



Perth's Farmer Freeway and Induced Traffic

Perth's most recent largescale highway project, the \$600 million Graham Farmer Freeway, provides an ability to examine the principle of induced traffic in the Perth metropolitan region.

Whenever new road infrastructure is constructed, changes in travel behaviour occur in response to that increase in road capacity. Some of these changes in behaviour induce new travel, ie. completely new trips that did not occur previously and longer trips or additional mileage for trips that already occur.

In an attempt to gauge the traffic impact of the freeway opening three road crossings over the Swan River that lead into the Perth CBD from the east were assessed for average daily traffic volumes before and after the opening of the Graham Farmer Freeway. They were the Causeway, the Graham Farmer Freeway and Garratt Road Bridge. The table below provides traffic figures for these crossings over three years.

| | 1998/99 | Sep-00 | Mid 2001 | 2002 |
|---|---------------|---------------|---------------|---------------|
| Causeway (daily average) | 107712 | 73032 | 57000 | 59200 |
| Farmer Tunnel (daily) | | 67590 | 80000 | 80000 |
| Garratt Rd Bridge (daily) | 27080 | 25270 | 18400 | 18870 |
| Totals (daily) | 134792 | 165892 | 155400 | 158070 |
| Daily Extra Vehicles (based on pre-tunnel traffic) | | 31100 | 20608 | 23278 |
| Percentage Increase (based on pre-tunnel traffic) | | 23% | 15% | 17% |

Based on WA Parliamentary Hansard:

Question on Notice 209, October 2002

Question on Notice 725, June 2003

Question on Notice 951, June 2003

Question on Notice 1049, August 2003

From the above figures, particularly the totals, it can be clearly seen that the opening of the Farmer Freeway (April 2000) led to a massive increase in daily vehicle use either to access the Perth CBD or to move through the Perth CBD to other destinations from access points to the east of Perth. (1)

In the first five months of opening the new freeway caused a 23% increase in traffic moving along the eastern access points. However, 18 months after the opening of the freeway traffic volumes declined but were still 15% above pre-freeway traffic levels or around an extra 20 000 vehicles per day.

The dramatic increase in traffic volumes in the first six months of opening followed by the decline may have something to do with the perceived novelty factor of driving through a 'tunnel' or covered trench. After the novelty experience period the induced traffic volumes displayed a more expected pattern. Under the current transport regime, (use of 'predict and provide' traffic policies, limited incentives to use alternative transport and a massive bias to road funding), traffic increase per annum is around 2%.

Main Roads WA engineers and 'planners' refuse to acknowledge the principle of induced traffic. This problem was quickly exposed when major traffic problems occurred not long after the opening of the Farmer Freeway. Urgent road works were needed on roads linked to the freeway in Belmont (Southern Gazette, May 15, 2001, p1) and Maylands (Minister for Planning and Infrastructure media release 12/06/2001). The residential street, Orrong Road, became the main feeder for the Freeway. Despite Main Roads' claim that Orrong Road could handle the increase in traffic, modifications had to be carried out along Orrong Road 18 months after the opening of the Freeway (Parliamentary Question on Notice 242, November 2002. WA Hansard). The increase in traffic along Orrong Road due to the opening of the Freeway was in the order of 42% by 2003, (Parliamentary Question on Notice 242, November 2002. WA Hansard).

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(1) We have included Garratt Road Bridge in our analysis to cover all sources. We expect that the Freeway plays a lesser roll on traffic on this bridge than we have allowed. If this is the case it would worsen the level of induced traffic caused by the opening of the freeway.

Further traffic counts, especially along Great Eastern Highway between Garratt Road Bridge and the Farmer Freeway, will help clarify the extent of the impact the freeway has had on reducing traffic on Garratt Road Bridge or whether other factors eg, Tonkin Highway, are playing a part.