



barometer 2020 based on 2018 DATA 14 th edition

Foreword by Ruud van der Ploeg, EMTA Secretary general

"Never waste a good crisis" (Winston Churchill) These are unprecedented times that impact our daily lives in many ways. A change in mobility habits seems inevitable both in short term and potentially even in the longer run. What does not change, though, is our need for knowledge transfer and cooperation that EMTA seeks to facilitate for its member community. The sharing of key indicators in the barometers is part of that effort. Whilst looking at figures on what transport authorities have performed in the recent

past might seem trivial, the reverse could be true. Outcomes could prove insightful points of reference to mark a year back when transport demand and supply were uncompromised. Therefore, it's with pleasure that I present this EMTA Barometer 2020 leaflet containing the 2018 data.

Our transport authorities once more went to great length to collect key performance indicators on geography, demography, mobility demand, supply, and on their financial performance and fares. Our association represents the catchment areas of 93 million inhabitants in the joint metropolitan areas. Positive indeed to see that EMTA was recently joined by authorities from the metropolitan areas of Porto, Thessaloniki and Krakow, growing EMTA into 29 members from 19 different countries.

As true Europeans, continental members dreaded possible ramifications of Brexit and its aftermath. However, all three metropolitan authorities from the United Kingdom reassured me to prolong collaboration in EMTA, irrespective the outcome of a negotiated deal. Reversely, EMTA is happy to continue the relationship with our British members on the same foot.

The present situation should not question the capability of authorities to adjust to disruptive economic and social circumstances. The "normal times of 2018" poses the right context from which this Barometer document is to be observed.

From todays' - Spring 2020 - perspective it appears that it will take a while until public transport operation will return at the levels of 2018. However, public transport has proven an important catalyst for economic development in a social cohesive manner. That's why the EMTA board reminded the presidents of the European institutions of the power tool for Europe's recovery already at their disposal: public transport. EMTA and its members are committed to play their part, making public transport one of the symbols for recovery the continent is in dire need for.

Whilst incomes from ridership dwindle, demands grow to protect the health of passengers and driving staff, causing public transport authorities to face challenges they never witnessed before.

I am convinced EMTA members are capable to meet the challenges. Public transport is a main lever in helping to revitalize local economies in the post-Corona era.

Stay strong and be confident. And in the process, keep learning from one another, so in the end lessons in terms of transport system resilience and planning strategies may emerge.

I wish you all the best and take care.

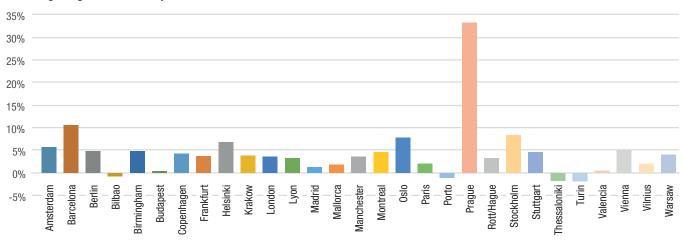
1. Description of the $PTA^{(1)}$ area surveyed

Authority responsible		Main city population	PTA area (km²)	PTA surface surface (km²)	PTA urbanised (inhabitants / km²)	PTA urban density per capita (€)	Annual PTA GDP ⁽²⁾
VRA	Amsterdam	862.965	1.548.891	1.025	850	1.822	34.000 €
ATM	Barcelona	1.620.343	5.571.822	8.810	3.307	1.685	31.207 €
VBB	Berlin	3.644.826	6.156.743	30.546	3.447	1.786	35.860 €
СТВ	Bilbao	1.142.853	1.142.853	2.215	235	4.863	32.986 €
TfWM	Birmingham	1.141.374	2.916.458	902	680	4.288	30.367 €
BKK	Budapest	1.752.286	1.752.286	525			
MOVIA	Copenhagen	727.364	2.632.638	9.195	1.713	1.537	55.663 €
RMV	Frankfurt	746.878	5.191.970	13.585	2.446	2.123	46.719 €
HSL	Helsinki	648.042	1.310.435	1.968	543	2.413	59.058 €
ZTP	Krakow	771.069	1.089.729	1.472			
TfL	London	8.600.000	8.600.000	1.579	1.042	8.253	52.059 €
SYTRAL	Lyon	664.846	1.381.249	746	360	3.837	57.384 €
CRTM	Madrid	3.223.334	6.578.079	8.028	921	7.142	34.916 €
CTM	Mallorca	409.661	880.113	3.636	214	4.113	
TfGM	Manchester	547.627	2.812.569	1.272	959	2.933	
ARMT	Montreal	2.029.379	4.255.541	4.402	1.607	2.648	29.868 €
RUTER	Oslo	681.071	1.305.126	5.005	327	3.991	67.271 €
IdFM	Paris	2.174.052	12.210.524	12.000	2.728	4.476	55.227 €
AMP	Porto	215.284	1.722.374	2.041	510	3.376	
ROPID	Prague	1.309.000	2.507.000	7.383			29.229 €
MRDH	Rott/Hague ⁽³⁾	638.712	2.347.331	1.256	969	2.422	
SL	Stockholm	962.154	2.344.124	6.524	903	2.596	63.060 €
VRS	Stuttgart	634.830	2.530.471	3.011	733	3.452	55.797 €
TheTA	Thessaloniki	787.218	1.104.690	3.677	397	2.783	27.568 €
AMP	Turin	875.698	4.356.406	25.387	1.771	2.460	21.794 €
ATMV	Valencia	795.736	1.808.177	1.551	306	5.909	22.659 €
VOR	Vienna	1.897.491	3.868.466	23.559	14.421	268	
MESP	Vilnius	549.640	549.833	401			23.410 €
ZTM	Warsaw	1.777.972	2.591.460	2.575	603	4.298	26.600 €

(1) PTA: Public transport authority (2) GDP: Gross domestic product (3) Rotterdam and The Hague have one PTA

2. Evolution of population in PTA's areas 2013-2017

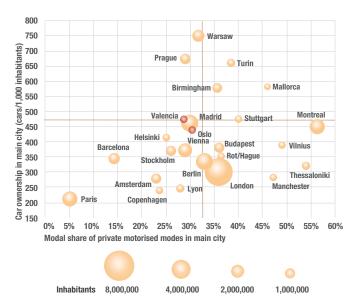
In general, all the PTA's has increased the population except Porto, Thessaloniki and Turin that has decreased in the last five-year period. Prague has the highest growth followed by Barcelona due to the increase of its administrative limits.



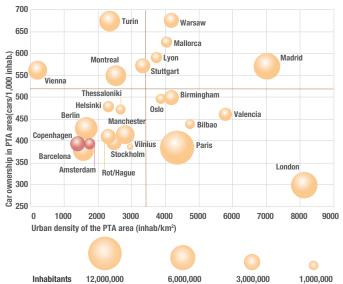
3. Car ownership rate

The first image represents the relation between car ownership in main city and modal share of private motorised modes also in the main city. In this graph the size of the balls represents the inhabitants in the main city. The second image is represented the relation between car ownership in the PTA area, expressed as cars per 1,000 inhabitants and urbanized PTA area density. The size of the balls represents the population in the PTA area.

Car ownership versus modal share in private motorised in main city



Car ownership versus urban density in PTA area



4. Modal share in main cities & PTA areas

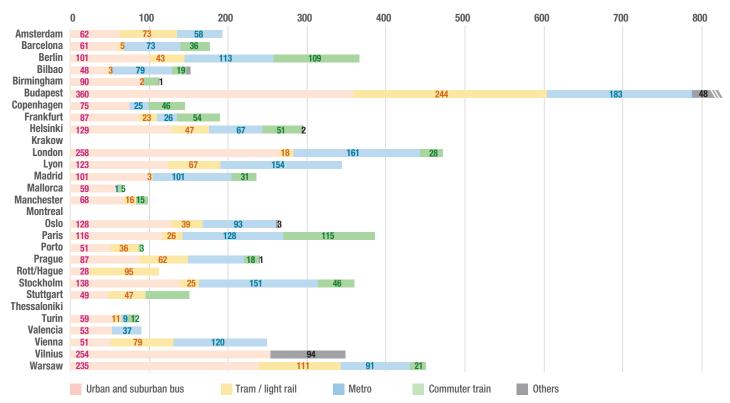


4

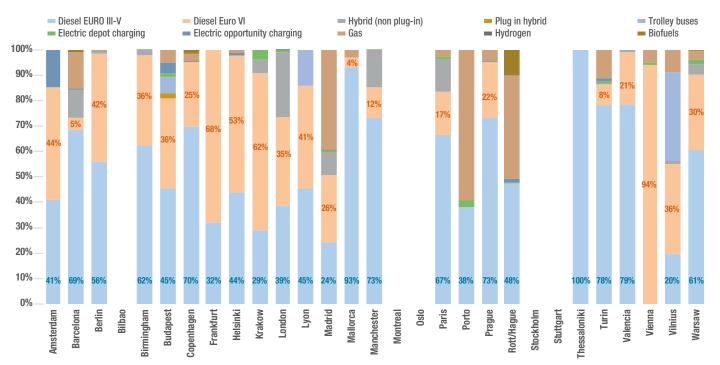
5. Public transport demand per inhabitant in PTA areas

Regarding the public transport demand, 2018 had practically the same use of PT in comparison with the last years with 339 boardings per inhabitant: in 2014 the average authority was 330; 304 in 2015 324 in 2016; and 346 boardings per inhabitant in 2017 were made. The bus being the most used transport mode (110 boardings per inhabitant, 113 in 2017) followed by the metro (87 boardings per inhabitant, 91 in 2017). In the case of Budapest, the high numbers are due to the fact that BKK is accountable for only PT services within the city borders of Budapest whilst boardings in this figure include both local journeys from citizens on top of commuter trips from outside services into the city. Hence, the city population produces a lower denominator.

Public transport demand (boardings per inhabitant in PT per mode)

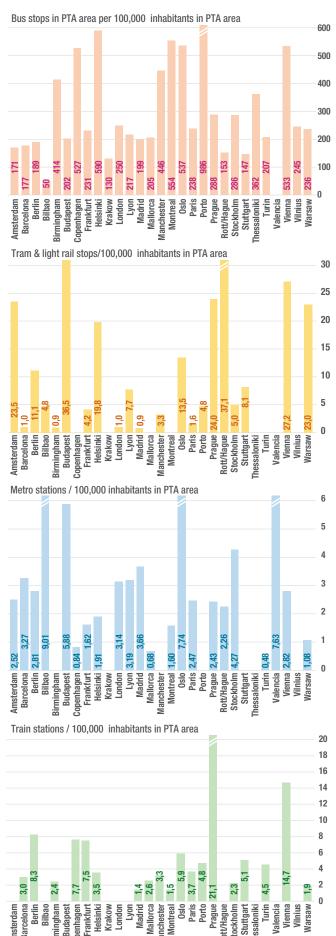


6. Urban bus fleet based on propulsion system

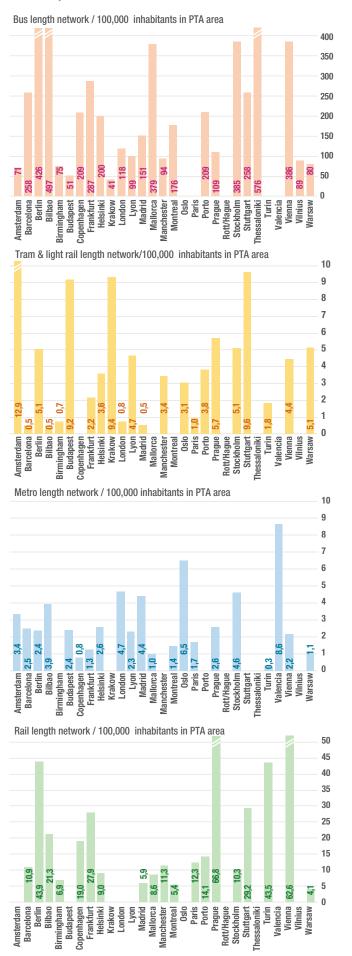


[&]quot;Electric depot charging" means that has the charge in the depot and "Electric opportunity charging" means that has the charge at the stops or in certain cases is dynamic along the road.

7. Ratio of stops or stations per 100,000 inhabitants in PTA area

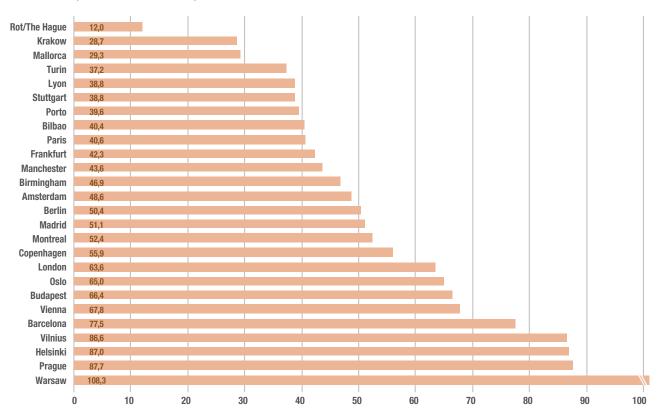


8. Ratio of length network per 100,000 inhabitants in PTA area



9. Vehicles-km per inhabitant and PTA area

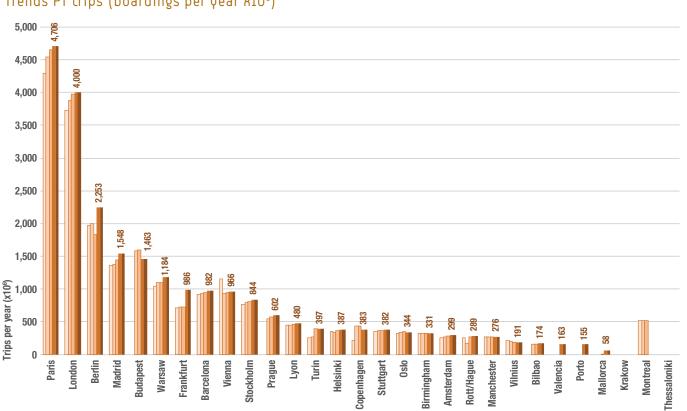
Vehicle km / inhabitants PTA/1000000



10. Public transport demand trends

Public transport demand trends have evolved differently over the last years. Overall, in 2018 it shows an increase in public transport demand for all PTA areas. In the graphic below we can distinguish three important groups: more than 2,000 millions trips per year for Berlin, Paris and London; more than 1,000 millions trips per year for Madrid, Budapest and Warsaw; and below 1,000 millions for the rest of the PTAs.

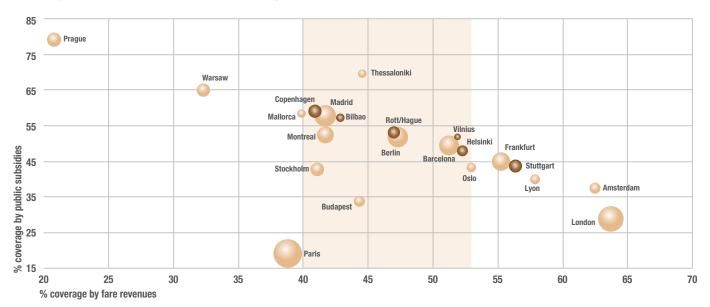
Trends PT trips (boardings per year x106)



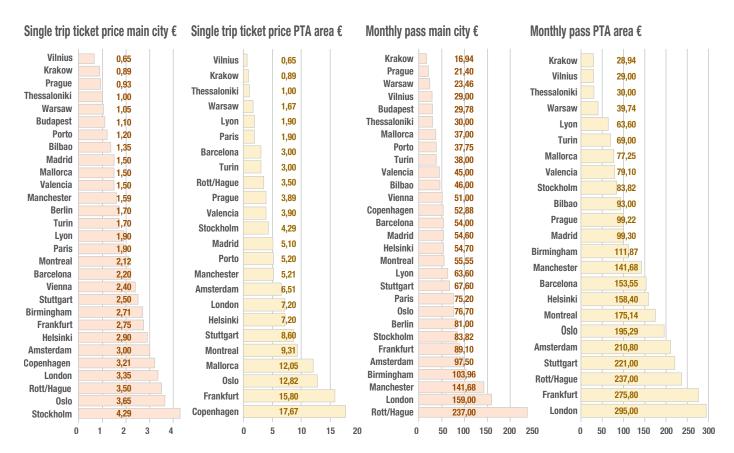
11. Coverage of operational costs

The size of each ball in the diagram below represents the relative volume of the annual cost of operations of public transport divided by the population of the PTA area (costs/total inhabitants). The ratio of the annual operational average authority costs per inhabitant for the PTA areas amounts to around 390 €. The PTAs of Greater London (1,058 €/inhab), Stockholm (843) and Paris Île-de-France (803), have the highest ratio (more than twice the average authority) and Thesaloniki the lowest (92 € per inhabitant per year). Most of the cities have a cost-coverage ratio for fare revenues within a margin of 40 - 60% and a public subsidies coverage ratio of 50% as average authority. Paris lle de France has the lowest coverage by public subsidies (19%) but Paris has an special coverage of operational costs that partly comes from the "versement transport" (a hypothecated local tax levied on the total gross salaries of all employees of companies larger than 11 employees). Prague have the highest coverage by public subsidies with a 79%, to be partly explained by the fact that in the case of Prague also has the lowest fares of all PTA's (21%).

Coverage by public subsidies vs coverage by fare revenues per PTA area'inhabitants



12. Ticket price for the main city and PTA area





Public transport authorities' partners



Vervoerregio



Autoritat del Transport Metropolità (ATM) Barcelona



Verkehrsverbund Berlin-Brandenburg (VBB)



West Midlands Integrated Transport Authority (WMITA) Birmingham



Budapesti Közlekedési Központ (BKK) Budapest



Rhein-Main Verkehrsverbund Frankfurt



Helsingin Seudun Liikenne Helsinki



Transport for London

Consorci Transports

Mallorca

Ruter#

RUTER Oslo

WW CTM

Syndicat Mixte des



Transports pour le Rhône et l'Agglomération Lyonnaise



Transport for Greater Manchester (TFGM)



Ile-de-France Mobilités Paris & Ile-de-France



Regional Organizer of Prague Integrated Transport (ROPID)



Metropoolregio Rotterdam Den Haag (MRDH)



Transport Authority of Thessaloniki SA (TheTA)



Verkehrsverbund Ost-Region Wien (VOR)



Zarzad Transportu MiejKiego Warszawie (ZTM) Warsaw



Amsterdam (VRA)



Consorcio de Transportes de Bizkaia (CTB) Bilbao



Trafikselskabet Movia Copenhagen



Zarzad Transportu Publicznego w Krakowie



Consorcio Regional de Transportes de Madrid (CRTM)



Autorité régionale de transport métropolitain de Montreal (ARTM)



Área metropolitana do Porto



Stockholms Lokaltrafik AB Stockholm(SL)



Agenzia della mobilità piemontese (AMP) Torino





Autoritat de Transport Metropolità de València (ATMV)









/IEII