SINGAPORE’S EXPERIENCE OF THE INTEGRATED LAND USE & TRANSPORT STRATEGIES
Dr. Limin Hee
1 LAYING THE FOUNDATION
2 STRATEGY FOR DECENTRALISATION
3 GUIDING PRINCIPLES OF INTEGRATED PLANNING FOR LAND USE & MOBILITY
4 GOING CAR-LITE
LAYING THE FOUNDATION
A country plagued with challenges of urbanization.

SINGAPORE IN THE 1950s & 1960s
Limited natural resources

5.6 million population
7,797 persons/km² density

Total land area: 721.5 km²

33.9 km

53.32 km

Fitting the essential needs of a nation

SINGAPORE – A CITY STATE’S CHALLENGES
S$73,167 per capita GDP*
Compared to S$1,310 in the 1960s

2.2% unemployment rate*
Compared to 8.6% in the 1960s

* 2016 data from the Department of Statistics Singapore

SINGAPORE’S GROWTH & ACHIEVEMENT

90.9% home ownership

100% access to clean water
The Ring Plan

Get the fundamentals right – Planning matters!

1971 CONCEPT PLAN STRUCTURE
INTEGRATED MASTER PLANNING – THINK LONG TERM
STRATEGY FOR DECENTRALISATION
Traffic issues in Singapore, back in the 50s and 60s.
Decentralisation supported by a well-planned and comprehensive public transport system

CONSTELLATION CONCEPT
LAYING THE FOUNDATION

SINGAPORE TODAY: COMPACT, LIVEABLE & TRANSIT-ORIENTATED

Schools within walking distance to homes

Amenities close to housing

High Density Developments Around Major Nodes

SINGAPORE TODAY: COMPACT, LIVEABLE & TRANSIT-ORIENTATED

GLOBAL PLATFORM FOR SUSTAINABLE CITIES – CITY ACADEMY SINGAPORE
GUIDING PRINCIPLES OF INTEGRATED PLANNING FOR LAND USE & MOBILITY
BUILD IN FLEXIBILITY – NEW GROWTH AREAS

GLOBAL PLATFORM FOR SUSTAINABLE CITIES – CITY ACADEMY SINGAPORE

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CONNECTING THE TOWNS

GLOBAL PLATFORM FOR SUSTAINABLE CITIES – CITY ACADEMY SINGAPORE
An integrated approach to planning for land use and mobility is crucial for creating a highly liveable environment in a small and densely built city like Singapore.
GOING UNDERGROUND IN THE CENTRAL AREA

ION ORCHARD & ENTRANCE TO UNDERGROUND ORCHARD MRT STATION

RAFFLES CITY MALL ABOVE UNDERGROUND CITY HALL MRT STATION

GOING UNDERGROUND IN THE CENTRAL AREA
ANG MO KIO WALKING AND CYCLING TOWN

ANG MO KIO HUB

ELEVATED CYCLING PATH

DIRECT ROUTE FROM AMK TO THE CITY

GLOBAL PLATFORM FOR SUSTAINABLE CITIES – CITY ACADEMY SINGAPORE
GOING CAR-LITE
12% of total land area for transport use

961,842 – Total motor vehicle population in 2017
39% of car owning households

16,700km – Average annual mileage clocked per private car in 2016
2016 TRAVEL DEMAND BY DIFFERENT MODES

- **6.1 million** Daily Bus & Rail Journeys
- **1 million** Daily Taxi & Private Hire Cars (PHC) Journeys
- **4.2 million** Daily Private Vehicles Journeys
- **2.6 million** Daily Active Mobility Journeys
PLANNING FOR SUSTAINABLE URBAN MOBILITY

CAR-CENTRIC
How it actually is now

- Private Cars
- Freight, Taxis, Private Hire, and Car Sharing
- Public Transport
- Active Mobility

PEOPLE-CENTRIC
How it should be in a sustainable scenario

- Active Mobility
- Public Transport
- Freight, Taxis, Private Hire, and Car Sharing
- Private Cars
EXPANDING, IMPROVING & FACILITATING DIFFERENT MODES OF TRANSPORTATION

EXPANDING THE RAIL NETWORK - 200km to 360km by 2030

RE-SIGNALING + INCREASING FLEET SIZE
- Shorter waiting times

EXPANDING BUS FLEET & SERVICES
- 1000 buses & 80 services added between 2012 to 2017

IMPROVING BUS RELIABILITY
- More punctual buses & fewer bus bunching occurrences

EXPANDING THE CYCLING NETWORK - 700km island-wide

COVERING THE LAST MILE

PROVIDING BICYCLE PARKING

GLOBAL PLATFORM FOR SUSTAINABLE CITIES – CITY ACADEMY SINGAPORE
2030 Goals from The LTMP 2013

- 8 in 10 households living within 10 minutes’ walk from a train station;
- 85% of public transport journeys under 20km completed within 60 minutes; and
- 75% of all peak hour journeys made using public transport

“The LTMP 2040 is an opportunity for us, as a people, to take a fresh look at our transport vision, policies and targets to make sure that they are fit for the future.”

- Land Transport Authority
01 Creating a car-lite culture through mixed use planning & good urban design

02 Creating vibrant public spaces to encourage interaction

03 Creating highly liveable environment through an integrated approach to planning for land use and mobility as well as transport strategies
Thank You!