) 50% of users, yet 40% avoid transit options out of fear of sexual harassment- twice as likely as men

UK research forecasts the number of public transport users would increase by 10 % if passengers, especially women, felt safer

Put bluntly, if operators want to recoup dwindling profits and cities are serious about hitting modal shift targets, they need to systematically take sexual harassment seriously

MAYOR OF LONDON



TRANSPORT
FOR LONDON
EVERY JOURNEY MATTERS

POLIS

A blurred background image of a city street. In the foreground, a red double-decker bus is visible on the left. To the right, several blue shared bicycles are parked in a rack. The background shows city buildings and a street with yellow lane markings.

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Complementing mass transit with shared
mobility

Momentum for joining forces



Redefining Public Transport

Integration PT & shared mobility

- embrace a mix of mass transit and shared mobility including active travel
- **Public-Private Partnerships**
 - new business models
 - subsidies
- **Reduce car dependence in suburbs**
- **Multimodality & Intermodality**

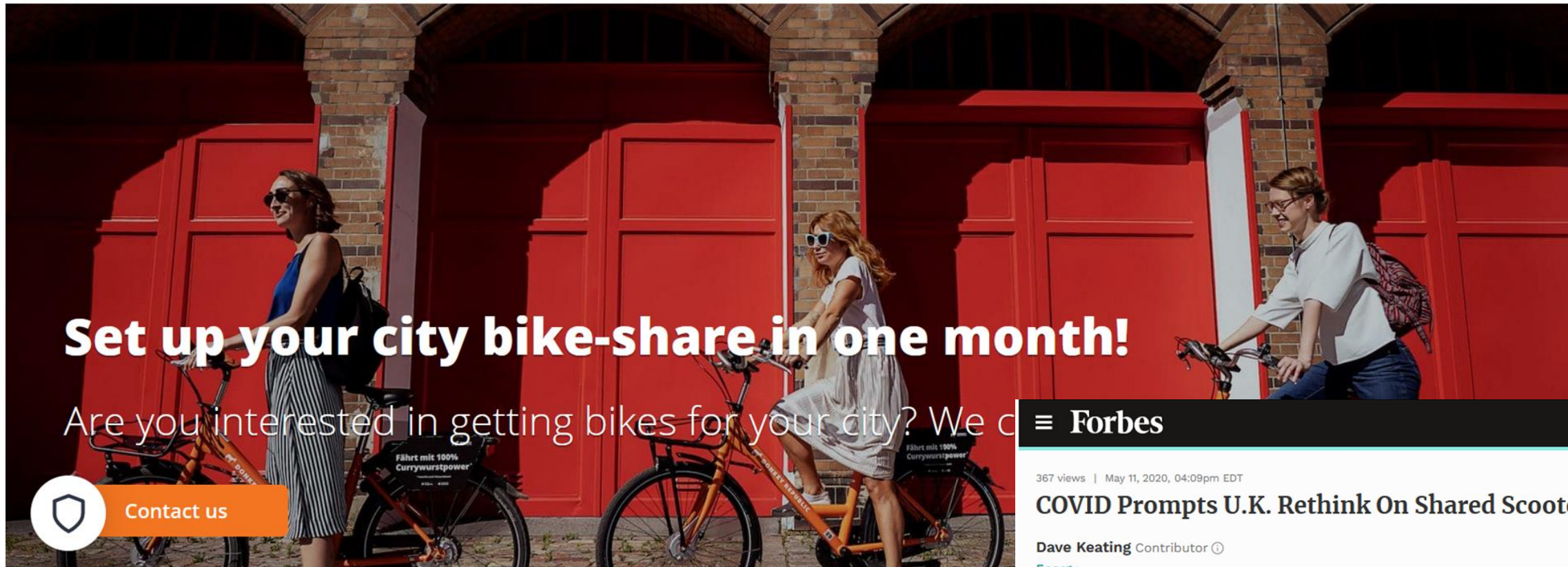




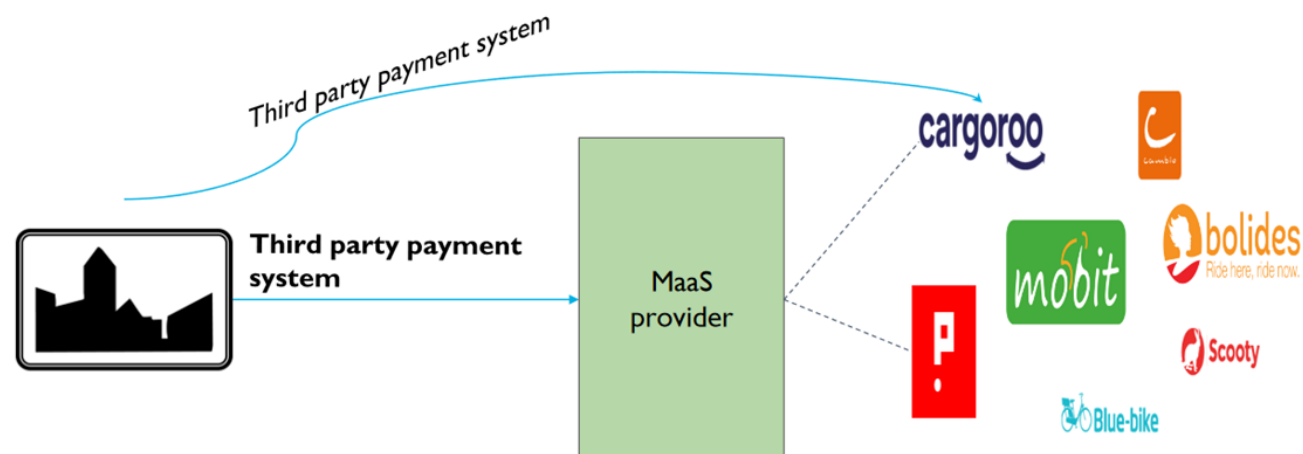
One Happy Family?



How it works ▾ Blog Cities About 🌐 ▾



How to describe and validate multi-modal rules in a uniform manner?

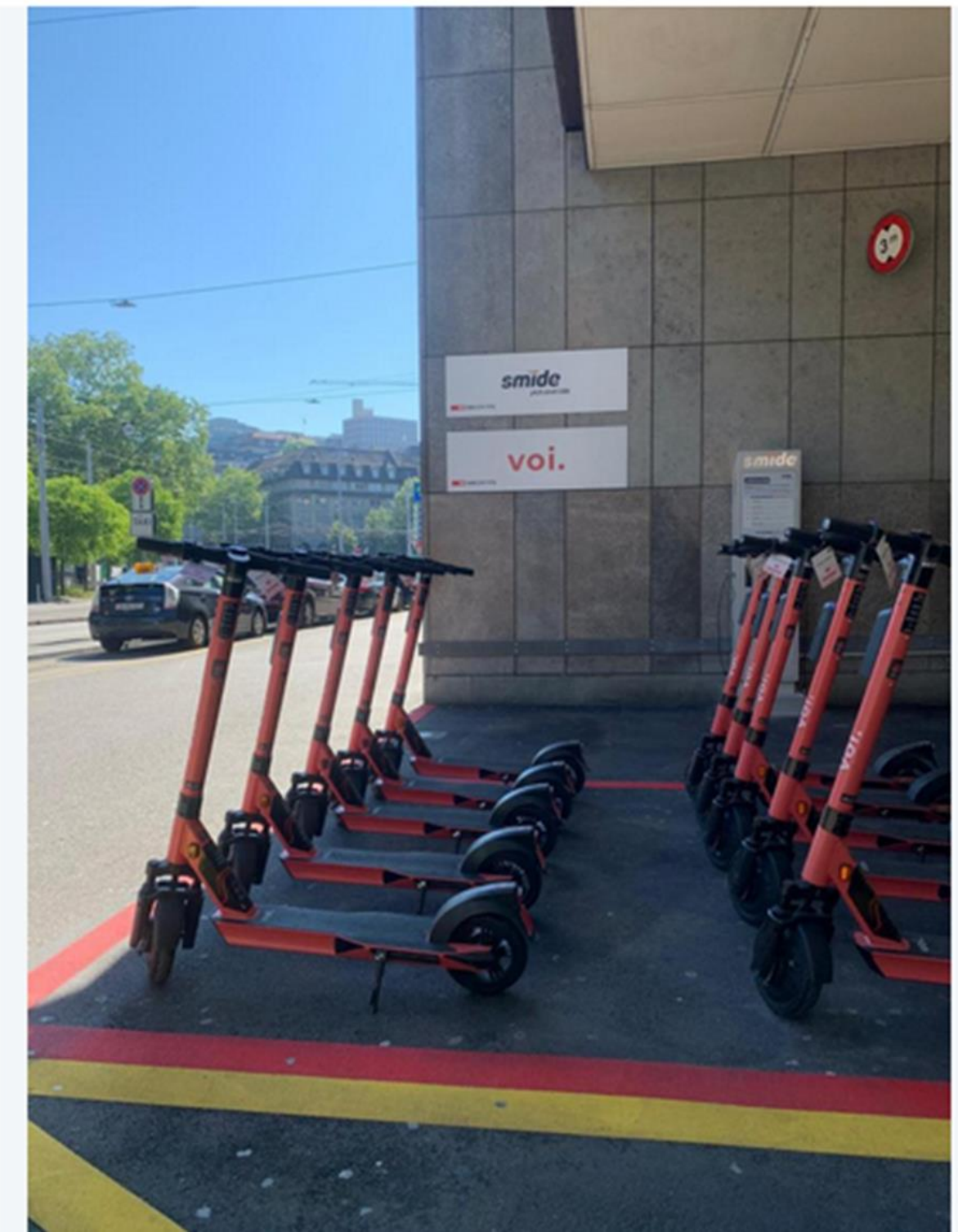


Hallo Zurich and Wintertur

Happy to be back in Switzerland today and going live with Swiss national railroad company [SBB CFF FFS](#). Designated parking at railroad stations and integration into app...

Strong move from SBB showing how old and new mobility combined could create consumer value

#sbb #ridevoi



Forbes

367 views | May 11, 2020, 04:09pm EDT

COVID Prompts U.K. Rethink On Shared Scooters

Dave Keating Contributor
Energy



Physical AND Digital Integration



MaaS Ecosystem

An open ecosystem of mobility solutions

A hand holding a smartphone over a public transport fare reader. The background is a blurred image of a transit station with a fare reader and a person walking.

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MaaS at the service of public transport

Potential pro's

Promote sustainable travel, especially giving up the private car

Improve efficiency of existing transport services and public resources

Personalized approach to develop inclusive systems

Enhance access to transport services

Offer choices to users



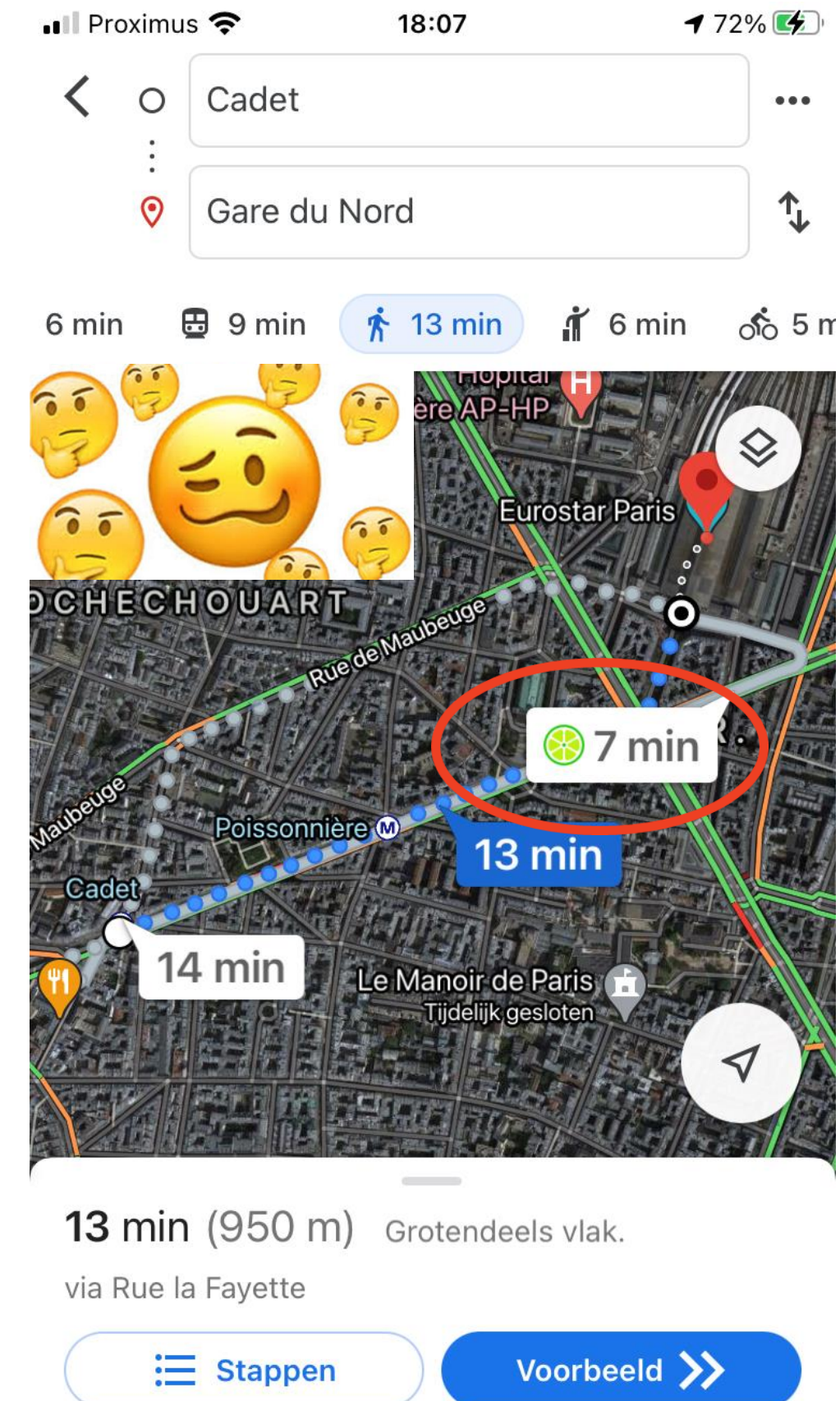
Risks of a purely commercial MaaS approach

Dis-incentivising sustainable trips

Higher costs for user or transport provider

Unequal services

Disconnect between user, transport provider & transport authority





Integrated ticketing

MaaS deployment hindered by inability to resell trips of PT services

More and more countries legislating to open up PT ticketing systems

Pressure from MaaS providers and some MSs for EU legislative action

EU plans to adopt regulation requiring creation of ticketing APIs

Polis, UITP and EMTA advocating for a public values-driven governance model



JOINT OPINION ON EU-WIDE INTEGRATED TICKETING

SUMMARY

To steer business, innovation potential, and investment towards effective sustainable mobility outcomes without upsetting the current, successful organisation of public transport in Europe and undermining its important position as the backbone of our mobility future, any revision, or new development of European mobility regulation should be based on the below principles. This also applies to the current review of the ITS Directive and any ensuing regulation.

1. Recognising the importance of local diversity and the principle of subsidiarity

Acknowledge the instrumental role and strengthen the capacity of public authorities (local and regional authorities and transport authorities) to achieve European Green Deal and digital objectives, in view of their experience and their central role as integrator, their local knowledge, and their legitimacy as elected officials.

2. Delivering public policy goals and a viable market through effective governance

To establish a fair and viable market, and to ensure public authorities can implement their sustainable and equitable mobility policy objectives, oversight and powers to orchestrate this market need to remain with the legal and democratically elected institutions that will inherit the problems of a potentially malfunctioning mobility system: local and regional transport authorities.

3. Leveraging the fare structure to achieve sustainability, equity and effective governance

To advance digital integration, the EU should encourage and enable local and regional (transport) authorities to describe the conditions for resale of publicly produced and funded transport and infrastructure services and define non-discriminatory contracts for interested resellers.

4. Guaranteeing fairness and rights and obligations for all

To ensure fairness and a balanced market development, any regulation or policy initiative must be applicable to all types of mobility operators and not be limited to public undertakings. It must allow any type of integrated mobility service to emerge, not restricting MaaS provision to a commercial business case, and ensure all vendors are subject to the same rules and regulations (e.g., passenger rights, accessibility information).

5. Forestalling market asymmetry through data reciprocity

What is holding MaaS back?



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**More than just hot air? Public Transport
decarbonization**

Multimodal

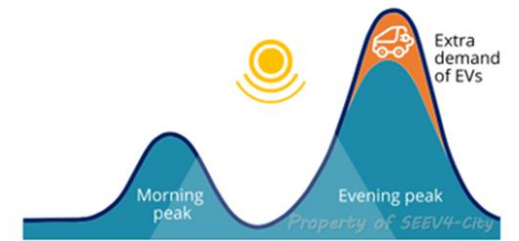
Captive Fleets

Charging infra

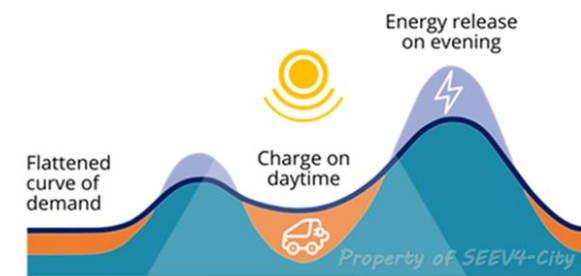
Smart grid



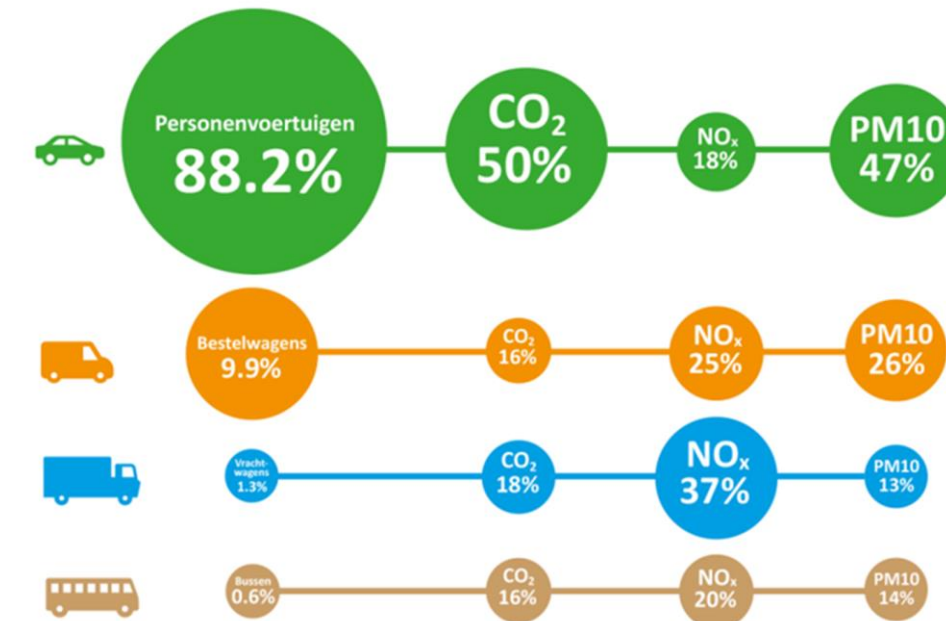
Without Vehicle to Grid:



With Vehicle to Grid:



Total emissions city traffic in Rotterdam





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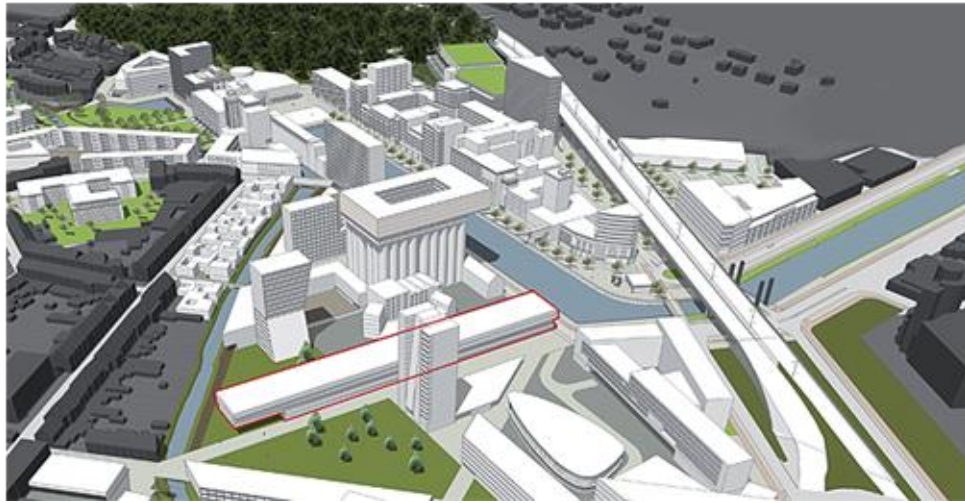
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Autonomous Vehicles as part of a Public Transport System

AVs: Key issues for cities

Policy, planning & urban development



Holistic approach to AVs



Personal security & safety



Tackling predicted growth in trips/km driven



Managing change

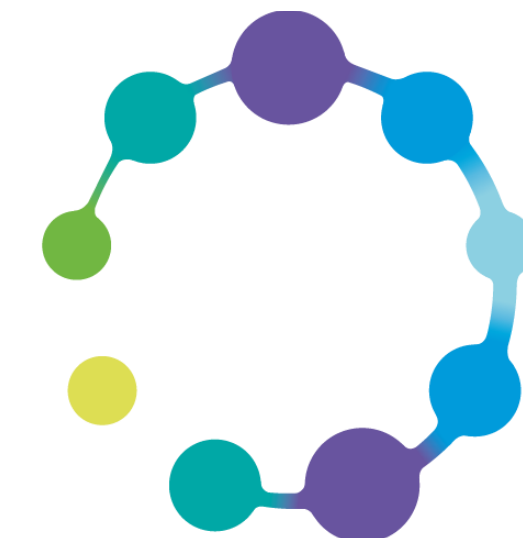


Enabling "Automation-Ready" Transport Planning

How to become an Automation-Ready road authority?



PLANNING FOR AUTONOMOUS VEHICLES



wetransform

PAV

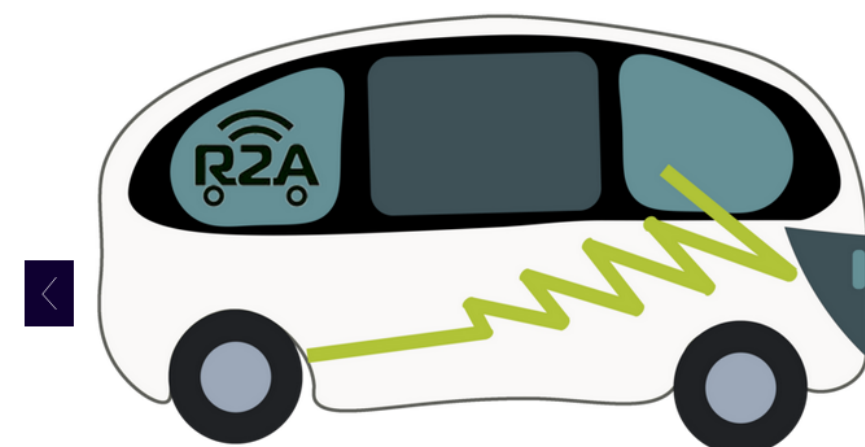
FUTURE-PROOFING AUTONOMOUS MOBILITY IN CITIES

Study on exploring the possible employment implications of connected and automated driving

Final Report

Client: European Commission, DG RTD
Rotterdam, 02 October 2020

Ecorys Nederland B.V. Watermanweg 44, 3067 GG Rotterdam, The Netherlands



Ride2Autonomy consortium
© Ride2Autonomy

Ride2Autonomy

Ride2Autonomy is a EU-funded project that demonstrates autonomous shuttles' integration into the transport system in ten EU cities:

Differdange (LU), Charleroi (BE), Aveiro (PT), Barcelona (ES), Inverness (UK), Trikala (GR), Tartu (EE), Reggio Emilia (IT), Tampere (FI), and Vianden (LU). The project analyses the system performance in view of safety and environmental impact, socio-economic potential of the services, as well as its multimodal integration with the transport network.

Ride2Autonomy helps to develop new mobility concepts for passengers leading to healthier, safer, more accessible, sustainable, cost-effective and demand-responsive transport.

Transforming Transportation



Money Matters

Decline in revenues versus increased costs

Revisit management contracts to ensure financial viability

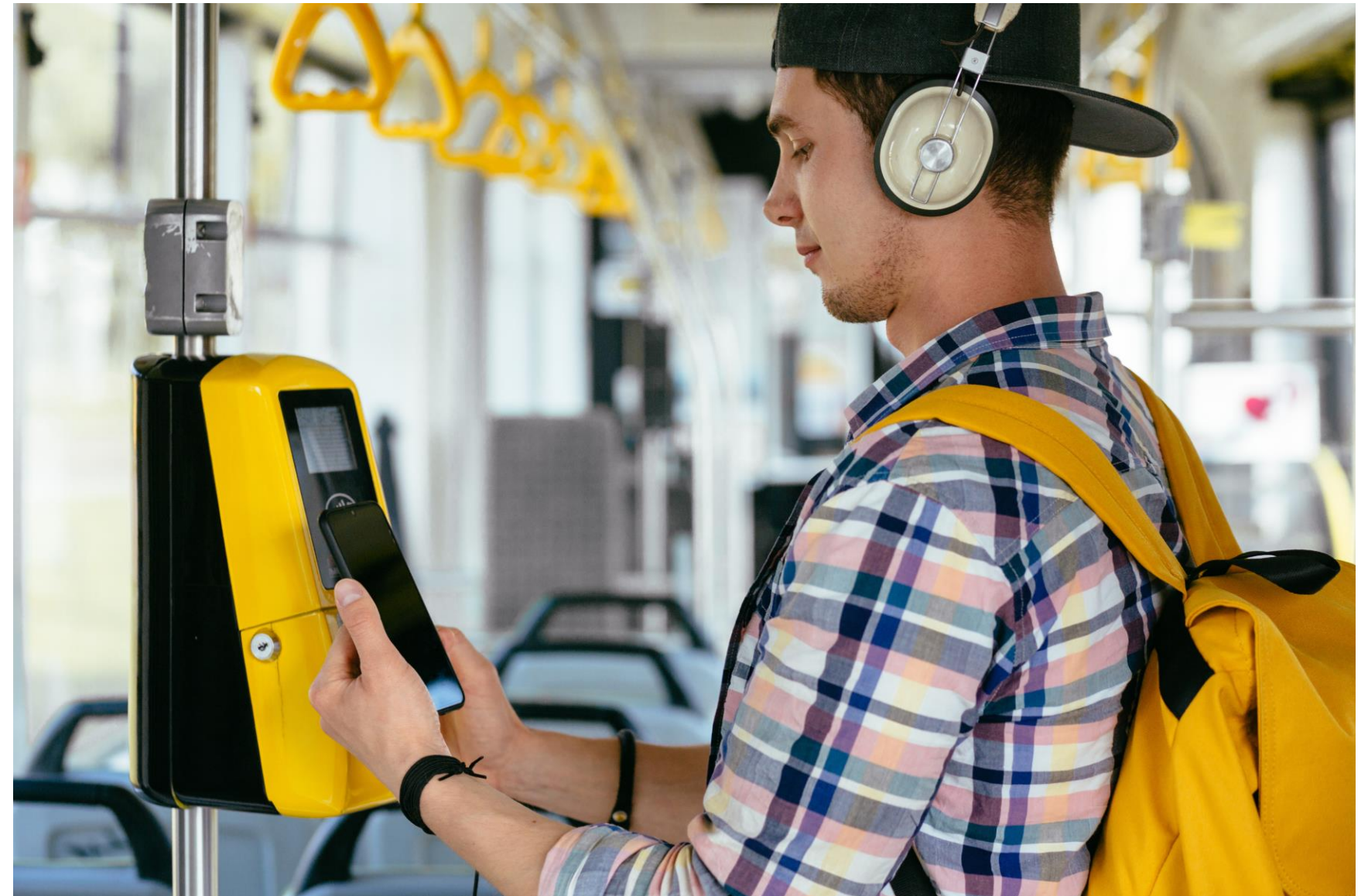
Monitor financial support mechanisms at national and European level

Reassess funding and governance frameworks which are more resilient to changes in travel demand

New business models & ppp's

Free PT is not the answer

Congestion charging and road pricing





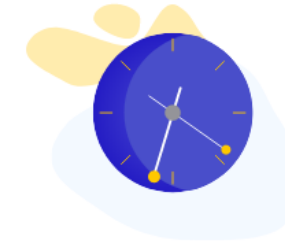
Polluter Pays



Intelligent kilometre charge

Our means of travel has a social cost. SmartMove is an intelligent **kilometre charge** for all passenger and delivery vehicles in the **Brussels-Capital Region**. The app will give Brussels residents and commuters insight into the costs and benefits of their transport choice.

This intelligent **kilometre contribution** will be calculated on the basis of three parameters:



When you travel



How far you travel



Engine size of you vehicle

Bloomberg CityLab

CITYLAB

Paris Will Ban Through Traffic in City Center

Mayor Anne Hidalgo's latest effort to rein in car use and fight pollution would prevent non-residents from driving across the French capital's historic heart in 2022.

By Feargus O'Sullivan

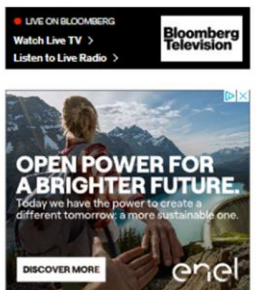
13 mei 2021 21:38 CEST



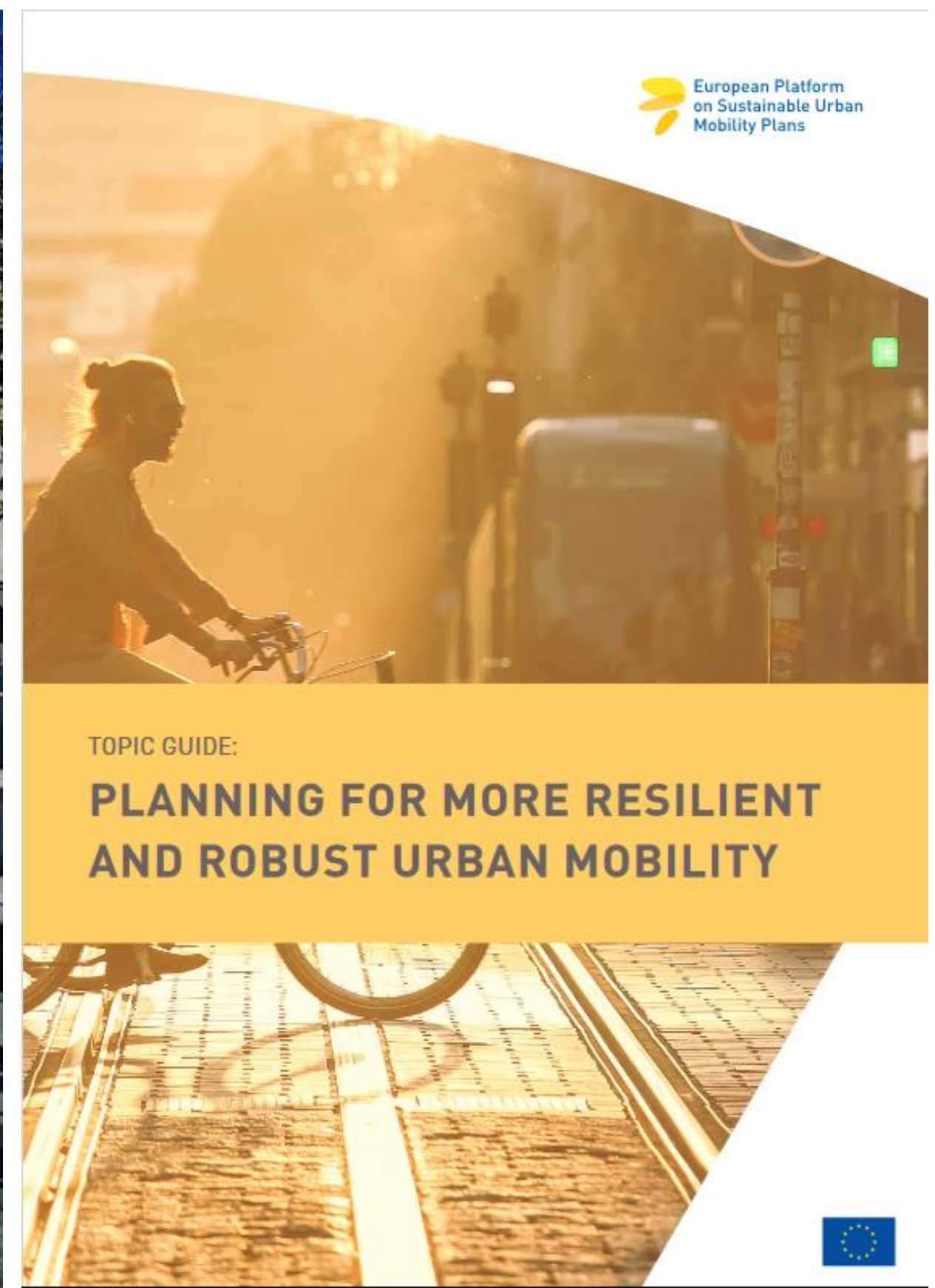
A traffic jam near Place de la Concorde in Paris in 2018 — a pre-pandemic scene that city officials don't want to repeat. Photographer: Mustafa Yalcin/Anadolu Agency/Getty Images



In an announcement Wednesday, Paris Mayor Anne Hidalgo set an audacious new benchmark in her ongoing campaign to reduce car use



Bouncing Back



 **Thank you**



kvanclyusen@polisnetwork.eu

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