Question on Notice

No. 131

Asked on Thursday, 6 March 2014

DR FLEGG asked the Minister for Transport and Main Roads (MR EMERSON) —

QUESTION:

Will the Minister advise if any research had been done in regard to measures that may improve traffic flow on main roads during congested periods and in particular, the likely effects if 'keep left unless overtaking' rules were enforced?

ANSWER:

I thank the Member for Moggill for the question.

The Department of Transport and Main Roads (TMR) has an ongoing commitment to researching ways in which traffic flow can be improved. A primary resource for this research is accessed through TMRs' long standing commitment to the national association of road authorities, Austroads, and its ongoing program of research.

Congestion is generally a result of either recurrent causes such as bottlenecks (where traffic demand exceeds available road capacity) or non-recurrent events such as traffic incidents or roadworks.

To address congestion, Queensland has been an early supporter of the emerging national research into managed motorways. At the core of managed motorways is TMRs' STREAMS traffic management system. The traffic management system uses sophisticated algorithms to analyse real-time traffic data and predict traffic congestion. Managed motorways include a range of traffic flow treatments, such as:

- Ramp signalling - If an on ramp on a motorway is experiencing large volumes of traffic, the system will communicate with nearby motorway on ramps and request that the ramp traffic signal timings be adjusted to reduce traffic flow onto the motorway. This allows the congested on ramp to clear and motorway traffic to continue to flow. Once the congested on ramp has recovered, traffic signals will automatically adjust and allow traffic to flow, maximising volume on the motorway.
- Variable speed limits – If there is an incident that causes queuing on the motorway, variable speed limits can be used to safely ease drivers into the back of a queue, reducing the risk of an additional incident. Similarly, if there is a major weather event, such as heavy rain, variable speed limits can be used to moderate the speed of drivers, reducing the risk of an incident.
- Lane use control – If there is an incident, lane control can be used to provide emergency services with faster access to and safer conditions at the incident site. Lane use signs also provide drivers with information regarding the impacted lane(s), allowing the driver to merge in advance of the incident site.

The key benefits of managed motorways for motorists include:

- reduced congestion and less stop-start travel
- more reliable journey times
- improved motorway capacity
- reduced incidents and reduced emissions.

TMR is committed to rolling out managed motorways technologies across south east Queensland on all new motorway projects.

TMRs' traffic management system also has mathematical algorithms built-in to provide for better traffic signal co-ordination on arterial roads. The latest research development now provides special priority for emergency vehicles. This life saving technology was first deployed in November 2012 to the Southport area and has reduced travel times for ambulances and fire engines by up to 20 per cent, with minimal impact on other general traffic.

In response to traffic incidents and non-recurrent congestion on the road network, TMR works closely with the emergency responders and its service providers to minimise detection, response and clearance times. As a result of national research, initiatives such as quick clearance and coordinated incident response plans have been progressed through TMRs' traffic management centres.

The "keep left unless overtaking" road rule (Rule 130) does not apply when traffic in other lanes is congested. This is because enforcement of the rule would in fact worsen congestion during these periods. During lower traffic flow periods when the rule is enforced, enforcement is unlikely to improve traffic flow, but does however assist in reducing driver frustration and aggression.

I would like to thank the Member for Moggill for his interest in improving traffic flow and how TMR is applying the latest research to minimise the impacts of congestion and improve reliability of our major roads for the community.