FWE 2- Resource Booklet

Ⅰ. General Introduction to Wangjing

Figure 1 The location of Wangjing District in Beijing

Figure 2 The land use of Wangjing District

Commented [ts1]: Add names of 4 main arterial roads and main roads through Wanjing (match with description in text under "Transport" in the next section). If possible show where the subway station is and indicate the subway line. Label the main roads running through Wanjing.

1. Location and general information:

Wangjing, is located within the jurisdiction of Chaoyang District of Beijing, and was once farmland. There are many residential units in Wangjing, with high quality projects, comfortable living atmosphere and complete service facilities. According to government plans, Wangjing will be built into a super large community with a total planning area of 16 square kilometers and total population of 500-600 thousand, which is equivalent to a standard medium city. There are a variety of large chain stores and basic education schools and higher education institutions in the community. The medical establishments in Wangjing include Wangjing Hospital of Chinese Academy of Chinese Medical Sciences and community health service station of Wangjing Xiyuan Fourth District. In addition, local activities are also very rich. Wangjing Party is the center of activities for young people in Wangjing with dining, sports, games, and other activities are carried out here.

3. Transport

Wanjing is well-connected with four arterial roads, Northeast Fourth Ring Road, Jingmi Road, Northeast Fifth Ring Road and Jingcheng Thruway, crossing here. Datun is in the west; 798 Art District is in the south; Laiguangying is in the north and Huantie is in the east. Covering an area of 16 square kilometers, Wangjing is 30 minutes to the Capital International Airport, China World Trade Center, Asian Sports Village and the Olympic Village. Rail transit and bus lines go throughout the whole area of Wangjing. Wangjing West Station provides access to public transport, with the 13th, 14th and 15th subway lines going through here. The private car ownership rate in Wangjing is nearly 50%. However the roads in this community do not extend from the south to the north, so drivers are easily disoriented. Wangjing Street, Guangshun South Street, Huajiadi Street are three important roads running through Wangjing.

3. Resident population

The number of residents in Wanjing is about 300 thousand, of which Japanese and South Koreans account for a large proportion. Residents in Wangjing are generally young, mainly middle class, and work as entertainers, business managers, employees of foreign companies, lawyers, doctors, journalists. Since 1992, a large number of South Koreans have settled in Wangjing. In 1997, the outbreak of the Asian financial crisis led to devaluation of the South Korean Won. In order to avoid the impact of the financial crisis, more and more South Koreans came to China to start a business and a new life, for the living and labor costs in China are much lower than in South Korea. The first South Koreans coming to Beijing mostly lived in the vicinity of Madianqiao, and later Wangjing began to be developed. Because it was close to Capital Airport and house prices were relatively low, the staff dormitories of a number of South Korean companies moved to Wangjing and gradually more and more South Koreans were attracted to settle here, with Wangjing becoming the largest gathering place for South Koreans in Beijing.

4. Economic Structure

The Communication industry and Internet industry in Wangjing are very developed. The Zhongguancun Electronic Science and Technology Zone houses multinational company headquarters and R & D centers. Headquarters for hi-tech enterprises in electronic information and application software like ABB, Motorola, Sony Ericsson, Siemens, Panasonic and Microsoft are located in Wangjing. With a number of well-known multinational companies in the area, Wanjing has a reputation for an, open, diversified and international atmosphere.

II. Wangjing Huayuandongqu Community

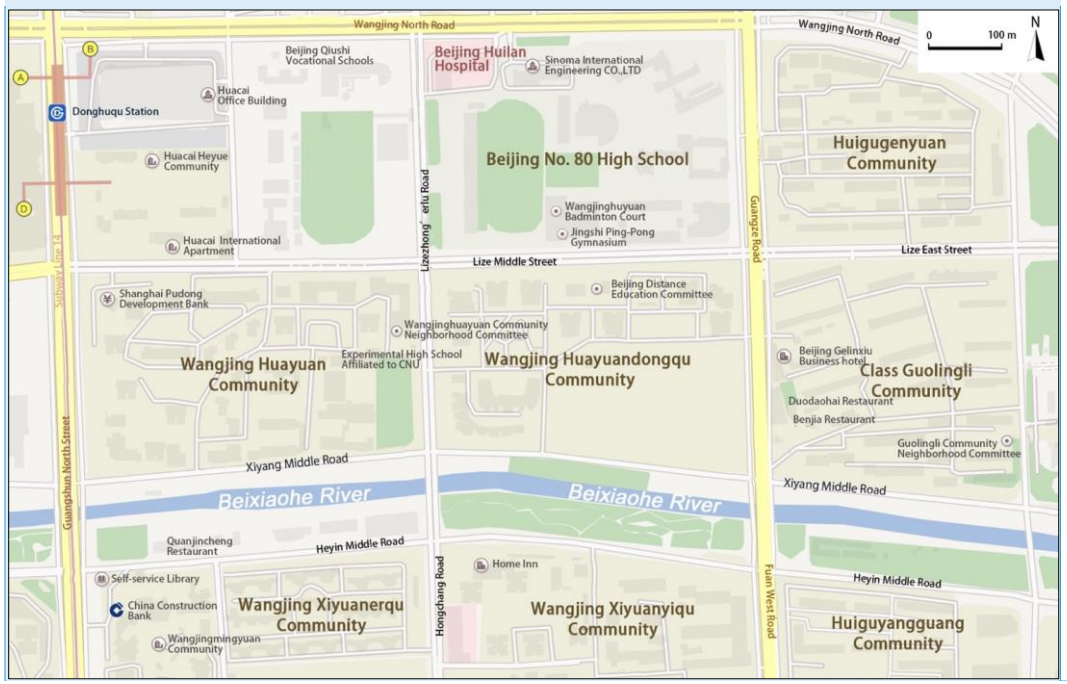

Figure 3 The neighbourhood around Huayuandongqu Community

Commented [ts2]: See comment below

III. Beixiaohe River

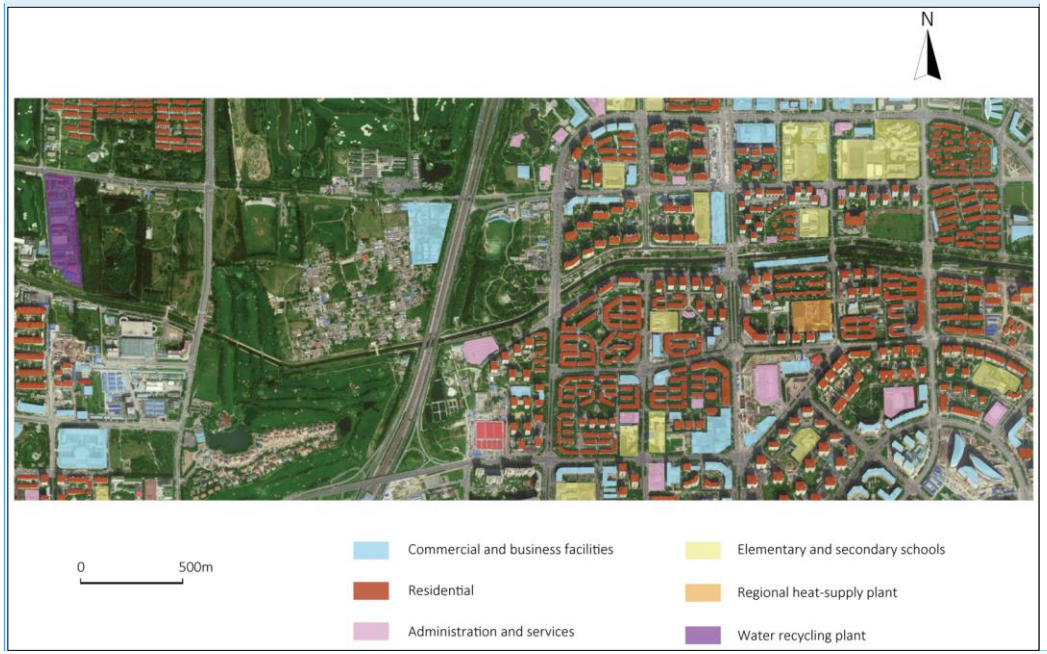

Figure 4 The land use of the neighborhood around the the Beixiaohe River

Commented [ts3]: Figure 3 and 4 are repetitive. I suggest we use Fig 4 since students are already familiar with it from FWE1. Blow up this figure, and make the boundaries and label of Huayuandongqu community clear. The empty plot of land next to it should also be labelled. Show the location of the Beixiao He river field site too, and ensure the entire length of the waterbody is clearly seen.

Ⅳ. Transit Elevated Bus

Transit Elevated Bus (TEB) is a new type of mass public transportation system pioneered by China which combines the advantages of the Bus Rapid Transit (BRT) and subway . Like the subway, it driven by electricity and runs on tracks, but hangs above the ground across both sides of the road. The first research and development base of the TEB in the world will be located in Zhoukou and the first TEB will be manufactured in June of 2017 in Zhoukou.

Figure 5 The word first test vehicle TEB-1 launching test running in Qinhuangdao City

Figure 6 The platform of TEB

Figure 7 The inside of TEB

TEB's average speed is 40 kilometers per hour, much faster than a normal bus with an average speed of 20 kilometers per hour. It carries 1200-1400 passengers, dozens of times the capacity of a normal bus. The TEB connects with the roadside bus stations or platform bridges, so whether other types of traffic under it will not be affected when it stops. Computer simulation results show that the TEB would be like a mobile tunnel as cars can run on two lanes under it without interference.

TEB is suitable for urban main roads which can accommodate the dimensions of the TEB. TEB is 56-

62-meter-long, 4.5-4.7-meter-high and 7.8-meter-wide. TEB is divided into 4 carriages with each measuring 12 meter long. The TEB, running across two lanes, has a raised compartment for passengers and the lower compartment is hollowed out. The height of lower compartment is 2.1-2.2 meter, so cars whose height is lower than 2 meter can successfully move under it.

Each TEB would cost about $20 million per kilometer, which is only 16%-20% of the cost of the subway.. TEB does not need parking lots, for it could stop at the platform on the lines in operation, which would not impede the normal traffic.

It is reckoned that each TEB would replace 40 normal gasoline-powered buses so that the urban air pollution and carbon emission would be relieved.