MANAGING DENSITY

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Singapore, a Compact City-State

- 5.5 mil population
- Land area 719 km²
- 7,698 persons/km²
Our People
• Multi-ethnic, multi-religious
The way we live

- High density living
- 80% in integrated public housing estates
- 90% home ownership
The way we work

- A business hub, with a diversified economy
- High employment
- World’s best Airport/ Sea port
- 3rd largest refinery hub
The way we play

- World class sports facilities
- High quality arts and performing venues
And today, Singapore is among the most liveable cities.

<table>
<thead>
<tr>
<th>Year</th>
<th>Singapore’s Ranking</th>
<th>GPCI</th>
<th>WEF Global Competitiveness Index</th>
<th>Mercer</th>
<th>Monocle</th>
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<tbody>
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<td>2012</td>
<td>5</td>
<td>2</td>
<td>25</td>
<td>26 out of 230; 1st in Asia</td>
<td>15</td>
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<tr>
<td>2013</td>
<td>5</td>
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<td>25</td>
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CLC Liveability Index

Source: 2016 Mercer Quality of Living Survey, Various government data sources.
Singapore Liveability Framework

Framework for Liveable and Sustainable Cities

Outcomes (What’s)
- Sustainable Environment
- Competitive Economy
- High Quality of Life

Systems (How’s)
- Dynamic Urban Governance
- Integrated Master Planning & Development

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What makes Singapore a compact high density high liveability city?
Jobs for all

Unemployment rate of less than 2%...
Competitive Economy: Moving up the Value Chain

1960s: Labour intensive
1970-80s: Capital intensive
1990s: Technology intensive
2000s: Knowledge intensive

Job Creation & Economic Growth

US$428


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60s-90s: Labour & land-intensive

2000s – now: Technology & Knowledge-intensive
A home for everyone

No homeless, No slums, No enclaves; 90% home ownership
Housing & community

- High-density, high-rise flats built since independence when it was unpopular in other cities. Today, 81.9% of residents live in HDB flats.
- Self-contained towns with schools, libraries, clinics/hospitals, supermarkets, F&B outlets, accessible transportation, and recreational facilities.
- Ensure social integration through mixture of flat types, racial quota, common public spaces. Keep community identities strong.
Mobility for everyone
Well-integrated, discouraging cars, promoting public transport
Well integrated public transport

- From 178km today to 360km by 2030
- 80% households within 10-min walk of a train station

Legend
- Rail lines before Land Transport Master Plan (LTMP) in 2008
- Rail lines in LTMP2008
- Rail lines in LTMP2013
Ongoing Efforts to make Singapore “Car-lite”

Improving accessibility and connectivity:

- Extensive public transit network
- Comprehensive network of covered walkways, underground pedestrian links & above-grade connections
- Cycling paths
Encouraging Active Mobility

[Map of Singapore with cycling routes and parks marked]

National Cycling Plan

Vision: Develop an integrated comprehensive cycling path network.

Strategies:
- Enhance cycling safety and connectivity convenience.
- Develop a safe cycling culture through education and programs.

Our aim is to build the cycling network to more than 700 km.

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High quality living environment

Green, clean, quality spaces...
Between 1986 and 2010, despite growth in the population from 2.7 million to 5 million...

The green cover in Singapore grew from 35.7% to almost 50%.

~50% green cover, more biodiversity than North America continent.
City in a Garden

Pervasive greenery
Parks and Waterbodies Plan

• Planning standard
  0.8ha of parks per 1,000 residents

• Increase households’ accessibility to parks
  Parks will be distributed across housing areas so that at least 85% of our residents and their families can live within 400m of a park by 2030

• LUSH programme for developers
  Landscaping For Urban Spaces And High-rises encourages the adoption of skyrise greenery
High Rise Greenery

Bringing nature closer to people in a dense city...
Water for all

100% access
Water self sufficiency

Hardware: “Water for All”

- Local catchment
- Imported water
- NEWater
- Desalinated water

Heartware: “Conserve, Value, Enjoy”

Adopt a 3P Approach to engage the people, private and public sector partners to use water wisely, keep the water catchments clean, and build a relationship with water
Programme activities around water

- Green lungs of the city
- Programmed with activities such as: trekking, fishing, bird watching and kayaking
Strengthen Identity

Through conservation, heritage, arts & culture
Community Bonding
How did we do it?
Integrated planning system

To ensure sufficient land to meet our long-term needs
Long term integrated planning

CONCEPT PLAN
Maps out strategic vision over the next 40-50 years
Reviewed every 10 years

MASTER PLAN
Guides development over the next 10-15 years
Reviewed every 5 years

URBAN DESIGN GUIDE PLANS

LAND SALES & DEVELOPMENT COORDINATION

DEVELOPMENT CONTROL
Evolution of Concept Plans

1971

1991

2001

2011

- Residential
- Commercial/White
- Industry/Business
- Agriculture
- Open Space/Recreation
- Infrastructure
- Institution
- Special Use
- Reserve Site
- Possible Future
- Reclamation
- Road
- Rail
Master Plan

- Translates broad Concept Plan to detailed local level plans
- Sets out:
  - Land use zoning
  - Development intensity
Planning & Development Framework

- The Master Plan comprises of 2 key documents:
  A set of land use, guideline, special control plans
  The Written Statement
  Depicts intension on use of each land parcel
  Reviewed at least once every 5 years
  Accessible to the public

Master Plan

Parks and Waterbodies Plan

Landed Housing Areas Plan

Building Height Plan

Street Block, Urban Design Area, Conservation and Monuments Plan

Activity Generating Uses Plan
Integration of the Landuse and Transport Plans

Transit-oriented town planning
• Safeguard land thru’ road reserves plan
• A mix of uses
• High density
• Good connectivity
• Transportation Choices
• High quality design
• Key amenities within walking distance
Integrated Approach
Whole-of-Government Efforts

- URA is the planning authority
- However, land use planning is a multi-agency efforts
- Need to ensure land is put to best possible use
- Mechanism/platforms in place to facilitate this whole-of-government approach and to iron out conflicts and trade-offs, e.g.
  - Inter-ministerial Steering Committee and Sub Committees for Concept Plan Review
  - Master Plan Committee (MPC)
Underpinned by Dynamic Governance


Supported by Sound Institutions

Sound institutions; Culture of integrity

WOG Effort

Public Works Department

Urban Redevelopment Authority

Ministry of the Environment and Water Resources

Housing & Development Board

Land Transport Authority

Corrupt Practices Investigation Bureau

Ministry of Law

Attorney-General's Chambers

AGC

MOF

Corrupt Practices Investigation Bureau

PUB

CENTRE for Liveable Cities SINGAPORE

We Keep Your World Moving

Water for All: Conserve, Value, Enjoy
Case Study: Punggol
Planning for new towns
• Residential eco town, providing high quality living environment amidst dense green and blue network
• 7 waterfront districts- public and private housing
• Planned for development of 96,000 DUs in 15 years
• Each precinct is made up of 1000-3000 homes
• GPR avg 3-3.5
Punggol Landuse Master Plan
HIGHLIGHTS

What's new: Punggol Promenade Nature Walk
- A trail that overlooks Coney Island
- 2.4km of unpaved bicycle track that takes you to the old kampong dirt paths
- Three aluminium-clad rest shelters that resemble seashells
- Three 200 sq m fishing platforms

Scenic views (Punggol Point Park)
- A 0.6ha park that opened last year
- Elevated viewing deck overlooking Pulau Ubin and the Straits of Johor
- Access to Punggol Beach and Punggol Jetty
- Two fish ponds, a sand-filled playground

Moat (Riverside Walk)
- Visitors can enjoy three stretches of glowing fibre-optic lights along the river edge, best seen at night. They are meant to look like swaying tallang grass

Lorong Halus Wetland
- The site of 18 football fields, this wetland collects and treats rainwater before it reaches Serangoon Reservoir
- Visitors can enter it by the Lorong Halus Bridge

Bioswale (Sungel Serangoon Park Connector)
- Shallow vegetated trenches with a range of plant life. They prevent erosion, help control flooding and also help to clean water before it reaches the river

Longest man-made waterway (Punggol Waterway)
- Opened last October
- Focal point of the 12.3ha Waterway Park

ABOUT THE LOOP

Distance: 26km
- Cycling time: Two hours
- Walking time: 3-4 hours
- Cost: $57 million
- Connects four parks
- Made up of six stretches

GETTING THERE

By public transport
- MRT: Punggol, Riviera and Farmway

By car
- Free parking at Sengkang Riverside Park, Punggol Waterway Park, Punggol Point Park and Lorong Halus Wetland

Animal and Plant Life

Black-naped Oriole
- Shy and tends to hide among branches

White-throated Kingfisher
- Known by its loud calls and striking colours

African Fountain Grass
- It's long, feathery and purple plumes grow up to 1.2m

Coral Plant
- Its flowers attract butterflies and bees

Run through four estates — Buangkok, Punggol, Hougang and Sengkang

Work started in 1996, the first section being Serangoon park connector

Bicycle kiosks along the loop and at Punggol Park by end-March

Source: NParks
• Green Fingers - variety of green spaces
• My Waterway - 4.2 km waterway cutting through the Punggol estate
• Housing estates served with integrated community hub,

• Shopping centres (Waterway Point), Polyclinic, Nursing Home
Work learn play

Creative Cluster - for innovative industries, tertiary institution, learning corridor
THANK YOU