2025 EMTA BAROMETER

on Public Transport in Metropolitan Areas



FOREWORD



BY THOMAS GEIER
Secretary General
EMTA

RECOVERING AND DECARBONISING: EUROPE'S METROPOLITAN TRANSPORT IN 2024

Metropolitan public transport in Europe is currently in an interesting phase. We are still getting adjusted to some of the new travel patterns that have emerged after the Covid-19 pandemic, and at the same time, public transport – just like the entire transport sector – is at the forefront of the fight against climate change and towards a more sustainable future.

This is the context where we release this fresh EMTA Barometer report. Launched in 2002, the Barometer provides a comprehensive set of public transport data across the largest metropolitan areas in Europe. European Metropolitan Transport Authorities has 35 members who serve daily mobility needs for more than 100 million residents in the continent.

In 2024, the rapid decarbonisation of public transport showed no signs of slowing down.

The rise of electric buses continued, particularly in the northern parts of the continent. Metropolitan regions of Amsterdam, Oslo, Copenhagen and Helsinki, for example, are on their way to boasting bus fleets where most of the vehicles, if not all, are electric. We also see a rise in the use of electric hybrids (London, Barcelona, Brussels) and biodiesel/biogas (Rotterdam/The Hague, Paris).

Even though most of our members were still to reach the passenger numbers of 2019, the last prepandemic year, passenger numbers have grown steadily in most metropolitan areas, and some regions have already recovered from the covid shock. However, there is great variation across EMTA members.

The financial situation of public transport remains challenging regardless. Fare coverage – the percentage by which public transport costs are covered by ticket revenues – is significantly lower than in 2019 in many metropolitan areas. This is due not only to the slow recovery of ridership and rise in costs, but in some countries also to national policies to make public transport cheaper.



-SUMMARY

EMTA Barometer saw a major overhaul last year, and this year's edition follows its predecessor's footsteps. Alongside the report, we have also updated the EMTA Dashboard which provides up-to-date data <u>online</u>.

This Barometer report would not have been possible without our member organisations, whose data contributions have been priceless. A special thank you goes to the Barometer Committee for their dedication.

Methodological note

The EMTA-level values presented in this report should not be directly compared with those from previous editions. The scope of countries and transport modes covered by each indicator may vary from year to year, depending on the data available at the time of compilation.

Furthermore, certain figures included in this report are provisional and may have been revised since the date of data extraction. The most up-to-date values can be consulted in the <u>online dashboard</u>.

1. ABOUT THE PUBLIC TRANSPORT AUTHORITIES ———	04
2. MULTIMODAL NETWORKS	10
3. MODAL SHARES & CAR OWNERSHIP RATE	13
4. BUS FLEETS ELECTRIFICATION ————————————————————————————————————	17
5. PUBLIC TRANSPORT SUPPLY & DEMAND	22
6. OPERATING COSTS & REVENUES	31
7. COVID CRISIS RECOVERY	36
DEFINITIONS	40





1

About the Public Transport Authorities

Who are EMTA members?

EMTA members are metropolitan public transport authorities (PTAs), responsible for organising public transport and other mobility services in, and in most cases also beyond, the core city. The exact tasks of EMTA members vary – some authorities are tasked with setting the broader mobility policy and procurement, with little or no responsibility for the operational side of day-to-day services; at the other end of the spectrum are PTAs responsible not only for running public transport services but also for their branding and marketing. Also, the ownership structures and organisational models can vary significantly across different PTAs.

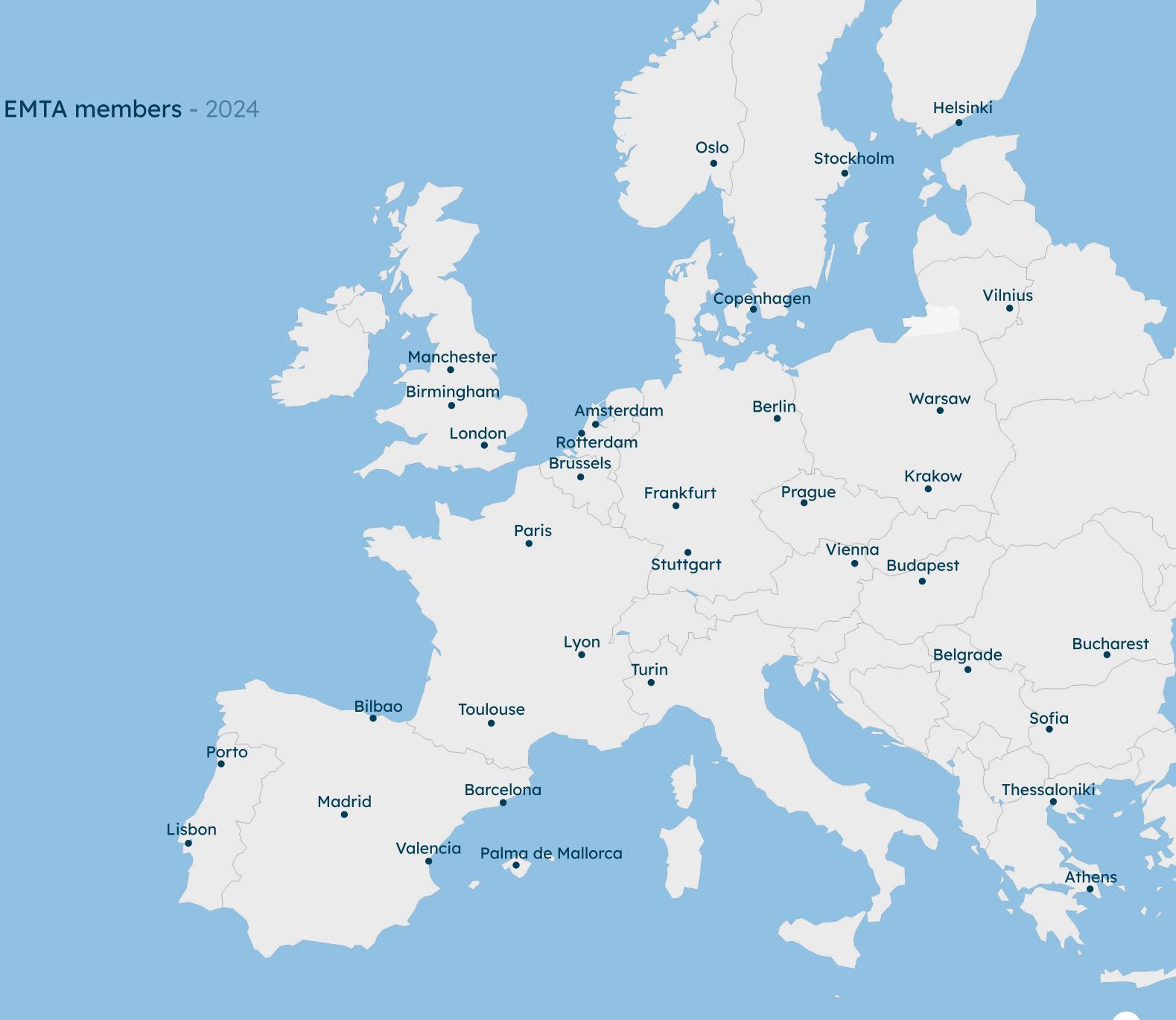
EMTA IN 2024

MEMBERS - PTAs

COUNTRIES

35

21





What kind of area do the PTAs serve?

As metropolitan public transport authorities are, in most cases, responsible for mobility services beyond the core city, the geographical perimeter of the PTAs is usually much larger than the city itself. On average, the PTA service area is 15 times greater than that of the main city.

EMTA IN 2024

AREA

GDP

202,028 km²

5,245 Billion Euros





What is the population of PTA areas?

The population of PTA areas is, on average, more than twice that of the main city, with a cumulated population of 105 million over the 35 EMTA members.

EMTA IN 2024

INHABITANTS

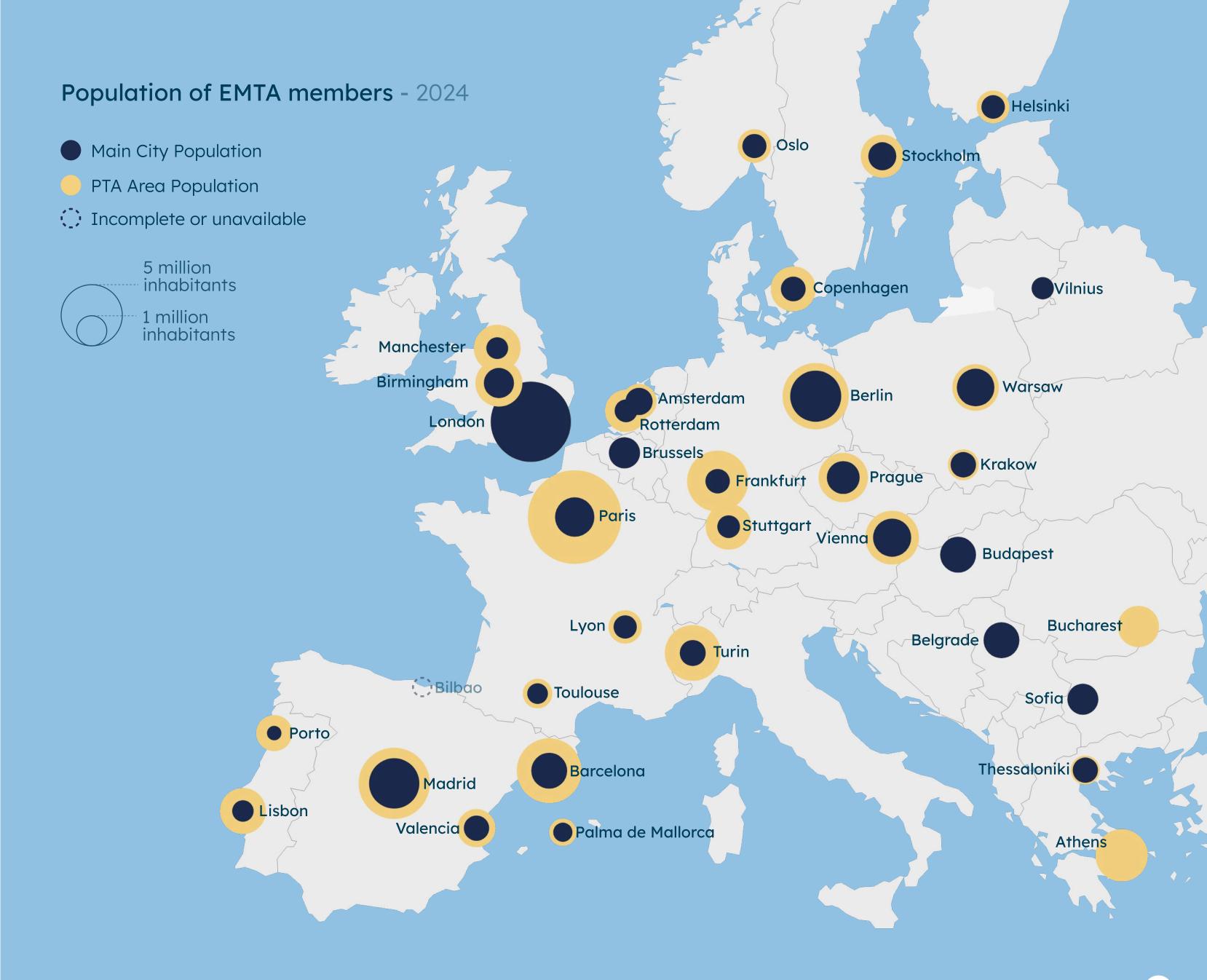
ADITANTS

105 million

DENSITY

521 inhabitants/km²





How different are the PTAs?

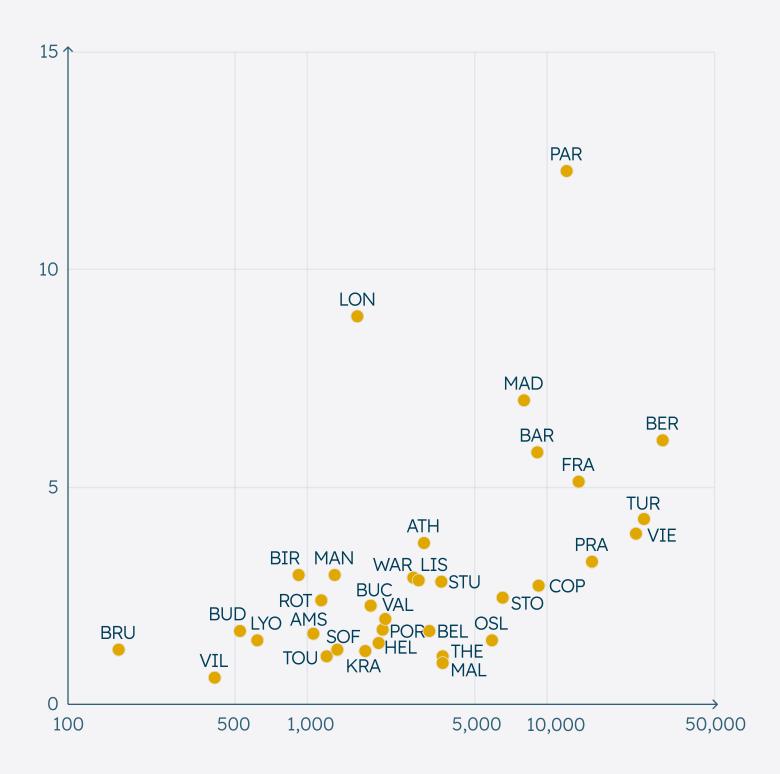
The PTAs vary significantly across the EMTA membership, not only in their responsibilities but also in their geographical remit.

Some PTA areas, such as those of Vilnius,
Budapest and Belgrade, cover only the main city,
whereas the area of PTAs in Vienna, Copenhagen,
Berlin and Turin, for example, include towns and
villages located in some cases more than 100
kilometres from the centre of the main city.

One must take this into account when making comparisons between PTAs.

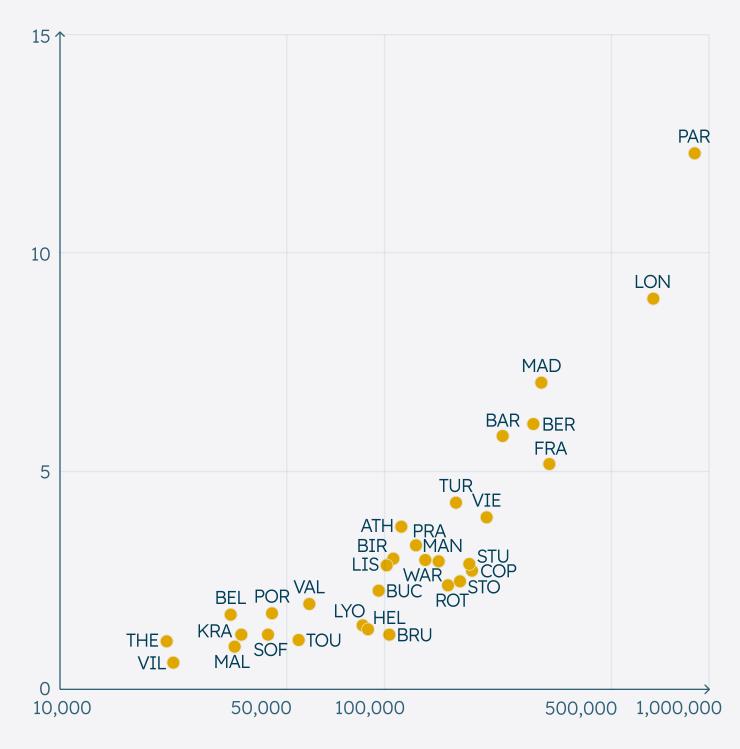
Comparing PTA areas - 2024

Population - million inhabitants



Total area - km² - logarithmic scale ->

Population - million inhabitants



GDP - million Euros - logarithmic scale \longrightarrow

How to read ? Berlin is the largest PTA area with a surface of 30,545 km² and a population of 6,1 million inhabitants.

How to read? Paris is the most populated and the most wealthy PTA area with more than 12 million inhabitants and a GDP of 905 billion Euros.



1/ ABOUT PTAs ————

Labe	I Authority	Main City	Population PTA area inhabitants	Population main City inhabitants	Surface PTA area km²	Surface main City km²	Pop. Density PTA area inhabitants/km²	Pop. Density main City inhabitants/km²	PTA area	GDP per capita PTA area Euros	Urbanized area % of PTA area	PTA/FUA* pop. ratio 'Functional urban area 'F	PTA/FUA* surface ratio functional urban area
AMS	Vervoerregio Amsterdam	Amsterdam	1,629,159	935,793	1,059	219	1,538	4,273			90 %	56 %	32 %
ATH	Athens Urban Transport Organization (OASA S.A.)	Athens	3,721,662		3,080		1,208		112,565	30,246	23 %		98 %
BAR	Autoritat Del Transport Metropolità	Barcelona	5,806,126	1,686,208	9,116	101	637	16,637	232,224	39,996	16 %	114 %	343 %
BEL	Secretariat For Public Transport	Belgrade	1,683,229	1,683,229	3,225	3,225	522	522	33,673 P	20,005	18 %		103 %
BER	Verkehrsverbund Berlin-Brandenburg	Berlin	6,058,792	3,531,195	30,545	891	198	3,963	287,978	47,531	12 %	122 %	173 %
BIL	Consorcio de Transportes de Bizkaia	Bilbao											
BIR	Transport for West Midlands	Birmingham	2,980,936P	1,166,049P	911	271	3,273	4,310	106,238P	35,639	70 %		42 %
BRU	Brussels Mobility	Brussels	1,255,795	1,255,795	162	162	7,752	7,752	103,000	82,020	100 %		
BUC	Ilfov Public Transport Intercommunity Development Association	Bucharest	2,258,507		1,823		1,239		95,965	42,490	31 %		169 %
BUD	Centre for Budapest Transport	Budapest	1,686,222	1,686,222	525	525	3,210	3,210			83 %	56 %	8 %
COP	Movia Public Transport	Copenhagen	2,724,597	764,249	9,203	100	296	7,673	186,857P	68,581	21 %		308 %
FRA	Rhein-Main Verkehrsverbund GMBH	Frankfurt	5,122,647P	742,640 P	13,592P	249 P	377	2,985	323,796 P	63,209	16 %	191 %	315 %
HEL	Helsingin seudun liikenne (HSL)	Helsinki	1,417,800	684,018	1,970	215	720	3,181	89,441 P	63,085		92 %	37 %
KRA	Zarzad Transportu Publicznego (ZTP)	Krakow	1,223,262P	807,644P	1,748P	327 P	700	2,466	36,054P	29,473	33 %	82 %	46 %
LIS	Transportes Metropolitanos de Lisboa	Lisbon	2,847,352	560,429	2,938	98	969	5,698	101,884	35,782	31 %	94 %	66 %
LON	Transport for London	London	8,945,309P	8,945,309P	1,605	1,605	5,575	5,575	672,087P	75,133	92 %		23 %
LYO	SYTRAL mobilités	Lyon	1,454,148	668,762	622	63	2,339	10,646	84,948	58,418	73 %	63 %	17 %
MAD	Consorcio Regional de Transportes de Madrid	Madrid	7,009,268	3,422,416	8,031	605	873	5,657	305,340	43,562	12 %	100 %	101 %
MAL	Consorci de Transports de Mallorca	Palma de Mallorca	957,726	438,234	3,654	210	262	2,085	34,436	35,957	8 %	135 %	176 %
MAN	Transport for Greater Manchester	Manchester	2,948,633P	579,917 P	1,295	117	2,278	4,944	132,606 P	44,972	76 %		41 %
OSL	RUTER AS	Oslo	1,464,970	724,290	5,899	426	248	1,700			11 %		74 %
PAR	Île-de-France Mobilités	Paris	12,278,210	2,048,472	12,065	105	1,018	19,430	905,461	73,745	24 %	93 %	100 %
POR	Area Metropolitana do Porto	Porto	1,716,335	231,591	2,054	42	835	5,572	44,905	26,163	48 %	133 %	213 %
PRA	Regionální Organizátor Pražské Integrované Dopravy	Prague	3,292,305	1,397,880	15,316	497	215	2,811	124,135	37,705	8 %	150 %	268 %
ROT	Metropoolregio Rotterdam/Den Haag	Rotterdam	2,384,055	638,870	1,136	292	2,098	2,188	157,460	66,047	75 %	126 %	52 %
SOF	Sofia Urban Mobility Centre (SUMC)	Sofia	1,235,261	1,235,261	1,327	1,327	931	931	43,476	35,196	29 %	80 %	23 %
STO	Region Stockholm	Stockholm	2,473,307	995,574	6,548	188	378	5,289	170,914	69,103	15 %		81 %
STU	Verband Region Stuttgart	Stuttgart	2,830,416P	631,940 P	3,653	207	775	3,049	182,489 P	64,474	23 %	112 %	100 %
THE	Thessaloniki Transport Authority SA (TheTA)	Thessaloniki	1,086,927	797,863	3,677	112	296	7,124	21,344	19,637	11 %		
TOU	Tisséo Collectivités	Toulouse	1,115,836	516,735	1,200	118	930	4,376	54,398	48,751	38 %	75 %	23 %
TUR	Agenzia Mobilita Piemontese	Turin	4,248,534	846,757	25,320	130	168	6,495	166,613	39,217	7 %	247 %	1489 %
VAL	Autoritat de Transport de Valencia	Valencia	1,928,233	802,786	2,141	121	901	6,637	58,747	30,467	24 %	109 %	121 %
VIE	Verkehrsverbund Ost-Region	Vienna	3,923,850	1,920,181	23,432	414	167	4,633	207,467	52,873	5 %		255 %
VIL	JUDU – Susisiekimo paslaugos	Vilnius	607,404	607,404	408	408	1,487	1,487	22,268 P	36,660	61 %	86 %	9 %
WAR	Zarząd Transportu Miejskiego	Warsaw	2,909,096	1,862,402	2,749	517	1,058	3,602	146,480	50,353	36 %	86 %	32 %





2

Multimodal networks

PTA's data reporting scope - 2024

Which transport modes are subject to data reporting?

Most PTAs have a mandate to procure all or most transport services within their area. However, some PTAs may not have the mandate to procure all public transport modes within their area: urban buses can be procured by a municipality, or commuter or regional trains by the regional/national government.

Some services, over which a PTA has limited control, can therefore be excluded from the barometer reporting scope. The PTAs and transport modes included in the barometer data this year are shown on the chart.

Also excluded from the reporting scope are bike-sharing, car-sharing, and car-pooling. Walking and cycling are reported through modal shares only.

		Regional Bus	Urban bus	Regional Rail	Commuter Rail	Light Rail	Tram	Metro	Other
Amsterdam	AMS			-	-	-	<u></u>	<u>,</u>	-
Athens	ATH	-		-	-	-		,=,	-
Barcelona	BAR			-	<u> </u>	-	<u></u>	,=,	-
Belgrade	BEL	-		-	_	-	P	-	-
Berlin	BER			<u> </u>	<u> </u>	-	<u></u>	,=,	=
Bilbao	BIL	-	-	-	-	-	-	-	-
Birmingham	BIR	-		-	_	-	<u></u>	-	=
Brussels	BRU	-		-	-	-	<u></u>	,=,	-
Bucharest	BUC			-	-	-	<u></u>	,=,	
Budapest	BUD	-		-	-	-	<u></u>	,=,	-
Copenhagen	COP	-		-	<u> </u>	-	-	,=,	=
Frankfurt	FRA			<u> </u>	_	-	<u></u>		-
Helsinki	HEL			-	_	<u> </u>	<u></u>		
Krakow	KRA	-		-	-	-	<u></u>	-	-
Lisbon	LIS			-	<u> </u>	<u> </u>	<u></u>		
London	LON	-		-	_	<u> </u>			-
Lyon	LYO	-		-	-	-	<u></u>	,=,	=
Madrid	MAD			-	<u> </u>	<u> </u>	-	,=,	-
Manchester	MAN	-		-	_	-	<u></u>	-	-
Oslo	OSL			-	-	-	<u></u>	,=,	=
Palma de Mallorca	MALL			-	_	-	-	,=,	-
Paris	PAR			-	_	-	_	,=,	-
Porto	POR		-	-	-	-	-	-	-
Prague	PRA			-	-	-	<u></u>	,=,	==
Rotterdam	ROTT			-	-	-	P		-
Sofia	SOF	-		-	-	-	<u></u>		-
Stockholm	STO		-	-	<u> </u>	<u> </u>	-		-
Stuttgart	STU			<u> </u>	A	A	-	-	-
Thessaloniki	THE			-	-	-	-	-	-
Toulouse	TOU	-		-	-	-			-
Turin	TUR			<u> </u>	<u> </u>	-			-
Valencia	VAL			-	-	-			-
Vienna	VIE	-	-	-	-	-	-	-	-
Vilnius	VIL	-		-	-	-	-	-	-
Warsaw	WAR	-		具	<u> </u>	-			_



Number of public transport lines per mode - 2024

How many lines are there in each network?

EMTA IN 2024

NUMBER OF LINES

> 15,000

NETWORK LENGTH

> 35 million km







3

Modal Shares & Car Ownership Rate

How do people travel?

Across EMTA PTAs, more than a fifth of all trips were made predominantly by public transport. However, the modal share of motorised vehicles is considerably higher, which is due to the PTA areas being metropolitan in their nature, including areas both suburban and rural. On average, walking and cycling together represent more than a third of modal share, even when not counting cycling or walking to and from public transport stops.

EMTA IN 2024

PUBLIC TRANSPORT

MOTORISED VEHICLES

22% of journeys

41% of journeys

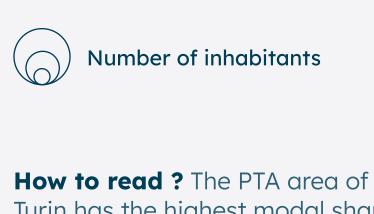
WALKING

CYCLING

32% of journeys

5% of journeys

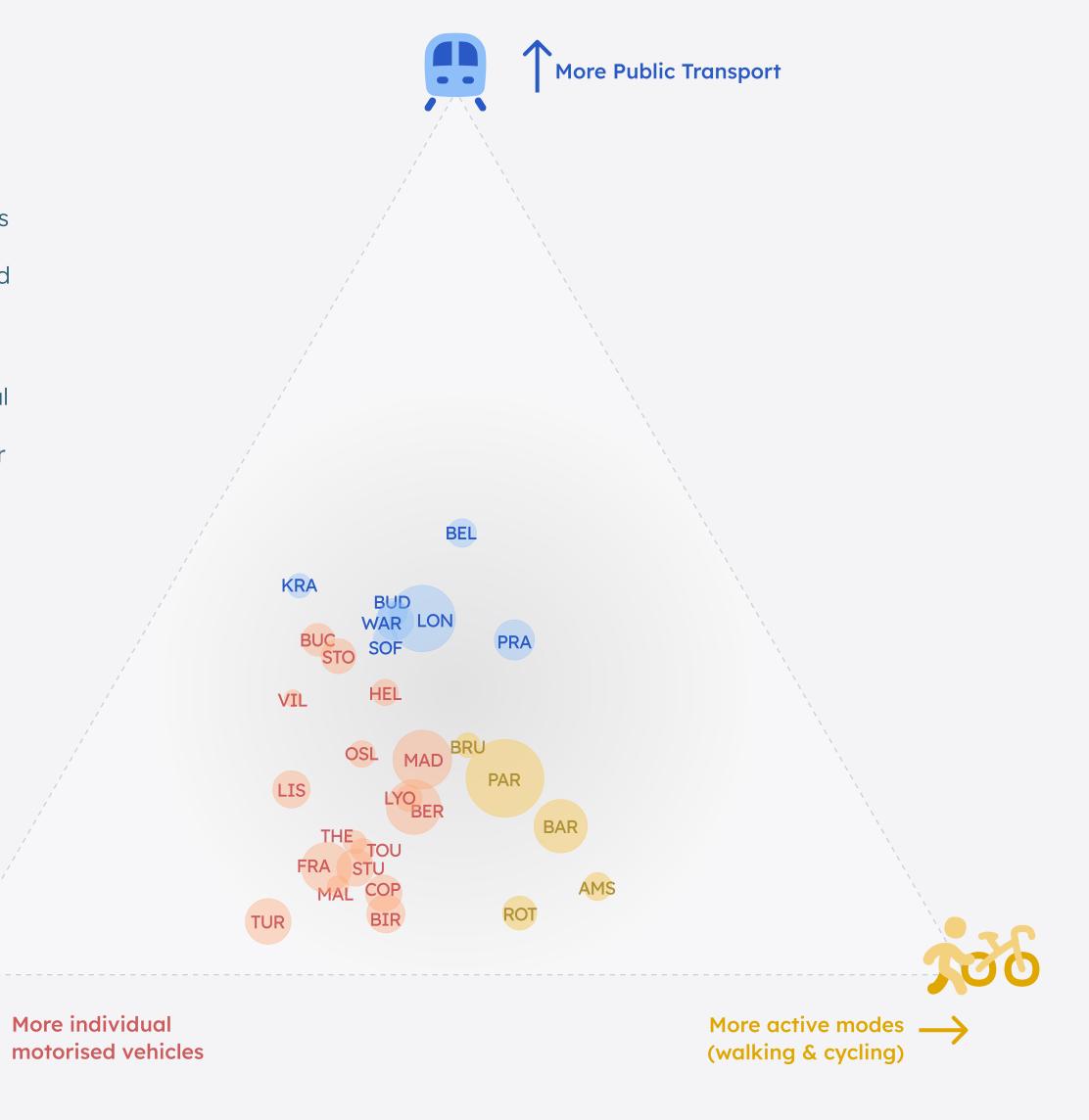
Breakdown of daily journeys per transport modes - Last available year



Turin has the highest modal share of motorised vehicles (private cars and powered 2-wheelers) as it is plotted closest to the "motororised vehicle" corner.

One important caveat however is that larger areas, such as that of Turin, inevitably contain more rural populations, with relatively higher car-dependence and hence higher car use.

Values are incomplete for Athens, Bilbao, Manchester, Porto, Valencia, and Vienna.





How do people travel?

There is great variation in modal share patterns across the PTAs.

Public transport has a larger modal share in areas with a high share of urban population; this is the case with the PTAs responsible for the main city only, such as Belgrade, Budapest, Krakow or Warsaw.

The share of cycling is highest in PTA areas with advanced cycling infrastructure, such as in and around Amsterdam and Rotterdam/The Hague.

Individual motorised vehicles tend to dominate in PTAs with a large geographical, non-urban area, such as that of Turin.

Label	•	Average number of daily journeys	Share of Motorised Vehicles	Share of Public Transport	Share of Cycling	Share of Walking	Year of the last study	Cars per 1,000 inhabitants PTA area	Cars per 1,000 inhabitants main City	Urbanized area % of PTA area
AMS	Amsterdam		33 %	P 10 % P	32 % P	25 % P				90 %
ATH	Athens									23 %
BAR	Barcelona	20,262,444	33 %	16 %	2 %	49 %		453 P	453 P	16 %
BEL	Belgrade	3,010,000	24 %	50 %	1 %	24 %	2017	425	425	18 %
BER	Berlin	18,900,000	44 %	19 %	13 %	24 %		430	329	12 %
BIL	Bilbao									
BIR	Birmingham	6,909,238 P	53 %	P 7 % P	2 % P	39 % P		391 P	343 P	70 %
BRU	Brussels	1,101,000 P	35 %	P 26 % P	7 % P	30 % P				100 %
BUC	Bucharest		42 %	38 %	5 %	14 %				31 %
BUD	Budapest	4,743,340	35 %	P 41 % P	5 % P	19 % P	2024	423	423	83 %
COP	Copenhagen	7,098,022	52 %	9 %	17 %	22 %	2024	419	239	21 %
FRA	Frankfurt	2,350,000 P	55 %	P 12 % P	9 % P	24 % P	2017			16 %
HEL	Helsinki	3,160,000	40 %	32 %	5 %	23 %	2024	496	426	
KRA	Krakow	2,231,459	41 %	44 %	4 %	10 %		613 P	P	33 %
LIS	Lisbon	5,050,000	53 %	21 %	1 %	24 %				31 %
LON	London	26,067,000 P	33 %	P 40 % P	4 % P	23 % P		291 P	291 P	92 %
LYO	Lyon	4,200,000	44 %	20 %	2 %	34 %	2015			73 %
MAD	Madrid	15,847,267	40 %	24 %	1 %	34 %		585	421	12 %
MAL	Palma de Mallorco	9,973,774	55 %	10 %	2 %	33 %				8 %
MAN	Manchester							385	282	76 %
OSL	Oslo	4,036,643	45 %	25 %	5 %	24 %	2024	452 P	380 P	11 %
PAR	Paris	40,000,000	35 %	P 22 % P	2 % P	41 % P		368 P		24 %
POR	Porto									48 %
PRA	Prague		26 %	38 %	1 %	35 %	2021	679	752	8 %
ROT	Rotterdam	6,094,306	41 %	7 %	26 %	26 %		428		75 %
SOF	Sofia		37 %	38 %	1 %	24 %				29 %
STO	Stockholm		41 %	36 %	8 %	13 %	2024	266	193	15 %
STU	Stuttgart	8,563,461	52 %	12 %	8 %	27 %	2023	609	473	23 %
THE	Thessaloniki	1,600,000	51 %	15 %	9 %	25 %	2023	528		11 %
TOU	Toulouse	3,500,000	50 %	14 %	5 %	29 %	2023	609	470	38 %
TUR	Turin	8,217,863	63 %	6 %	3 %	28 %		705 P	689 P	7 %
VAL	Valencia									24 %
VIE	Vienna									5 %
VIL	Vilnius	1,524,000	48 %	31 %	5 %	15 %	2024	403 P	403 P	61 %
WAR	Warsaw	4,600,000 P	35 %	P 40 % P	4 % P	21 % P	2015			36 %



Comparing PTAs areas car ownership rates - 2024

Where are the highest car ownership rates?

There is no obvious relationship between car ownership and car use. It is remarkable, however, that among the wealthier PTA areas, most have a car ownership rate that is lower than average. This is the case especially with London and Stockholm, both of which boast an extensive urban rail network.

EMTA IN 2024

IN PTA AREAS

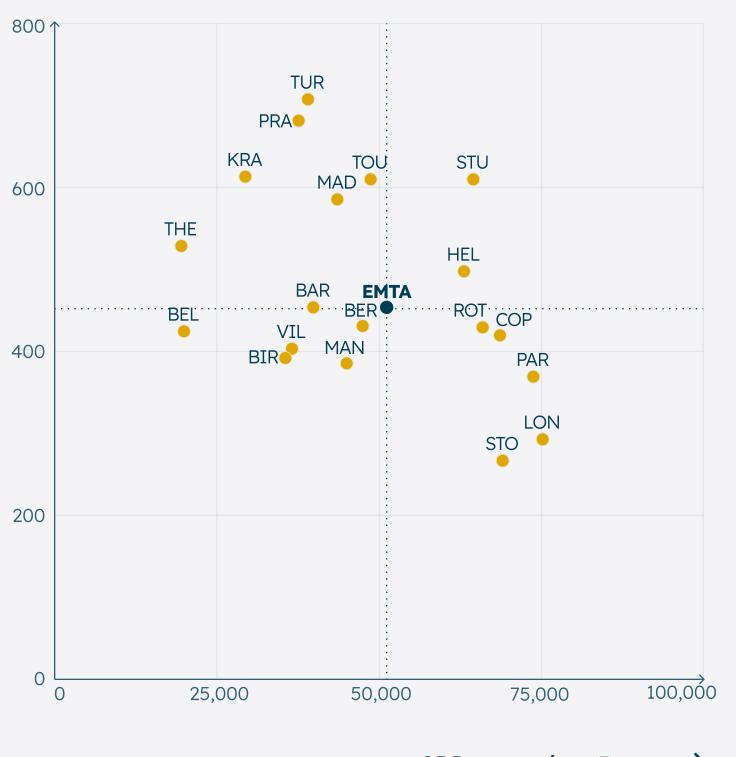
452 cars per 1,000 inhabitants

IN MAIN CITIES ONLY

379 cars per 1,000 inhabitants

emfe european metropolitan transport authorities



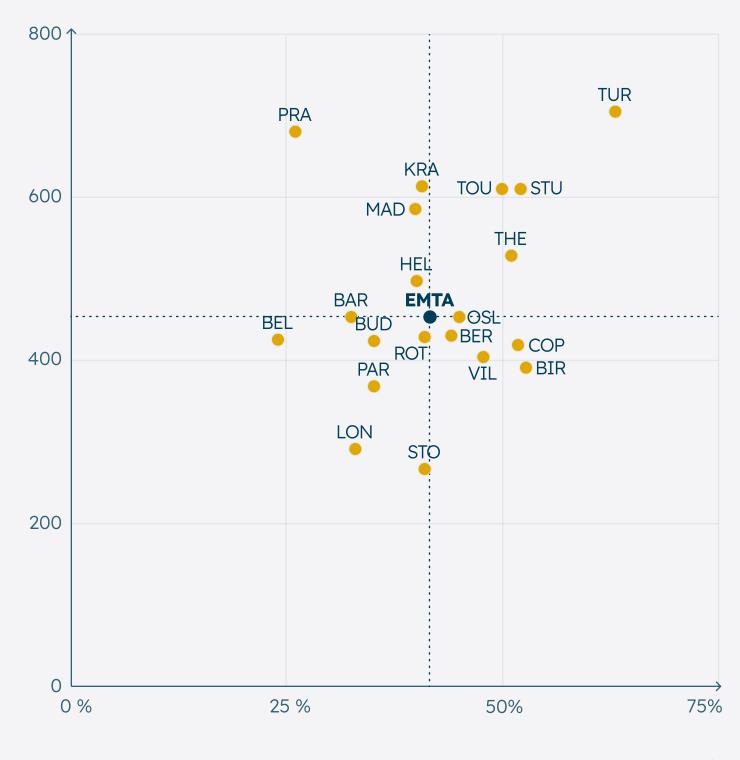


GDP per capita - Euros \longrightarrow

How to read ? The PTA area of London has the highest GDP per capita, and its car ownership rate is below the EMTA average.

Values are incomplete for Amsterdam, Athens, Bilbao, Brussels, Bucharest, Budapest, Frankfurt, Lisbon, Lyon, Oslo, Palma de Mallorca, Porto, Sofia, Valencia, Vienna, Warsaw.

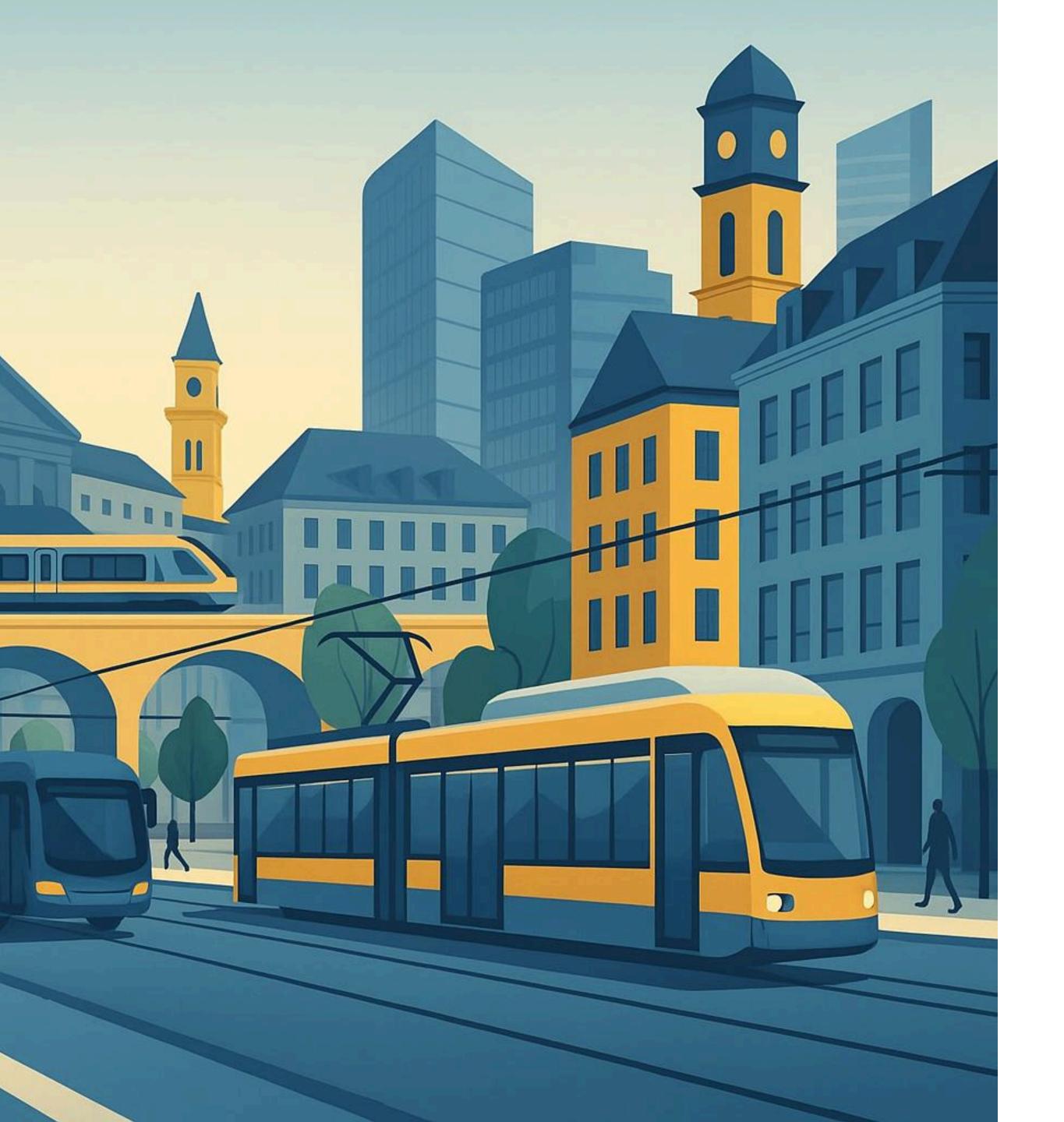
Car ownership rate - cars per 1,000 inhabitants



Share of motorised vehicles - % of daily journeys ->

How to read? The highest car ownership is in the PTA areas of Prague and Turin with arround 700 cars per 1,000 inhabitants, despite for Prague a below-average modal share for cars and motorcycles.

Values are incomplete for Amsterdam, Athens, Bilbao, Brussels, Bucharest, Frankfurt, Lisbon, Lyon, Manchester, Palma de Mallorca, Porto, Sofia, Valencia, Vienna, Warsaw.



4

Bus fleets electrification

Breakdown of bus fleets per propulsion mode - 2024

What is the propulsion mix within bus fleets?

In 2024, the share of fully electric vehicles has grown 3 percentage points year on year, from 11% to 14%. The share of biogas has dropped from 7% to 5%. The majority of buses within EMTA PTAs still run on gas or diesel. This represents the technology choices for the urban and regional bus fleets combined. Specific urban and regional statistics are presented overleaf.

EMTA IN 2024

GAS & DIESEL

70% of bus fleet

BIODIESEL & BIOGAS

5% of bus fleet

ELECTRIC

14% of bus fleet

HYBRID ELECTRIC

12% of bus fleet

■ Gas & Diesel

Diesel Euro VI, Diesel Euro III-V including EEV and older Diesel, Gas including CNG and LPG

Hybrid electric

Plug-in hybrid electric and other hybrid electric vehicles

Electric

Trolleybus, battery-electric vehicle with depot charging, battery-electric vehicle with opportunity charging

Biodiesel & Biogas

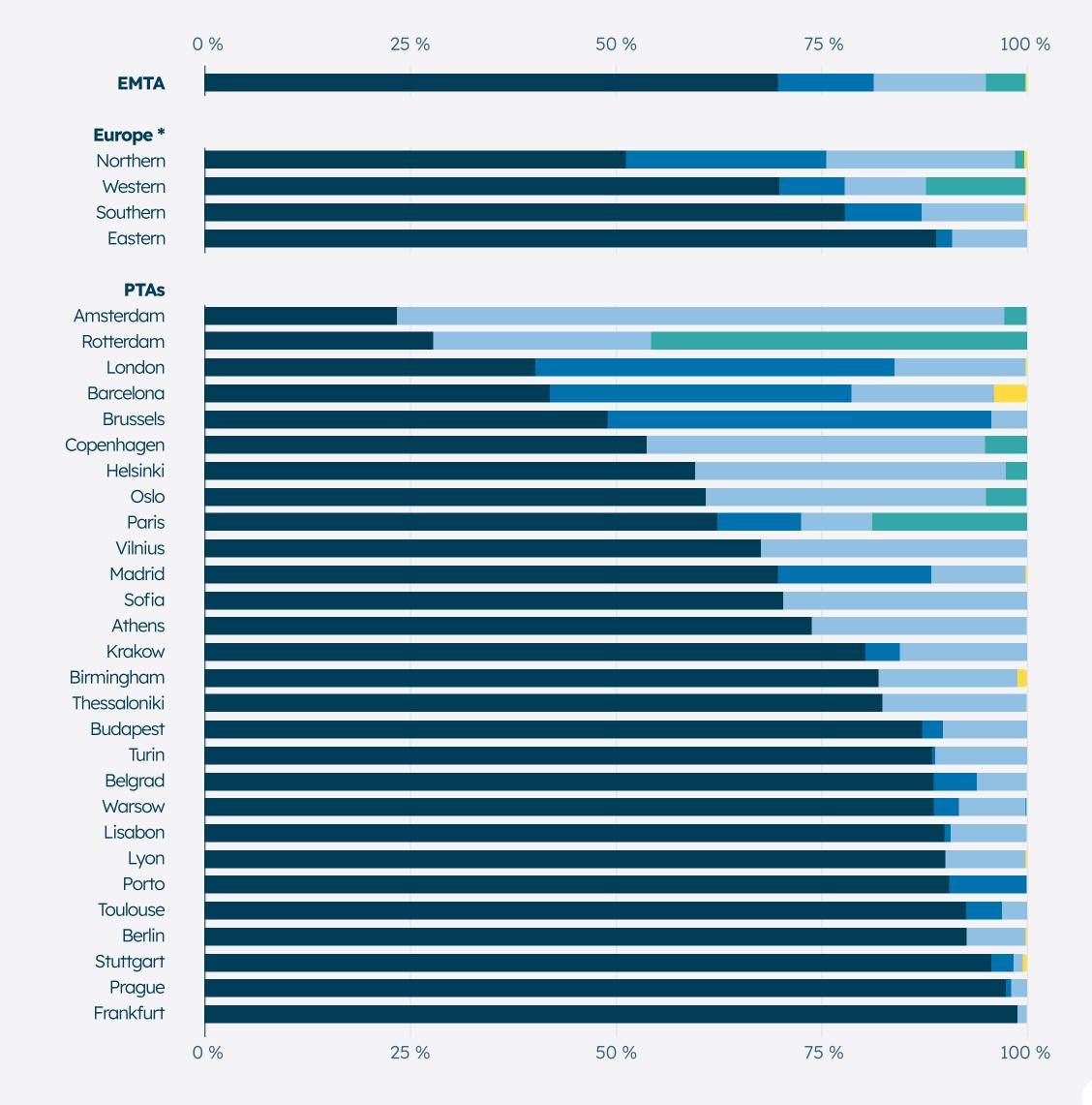
biodiesel and biogas vehicles

Hydrogen

Hydrogen fuel-cell vehicle

* According to the United Nations Satistics classification

Values are incomplete for Bilbao, Bucharest, Palma de Mallorca, Manchester, Stockholm, Valencia, and Vienna.





What is the propulsion mix within bus fleets?

The PTA areas of Amsterdam (74%), Copenhagen (41%), Helsinki (38%) and Oslo (34%) have the highest proportion of fully electric buses.

Barcelona, London and Brussels have the highest shares of hybrid electric buses.

The north of Europe has decarbonised faster than other regions, partly due to the lower price of electricity in some countries of the region, and national support programmes.

Breakdown of bus fleets per propulsion mode - 2024

Berlin

Budapest

Belgrade

Warsaw

Toulouse

Prague

25 %

50 %

75 %

100 %

Lyon

■ Gas & Diesel

Diesel Euro VI, Diesel Euro III-V including EEV and older Diesel, Gas including CNG and LPG

Hybrid electric

Plug-in hybrid electric and other hybrid electric vehicles

Electric

Trolleybus, battery-electric vehicle with depot charging, battery-electric vehicle with opportunity charging

■ Biodiesel & Biogas

biodiesel and biogas vehicles

Hydrogen

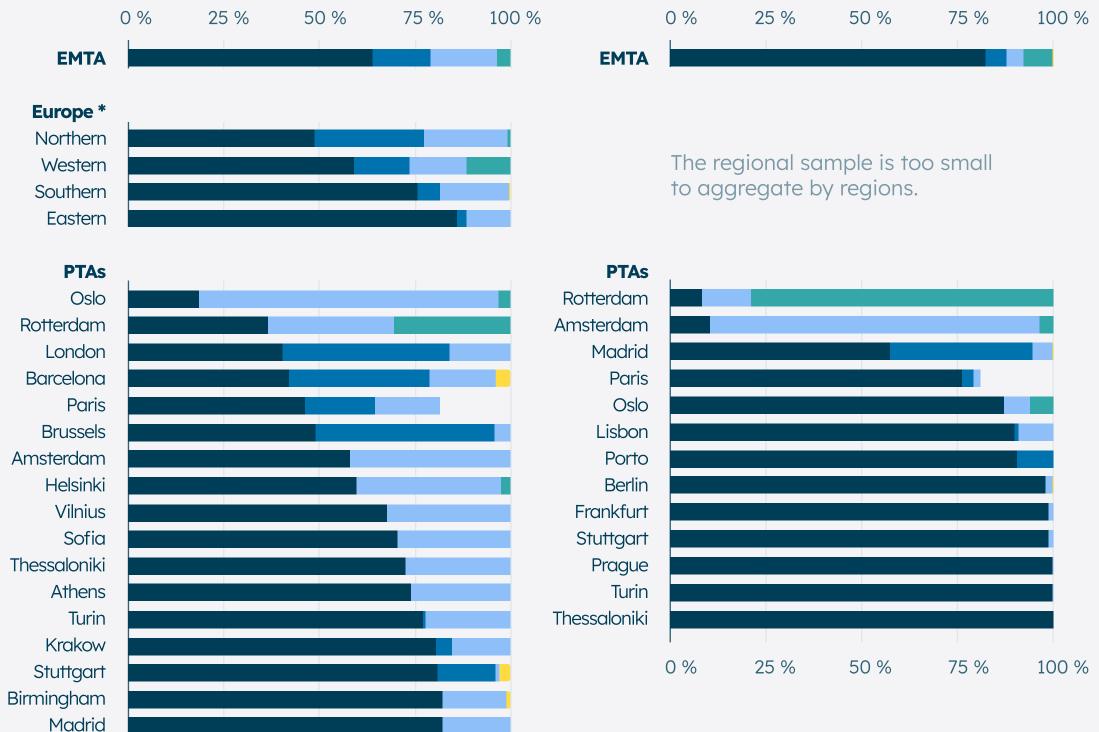
Hydrogen fuel-cell vehicle

* According to the United Nations Satistics classification

Values are incomplete for Bilbao, Bucharest, Copenhaguen, Manchester, Palma de Mallorca, Stockholm, Valencia, and Vienna.

Urban buses

Regional buses





At what pace is the electrification of fleets happening?

Time series illustrate how bus fleets have transitioned across various PTA areas. The pace of electrification has been extraordinarily rapid in Amsterdam, where electric buses made up 74% of the bus fleet in 2024, a 28-point rise year-on-year, with growth projected to continue.

■ Gas & Diesel

Diesel Euro VI, Diesel Euro III-V including EEV and older Diesel, Gas including CNG and LPG

Hybrid electric

Plug-in hybrid electric and other hybrid electric vehicles

Electric

Trolleybus, battery-electric vehicle with depot charging, battery-electric vehicle with opportunity charging

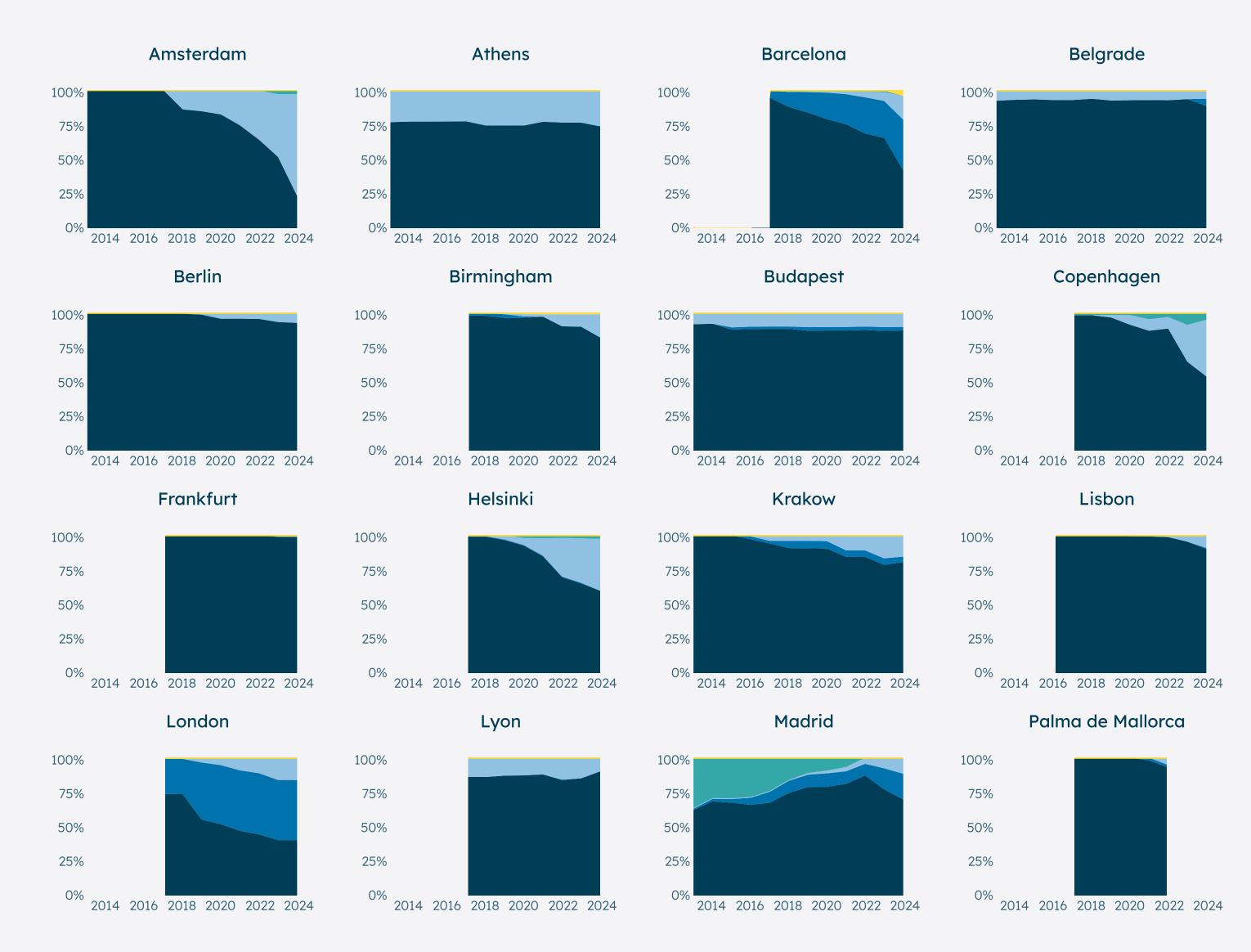
Biodiesel & Biogas

biodiesel and biogas vehicles

Hydrogen

Hydrogen fuel-cell vehicle

Breakdown of bus fleets per propulsion mode - Time series





At what pace is the electrification of fleets happening?

Copenhagen and Helsinki have also kept up their pace of electrification. Athens and Lyon, among others, have had electric buses for decades, thanks to their trolleybus networks.

■ Gas & Diesel

Diesel Euro VI, Diesel Euro III-V including EEV and older Diesel, Gas including CNG and LPG

Hybrid electric

Plug-in hybrid electric and other hybrid electric vehicles

Electric

Trolleybus, battery-electric vehicle with depot charging, battery-electric vehicle with opportunity charging

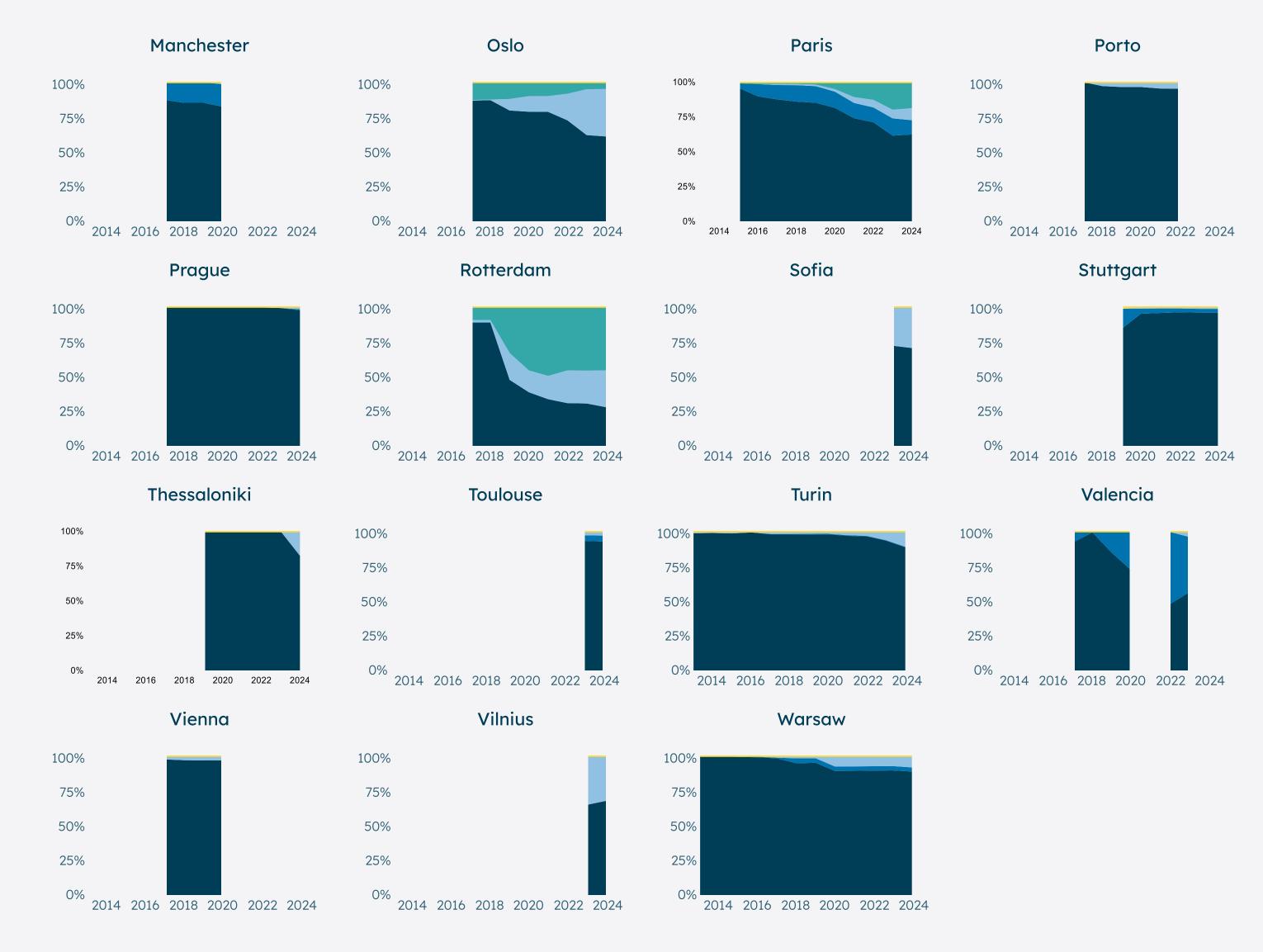
Biodiesel & Biogas

biodiesel and biogas vehicles

Hydrogen

Hydrogen fuel-cell vehicle

Breakdown of bus fleets per propulsion mode - Time series







Public Transport Supply & Demand

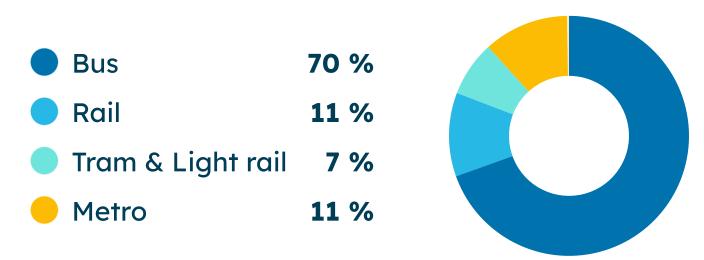
What's the public transport supply by mode?

In total, public transport vehicles - buses, trains, trams, light rail, metros and others - cover 4,7 billion kilometres a year within the EMTA member PTAs. 70% of these vehicle movements are by bus.

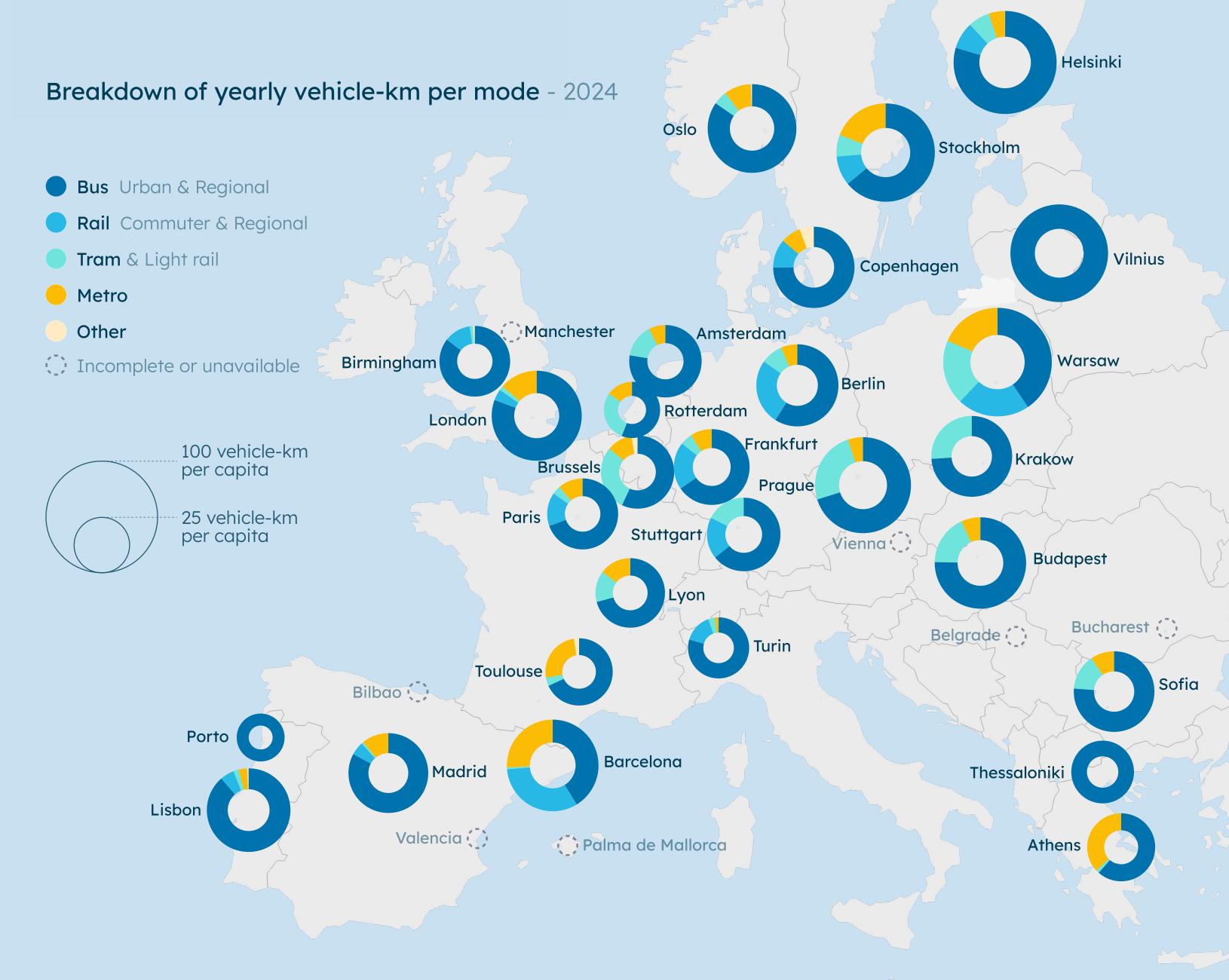
EMTA IN 2024

VEHICLE-KM - ALL MODES

4,654 million







How to read? In Barcelona and Warsaw are the only PTA area where buses represent less than 50% of the vehicle-km supplied.

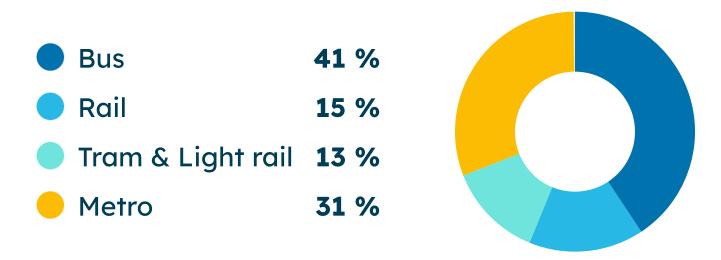
What's the public transport demand by mode?

There are almost 25 billion public transport passenger journeys made a year within the EMTA PTA areas. Despite buses representing 70% of kilometres produced, bus journeys make up only 41% of boardings. This is obviously due to the much higher capacity of the vehicles running on rails.

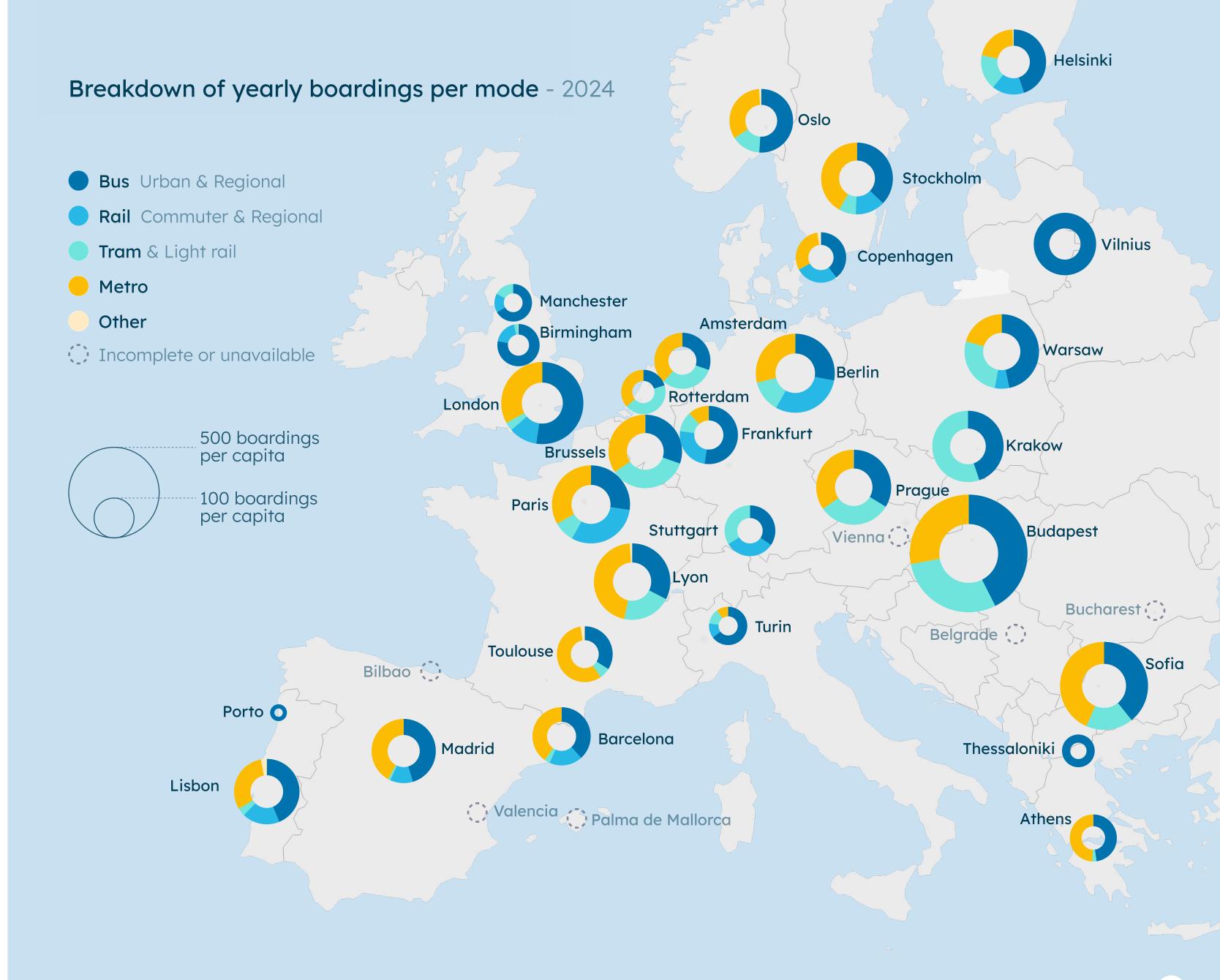
EMTA IN 2024

BOARDINGS - ALL MODES

24,883 million







2024 results [results, compared to 2023 [| |

How do 2024 results compare to 2023?

In most PTA areas, between 100 and 300 public transport boardings were reported per unit population in 2024. In Budapest, the figure is considerably higher: this is due to the public transport area there being limited to the city of Budapest, which attracts large flows of commuters and visitors coming from municipalities located outside. Similar figures would be likely to appear also in other core cities of PTA areas – this goes to show that public transport demand and supply is a lot higher in central areas than on the outskirts.

EMTA IN 2024

BOARDINGS

263 per capita

OCCUPANCY RATE

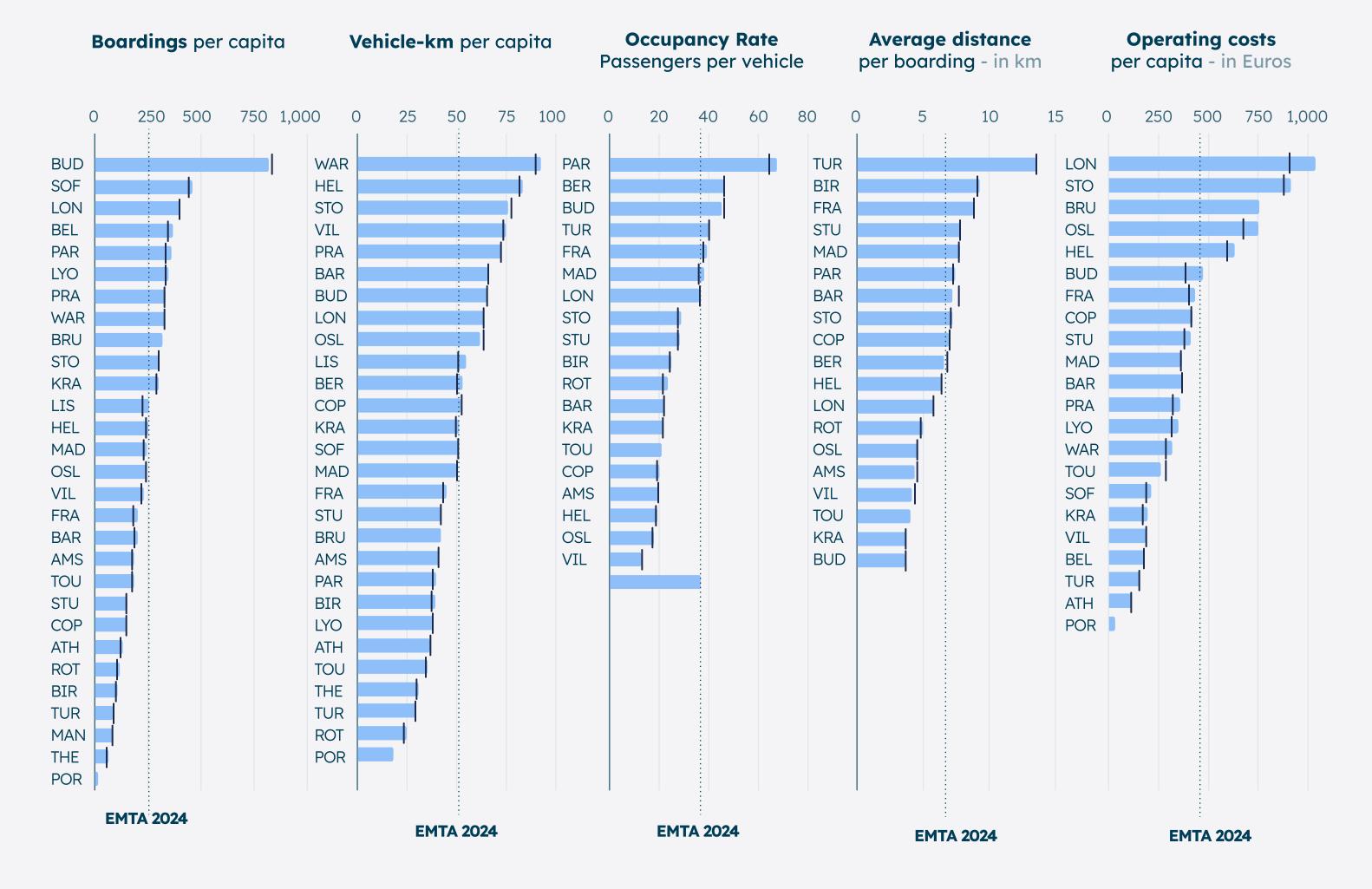
37 passengers/vehicle

VEHICLE-KM

51 per capita

AVERAGE DISTANCE

6.7 km per boarding



How to read? Budapest PTA has the highest number of boardings per capita, with 820 boardings per inhabitant, decreasing since 2023 (837 boardings per inhabitant). It's also the third highest average occupancy rate in 2024, decreasing.



In most PTA areas, between 30 and 70 vehicle kilometres per capita were operated in 2024. There is no major change compared with the figures from 2023.

The average occupancy of public transport vehicles in 2024 was ranging from 13 to 68 across EMTA members. Higher figures were observed in areas where rail services are more prominent in the production of public transport services, such as Paris, Berlin, Turin and Budapest.

The cost of operation of public transport services varies greatly across EMTA members ranging from 30 to more than 1000 euros per unit population. However, these differences are due to various mandates of public transport authorities.

About Helsinki operating Costs

Operating costs of Helsinki also include costs that the PTA pays its member municipalities for utilising public transport infrastructure (such as metro tracks and stations, tram tracks). This structure is unique to the PTA of Helsinki region.

Label	Main City	-		Boardings	Vehicle-km	Vehicle-km		Avg. distance	Operating	Op. Costs
		PTA area	million	per capita	million	per capita	passengers per vehicle	per boarding km	Costs million Euros	per capita Euros
								0.000		
AMS	Amsterdam	1,629,159	303	186	67	41	20	4.4		
ATH	Athens	3,721,662	487	131	135	36			428	115
BAR	Barcelona	5,806,126	1,165	201	382	66	22	7.2	2,122 P	366
BEL	Belgrade	1,683,229							298	177
BER	Berlin	6,058,792	2,240	370	320	53	46	6.6		
BIL	Bilbao									
BIR	Birmingham	2,980,936 P	315	106	117	39	25	9.3		
BRU	Brussels	1,255,795	402	320	53	42			950	757
BUC	Bucharest	2,258,507								
BUD	Budapest	1,686,222	1,382	820	111	66	45	3.6	797	473
COP	Copenhagen	2,724,597	409	150	141	52	20	6.9	1,149	422
FRA	Frankfurt	5,122,647 P	1,028	201	231	45	39	8.8	2,213 P	432
HEL	Helsinki	1,417,800	355	250	118	83	19	6.4	895	631
KRA	Krakow	1,223,262 P	368	301	63	51	22	3.7	241	197
LIS	Lisbon	2,847,352	722	254	156	55				
LON	London	8,945,309 P	3,571 P	399	569	64	36	5.8	9,267	1,036
LYO	Lyon	1,454,148	503	346	55	38			506	348
MAD	Madrid	7,009,268	1,713	244	350	50	38	7.8	2,585	369
MAL	Palma de Malloro	ca 957,726								
MAN	Manchester	2,948,633 P	246	83						
OSL	Oslo	1,464,970	351	240	90	62	18	4.6	1,101	751
PAR	Paris	12,278,210	4,429	361	485	40	68	7.4		
POR	Porto	1,716,335	29	17	31	18			52	30
PRA	Prague	3,292,305	1,095	333	238	72			1,186	360
ROT	Rotterdam	2,384,055	278	117	59	25	24	5.0		
SOF	Sofia	1,235,261	566	458	63	51			261	211
STO	Stockholm	2,473,307	754	305	188	76	29	7.2	2,266	916
STU	Stuttgart	2,830,416 P	432	153	120	42	28	7.9	1,160 P	410
THE	Thessaloniki	1,086,927	69	63	34	31				
TOU	Toulouse	1,115,836	206	185	40	35	21	4.1	290	260
TUR	Turin	4,248,534	369	87	124	29	40	13.6	659 P	155
VAL	Valencia	1,928,233								
VIE	Vienna	3,923,850								
VIL	Vilnius	607,404	140	230	45	75	13	4.1	114	187
WAR	Warsaw	2,909,096	956	329	269	92			931	320



Comparing demand and supply across PTAs - 2024

To what extent does the supply drive the demand for public transport?

There is a natural relationship between a higher production (expressed as public transport mileage) and a higher ridership (expressed as the number of passenger boardings).

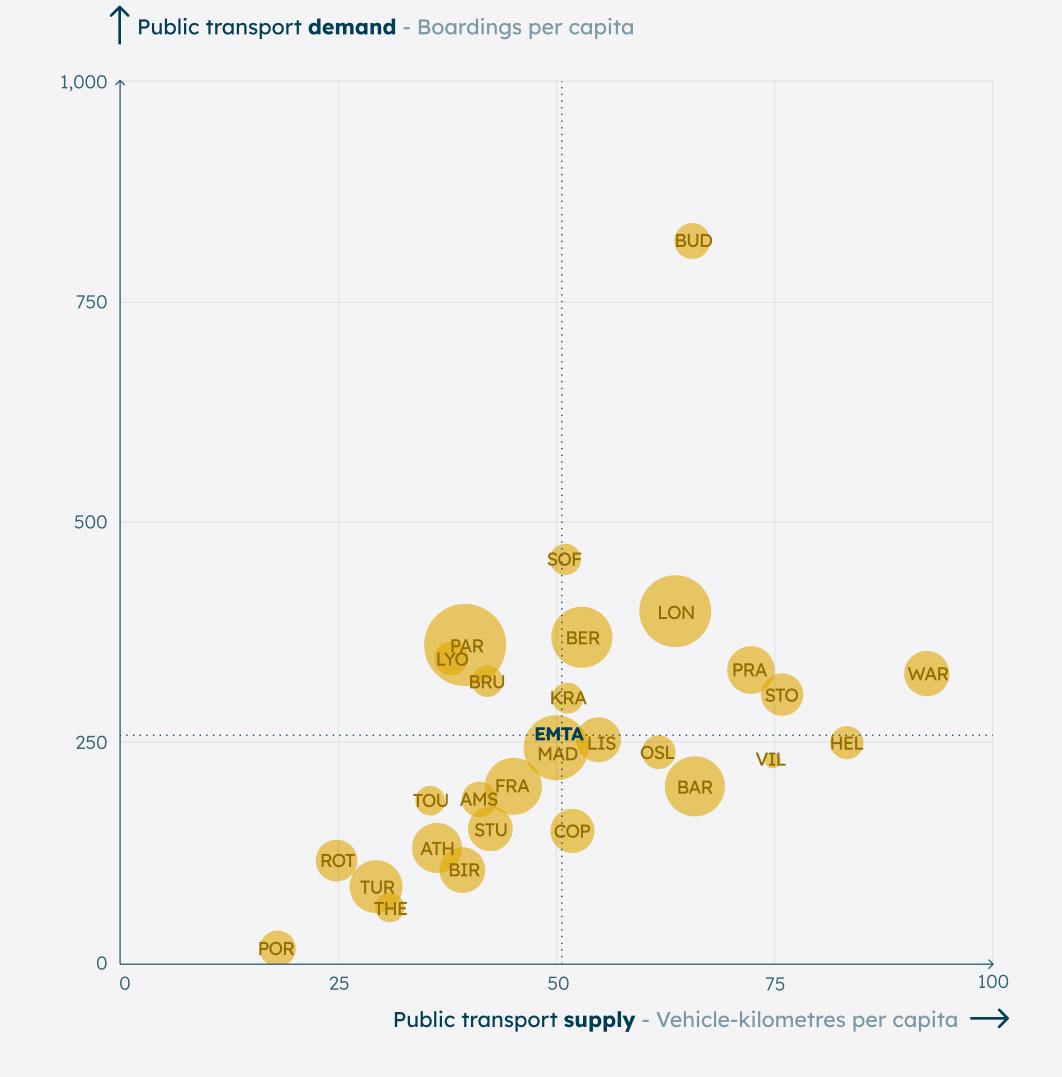
Per unit population, there were most boardings per capita in Budapest, where the PTA area consists of the city of Budapest only.

Highest public transport supply per capita, measured as vehicle-kilometres, was found in Warsaw.



How to read? The PTA in Warsaw orchestrates the highest public transport supply per unit population, measured as vehicle mileage per capita, and report higher than average ridership per unit population, measured as number of boardings per capita.

Values are incomplete for Belgrad, Bilbao, Bucharest, Manchester, Palma de Mallorca, Valencia, Vienna.



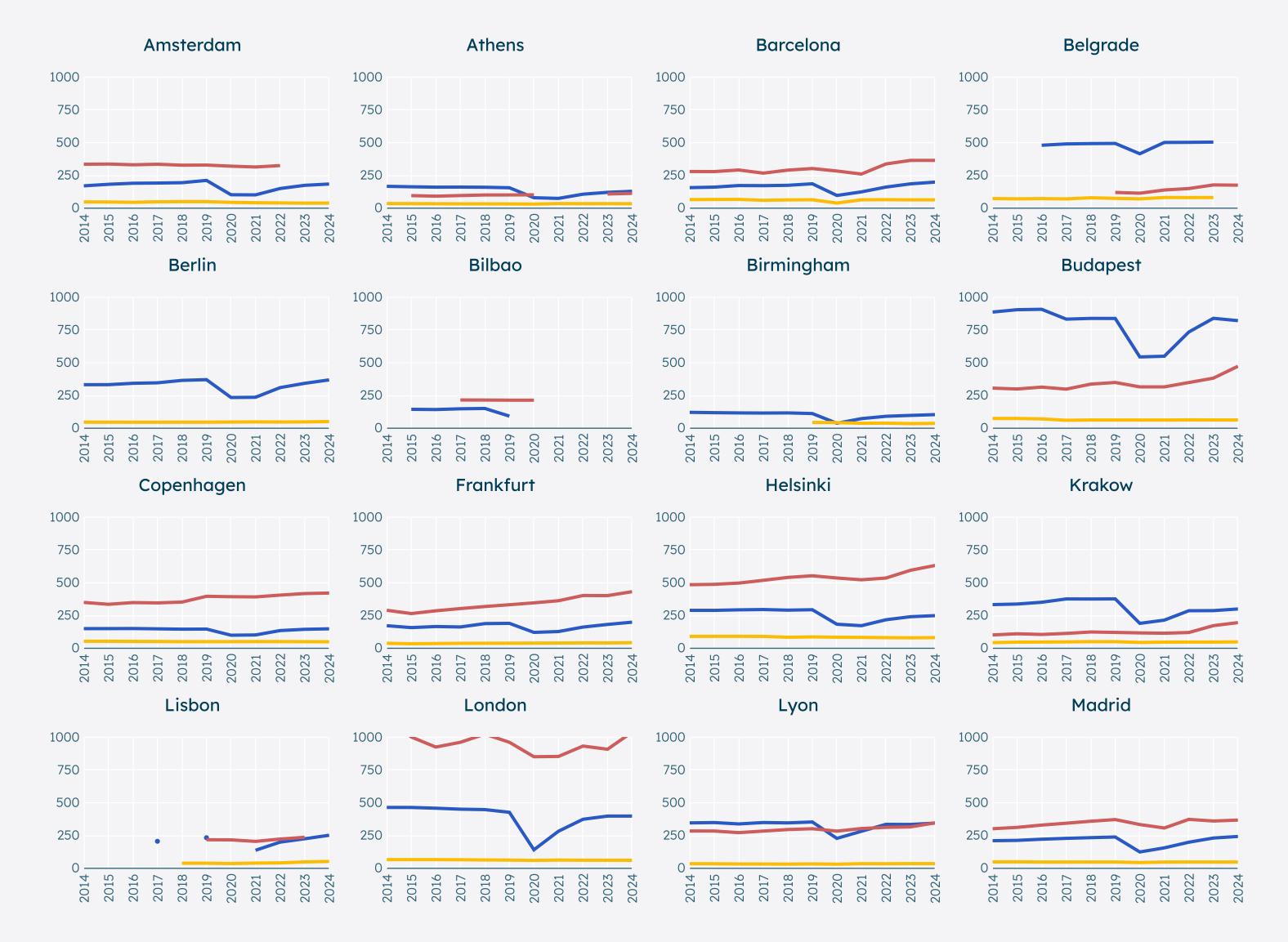


How have supply and demand evolved over the past 10 years?

There is close to no change visible in the vehicle-kilometres supplied per capita within the EMTA members. However, there has been significantly more variation in boardings and operating costs per capita. The Covid-19 pandemic saw a significant drop in boardings across all EMTA members with data available.

In 2024, most EMTA members had not yet reached the pre-pandemic level in the ridership figures, with the notable exceptions of the Spanish cities of Barcelona, Madrid, Valencia and Palma de Mallorca. This is due to Spain's booming tourism industry, and partly also to Spanish national schemes to make public transport fares cheaper.

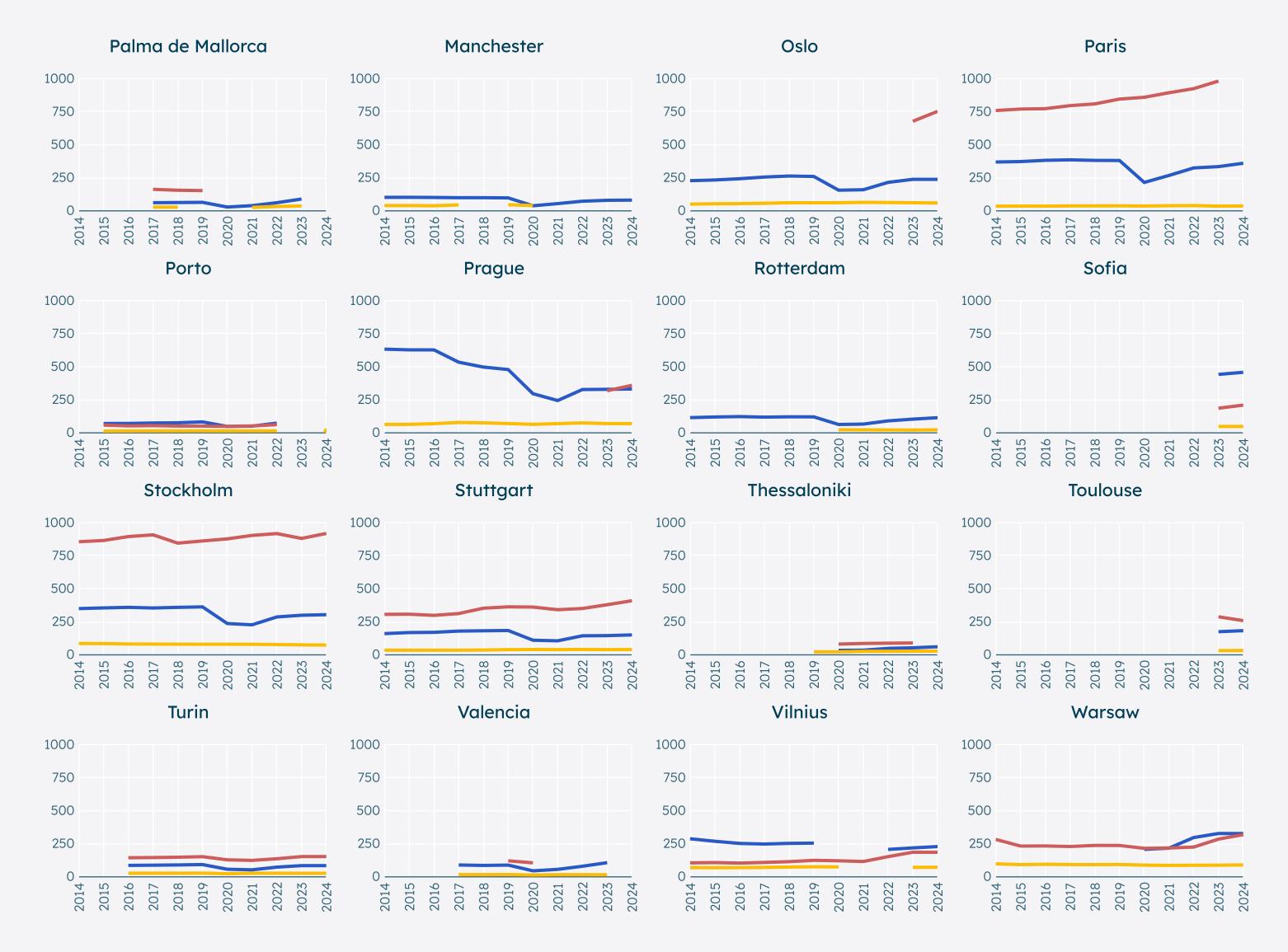
Boardings per capita Vehicle-km per capita Operating costs per capita - Time series





How have supply and demand evolved over the past 10 years?

Boardings per capita Vehicle-km per capita Operating costs per capita - Time series





What are the differences between transport modes?

This page introduces EMTA-level average statistics for each transport mode. The sample size is indicated below each figure and a plot represents the spread of values observed.

For exact figures by transport mode and by PTA, please visit the <u>online dashboard</u> of the EMTA Barometer.

Main indicators per transport modes - 2024







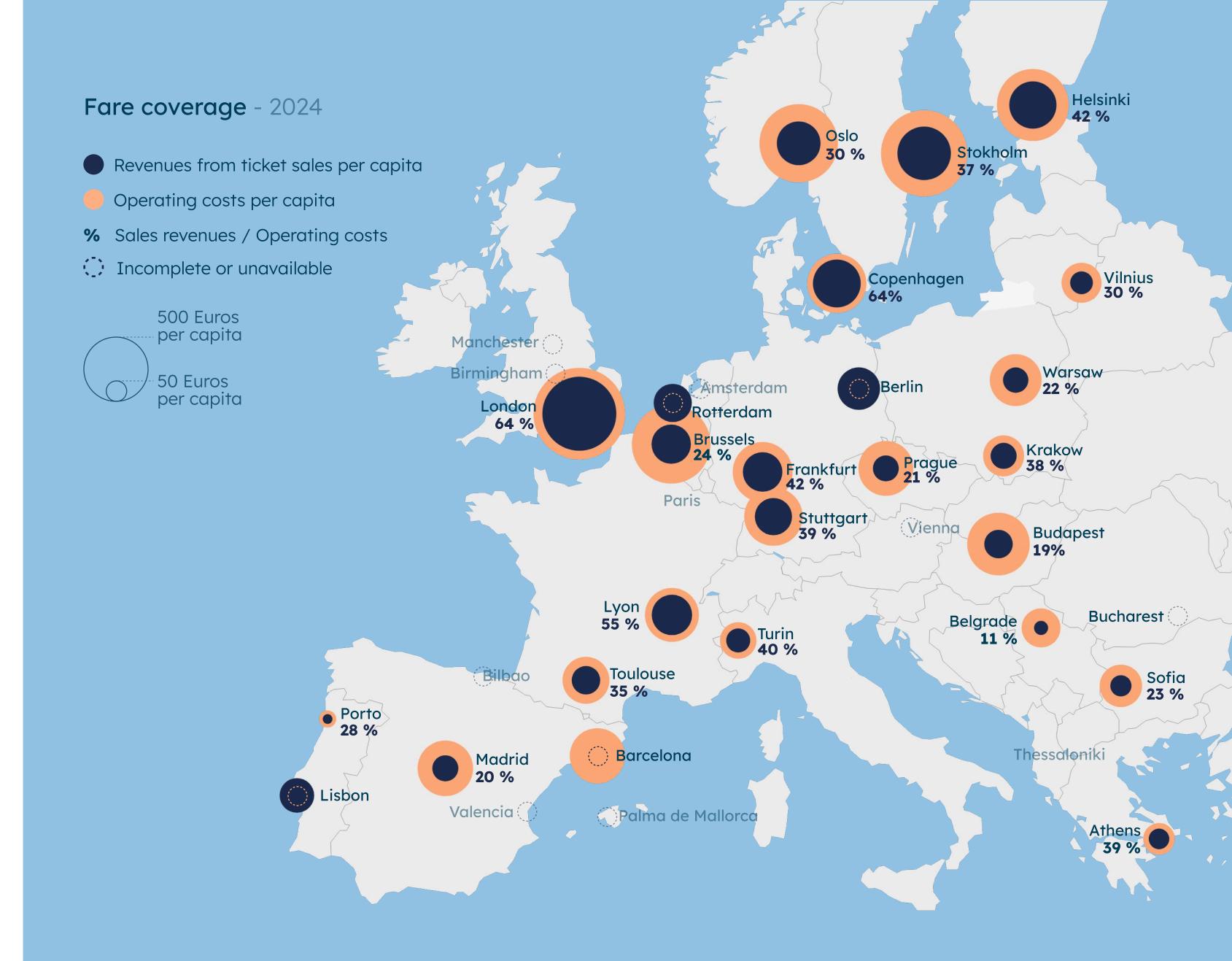
Operating Costs & revenues

How do ticket sales revenues cover operating costs?

Fare coverage percentage, i.e. the proportion of the cost of operation covered by ticket incomes, varies significantly across EMTA members.

Covid-19 pandemic marked a substantial and systemic change in public transport funding; however, fare coverage for most PTAs has improved since last year, even if we are not yet on the level seen in 2019.

In Madrid, for example, fare coverage in 2024 remained unchanged compared with 2023, at 20%, having been 41% before the pandemic in 2019. This lower level is mainly due to a discounted fare policy coordinated by the national government. In Belgrade, fare coverage dropped from 19% in 2023 to 11% in 2024. This figure is likely to fall further as most public transport in Belgrade was made free for all residents and visitors at the start of 2025.





What influences operating costs?

The cost of operations varies greatly across public transport authorities, even when normalised by population. However, there is a clearer pattern when comparing the gross domestic product (GDP) per capita with public transport operating costs per capita. The share of GDP spent on operating public transport falls in the range of 0.6% to 1.0% across most public transport authorities.

EMTA IN 2024

OPERATING COSTS

COSTS / GDP

€461 per capita

0.88% of GDP

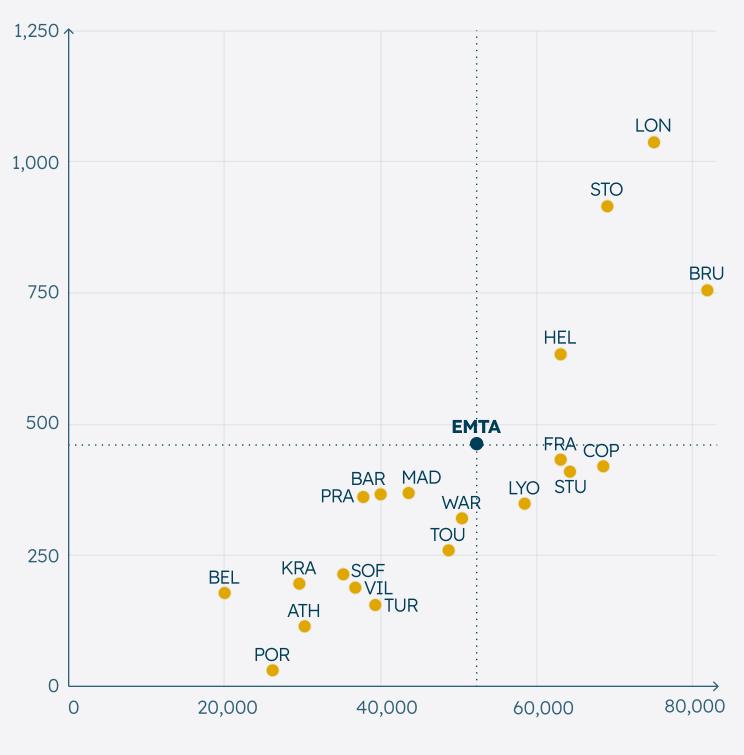
FARE COVERAGE

44% of operating costs

emte European METROPOLITAN TRANSPORT AUTHORITIES

Comparing PTAs operating costs - 2024

Operating costs per capita - Euros per year

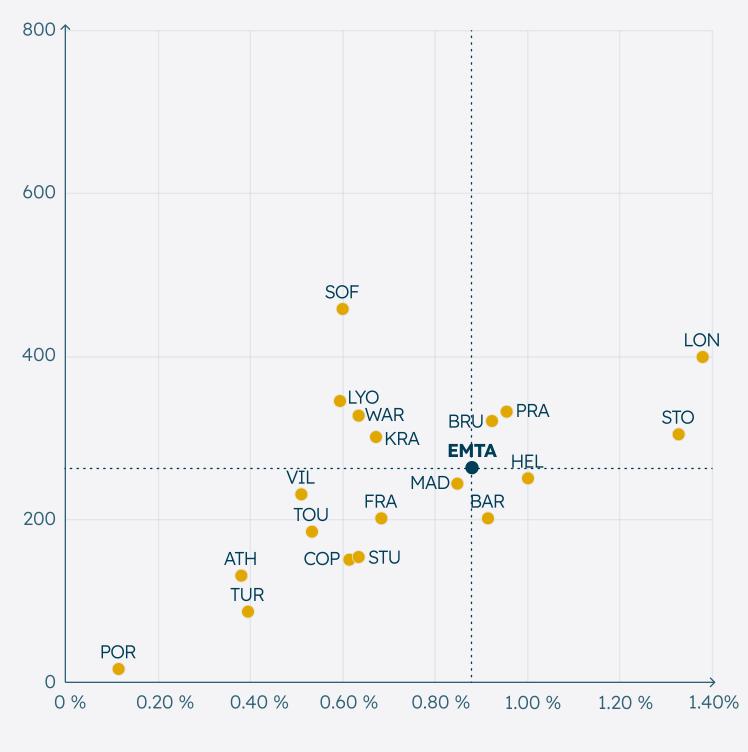


GDP per capita - Euros ->

How to read ? The PTA of London spent more than 1,000 Euros per capita on public transport operations in 2024, that compares to a local GDP per capita above 75,000 Euros.

Values are incomplete for Amsterdam, Berlin, Bilbao, Birmingham, Bucharest, Budapest. Lisbon, Mallorca, Manchester, Oslo, Paris, Rotterdam, Tessaloniki, Valencia, Vienna.

Boardings per capita - per year



Share of GDP spent in Operating Costs \longrightarrow

How to read? The PTA of Helsinki spent about 1% of the local GDP on public transport operations, enabling about 250 passenger boardings per unit population in 2024.

Values are incomplete for Amsterdam, Belgrade, Berlin, Bilbao, Birmingham, Bucharest, Budapest. Lisbon, Mallorca, Manchester, Oslo, Paris, Rotterdam, Tessaloniki, Valencia, Vienna.

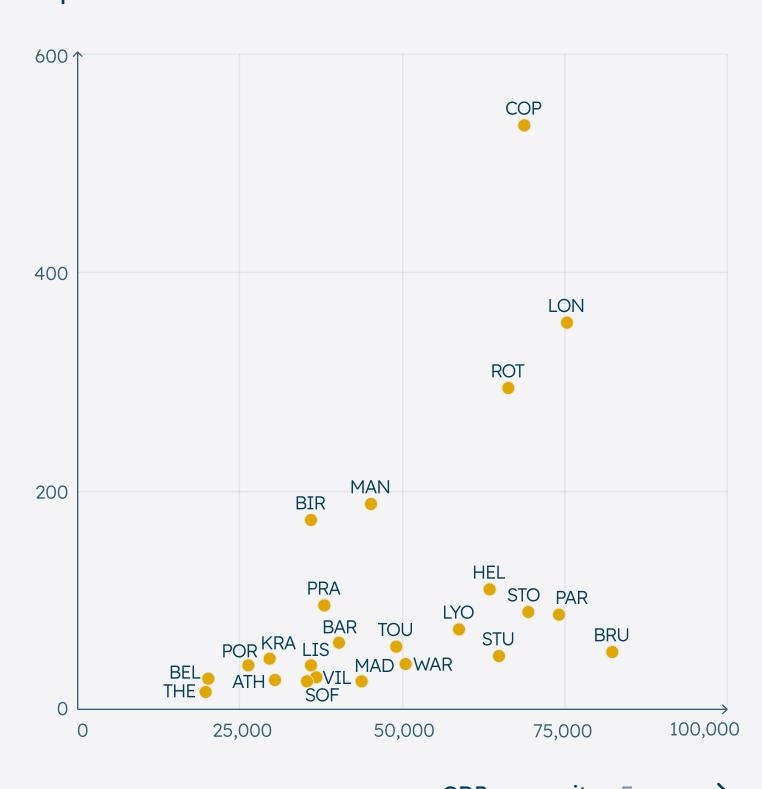
Comparing PTAs monthly pass price - 2024

Monthly pass price - Euros

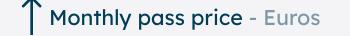
How does the monthly pass price vary across Europe?

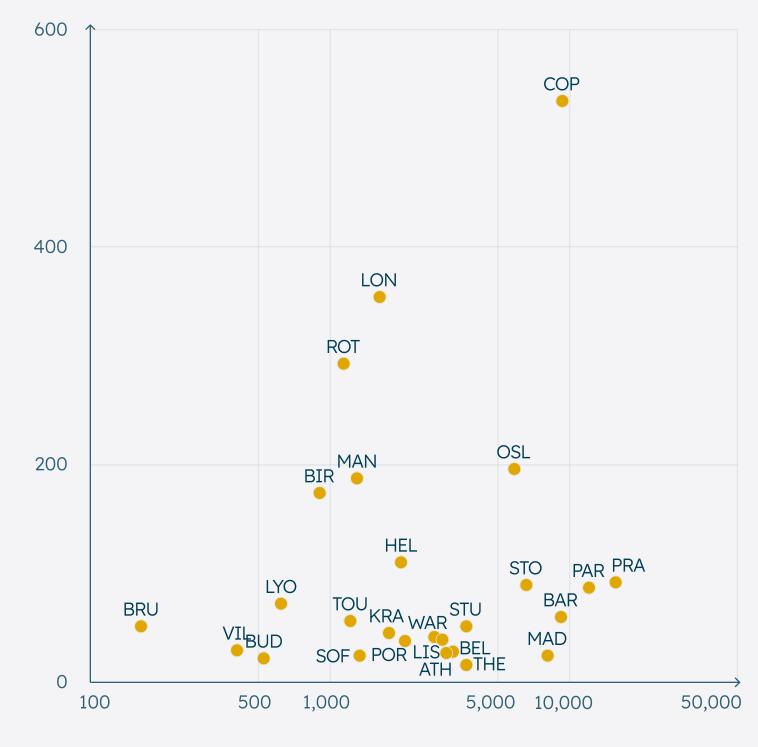
The face value of a monthly public transport pass varies greatly across EMTA members. This is due to multiple factors: differences in wealth, differences in the size of the PTA area, differences in fare policies and ticketing zones, and differences in politics, among others.

Ticket prices displayed here are for monthly passes covering the entire PTA area. This is not necessarily the most sold monthly pass in the PTA area – there can be cheaper ticket options for the core city of the metropolitan area, for example.









Total area - km^2 - logarithmic scale \longrightarrow

How to read? The monthly pass price for the Birmingham PTA area is close to 190 euros, and the local GDP per capita is close to 45,000 euros.

How to read ? The monthly pass price for the Oslo PTA area is just below 200 Euros, considering a PTA area size of circa 6,000 km².



How does the monthly pass price vary across Europe?

The price of monthly pass for the entire PTA area quite often reflects the size or the wealth of the metropolitan region. The lowest monthly pass price for 2024 was reported in Thessaloniki. The highest price for the monthly pass in 2024, €535, was reported in Copenhagen – one must keep in mind, however, that this ticket covers travel on the entire islands of Zealand and Lolland.

EMTA IN 2024

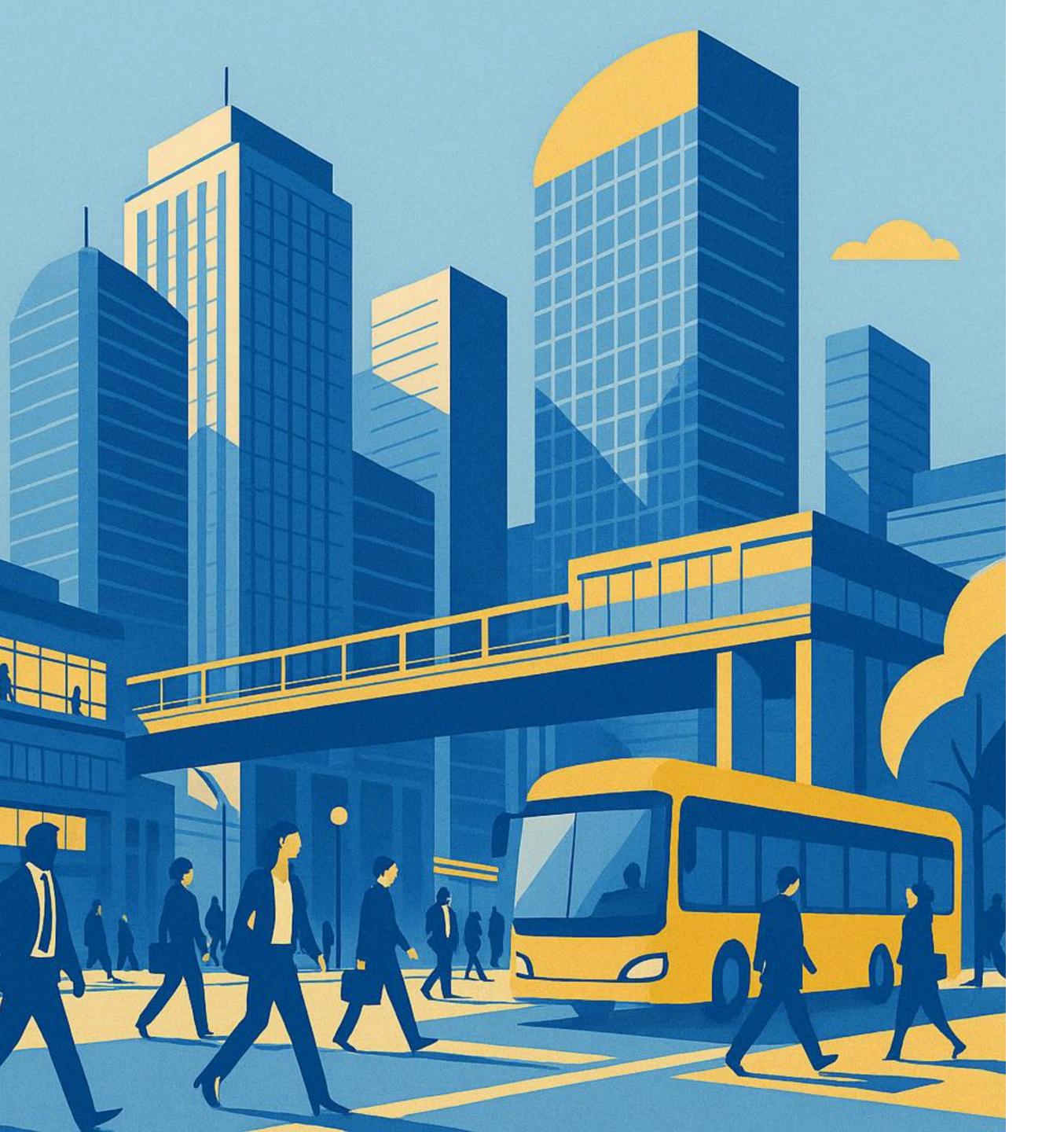
MONTHLY PASS PRICE

Min 16 Euros

Max 535 Euros

Label	Main City	Population PTA area	Surface PTA area km²	GDP per capita PTA area in Euros	Operating Costs million Euros	Op. Costs as share of GDP	Op. Costs per Vehicle-km Euros	Revenues from sales million Euros	Costs coverage by Sales % of Op. Costs	Pass Price
AMS	Amsterdam	1,629,159	1,059							
ATH	Athens	3,721,662	3,080	30,246	428	0.38%	3.17	168	39 %	27
BAR	Barcelona	5,806,126	9,116	39,996	2,122 P	0.91%	5.55			61
BEL	Belgrade	1,683,229	3,225	20,005	298	0.89%		32	11 %	28
BER	Berlin	6,058,792	30,545	47,531				1,280 P		
BIL	Bilbao									
BIR	Birmingham	2,980,936 P	911	35,639 P						174
BRU	Brussels	1,255,795	162	82,020	950	0.92%	18.00	226	24 %	52
BUC	Bucharest	2,258,507	1,823	42,490						
BUD	Budapest	1,686,222	525		797		7.22	154	19 %	23
COP	Copenhagen	2,724,597	9,203	68,581 P	1,149	0.62%	8.14	737	64 %	535
FRA	Frankfurt	5,122,647 P	13,592 P	63,209 P	2,213 P	0.68%	9.59	930 P	42 %	1
HEL	Helsinki	1,417,800	1,970	63,085 P	895	1.00%	7.58	372	42 %	110
KRA	Krakow	1,223,262 P	1,748 P	29,473 P	241	0.67%	3.85	92	38 %	46
LIS	Lisbon	2,847,352	2,938	35,782				391 P		40
LON	London	8,945,309 P	1,605	75,133 P	9,267	1.38%	16.29	5,959 P	64 %	354
LYO	Lyon	1,454,148	622	58,418	506	0.60%	9.18	277	55 %	73
MAD	Madrid	7,009,268	8,031	43,562 P	2,585	0.85%	7.39	526	20 %	26
MAL	Palma de Mallorco	957,726	3,654	35,957						
MAN	Manchester	2,948,633 P	1,295	44,972 P						188
OSL	Oslo	1,464,970	5,899		1,101		12.18	328 P	30 %	196
PAR	Paris	12,278,210	12,065	73,745						86
POR	Porto	1,716,335	2,054	26,163	52	0.12%	1.69	15	28 %	40
PRA	Prague	3,292,305	15,316	37,705	1,186	0.96%	4.98	244	21 %	93
ROT	Rotterdam	2,384,055	1,136	66,047				403		293
SOF	Sofia	1,235,261	1,327	35,196	261	0.60%	4.14	60	23 %	26
STO	Stockholm	2,473,307	6,548	69,103	2,266	1.33%	12.08	842	37 %	89
STU	Stuttgart	2,830,416 P	3,653	64,474 P	1,160 P	0.64%	9.67	452	39 %	49
THE	Thessaloniki	1,086,927	3,677	19,637						16
TOU	Toulouse	1,115,836	1,200	48,751	290	0.53%	7.32	102	35 %	57
TUR	Turin	4,248,534	25,320	39,217	659 P	0.40%	5.30	267 P	40 %	
VAL	Valencia	1,928,233	2,141	30,467						
VIE	Vienna	3,923,850	23,432	52,873						
VIL	Vilnius	607,404	408	36,660 P	114	0.51%	2.50	34	30 %	29
WAR	Warsaw	2,909,096	2,749	50,353	931	0.64%	3.46	206	22 %	42





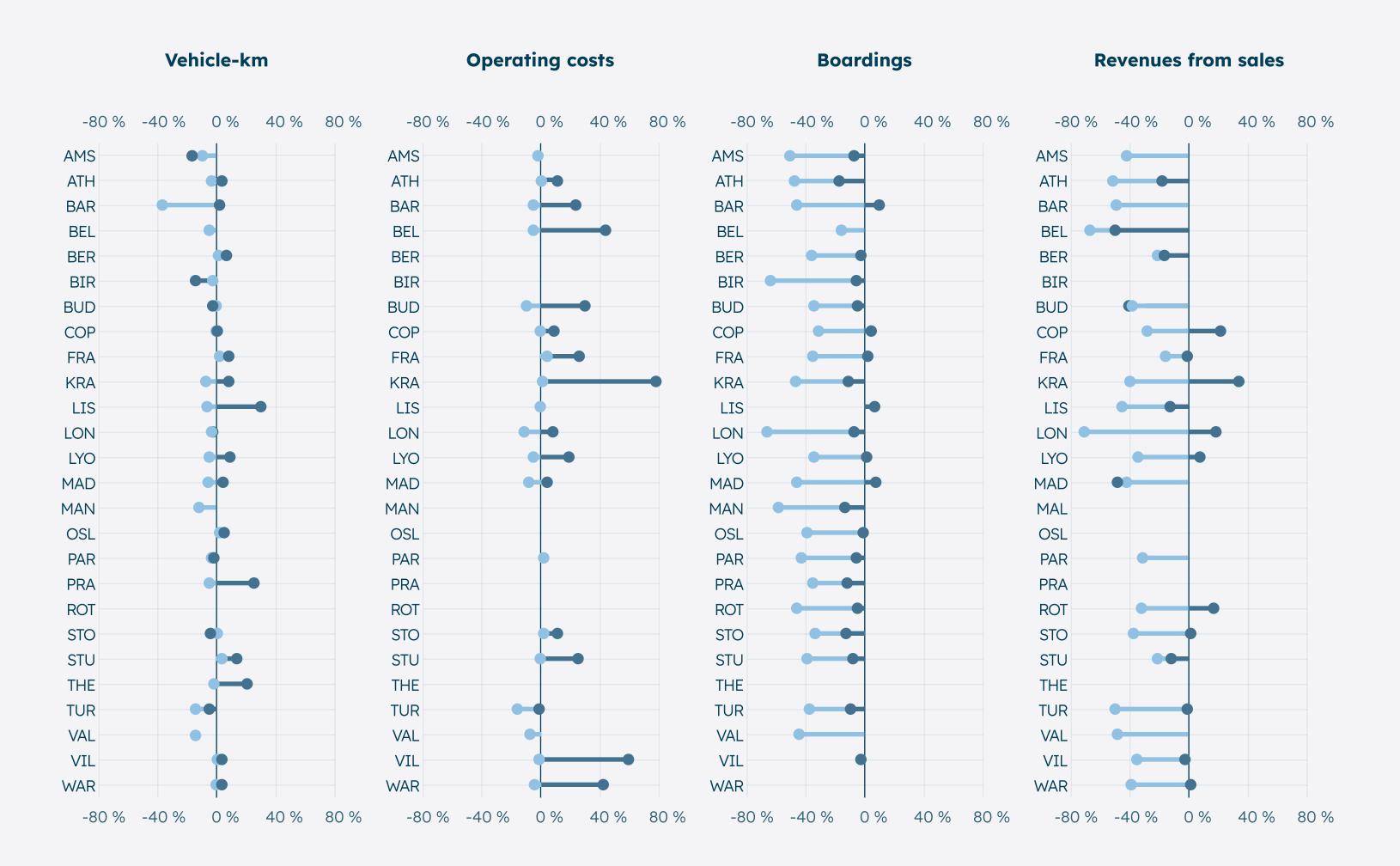
Covid Crisis Recovery

How did the COVID crisis impact activity?

Most EMTA members operate more vehicle-kilometres than in 2019 and also spend significantly more on operating public transport. However, boardings in 2024 were yet to reach the pre-pandemic levels for most of the PTA areas, with the exceptions being Barcelona, Copenhagen, Frankfurt, Lisbon, Lyon and Madrid. Revenues from sales were past the pre-pandemic levels in 2024 in Copenhagen, Krakow, London, Lyon, Rotterdam/The Hague and Stockholm.

Comparing • 2019-2020 changes and • 2019-2024 changes among PTAs

Only PTAs with a similar scope in 2019, 2020 and 2024 are presented here.



How to read? Amsterdam PTA reduced its service (Vehicle-km) by 10% in 2020 compared to 2019 to cope with a more than 50% drop in demand (Boardings) in 2020 compared to 2019. Operating costs have increased by 30% in the Budaptest PTA from 2019 to 2024, whereas sales revenue dropped by 41%.



What is the extent of the crisis 5 years later?

The number of boardings in 2024 was still lower than in 2019 in most PTA areas of EMTA. However, the picture is much less grim than in 2023, even though the growth is not on the same track as before the pandemic. Revenues from ticket sales have recovered faster than boardings in most PTA areas; however, for some PTAs, revenues remain at a significantly lower level. In some cases, this is due to political initiatives aimed at making tickets more affordable for passengers. This, in turn, means that incomes need to be compensated by municipalities, national or regional governments, or the like.

Changes in revenues compared to changes in boardings - 2019-2024 variations

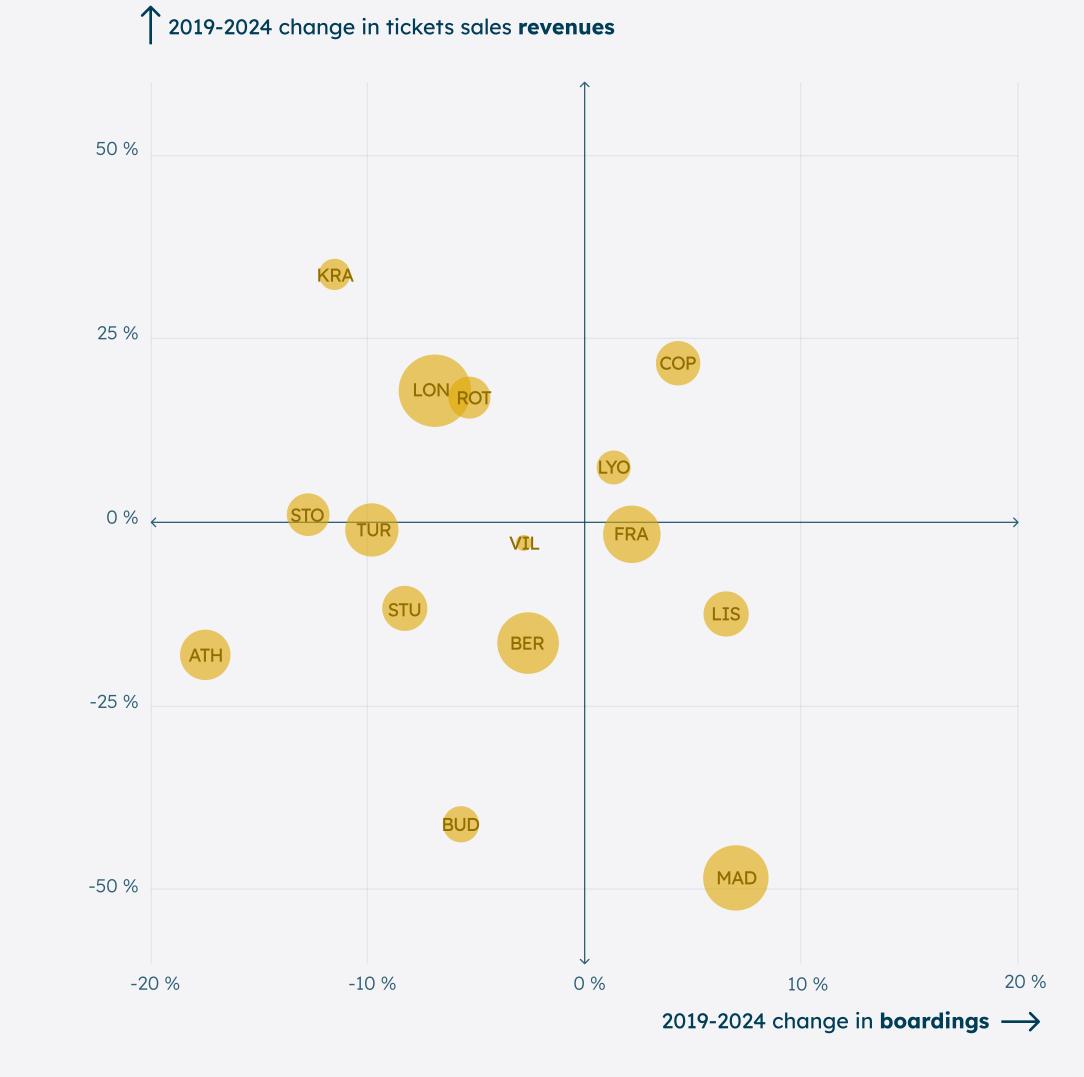
Only PTAs with a similar scope in 2019, 2020 and 2024 are presented here.



How to read? Over the Berlin PTA area, the number of passenger boardings fell by 2.6% since 2019 but ticket sale revenue fell by 16%.

Scope changed between 2019 and 2024 for Bilbao, Brussels, Bucharest, Helsinki, Porto, Sofia, Toulouse and Vienna.

Values are incomplete for Amsterdam, Barcelona, Belgrade, Birmingham, Palma de Mallorca, Manchester, Oslo, Paris, Prague, Thessaloniki, Valencia, Warsaw





7/ COVID RECOVERY ———

Label	Main City	Population Change 2019-2020	Population Change 2019-2024	Boardings Change 2019-2020	Boardings Change 2019-2024	Vehicle-km Change 2019-2020	Vehicle-km Change 2019-2024	Op. Costs Change 2019-2020	Op. Costs Change 2019-2024	Sales Revenues Change 2019-2020	Sales Revenues Change 2019-2024
AMS	Amsterdam	0.2%	6.0%	-50.9%	-7.6%	-10.0%	-16.3%	-2.4%		-42.3%	
ATH	Athens	-0.1%	-0.5%	-48.0%	-17.5%	-3.1%	3.5%	0.8%	11.1%	-50.5%	-18.0%
BAR	Barcelona	1.3%	3.2%	-46.5%	10.2%	-36.8%	2.2%	-5.0%	24.2% P	-49.2%	
BEL	Belgrade	-0.2%	-0.8%	-16.0%		-5.3%		-4.8%	44.1%	-66.9%	-49.9%
BER	Berlin	0.1%	-2.1%	-36.4%	-2.6%	1.5%	6.4%			-21.1%	-16.4% P
BIL	Bilbao										
BIR	Birmingham	0.0%	2.0% P	-64.5%	-5.3%	-2.5%	-14.1%				
BRU	Brussels										
BUC	Bucharest										
BUD	Budapest	-0.1%	-3.8%	-35.0%	-5.7%	0.0%	-3.0%	-9.7%	30.0%	-38.9%	-41.1%
COP	Copenhagen	0.0%	3.1%	-31.5%	4.3%	-0.1%	0.8%	-0.8%	9.4%	-28.5%	21.7%
FRA	Frankfurt	0.0%	-2.3% P	-35.8%	2.2%	1.7%	8.0%	4.3%	26.7% P	-15.6%	-1.6% P
HEL	Helsinki										
KRA	Krakow	4.2%	11.0% P	-47.1%	-11.5%	-7.1%	8.3%	1.2%	78.4%	-40.3%	33.8%
LIS	Lisbon	0.0%	-1.3%		6.6%	-6.9%	30.4%	-0.4%		-45.9%	-12.5% P
LON	London	0.5%	-0.2% P	-66.4%	-6.9% P	-3.6%	-2.4%	-11.0%	7.8%	-71.5%	17.9% P
LYO	Lyon	1.1%	3.9%	-34.5%	1.4%	-5.1%	9.0%	-5.0%	19.2%	-34.6%	7.5%
MAD	Madrid	1.7%	5.2%	-46.3%	7.0%	-6.2%	4.4%	-8.5%	4.1%	-42.5%	-48.4%
MAL	Palma de Mallorca	1.8%	6.9%	-52.3%						-62.5%	
MAN	Manchester	0.4%	4.0% P	-59.0%	-13.2%	-11.6%					
OSL	Oslo	0.8%	7.7%	-39.0%	-1.2%	1.6%	5.0%				
PAR	Paris	0.1%	0.1%	-43.2%	-5.4%	-3.7%	-2.3%	1.7%		-31.3%	
POR	Porto										
PRA	Prague	4.0%	26.1%	-35.5%	-12.4%	-4.8%	25.6%				
ROT	Rotterdam	0.4%	-0.3%	-46.4%	-5.3%					-32.8%	17.0%
SOF	Sofia										
STO	Stockholm	0.6%	4.0%	-34.0%	-12.7%	0.9%	-3.9%	2.5%	10.9%	-37.6%	1.0%
STU	Stuttgart	-0.5%	11.6% P	-39.7%	-8.3%	3.2%	14.1%	-0.9%	25.7% P	-20.9%	-11.7%
THE	Thessaloniki	-0.1%	-1.6%			-1.4%	20.6%				
TOU	Toulouse										
TUR	Turin	-0.8%	-1.5%	-37.7%	-9.8%	-14.6%	-5.0%	-16.1%	-1.0% P	-50.2%	-1.0% P
VAL	Valencia	5.4%	10.3%	-44.5%		-14.3%		-7.7%		-48.3%	
VIE	Vienna										
VIL	Vilnius	1.4%	8.1%		-2.8%	0.0%	3.2%	-1.2%	59.6%	-35.7%	-2.8%
WAR	Warsaw	5.1%	6.3%			-0.1%	2.9%	-4.4%	42.6%	-38.8%	1.1%



DEFINITIONS

Population - inhabitants

Number of inhabitants in the considered perimeter

Total area - km2

Total surface for the considered perimeter

GDP - million Euros

Gross Domestic Product for the considered perimeter

Average number of journeys in a day - journeys

It's the total number of journeys in the urban area on an average day, including all travel purposes and all modes of transport (not only public transport). A journey is made of one or several boardings that enable the movement from a meaningful origin (e.g. home) to a specific destination (e.g. office) with a single purpose (e.g. going to work).

Modal share of public transit - share of journeys

Share of journeys in the urban area that include at least one trip on a public transport mode, even if it's in connection. The displayed value is based on the latest available survey, which may have been conducted several years earlier.

Modal share of motorised vehicles - share of journeys

Share of journeys in the urban area undertaken with individual motorised vehicles. For a given year, the displayed value is based on the latest available survey. which may have been conducted several years earlier.

Modal share of walking - share of journeys

Share of journeys in the urban area undertaken by walking. The complete journey should be walked. For a given year, the displayed value is based on the latest available survey, which may have been conducted several years earlier.

Modal share of cycling - share of journeys

Share of journeys in the urban area undertaken by cycling. The complete journey should be cycled. For a given year, the displayed value is based on the latest available survey. which may have been conducted several years earlier.

Car owernship rate - cars per 1,000 inhabitants

Number of privately owned automobiles in the perimeter, divided by the number of inhabitants in the same perimeter, and multiplied by 1000.

Number of lines - lines

Number of commercial service lines for the considered transport mode, for an average day during the week.

Boardings - million boardings

Number of boardings for the considered transport mode in a year. A boarding is a movement using a single transport mode. Eg. If someone makes an interchange from one bus to another, this counts as 2 boardings. Every boarding of any public transport vehicle counts as 1 boarding.

Vehicle-kilometres - million vehicle-km

Total distance covered by vehicles for the considered transport mode to provide public transport services, in a year. It's the sum of all kilometres covered by all vehicles. Only the kilometres for commercial service is taken into account, excluding deadhead runs from and to depots.

Operating costs - million Euros

Annual service operation cost of public transport in the urban area for all services in the scope of the area. Operating costs include expenditure on staff (including social security contributions and pensions), energy expenditure, purchases of external goods and services (including subcontracting), vehicle maintenance expenditure, miscellaneous costs (e.g. rental), financial costs, depreciation expenditure, taxes and duties. It does not include special maintenance or investment programs for infrastructure and vehicles.

Monthly pass price - Euros

The cost of a monthly pass for an adult allowing travel throughout an entire urban area.

Revenues from tickets sales - million Euros

Annual revenue from ticket sales in the urban area from all services and transport modes in the urban area's scope.



EMTA MEMBERS









































































- ACKNOWLEDGMENT ----

The report editors would like to thank all collaborators involved in the data collection and analysis within the PTAs, as well as the members of the EMTA Barometer Committee, and secretary-general.

More information

bit.ly/emta-barometer www.emta.com

Contact

contact@emta.com EMTA c/o Île-de-France Mobilités 41 avenue de Châteaudun PARIS - FRANCE

Data-visualisation & data-collection

Caroline Goulard
Dataveyes / Modality

Image Credits

Illustrations: Dall • E Icons: Streamline



