

**World Urban Transport
Leaders Summit 2010**

Mr. Lim Bok Ngam

Acting Chief Executive, Land Transport Authority, Singapore

**Singapore's Land Transport System –
Enabling the Growth of a Nation**

WUTLS Plenary Forum 1

30 June 2010



**Singapore's Land Transport System –
Enabling the Growth of a Nation**

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Outline



- Challenges Ahead
- Sustainable Transport System
- Strategic Thrusts
 - Making Public Transport a Choice Mode
 - Managing Road Usage
 - Meeting Diverse Needs
- Sustainable Development Initiatives

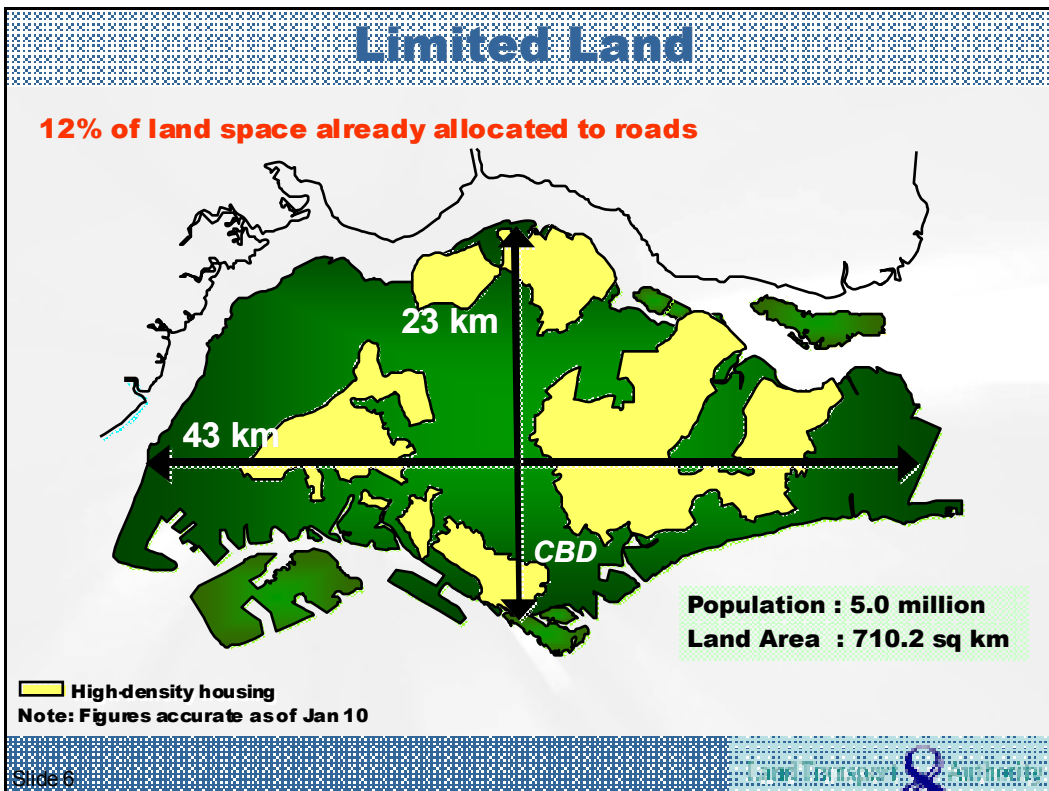
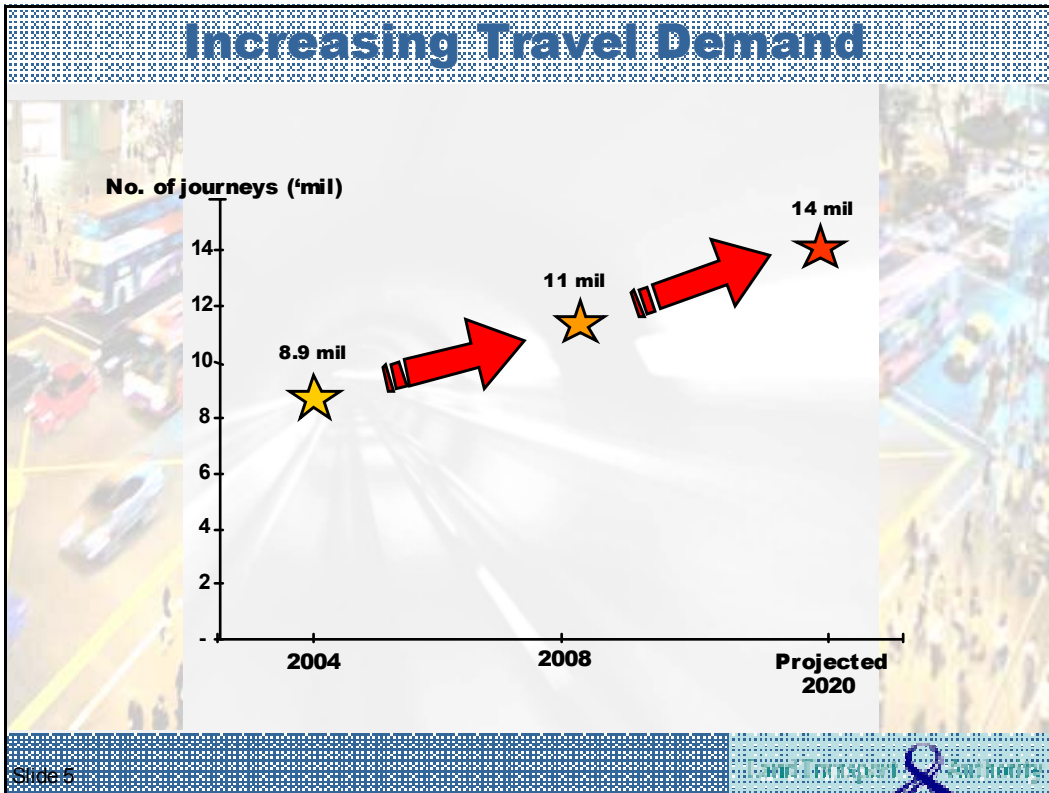
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Challenges Ahead

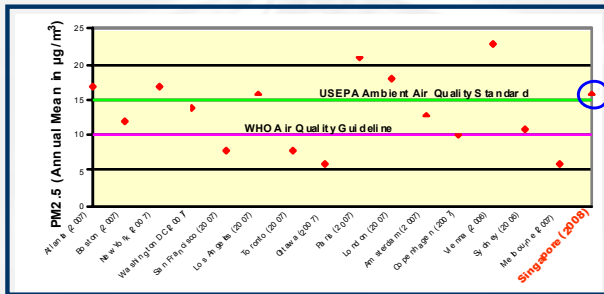
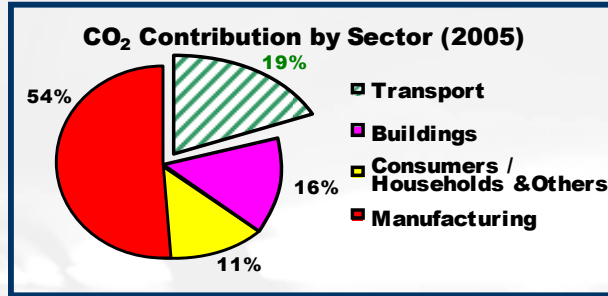
Towards a Sustainable, People-Centred Land Transport System





Environmental Concerns

Transport systems account for 20-25% of world energy consumption and carbon dioxide emissions



Like many developed cities, Singapore has yet to meet the recommended standard for PM_{2.5}

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Changing Demographics

- Ageing population
 - In 2009, elderly (65 years and above) population is 320,000
 - By 2030, elderly population is projected to triple to nearly a million (20% of residents)
- Increased expectations of Singaporeans



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Sustainable Transport System

Realising a Nation's Aspiration of Becoming a Thriving Global City



Sustainable Transport System



A sustainable transport system is human-oriented and environmentally friendly, economically viable and efficient, and socially sound.

Adapted from "Transportation for Livable Cities" by Vukan R. Vuchic, 1999



- Increase in travel demand must be met largely by public transport
- Cater to diverse needs of our people



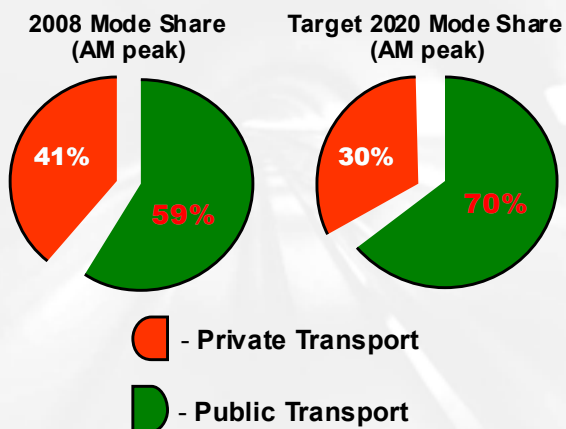
Making Public Transport a Choice Mode

"My Other Car is a Bus or Train"

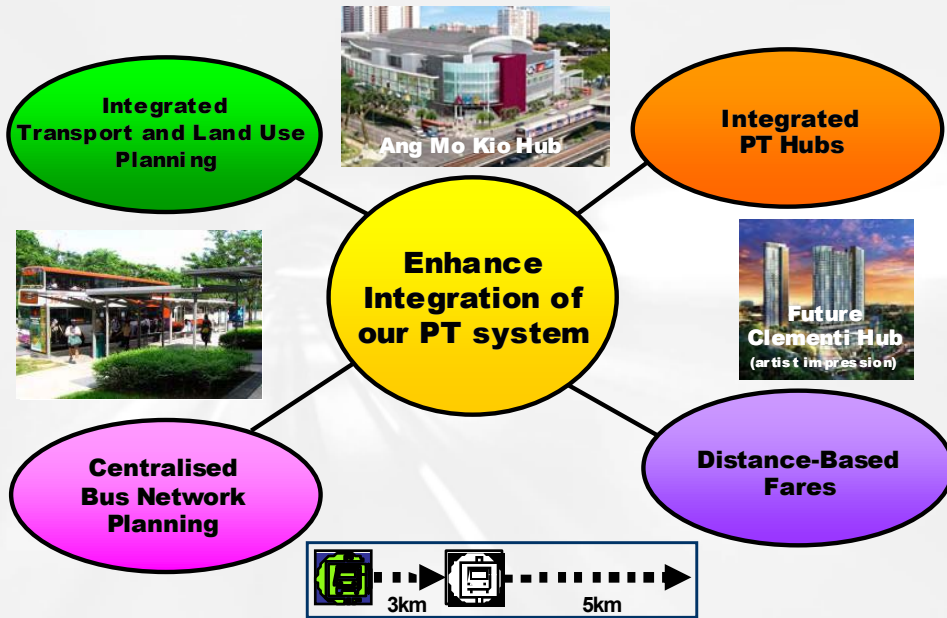
TRANSFORMING
Public Transport

Key Targets by 2020

- Increase AM peak modal share on public transport from 59% to 70%



Enhance Integration of PT System



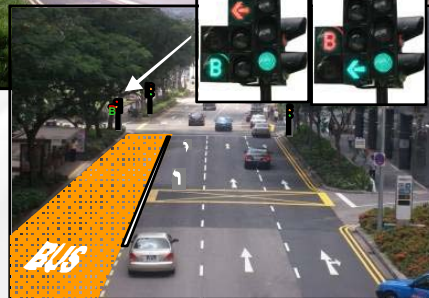
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Extend Priority for Buses

Full Day Bus Lanes

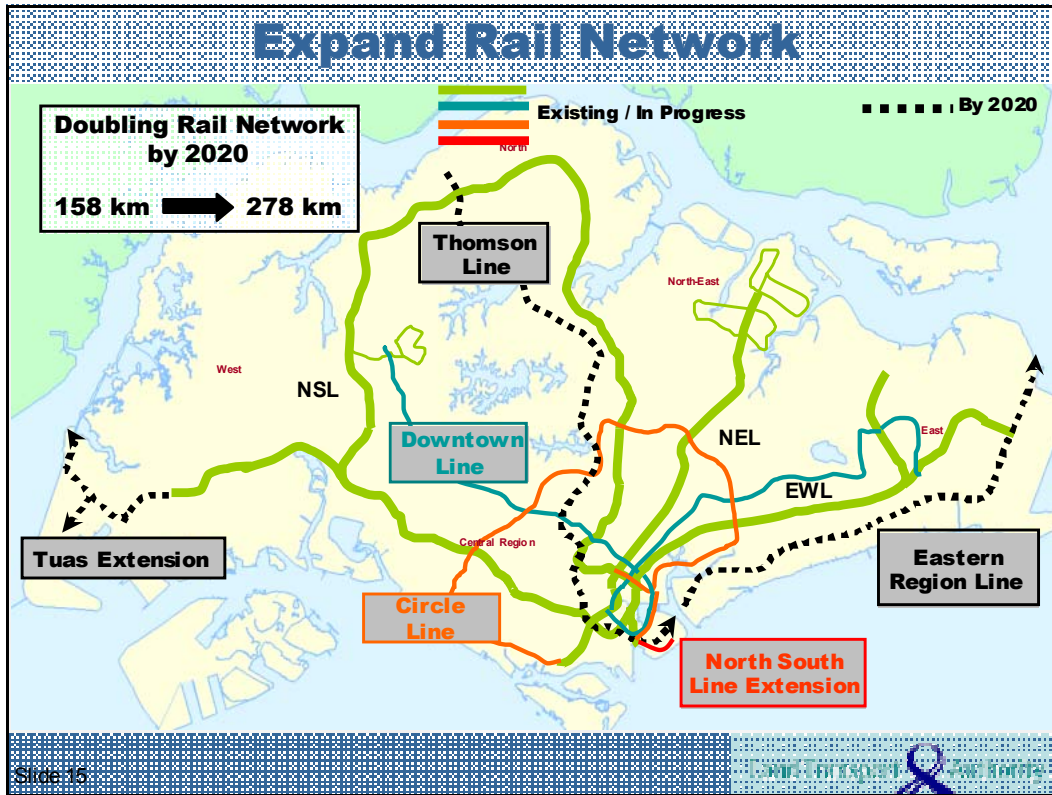


Mandatory Give-Way at Bus Bays



Bus Priority of Junctions

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Managing Road Usage

Optimising the Use of Our Road Network

LTA ACADEMY SINGAPORE

Manage Demand for Road Use

- Combination of ownership control and usage restraint measures

**Ownership
Control**

**Usage
Restraint**

Ownership Measures:

1. **Vehicle Quota System (i.e. COE)**

Usage Measures:

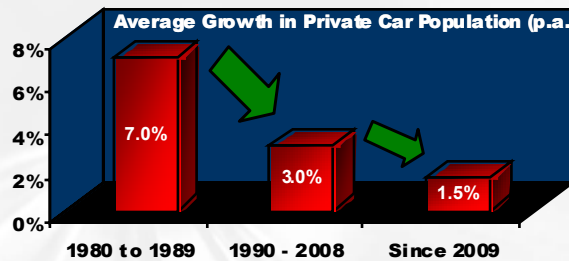
1. **Electronic Road Pricing (ERP)**
2. **Petrol Duty**

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Manage Demand for Road Use

Ownership Control

- Vehicle Quota System



- Ownership taxes
 - Additional registration fee
 - Excise duty
 - Road tax

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Manage Demand for Road Use

Usage Restraint

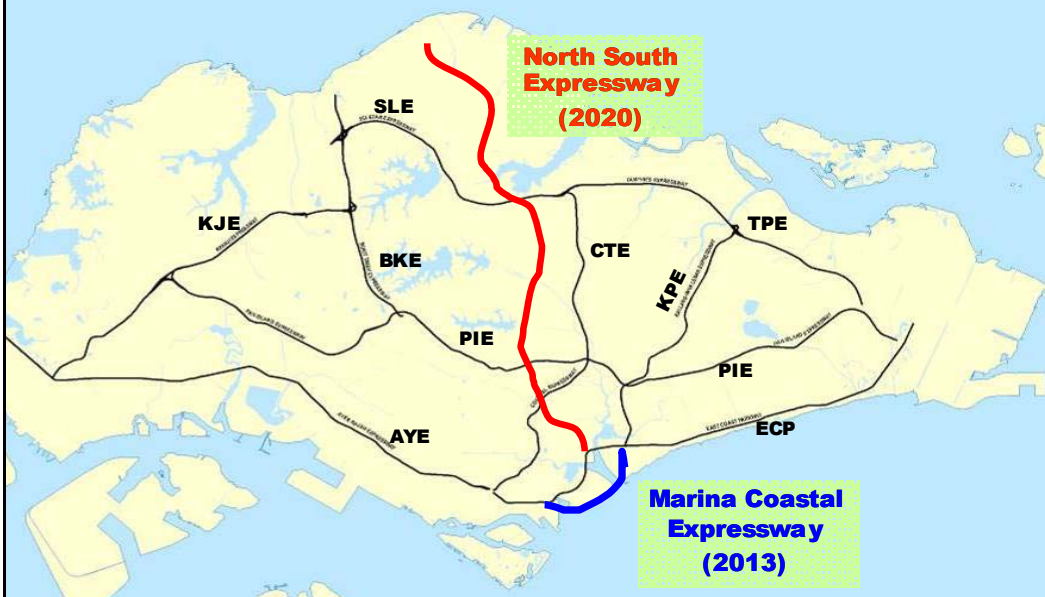
- ERP
 - Congestion management tool
 - Rates are reviewed on a quarterly basis to ensure optimal speeds:
 - Expressways: 45-65kph
 - Arterial roads: 20-30kph
 - Flexible: Varied rates based on local traffic conditions
 - Equitable: Motorists pay for congestion costs imposed on others

Household Interview Survey 2008	ISLAND-WIDE	CENTRAL BUSINESS DISTRICT (CBD)
Growth in Traffic During Peak Hour (2004-2008)	25%	15%

ERP is effective in managing travel demand in the city area.

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Expand Road Network



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Leverage on Technology



- Traffic and Incident Management System
 - Parking Guidance System (PGS)
 - Green Link Determining System (GLIDE)
 - Expressway Monitoring and Advisory System (EMAS)
 - Junction Eyes (J-Eyes)
- Provide timely traffic information
 - Real-time traffic information on ONE.MOTORING portal
 - Radio channels to broadcast traffic information



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Meeting Diverse Needs

Ensuring that Everyone has Access to Transport

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Implement Barrier-free Accessibility

- RTS Stations
 - Barrier-free access routes at RTS stations
 - Lift retrofitting
- Wheelchair-accessible buses
 - Progressively upgrading bus fleet to be wheelchair accessible by 2020
- Pedestrian and road facilities
 - Barrier-free facilities



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Encourage Non-motorised Transport

- Walking – Pedestrian and commuter facilities
 - Enhance the accessibility of road facilities and public transport nodes
- Cycling
 - Foldable bicycles on board trains and buses
 - Establish planning guidelines for bicycle tracks and parking facilities



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Promote Environmental Sustainability

Gearing our transport practices and policies towards supporting environmental aims

Improve resource efficiency

- Encourage fuel efficient vehicles
 - Fuel Economy Labelling Scheme
 - Green Vehicle Rebate: 40% of upfront tax on cars
- More energy efficient buses and trains
 - Incentivise operators to consider cleaner technologies and fuel sources



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Promote Environmental Sustainability

Improve emission standards

- Set stringent emission standards for registration of vehicles
 - New diesel vehicles must comply with Euro IV emission standards
- Mandatory periodic inspection of in-use vehicles
- Enforcement and regulation of black smoke



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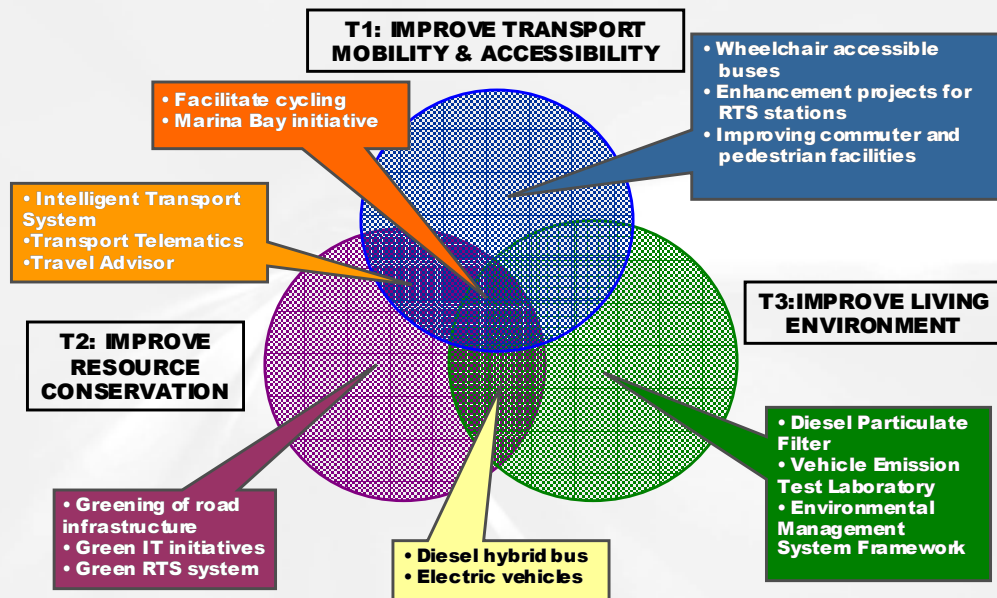


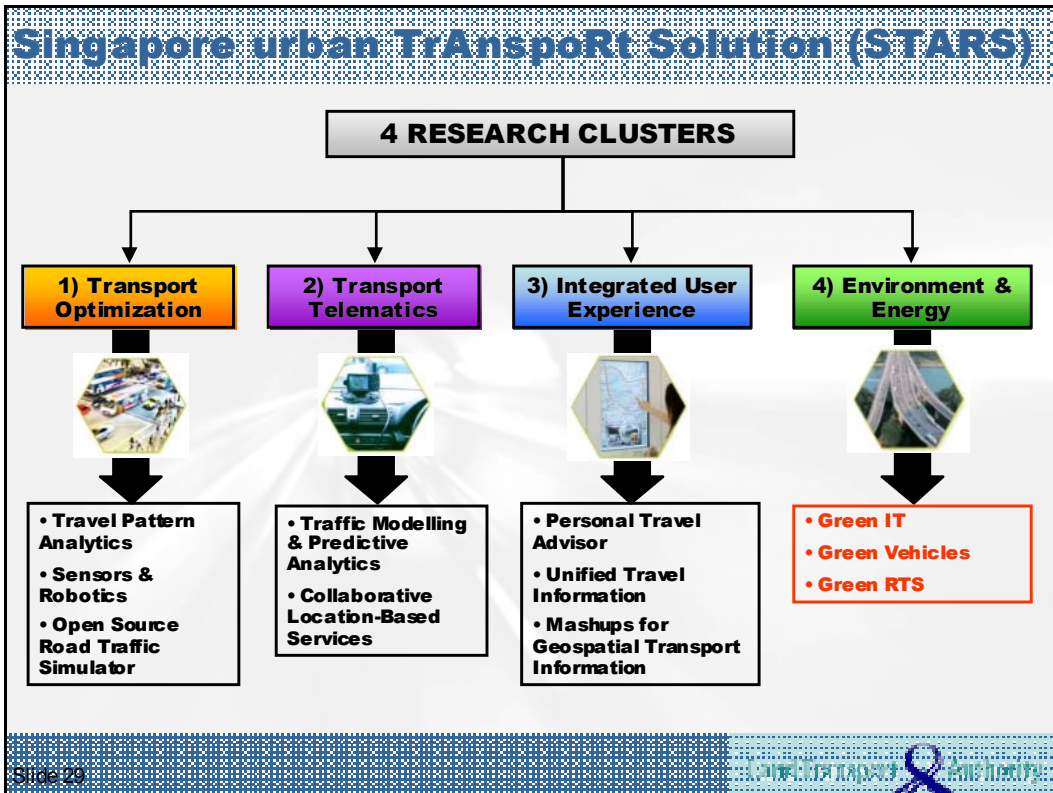
Sustainable Development Initiatives

Towards a Better Quality of Life



Sustainable Development Framework





Thank You