Motorists may soon have an easier time on the roads with new navigation systems being able to tell drivers where traffic jams are.

This together with the possibility of having traffic lights being smart enough to automatically adjust their frequencies based on traffic conditions are some of the cutting edge technologies being developed.

The Land Transportation Authority has inked deals with five local academic and research institutions to improve the quality of commuting across the island.

The smart traffic lights and value-added navigation systems are just two projects that the LTA is currently developing with one of its partners, the National University of Singapore.

Associate Professor Lee Der-Horng is from the NUS' Department of Civil Engineering.

He says, they have also completed the world's first risk assessment system of road tunnels in June this year.

"It's a software to enhance the planning of the tunnel, and also most importantly to enhance the driving safety in the tunnels. Especially now, we have the KPE, which the longest road tunnel network in Southeast Asia."

The system will be useful in planning the location of escape routes and their distances during a possible evacuation.

"It has received some very good feedback from LTA as well as from our transportation community in the international arena."

These include agencies from countries such as Switzerland, and the Netherlands.

The LTA is also working with the Singapore Management University to build a model helping cabbies decide whether to join the queue at high passenger volume taxi stands.

This will help cabbies better serve their passengers without wasting their own resources waiting in line.

The LTA's three other partners are: A-star, the NUS Institute of Systems Science and Nanyang Technological University.

The LTA also launched today a new platform allowing you to access public transportation information via your mobile phones and PDAs.

The Authority's Chief Executive, Yam Ah Mee with more on the mobile version of its existing PublicTransport@SG online portal.

"Our aim is to put the top three most popular features of the PublicTransport@SG portal on the mobile. It is another way to convenience all our commuters to make it more used friendly for all our commuters. And therefore, further encourage travel on public transport."

The features include information on real-time bus arrivals as well as maps showing both the MRT and LRT rail systems.