

Singapur ma plan!

Doświadczenia
i obserwacje
z wizyty studialnej

Śniadanie u geografów

25 marca 2019, Kraków

Instytut Rozwoju Miast i Regionów

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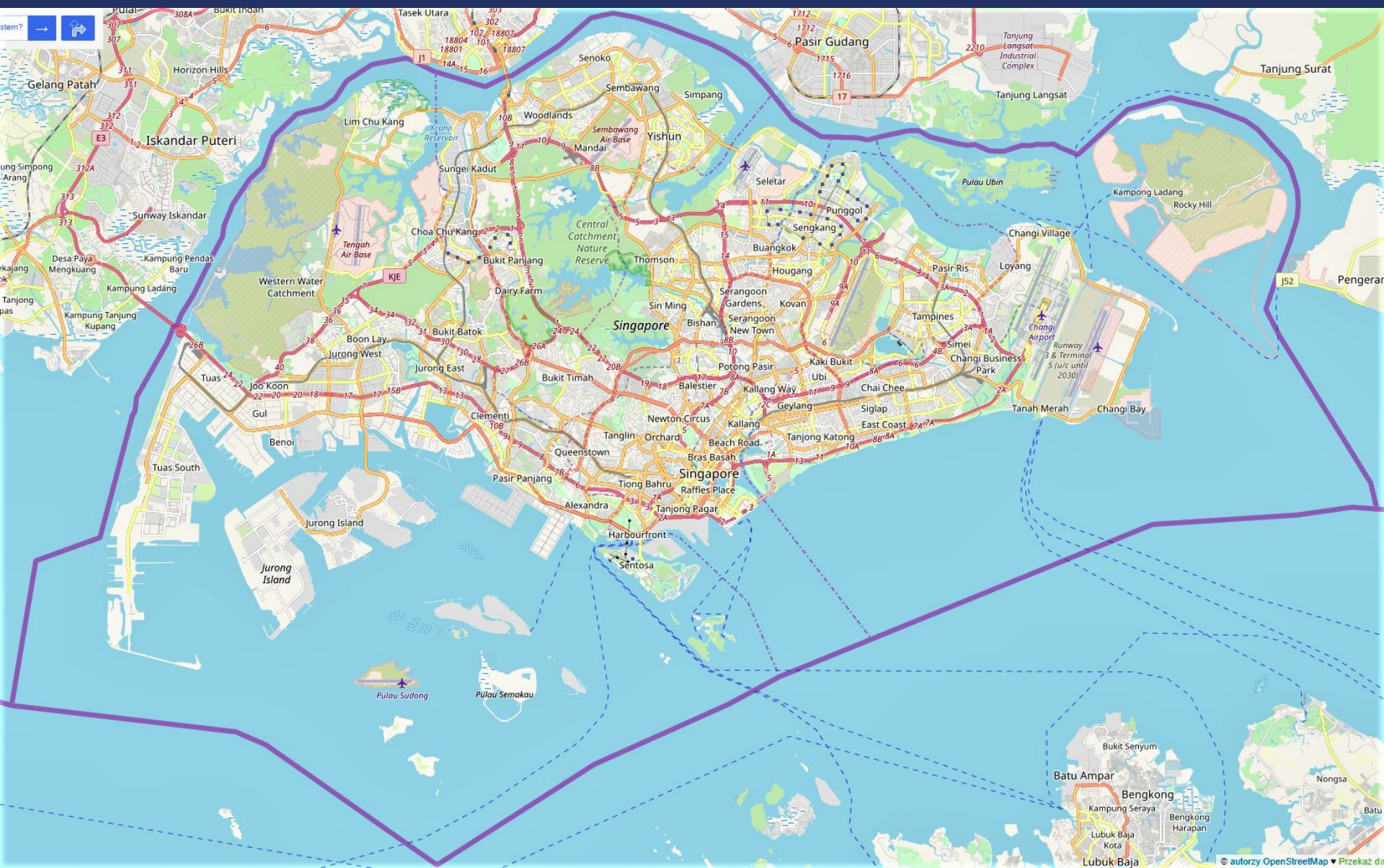


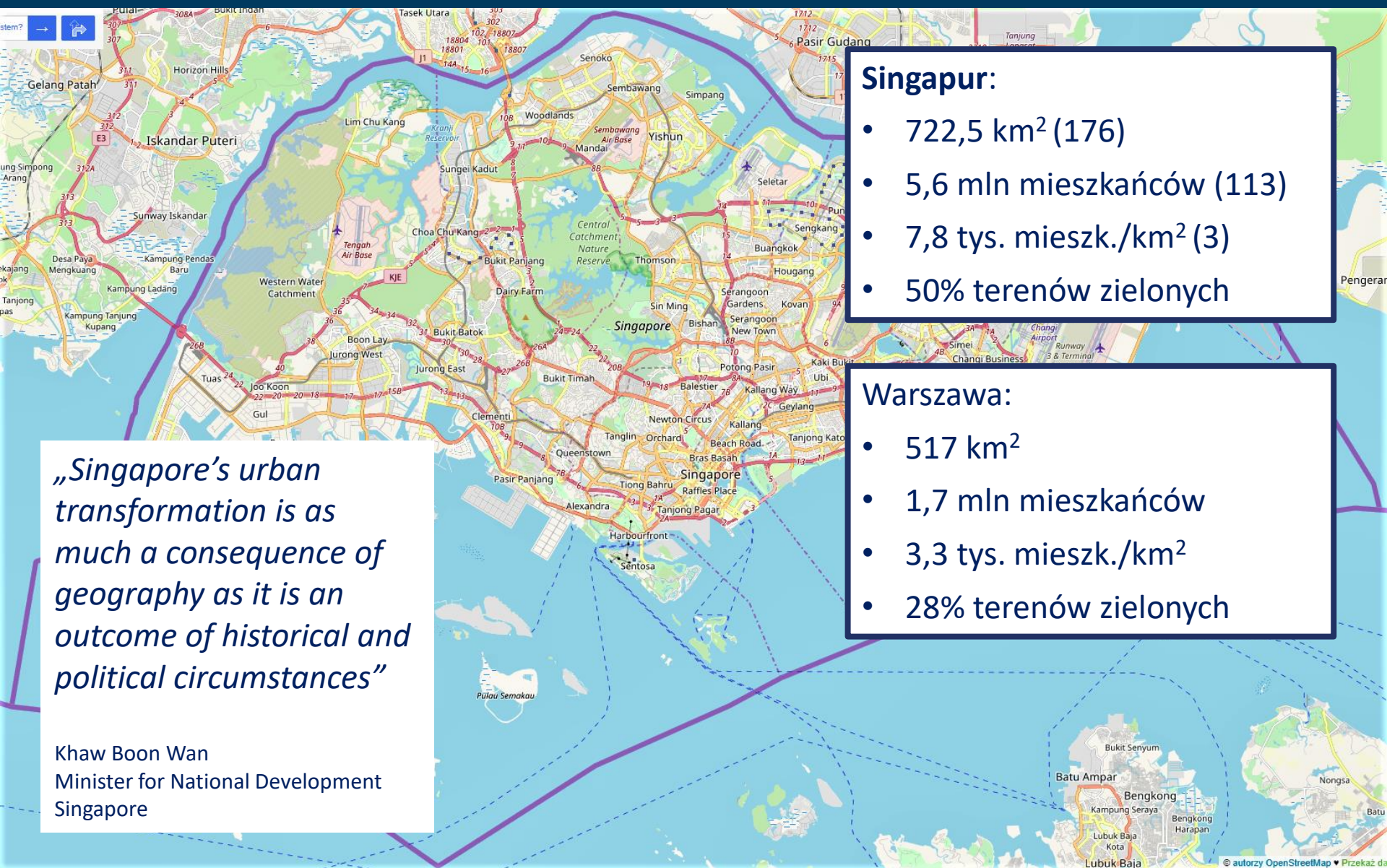
WAW ✈ SIN: 13,5 godz.

KRK-SIN: 9 500 km









Singapur:

- 722,5 km² (176)
- 5,6 mln mieszkańców (113)
- 7,8 tys. mieszk./km² (3)
- 50% terenów zielonych

Warszawa:

- 517 km²
- 1,7 mln mieszkańców
- 3,3 tys. mieszk./km²
- 28% terenów zielonych

„Singapore’s urban transformation is as much a consequence of geography as it is an outcome of historical and political circumstances”

Khaw Boon Wan
Minister for National Development
Singapore



Car Park Code:

A0006

Parking.sg

1
2

謙懷

廈門街客棧

廈門街客棧

Ceiling
The ceiling is made of
bamboo and is very
strong and durable.
It is also very
lightweight and easy
to move.

廈門街客棧
The history of the
Xiamen Street
Guesthouse is
very long. It was
built in the 19th
century and has
been a famous
landmark ever since.
It is a very good
place to stay if you
are visiting Xiamen.
The food is also very
good and the service
is excellent.



Singapur 1960

- 580 km²
- 1,6 mln mieszkańców
- 0,5 mln zamieszkuje slumsy
- PKB/os. 1 tys. USD



(39)

Malay Village, Singapore

Singapur dzisiaj



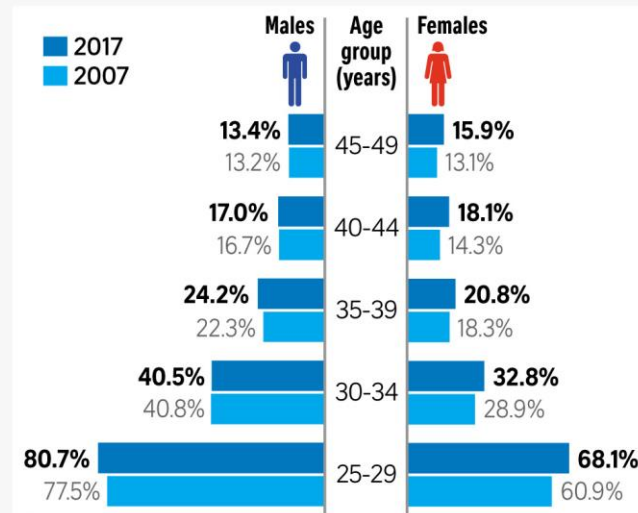


Globalna metropolia

- PKB/os. **98 tys. USD** (3 m. na świecie)
- Miasto z **najwyższą jakością życia** w Azji (25 miejsce na świecie) [Mercer 2019]
- 1 miejsce (7 lat z rzędu) **Ease of doing business** [World Bank]
- The **3rd most competitive country** in the world
- The **most „technology-ready” nation** [World Economic Forum]
- 1 miejsce w **Global Smart City Performance Index** (1 pozycja we wszystkich kategoriach: mobility, health, safety, productivity)
- **7 najbardziej kosmopolityczne państwo na świecie**
- **Najbezpieczniejsze państwo** na świecie [World Justice Project]
- Changi – **najlepsze lotnisko na świecie** (6 lat z rzędu) [Skytrax]
- **Najbardziej ruchliwy port na świecie**
- **Najlepsza edukacja na świecie** [Pisa tests, OECD global education report]



Proportion of singles among citizens by age group and gender



Decrease in resident overall total fertility rate* (per female)



„Sociocultural diversity and an ageing populace are anticipated to be the twin demographic challenges of our future”

Khaw Boon Wan
Minister for National Development
Singapore

(Chinese zodiac)

*Total fertility rate refers to the average number of live-births each female would have during her reproductive

Trochę dzieciu:

- **Najniższy na świecie wskaźnik płodności** (total fertility rate): 0,84 (224 miejsce)
- **Bardzo wysoki udział singli w wieku rozrodczym**
- **World's most expensive cities to live in** (8 lat z rzędu) [The Economist Worldwide Cost of Living Survey]
- **Wysoki poziom rozwarstwienia ekonomicznego** (Gini index 45,6, 38 miejsce na świecie)
- **Wadliwa demokracja**: 66 miejsce [Democracy Index]



Krótki, acz ważny rys historyczny

1819: Założenie brytyjskiej placówki handlowej przez Stamforda Rafflesa

1819-1942: Singapur pod brytyjską kontrolą

1942-1945: Okupacja japońska

1945-1963: Kolonia brytyjska

1959: Wygrana People's Action Party, Lee Kuan Yew

1963-1965: Singapur w Federacji Malezji (z szeroką autonomią)

1965: Ogłoszenie (niechcianej początkowo) niepodległości

1971: Przyjęcie pierwszego planu koncepcyjnego jako podstawy dalszego rozwoju i przebudowy

New impetus

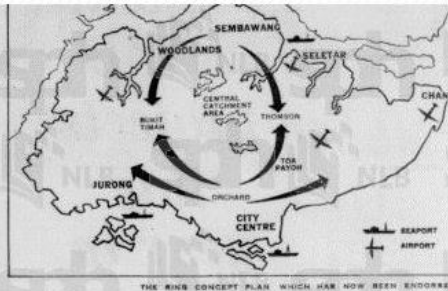
BY WILLIAM CAMPBELL
SINGAPORE

THE United Nations Consultative Review Panel endorsement of the ring concept plan as a viable framework for Singapore's future urban development marks a crucial test successfully passed. The mood in the State and City planning offices at Pearl's Hill is palpably more relaxed and confident as a result.

enables us to go forward into the final stages of the project - formal policy proposals for future consideration - with greater authority and confidence. The high-level official view panel acceptance of the desirability of

the tight path has largely over water, and it would appear practicable besides to construct a second runway by reclamation to the east of the existing strip.

as ring plan gets go-ahead



THE RING CONCEPT PLAN WHICH HAS NOW BEEN ENDORSED

REPUBLIC'S RAPID GROWTH ADDS FRESH URGENCY TO DEVELOPMENT PROJECT

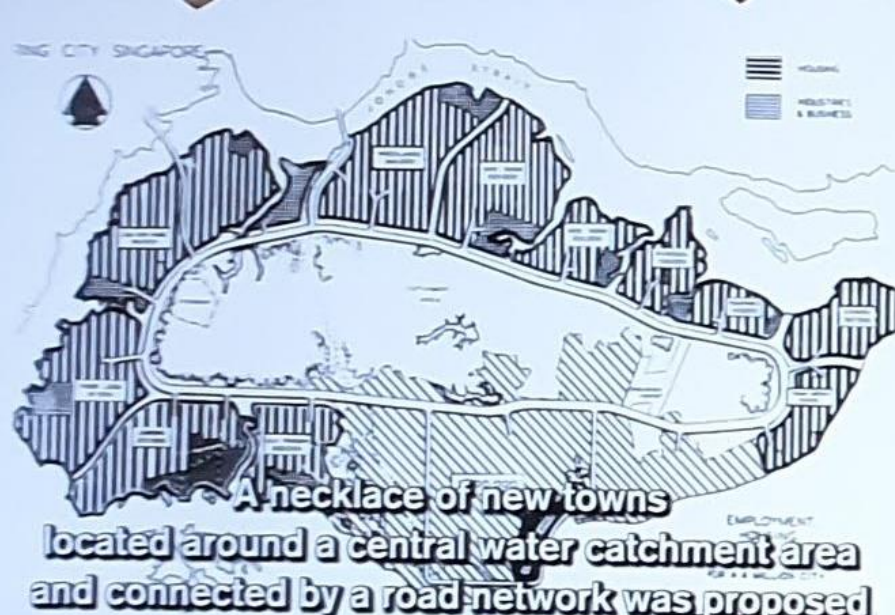
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The mood in the State and City planning offices at Pearl's Hill is palpably more relaxed and confident as a result.

1967-1971

State and City Planning Project under UN Development Programme



1971 CONCEPT PLAN STRUCTURE (SCP)





Główne założenia – aktualne do dziś:

- Hierarchiczna sieć samoobsługowych osiedli miejskich
- Szkielet transportu drogowego i publicznego (MRT)
- Relokacja lotniska pasażerskiego do Changi
- Zachowanie i ochrona obszarów zlewiskowych oraz cennych przyrodniczo – powiązanie korytarzami
- Wskazanie miejsca na rozwój CBD
- Zachowanie niskiej zabudowy uznanej za dziedzictwo kulturowe

The background of the slide is a composite image. The top half shows a panoramic view of the Singapore skyline with numerous skyscrapers under a blue sky with scattered clouds. The bottom half shows a close-up of a multi-story public housing block (HDB flat) with a light blue facade and colorful horizontal stripes in red, yellow, and orange. The number '32' is visible on one of the units. In the foreground, there are some green and orange foliage.

*“On the government side, right from independence, it had had a strong view that a good physical plan, environmental plan, land-use and transport plan, **all integrated into one, was an essential basis for building the economy** and diversifying the economy in the way that was necessary”.*

Henry Wardlaw, project director from the consultancy firm

Source: Urban System Studies, 2016, Centre for Liveable Cities

*“ The first principle should be the acceptance of Singapore Island and **Singapore city as one unit**. We must look at the island as an urban complex which includes essential open spaces rather than as a province or county containing two different elements, a town and its rural hinterland.”*

The 1963 United Nations “KAK” (Koenigsberger, Abrams and Kobe) Team

Source: Urban System Studies, 2016, Centre for Liveable Cities

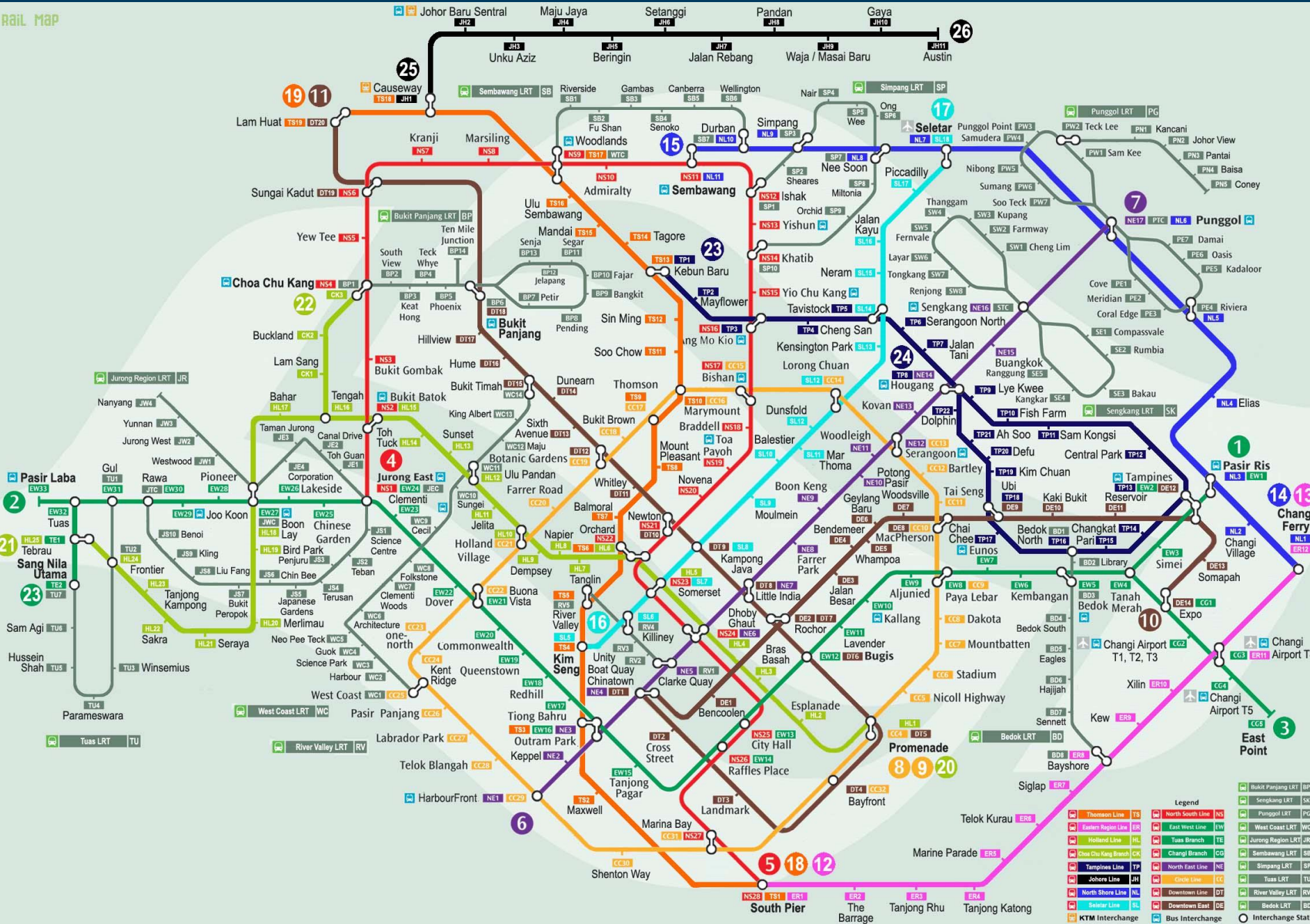


*“...it is a common fallacy to regard the MRT only as a tool to solve transportation problems. **A properly designed MRT** is more than that. It also **provides a valuable means of shaping more orderly urban development patterns**. Confused and haphazard sprawl can be avoided by intensifying development along its routes. In this way, other land can be released for more meaningful development.”*

Teng Cheong, Minister of Communications

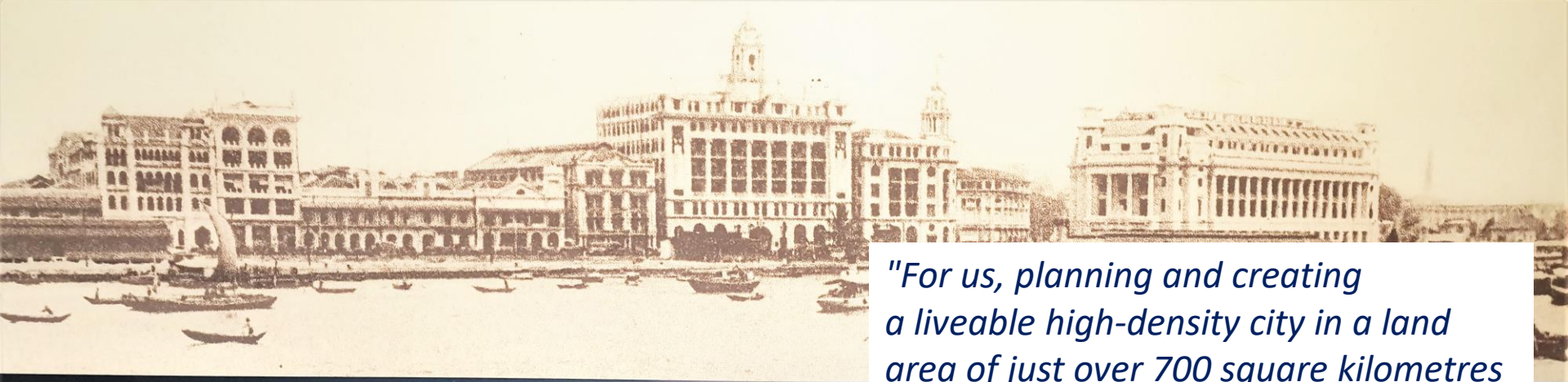
Source: Urban System Studies, 2016, Centre for Liveable Cities





Legend

North-South Line	East-West Line	Circle Line
Tampines Line	Jurong Region Line	Tuas Branch
Changi Branch	Sembawang LRT	Simpang LRT
North East Line	River Valley LRT	Bedok LRT
Downtown East	Bus Interchange	Interchange Station



PLANNING FOR A CITY-STATE

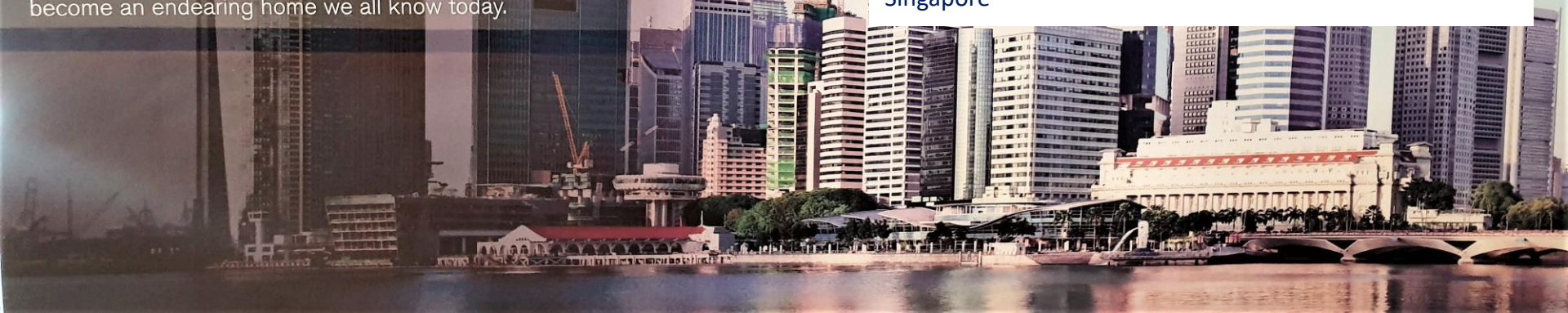
Singapore's transformation from a small trading post to a cosmopolitan city is well-known.

Careful long-term planning over more than 50 years has allowed the country to not only overcome high unemployment, poor infrastructure and overcrowding in the city centre but become an endearing home we all know today.

"For us, planning and creating a liveable high-density city in a land area of just over 700 square kilometres is not a nice-to-have but a matter of survival. (...)

Maintaining a good quality, liveable high-density urban landscape in which all Singaporeans can find and make a home is crucial to the survival of the Singapore nation"

Khaw Boon Wan
Minister for National Development
Singapore



SINGAPORE CITY GALLERY

VIEW THE CITY IN A HEARTBEAT



Level 5

- Function Hall
- Function Room
- Strata Title Board
- Training Room 5

Level 4

- Seminar Room
- Resource Centre

Level 3

- White Room
- City Canvas
- Permanent Exhibition

Level 2

- Permanent Exhibition
- Central Area Model

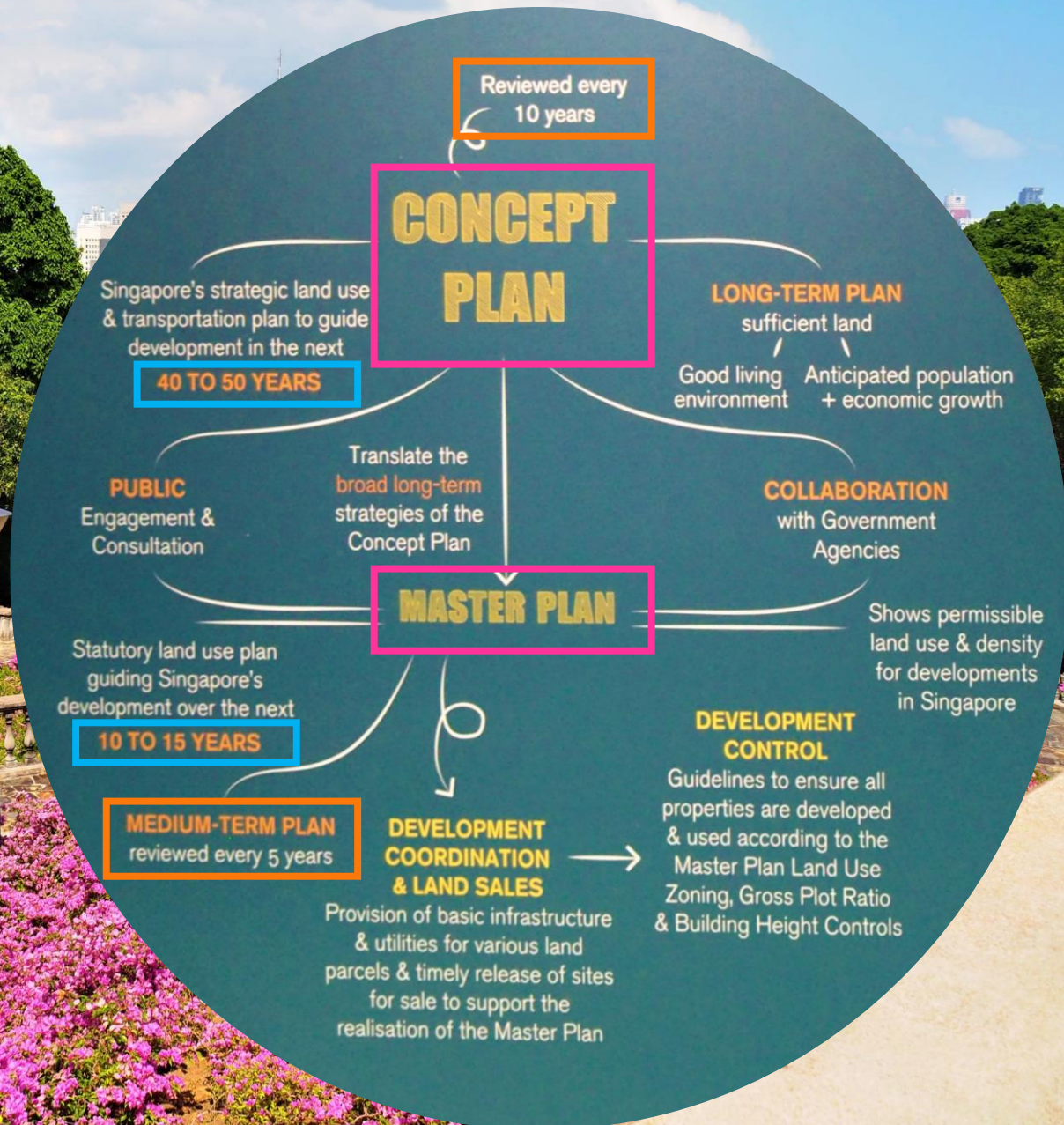
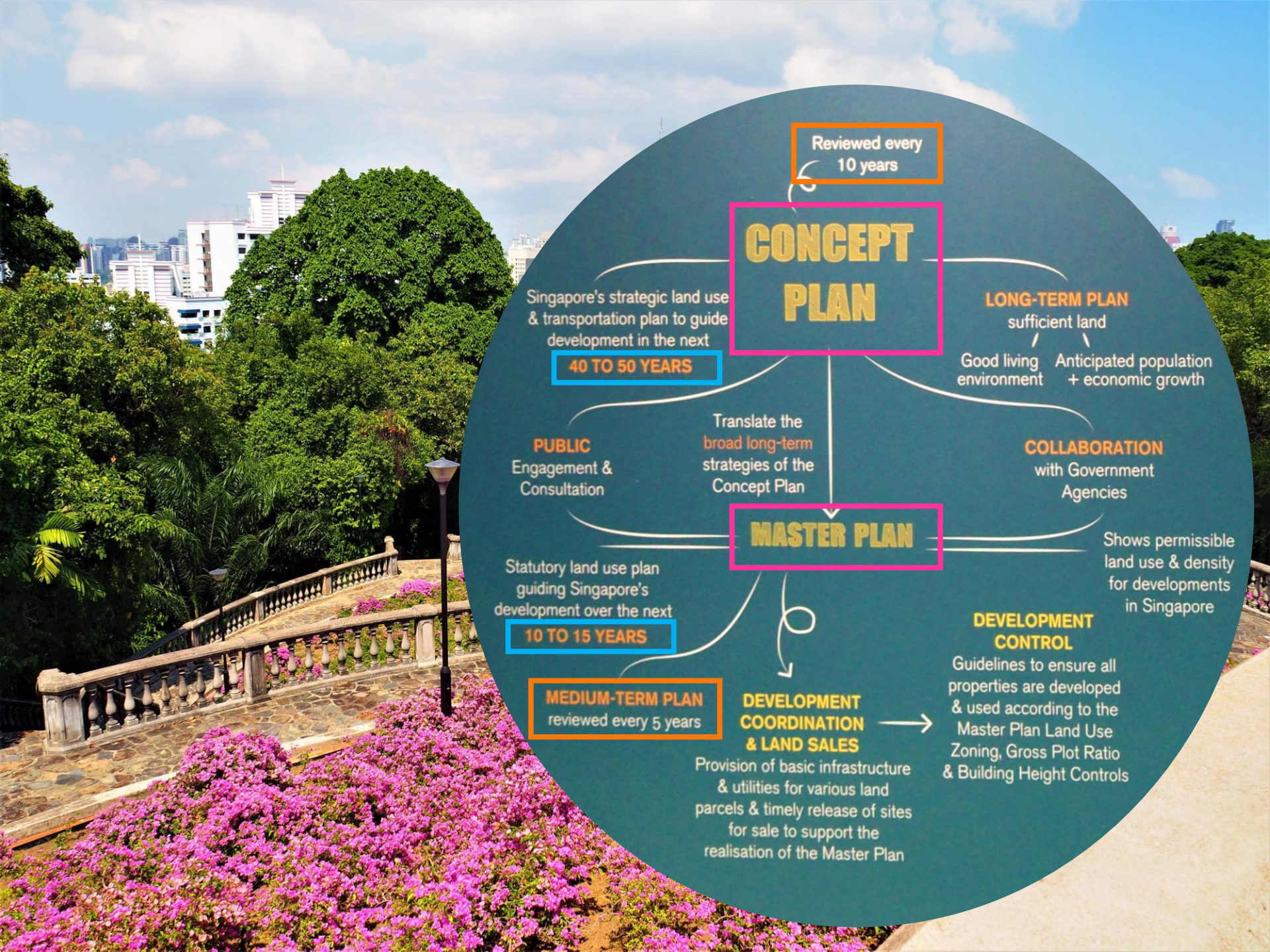
Level 1

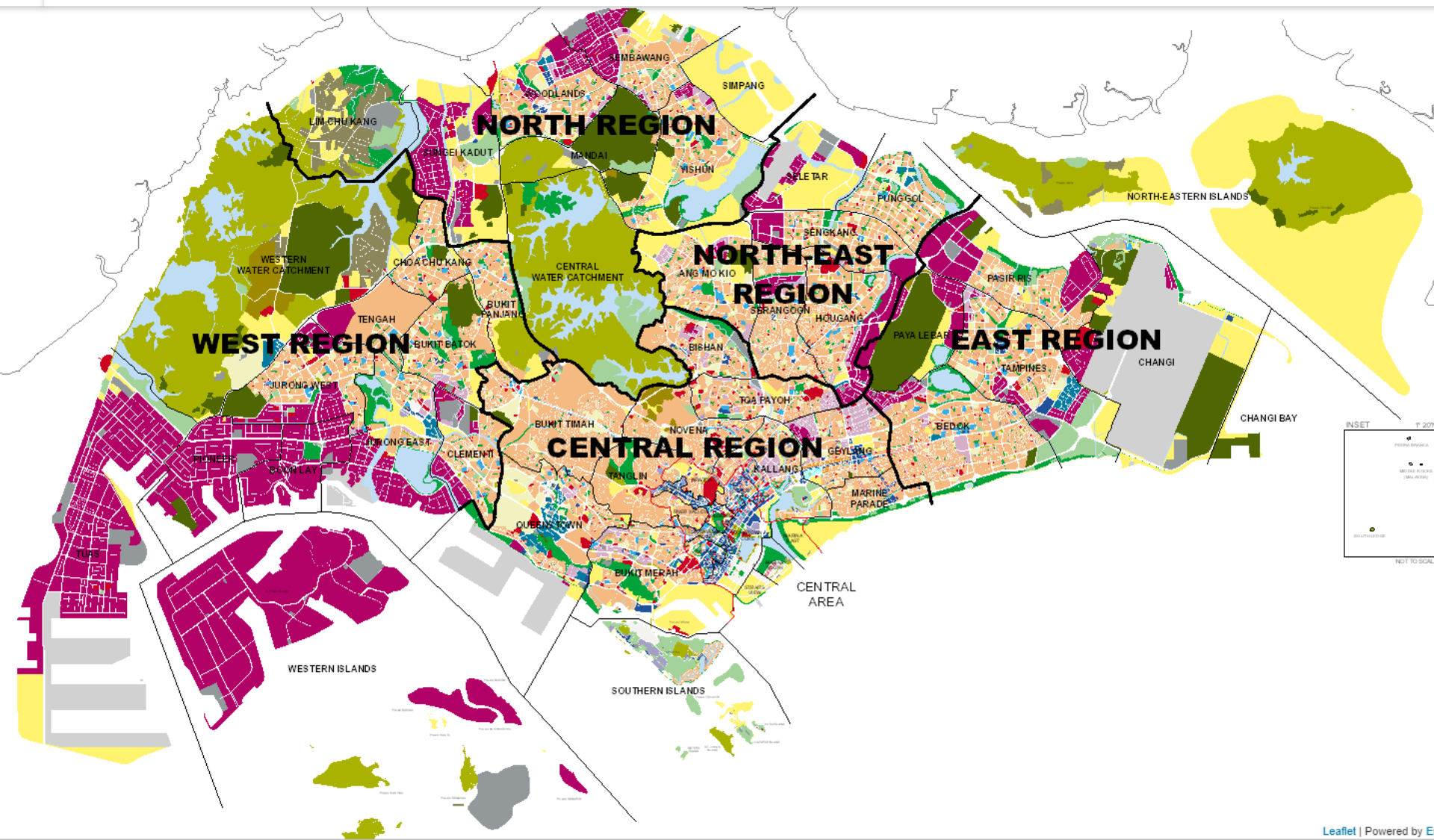
- Islandwide Model
- Temporary Exhibition

Legends

- 1 Gallery Reception Counter
- 2 Security Counter
- 3 Customer Service Centre
- 4 AXS Machine
- 5 Toilet
- 6 Bicycle Park
- 7 Elevator
- 8 Mailroom
- 9 Escalator









Total Building Footprint Percentage

Source: 10 Principles for Liveable High-Density Cities: Lessons from Singapore, 2013



Total Green Surface Area Percentage

Source: 10 Principles for Liveable High-Density Cities: Lessons from Singapore, 2013



Total Built-up Space Percentage

Source: 10 Principles for Liveable High-Density Cities: Lessons from Singapore, 2013

The image displays a 'Master Plan' for an urban area, characterized by a dense grid of streets and various colored zones representing different land uses. A large yellow area is visible on the left, and a large purple area is on the right. A river or water body is shown at the top. An inset map in the top right corner, titled 'Concept Plan', provides a broader context of the area, showing the master plan's location within a larger regional framework.

	RESIDENTIAL
	RESIDENTIAL WITH COMMERCIAL AT 1ST STOREY
	COMMERCIAL & RESIDENTIAL
	COMMERCIAL
	HOTEL
	WHITE
	BUSINESS 1
	BUSINESS 1 - WHITE
	BUSINESS 2
	BUSINESS 2 - WHITE
	BUSINESS PARK
	BUSINESS PARK - WHITE
	RESIDENTIAL / INSTITUTION
	HEALTH & MEDICAL CARE
	EDUCATIONAL INSTITUTION
	PLACE OF WORSHIP
	CIVIC & COMMUNITY INSTITUTION
	OPEN SPACE
	PARK
	BEACH AREA
	SPORTS & RECREATION
	WATERBODY
	ROAD
	TRANSPORT FACILITIES
	RAILWAY
	MRT
	LRT
	UTILITY
	CEMETERY
	AGRICULTURE
	PORT / AIRPORT
	RESERVE SITE
	SPECIAL USE
	PARK CONNECTOR





PLAN NO. 8 (SHEET 2 OF 2) DOWNTOWN CORE PLANNING AREA

This map shows only the named Planning Area in its entirety (as marked out by the bold dotted line in accordance with the Planning Area Boundary symbol in the legend). To view the adjacent Planning Areas, please refer to the Master Plan at the URA website or refer to the adjacent Planning Area maps.

Malay sian coastline shown, if any, is approximate and indicative only.

LEGEND

- RESIDENTIAL
- RESIDENTIAL WITH COMMERCIAL AT 1ST STOREY
- COMMERCIAL & RESIDENTIAL
- COMMERCIAL
- HOTEL
- WHITE
- BUSINESS 1
- BUSINESS 1 - WHITE
- BUSINESS 2
- BUSINESS 2 - WHITE

- BUSINESS PARK
- BUSINESS PARK - WHITE
- RESIDENTIAL / INSTITUTION
- HEALTH & MEDICAL CARE
- EDUCATIONAL INSTITUTION
- PLACE OF WORSHIP
- CIVIC & COMMUNITY INSTITUTION
- OPEN SPACE
- PARK
- BEACH AREA

- SPORTS & RECREATION
- WATERBODY
- ROAD
- TRANSPORT FACILITIES
- RAILWAY
- MASS RAPID TRANSIT
- LIGHT RAPID TRANSIT
- UTILITY
- CEMETERY
- AGRICULTURE

- PORT / AIRPORT
- SPECIAL USE
- PLANNING AREA BOUNDARY
- PLOT RATIO BOUNDARY
- UNDERGROUND ROAD / STRUCTURE
- MAXIMUM PERMISSIBLE PLOT RATIO
- BASE PLOT RATIO
- MAXIMUM PERMISSIBLE WHITE QUANTUM
- MINIMUM BUSINESS (B) PLOT RATIO

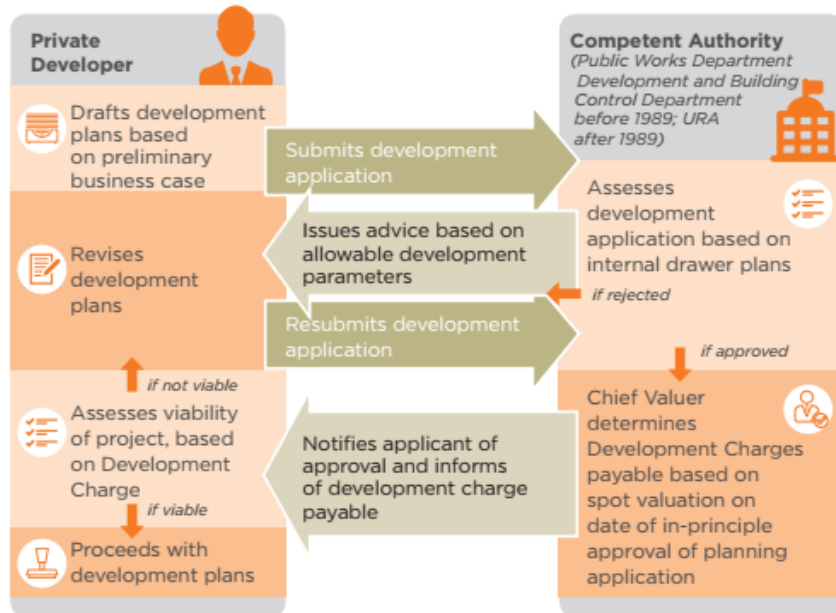
- CONSERVATION AREA
- NATURE RESERVE
- NATIONAL PARK
- MONUMENT

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APPROVED BY THE MINIST
UNDER SECTION 8(6) OF

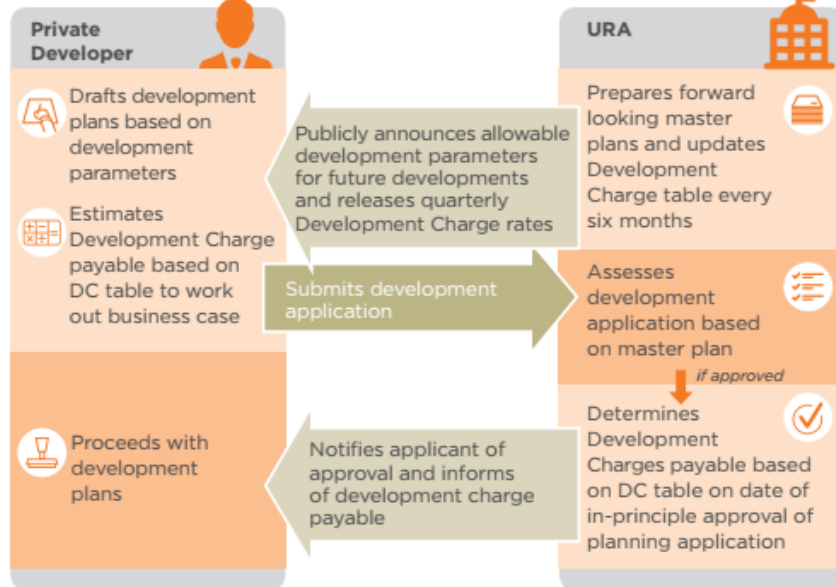
URBAN RE
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Enhancing Transparency in the Development Application Process

Pre-1998



After-1998



Preparation of Detailed Development Plans in Singapore over the Years

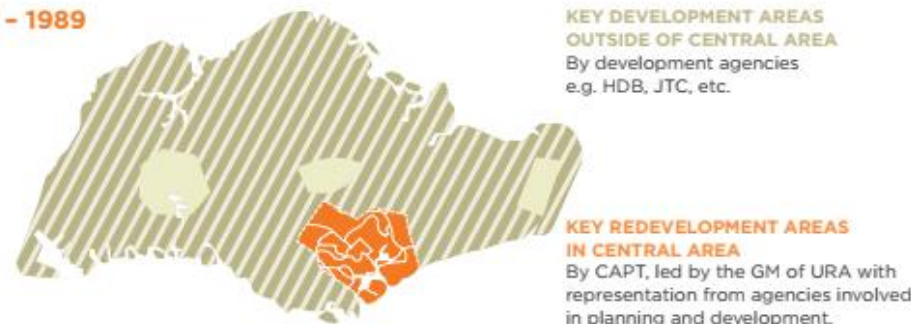
Diagrams for illustration purposes only

Pre-1979



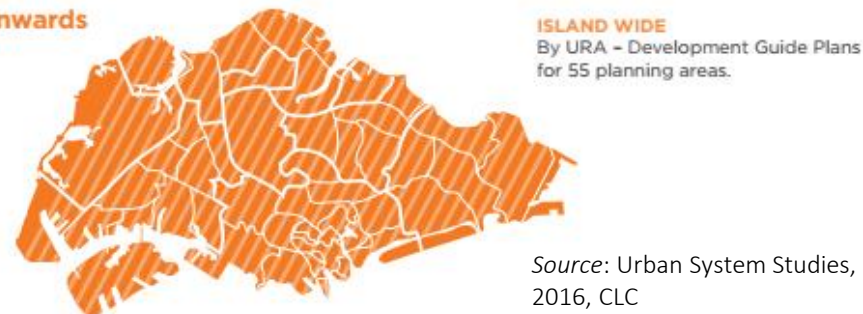
Development plans were prepared to guide the implementation of "action plans" by agencies including URA (for redevelopment areas in Central Area), HDB (for public housing towns) and JTC (for industrial developments).

1979 - 1989



The lack of a central coordinating body for private and public developments within and around the densely built up Central Area led the MND to set up the Central Area Planning Tea (CAPT) in 1979 to guide planning efforts and coordinate developments in the Central Area.

1989 onwards



I co dalej?

THE AWARD-WINNING WEBSITE: BEST IN ONLINE MEDIA (GOLD) - WAN-IFRA ASIA DIGITAL MEDIA AWARDS 2012

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More can still be done to make use of underground spaces: Minister Khaw

Published on
Sep 03, 2013
11:34 AM



An underground linkway between Orchard Central and The Centrepoint. There is still scope to do much more in terms of making use of underground spaces in Singapore, said Minister for National Development Khaw Boon Wan on Tuesday. - ST FILE PHOTO: DESMOND LIM

singapore

Govt mulling large-scale underground developments



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Govt considering underground masterplan: Khaw



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Daryl Chin Property Correspondent
The Straits Times

Mon, Nov 04 2013

Govt mulling master plan for underground spaces

POSTED: 03 Sep 2013 12:59
TREND

MORE SINGAPORE NEWS



Accountant employees' work life needs now or risk losing them: Amy Khor



Ministry of Transport to respond to fare review mechanism report next week



Seletar Airport website hacked

- LTA to build more bicycle parking spaces around MRT stations
- 50 trees to mark 50 years of tree planting
- Kallang area could see significant changes due to upcoming Sports Hub
- workers at PAP town

Singapore National Development Minister Khaw Boon Wan said the government is considering the possibility of developing a master plan for underground spaces.



File photo of the underground Jurong rock cavern. (Photo: JTC)

Finding space for the future

To use our space more efficiently, the Government is looking to launch its Underground Master Plan in 2019. Here are some subterranean ideas that are being explored.

Substations

Electrical substations, which are essential for providing electricity to estates, currently occupy small tracts of land at the ground level, even though they are connected to the underground cabling network. To save space, these can be housed underground, and can still be serviced through access points with a smaller footprint.

Bus interchange

The new Bidadari housing estate will be home to Singapore's first underground air-conditioned bus interchange below Housing Board flats. Slated for completion by 2019, it will sit below a carpark and a garden, and will likely cater to five bus services.

Road and rail networks

To enhance our living environments, future major road and rail networks, especially those that will cut through built-up areas, will be located underground. This reduces the impact of noise and dust on homes.

Deep Tunnel Sewerage System

This is a network of tunnels that operates on gravity, and transports sewage and waste water across the island to two centralised water reclamation plants.

Jurong Rock Caverns

The Jurong Rock Caverns under Jurong Island is for petrochemical storage. In phase one, its five caverns are as high as nine storeys, saving approximately 60ha of land.

Ammunition facility

The underground ammunition facility built under a quarry in Mandai in 2008 stores ammunition and explosives. It frees up land about half the size of Pasir Ris town.

SecureMyBike

In Admiralty, the Land Transport Authority completed the first automated underground bicycle parking space, known as SecureMyBike. Users can leave their bikes at kiosks located above ground, which then houses them in storage cells extending up to 10m underground.

Pedestrian links

Underground pedestrian links make it easier to connect between buildings or cross busy streets. For a more extensive underground pedestrian network, the Urban Redevelopment Authority offers an incentive scheme to co-fund the construction of selected linkages in Orchard Road and the Central Business District.

Common Services Tunnel

More than just space-saving measures, underground pipes are less prone to external wear and tear. The Common Services Tunnel in Marina Bay is a creative way of housing all utilities together. This frees up land, with lesser maintenance disruptions on the roads.

Waste disposal

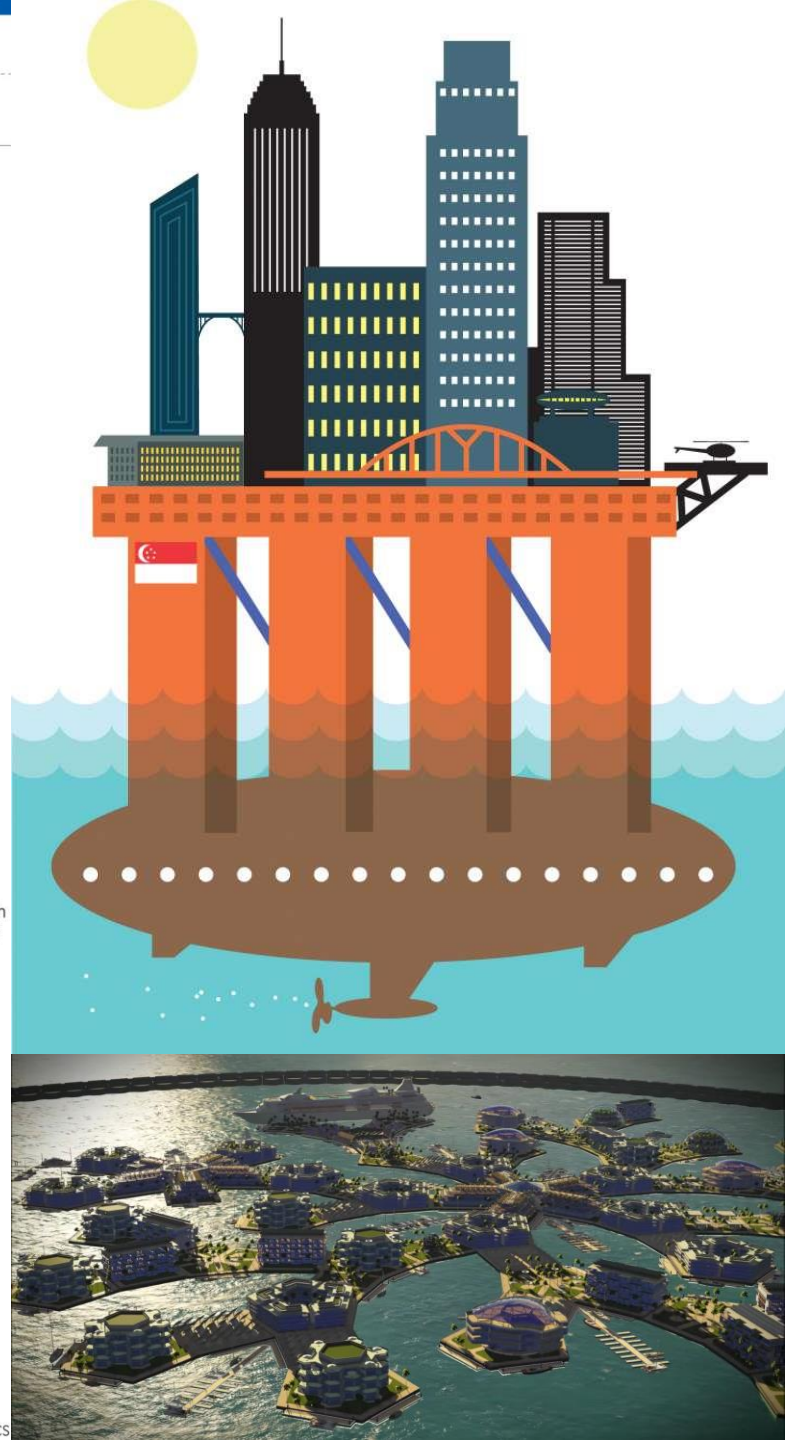
In housing estates, trash can be carried away to a centralised bin centre through a suction force via underground pipes, using pneumatic waste conveyance systems. Such a waste disposal network can be seen in an HDB estate in Yuhua, removing the need for refuse workers to manually collect waste from each block.

Air-conditioning pipes

Chilled water used for air-conditioning could be supplied centrally through an underground network of pipes, known as a district cooling system. This is already done in Marina Bay, and the authorities are looking to implement them in the Punggol Digital District.

Reservoirs

Water can be stored in underground reservoirs, with the national water agency PUB currently looking into an idea that can free up significant parcels of land for development. The 17 reservoirs currently occupy 3,700ha, or around 5 per cent of Singapore's total land.



Składniki dobrego planowania w **Singapurze**

1. Wysokiej jakości zarządzanie (model singapurski): wizjonerskie podejście, pragmatyczni liderzy, **dobrze i udoskonalane prawo, profesjonalna administracja** wspierana przez szereg instytucji eksperckich
2. **Długofalowe podejście** do planowania oraz stabilność (*Long-Term Planning Framework*)
3. **Pełna integracja i współpraca** (na poziomie merytorycznym oraz przy wdrażaniu)
4. Zaangażowanie państwa stosownie do potrzeb i **konsekwencja w działaniu** – od silnej interwencji po koordynatora, facylitatora i kontrolera
5. Transparentne i efektywne **włączenie sektora prywatnego** (*market oriented approach*), na warunkach wyznaczonych przez państwo
6. **Proinnowacyjne nastawienie**, sprawdzanie istniejących rozwiązań/doświadczeń na świecie i ich dostosowywanie do lokalnych potrzeb i celów
7. **Ale najważniejsze, to...**

3xP

The Singapore story, if told right, shows that the horse which ought to come before the cart is a pragmatic, problem-solving, action-oriented approach.

- The **P**roblem
- The **P**olicy
- The **P**olitical Will

Resources and further reading/watching:



To make Singapore a great city to live, work and play



(FCL) FUTURE CITIES LABORATORY 未来城市实验室



THE STRAITS TIMES

Singapur ma plan!

Doświadczenia
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Śniadanie u geografów

25 marca 2019, Kraków

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Pear Juice 梨汁
Pineapple Juice 鳳梨汁

FRESH JUICE

SUGARCANE EXPRESS
100% Sugarcane \$1.50
Additional Add-ons:
Lemon, Kiwi, daily
Popping daily, Singapore Fruit

FRUIT & JUICE

\$1.50 葡萄汁 Guava Juice
\$2.00 紅毛榴槤 Sourpaw Juice
\$1.50 白龙珠果汁 White Dragon Fruit Juice
\$2.00 紅龙珠果汁 Red Dragon Fruit Juice
\$1.50 檸檬汁 Lemon Juice
\$1.50 蘋果汁 Apple Juice
\$1.50 檸檬汁 Lemon Juice
\$1.50 蘋果汁 Apple Juice

FRUIT & JUICE

Watermelon Apple \$1.00
Ice & Lemon Tea 檸檬茶 \$1.00
Fruit & Lemon Juice 檸檬汁 \$1.50
Fruit & Lemon Juice 檸檬汁 \$1.00

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Thai Steamboat
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