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## **An Alternative Transport Strategy with due Consideration of Environmental Impacts**

by  
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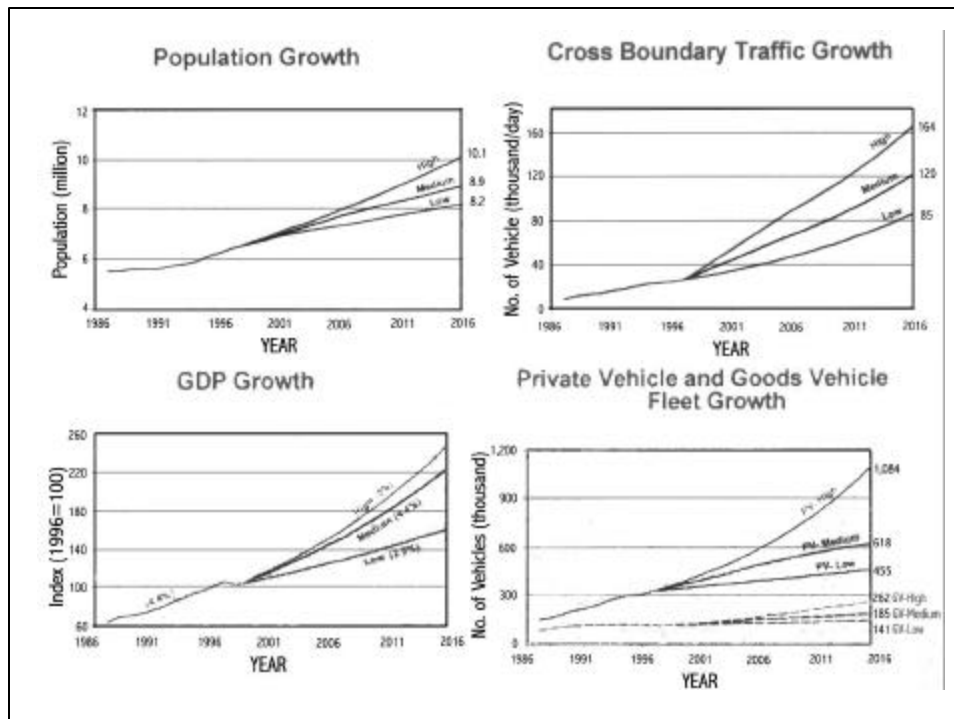
### **Hong Kong in Figures**

- ✦ **Population - over 6.8 million**
- ✦ **Total area 1098 km<sup>2</sup> , 17% is built-up area**
- ✦ **Over 580,000 vehicles on 1904 km of roads**
- ✦ **Over 10 million passenger journeys are relied on public transports everyday**

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## Third Comprehensive Transport Study

- ✦ **In August 1997, the Government commissioned a Third Comprehensive Transport Study (CTS-3)**
- ✦ **Objective**  
**To formulate a transport strategy: -**
  - to maintain mobility up to 2016
  - with due consideration of cross boundary traffic and environmental impacts
  - to contribute towards sustainable development
- ✦ **CTS-3 was completed in September 1999**



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## **Strategic Environmental Assessment (SEA)**

### **Objective**

- ✦ **To ensure that future transport developments and policies are environmental acceptable**

### **Scope**

- ✦ **Air quality**
- ✦ **Noise**
- ✦ **Ecology**

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## **Air Quality Assessment**

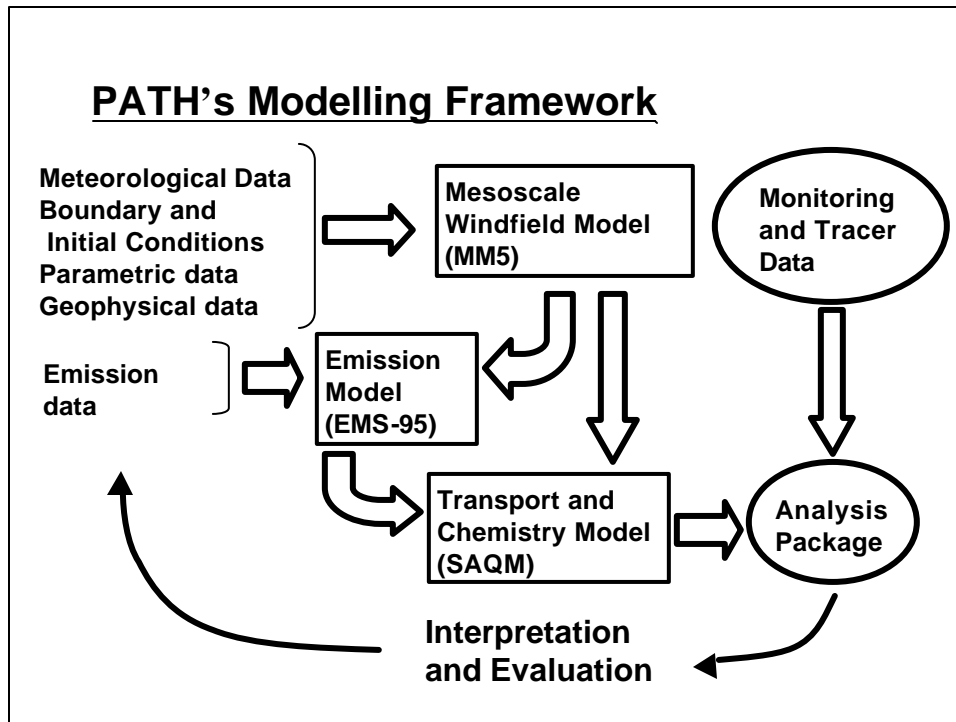
### **Pollutants**

- ✦ **NO<sub>2</sub> (Nitrogen Dioxide)**
- ✦ **RSP (Respirable Suspended Particulate)**
- ✦ **VOC (Volatile Organic Compound)**

### **2016 against 1997**

<b>Vehicle Kilometre Travelled (VKT)</b>	<b>82 % Increase</b>
<b>NO<sub>2</sub></b>	<b>46 % Increase</b>
<b>RSP</b>	<b>34 % Increase</b>
<b>VOC</b>	<b>52 % Increase</b>

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### **CTS-3's Findings**

- ✍ **Environmental impacts of vehicle emissions will remain to be a concern**
- ✍ **Control measures are being implemented**
- ✍ **Further improvement measures need to be studied**
- ✍ **Study assumptions and environmental performance of transport strategy to be monitored**

## **A Transport Strategy for the Future**

**To provide a safe, efficient and reliable transport system to meet the economic, social and recreational needs of the community in an environmentally acceptable manner.**

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## **An Alternative Transport Strategy – Environmental Considerations**

✍ **Integration of transport and land use planning**

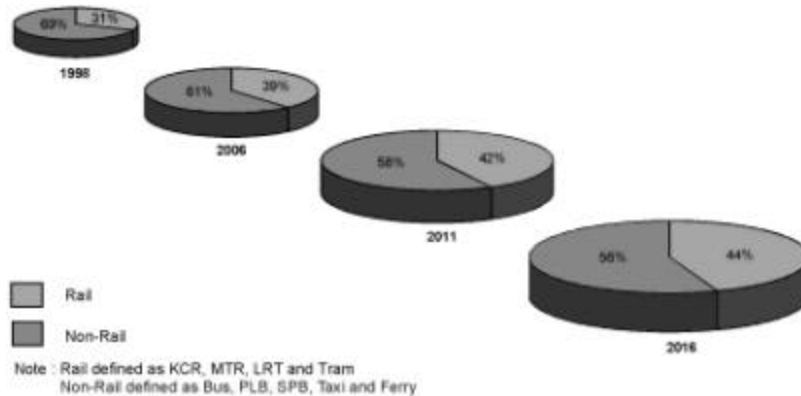
### **Integration of transport and land use planning**

- ✍ **Siting developments within easy pedestrian reach of rail stations**
- ✍ **Pedestrianising of roads and grade-separated walkways**
- ✍ **Encouraging non-polluting travel such as walking and cycling**
- ✍ **Devising plans to cope with increase in cross-boundary traffic**

### **An Alternative Transport Strategy – Environmental Considerations**

- ✍ **Integration of transport and land use planning**
- ✍ **Use of railways as backbone for future passenger transport system**

## Use of railways as backbone for future passenger transport system



In terms of patronage, railways are forecast to handle about 40% to 50% of the total public transport passenger boarding by 2016, increasing from 33% in 1997.

## An Alternative Transport Strategy – Environmental Considerations

- ✍ Integration of transport and land use planning
- ✍ Use of railways as backbone for future passenger transport system
- ✍ Public transport management

## **Public transport management**

- ⌘ **Scrap some 400 older pre-Euro buses and replace them with Euro II buses**
- ⌘ **Retrofit the remaining 1900 pre-Euro buses with diesel catalyst**
- ⌘ **Rationalise bus stops in busy areas to reduce stopping of buses**
- ⌘ **Deploy cleaner Euro II buses on routes operating along the congested traffic spots**
- ⌘ **Park-and-ride schemes**

## **An Alternative Transport Strategy – Environmental Considerations**

- ⌘ **Integration of transport and land use planning**
- ⌘ **Use of railways as backbone for future passenger transport system**
- ⌘ **Public transport management**
- ⌘ **Pedestrianisation**

## **Pedestrianisation**

### **Objectives of pedestrian schemes are: -**

- ✍ **to promote walking**
- ✍ **to improve overall pedestrian environment**
- ✍ **to reduce air pollution**

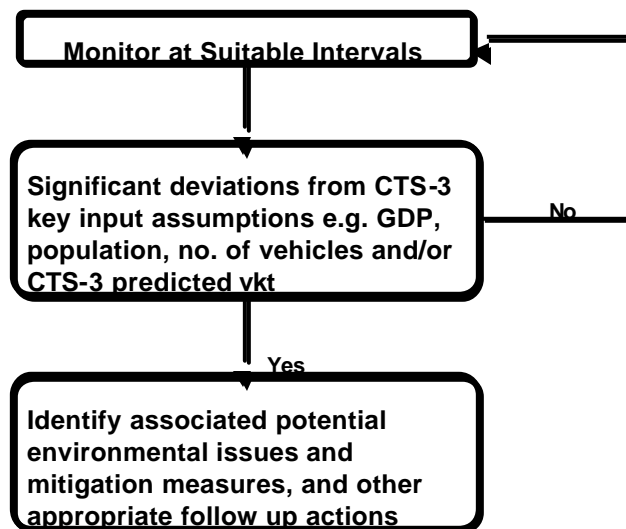
## **An Alternative Transport Strategy – Environmental Considerations**

- ✍ **Integration of transport and land use planning**
- ✍ **Use of railways as backbone for future passenger transport system**
- ✍ **Public transport management**
- ✍ **Pedestrianisation**
- ✍ **Use of alternative environmentally friendly vehicles and fuel**

### Use of alternative environmentally friendly vehicles and fuel

- ✦ **More stringent vehicle fuel standard**
- ✦ **More stringent emission controls**
- ✦ **Alternative fuel vehicles**
- ✦ **Retrofit in-use vehicles with diesel trap/catalyst**

### Strategic Environmental Monitoring and Assessment (SEM&A)



**Greater efforts will be needed to address the importance of an environmentally sustainable transport system for Hong Kong.**