

WESTERN AUSTRALIAN BRIDGES

669. Hon BARRY HOUSE to the parliamentary secretary representing the Minister for Planning and Infrastructure:

- (1) How many bridges in Western Australia do not meet the requirements for shear capacity given in the Australian standards?
- (2) Which ones are they?
- (3) What work is currently being done on each of these bridges to address their deficiencies?
- (4) What is the expected cost of fixing the bridges listed in (2)?
- (5) How much has been committed to funding this in the 2006-07 budget?
- (6) What funding does the government invest in researching technology to fix or maintain bridges in Western Australia?

Hon ADELE FARINA replied:

I thank the member for some notice of this question.

- (1) The current Australian standard for bridges with increased vehicle design loads was initially adopted in Western Australia as an interim standard in 1999. The previous standard was in place from 1976 to 1999. Bridges designed and built since 1999 would conform to the current standard. Records indicate that, of the 1 860 bridges on the Main Roads and local government road network, approximately 153 have been designed and built since 1999. Main Roads is responsible for the assessment and posting of any load limits on all bridges on public roads. Main Roads undertakes regular monitoring of bridge structures to ensure that an appropriate level of safety is maintained for all road users. Factors such as the type of vehicles using the route are major considerations and load restrictions are imposed where considered necessary. Where these structures are not used by the type of heavy vehicles the current standard is designed to accommodate, there is no justification to raise them to that standard.
- (2)-(5) As indicated in (1), numerous bridges were constructed before the current standard was adopted. However, this does not mean they are deficient for the purpose they provide. The need to strengthen any particular bridge is assessed on a number of criteria, including the nature of traffic it carries and its structural condition. If there are any particular bridges that may be of concern to the member, I would be happy to ask Main Roads to investigate and provide details to the member.
- (6) Main Roads has a number of technical and engineering staff involved in a range of activities directly related to bridge design, inspection, assessment and maintenance, and liaising with other state road authorities and overseas authorities on an ongoing basis on bridge technologies and research. These activities are funded through various components of Main Roads' annual budget allocation. Specific recent and current activities include a number of projects to assist in the effective management of bridge assets; contract to assess the performance of a number of bridges in the Kimberley region and to purchase and trial new inspection equipment; and ongoing research and assessment of a new strengthening option for longitudinal shear in pre-cast beam and slab bridges. Based on the outcome of this project, it is planned to develop a special strengthening program for selected bridges of this type. One of Main Roads' larger recent research projects involved the test loading of a flat slab bridge near Baandee Lakes. The result of this testing enabled Main Roads to re-evaluate and increase the safe load rating capacities for punching shear and slab shear for flat slab bridges.