



caring about you & your environment

Report 02.675

7 November 2002

File: TP/5/3/2

[02.675_awb]

Report to the Regional Land Transport Committee
From Tony Brennand, Manager, Transport Policy

Traffic Growth In Wellington And Its Health Effects

1. Purpose

To respond to issues arising from a report to the Committee at its May 2002 meeting.

2. Background

At its meeting of 30 May 2002 the Committee received a report titled "Vehicle Air Pollution In Wellington And Its Health Effects". That report made the point that even if we were successful in implementing a range of policy measures such as encouraging walking, cycling, public transport use, carsharing, teleworking, improved vehicle technology and other measures this would not be enough. The magnitude and relentless nature of traffic growth would soon swamp the benefits obtained by these measures and air quality would continue to deteriorate. The report then went onto make a number of recommendations, some of which promoted the need to actively develop traffic restraint measures.

Recommendations 3, 4, and 5 from the May 2002 report are reproduced below:

- “3. *That the Committee recognise that a long term solution to motor vehicle induced air quality problems requires measures to deal with the underlying growth in car ownership in this country and that Government be approached to develop a strategy to deal with this issue.*
4. *That the Regional Land Transport Committee continue its investigations into road pricing and parking restraint.*
5. *That the Committee seek to develop policies and measures that encourage organisations within the Wellington region to review the practice of providing motor vehicles as part of staff remuneration packages.”*

As a result of that meeting two actions were requested. These were:

- to provide a report on traffic growth in the region and examine its relationship to underlying car ownership.
- to write to the Government and the New Zealand Refining Company Limited to seek clarification of their respective programmes on improving diesel fuel specifications.

3. Comment

3.1 Traffic growth and vehicle ownership

The September 2002 Annual Report on the Regional Land Transport reports that the annual average daily traffic growth on a collection of representative state highway locations has been 17 percent over the 1996 to 2001 period. Over the same period the growth in the usually resident population in the Wellington region was 2.3% and the growth in economic activity is just under 17%.

There are many reasons for this growth. Clearly the average per capita number of car trips is increasing in the Wellington region. This is a global trend and reflects the growing number of activities in the lives of people today and the increased complexity of modern lifestyles. Restructuring of employment which has seen a growing number of part time jobs has also been a contributing factor.

The following diagrams show the trends in vehicle ownership in the region (excluding Wairarapa) from census information since 1991. The Wairarapa has been excluded because the data was not available for 1991. **Attachment 1** shows the total number of vehicles owned and the motor vehicles per capita.

The diagram shows clearly that regional vehicle ownership and vehicle ownership per capita continues to grow steadily. Examination of the 1996 to 2001 period compared to the 1991 to 1996 period shows that regional vehicle ownership and vehicle ownership per capita has shown an acceleration in growth in recent times.

The table below shows weekday person trip rates segmented by number of vehicles owned. This table comes from the Wellington Regional Household Interview Survey 2001.

Trips per resident per day

<i>Vehicles in household</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3 or more</i>
Female	3.163	4.360	4.959	4.809
Male	3.088	4.287	4.821	4.932

It is clear from this table that people in households with higher levels of car ownership will undertake more trips. This effect reaches a plateau once a household has two or more cars. It is apparent that the trips rates for male and female have almost converged whereas in other cities male trip rates still exceed female trip rates. This establishes a clear link between levels of vehicle ownership and traffic growth. Even under conditions of modest population growth, growth in per capita vehicle ownership will invariably lead to significant levels of traffic growth. This link between vehicle

ownership growth and traffic growth does not establish a cause and effect relationship. It does not establish whether it is because more cars are available, people in a household are able to make more trips or whether households that make more trips need more cars. It is likely that both will be true.

From this information it is apparent that as vehicle ownership rates increase there will be fewer households with no cars and a growth in one, two or more vehicle households. This will invariably lead to increased regional traffic.

3.2 Correspondence with Government and the New Zealand Refining Company Limited

Copies of the letters sent to and received from the Government and the New Zealand Refining Company Limited on the matter of diesel fuel specification are provided in **attachment 2**.

4. Communications

There are no relevant communication matters.

5. Recommendation

That discussions take place with the appropriate Government agencies on the matter of traffic growth and growth in car ownership.

Report prepared by:

Approved for submission by:

TONY BRENNAND
Manager Transport Policy
On behalf of the Technical Group

DAVE WATSON
Divisional Manager, Transport

Attachments:

- 1: Total number of vehicles owned and motor vehicles per capita**
- 2: Letters sent to and received from the Government and New Zealand Refining Company Limited**