



**Austroads**



Austroads Technology Program  
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Judge Ian Gray  
State Coroner  
Level 11, 222 Exhibition St  
MELBOURNE VICTORIA 3000

Dear Judge Gray

**INQUEST INTO THE DEATHS OF GEOFFREY KENNARD, DARREN SPORN AND DAMIAN McDONALD (your references 1127/07, 1126/07, 1129/07 and 1128/07.**

In regards to the above inquest, although several of the findings by Judge Jennifer Coate were directed to VicRoads, the Austroads Tunnel Task Force (ATTF) has considered those recommendations required to be referred by VicRoads to Austroads.

From the outset, it should be noted that the Austroads Guide to Road Tunnels is not a mandatory standard but is written to provide guidance only in the planning, design, operation and maintenance of road tunnels.

As background, the ATTF consists of jurisdictional representatives from Australia and New Zealand, as well as the Australasian Tunnelling Society (ATS; an association of Design Consulting Engineers) and the Australian Tunnel Operators Group (ATOG: an association of tunnel operators).

Specific comments on the recommendations are provided below:

*Recommendation 2: 'That VicRoads reconsider and request Austroads to re-consider its position on banning lane changing in all future road tunnels to minimise the possibility of collisions as a result of lane changing in tunnels.'*

In discussing the matter of lane changing, ATTF identified the following design, operating and enforcement issues:

- Tunnel entry and exit options are constrained by feeder roads leading to a tunnel. These constraints may require entry from the left or right lane and then the need to cross over to right and left lane respectively for exit.
- Tunnel operators cited the example of a vehicle broken down in a tunnel and the need for traffic to go-around the broken down vehicle. While this was the situation in the Burnley tunnel, the adoption of a no-changing-of-lanes in tunnel regulation will require the tunnel operators to hold traffic until appropriate incident management actions can be put in place. In heavily used tunnels, such as the Sydney Harbour tunnel, Sydney M5 East, and the Burnley tunnel, these time delays may not be acceptable by the community
- The need to go around a particularly slow moving vehicle. In this situation it would be difficult to prevent vehicles from changing lanes.
- Finally, it was considered that the monitoring and enforcement of any regulation prohibiting the changing of lanes would be difficult to enforce.

In summary, ATTF considered that the recommendation to prevent lane changing had a number of design, operational and enforcement constraints and would be difficult to achieve. ATTF did consider that techniques employed since the Burnley Tunnel incident to discourage lane changing, which include overhead messaging, long-line striping between lanes and signing in advance of tunnels to encourage motorists to enter the tunnels in the correct lane have all contributed to a reduction in the frequency of lane changing.

*Recommendation 8: That VicRoads requests Austroads to consider incorporating into its current Guide to Road Tunnels the best and most up to date information as to the design of road tunnels to assist drivers to maintain safe speeds and vehicle separation.*

The Guide currently provides for Variable Message Signs, Variable Speed Limit Signs, and overhead red/green signals to indicate lane availability or closure. These have been adopted in all most recently commissioned tunnels.

Tunnel design standards and speed limits have been developed to assist drivers maintain safe speeds. Vehicle separation is a more difficult matter to enforce but it was considered that the operational protocols to advise motorists about upcoming driving conditions in tunnels including overhead messages such as 'maintain safe braking distance' are directed towards achieving effective vehicle separation.

Thank you for this opportunity to provide comment on the Coroner's recommendations.

Yours sincerely



**Chris Harrison**  
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CC: Murray Kidnie – Chief Executive, Austroads Ltd  
David Francis – Manager, Austroads Program Support

Date: 28 June 2013

File: Tunnel Task Force (General Correspondence)