



fluctuo
Mobility enablement

EUROPEAN SHARED MOBILITY INDEX

— Q3 2022 —



ARVAL
BNP PARIBAS GROUP

INVERS

SHARENOW ✓

POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION

HERE TO STAY

This summer, soaring energy prices and scorching temperatures did their best to derail the progress made by mobility companies. **It wasn't enough.**

Despite all the noise, each of the 4 modes seem to be progressing well. So much so, we've had to add 11(!) more cities - 4 new countries - to give you a clearer picture of what's happening across Europe. These cities include: Amsterdam, Antwerp, Bucharest, Frankfurt, Marseille, Riga, Seville, Tallinn, Turin and Zurich. Among the 4 cities we chose for a 'City Dive' is the Finnish capital - and we were thrilled to speak to the **City of Helsinki** to discuss their goal of being net-zero by 2030, and how shared mobility could get them there.

We've also covered **Marseille**, a city about to renew their bike-sharing scheme; **Turin**, a city built on cars (spoiler: it's not anymore); and **Tri-City**, voted the 'happiest' city in Poland.

We are entering a fascinating time for the industry: operators are looking to consolidate their current (profitable) markets, and cut costs wherever possible. Cities, on the other hand, are coming round to the idea that **these services are essential to reduce the use of private cars**, but remain bullish on health and safety.

Whilst 'profitability' has been on everyone's lips for over 18 months, it's never been more of a hot topic. But make no mistake, **shared mobility is here to stay.**

33 CITIES 408 SERVICES

Shared mobility by n°. available services

-  Bikes (station-based)
Physical or virtual stations
-  Bikes (free-floating)
-  Scooters
-  Mopeds
-  Cars



AT A GLANCE RIDERSHIP

33 CITIES MONITORED

100M
TRIPS
IN Q3 2022

+20%

ANNUAL
TRIP GROWTH
Q3 2022 VS Q3 2021

1.9

TRIPS/VEHICLE/DAY
Q3 2022

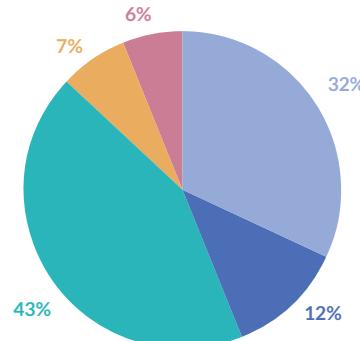
YEAR-ON-YEAR RIDERSHIP

Base 100 | 2021 Average



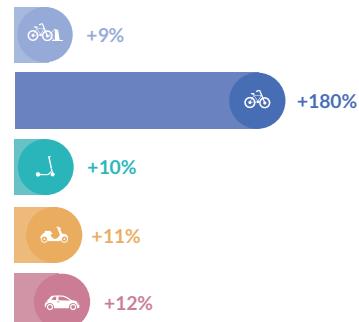
MODAL SHARE

Total ridership per mode | Q3 2022



YEAR-ON-YEAR TRIP GROWTH

Q3 2022 VS Q3 2021



AT A GLANCE

FLEETS

33 CITIES MONITORED

525,000

SHARED VEHICLES
IN Q3 2022

+52%

ANNUAL
FLEET GROWTH
Q3 2022 VS Q3 2021

+18%

QUARTERLY
FLEET GROWTH
Q3 2022 VS Q2 2022

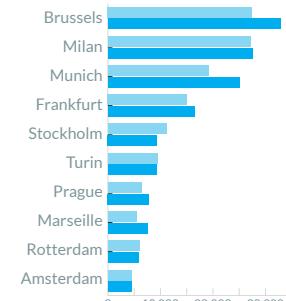
QUARTERLY FLEET SIZE BY POPULATION

Q3 2022 vs Q2 2022

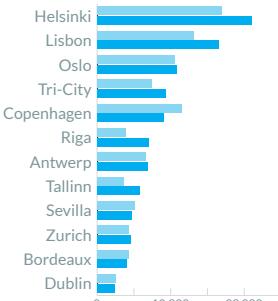
ABOVE 1.5M INH.



BETWEEN 1.5M-0.75M INH.



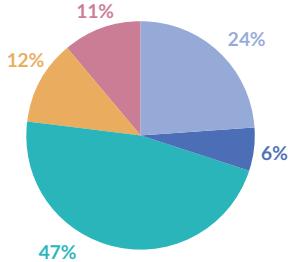
BELOW 0.75M INH.



MODAL BREAKDOWN

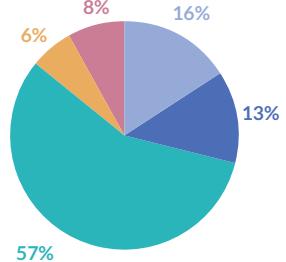
Q3 2022

ABOVE 1.5M INH.



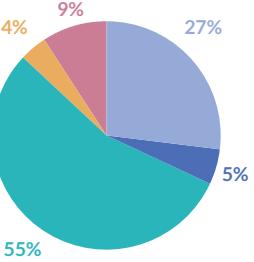
Avg N° Vehicles
26,700

BETWEEN 1.5M-0.75M INH.



Avg N° Vehicles
14,600

BELOW 0.75M INH.



Avg N° Vehicles
8,300



DEEP DIVE CYCLING INFRASTRUCTURE

IN NUMBERS

€20 BILLION

for cycling infrastructure to bridge the investment gap in the EU.

Source: EU Cycling Strategy

60%

of urban trips globally are **shorter than 5 km** and could be walked or cycled. **25% are shorter than 1km**. More than half of these short trips are currently travelled by motorised mobility.

Source: PATH (Partnership for Active Travel and Health)

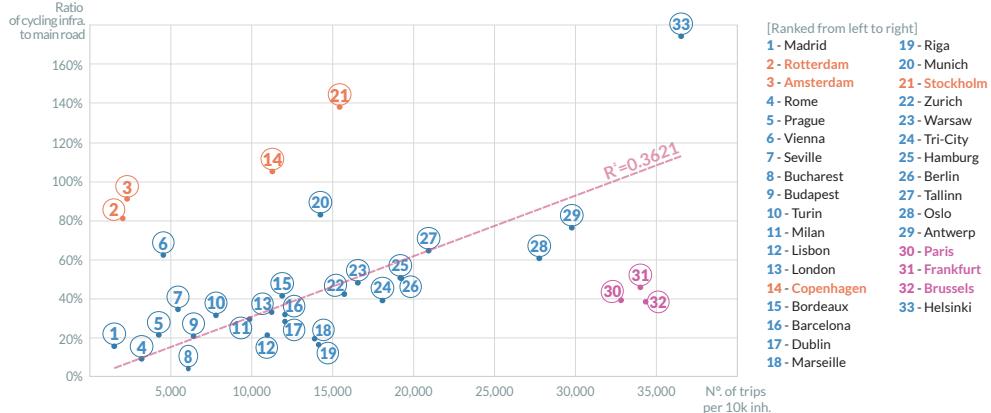
30 minutes

cycling or walking per working day is enough to meet the WHO minimum physical activity requirements and reduce the risk of premature death by 20-30%.

Source: WHO (World Health Organization)

SHARED BIKE & SCOOTER USAGE IS REINFORCED BY DENSE CYCLING INFRASTRUCTURE

Q3 2022 | Ratio of cycling infra. to main road network against trips per 10k inh.



Urban residents' mobility choices are strongly linked to the infrastructure at their disposal

As cities are being reshaped to reduce greenhouse gas emissions and become fairer, safer, and healthier, the adoption of new transport modes is essential. Shared bikes and scooters offer an alternative to motorized mobility. However, a widespread rollout is being slowed down. The perception of safety is perhaps one of the most important factors influencing the decision to use a bike or a scooter, as their use is sometimes perceived as dangerous - which can be addressed by developing proper cycling infrastructure. Academic studies highlight the positive impact of implementing and expanding segregated cycling networks on the adoption of cycling.

The data collected by Fluctuo (above) shows that in cities with greater cycling infrastructure, people are more likely to use shared bikes and scooters. However, two groups of cities require a specific focus. Firstly, in a matter of years, Paris has become the

front-runner and role model in micromobility for cities around the world. For decades, **municipalities in the Netherlands, Denmark and Sweden** have seen cycling as a means of making their cities more people-friendly and have heavily developed their cycling infrastructure. Therefore, the usage of personal bikes is much higher than elsewhere and mitigates the adoption of shared micromobility. On the other hand, global cities like **Paris** (the most visited city in the world), **Brussels** (the administrative centre of the European Union) and **Frankfurt** (a major financial European hub) follow a different trend. Although the cycling infrastructure isn't as developed as in other European cities, shared bike and scooter usage is among the highest on the continent. Regardless of the lack of infrastructure, operators have not hesitated to massively invest in these territories and use these well-known cities to promote their model.

To ensure metropolises successfully meet their environmental, health and safety goals, European cities will need to further promote shared mobility and develop cycling infrastructure.

As the number of urban trips is expected to more than double between 2020 and 2050, cities will play a critical role in reducing carbon emissions by supporting citizens to make the best transportation choices. Currently, walking and cycling make up less than one-third of all urban trips, despite their potential to far exceed this share. 60% of urban trips are shorter than 5 kilometres, and one-quarter are shorter than 1km. To ensure European cities will need to further promote shared mobility and develop cycling infrastructure.



HOW CAR SHARING HELPS COMPANIES & MOBILITY MANAGERS ACHIEVE THEIR BUSINESS GOALS

Car Sharing Technologies enable a more flexible, efficient & employee friendly corporate mobility

Inflation and macroeconomic problems are putting additional pressure on corporates. These parameters push corporates to look for solutions that reduce their mobility costs and increase the utilization rate of their fleets. By equipping their vehicles with car sharing technologies, corporates can do more with less via levers such as: digital and keyless vehicle access, online bookings, data analysis, on-time reporting & process automation.

Achieving corporate CSR objectives has become a priority for companies. High-level vehicle integration car sharing technologies allow corporates to accurately measure their mobility footprint and make the most environmentally-friendly decisions. Also, more and more companies use car sharing to push the electrification of fleets by introducing emission-free shared vehicles. That way, employees can try an electric car to overcome EV-driving fear with the objective of taking the plunge for their personal car. As recruitment is becoming more of a challenge, companies need to appear as attractive - especially to young professionals who look to commute in different ways. Offering solutions for their professional trips is a must-have, in parallel to other types of transportation. Car sharing tech can really make a difference in offering a more flexible and digitised mobility offer. Additionally, the progressive introduction of Tax-incentivized Mobility allowance/budgets in EU countries is expected to push corporate interest for innovative & shared mobility solutions.

Busting the myth of complex implementation

Even though there are only good reasons to make the switch to shared mobility, it is not massively implemented by corporates. The main reason why they don't offer these solutions to their employees is down to the cost of change and the hassle of implementation. Companies still need to work on taking the plunge and implementing these solutions.

In accordance with the 2025 Arval Beyond strategic plan, one of Arval's ambitions is to encourage corporates to take the first step into a new era of digitalization, implementing innovative mobility solutions for all their employees. We strongly believe that testing car sharing technologies in real-life scenarios on their own fleet will help them to embrace shared mobility and its many benefits.

Pool Cars Become Smart with Arval Car Sharing Technology

At Arval, there is no doubt that shared mobility will help corporates achieve their business goals. They just needed our support to test it themselves on their existing vehicles. That's why we launched a massive plan to accelerate the transformation of their fleet with the Smart Pool Cars Campaign. Companies that currently use traditional pool cars can equip them with Arval Car Sharing technology. Then, they can test the added value of this product for free via a satisfied or money-back trial period of about four months.

At Arval, we are doing our utmost to accompany corporates with this transition towards a more flexible, efficient & employee friendly corporate mobility. Shared mobility solutions are the future and Arval will be at their disposal to implement them alongside companies willing to enjoy them.



Amélie Phelip
Global Mobility
Director



Simon Coppenolle
Global Head
of Car Sharing

MARKETS & POLICY DEVELOPMENTS

Fleet capping continues

Paris did it, and so too have many others. Oslo implemented a fleet cap on scooters last year, and to great effect. Thanks to effective legislation that came about in the summer of 2021, the number of scooters was cut by two-thirds from 20,000 - and trips per vehicle per day marginally improved too. It seems to be a win-win for cities and operators. The latest city to reduce operators is Bordeaux, who have chosen 6 operators across bikes, scooters and mopeds in a recent tender... and Rome will be next.

JULY



Department for Transport extends existing scooter trials until May 2024.



Freebike launches 1,100 electric bikes in partnership with Mastercard.



BiciMAD becomes publicly-owned & operated, and announces a significant expansion.



Dutch operator Cargoroo launches a fleet of 60 cargo bikes.



A new set of rules (operators and fleet caps, speed limits, minimum age) is introduced to frame future shared bike and scooter services.



Human Forest launches the first shared moped service in the city with 200 vehicles.

Insistant on insurance

National governments are becoming stricter on shared services in one department in particular: civil liability. The most notable example is in Norway, where almost overnight, operators were forced to agree contracts with the only company in the country that offered this kind of insurance - who quoted astronomical prices. The operators were forced to pay these inflated prices, or stop operations in Norway. It is unlikely to happen quite like this in other countries, but could we see more governments move in this direction? Recent developments in Spain suggest that this might be the case.

AUGUST



Antwerp
BELGIUM

Donkey Republic launches 1,650 electric bikes with Antwerp Transport Region.



UK

Walking and cycling can now be prescribed by doctors in a nationwide trial.



Prague
CZECH REPUBLIC

'15min per day free on shared bikes' offer for public transport users extended for 4 years by Prague Integrated Transport.



Dublin
IRELAND

Dublin Bikes announces losses of €2.1m in just three years.



Rome
ITALY

Tender published for shared bikes and scooters, falling under a new regulatory framework.



Munich
GERMANY

It becomes mandatory to end scooter rides in dedicated parking zones.

Cycling the cure

In the United Kingdom, cycling can now be prescribed by doctors. Similarly, many city officials are encouraging their inhabitants to pick up cycling to cure transport problems. In Lisbon, the Gira bike system will become free to certain social groups, whilst in Prague, the '15 minutes free per day' scheme continues. Investments by cities aren't just in cycling infrastructure; in Madrid, the city has taken over the public bike system in a bid to turn it around and boost usage.

SEPTEMBER



Paris
FRANCE

Owners of private, non-electric 2-wheelers will now have to pay for parking.



Brussels
BELGIUM

Poppy expands beyond cars with a 1,500-strong scooter fleet.



NORWAY

Liability insurance becomes mandatory for shared scooters, putting a significant financial burden on operators' shoulders.



Vienna
AUSTRIA

Public transport operator launches car-sharing service WienMobil Auto.



Bordeaux
FRANCE

Bird & pony (bikes), Dott & TIER (scooters) and Yego & E-Dog (mopeds) win licences to operate in the Bordeaux region.

BIKE SHARING

Despite extreme temperatures this summer, bike usage grew 7% from Q2 levels. This may seem small, but in some cities like Barcelona, Madrid and Seville, bike usage unsurprisingly fell, due to the extreme temperatures reached in July and August.

Stockholm tops the list of bike-sharing growth, perhaps due to the launch of the new electric City bikes. London makes it onto both lists, unsurprisingly due to the continuing support for Santander Cycles, but also due to the free-floating bike launches from Dott, TIER and Lime, as well as an expansion of Human Forest's scheme.

YEAR-ON-YEAR RIDERSHIP

Base 100 | 2021 Average



BIKE SHARING CHAMPIONS

Trips per capita | July - September 2022



GROWTH IN TRIPS

Q3 2022 vs Q3 2021



SCOOTER SHARING

'Scooter mania' appears to be over - at least as we know it. Services are becoming an integral part of transport systems and less of a novelty for tourists. It comes as no surprise that in the summer months, the most touristy cities witnessed the most growth from Q2 to Q3 2022 (Lisbon, Prague). Across the 33 cities, ridership is up 16% from the previous quarter. We see Lisbon and Prague again topping the year-over-year growth, with London joining them on the podium - an indication that adoption rates are good and that the UK scooter trial is proving successful.

Oslo continues to record the most trips per capita, whilst the Scandinavian summer means that Brussels drops from 3rd to 4th in the rankings, behind Stockholm but ahead of Helsinki.

SCOOTER SHARING CHAMPIONS

Trips per capita | July - September 2022



GROWTH IN TRIPS

Q3 2022 vs Q3 2021



YEAR-ON-YEAR RIDERSHIP

Base 100 | 2021 Average



MOPED SHARING

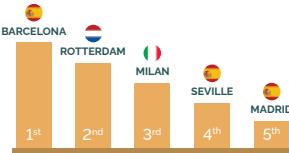


While trip growth slightly slowed down over summer, the list of 'city champions' holds no surprises. Barcelona and Rotterdam - cities where shared scooters are banned - top the chart. In the Netherlands, mopeds are a fine alternative to bikes as they can be used in cycle lanes (until new regulation kicks in, in 2023). This might give us an indication as to why shared scooters in Rotterdam - and Amsterdam to a lesser extent - are so popular.

Antwerp, one of our new inclusions, moves straight to the top of the chart for an impressive YoY growth in trips. Milan keeps its position in 2nd, in front of Rome and Rotterdam, who also made the top three last time out. Spanish cities were not far behind - having recorded the most trips per capita.

MOPED SHARING CHAMPIONS

Trips per capita | July - September 2022



GROWTH IN TRIPS

Q3 2022 vs Q3 2021



YEAR-ON-YEAR RIDERSHIP

Base 100 | 2021 Average



CAR SHARING



Two regions stand out as the most mature for car-sharing. The first is Germany. In Frankfurt, car-sharing is up 70% compared to last year; in Munich it is up 61%. To see the other two German cities in the report - Hamburg and Berlin - in the top 5 for car-sharing per capita shows the immense popularity of these services.

Then, there are the Nordic countries. Copenhagen has more shared cars per capita than any other city, and clinches top spot for most trips per capita for the second time running.

Italy and Spain are also proving to be lucrative markets for car-sharing but, to grow car-sharing all over Europe, what can we learn from these examples?

CAR SHARING CHAMPIONS

Trips per capita | July - September 2022



GROWTH IN TRIPS

Q3 2022 vs Q3 2021



YEAR-ON-YEAR RIDERSHIP

Base 100 | 2021 Average



HELSINKI

FINLAND

IN PARTNERSHIP WITH
THE CITY OF HELSINKI

Like 25 other cities in this report, Helsinki is one of the 100 cities selected by the EU to participate in the Cities Mission - an initiative to create 100 climate-neutral and smart cities by 2030. For the Finnish capital, in the transport sector, this means reducing CO2 emissions by 69% compared to 2005 levels. All actions are being considered to achieve this goal.

Helsinki is home to one of the most successful bike schemes in the world. Since 2016 (when the system launched), the system has grown every year and now serves neighbouring Espoo with a total of 4,500 bikes across 457 stations. It's a one-of-a-kind: the stations are removed every winter. The city takes this opportunity to analyse the trips from the previous season to find the optimal locations for the following season.

For scooters, however, it's not been as straightforward. In Finland there are no fleet caps and no legislation to stop new players entering the market, meaning it's a bit of a free-for-all and it has, in the past, been hard to regulate. The city and the operators, however, have come to an understanding and the city has bi-weekly or monthly meetings with the operators to discuss improvements to key topics (e.g. safety, parking). The next step would be to have a fleet cap to limit the current 14,000 vehicle fleet, and perhaps to have a tender process - although this isn't expected until the end of 2023.

They are already well on their way to becoming a sustainable and smart city, and we wish them all the best on their mission to become climate-neutral by 2030!

Population
650,058
Density
909/km2

"We want to make sure that the modal shift actually happens so we are investing a lot in the light rail network and the bicycle highways. The future looks very sustainable and different services that support that are more than welcome!"

Heikki Palomäki
Head of Unit, Transport
Systems at City of Helsinki

SERVICES AVAILABLE



READ THE FULL INTERVIEW
or visit blog.fluctuo.com

TRI-CITY

POLAND

IN PARTNERSHIP WITH
MOBILNE MIASTO

The so-called "Tri-City" is a metropolitan area comprising 3 cities (Gdańsk, Gdynia and Sopot) in the north of Poland, picturesquely situated by the Baltic Sea. According to a 2022 ranking, the 750,000-odd inhabitants are the happiest in Poland. Interestingly, Tri-City stands out from other Polish cities in every mode of shared transport.

For more than 3 years, Tri-City has suffered from lack of any bike sharing service, after the previous bike-sharing system collapsed in 2019 due to extreme popularity - reaching over 2 million rentals in just 7 months with a fleet of only 1,200 bikes. Fortunately, in 2023 a new 6-year long scheme will be launched in the region with over 4,000 bikes, 75% of which will be electric.

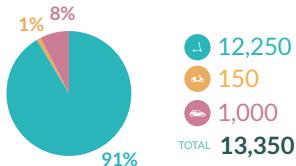
When it comes to scooters, Tri-City ranks first in Poland for shared scooters per capita, with a figure 55% higher than Warsaw! It is Poland's car sharing 'capital' with the highest number of shared cars per capita, even after a local player shut down their 400-car fleet in 2021.

There are more than 150 shared mopeds on the streets (more than any other Polish city).

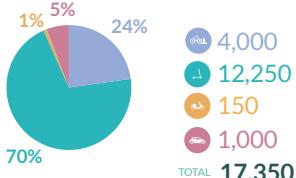
Population
749,786
Density
1,806/km2

MODAL BREAKDOWN

TRI-CITY
Current situation



TRI-CITY
Projection: with bike scheme



MARSEILLE

FRANCE

Population 870,018
Density 3,610/km2

Marseille is the second largest city in France. Districts spread from altitudes of 242m down to sea level making it a challenging territory for transport: despite 2 metros and 3 tram lines, many citizens remain dependent on cars... and the city is prone to congestion.

Like many prominent French cities, Marseille's first foray into shared mobility began in the late 2000s with the launch of "le vélo" bike-sharing service. More than fifteen years later, the City still bets heavily on electric bikes: 2,000 free-floating bikes - operated by Dott and Lime - have been available since January 2022, and "le vélo" is set for an upgrade in early 2023, offering another 2,000 electric bikes across 200 stations.

Bikes have found a popular home around the **Old Port**, the picturesque and pedestrian historic centre. Cycling is also in vogue around main transport hubs (**Saint-Charles station**), tourist sites (**Notre-Dame de la Garde**), shopping and business districts (**La Joliette**) and areas known for the nightlife (**Cours Julien**) in the heart of the city (see heatmap).

The next challenge for authorities to boost cycling will be to integrate these steep and narrow streets with infrastructure to improve safety and encourage new riders. Marseille has a way to go but aims to reach a total of 350km of cycle lanes by the end of 2023.



TURIN

ITALY

Population 875,698
Density 6,736/km2

Once the Italian capital of the automotive industry and renowned for poor air quality, it's safe to say that Turin has launched its transition from grey to green. Today, one of Turin 2030 Action Plan's 'Liveable City' goals is to provide mobility services "that focus on people's well-being, making (people) young and old independent, facilitating life in every part of the city".

This may come as a surprise, but the city has been prioritising people over cars as early as 1999, when they pioneered ZTL (Limited Traffic Zone) technology - electronically restricting car access to the city centre. The ZTL in Turin now spans 260 hectares, which means more room for shared mobility!

No less than 17 services are available in Turin, 6 of which launched this year - scooters and bikes from Bolt & TIER, bikes from RideMovi and cars from enjoy - confirming the dynamic and the growing demand in the 'Old Lady'... but also the need for regulation and cooperation. A tender is in progress to select 4 scooter operators, while all new services must be compatible with Turin's future MaaS app that will be developed under a national program.



ABOUT FLUCTUO

Shared mobility is essential for building cleaner, more livable cities.

Fluctuo is the leader in mobility enablement. We provide key stakeholders with the most exhaustive, accurate data on the market to accelerate the growth of shared mobility.

Dive into shared mobility

Everyone always talks about how important data-driven decisions are. Well, trying to make data-driven decisions without all the facts is like trying to do a jigsaw puzzle with all the edge pieces missing.

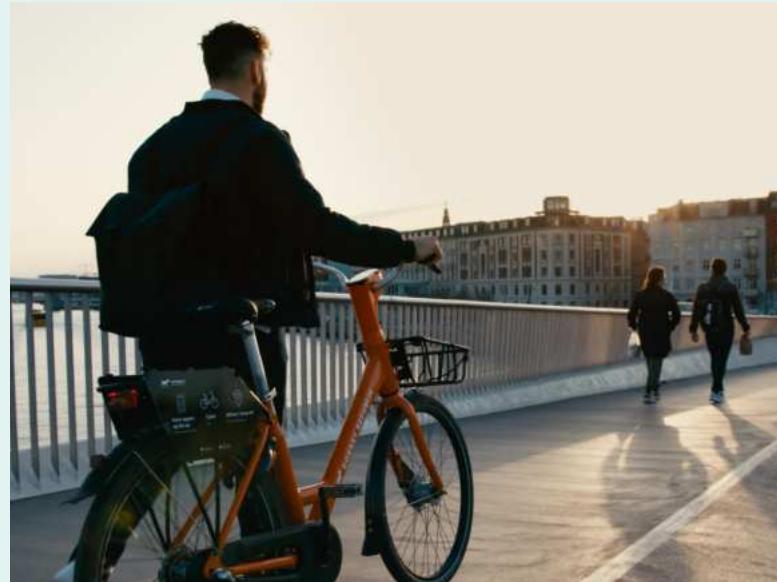
City Dive allows users to make decisions based on the big picture. Our team of mobility experts combine innovative data-collection methods with sophisticated algorithms to produce the most exhaustive and precise data on the market. Every day, we analyse 250+ services in 180+ cities, giving operators the means to improve the performance of their operations, and cities the opportunity to benchmark their mobility ecosystems against others.

[Explore City Dive >](#)

¿Qué MaaS?

Fluctuo's API displays real-time vehicle information on 250+ services in 700+ cities, and allows users to book them through 3rd party apps. Attract users for your MaaS app. Get more rides for your service. Attract shopping centre visitors what scooters are available in the area. Power the micromobility revolution.

[Discover Bridge >](#)



citydive
by fluctuo

City Dive gives operators, public transport authorities and cities access to reliable data on shared mobility services.

250+ SERVICES **180+ CITIES** **2.6M DAILY TRIPS**

TRY FOR FREE dive.fluctuo.com

METHODOLOGY

The European Shared Mobility Index is a quarterly snapshot of the industry across 33 cities, selected to highlight diversity in size, geography and market characteristics.

The Index includes shared bikes, scooters, mopeds and cars. In this edition (Q3 2022) and the previous edition (Q2 2022), we revised our definition of car sharing, and included only rentals that are made by the hour or by the day - multi day rentals were not included.

Ride-hailing services (e.g. Uber), car-pooling (e.g. BlaBlaCar) and long-term rental services (e.g. Swapfiets) are not included. Unless otherwise indicated, all maps, tables, and graphics are point-in-time analyses based on available data as of 30th September 2022. Vehicle and trip data was sourced directly from operators, via open data sources, from mobile applications and public announcements. Industry averages and small amounts of data extrapolation were used to fill remaining gaps.

Partners who contributed financially to this report have not received any special treatment. All graphics and tables appearing in this report are the exclusive property of Fluctuo. Reposting of use is authorised, subject to the notice of copyright.

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THANKS TO OUR PARTNERS



Fully owned by BNP Paribas, Arval is a specialist in full-service vehicle leasing and new mobility solutions. Through our connected solutions and tailored services, companies are able to optimise their employees' mobility and outsource the risks associated with fleet management. We also actively support and advise our customers in accelerating the energy transition, empowering them to be more sustainable.

arval.com



INVERS, inventor of automated vehicle sharing, enables mobility service providers to launch, operate and scale their offerings with integrated telematics and software solutions, specifically designed for developers of shared mobility services. The company acts as an independent and reliable partner for operators such as SHARE NOW, Clevershuttle, Miles, Getaround, Flinkster, Tier, and Emmy. The development takes place entirely in Germany.

invers.com



SHARE NOW is the market leader and pioneer of free-floating carsharing. The company is operating 11,000 vehicles in 16 European cities. More than three million customers are already using the on-demand service that offers rentals from 3 minutes to 30 days and a variety of car models from brands such as BMW, Mercedes-Benz, MINI, smart and Fiat.

share-now.com



LEADER AND VOICE FOR TRANSPORT INNOVATION

POLIS is the leading network of European local, regional and transport authorities committed to transport innovation. Our focus is on innovations that make urban mobility more sustainable, safe, affordable and equitable. We actively support constructive dialogue with shared mobility operators to shape together solutions that serve the public good and drive the shift that we all need to achieve this decade.

polisnetwork.eu

