

A Mobitex Success Story

Intelligent Traffic Systems

A watchful eye in Singapore

Imagine a world where traffic jams and accidents are monitored and warnings are posted on large signs. Imagine a city where you can plan your routes or times of departure simply by looking at a web site or at a WAP page on your wireless PDA. Imagine being able to obtain up-to-the minute and highly accurate traffic information right in your car.

Imagine a dynamic system for traffic light control that helps traffic flow more smoothly. These are all examples of the wireless transport system in Singapore today – and in the near future.

Many companies have already implemented wireless communication in their business with impressive results. When will your business join in and help to shape the new wireless world?

The challenge

The mission of the Land Transport Authority (LTA) is to provide Singaporeans with world-class ground transportation, which encompasses infrastructure for both private automobiles and public transportation. For

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decades, the LTA has been striving to provide highly efficient and cost-effective systems to solve the traffic problems all major modern cities are facing. LTA recognized that simply building a comprehensive network of roads and expressways is not enough in itself to ensure a smooth flow of traffic.



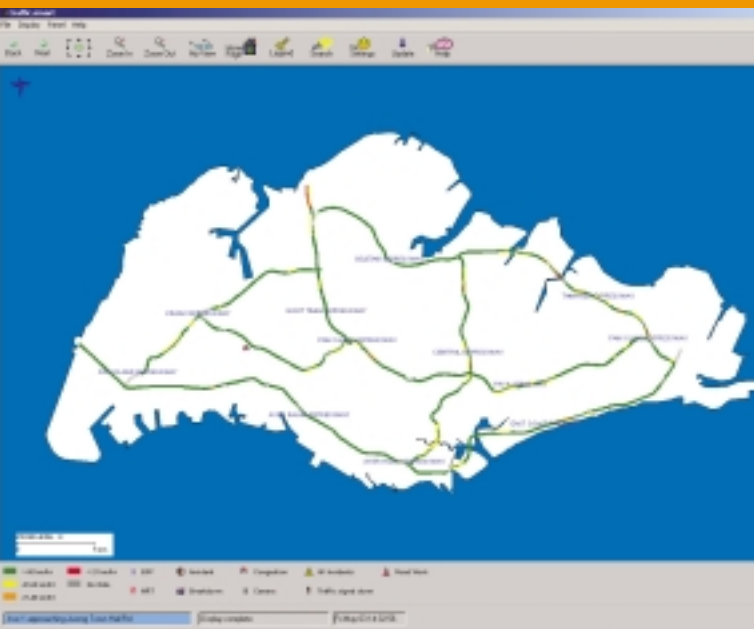
The solution

The intelligent transport system called TrafficScan, uses Mobitex and GPS technology to collect and disseminate traffic speeds on arterial roads throughout the island.

The system takes advantage of the natural circulation of some 8,000 taxicabs, already equipped with Mobitex terminals, in order to pinpoint traffic jams and alert motorists of delays. The application was developed in collaboration with the Singaporean Mobitex operator ST Mobile Data.

In addition to TrafficScan, the Expressway Monitoring and Advisory System (EMAS) also uses Mobitex wireless packet data technology to send messages to signs informing motorists of road incidents that can cause any major blockages. EMAS uses a series of high-tech cameras to detect accidents or other conditions that may hinder traffic flow.

LTA's intelligent traffic system also comprises other applications such as dynamic green light control and automatic wireless payment of road tolls. LTA provides a web site called Traffic Smart where all information about incidents and roadblocks are displayed.



The next step is to enable access to services on mobile devices such as interactive pagers, WAP phones or PDAs. This will allow motorists to obtain up-to-the minute and highly accurate traffic information in their cars, in addition to information about public transportation, directions to special attractions, shopping areas, etc.

While traffic authorities in many of the world's major cities are obsessed with building ring roads and adding expressway lanes, it should be noted that the technology used in Singapore can be deployed just about anywhere, with a price tag considerably below the cost of road building.

The benefits

- **Enables drivers to better plan their routes** or times of departure in order to avoid congested areas.
- **A more sophisticated monitoring** of the city-state's crowded roadways.
- **More frequent use of public transportation**, thanks to better traffic information and improved services.
- **Cost effective alternative** or complement to building ring roads and expressway lanes.
- **Up-to-the minute** and highly accurate traffic information for car drivers.
- **Improved traffic conditions** resulted in greater willingness to pay road tolls.
- **Less accidents** as drivers are aware of traffic jams and road blocks.
- **Increased accessibility** on Singapore's roadways.
- **Improved air quality** and reduced emissions by limiting the amount of time that cars are at a standstill or crawling at slow speed with their engines running.

Why Mobitex?

LTA chose ST Mobile Data's Mobitex network as wireless carrier because of its industry-leading performance in terms of very high availability, high capacity also during peak hours, reliability with no loss of data, connectivity and cost-efficiency.

It is the full coverage that enables ST Mobile Data to provide innovative applications that can be used nationwide. The ST Mobile Data network has among the highest per-node traffic rates in the world.

Facts about Mobitex

Mobitex from Ericsson is an open and international standard for wireless packet-data communications. With more than 30 networks in operation on six continents, Mobitex is the most widespread dedicated wireless data technology in the world.

Based on state-of-the-art packet switching and routing technology from Ericsson, Mobitex offers the most reliable and robust wireless data technology available today, delivering industry-leading performance in terms of capacity, connectivity and cost-efficiency.

These features, along with an open specification available to all, has made Mobitex the preferred choice by the leaders in wireless communication and mobile computing, attracting top names like Palm, RIM, Panasonic, Compaq and Microsoft.

Over the past three years, the number of Mobitex subscribers around the world has grown sevenfold, and the number of Mobitex networks have increased by ten. Today there are more than hundreds of applications available to meet every customer need.

The next step is to enable access to services on mobile devices, giving motorists up-to-the minute information on traffic conditions, nearby attractions and shopping areas

This success story is intended to provide inspiration and to give you an idea of how innovative services and solutions are enabled by Mobitex.