



15 June 2020

## **Road Transport Forum NZ response to public consultations by Waka Kotahi NZ Transport Agency in the Warkworth area:**

- Ara Tūhono – Pūhoi to Warkworth motorway – tolling proposal
- Speed review State Highway 1 between L Phillips Road and Pūhoi

### **Part 1: Ara Tūhono – Pūhoi to Warkworth motorway – tolling proposal**

#### **Representation**

Road Transport Forum New Zealand (RTF) is made up of several regional trucking associations for which the Forum provides unified national representation. The Forum members include Road Transport Assn's NZ, National Road Carriers, and NZ Trucking Assn. The affiliated representation of the Forum is some 3,000 individual road transport companies which in turn operate 16-18,000 trucks involved in commercial road freight transport as well as companies that provide services allied to road freight transport.

The Forum is the peak body and authoritative voice of New Zealand's road freight transport industry which employs 32,868 people (2.0% of the workforce), and has a gross annual turnover in the order of \$6 billion.

RTF members are predominately involved in the operation of commercial freight transport services both urban and inter-regional. These services are entirely based on the deployment of trucks both as single units for urban delivery and as multi-unit combinations that may have one or more trailers supporting rural or inter-regional transport.

According to Ministry of Transport research (National Freight Demands Study 2018) road freight transport accounts for 93% of the total tonnes of freight moved in New Zealand with some 5% of the country's total freight moved within the Northland/Auckland provincial area.

#### **Introductory comments**

RTF received the briefing papers and background explanations to the above consultations in mid-May 2020 and we offer the following comments.

We note also a number of our member associations and representatives of those organisations have also received the same information and invitation to comment. As we are a national organisation, our comments are from a national perspective.

#### **The proposal to toll the new route**

The recent commentary around roading public and private partnerships (PPPs) in New Zealand may impact road users' confidence in the NZTA completing this project on time and on budget. Furthermore, private enterprises such as road builders and independent project management enterprises are more likely to be concerned about their obligations to their shareholders than ensuring a legacy

road that will continue to be reliable at hand-over of what is ostensibly a public asset back to the Crown.

We see considerable risk in the proposed project approach, including the tolling value applicable for heavy vehicles cited in the discussion document. The initial toll for trucks and heavy vehicles is proposed to be set at \$4.80 at the early pre-construction stage, but RTF is not confident the whole-of-life 25-year scenario will still have this cost set at the same level. There are simply too many unknowns to give unbridled support for the concept.

A number of papers on efficacy of tolling in a contract to build and operate model from across the international road funding spectrum also fail to provide confidence that the tolling option in a New Zealand project context gives the best outcome. In a number of publicised cases the relevant government agencies have had to take the projects back, or micromanage the maintenance, often before the build, operate, and maintain service agreement period with the original contractor is completed.

Of equal concern is the misdistribution of toll revenues a point highlighted by USA research but by no means unique to the States.

*"Recently American Transportation Research Institute (ATRI) [TruckingResearch.org](http://TruckingResearch.org) documented the collection and distribution of \$14.7 billion in U.S. toll revenue, representing 82 percent of U.S. toll collections. The research sheds light on many questions about tolling, including how much toll revenue is generated versus reinvested in toll facilities, and contrasts truck-generated toll revenue versus truck utilization of toll roads.*

*"To better understand tolling, researchers collected public financial data from Comprehensive Annual Financial Reports (CAFR) published by toll systems, and attempted to standardize financial comparisons across systems. Key metrics included toll facility charges by user type, toll facility expenditures and toll revenue diversion to non-toll entities.*

*"ATRI's research found that the 21 major toll systems analysed collected more than \$14.7 billion in revenue with nearly 50 percent of toll revenue diverted to other uses. In addition, toll revenue increased more than 72 percent over the last decade compared to inflation growth of just 16.9 percent.*

*"The report includes a first-of-its-kind data analysis to better understand the relationship between interstate commerce and toll road utilization. Through an analysis of truck GPS data, the researchers were able to quantify toll revenue impacts on local truck activity versus interstate commerce.*

*"It is clear from this research that highway funding mechanisms that return our tax investments to highways are far superior to tolling," said Darren Hawkins, YRC Worldwide Chief Executive Officer. "We need greater oversight and transparency to ensure that the billions of dollars paid by our industry goes back into the roads and bridges that generate the revenue."*

What is also troubling about the tolling of the 18 .5km Ara Tūhono – Pūhoi to Warkworth motorway is this is expected to be one of many tolls on this route. The

NZTA's media release points out there will be separate tolls for each section of motorway. This approach will be an anathema to commercial transport operators and result in unnecessary administration burdens for businesses. We believe NZTA must consider an alternative approach that has lower front-end administration costs, alleviating the proposition of successive tolls for travelling relatively short distances.

The principle of tolls being introduced in a New Zealand context has been postulated on the premise to accelerate the start of relatively important projects that would otherwise not be started. In this context the toll option may well have merit, and the RTF is open to the idea of tolls on new roads.

However, in the present-day context the whole tolling concept is open to question, while the Government's policy is to fund marginal rail services via the National Land Transport Fund (NLTF) with road-user funds generated from Fuel Excise Duty (FED) and Road User Charges (RUC). This approach undermines the proposition validating the use of tolling for infrastructure improvements especially in an environment where both RUCs and FED are under a back drop of yearly increases.

In a broader overview, we have the Government continuing to argue the economic benefits of rail investment and financially committing to the developing the Northland rail route to this end. The addition of tolls on the road route, particularly the proposition of multiple tolls between Auckland and Whangarei, could be viewed as an overt plan to influence road freight activity by adding additional costs to freight shippers, thereby inflating the economic attractiveness of the Northport proposal and Northland rail development economic argument.

RTF is opposed to tolling in an environment where the final whole-of-route costs for the Auckland to Whangarei highway are buried in a fragmented road investment approach.

We are not even cautiously optimistic about the PPP approach, or about the performance of contractors who are left to internally manage quality control of the infrastructure. The Transmission Gully project and the contentious issues that have arisen over this primary route, with many media comments alluding to substandard construction techniques or substandard materials, doesn't bode well for other projects. The continual rehabilitation of the Kapiti Expressway is another example of problematic construction and material deficiencies that still haven't been entirely resolved some three years later.

While the PPP model offers some opportunities for civil construction enterprises, when it all goes bad the road users pick up the tab both directly and indirectly. Directly, because the charges and tolls remain, and indirectly via the productivity losses due to travel time delays negotiating never ending repairs, which cannot ever be recovered.

In summary, the RTF is opposed to the current proposition of tolls being considered for this route's development.

## **Part 2: Speed limit review proposals:**

### **Phase 1 - Speed limit Proposal State Highway 1 between L Phillips Road and Pūhoi**

The speed limit review phase 1 perhaps has some merit, but the publicity and consultation document around this change states the community engagement comments alluded to poor driver behaviours and excess speeds. The intro to this document states speed is a determinant in the severity of the outcome in any crash, which is pretty self-evident. There is no doubt that this route is heavily trafficked and the nine-year history of crashes and fatalities also documented in the speed change publicity is high. However, we cannot entirely ignore the fact that the route is demanding with narrow shoulders and poor visibility. For many years, NZTA supported the notion of self-explaining roads, that is, a concept where the environmental and infrastructure limitations would provide cues to drivers on appropriate speed management on constrained networks. The idea that *speed kills* stated by the safety advocacy purists is presented without context when in fact, we know that inattention and errant driver behaviour are the primary causes of most crashes.

We are not convinced lowering speed limits will reduce actual crashes, although if drivers are being speed-compliant the severity will be reduced, but even that's a big assumption. The speed reduction approach is driven by the Government's reluctance to invest in properly rehabilitating problem sections of the network. The L Phillips Road and Pūhoi existing SH1 presents a conundrum in some respects because assuming the new road is completed as planned, the traffic displacement will reduce on the existing road and consequently reduce the likelihood of accidents. This point does take the emphasis off expending substantial amounts of money on the existing road.

Given the evidence that the current road traffic speed patterns are relatively close to the proposed phase 1 speed reductions, the net impact on travel times should be minor, which the discussion paper places in the region of 10 seconds for the 15 km journey. We note the discussion paper uses the average speeds for comparison purposes. This is an interesting approach as averages, even with a lot of data, can still be open to distortion by a cluster of high or low readings. We would have thought the median traffic speed might have been useful, along with 75<sup>th</sup> percentile, for the discussion.

The biggest variation in recalibrating the speeds is at the construction interface site access points, using variable speed signs reducing the speed to 60km/h from current ambient speeds of 75/84km/h which presently sits within the 100km/h zone, and moderated by 70km/h variable speed signs. No doubt the increase in traffic movements at these node points warrants some form of speed management and the use of variable signs is an acceptable solution because the speed defaults back to the proposed 80km/h when they are not active. What is interesting about the speed data averages for the Pūhoi/Warkworth site and the Perry Road intersection is the wide range of current speeds which fall within an average range of 75 to 84km/h. We thought the data sets would have been a little more precise.

## **Phase 2 speed limit proposal**

It is hard to confidently judge the merit or otherwise of the phase 2 speed reduction to 60km/h from Hudson Road to Kaipara Flat Road, but it appears reasonably clear that the interface (roundabout) between the existing SH1 and the new motorway requires some consideration of speed to improve the safety at that connection/ transition point. Interestingly, the map in the discussion paper shows the speed limit from McKinney Road through to Hudson Road is already an existing 60km/h zone, so the phase 2 proposal is an extension of that speed limit.

One of the concerns with roundabouts is the ability for trucks and multi-unit truck trailer combinations to be able to negotiate these safely. Frequently, for drainage purposes, roundabouts employ super elevations or cross fall gradients in the lane pathways and the changes in gradient can disturb the trajectory of the combination vehicles to the point that rollover becomes inevitable. This new road is likely to be used by significant numbers of heavy vehicles and NZTA should consider a heavy vehicle dynamic stability assessment as part of the roundabout design criteria.

Overall, speed compliance will remain an ongoing issue for drivers. If drivers remain sceptical about the speed changes or simply ignore the safety objectives the speed reductions are expected to produce, the crash profile reductions will not be realised. The self-explaining roads principle is still an important part of picture influencing driver behaviour and driver compliance.

The speed reductions proposed for the existing SH1 route sit in a unique context in that this route will become very much a secondary route, with most traffic preferring the new motorway route. That in itself will reduce the traffic loadings compared to the present day and will in turn, significantly reduce the likelihood of crashes occurring at the present rate. Post 2021, attributing improved safety and crash reduction outcomes would almost point toward the speed changes producing a false positive because the risk profile of the existing SH1 will have been moderated by the new route. Clearly drivers already have elected to travel at less than the current posted speed of 100km/h so reposting the speed at the current averages of around 80km/h is likely to have travel times remain relatively consistent with today, a point the discussion paper already confirms.

**Kerry Arnold**  
**Manager Technical & Roading**