UITP ADVANCING PUBLIC TRANSPORT

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STATISTICS BRIEF

WORLD METRO FIGURES

INTRODUCTION

Metros are the backbone of public transportation systems in cities of different sizes around the world. 148 cities have a metro system and there are close to 540 lines in total. Together, they carry over 150 million passengers per day.

Two-thirds of the world's metro systems are located in Asia and Europe (50 and 45 respectively). There are 16 systems in Eurasia, 16 in Latin America, 15 in North America and 6 in the Middle East and North Africa (MENA) region.

PASSENGER NUMBERS

With close to 3.3 billion passenger trips per year, Tokyo has the busiest metro system in Asia and also in the world (see figure 1). Moscow's metro carries over 2.4 billion per year, making it the busiest outside Asia (and the world's 3rd). New York City has the highest ridership in North America (1.7 bn, world's 7th) and Mexico City is the busiest network in Latin America (1.6 bn, world's 8th).

The networks of Paris (opened in 1900) and London (opened in 1863) are ranked 9th and 11th respectively.

Metro systems in Asia carry, together, over 70 million passengers per day, which represents nearly half the world total (see figure 3).

City/Operator		Annual passenger trips	City/Operator		Annual passenger trips
	Tokyo*	3,294		Guangzhou	1,841
	Seoul*	2,467		New York City	1,661
	Moscow	2,464		Mexico City	1,609
	Beijing	2,460		Paris	1,541
	Shanghai	2,269		Hong Kong	1,482

Fig. 1: 10 busiest metro networks (2012) in millions of passengers.
*Tokyo and Seoul have multiple-operator networks. The ridership figure refers to the entire network; the operator logos show the UITP member companies in the respective cities.

MORE NEW SYSTEMS TODAY THAN EVER

The number of cities with metros continues to grow. In 2013, new systems opened in Brescia (Italy), Yongin (South Korea), Harbin and Zhengzhou (China).

The increase has actually accelerated. From the 1970s to the year 2000, there were approximately 25 new systems every decade. Since the start of the new millennium, more than 45 cities have been added to the list.

Asia also leads the absolute ranking on this occasion, with 23 opening metro networks. In relative terms, MENA saw the greatest increase with respect to the situation in 2000, with the opening of 4 out of its current 6 metro systems. It is significant to note that Latin America also presents a high comparative growth rate, with an increase from 10 to 16 systems.
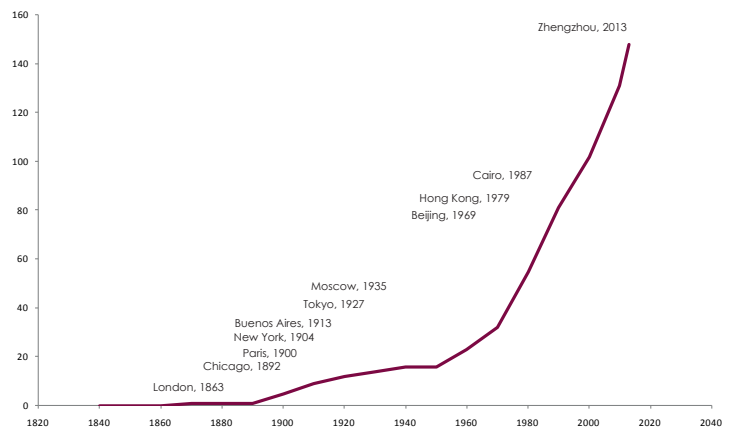

Fig. 2: Number of metro cities and some key opening dates

Asia-Pacific
71 mio. passengers
per day
50 cities
4900 km of track

Eurasia
16 mio. passengers
per day
16 cities
760 km of track

MENA
7 mio.
passengers
per day
6 cities
300 km of
track

Europe
31 mio. passengers
per day
45 cities
2800 km of track

North America
11 mio. passengers
per day
15 cities
1500 km of track

Latin America
15 mio. passengers
per day
16 cities
800 km of track

Countries in the Asia-Pacific region with metro networks
Countries in the Europe region with metro networks
Countries in the Eurasia region with metro networks
Countries in the Latin America region with metro networks
Countries in the North America region with metro networks
Countries in the MENA region with metro networks
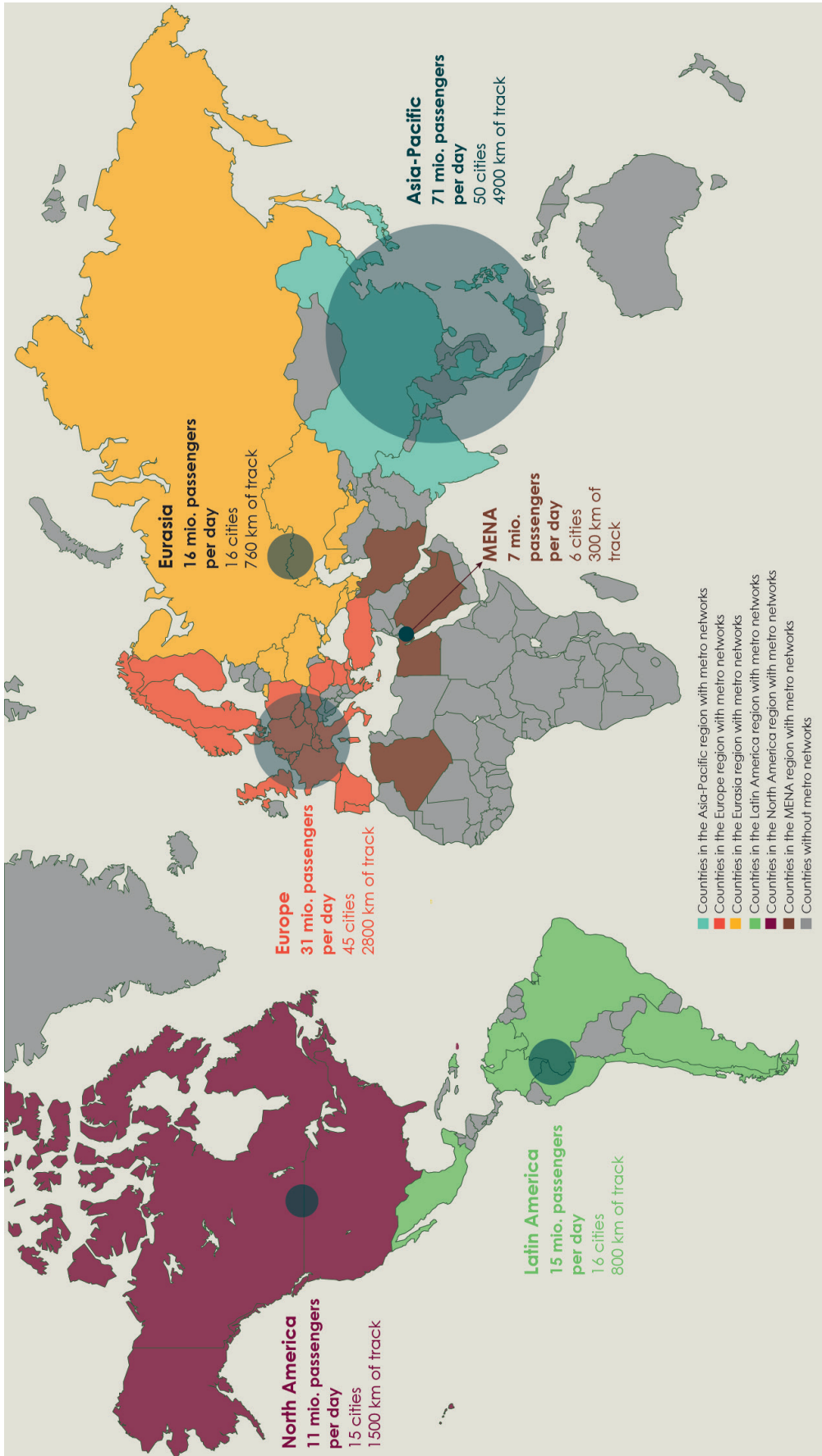Countries without metro networks

Fig. 3: Map of countries which have metro networks, according to world region, with average daily ridership. The number of cities in each region with metros and total length of metro infrastructure are also shown. The size of the bubbles reflects ridership figures.

INFRASTRUCTURE

In parallel to the increase in the number of metro networks, many cities have expanded their network. Today there are 9,000 metro stations in the world and 11,000 kilometers of line infrastructure. Average line length is approximately 20 kilometers.

With more than 500 km of infrastructure, Shanghai has the world's longest network. It is followed by Beijing, another fast-growing network in China. In fact, Asian cities take up 5 of the 10 top positions. London is the longest non-Asian network in the ranking, with New York, Moscow, Madrid and Paris completing the table (figure 4).

Average distance between stations on the world's metros is approximately 1,200 meters. Europe has the highest network density with an average inter-station distance of approximately 1 kilometer. Eurasia has the lowest network density, with a 1.5 km average, followed by Asia-Pacific and MENA (figure 5).
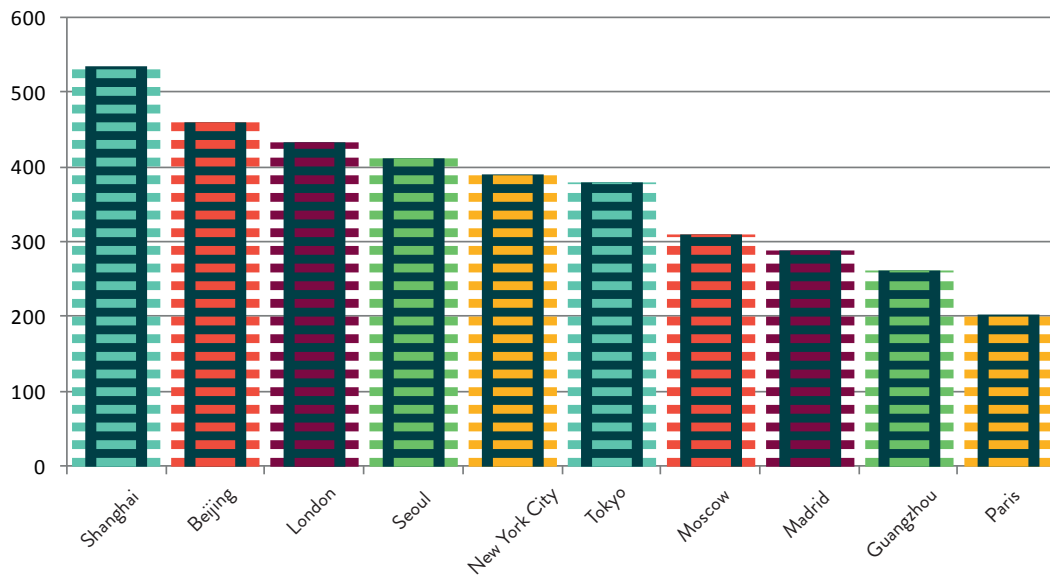
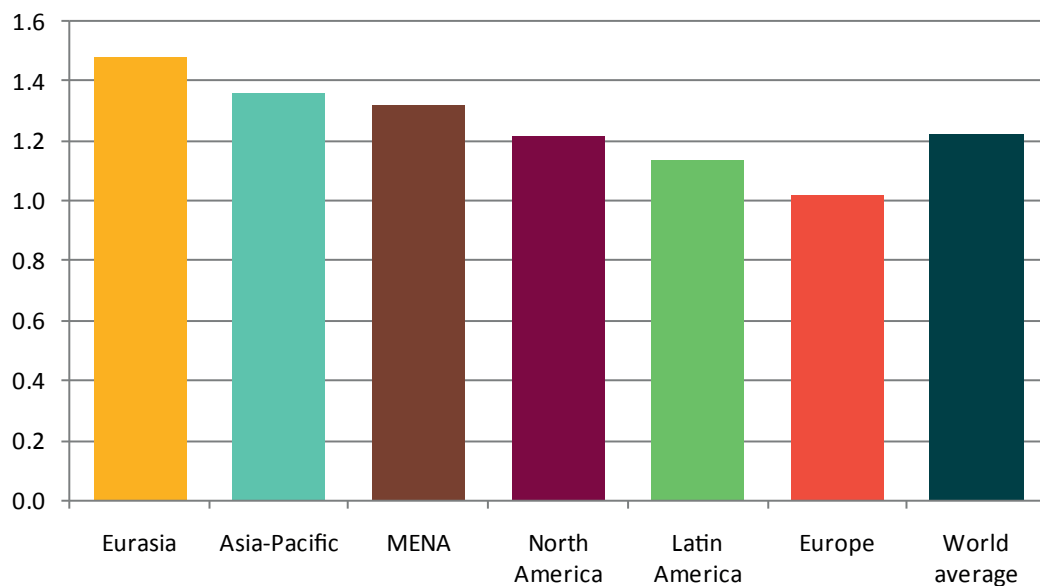*Fig. 4: Top 10 cities in network length (in km)*

Fig. 5: Average inter-station distance (in km) by region

ADAPTING TO URBAN LIFESTYLE - INTERNET CONNECTIVITY

Urbanites are a mobile and hyper-connected community. Today, passengers expect a seamless surfing experience when travelling. As a consequence, internet connectivity in underground transport infrastructure is becoming a life-style aspect of paramount importance.

According to the results of research carried out by UITP , 77% of the metro systems surveyed provide some level of internet access in their un-

derground installations, either in stations (73%) or on-board metro trains (58%). In the future, 68% of metros plan on increasing their efforts to expand broadband connectivity over their existing stations in the coming 1-3 years, while only 5% do not.

Over the past years, Wi-Fi has been quite popular as a channel for connectivity in 51% metros (and will continue to grow up to 72%), as it can provide free-of-charge complimentary access to internet for users in a given geographic space.
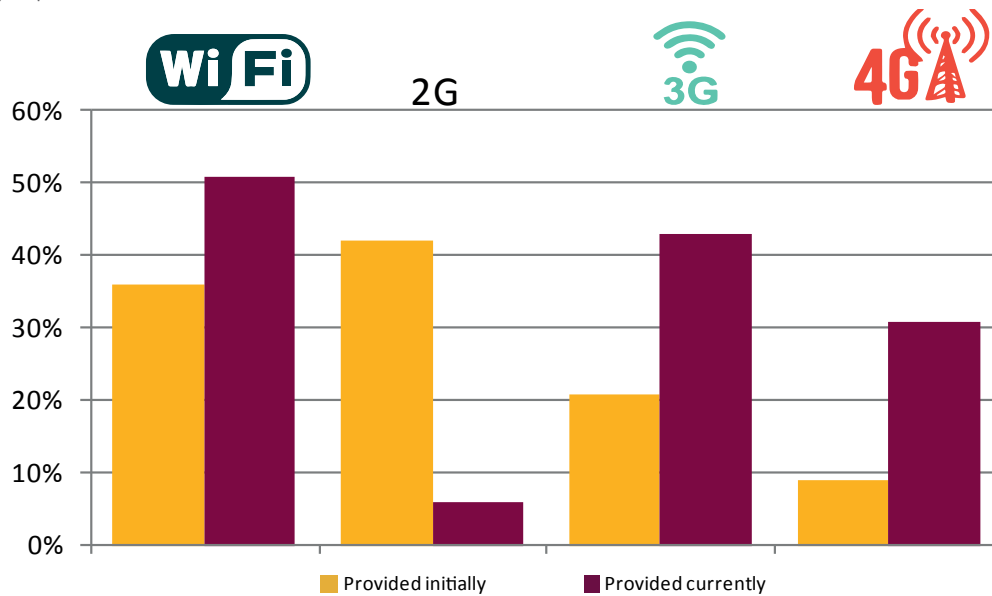

Fig. 6: Change in tendency of different connectivity types provision in stations. Initially refers to the type of connectivity first used. As far as mobile communication is concerned, the newer mobile communication generations are logically gaining ground to the detriment of the older ones.

METHODOLOGY: WHAT IS A METRO?

A metro is an urban guided transport system, mostly on rails, running on an exclusive right-of-way without any interference from other traffic or level crossings and mostly with some degree of drive automation and train protection. These design features allow high capacity trains to run with short headways and high commercial speed. Metros are therefore suitable for the carriage of high passenger flows.

Besides the above criteria, lines included in the above statistics run with trains composed of minimum two cars and with a total capacity of at least 100 passengers. Suburban railways (such as the Paris RER, the Berlin S-Bahn and the Kuala Lumpur International Airport express line) are not included. Systems that are based on light rail, monorail or magnetic levitation technology are included if they meet all other criteria. Suspended systems are not included.

UITP acknowledges the support of New Cities Foundation for the study on internet connectivity in metros. For more information, please visit: http://www.uitp.org/lifestyle-services-staying-connected-whilst-metro.

UITP DATA ON METRO RIDERSHIP AND INFRASTRUCTURE

The data on which this report is based was extracted from a database compiled by UITP using official company, or other authoritative sources. Please visit www.uitp.org for more information on access conditions.

This is a publication of the International Association of Public Transport. UITP has over 1,300 member companies in 92 countries throughout the world and represents the interests of key players in this sector. Its membership includes transport authorities, operators, both private and public, in all modes of collective passenger transport, and the industry. UITP addresses the economic, technical, organisation and management aspects of passenger transport, as well as the development of policy for mobility and public transport world-wide.

For further information please contact Mr Mircea Steriu, Statistics Manager. mircea.steriu@uitp.org