

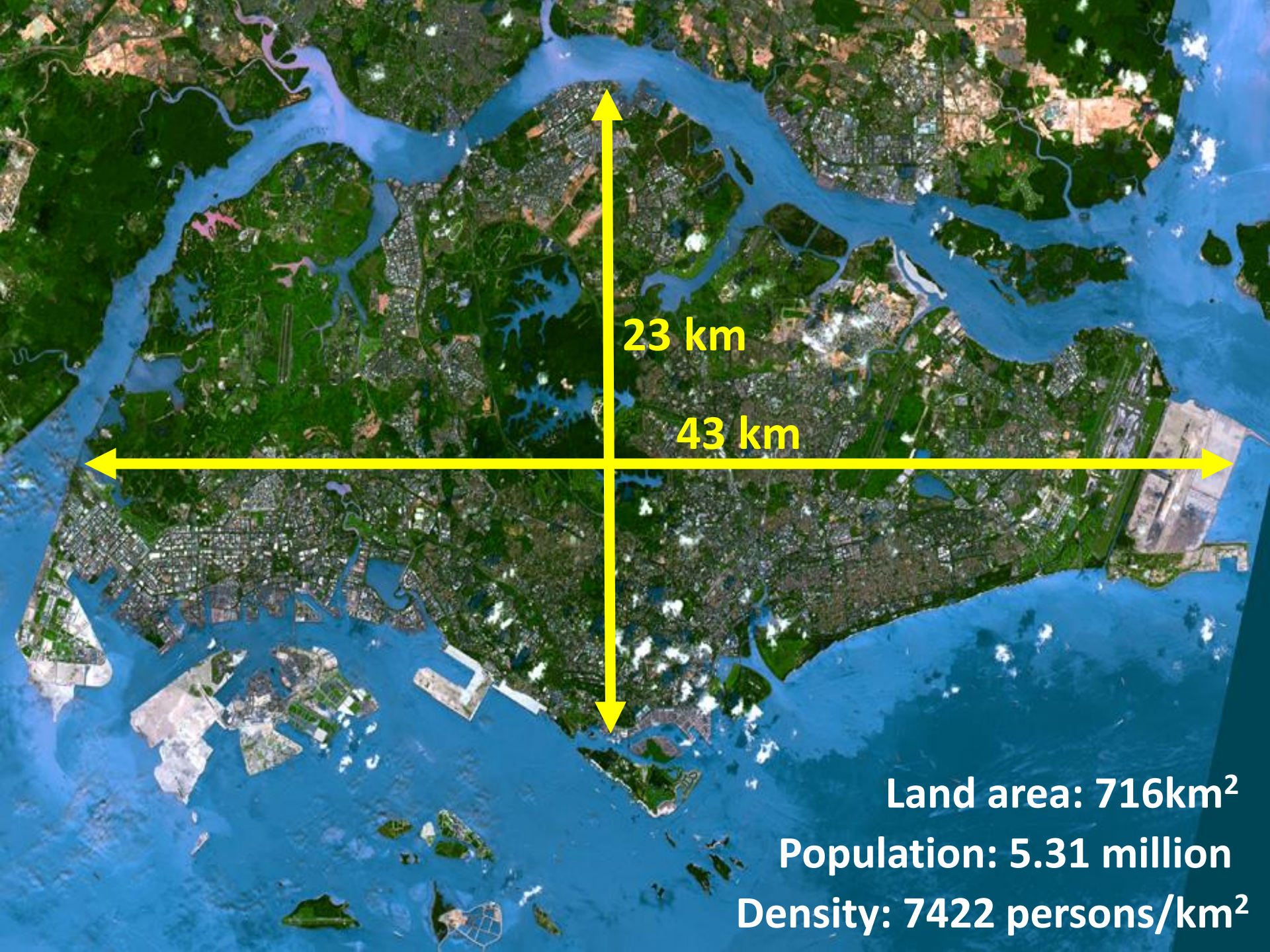
An Insight to Singapore's

INTEGRATED MASTER PLANNING

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Wong Kai Yeng
Centre for Liveable Cities
Singapore

12 Dec 2013



23 km

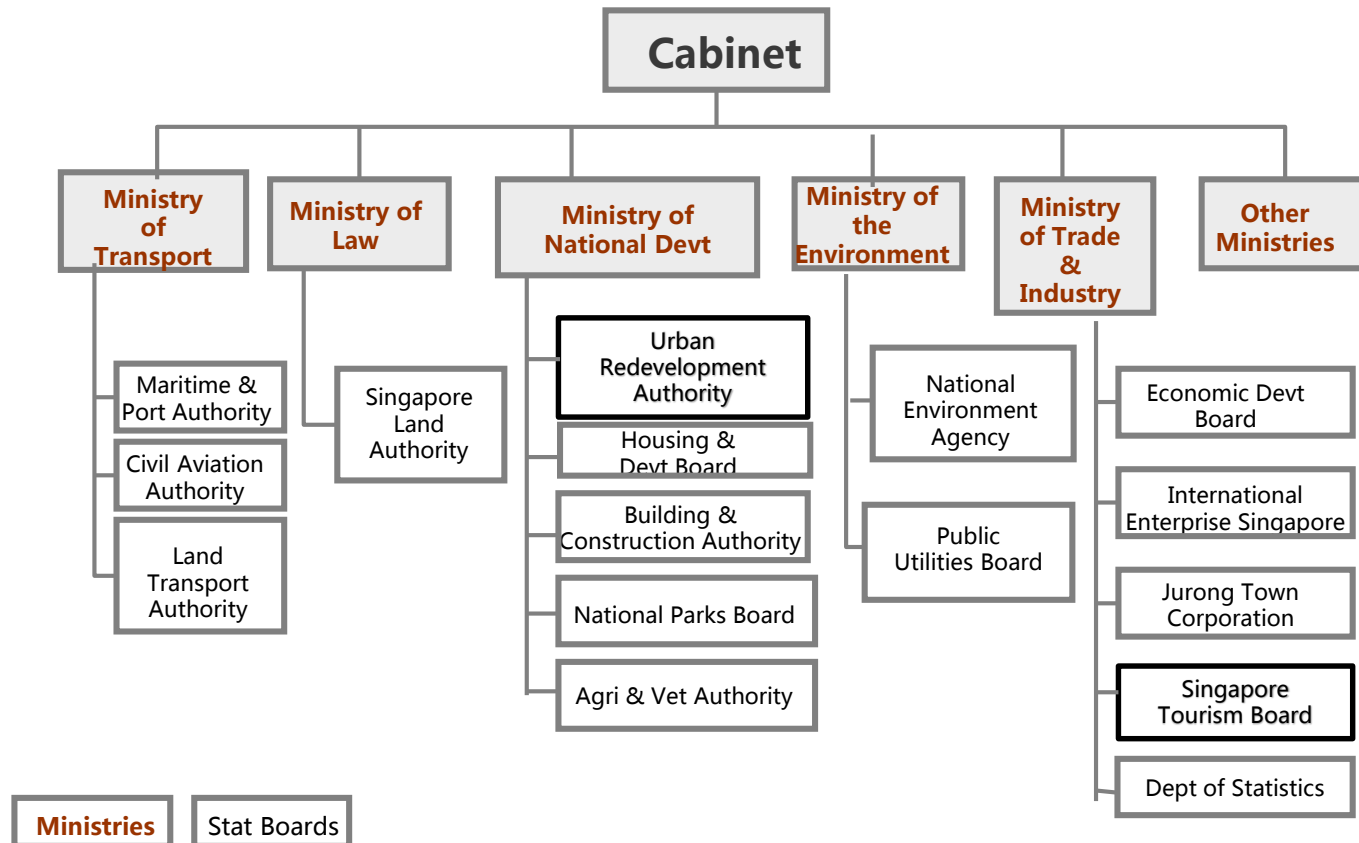
43 km

Land area: 716km²

Population: 5.31 million

Density: 7422 persons/km²

SINGAPORE GOVERNMENT STRUCTURE



The Planning Process

Concept Plan



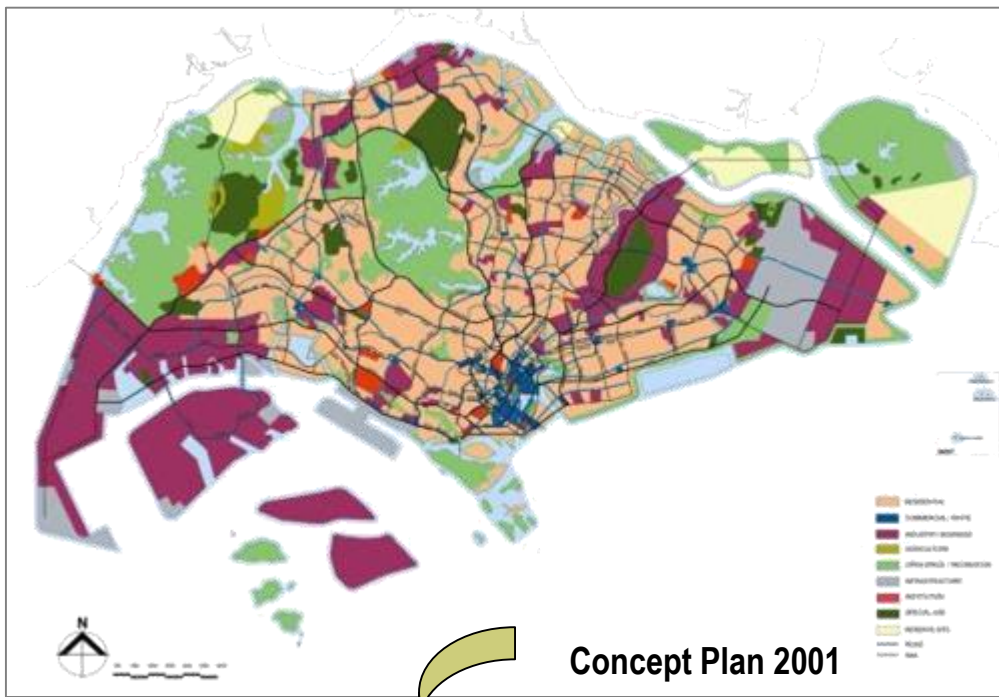
Master Plan



Land Sales



Development Control



Concept Plan

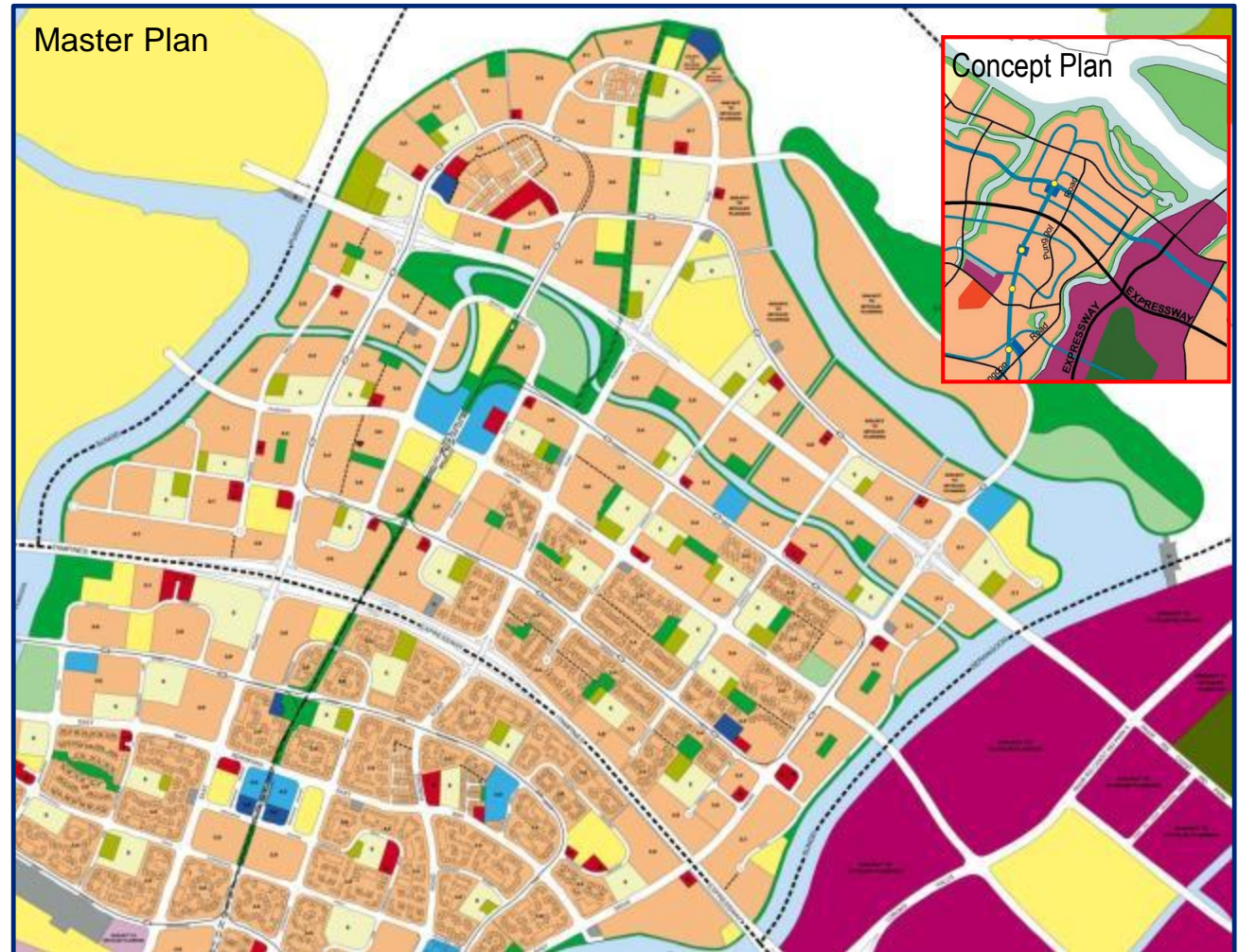
- Long term planning horizon
- Charts the strategic growth direction
- Balance between different land use needs
- Reviewed every 10 years

Key Parameters

- Demography
- Population size
- Economic growth



- Statutory land use plan
- Guides development on each plot of land
- Reviewed every 5 years



Concept Plan



Master Plan



Land Sales






















Development
Control

Reading the Master Plan



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 |
|  | MRT |
|  | LRT |
|  | UTILITY |
|  | CEMETERY |
|  | AGRICULTURE |
|  | PORT / AIRPORT |
|  | RESERVE SITE |
|  | SPECIAL USE |
| | PARK CONNECTOR |

Concept Plan



Master Plan



Land Sales



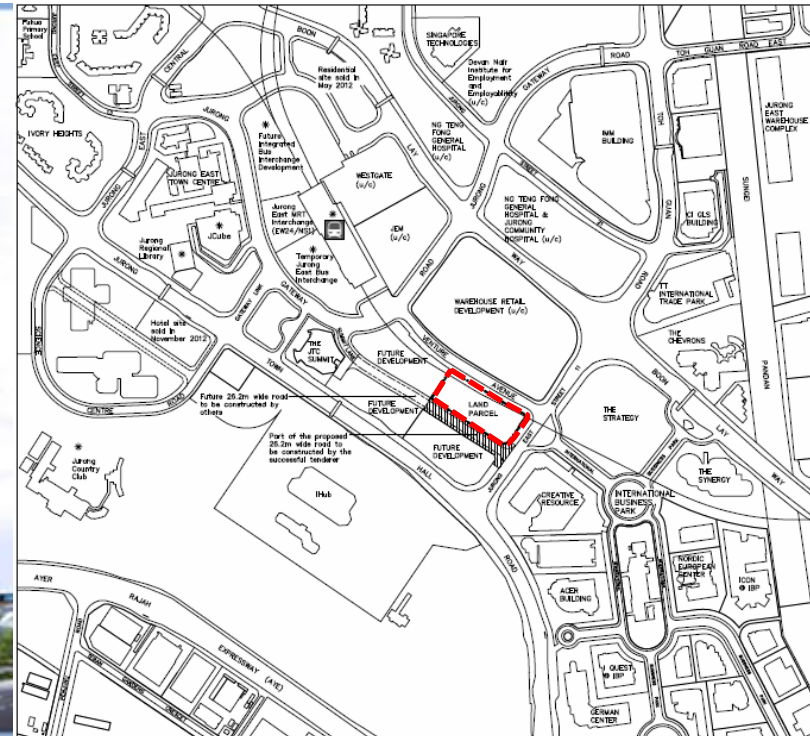
Development Control

- State-owned land : privately-owned land
- To realise planning intentions
- Tool to calibrate real estate market

Sale Site at Venture Avenue

Allowable development: Commerical (with a minimum component for office use)

Tender closing: 12 March 2013



Development Control

Concept Plan



Master Plan

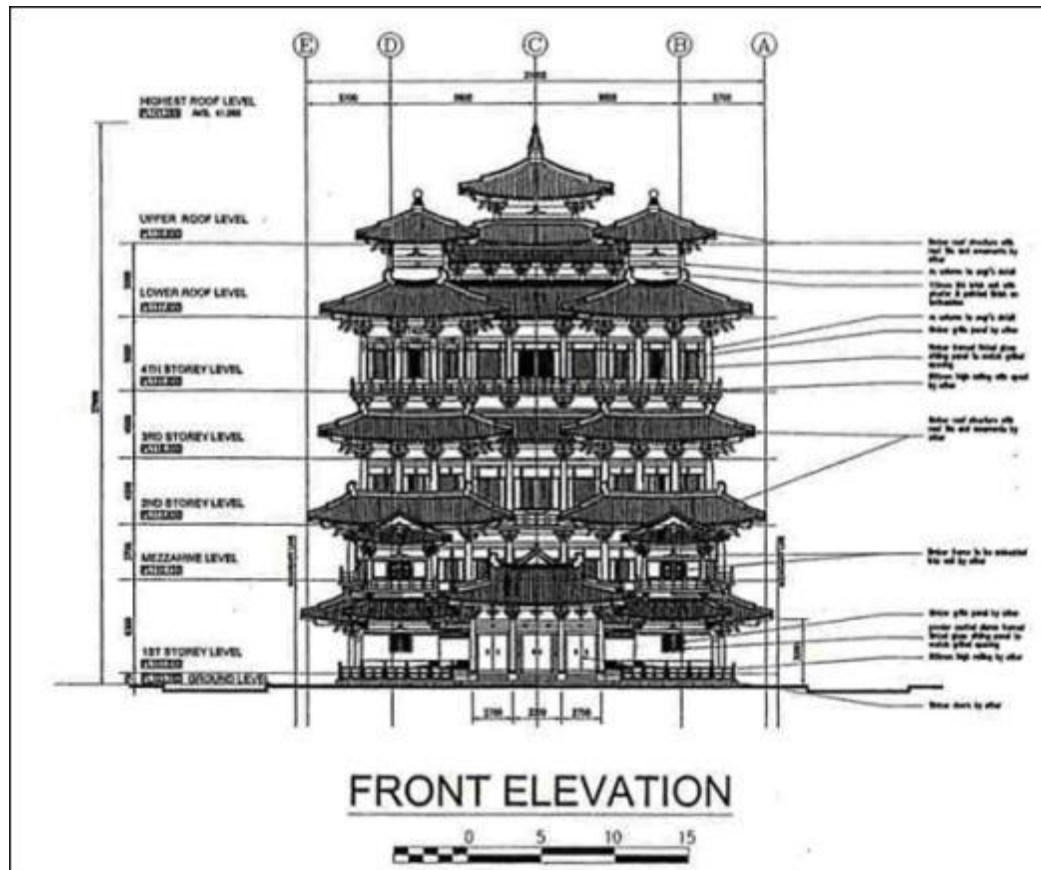


Land Sales



Development Control

- Approval before construction
- Ensures that all developments are in accordance with the Master Plan
- Macro & micro parameters



Planning Permission

Change of use

Development Charge

Enforcement

Engaging the Public

- At each step of the planning process
- Why do we engage?
 - Informing them of plans
 - Getting ideas & feedback
 - Getting public buy-in
 - Participating in plan development
- Who to engage?
- How to engage?
 - Which platform to use
 - What do we engage them on



Our Constraints

CITY-STATE

Competing land uses

Height
constraints

No hinterland

Land needed for
national purposes

**No natural
resources**

Limited land area

Planning for Sustainability

Economic driver

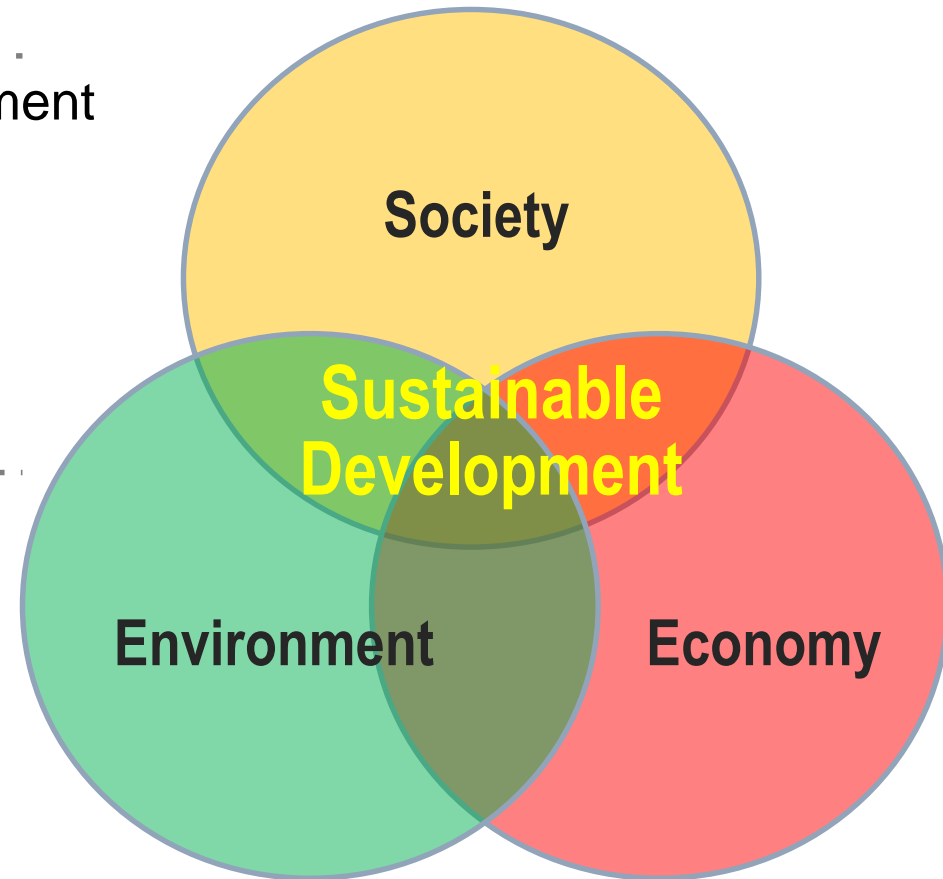
Meet the needs of economic development

Social driver

Meet the needs of the people

Environmental driver

Provide & maintain a high quality environment



Planning for a Compact & Liveable City



- Compact development model
- Integration between land use & transport planning
- High density yet liveable



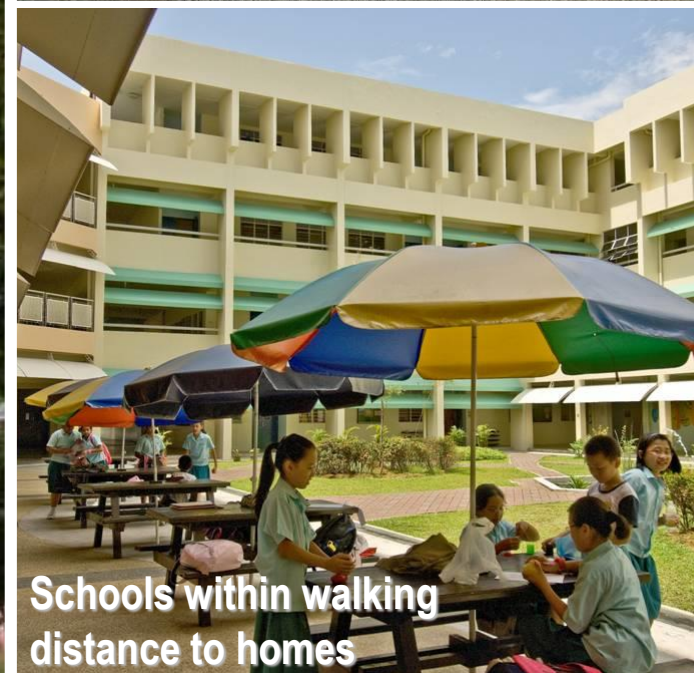
A Compact and Transit-Oriented City



High Density Developments Around Major Nodes



Amenities Close to Housing



Schools within walking distance to homes

Integrated Land Use and Transport Planning

- Planning for land use and transport networks done together
- Emphasis on public transport especially MRT/Metro



Tampines Regional Centre in the east



Good Quality Living Environment

463ha; 102,100 population

Toa Payoh



Office



School



Nursing Home



Town Park



Industry

Civic & Community
Institution

School

Town
Centre

Park

Polyclinic

Industry

Planning for a Good Quality Living Environment

- Public amenities: schools, parks, clinics, library, shops, markets, etc.



Sports Facilities



Town Centre with Shops, Library, Markets



Swimming Complex

Planning for Inclusivity



HDB: building communities

- Meeting the needs of the people
- More than building houses; building of communities
- Policies to complement land use plans

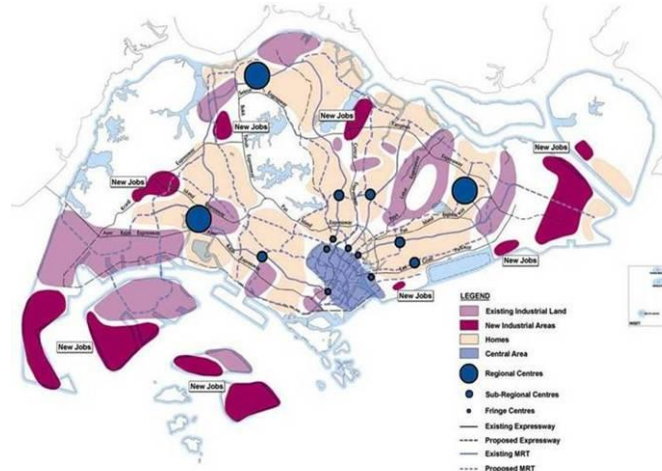


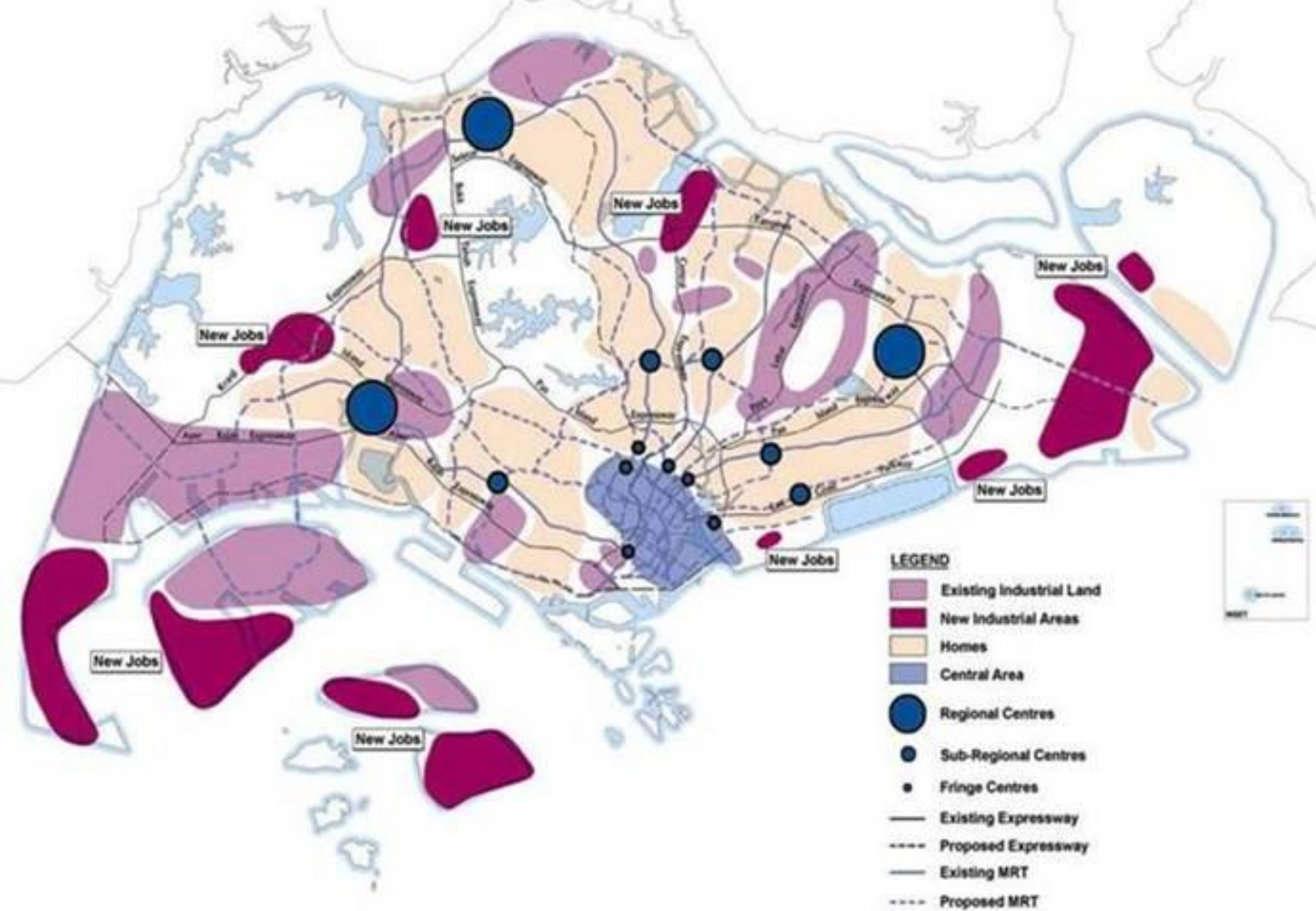
Private housing



Social & communal spaces

Economic Development





Creating a Vibrant City Centre to Support Growth

Seamless extension of the existing CBD



Marina Centre – Convention/Hotel



Bayfront before



Central Business District

Planning for a Green Environment

BCA's Green Mark Scheme

- Encouraging environmentally friendly developments
- URA's policy on bonus GFA
- Legislation for higher Green Mark standard for GLS sites in strategic areas



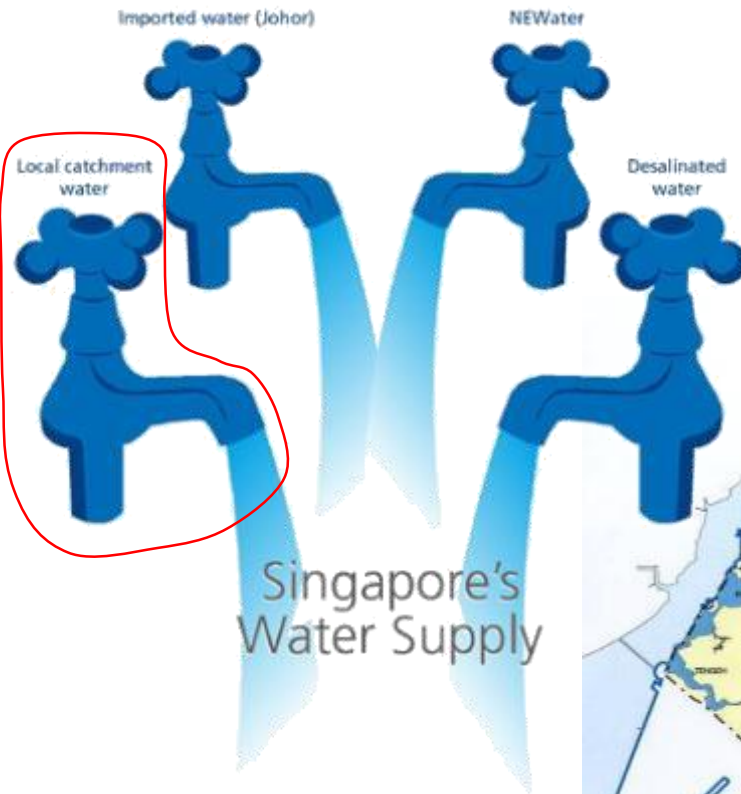
BCA Zero Energy Building



Jcube – BCA Green Mark Platinum

Drinking Water Supply

- Development *versus* protect water sufficiency



➔ Need for creative solutions, tapping on technology

Green & Blue Connectors

- Transforming into a City of Gardens and Water
- Contentious issues: land take, public safety, maintenance



Alexandra Canal



Pandan Reservoir



Seng Kang Floating Wetland



Bishan – Ang Mo Kio Park

➔ Need for close inter-agency collaboration

➔ Working towards a common objective

Bishan Park

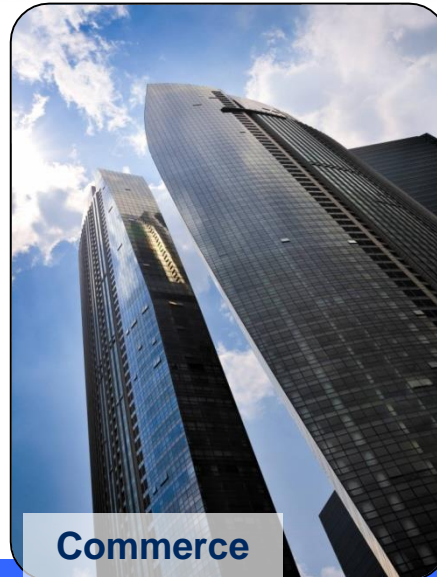


Before

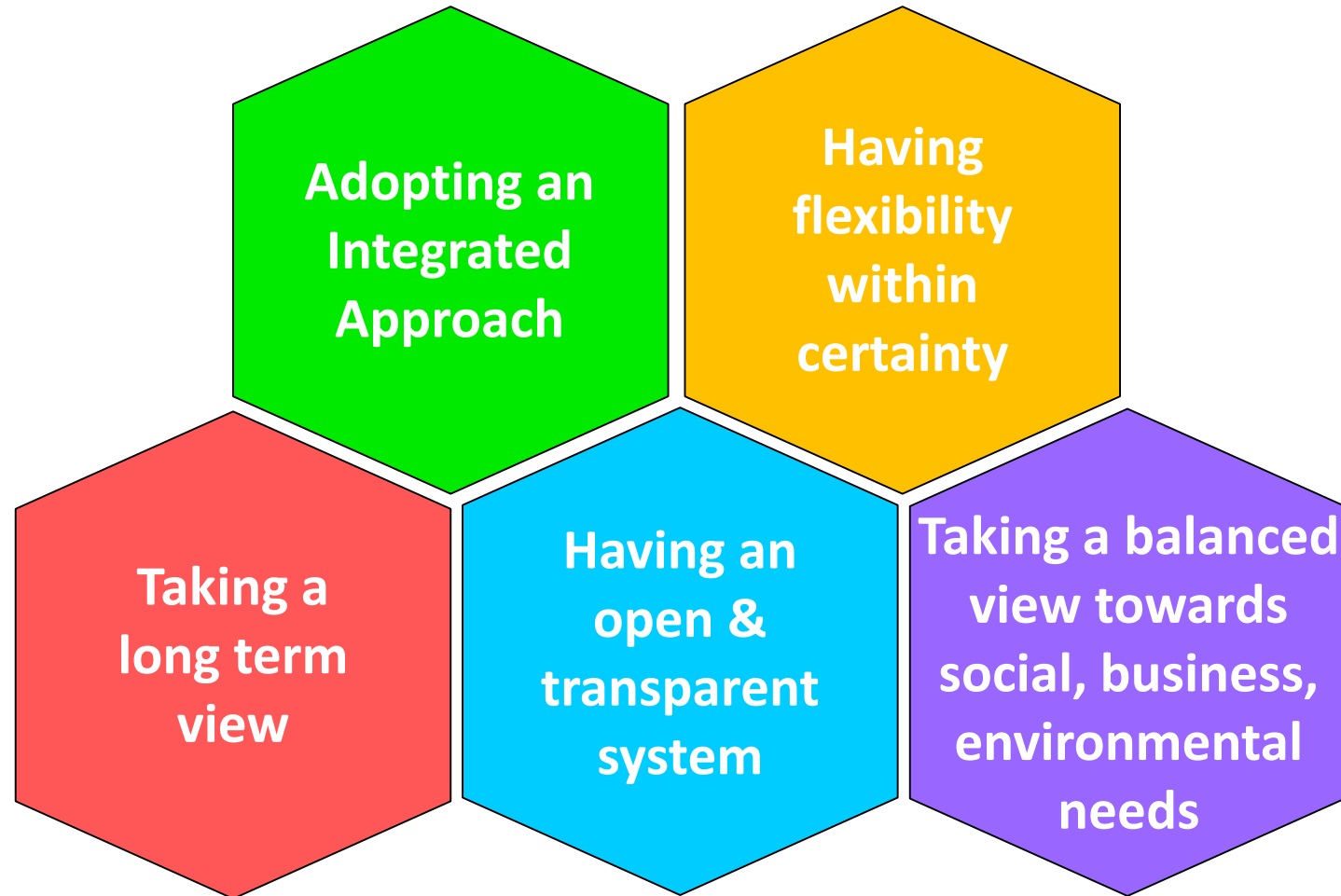
After

Singapore: A City-State

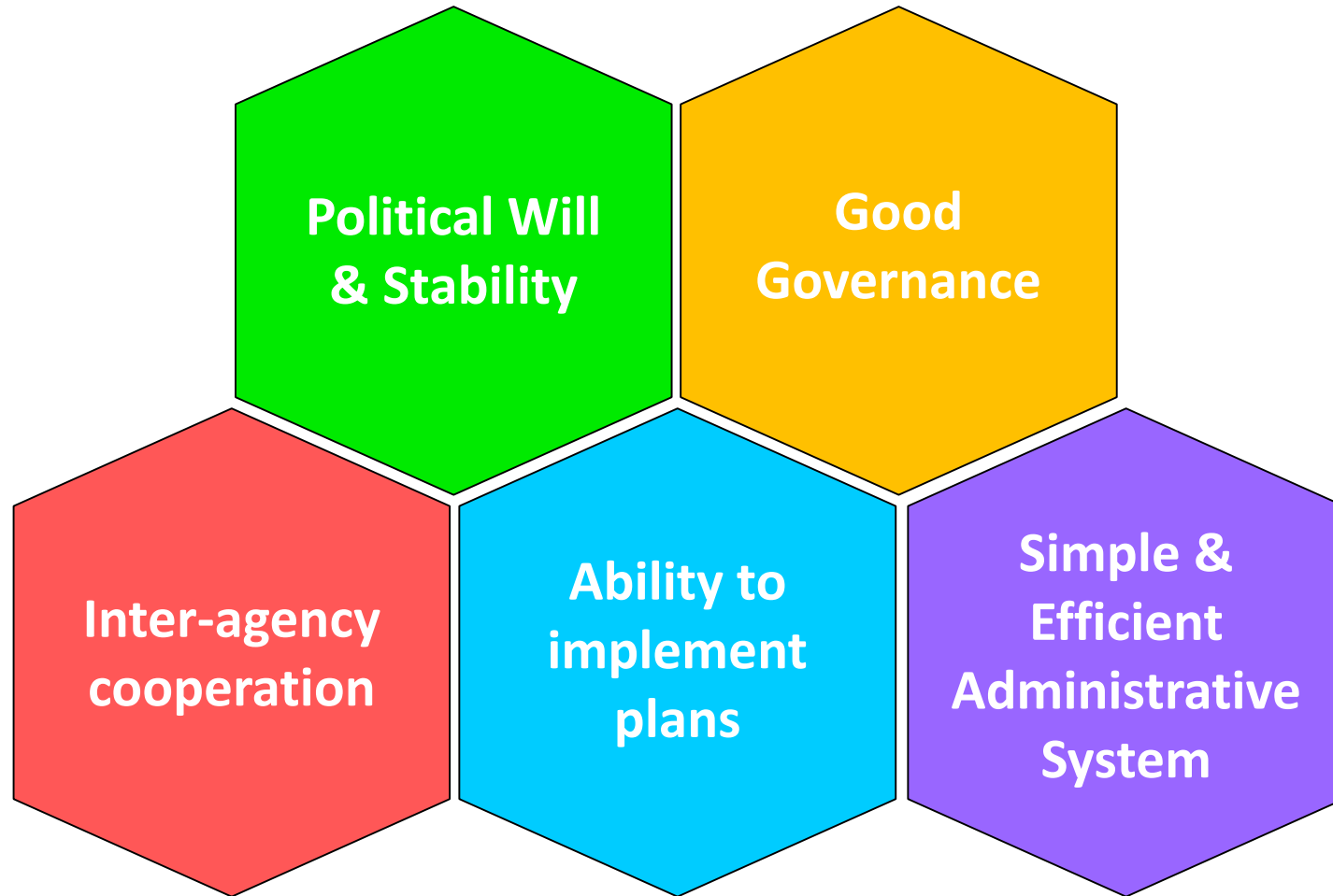
Balancing different land use needs



Key Planning Principles



Enabling Factors



Some challenges ahead

**Competing demand for
limited land**

**Rapidly changing
global trends**

**More discerning
and vocal residents**

**Rising aspirations
for quality of life**

Thank you !

