

TAIYUAN: RUST BELT RECOVERY



BASIC INFORMATION		World Rank	Similar to
Urban Area Population (2007)	2,730,000	110	Seattle, Curitiba, Nairobi
Projection (2025)	3,610,000	116	Berlin, Maputo, Melbourne, Detroit
Urban Land Area: Square Miles (2005)	120	260	Dhaka, Manaus,
Urban Land Area: Square Kilometers	310		Alexandria, Sendai
Density: Per Square Mile (2005)	22,800	160	Bangalore, Danang,
Density: Per Square Kilometer (2005)	8,800		Istanbul, Lagos
*Continuously built up area (Urban agglomeration)			
Land area & density rankings among the more than 750 yrban areas with 500,000 penulation or more			

Land area & density rankings among the more than 750 urban areas with 500,000 population or more. Data from *Demographia World Urban Areas* (<u>http://www.demographia.com/db-worldua.pdf</u>)

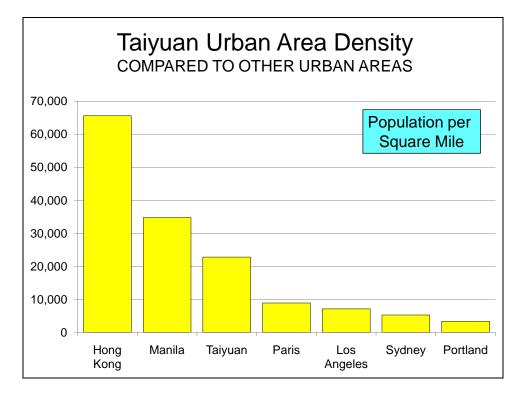
14 December 2008

LOCATION

Taiyuan (pronounced TY-U-ANN) is approximately 250 miles (400 kilometers) southeast of Beijing, slightly less than one-half the way to Xi'an. Taiyuan is the capital of Shanxi Province (SHAN = mountains, XI= west). Taiyan is south of Shanxi's other large urban area, Datong, which is 150 miles (205 kilometers) away. The urban area is in a valley with mountains on the east, west and north sides. The urban area rises from the Fen River, which flows north to south through the middle of the valley and empties into the Huang He (Yellow River or Huang Ho). Taiyuan is located in China's arid north, which is illustrated by the barrenness of the nearby mountains.

GENERAL DESCRIPTION

Taiyuan is a historic coal mining, steel producing and industrial urban area. The Taiyuan urban area has a population of 2,730,000 (2007 estimated). The urban area covers 120 square miles (310 square kilometers). The population density is 22,800 per square mile (8,800 per square kilometer). Taiyuan is comparatively dense, at about 30 percent greater than the average of urban areas in China over 500,000 (17,000 per square mile or 6,800 per square kilometer). Taiyuan is one-third as dense as world leader Hong Kong and one-third less dense than Manila. On the other hand, the Taiyuan urban area is 2.5 times as dense as the Paris urban area, 3.3 times as dense as the Los Angeles urban area, 4.3 times as dense as the Sydney urban area and 6.7 times as dense as the Portland urban area (Chart).



Like Shenyang and Fushun,¹ Taiyuan has been the home of some of China's largest heavy industries. As a result, as reforms have reduced the size of the state sector and heavy manufacturing has declined, Taiyuan has suffered economic downturns and can be considered a part of China's "Rust Belt." However, there is plenty of evidence of economic vibrancy in Taiyuan.

GETTING TO TAIYUAN

There is convenient airline access to Taiyuan from all over China. Taiyuan Wusu Airport is located less than 10 miles from the historic core (less than 16 kilometers). It takes less than one-hour to fly to Beijing.

Taiyuan is also served by China's "7918" toll expressway system. Currently, interstate or motorway standard roads connect Taiyuan to the rest of the nation in four directions. Bus and rail service is

¹ See rental car tours on Shenyang and Fushun.

also available. The high speed rail link to Taiyuan from Beijing will be completed early in the next decade, with travel times of less than three hours.

THE URBAN FORM

Perhaps one-third of the Taiyaun urban area is located on the east side of the Fen River. Much of the urban area has a grid street system, with the main east-west street being Yingze Xidajie. Yingze Xidajie begins in the east at the Taiyuan railway station and crosses most of the urban area, ending at western portion of the Ring Expressway. At least five bridges cross the Fen the river in the central area. The main north-south street on the west side is Heping Bailu.

The Historic Core: The main commercial center is located to the west and south of the railway station on the east side of the river. It is appropriate to label this the "historic" core, since core activities, such as major shopping centers and office buildings are increasingly found throughout Chinese urban areas, including Taiyuan. Taiyuan boasts a number of high rise office towers, the tallest being more than 40 floors. As is typical of Chinese urban areas, however, office buildings are widely spread. Most of the office towers are within two miles (three kilometers) of the railway station, are not concentrated, as would be the case in a North American or Australian urban area. The core contains many shops and residential buildings.

East Side: South of the core, the east side becomes predominantly residential. There are office buildings, but they are very sparsely spaced and there are many smaller shops. The east side also includes many new high-rise residential buildings. Even to a greater extent that offices, the new high rise residential buildings are spread throughout the urban area. Interspersed between the offices, residential towers and shopping facilities are the "classic" multi-unit residential buildings, similar to what is seen throughout China (see "Housing," below). The south side is also home to Taiyuan's "automobile row," a concentration of new automobile dealerships (Slides 89-91)

The West Side: The west side is similar to the east side, except that it does not contain many office towers. There are many dispersed high-rise residential towers and many shopping facilities. Some of the newest residential towers are located on Yingze Xidajie, near the west end of the urban area, near the ring road, more than 6 miles (10 kilometers) from the railway station (Slides 131-133).

The South: Toward the south, Taiyuan is not as prosperous. Much of the area is given to industry, including a major power plant on the southwest side. There are fewer high-rise residential towers, however, toward the airport, on the southeast side, there are some new towers. The south side contains the kind of less attractive uses that must attend to every urban area, such as repair shops, junk yards, trucking facilities, etc.

The Northeast Side: Toward the north, principally on the east side, there is also considerable industry, coal fired power plant and a large steel mill (owned by Taiyuan Iron and Steel Corporation, the largest corporation in Shanxi and it is reported will become the largest stainless steel producer in the world). Housing in this part of the urban area is more modest and there are few high-rise residential towers. Like the south side, the north side has some of the typical but necessary unattractive urban uses.

Shopping: Shopping is also very dispersed, which is a necessity since a low automobile ownership share requires people to shop relatively close to home, by walking, bicycle or motorcycle. Modern

shopping centers are located throughout most of the urban area. Like other Chinese urban areas, there are many convenience stores and some are open 24 hours (Slides 46 & 57). Indeed, there are "7-11" stores in China. Thus convenience shopping opportunities in China are similar to the United States. However, in the United States the "7-11" and other similar stores have largely been replaced by convenience stores at petrol stations.

Housing: China has been successful in housing its large urban population, which includes the registered population --- people with the right to live in a particular urban area --- and the unregistered, or floating population. The unregistered population is legally permitted to live in the urban area only temporarily, but the reality is that they have become a permanent fixture, staffing the many growing businesses.

In Taiyuan, as in other Chinese urban areas, there are many "classic" multi-unit residential buildings (Slides 189-192) in the older areas. These were originally built by the government and made available, generally as rentals to households. We are told that many of these units have been sold. The "classic" buildings are up to ten floors, though in medium sized urban areas, like Taiyuan, they tend to be six or fewer floors. Most of the units have bay windows and are fairly attractive given that they were built as public or social housing and are aging. It is unclear when these were built. They appear to date at least to the late 1970s and perhaps even before. Much of the older parts of Chinese urban areas are covered by these "classic" buildings, which are spaced close together within urban blocks (Slide 192, additional Slides are noted in the footnote²).

As throughout China, an increasing number of Taiyuan households are moving into the newer, privately developed condominiums, most of which are at least 20 floors and some exceed 30 floors. A large number of high-rise residential buildings are under construction. These buildings are being developed in virtually every part of the urban area and often a number of near-duplicate buildings constitute a development (Multiple Slides, see footnote³). People stand at intersections handing out flyers to passersby, whether in cars or on foot, advertising new residential buildings, complete with floor plans and sale prices. The main Xinhua Bookstore, in the core, has a large billboard advertising a new condominium development (Slide 50).

In all of our travels in China, which now cover more than 15 urban areas, virtually no "shanty towns" nor informal housing has been seen. This is unusual for a nation of China's economic status. Nations that are rated as much more affluent, such as Mexico and Brazil have significant shanty towns, which cannot be missed in traveling through the urban areas. Moreover, China has every bit as big an urban housing challenge, since the strong movement of people from the rural areas to the urban areas continues. China will add more urban residents in the next quarter century than the population of the United States (more than 360 million).

Small Businesses: As is the case in virtually all Chinese urban areas, many major streets are lined by small businesses (Slides 35, 42, 61, 75, 94, 112 & 159)

² Slides 14, 43, 46, 48, 49, 75, 93, 97, 99, 147, 160, 161, 184, 187, 188, 190.

³ Slides 15-17, 28, 41, 53, 60, 62, 66, 68-72, 74, 79, 80, 83-87, 103, 104, 107-112, 116, 119, 120, 122, 123, 127, 129, 131-133, 137, 140, 143, 163-165, 172.

TRANSPORT

Taiyuan has a public transport system that relies on buses and trolleybuses. As in other Chinese urban areas, there is a growing volume of car and motorcycle traffic. There is a freeway ring road and some limited access road within the urban area. The urban area is generally served by a grid of wide streets.

MAPS AND BOOKS IN CHINA

In Taiyuan and most Chinese urban areas, the largest and most comprehensive bookstores are a part of the Xinhua Bookstore chain, which is owned by the government. Xinhua bookstores generally have the best assortment of local and regional maps and include a small selection of English language books. Any one serious about touring China or Chinese urban areas will need good, detailed maps and they are generally available only in Chinese. However, there is no difficulty in developing a touring route to see an urban area using a Chinese map.

EATING IN CHINA

The local food is superb. My rule in China is to never frequent a restaurant that takes credit cards. That way, there is a good chance of getting genuine local food. The experience is a happy one, though language difficulties make it virtually impossible to enunciate any recommendations. There are, along all business streets in the urban areas of China, a plethora of good local restaurants. Ordering can be difficult, since few such establishments have menus in English (though rather more than have Mandarin menus in Western Europe or the United States). Moreover, given the humble status of these restaurants --- low prices, good food, they will not be found in any of the tour guides.

It is recommended, however, that tap water be avoided. The hotels provide bottled water. Generally, bottled water should be relied on in all but the most affluent nations. This is my unfortunate advice after having contracted Montezuma's revenge on every continent but Australia and Antarctica.

TRAVELING IN CHINA

China has one of the world's most advanced air transport systems and has built many new airports. The new Beijing Terminal 3 and the Guangzhou Baiyun International Airport are among the most impressive in the world. Other large and medium sized urban areas also have new airport terminals, such as Chengdu, Wuhan, Xi'an, Shenyang, Shenzhen, Taiyuan and a new terminal is under construction at Hongqiao International Airport in Shanghai.

Passenger rail is a very inexpensive and comfortable way to travel, especially over shorter distances. China has developed the fastest intercity train in the world, which operates between Tianjin and Beijing. It reaches nearly 220 miles per hour (350 kilometers per hour). Rail travel is very inexpensive. For example, second class travel between Hangzhou and Shanghai has an approximately cost of \$15.

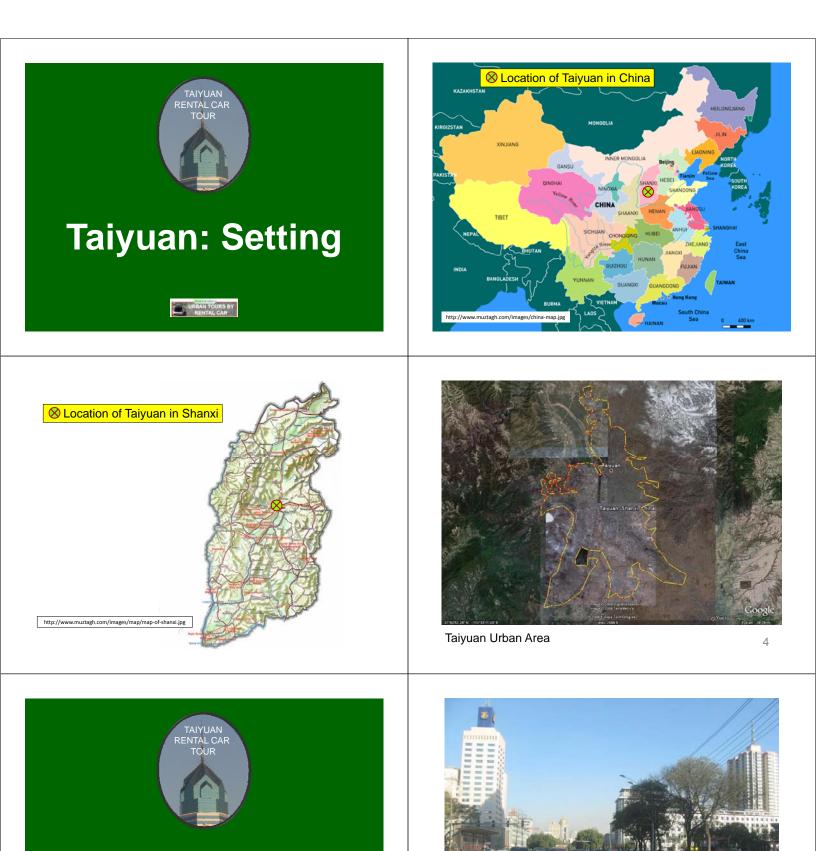
China has developed the world's second longest freeway system, but it is largely inaccessible to foreign drivers because China has not ratified the international drivers license treaty. When and if they do, anticipate a rental car tour covering thousands of miles of Chinese intercity freeway.

"CITIES" IN CHINA

Analysts are often confused by the "city" ("shi" in Chinese) terminology used in China. All of the Suzhou urban area is contained within the city or municipality of Suzhou. Similarly, most (if not all) Chinese urban areas are contained within a single city. While Chinese "cities" are municipalities, they are far different from municipalities in the western world, by virtue of their geographical size and vast rural territories. A better rendering of the Chinese word "shi" would be region.

These cities or regions routinely include large areas of agricultural land, which keeps their density relatively low and leads publishers and analysts to report density data that is so low that it belies a complete misunderstanding of urban geography. For example, the largest municipality in the world is Chongqing, which has more than 30,000,000 people. Its land area is more than 30,000 square miles (more than 80,000 square kilometers) --- nearly as large as Austria or the state of Indiana. The urban area of Chongqing, however has a far more modest population of 4,000,000

http://www.rentalcartours.net http://www.demographia.com http://www.publicpurpose.com



Historic Core







East Side: Core





East Side Core: Railway Station

10



East Side Core: Railway Station





East Side: Core



East Side: Core



East Side: Core



East Side: Core

15



East Side: Core





East Side: Core

16





East Side Core: Shopping on Nanneihuan jie



East Side Core: Shopping on Nanneihuan jie





East Side Core: Shopping on Nanneihuan jie

21



East Side Core: Shopping on Nanneihuan jie





East Side Core: Shopping on Nanneihuan jie





East Side: Core



East Side: Core



East Side: Core



East Side: Core



East Side: Core

28



East Side: Core

29







East Side: Core



East Side: Core



East Side: Core

34



East Side: Core







37



East Side: Core

38



East Side: Core



East Side: Core

40





East Side: Core: Pedestrian Overcrossing



43



East Side: Core



East Side: Core



East Side: Core



East Side: Core

47





East Side: Core



Core: Xinhua Bookstore with Condominium Billboard 50



East Side: Core

51



East Side: Core

53



East Side: Core: Yingze Xidajie

52



East Side: Core: Yingze Xidajie



East Side: Core: Yingze Xidajie



East Side: Core: Yingze Xidajie





57





East Side





East Side



East Side

61



East Side





East Side

64



East Side



East Side: Shanxi World Trade Center to Right



East Side: Shanxi World Trade Center to Right



East Side





East Side

69



East Side



East Side

71



East Side



East Side: Shanxi Provincial Building



East Side



East Side

75

73



East Side



East Side

77



East Side





East Side: Core



81



East Side: Core



East Side

83



East Side



East Side

85



East Side

86



East Side

87



East Side: Auto Row





Toward River from East Side

88



East Side: Auto Row



East Side: Auto Row

91





West Side: Heping Bailu

93



West Side: Heping Bailu

94



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Heping Bailu

100



West Side: Catholic Church





West Side: Catholic Church



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Heping Bailu

105



West Side: Heping Bailu





West Side: Heping Bailu

106



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Heping Bailu

110



West Side: Heping Bailu

111



West Side: Heping Bailu

112



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Heping Bailu



West Side: Toward Northern Mountains



West Side

117



West Side

118



West Side: Bridge over Fen River Looking East

119



West Side



West Side

121



Yingze Xidajie Bridge Looking North



West Side: Yingze Xidajie

123



West Side: Yingze Xidajie

124



West Side: Yingze Xidajie





West Side: Yingze Xidajie



West Side: Yingze Xidajie



West Side: Yingze Xidajie



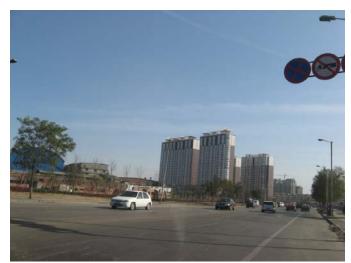
West Side: Yingze Xidajie

129



West Side: Yingze Xidajie

130



West Side: Yingze Xidajie





West Side: Yingze Xidajie



West Side: Yingze Xidajie

133



West Side: Yingze Xidajie: View Toward Core



136



West Side: Yingze Xidajie: Toward Eastern Mountains 135



West Side



West Side





West Side



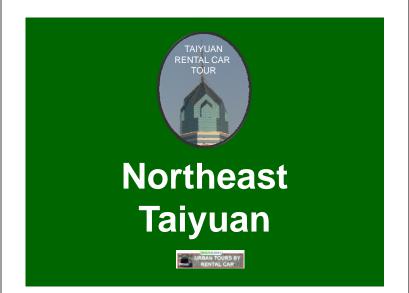


West Side: Yingze Xidajie

140



Yingze Xidajie Bridge Looking South





Northeast Side

143



Shanghai GM Buick



Northeast Side

145



Northeast Side



Northeast Side

147



Northeast Side

Northeast Side



Northeast Side





Northeast Side



Northeast Side: Steel Mill

153



Northeast Side



Northeast Side

154



Northeast Side



Northeast Side: Power Plant



Northeast Side



Northeast Side



Northeast Side

160



Northeast Side

161



Northeast Side: Toward Western Mountains



Northeast Side

163





Northeast Side

165





South Side

167



South Side



South Side: Ring Road



South Side: Ring Road



South Side: Ring Road: Toward Western Mountains



South Side

172



South Side: Airport







Southwest Side: Toward Eastern Mountaints



Southwest Side



Southwest Side

177



Southwest Side: Toward Western Mountains

178



Southwest Side: New Development Due

179



Southwest Side



Southwest Side

181



Southwest Side



Southwest Side: Power Plant

183



Southwest Side

184



Southwest Side



Southwest Side



Southwest Side



Southwest Side





Older Multi-Unit Housing: West Side: Heping Bailu

190



Older Multi-Unit Housing: West Side: Heping Bailu

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191
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Older Multi-Unit Housing: East Side