NEWS RELEASES

LTA Employs Innovation in Traffic Forecasting

Traffic Prediction Tool

1.   Motorists can look forward to more reliable traffic advisory information in the future, thanks to the Traffic Prediction Tool (TPT). TPT is a technological tool currently used by the Land Transport Authority (LTA) to anticipate and manage traffic flow so as to minimise traffic congestion.

2.   The LTA has been working closely with IBM since 2006 to develop the TPT for local conditions. A patent-pending technology, the TPT can currently achieve up to 85% accuracy in predicting traffic volume and speed 10 minutes ahead, based on the work done in an earlier phase involving roads in the Central Business District from December 2006 to April 2007.

3.   TPT predicts traffic speeds and flow using advanced statistical techniques. It relies on both real-time and historical data to generate its predictions.

4.   Presently, data on the traffic volume and speed is collected and fed to the TPT through other Intelligent Transport Systems such as the EMAS, GLIDE, J- Eyes and Traffic Scan.

5.   Phase 1 of TPT has already been completed. Subsequent phases will involve more research and development to improve TPT's prediction, particularly for roads where coverage by sensors are less comprehensive, and hence, traffic data is still being obtained.

6.   The TPT is part of LTA's wider effort to employ innovation not just to improve its traffic management capabilities but also to enhance its business processes and customer satisfaction.

Traffic Information Platform

7.   Another innovation that LTA initiated is the Traffic Information Platform (TRIP). Developed in collaboration with Quantum Inventions Pte Ltd (QI), TRIP facilitates dynamic navigation applications which enable motorists to receive real-time traffic information via portable/in-vehicle navigation devices or mobile phones, in addition to the internet.

8.   Based on motorists' travel preferences, these applications will guide them on the most appropriate routes as they travel on the road. Some of these preferences include advice on faster or cheaper routes. The dynamic navigation applications were recently featured during the international Intelligent Transport Systems Asia Pacific Forum held at Suntec City in July this year. LTA & QI are working together to offer commercial services by the end of the year.

Glossary of Terms:

Expressway Monitoring and Advisory System (EMAS) - Performs live video traffic surveillance, incident detection and traffic advisory functions. It can prompt activation of vehicle recovery crews and other emergency response agencies such as Traffic Police. It also informs motorists of current traffic conditions through strategically placed electronic signboards and electronic broadcasts.

Green Link Determining System (GLIDE) - Co-ordinates and optimises the traffic light signals to minimise delay to motorists at signalised junctions.

Junction Electronic Eyes (J-eyes) - A system of surveillance cameras at signalised junctions to help traffic operators spot and rectify causes of traffic congestion.

Enhanced TrafficScan - A system that collects traffic speeds on major arterial roads through the use of GPS-equipped taxis.

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