July, 2012 Jeremy Li

Shanghai's Metro – Subway Lines: (Notes Taken from Metro Line 8 and Line 4 on July 4, 2012)

SHANGHAI'S METRO is world's largest and longest metro system in terms of track mileage, and will continue to grow quickly from current 12 Metro lines (Metro 1 to Metro 12) in production to 25 Metro lines within next 5 to 10 years. Metro Line 1, designed and built by Germany, is the main north-south line of the Shanghai Metro and was the first Metro line to open, in 1995.

The permanent resident population in Shanghai is 23 million, which exceeds that of Australia, with a large population of working poor deserving an efficient, convenient and comfortable network of frequently scheduled buses in every 5 to 10 minutes to mesh with current 12 Metro lines (Subway lines), high-speed rail and highways. Click on the link http://www.urbanrail.net/as/cn/shan/shanghai.htm for a subway map and each subway line information.

Anyone can make a phone call; read & send emails via smartphone or tablet and text message while riding a subway or waiting at a subway station. Many Executives and managers in China can sign a document via smartphone or tablet as an official signature.

The \$32.5 billion Shanghai-Beijing high-speed 819 miles long rail link (bullet trains), which was in production in 2011, marked a significant milestone to improve intercity rail systems – click on the link below for details:

http://www.thetransportpolitic.com/2011/07/03/in-chinas-high-speed-successes-a-glimpse-of-american-difficulties/

Note: The original plan for the Beijing-Shanghai high-speed rail link would continue using German Maglev Train after the world's first public commercial **Shanghai Maglev Train** (http://www.youtube.com/watch?v=y-54gBLwK3s) was in service on January 1, 2004. The construction of the line began on March 1, 2001. However, a negotiation between China and German failed due to German's technology transfer refusal. As a result, China decided to use bullet trains, instead of the expensive German Maglev Trains.

The line 13 was in operation during the World Expo 2010 in Shanghai, but it was shut down for an extension at this time. Many Metro lines have 30 stations on average. The sign in each station is very clear, while the Los Angeles MetroLink signs at Union Station (http://www.metrolinktrains.com/) are confusing. The Red Line sign from each station at Los Angeles is not as clear as the sign in Shanghai Metro station, as shown in the picture below:



Signs are very clear at each station

It is almost impossible to have a suicide accident occurring again at each Metro station in Shanghai because either full or half fences are installed at each station, as shown below:



Most Metro Lines have closed fence



Metro line 8 has an open fence



A train is arriving inside a fence

- Until a train is at a full stop, a door from the fence will not open.
- To generate funds for the public transportation agency, many advertising signs are placed on every station

Note: There are no barriers separating the trains from the people on most U.S. City's subway platforms (e.g., in New York City, the largest city in the U.S. and Los Angeles City, the second largest city in the U.S.), and many people fall or jump to their deaths in front of rushing trains each year.



A fence door is closed until a train is at a full stop



Both a Metro carriage and fence doors are closing A Metro Map is displayed on top of every entrance door



A fence door is open after a train is at a full stop



More Signs are placed on the floor for additional directions (e.g., a sign for Metro Line 8, a sign for EXIT GATE etc.)

• You can go many places easily (e.g., the Huangpu River, shown in a picture below) with subway systems by using a subway map via the link http://images.chinahighlights.com/city/shanghai-subway-map.jpg



• TAP systems are installed at each station, shown in the picture below:



• A LED Map is placed inside a subway carriage, shown in the picture below:



Inside a subway carriage on Metro Line 8, July 4, 2012



A LED Map is displayed inside a subway carriage

Note: A **red dot color** represents a past station. An **amber dot color** represents the forthcoming next station. The flashing and growing **green color** of moving dots (e.g., in this case, **four green dots**) between a **red dot color** and **amber dot color** represent "A train is moving toward next station", and will be disappeared when a train stops.

Additional info can be obtained by clicking on the link below:

http://www.thetransportpolitic.com/2010/04/15/shanghais-metro-now-worlds-longest-continues-to-grow-quickly-as-china-invests-in-rapid-transit/

Appendix (Beijing Metro – Subway Lines):

Beijing, capital of China, will put four subway lines into operation by the end of 2012 as part of the city's efforts to expand rail transit to ease severe traffic congestion. This will make Beijing the longest subway system in the world. The new lines will bring the number of subway lines in the city to 16, with a total length of 275 miles. That will add the city's total subway transport capacity to over 9 million passengers per day, while the city's public transport system carried an average of 20.6 million people per day in 2012. By 2015, the number of subway lines in the city will reach 19, with a combined length of

349 miles. Most importantly, the new four subway lines will be completed within two to four years or by the end of 2012, while most western countries often spend decades of times conducting an environment study and going through multiple lawsuits to prevent a new subway line from starting construction. Checks and balances are good for modern governments, but too much unreasonable fighting for a reason of an environment damage or inconvenience for a small group has far exceeded the original estimated cost for building a public transit, which would have reduced traffic congestions for most citizens and daily commuters, who, in turn, lost hundreds of hours' productivity each year.

Leisure Reading:

36 Hours in Shanghai by the N.Y. Times at http://travel.nytimes.com/2009/03/15/travel/15hours.html?_r=0 where a traveler can take subway lines to any places mentioned in the Times.