LEGISLATIVE COUNCIL
PANEL ON TRANSPORT

Application of IT to Transport Management

Transport Bureau

16 March 2001

Objectives

❖ Present to Members findings of the ITS Strategy Review Study

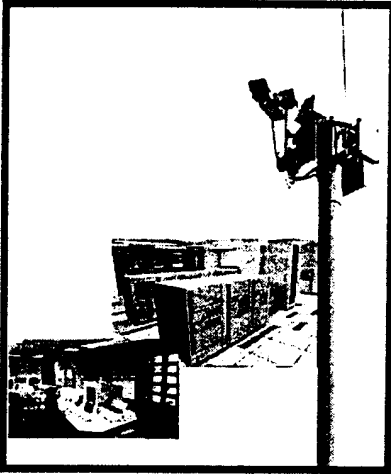❖ Seek Members' comments on the recommendations

Background

Intelligent Transport Systems (ITS)

* Deployment of advanced information and telecommunication technologies

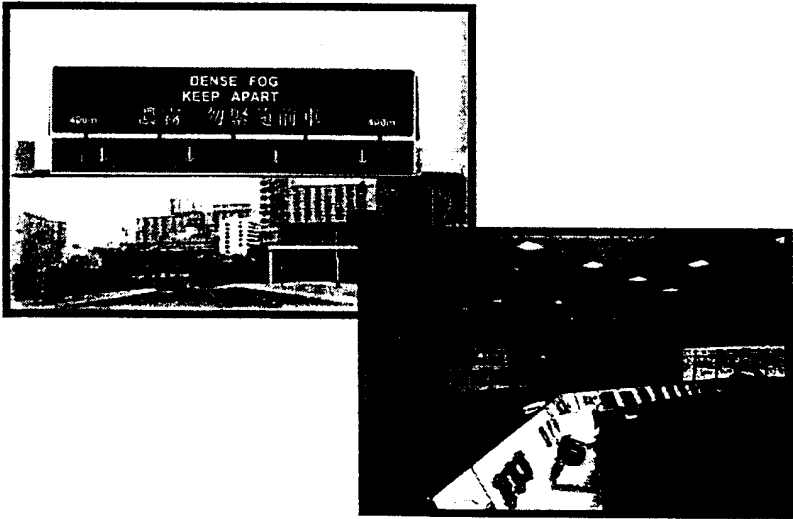* To enhance the safety, efficiency, reliability, user and environmental friendliness of the transport system

Existing Applications in HK

* Area Traffic Control
* Traffic Control and Surveillance
* Autotoll
* Octopus Card
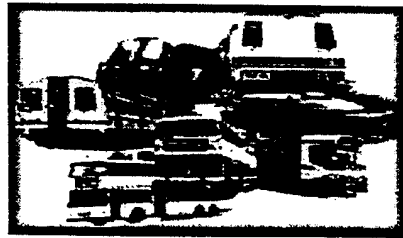* Electronic Parking Meter

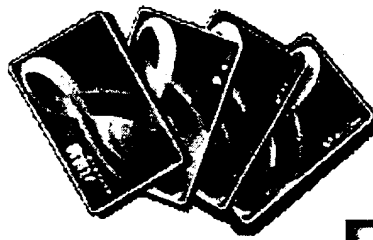# Area Traffic Control

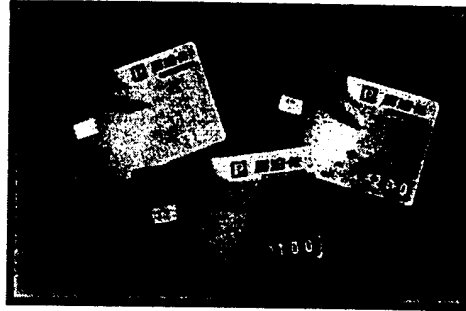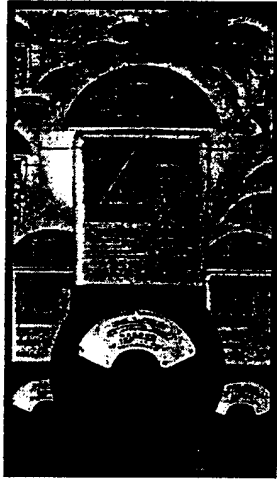# Traffic Control & Surveillance

Automatic Toll Collection

Octopus Card

Electronic Parking Meters

Existing Applications in HK

❖ Problem

– single-purpose systems, small scale

– not in line with present day ITS which emphasises on systems and functions (transport and non-transport) integration

Need for an ITS Strategy

❖ Better utilization of infrastructure
❖ More efficient traffic management
❖ Better interaction among people, roads and vehicles
❖ Enabling better and more informed choices

The ITS Strategy Review

❖ In-house study by Transport Department commenced in May 2000
❖ Develop a long-term ITS deployment plan
❖ Examine technical, administrative, and financial requirements
❖ Ensure compatible and coordinated systems
❖ Provide seamless integrated services

Findings & Recommendations

- ❖ Findings
  - Transport information not fully exploited
  - Unsatisfactory coordination in traffic management
- ❖ Recommendations
  - Transport Information System
  - Traffic Management Framework
  - Private sector participation

Transport Information System

- ❖ Central database for collecting, processing, analyzing and disseminating comprehensive transport information
- ❖ Real-time updating and sharing
- ❖ Users : motorists, passengers, pedestrians, government agencies, transport operators, third-party service providers
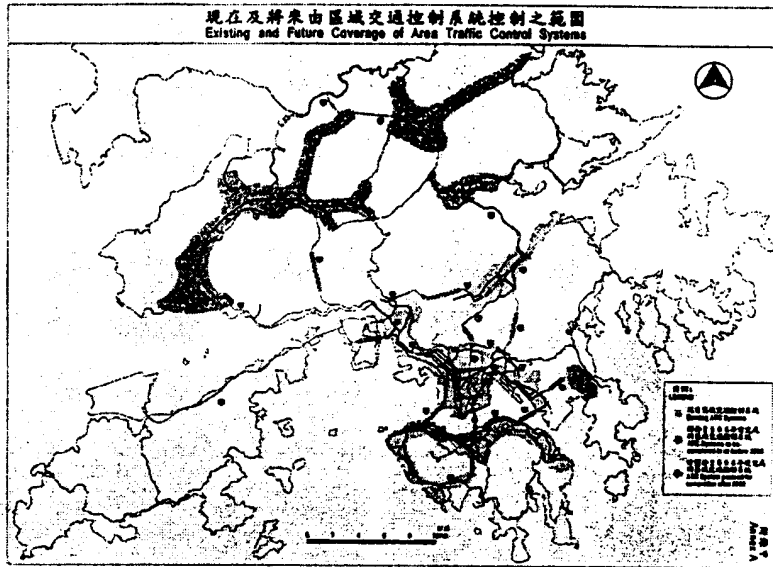- ❖ Public transport enquiry sub-system

Traffic Management Framework

❖ Present situation

- Existing ATC and TCS in limited areas and sections of expressways respectively

- Controlled by their respective control centres with limited linkage
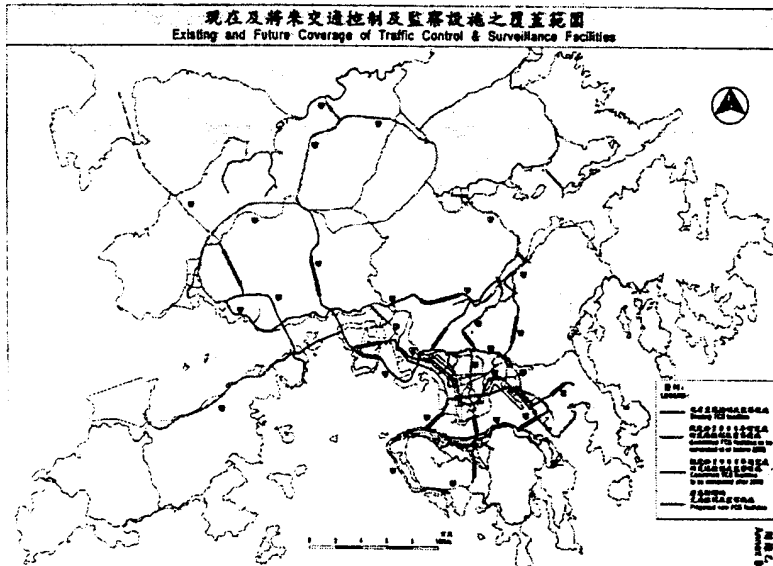
Traffic Management Framework

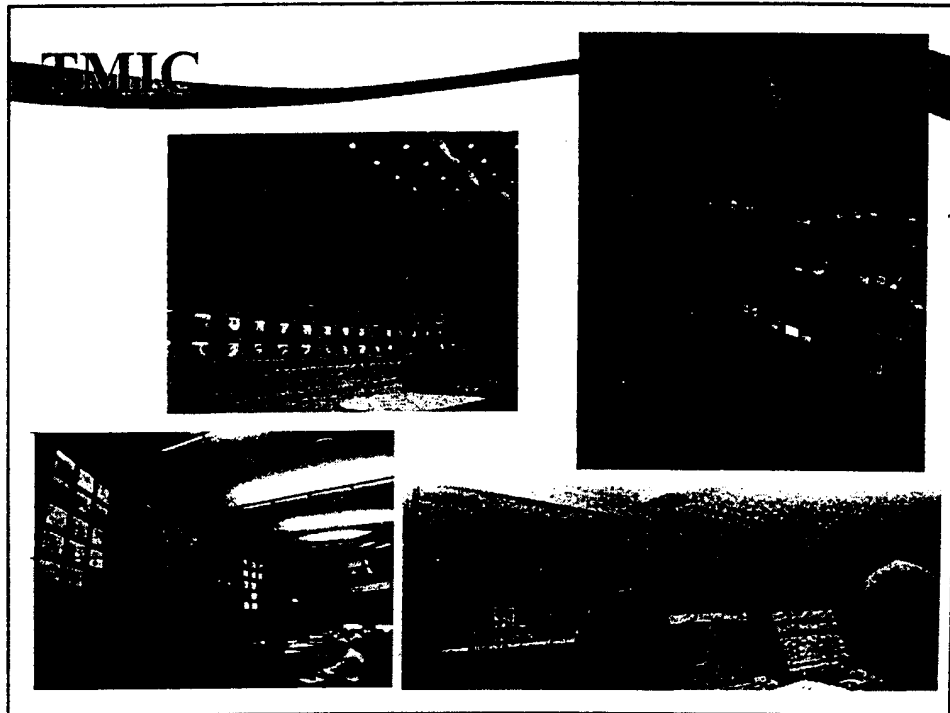❖ Recommendations

- Extend ATC to all New Towns

- Provide comprehensive TCS facilities on all existing and new expressways

- Establish the Traffic Management and Information Centre

ATC Areas

現在及將來由區域交通控制系統控制之範圍
Existing and Future Coverage of Area Traffic Control Systems

TCS Facilities

現在及將來交通控制及監察設施之覆蓋範圍
Existing and Future Coverage of Traffic Control & Surveillance Facilities

TMIC

Private Sector Initiatives

- ❖ TIS and TMIC to form part of transport infrastructure
- ❖ Facilitate commercial utilisation : car navigation, fleet management
- ❖ 3G mobile phone : personalised information service

The Benefits of ITS

* Increase road capacity by 20% ($30b)
* Reduce travel time by 20-40% ($14-28b/yr)
* Reduce fuel consumption & vehicle emissions
* Reduce accidents by 15% ($175m/yr)
* Reduce operating costs of commercial activities and increase productivity
* Alleviate pressure for new infrastructure
* Enhance HK's image as a leading international city

Resources Required

Item	Estimated Cost ($M)
TIS	64
ATC	610
TCS	2,219
TMIC	210
Others	135
Total	**3,238**

Creation of 1 CE and 1 CSM posts in TD

Implementation

	01	02	03	04	05	06	07	08	09	10
TIS		████	████		System Expansion & Enhancement					
ATC		████	████	████	████	TKO				
JTIS		████	Extension to Other Tunnels & Trunk Roads							
TCS		████	████	████	████	Extension to Other Sections				
TMIC			████	████	████	System Expansion & Enhancement				

THANK YOU
多謝各位