

## PEARL RIVER DELTA SERIES

Hong Kong: Like No Other (<u>www.demographia.com/rac-hk.pdf</u> Dongguan: The Unknown (<u>www.demographia.com/rac-dongguan.pdf</u>) Guangzhou: Pearl River Renaissance (<u>www.demographia.com/rac-guangzhou.pdf</u>) Macau: West Pearl River Anchor (<u>www.rentalcartours.net/rac-macau.pdf</u>) Shenzhen: Start of China's Future (<u>www.rentalcartours.net/rac-shenzhen.pdf</u>)

FAST FACTS		Similar To
Metropolitan (Labor Market) Population	7,000,000	Rhine-Ruhr-Wupper, San
		Francisco
Urbanized Area* Population	6,475,000	Bangkok, Rhine-Ruhr-Wupper
	0,470,000	
Urbanized Land Area: Square Miles	85	Provo (Utah), Strausburg, London
Urbanized Land Area: Square Kilometers	220	(Ontario)
Population per Square Mile	76,200	Ho Chi Minh City
Population per Square Kilometer	29,400	
*Continuously built up area		

## 20 August 2005

The guide books make it pretty clear. Of course you can rent a car in Hong Kong. But why would you want to? Well, I figured out why on my first trip, when the limitations of public transport, even in this ultimate of public transport urban areas made it clear that much of Hong Kong could not be seen without the freedom of the automobile. True, most of the suburban new towns can be reached by the rail system. But relying on public transport and walking here will take an extraordinary amount of time, though less than elsewhere.

So, on the second trip I didn't make the same mistake. When I really wanted to see the totality of the urbanization, I took public transport --- the Mass Transit Railway (MTR) and the Kowloon Canton Railway (KCR) to Hung Hom Station, where I obtained my automatic transmission Mazda 323. To my disappointment, they didn't have a standard transmission available.

At the same time, a good deal of my travel was on Hong Kong's unparalleled public transport system --- unparalleled for good reason, because Hong Kong is the only urban area in the first world with pre-automobile urban area densities. But, toward the end of the trip, I realized that the only way to efficiently see Hong Kong by public transport was to combine it with taxicabs --- public transport for the trunk line part of the trip, and taxicabs from the stations to the specific destinations. Hong Kong taxicabs are relatively inexpensive for short trips.



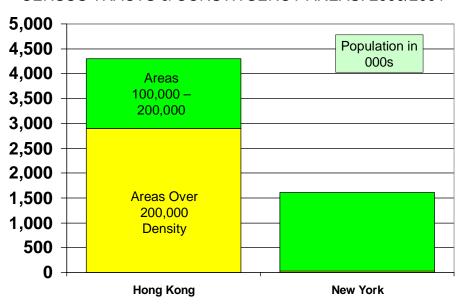
**Density, Density:** Hong Kong is well known as the most dense urban area in the world. It is notable for other densities as well.

**Most Dense Urban Area:** Hong Kong is a very dense place. The older districts of Kowloon were among the most dense, though were relatively modest in building height --- often six to 10 stories. The newer developments are much different. Many are more then 50 stories and include a number of towers. For example, the Amoy Gardens development (pictured), where the SARS virus broke out in Hong Kong, has 19 towers, built on top of a modern high-quality enclosed shopping mall. I can recommend the *Yoshinoya* fast food Japanese restaurant. A number of the buildings are shrouded in construction apparatus, including Block E, where the SARS virus broke out. But, it was clear that the buildings remain occupied, from the fact that the reception areas were open and residents were going in and out.

Near the east end of the Island MTR line is a development of 50 buildings. The new town of Tsuen Wan contains perhaps the most dense urban neighborhood in the world. The constituency area that includes the Allway Gardens Estate has a population density of more than 1,100,000 per square mile (pictured). Demonstrating the brotherhood of man, the pedestrian overpasses in

this development serve the same human elimination purposes as New York City subway stations. Many of the large residential developments have parking available underneath, or even beside the buildings, For example, the first 8 of the approximately 35 floors of Allway Gardens (above) is parking. But parking requirements are less because less than one-fifth of households have cars. Hong Kong's automobile ownership rate is especially low, well below rates already being achieved in much less affluent Guangzhou (100 miles away) and adjacent Shenzhen.

Virtually no high-income urban area can compete with Hong Kong's population density. The New York urban area has the highest concentration of above 100,000 per square mile densities in the high-income world outside Hong Kong. A total of 1.6 million New Yorkers live at such hyper-densities, less than 10 percent of the urban area population. In Hong Kong, more than 4.4 million people live in densities above 100,000 per square mile, representing 70 percent of the urban area's population. The gap is even greater in densities above 200,000. Hong Kong has 2.9 million people living in 200,000 and above densities, while New York has only 34,000. In fact, nearly 2.6 million people in Hong Kong live at densities above the highest in New York.



## Hyper-Densities: Hong Kong & New York CENSUS TRACTS & CONSTITUENCY AREAS: 2000/2001

The new towns generally are of the new, high rise, multiple tower variety. Most of them are located in the New Territories and have been developed over the past 25 years. The New Territories is the land that the British leased from China in 1898 for 99 years and provided a ready opportunity for the peaceful transfer of sovereignty back to China for all of the former British territory (including the original cession).

Many of these residential developments also sit atop enclosed shopping malls. The enclosed shopping mall is particularly important here, where temperatures are high, humidity is high and

the rain, when it falls, is intense. A notable development is Metrotown, being built adjacent to the MTR (metro) station in Tseung Kwan O. This project is a joint venture between the MTR and private developers and will top out at more than 50 floors. Difficulty in selling the units has resulted in a proposal to offer 40 year mortgages.

**World's Most Dense Freeway System:** Perhaps most surprising is that Hong Kong has the highest density of freeways among the high-income world's large urban areas. In fact, the density of freeways in Hong Kong is so great that second place Madrid is more than a third behind Hong Kong and third place Barcelona is more than 50 percent back. Tolls are not charged on most of the freeways, but there are tolls on most of the tunnels and bridges (<u>www.publicpurpose.com/ut-worldfwy.htm</u>). But this is just the beginning. Major new road construction and expansion programs are underway. Hong Kong's long term plan calls for a virtual doubling of freeway capacity, which will lengthen its already strong lead as the urban area with the most dense network of freeways.

But Hong Kong is an urban area of freeways. There are three harbor crossings. Two tunnels run between Kowloon and the new town of Sha Tin and nearby Ma On Shan. There are other tunnels between the new towns of Tsuen Wan and Sha Tin and Tsuen Wan and Yuen Long. The freeway between Kowloon and Tseung Kwan O goes over the crest of the hill. There are three tunnels crossing Victoria Harbour between Hong Kong Island and Kowloon.

The newest tunnel leads to the relaimed land in West Kowloon, where plans call for the tallest building in the world to be built. Currently the tallest building is on Hong Kong Island, the International Finance Centre 2 (IFC2), which at 1,362 feet, is the fifth tallest building in the world, following Taipei's 101 Tower, Kuala Lampur's two Petronas towers and Chicago's Sears Tower. IFC2 is slightly taller than the former World Trade Center towers in New York.

Most of the development in Hong Kong tends to be somewhat linear, which makes it comparatively conducive to service by public transport. It also makes the freeway network operate well.

The freeways are wide. Some are as wide as eight lanes, while most are six lanes. The overcrowded freeway between Yuen Long and the port of Tuen Mun is being expanded to handle the heavy traffic. Hong Kong has now emerged as the world's busiest port measured by annual containters. A freeway runs nearly the entire length of the highly urbanized, northern shore of Hong Kong Island, parallel and beyond the MTR island Metro line. Another freeway leads through one of the tunnels, along reclaimed land toward the Airport and Tuen Mun.

**Most Dense Public Transport System:** Hong Kong has the most dense public transport system in the high-income world, and virtually no graffiti. The Metro (MTR or Mass Transit Railway) system and commuter rail system (Kowloon-Canton Railway or KCR), combined with the surface modes of trams (double-deck) franchised buses (generally double deck), public light buses (minibuses) and light rail (Yuen Long to Tuen Mun) provide a level of service that is unparalleled. Of course, with its extraordinary population density, such a public transport system is necessary. Major additions have recently been opened and others are planned, including a virtual doubling of capacity on the Island MRT line. The UITP's Millenium Cities database estimates public transport's market share at 73 percent of motorized travel (measured in passenger kilometers). This is by far the highest public transport market share in the high-income world. While UITP does not provide work trip market share data, it seems likely that between 80 and 90 percent of work trip travel is on public transport (based upon the fact that work trip market public transport shares are normally well above overall market shares).

On at least three of the MTR lines, service is provided every three minutes throughout the day. Trains are eight cars long, with a crush load possible of more than 2,500 passengers per train. Crush loads occur during peak periods and at other times as well. Hong Kong, unlike many urban areas aspiring to rail public transport systems, has the demand to justify its expensive system. Indeed, the MTR makes a profit and pays its capital costs out of commercial revenues. Some analysts have attempted to contrast metros with light rail by using a power collection criteria --- Metros take power from third rails along the side of the right of way, while light rail takes power from overhead lines (by overhead catenaries). But the MTR shows this criteria to be wrong. Surely the MTR is a Metro system, and its power collection is overhead. My definition of Metro versus light rail is based upon grade separation. A Metro is virtually all grade separated, light rail is not.

KCR is also commercial. KCR operates West Rail to Yuen Long and Tuen Mun, the Ma On Shan rail line from Sha Tin but most interestingly operates the line to Lowu, on the border with Shenzhen. Even this line operates with three minute frequencies throughout the day. The most comfortable way to make this trip is in the first class car, which requires a fare of HK\$66 (US\$9), which compares to a fare one-half as much to ride in rail cars with peripheral seating and a good chance of standing all the way for 40 minutes.

But there are problems with the public transport system. The worst is not the fault of public transport. It is the weather. Hong Kong is hot, humid and it rains a lot. This means that waiting for public transport services is often not comfortable. And Hong Kongers do wait for public transport. Despite the quality of the MTR and KCR and despite the unique corridor based development of much of the area, the high quality rail systems are not within walking distance of much of the urbanization. This means long walks to the stations. Or it can mean queuing up along the streets for bus services, which while intense in appearance to an outsider, require waits that are generally much longer than on MTR or KCR to get to specific destinations.

But even with Hong Kong's unparalleled public transport system, travel times are long. In 1990, it was reported that the average one way work trip took 44 minutes, 18 minutes more than in Houston. The longer travel times in dense Hong Kong are typical of more dense urban areas, despite their shorter work trips. In sprawling Houston, the average commuter has an extra three hours a week to work or play that a Hong Kong worker spends traveling to or from work.

**Most Dense System of Pedestrian Over-crossings:** With Hong Kong's extraordinarily high population density, it would be expected that it would be pedestrian oriented. Nothing could be further from the truth. With such a high density of cars and people, special measures must be taken to keep the two separate. Thus, throughout the commercial sectors of Hong Kong Island, location of the central business district, there is a massive system of pedestrian overcrossings and bridges. But it is not a comprehensive system. As would be expected in such an urban setting,

there are many businesses along street levels. In many cases, it is not possible to cross streets without climbing up a pedestrian over-crossing and then descending on the other side. Steel fences make it difficult to cross illegally, and, indeed, it would be very dangerous. In parts of the business district core, in Central, the pedestrian bridge system is more complete than in other areas, such as nearby Causeway Bay or Wan Chai, but most commercial establishments are at the street level, not the pedestrian walkway level. One advantage of the pedestrian walkway system is that parts are routed through air conditioned buildings. Hong Kong has perhaps the ultimate pedestrian transport system, an escalator that climbs from Central to the Mid-Levels, an area of higher cost housing part way up Victoria Peak

**Most Dense Concentration of Automobile Junk Yards?** Another distinction is that Hong Kong may have the highest density of automobile junkyards and equipment lots in the world. But more about that later. But, without a car, much of the urbanization of Hong Kong cannot be seen. I had been examining satellite photographs of Hong Kong and noticed what appeared to be rather sparse urban development in the valley containing Kam Tin to the east of Yuen Long. Without the satellite pictures, one could get the impression that this was an agricultural area. It doubtless was at one time. But the automobile has taken over. For miles, the major roads of this area, and even some of the routes south of Yuen Long toward Tuen Mun, are dotted with automobile junk yards. Interspersed among the junkyards are heavy equipment yards.

**The Harbour Tour:** One of the delights of Hong Kong's public transport system is the Star Ferries. Frequency service is provided from the Kowloon Tsim Tsa Shui terminal to both Central and Wan Chai. The standard fare is HK\$2.20 (US\$0.30), though a less expensive ride is available on the lower deck of the Kowloon-Central route (HK\$1.70). Star also operates an hour long Victoria Harbour tour loop, which allows patrons to ride virtually all day for HK\$150 (less than US\$20) or to make as many stops as desired (Central, Wan Chai, Hung Hom and Tsim Tsha Shui). The highlight is the 8:00 p.m. light show from the skyscrapers of Hong Kong Island.

**Dining in Hong Kong:** The most important thing about eating in Hong Kong is to dine where the locals dine. This means avoiding any restaurant that takes credit cards. There are a plethora of good, though not upscale appearing, restaurants along the streets of Hong Kong Island and Kowloon. Most have at least an abbreviated menu in English. Failing that, one can always walk around the restaurant and point to the food that looks interesting. The restaurants deal with density by allocating seats in the same booth or at the same table to multiple parties. This may be a bit disconcerting to the Westerner, but is a part of the Hong Kong and even the mainland China experience.

**Low Density Development:** There is a surprising amount of relatively low density development. In "Junkyard Valley" (east of Yuen Long) there are many low rise residential buildings and some detached housing. High cost low rise and detached housing will be found in the mid-levels, between Central and Victoria Peak on Hong Kong Island. Pok Fu Lam village, on Hong Kong Island, has the look of a shanty town, a type of development that used to be found in a number of places in pre-affluent Hong Kong. Upscale detached and semi-detached housing has been built in recent years. The most notable developments are Fairview Park, north of Yuen Long and Hong Fok Yuen, near Tai Po. Both of these developments have security arrangements that make casual visits impossible without an appointment. **East Pearl River Delta:** The arc of urbanization along the east side of the Pearl River, from Hong Kong, through Shenzhen, Dongguan to Guangzhou (former Canton) now accommodates as much as 35 million people, approximately the same population as the Tokyo-Yokohama area. If there were free travel across the border between Hong Kong and Shenzhen (as there is between the countries of the European Union), the two would combine to form a metropolitan area of approximately 17 million population, one of the largest in the world and approximately the size of Los Angeles or Osaka-Kobe-Kyoto. Even with the border restrictions, however, it is reported that some former Hong Kong residents have moved to Shenzhen and commute to jobs in Hong Kong. This trend may become more pronounced in the future, but would require substantial government policy changes.

**Macau:** The Portuguese, like the British, had their colony in China, Macau. Portugal took Macau long before the British took Hong Kong and the colony reverted to Chinese sovereignty in 1999. Macao is worth a quick trip once the traveler has seen all of the sights in Hong Kong. Generally, no visa is required. Macau is located across the tidal mouth of the Pearl River, approximately 40 miles from the ferry terminal in Central. Service is very frequent, averaging at least four trips per hour through most of the day, with a travel time of one-hour. The lowest round trip fare is HK\$144, less than US\$20. A premium service is available, but there is no reason not to travel in economy class. There are serious plans to build a "Y" shaped bridge linking Macau, Hong Kong and Shenzhen, with construction tentatively planned to begin this decade.



## By Wendell Cox

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