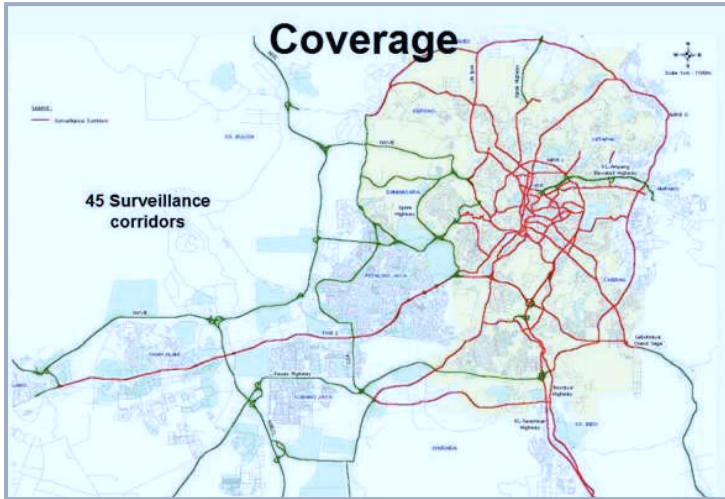


Integrated Transport Information System (ITIS) for Kuala Lumpur: The Clear Way To Go

By: Ir. Michael Yong



ITIS will cover 243 km² of Kuala Lumpur city and its surrounding area including 45 selected surveillance corridors

ITIS is an acronym for Integrated Transport Information System and with this new system road authorities would be able to provide the public with real-time information on the traffic conditions of our roads and highways so that we can have a “clear way to go.” On Tuesday, 7 December 2004, Mr. Lawrence Liew, Deputy Project Director of ITS Konsortium Sdn. Bhd. briefed an enthusiastic audience of 45 on the much awaited ITIS project for Kuala Lumpur.

Traffic congestion and unpredictable traffic conditions are an everyday experience for most motorists. This coupled with the lack of up-to-date information on road traffic conditions makes it difficult for motorists to plan their journey to avoid congestion. The need for an effective and sustainable means of managing the Klang Valley’s transport infrastructure has never been more pressing especially with the completion of the main road network in the Klang Valley, the rail transit systems and the planned amalgamation of the bus transportation system. Hence, ITIS was mooted to address these needs.

In March 2003, the City Hall of Kuala Lumpur launched ITIS. The system to be designed and built by ITS Konsortium Sdn. Bhd. was expected to take 2½ years to

complete, i.e. mid-2005.

In simple terms, ITIS uses the latest in information management technology to assist motorists in making the most appropriate decisions about their travel by gathering and sharing (with the motorist) accurate and

up-to-date information about road traffic conditions.

ITIS will be able to provide the public with real time information on:

- Areas of traffic congestion;
- Expected traveling time from one point to another;
- Cause of traffic congestion ;
- Alternative route to get to the next destination .

Essentially, ITIS has 2 main components:

- a) Advanced Traffic Management System (ATMS); and
- b) Advanced Traveller Information System (ATIS).

ATMS employs state-of-the-art software and a variety of equipment including detectors, closed circuit television (CCTV) cameras and communication systems to monitor traffic, optimise travel time and control the flow of traffic in and around the city centre.

Real time traffic information will be captured using the following:

• Closed Circuit Television (CCTV) Cameras

Known as the “eyes” of ITIS, they consist of about 255 cameras including

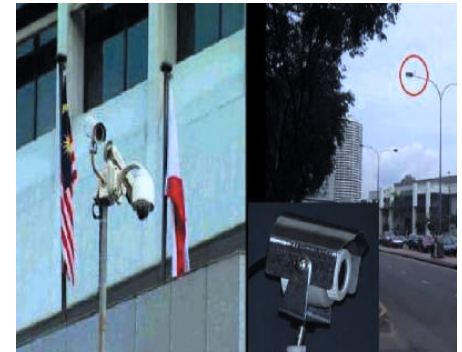
pan-tilt-zoom (PTZ) cameras mounted on poles up to a height of 15 metres along the roadside to capture the view of the traffic situation.

• Automatic Incident Detection Systems (AIDS)

Consists of 728 AID cameras using “machine vision” technology which



Scope of ITIS



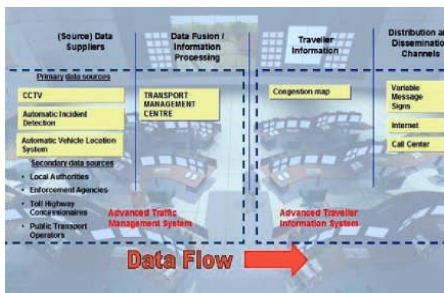
PTZ camera (left) and AID camera (right) strategically located on our roads and highways provide real-time information on the traffic conditions



AID cameras detect incidents and are confirmed by CCTVs



Public transport vehicles fitted with GPS provide travel time database



Data flow of the ITIS system

Advanced Traveller Information Services

- Internet
- Call Center
- Wireless Services (WAP)

Website provides graphical map of congestion status, and dynamically generates route guidance. Also provides updates and reports of incidents, work zones, lane or road closures.

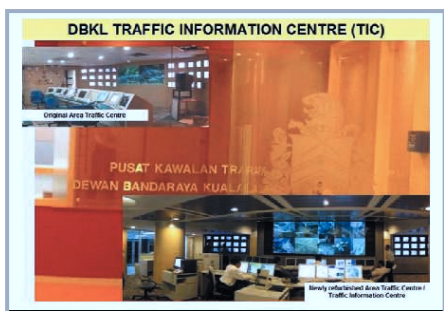
Public can call the center (voice or WAP) and receive general advisories including incidents, traffic disruptive events with or without operator assistance.

Serves as data center for other ISPs, ASPs, media, etc.

Traffic information will be available thru various channels



The hub of ITIS is the Transport Management Centre (TMC) and is located at Technology Park Malaysia



Traffic Information Centre (TIC) at DBKL

are capable of collecting data on travel speeds, volume counts and queue length, and incident alert for up to 8 lanes.

• **Automatic Vehicle Location Systems (AVLS)**

1600 public transport vehicles fitted with Global Positioning System (GPS) tracking devices that allows these vehicles to be tracked 24 hours a day provide rolling data points for the real time travel database.

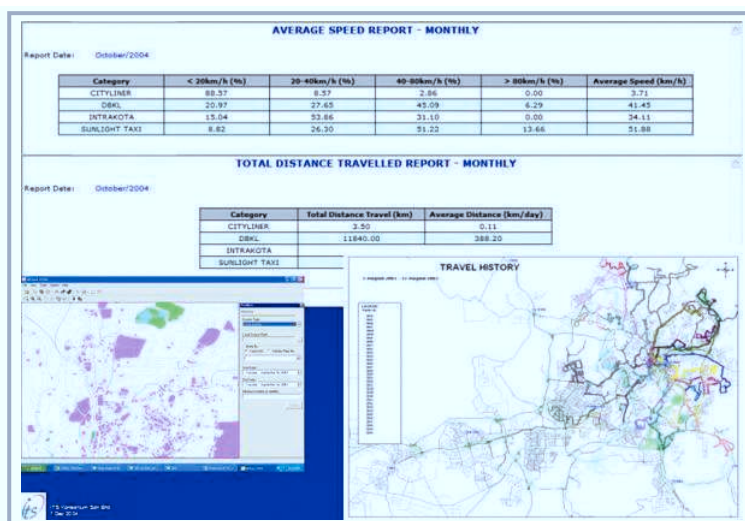
On the other hand, ATIS is the system that delivers real-time information about road traffic conditions to the public to assist them in making informed decisions on which route to take to reach their

and traffic disruptive events with or without operator assistance.

The soon to be completed Transport Management Centre (TMC) will be the nerve centre for communications and control. This 60,000 ft² facility will be equipped with secure high speed and high bandwidth communications infrastructure to receive, analyse and evaluate the information from ATMS and ATIS. TMC is also linked up to the Traffic Information Centre (TIC) in City Hall for back up in the event there is a technical breakdown.

The many benefits of ITIS include:

- Allows informed decisions to be made on travel, i.e. choice of routes, modes and schedules.
- Enables real-time capture of traffic



Average speed and distance traveled reports

destination. This information will be sent through various channels, which include the following:

- 140 Variable Message Sign (VMS) Boards
- ITIS Call Centre
- Internet
- Radio

ATMS collects real time information on road traffic conditions and this information is relayed to the Transport Management Centre (TMC) for analysis and evaluation. ATIS disseminates the required information to the public.

The public can call the ITIS Call Centre located in the Transport Management Centre (TMC) to obtain advisory information on incidents, congested roads

information for incident management and long-term transport planning.

- Alleviates traffic congestion and delays during rush hour periods and emergency situations.
- Reduces accidents, their severity and impact on the highway.
- Improves emergency assistance for motorists and commuters.
- Reduces travel time and promotes uniform traffic flow.
- Reduces pollution as a result of less idling in traffic.
- Improves utilisation of available capacity.
- Improves quality of life in the Klang Valley. ■

More information can be obtained from the ITIS website: <http://www.itis.com.my/>