

COMMENTARY

What higher building heights could bring for Singapore's land use and urban planning

By Sing Tien Foo

THE review of building height limits for land surrounding Singapore's airports has been long overdue.

Current height restrictions near airports and flight buffer zones were set in the context of the 1950s. With advancement in navigation controls and new aircraft technologies, whereby newer aircraft not only have quieter engines but are also more nimble and require shorter angles and paths for landing and taking off, the old rules on building heights are outdated.

This policy review will be important for Singapore, a small island where flight buffer zones impose physical constraints on the allocation of land use. The relaxation of building restrictions near airports frees up more airspace and further enhances land intensification in Singapore.

The areas within the flight path setbacks and buffer zones near Changi and Paya Lebar airports will benefit the most from the changes, if implemented.

Flight paths into Paya Lebar Air Base (PLAB) have limited building heights of commercial developments in the Central Business District (CBD).

The tallest buildings used to be capped at 280 m, before special permissions were granted to allow for Guoco Tower to increase its building height to 290 metres. When completed, Skywaters Residences will become the tallest building in Singapore, with the building's height reaching approximately 305 m.

The proposed relocation of PLAB was earlier unveiled in the long-term plan review in 2022, although the comprehensive land use planning is still ongoing. The move will free up to about 800 hectares of greenfield sites for future developments.

More importantly, the PLAB relocation will also significantly enhance the intensification of brownfield sites in the CBD areas, which could spur more redevelopment of older commercial buildings similar to Skywaters Residences.

The most valuable tracts of reclaimed land in the downtown Marina area could also be planned more intensively, which, together with the current Raffles City CBD, will position Singapore as a leading financial hub, contributing significantly to the finance, insurance and real estate – known as the Fire – sectors.

Changi Airport is the world's busiest aviation hub in Singapore,

supporting inbound and outbound passenger and cargo activities. Noise barriers near the airport zone will be a deterrence to residential developments.

Still, the intensification of industrial and warehouse developments in Changi Business Park and the future Aviation Park in Changi East could complement aviation businesses, especially in logistics and import-export trades. Future industrial and commercial or integrated buildings could go nine storeys higher after the restrictions are eased.

For public and private housing estates closer to Changi Airport – such as Loyang, Tampines and Bedok – residential buildings could increase by up to 15 storeys in height. This could intensify density in the area, especially around the Tampines regional centre, where the neighbourhood amenities and public transport and MRT networks are well established.

Expected long-term implications of the rule changes

Seletar Airport is a regional airport serving smaller private and business airplanes. The relaxation of building height limits around the buffer zones in the area could transform the northern and north-eastern coastal areas, which comprise a mix of industrial and housing developments.

We see three possible long-term implications associated with the rule changes.

First, relaxing the build height restrictions could bring about



Flight paths into Paya Lebar Air Base have limited building heights of commercial developments in the Central Business District, which could now see fresh redevelopment. PHOTO: TAY CHU YI, BT

higher intensification of land use on both greenfield and brownfield sites.

However, the impact on long-term land use and the urbanisation process requires careful planning and evaluation to avoid knee-jerk responses in local real estate markets.

Taller buildings increase the density of land, which has a positive impact on land values.

The value increase is, however, not linear, and the costs of adding more space could also increase exponentially because of the need to have more expensive structures and mechanical systems (such as lifts and water distribution systems) to transport people and services within the buildings.

Physical infrastructure – such as

transport, sewage and utilities – and neighbourhood amenities should also be expanded in local areas following the easing of the height constraints, to avoid overcrowding, congestion and over-stressing municipality services.

Second, the move to relax the caps on building heights near airports enhances planning resilience in future land uses of Singapore.

In the long term, building higher vertically eases the crunch on scarce land resources, which could also help stabilise real estate price volatility in the long term.

More land near environmentally sensitive areas, such as water catchments and natural resources, can be safeguarded. More green parks could also be used to soften the "concrete-jungle feel" in densely

populated areas.

Third, the planning rule changes, if they happen, will spur more sustainable and compact developments in city and town centres.

We will not see the mushrooming of taller buildings uniformly across the island. Instead, the commercial hub in the CBD and Marina areas, where land costs are expensive, will undergo further land intensification. Older commercial buildings in the areas may make way for taller and more modern skyscrapers.

Town centres in Punggol and Sengkang along the north-eastern shores – which are near Seletar Airport – can be planned more compactly and densely, with more integrated commercial and residential buildings of more than 30 storeys.

The concentration of high-rise buildings in town centres could curtail the spread of developments outside the town centres. It could shorten travel time for commuters and reduce the carbon footprint of the towns.

As in some Asian metropolitan cities – such as Shanghai, Hong Kong and Kuala Lumpur – super-skyscrapers could emerge in the skyline of Singapore, enhancing and strengthening its position as a financial and commercial hub.

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