



Submission on Land Transport Rule Vehicle Dimensions and Mass Amendment [(No 2) 2009]

Introduction

The Campaign for Better Transport considers that the proposal to introduce bigger and heavier trucks onto New Zealand roads is fundamentally flawed. This is for a number of reasons outlined below, and detailed further in later sections of this submission:

1. Insufficient information has been provided to explain the economic justification for the proposed changes.
2. Larger trucks will lead to significantly more wear and tear on roads. Unless the extra wear and tear on roads is paid for through increased road-user charges then the changes will simply involve an increased subsidy for the heavy trucking industry.
3. Increasing the maximum size and weight of trucks will mean that trucking competes more directly with rail for bulk goods transport. It is bizarre for government to subsidise trucking and undermine a railway business that is actually owned by the government.
4. Potential safety effects of larger trucks.
5. Other environmental effects of larger trucks, such as greater CO₂ emissions, more particulate matter pollution and more noise pollution.

The CBT considers that the proposed changes will not result in better transport alternatives for New Zealand, but instead increase our dependency on trucking for moving freight around the country.



Insufficient information has been provided to explain the changes

The proposal increases the maximum weight of trucks along designated routes from 44 tonnes to 53 tonnes.

The justification for this change is based on a supposed \$250-500 million increase in GDP per year. However, no information has been publicly released to back up these claims. The CBT has made enquiries to the Ministry of Transport relating to how this economic gain was calculated, but unfortunately that information has not been released.

Considering the potential adverse effects of allowing larger trucks on the country's roads, as detailed later in this submission, it is considered essential that the benefits of the larger changes should be publicly available. Therefore, further information should be released.

Further information about the cost of upgrading specific routes to handle larger and heavier trucks is also considered necessary. NZTA has released information that estimates around \$75-100 million will need to be spent on strengthening roads as a result of this law change – but once again no supporting information has been provided showing how this figure has been calculated. The CBT is concerned that the real figure may be much higher, and could result in more money having to be spent on fixing roads, rather than on more sustainable transport options. It is also confusing what the maximum allowed truck weight will be, with the proposed documents stating that it would be increased from 44 tonnes to “up to 53 tonnes or more”. How can a maximum weight have an ‘or more after it?

Further detail of how the proposed costs are calculated should be provided. Further clarification of the changes, specifically what the actual maximum truck weight will be, should also be provided.

Larger trucks will cause more wear and tear on the roading system

Research in the USA by the American Association of State Highway and Officials (AASHO) studied the relationship between axle weights and pavement damage is exponential rather than linear. In the example analysed by the AASHO increasing the axle weight by 2,000 pounds (just under a tonne) increased pavement damage by 50%. The generally accepted rule is that pavement damage is related to the “fourth-power” of the increase in weight.

Taking that formula, an increase in maximum weight from 44 to 53 tonnes would result in more than twice the damage being done to the road by a truck that is only 15% heavier. It is proposed to allow the per axle weights of a quad axle vehicle to increase from 5.5 tonnes to 6.0 tonnes. This seemingly small increase would result in 41% more damage to roads from the heavier vehicles.

The CBT is concerned that this extra road damage will not be fully funded by higher road-user charges. This would result in more money having to be spent on upgrading and maintaining these roads that would have to come from other parts of the transport budget – potentially from more sustainable transport spending.

To ensure the heavier vehicles do “pay their way” it will be necessary for the road-user charge system for trucks to continue to be used, rather than dropped in favour of a diesel tax. If a diesel tax system was used instead, other road users would end up enormously subsidising the heavier trucks.



Larger trucks will undermine KiwiRail

The most energy efficient way of transporting large quantities of goods is by freight train. Studies in the USA indicate that heavy trucks use 12 times the energy of rail to transport freight on a per tonne basis. Trucks provide excellent flexibility for smaller loads and where a dispersed source or destination of the freight exists. Allowing larger trucks on the country's roads will undermine the competitiveness of rail in transporting freight around the country as the larger trucks would compete directly with rail for freight.

Considering that the government owns KiwiRail, and already have to provide it with a significant operating subsidy every year, it is very surprising to see this proposal from the government.

Due to the efficiencies of rail for transporting bulk goods, and rail's lower environmental effects, the CBT supports funding going to improving the viability of shifting freight via rail, rather than making it easier for the trucking industry to reduce KiwiRail's competitiveness. The CBT does not agree with the Minister's contention that larger trucks will lead to lower fuel consumption. If the Minister is truly concerned about reducing the fuel consumption of shifting freight around the country then greater efforts could be made to increase the utilisation of the rail network.

Potential safety effects of larger trucks

There are a significant number of studies that detail the significant adverse safety effects of larger trucks. In the USA, according to a 2007 study by the Federal Motor Carrier Safety Administration, about three times as many large trucks are involved in injury crashes than passenger vehicles – per distance travelled. Furthermore, in the USA more than 20% of occupant deaths in passenger vehicles in 2002 were the result of crashes involving large trucks.

New Zealand has similar statistics, with a 2007 "Truck crash fact sheet" from the Ministry of Transport detailing that: "Because of their large mass trucks tend to be over represented in serious crashes. Deaths from crashes involving trucks make up around 18 percent of the total road toll, while only about 7 percent of the total distance travelled on NZ roads is travelled by trucks."

New Zealand police statistics from January 2009 showed that 50% of road-crash deaths on South Island State highways involved trucks. Increasing the maximum allowable weight of trucks is likely to make any crashes that these larger trucks are involved in even more deadly.



Other adverse environmental effects of larger trucks

One of the CBT's prime concerns is improving the sustainability of the transport system. The Minister's press release states that "there will be a decrease in total emissions with a reduction in the number of vehicle movements". However, yet again this assertion is not backed up by any data or figures. As outlined earlier in this submission, larger trucks may compete more directly with rail for bulk freight, rather than simply carrying the same amount of road freight on fewer, larger, trucks. Even if the number of truck vehicle movements stayed constant, there would be increased emissions because of the larger engines required to power the heavier trucks. A report released by the American Transportation Research Institute (ATRI) in 2008 found that heavier gross-weights will require larger engines that decrease fuel economy. Decreased fuel economy means greater emissions per tonne of freight shifted.

Other significant potential effects from allowing bigger and heavier trucks include the potential for noise pollution, pollutants from particulate matter and effects of vibration on buildings located adjacent to the routes the heavier trucks will be allowed to travel along. None of these wider potential adverse effects seem to have been taken into account in the economic justification for this change.

Conclusions

The CBT opposes the rule change for the reasons outlined above. Of particular concern to the CBT is how the proposed changes will subsidise a less sustainable means of freight transportation (large trucks) and undermine a more efficient and sustainable means of freight transportation (rail). The CBT believes that an inadequate cost-benefit analysis of the law change has been undertaken, which has not taken into account the wide adverse effects of the proposal and has also not fully costed the potential damage to the country's roads from allowing heavier trucks.

Notwithstanding the CBT's opposition to the proposal, if the law change is to proceed then the CBT considers that it is essential for the heavier trucks to fully "pay their way" in terms of their road user charges. The level of road user charges should directly relate to the level of damage such large and heavy trucks will do to the country's roads. Furthermore, the CBT considers that all new heavier trucks should be regularly checked for their safety. Finally, there should be a review of the changes in two years time to analyse what the costs have actually been, and whether the estimated benefits have actually been realised. Stakeholders in that review should come from a variety of sources, potentially including the CBT.

Submitter Details

The Campaign for Better Transport (CBT) is a politically independent, voluntary incorporated society which is committed to better transport alternatives for New Zealand. It is run by a committee that meets on a monthly basis and has a membership of 80 paid members.

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