

23 February 2010

---

## New Lane Control Signs - SH1 in Wellington

---

### Background

- Around 85,000<sup>1</sup> vehicles per day (vpd) travel on SH1 between Ngauranga Interchange and the Terrace Tunnel
- Around 42,000<sup>2</sup> vpd use SH2 between Petone and Ngauranga interchanges
- Congestion is common, particularly during am and pm peaks, and on the approaches to the Terrace Tunnel
- Merging and weaving occurs around the interchanges in particular, and is associated with increased accident risk
- 50% of recorded crashes<sup>3</sup> are rear end incidents; typically associated with queuing
- A significant proportion of crashes are secondary accidents, where a vehicle crashes into another vehicle already slowed or stopped by a previous incident, or where drivers are distracted while observing another incident

### The signs

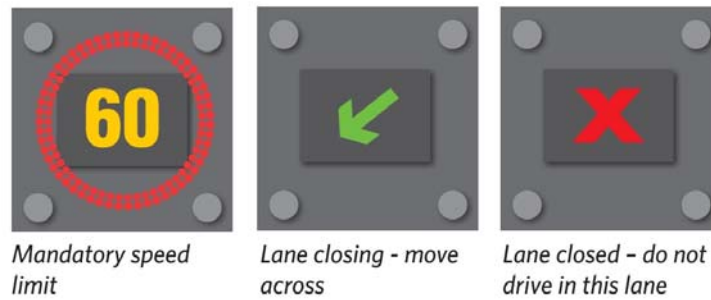
- The 'Lane Control Signs,' will operate from early March on SH1 between the Terrace Tunnel in Wellington city centre and Ngauranga Interchange – see Lane Control Signs map
- The signs are part of an Advanced Traffic Management System (ATMS) system, installed as part of the \$10 million Petone to Terrace Tunnel Traveller Information project that extends to SH2 at Petone and includes a fibre optic network and CCTV cameras monitoring conditions on the region's motorways
- As well as the cameras, electronic loops underneath the road and radar devices measure and monitor traffic flow and volume and will enable the signs to be adjusted to maximise flow and manage incidents
- Included in the roll out of the new technology are 27 sets of new Lane Controls Signs – electronic signs mounted on gantries over the motorway
- Lane Control Signs inform drivers of speed limit changes and lane closures ahead. A typical display is shown overleaf:

---

<sup>1</sup> Transit New Zealand Traffic Data Book 2008

<sup>2</sup> Transit New Zealand Traffic Data Book 2008

<sup>3</sup> According to 2003 – 2008 accident rate data



- Available to operate 24 hours, 7 days a week, the signs will only be switched on when they are needed. Flashing orange lights on the corners of each sign show that the signs are turned on and attract the attention of motorists
- Obeying lane control signs is mandatory and legally enforceable.
- Six new Variable Message Signs (VMS) will also be turned on to display short strands of text to inform and advise drivers about incidents, queues, traffic and weather conditions. Examples of messages include *slow down*, *lane 3 blocked*, *incident ahead* and *poor visibility*
- A typical message sign is shown below:



- A fibre optic network of cameras and a team of traffic experts based at the NZTA's Wellington Traffic Operations Centre manage the system
- Cameras enable the traffic managers to monitor conditions and respond quickly

### Benefits

- Improved traffic flow and safety as motorists receive relevant and quality information where and when they need it most
- Ability to temporarily adjust the speed limit to the conditions
- Faster response to incidents
- Safer access to crash sites for emergency services and clearing of debris
- Early and accurate alerts to warn drivers about road conditions and hazards
- Safety warnings when crashes occur to protect the end of queues, and avoid further secondary crashes
- More rapid identification of incidents through CCTV monitoring

- Providing of alternative route information to motorists in time for them to make informed choices about using diversions or deferring journeys to another time

### **Performance**

- Lane control signs are already being used successfully in Auckland and overseas
- Signs lead to less congestion and pollutant emissions through reduced idling