

# *Hong Kong*

*THE RESPONSE TO  
POPULATION GROWTH*





01 Hong Kong, one of the world's highest density cities.

**H**ong Kong is one of the most densely populated cities on earth, placing it at the frontline of efforts to make high urban density more liveable. Prof **Anthony G.O. Yeh**, an expert on Hong Kong's achievements and challenges in this area, shared the experiences of his city at the **WORLD CITIES SUMMIT** in July 2012, held in Singapore. This essay is adapted from his presentation.

By the definition of a city, its activity should be intense – otherwise, the city would have great problems. Being a high-density city, Hong Kong is a very intense city.

Hong Kong has 1,100 square kilometres but we only occupy 30% of the area. It is mainly because of the terrain and historic reasons. As we did not have enough land, we did a lot of land reclamations in the past, and these are concentrated near the main urban area. Because of this, the density of Hong Kong is very high – around 6,400 persons

per square kilometres for the whole territory, but it can be as high 300,000 to 400,000 persons per square kilometres in some very dense parts in the main urban area, which has no comparison in other cities.

Hong Kong's population is growing at an additional one million people every 10 years. Future projection shows a population of over 8.5 million by 2030. How are we planning for this?



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01 An aerial view of the old town of Fez, Morocco.

### **Strategic Planning and Land Supply**

We do a lot of strategic planning for future population growth. *Hong Kong 2030* is a strategic plan for the next 20 years to meet the housing and economic land requirements as well as infrastructure development. It still continues to use high density compact transit-oriented development (TOD) to minimise the use of the precious and limited urban land. In addition to the *Hong Kong 2030*, we have to search our soul to find more land supply. We have carried out public consultation on how to create more land supply through land

reclamation, redevelopment, land resumption, rezoning land, rock cavern development, and the use of ex-quarry sites.

Even if we can do all this, we still need to have high-density development strategy because of land scarcity. There are a lot of advantages to high density development. For example, it will save land, shorten travel distances and support mass transit systems, as seen in the work of Peter Newman and Jeffrey Kenworthy's *Cities and Automobile Dependence*, published in 1989. However there are also a lot of disadvantages associated with high-density development, particularly social pathology and crowding.

### Addressing Perceptions of Crowding

When we talk about high density, one of the major problems is crowding and this is something we want to avoid. In a lot of studies in the 1960s about high density, there was already a conclusion that there is no direct relationship between social pathology and high density. Crowding and the associated 'crowdiness' is a psychological feeling that is influenced by many factors. For example, Chinese culture can tolerate high density. Crowdiness and the environment is a very complicated issue. It varies from the scale of rooms, flats, buildings, street blocks, neighbourhoods, and to districts in a city.

The feeling of crowdiness can be ameliorated through good design and layout of buildings, making people move more quickly, and a clean and well-managed living and working environment. This is also related to cultural and socio-economic background, and the habits of the people. Hong Kong has been quite successful in the last 30 years in managing its crowdiness.

Comparing the images of Morocco and Hong Kong, the population density in Hong Kong is much higher than Morocco. But, when people travel to Hong Kong, they feel that Morocco is denser than Hong Kong. What are some of the measures taken in Hong Kong to reduce crowdiness?



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## Transport Policy

One of the most important things is that we do have a transport policy. Starting in 1979 we have had a long-term policy of trying to make use of public transport rather than private cars, and pursuing rail-based public transport development.

We also use TOD to maximise the use of transport-led development. We have increased the intensity of transit stations through the developments of shops, offices and residential flats to maximise this development. We also have a lot of transport management

policies, including transport demand management, using road pricing and vehicle and gasoline tax to reduce the number of cars.

Another thing that we have done is to separate people from cars. In the central business district (CBD) in Hong Kong's Central District, we have an extensive pedestrian flyover system so that people do not have to have conflict with cars and can walk from one building to another using the pedestrian flyover without touching the ground.

## Multiplied, Mixed and Managed Public Spaces

We can create space from limited space. This is something that Chinese landscape architecture is very good at and we are using this approach to have multiple uses of land. This includes having rooftop gardens on top of car parks and converting a road in the CBD in Central District to be a pedestrian street and public open space in the weekends.

In some buildings, like that of the Hongkong and Shanghai Bank Corporation (HSBC), we convert private space into public open space so that people can have a better shared space. Inside this landmark building you can see there is a nice privately owned public space (POPS).

Community facilities and spaces are provided in large-scale housing estates to minimise the need for residents to travel for these facilities. Each housing estate typically has over 20,000 people with self-contained and self-sustained community facilities and shops. In some places, it is like a city itself.

High-density living is also carried out through good housing management and education. The housing estates are well managed to create a clean and comfortable living environment despite their high density. Public education, such as publicising the dangers of falling objects from high-rise buildings on TV, can make people learn to behave better in the high-density environment.

01 An elevated pedestrian walkway, part of the Central-Mid-Levels escalator pedestrian system on Hong Kong Island.

02 Upper Ngau Tau Kok Estate is a typical large-scale housing development with community facilities and spaces. Courtesy of Wing1990hk@Wikipedia.

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01 The public plaza of the HSBC building is well used as a gathering space on the weekends.

02 The 'wall effect'.

### **The Wall Effect**

High density is not without its bad effects. In the last five years, we have been talking about the 'wall effect' in Hong Kong. This is an extreme case of high-density development. High-rise buildings built with little separation distance in between them will create a 'wall' with poor ventilation. This will create heat island effect, and also poor air quality and pollution. In 2009, we embarked on new building

and urban design guidelines to foster a quality and sustainable built environment. We are concerned about high density, particularly building density. One of the proposals is to make buildings have greater setbacks from one another. Recently, we have also introduced air ventilation assessments in our planning system to further improve our high-density urban environment.

## Planning, Education and Management

From the experience in Hong Kong, we find that a high-density living environment is more demanding than a low-density environment in planning and management. A small planning and management error will affect a lot of people. A good urban environment cannot totally rely on good planning – we cannot blame everything on the planners. We need good management and public education as well. Better planning, design and management can therefore reduce the negative impacts of high-density living.



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