

**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

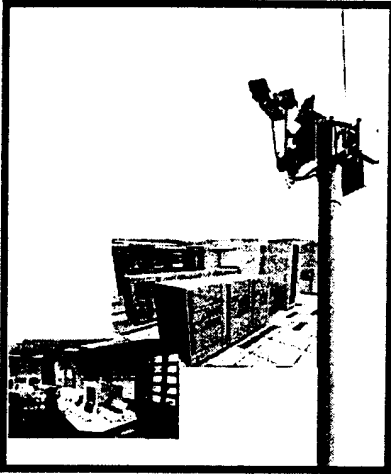
Intelligent Transport Systems (ITS)

- ❖ Deployment of advanced information and telecommunication technologies
- ❖ To enhance the safety, efficiency, reliability, user and environmental friendliness of the transport system

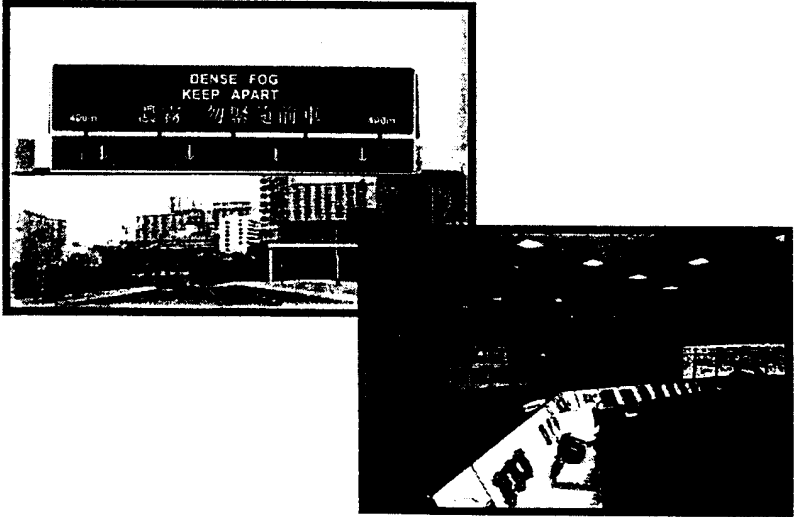
Existing Applications in HK

- ❖ Area Traffic Control
- ❖ Traffic Control and Surveillance
- ❖ Autotoll
- ❖ Octopus Card
- ❖ Electronic Parking Meter

Area Traffic Control



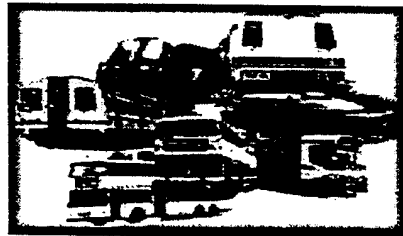
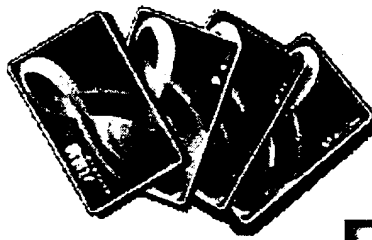
Traffic Control & Surveillance



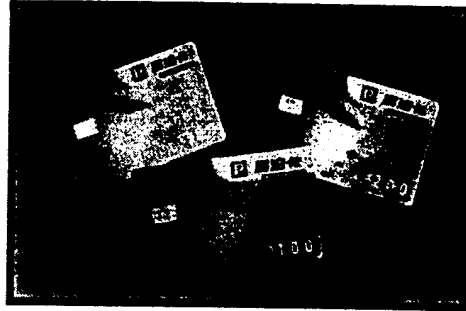
Automatic Toll Collection



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

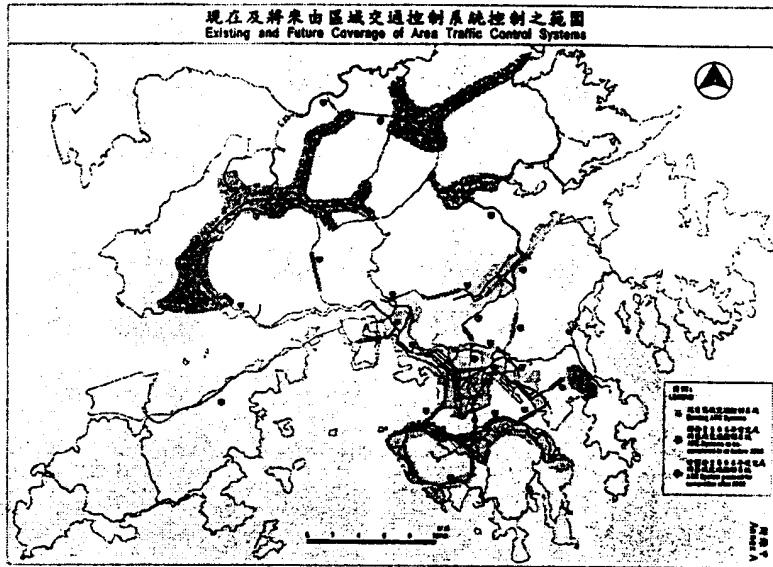
Traffic Management Framework

- ❖ Present situation
 - Existing ATC and TCS in limited areas and sections of expressways respectively
 - Controlled by their respective control centres with limited linkage

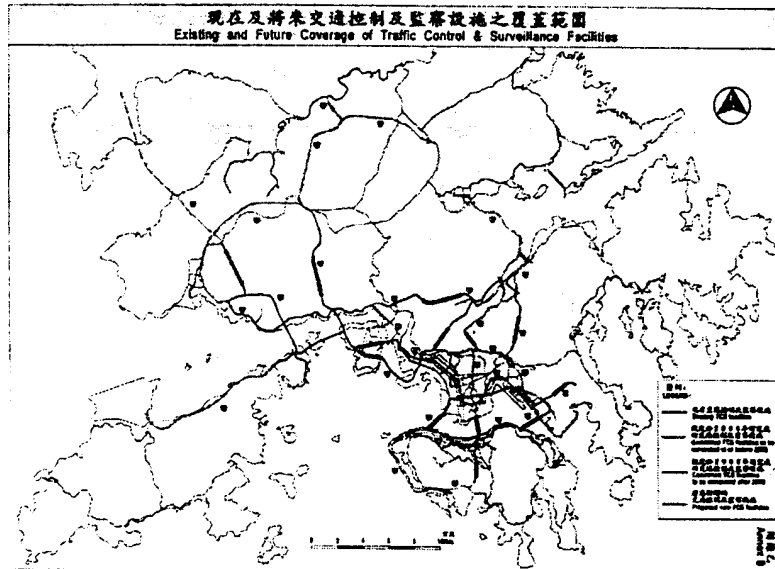
Traffic Management Framework

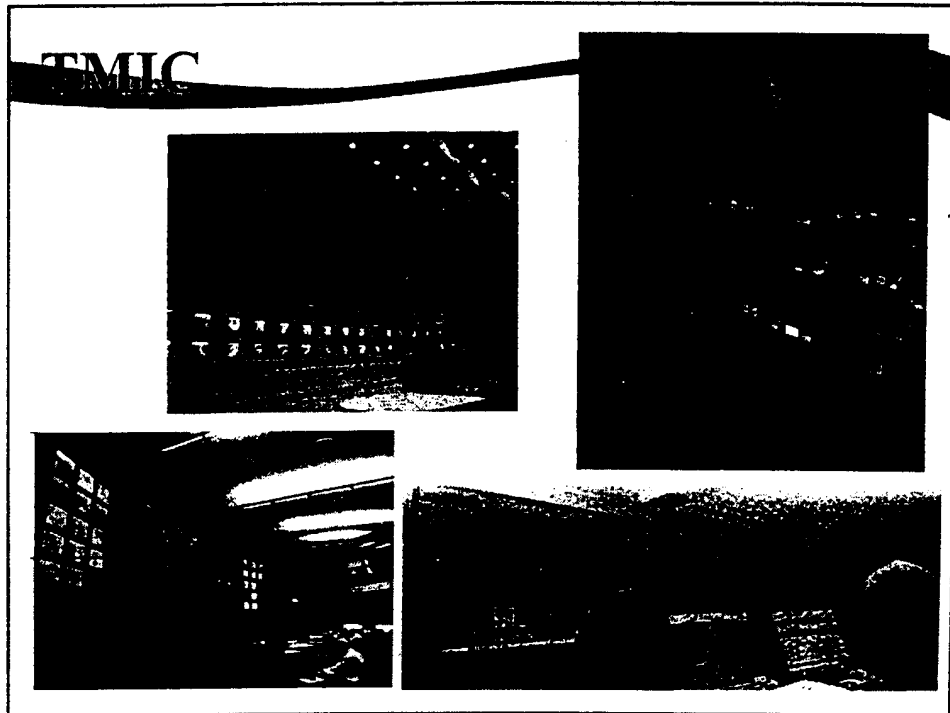
- ❖ Recommendations
 - Extend ATC to all New Towns
 - Provide comprehensive TCS facilities on all existing and new expressways
 - Establish the Traffic Management and Information Centre

ATC Areas



TCS Facilities





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		[REDACTED]			System Expansion & Enhancement						
ATC		[REDACTED]				TKO					
JTIS		[REDACTED]	Extension to Other Tunnels & Trunk Roads								
TCS		[REDACTED]				Extension to Other Sections					
TMIC		[REDACTED]				System Expansion & Enhancement					

THANK YOU

多謝各位