

SUBMISSION to the NZ Transport Agency

Nelson Future Access Project Public Engagement

From:

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PUBLIC INFORMATION STATEMENT:

We are happy that our submission is included in reports available to the public.

INFORMATION ABOUT NELSUST:

We are an incorporated society of 300 people with a focus on sustainability, including transport strategy. This submission is the result of committee consultation.

1. INTRODUCTION

Nelsust is excited to finally have an option presented by NZTA that does not involve a motorway on Rocks Road or through Victory and Nelson South. The Priority Lanes Package needs some tweaks, some of them significant, but it is heading in the right direction. The major change that we propose to this package is leaving rocks road as two lanes, which we have been advised (by Rhys Palmer) is feasible. It is unfortunate that NZTA did not propose this option, as it would have made the package more appealing to more people.

If we are serious about mode shift, we must realise that it is insufficient to only make active and public transport better; we have to make them the *best* choice. If they are not the *best* choice, we should not be surprised if people choose alternative transport options (e.g., private car) that are damaging to communities and the environment. The other two packages (Inland Route and Four-laning Rocks Road) will not only prevent public transport becoming faster than car commuting, they will take us into the trap of increased road capacity and thereby encourage more car commuting, leading in turn to more traffic, renewed congestion, and the need for yet more roads in an endless cycle. The Priority Lanes Package offers the most in terms of achieving a significant mode shift.

Nelsust would like to see the end of the whole idea of a new arterial through Victory and Nelson South. This proposal has stifled all sorts of development throughout the city. It should have ended in 2004 when the environment court found this route would not improve safety or efficiency, would not lessen social severance on Tahunaui Drive and Waimea Road, would be detrimental to air quality regardless of reductions in woodburner pollution and was fundamentally the wrong place for a state highway. Please let's stop dividing this city into winners and losers. We need a long term plan

that does not pit one part of the city against another and so **we welcome the Priority Lanes Package as an all-win solution.**

2. ANSWERING QUESTIONS POSED BY DOCUMENT

Q1 Smart Little City Option

A. Priority lanes Package

A smart, vibrant city is one that is filled with people not with cars. Today, 44% of the land area in central Nelson is given to cars, car parking, and car dealers (see appendix). Options that simply expand road capacity for car commuters will encourage more car commuting which would fill our city with even more cars. Nowhere in the world do people visit cities just because of good car parking. But more than that, the cities that people really like to visit and get around in, are those that are least dominated by cars. The Priority Lanes Package is the only option that could make commuting by bus faster than commuting by car and thus give a significant incentive to bus commute. And the attractiveness of active transport is inversely proportional to the dominance of motor vehicles. So filling our city centre with cars, as would result from the Coastal and Inland packages, works *directly against* making active transport appealing in the city centre, regardless of how good the walking and cycling infrastructure elsewhere in the city might be. The Priority Lanes Package is clearly the best option to help create a 'smart little city'.

Q2 Travel Change Option

A. Priority lanes Package

In Nelson we have a unique cycling arterial all the way from Stoke to the CBD. It is a bit disjointed in the middle and this needs mitigating; however, to have what is, in effect, a linear largely 'green' route available for active transport along much of the length of our city is precious and perhaps unique in NZ. It really needs to be appreciated that to get our people to change behaviour, to attract them to other transport modes, the options must be attractive. Obvious perhaps, but not recognised. It is a completely different experience to bike along the railway reserve, listening to the birds sing, feeling the wind in your face and breathing fresh air, as opposed to riding alongside loud, fuming and often intimidating motor vehicles, even if you are physically protected from them. One is attractive and one isn't. That is why the attractiveness of commuting alongside trucks grinding up the Southern Link is utterly incomparable to gliding through our linear park as it is now. And how much more pleasurable it could be with some love and attention given to the infrastructure - think of plantings, art, seating, lighting and interpretive signage. That is why we propose a car-park lane along Rocks Road, as a buffer against the vehicle traffic for the walking and cycling esplanade, to protect people using the esplanade from the effects of traffic, all the way from Tahuna beach to the Nelson Yacht Club.**

Cycling within the city centre is so much more attractive when you aren't in a car-dominated space. Options other than the Priority Lanes Package will funnel more cars into our central city, making biking in the central city less appealing.

With mode shift to public transport, the provision of a clean, comfortable and reliable bus service would help in encouraging commuters to shift to public transport. A regular service covering a wide range of hours would also help, but even these things won't give us the mode shift from car commuting until the bus becomes *faster* than car commuting. It is clear that for more people to use public transport, it needs to be the *best* option for them and unless it's faster, it won't be the best option for most people. This is what Auckland found with the development of the hugely successful Northern Busway: once car drivers saw bus passengers whizzing past while reading the morning

paper or catching up on social media on a comfortable bus, people switched to taking the bus in significant numbers: The bus lanes caused a step change in bus patronage. And this is why the Priority Lanes package is completely superior to the other two packages in terms of encouraging a mode shift to buses.

Q3 Sea Level Rise

A. Priority lanes Package

The package that reduces carbon emissions is best for mitigating sea level rise. Clearly the Priority Lanes Package is best in this regard, as it provides better options than car commuting.

The NZTA document, however, claims the inland route is the climate resilient option, yet the northern part of St Vincent Street is already marked on planning maps as an inundation zone. Rocks Road is considerably higher and is not marked as an inundation zone, although it does suffer from waves washing onto the road. But this is where the 5 m wide walking and cycling esplanade comes in. All of the options include this 5 m esplanade and this could and should be built to protect the road from wave splash. We suggest this should be built with a kerb that is 200 mm higher than the road, with a 300 mm high plinth on the outer edge of the esplanade, to take the relocated chains and bollards. Thus, the esplanade edge would be 500 mm higher than the road, and it could be built relatively cheaply as a boardwalk along the lines of the Conolley's Quay fishing platform with just some legs into the sea. These legs would help hold it down as the waves come up from underneath. See appendix *** to see how this structure fared well in the cyclones, with just some decking lifted that had not been well secured.

During cyclones Gita and Fahi, a number of cars parked in Whakatu Square were written off from sea water intrusion, yet none were written off from the seas around Rocks Road. Even should Rocks Road have to be closed during cyclonic conditions, it would only be during high tide for a few hours a day, a few times a year, and there are alternative routes. For cycling/e-biking transport there are multiple alternative options including the Railway Reserve linear park. Waimea Road is obviously the one most suitable for trucks, but Washington Valley/Princes Drive/Bisley Ave or Toswill Road is another route for smaller motor vehicles. Furthermore, even if the Southern Link went through, we do not think it likely the city (or the NZTA) would abandon Rocks Rd to sea level rise, at least in the near term. It will likely be built up as the seas rise and be one of the last places we retreat from. By the time the king tides reach the level of the present Rocks Road, parts of Atawhai and Whakatu Drive will be flooded as well: are we to abandon these too? We are not going to abandon any of these roads in the foreseeable future and by the time we do the boulder bank will probably be breached, and the port and the bottom half of town also flooded.

Q4 Carbon Emission Best Option

A. Priority lanes Package

We tend to focus on building infrastructure to reduce carbon emissions when the very act of building can generate significant emissions that occur up front, at the time of building. So which transport option has the least carbon emissions in construction as well as least carbon emissions in use? It is here that decongestion pricing (sometimes called congestion charging) at peak hours offers far and away the greatest benefit: for very little or no construction cost, it is possible to reduce congestion by 15%–30%. Some of those vehicles will still be driving and emitting, but at other times of day. However, much of the reduced traffic will come from either be trips not taken (e.g. online

shopping, working from home) or trips taken by other modes of transport (e.g. walking, biking, ebiking, scootering or other micro mobility devices, taking the bus or car pooling). All these account for a reduction in carbon emissions. The construction of a new road (such as the Southern Link) will have much higher emissions related to construction than would result from improved efficiency on an existing network (i.e. the Priority Lanes package).

We also note that the idea to increase road capacity to reduce congestion and thereby improve travel efficiency is *simply wrong*. Increases in capacity through inducing more traffic will ultimately result in *increased emissions from increased vehicles* on the road. And this leads back to congestion again which results in further emissions, but this time from a higher number of vehicles.

Options other than the Priority Lanes Package encourage car commuting by expanding car commuting lanes. Most of NZ's transport carbon emissions are from cars. (Cars are 59% of transport CO2 emissions, but another 15% is light commercial vehicles such as vans that many people use for commuting so it is likely that about 70% of transport emissions are actually from commuting)

Cars last on average 14 years, so even if we rapidly change to zero emission vehicles, there will still be a long tail of emissions from these fossil-fuelled vehicles into the future. The Priority Lanes could be used for trade vehicles as well as buses, so they aren't held up by car commuters who have other options to avoid the traffic - bus, bike etc). However we can't wait 15 years for these emissions reductions, we need emission reductions *now*. We think priority lanes could be introduced gradually and earlier, starting with Whakatu Drive and the Richmond deviation, but also using Beatson Road for a priority lane coming into town in the morning and just minor expansions along Waimea road to get these priority Lanes to the bottom of the hospital hill. And perhaps just on the easy (practical) parts of Tahuna Drive.

The other two options will not result in making buses faster than cars so people will tend to keep using cars rather than the more fuel efficient bus transport. (Even comparing electric buses to electric cars, the buses use less electricity than the same number of people taking their cars and therefore less electricity has to be generated. It will be sometime or perhaps never that our electricity system will reach zero carbon (eg our geothermal stations emit carbon dioxide)

Options other than the Priority Lanes Package encourage more car use and will tend to discourage cycle use with more cars on the road and particularly more cars filling up the city. Less bikes mean more emissions from cars.

Priority Lanes have significantly less construction carbon costs and significantly lower carbon emissions by discouraging car commuting but also at the same time making public and active travel more attractive.

Q5 Walk - Cycle Encouragement Option

A. Priority lanes Package

Options other than the Priority Lanes Package, by encouraging more car driving, will tend to discourage walking and cycle use with more cars on the road and particularly more commuter vehicles filling up the town. Transport engineers need to understand how unpleasant it is to be walking and cycling alongside motor vehicles: if it becomes even less pleasant people are even less likely to do it.

The Rail Reserve is a very pleasant linear park route passing through green space and past residential back yards well away from the traffic. As the bird life increases from the Brook Sanctuary it will increasingly become an attractive wildlife corridor also. This tranquil ride would be utterly devastated by the need to share the space with noisy, intimidating motor vehicles as would be the case were the Southern Link to proceed. This would really discourage people from cycling or walking along there.

All of the options include the 5 metre Rocks Road esplanade so that is not an issue although timing of it really needs to be *immediate*. We can't wait years for this and doing a 'half baked' approach in the meantime will not protect Rocks Road from wave splash. The public engagement brochure is misleading on the point suggesting that with the Southern Link option the esplanade could be built earlier. We know that only 2 lanes of traffic are required around there for the Priority Lane Package to still work essentially as well (Rhys Palmer June 15th Nelson Library), and as the demand for this active transport link is already there, we need to get on with it immediately. It is one project that the whole town can come together on and improve this jewel, our waterfront, so that it can be enjoyed by all, and not just from a car.

We would like to note here that previous studies have found that Rocks Road would continue to be a busy route even if the Southern Link was built (the Arterial Study 2010-11 found 65 to 80% of traffic would remain on the route **** Appendix). The pleasantness or otherwise of the Rocks Road Esplanade would be relatively unaffected by the Southern Link, especially with the parked car buffer that we propose from Tahunanui to the Yacht club.

Q6 Separated Paths or On Road Cycling Preferred?

A. Separated Paths where speeds >30kph

On-road cycle lanes, most often in the 'car-door opening zone' might seem OK for cyclists in lycra riding racing bikes who are often biking at car driving speed anyway, but for the vast majority of people, and certainly those not currently cycling, it is too scary to be on the road alongside 18 wheeled logging trucks protected by nothing more than a strip of paint.

Until cycling is safe, pleasant and convenient we won't get the levels of uptake such as is seen in Holland. On-road cycling with traffic going faster than 30kph is neither safe nor pleasant. We need *separated, protected paths* for these roads.

20 or 30kmh shared zones are different - here it is as if the cars are driving though a pedestrian realm, so separate lanes for cyclists in this situation become unnecessary. But then it's not really on-road cycling, it's cars sharing the pedestrian/cycling space and therefore redefines the term 'road'.

We suggest a blanket 30kph speed limit across all urban areas, but with exceptions for those roads that have protected paths for cyclists where higher speed limits would be acceptable. This approach avoids piecemeal actions of varying speed limits - the speed limit would be 30kph unless there are cycle lanes. This would also incentivise councils to rapidly institute protected paths on any roads where a speed limit higher than 30kph was wanted. Covid 19 has shown us how quickly changes can be implemented given the political will! 30kph speed limits on quieter streets would also tend to reduce 'rat running' through quiet neighbourhoods. This 30kph blanket limit would in itself reduce emissions directly but also encourage more people to bike or walk, taking cars off the

road and so may not make car driving journey times that much longer. This is an important point to grasp.

Lastly, it is preferable that users of protected cycle paths do not have to cross streets: ideally one would be built each side of arterial routes as can be seen in our Rocks Road design image. By having them on each side of an arterial, they do not have to be wide: because they are essentially one way. A 1.2 m wide, one way, cycle path is fine, whereas a two way path where you face opposing traffic feels too narrow even at 2.5m wide. The illustration of the Priority Lanes Package on Waimea Road has two way lanes on one side of the road, but we would much prefer one way paths each side of the road at footpath height but with a different paving treatment, and the walking lane available for overtaking if required and if it is clear at the time.

Q7 What Sort of Cyclists are we?

A. All-sorts

Some of us are confident cyclists, some of us are nervous, some of us ride a lot in all sorts of conditions, some of us don't or can't cycle. And that really is the point isn't it: Cycling infrastructure must cater for all types of users or potential users!

Additional Comments about Cycling and Walking:

We would like to see infrastructure being given the same priority whether it is infrastructure for those using a bike for transport or for those using their car for transport. People driving motor vehicles kill people riding bikes only because of completely inadequate infrastructure to provide for the more vulnerable party. We have a complete roading network but a very incomplete and inadequate cycling infrastructure. *"...the Dutch cycle (in such high percentages of their trips) because they've built a dense, 35,000 km network of fully separated bike infrastructure equal to 1/4 of their 140,000km road network"* (Building the Cycling City Melissa and Chris Bruntlett page 2). We need to treat people on bikes as well as we have been treating people driving cars. Arguably we should actually give them *higher* priority as they are taking up only 1/10 of the roadspace, almost never kill another human being, contribute zero air or noise pollution and contribute negligible wear on the pavement.

In weighing up the options you must also price in the effects of better health which results from encouraging active and public transport in the Priority Lanes Package. *"Current Dutch cycling levels are estimated by the Utrecht University to prevent 6,500 premature deaths per year saving the economy 19 billion Euros (some 3% of their GDP)"* (p3. Building the Cycling City Melissa and Chris Bruntlett Island Press 2018)

Q8 Prioritise Space for Car Parking or Space for Walking

A. Space for Walking & Cycling

We assume by 'parking' you are not referring to bicycle parking but refer to giving over 10m² of council land to one person because they are using a car? In the same space as one carpark you can get 30 bikes parked. We already have 44% of the centre of the city given over to cars so we really need to prioritise people not cars.

More car parking and free car parking simply encourages more driving, more road congestion and discourages mode shift to more environmentally friendly and healthy options. Even taking the bus has significant health benefits over car commuting (whilst requiring no car parking) so increasing the cost and decreasing the availability of parking has a role in increasing the health of the population.

If we make walking, cycling and bussing really attractive, then there will be fewer cars on the road and so fewer car parks will be needed. We have a complete road network but a very incomplete cycling network as noted above. We should not hesitate to remove car parks to create protected cycle paths: this will tend to make car driving relatively less attractive and cycling more attractive. We should prioritise the vulnerable, those taking up less space and creating less pollution: we should *prioritise* space for active travel over space for car storage.

Q9 Priority Lanes for Who?

A. Only Buses and Freight (and Trade Vehicles)

This should also include trade vehicles (sign written vans) so tradies aren't held up in traffic. If all traffic is allowed on extra lanes then it just "induces" more car commuting. If all traffic is allowed on the lanes it will fill the city up with cars. Nobody is attracted to a city full of cars.

(comments on this question continued on following page) If high occupancy vehicles (ie cars carrying 2 or more people) are allowed in these lanes, even if they are carrying 3 or more people it means these lanes will get clogged up and buses will be slowed up. Note that buses are much more efficient in carrying people in terms of roadspace, emissions etc). Furthermore these HOVs still need somewhere to park in town, compared to buses that have no parking requirement. These lanes should be for just buses and trade vehicles.

Further comments about the Priority Lanes:

- 1.They might not be needed on both sides of the road. With Priority Lanes coming into town, people will have already made the decision to use the bus, so that is one less car coming home. As long as there is still a relative significant "tidal flow" of traffic into Nelson in the morning and out in the afternoon, perhaps we only need the priority lane coming in. This could be trialled before committing to priority lanes on the other side too.
- 2.The Priority Lanes should be for Trade Vehicles as well as freight. This could be easily policed by issuing Trade Vehicle Exemption signs to vehicles. To clarify - by trade vehicles we mean tradespeople with a ute or a van full of tools etc who do not have the option of using public or active transport. They should not be held up by those who car commute when other options are available.
- 3.Addressing concerns of *4 Laning by stealth*: Some are worried that the times and situations where there might be 2 lanes in any one direction could be increased and increased until it became a permanent feature of having two lanes each side of the centreline all the time. Furthermore, the types of vehicles using them could be changed over time. For instance people might be worried that things would change from the initial situation of just buses and freight/trade vehicles in these lanes, then later extended to cars with 3 people, then cars with 2 people, then all cars. To overcome this fear there should be set limits to the types of vehicles able to use priority lanes and the hours that they are operational. The limits should be fixed and only able to be changed with public consultation and agreement.
- 4.We have already said how we do not accept any additional lanes around Rocks Road whether priority lanes or not: this *must* remain just 2 lanes.

Q10 Public Transport encouraged by what option?

A. Priority Lanes Package

Only this option makes bus travel faster than car commuting. Whilst other packages might provide more roadspace for all vehicles including buses, they will not make bus

commuting faster than car commuting. And more roadspace will of course induce more car driving, bringing back congestion. With everyone stuck in the same traffic there is no advantage of to being on a bus, so patronage would not increase. Until bus commuting is faster than car commuting there will be limited uptake. We need the Priority Lanes to make bus travel faster than car commuting and so attract more people to it.

Q11 Rank Packages

1. Short Term Package (but with peak hour congestion charging added)
2. Priority Lanes Package
3. Coastal Widening Package
4. Inland Route (Southern Link)

The Short Term Package hamstrings buses by not giving them a priority lane: there will be limited uptake until bus commuting is faster than car commuting

The Coastal Route (4 laning Rocks Rd) and The Southern Link (Inland Route) both funnel extra cars into the city centre. A city centre full of cars, moving or parked, is not an attractive place to visit so these routes will detract from city vibrancy. We want a city filled with people and laughter not noise and yet more motor vehicles.

Other Comments on the Packages:

The Public Engagement Document is misleading for the following reasons:

- It includes 3 laning Rocks Road in the Priority Lanes Package when this is unnecessary (according to your own traffic engineer)
- It suggests that the Rocks Road Esplanade could be built sooner with the Southern Link (Inland Route): this is incorrect as Rocks Road needs reinforcing and protecting *now* and the esplanade is needed *now*. There is no reason not to upgrade the sea wall making it suitable for the Priority Lanes (should that other lane ever be needed) but use the extra lane as a car parking buffer. We cannot understand how the sea wall upgrade would be any different under these two scenarios
- It uses positive reinforcement phrases such as ‘features to reduce noise’, ‘smooth surfaces’, ‘noise walls’, ‘safe speed zone’ only in the Southern Link option, thereby making the Southern Link option subliminally more attractive.
- The Southern Link, a name that people are familiar with, has been renamed and given the new title The Inland Route. This potentially misleads people into thinking it is somehow significantly different to the previous project when this is not the case.
- It presents highly misleading graphics of what the Inland Route might entail. Why are there no images of the road going past Victory Community Centre, Victory School or Nelson Intermediate? The route will be incredibly close to some classrooms and the Intermediate pool and gym.
- Two of the three packages do not align with the Government’s GPS, while there is a legal requirement to do so. The NZTA has presented options that do not “give effect to” the GPS and so are therefore *illegal*. Trying to argue that a new government may well bring in different priorities does not make sense. If you argue that, you would never have to give effect to the present governments GPS, yet clearly this is the intent of the legislation.

•The Southern Link route has been rejected by *every* study to date including the 2004 Environmental Court review. Here it was rejected on multiple grounds including not increasing safety, not reducing social severance in Tahunanui or Waimea Roads while having severe effects in Nelson South and Victory, not more efficient, and that bringing additional fossil combustion pollution into a valley with poor dispersal characteristics was untenable even if other air pollution was reduced. And most famously it was a route that was fundamentally the wrong place for a state highway: It should not even be there as an option, so we view it as arguably in contempt of the Environment Court by including it again now.

•Costings for the Southern Link are troubling. Underpricing is a way of making an option more appealing and it has clearly been portrayed here as costing less than it would do even using your own figures. Many people would prefer to support the option that will cost them, as taxpayers, the least. The Southern Link was stated to cost \$190 - \$220 million but that price did not include the \$5.5 to \$6.2 million MSQA costs that are included in other options. Furthermore the price includes figures that are simply not credible eg earthworks of only \$3m more than the Priority Lanes when this entails building a completely new road around the side of a steep hill.

•One of the reasons the Southern Link appears less expensive is that the costings do not include the cost of land buying as the other options do. The reason given is that these costs have already been covered, however if the Southern Link was not needed as a road corridor this land could be sold by NZTA and so the revenue for the sale of the land should be subtracted from the costs of the other options. We believe this be in order of \$4 million. All these factors combined should have made the Priority Lanes package considerably cheaper than any of the other options, even if it still included the unnecessary priority lanes around Rocks Road. If many people are swayed by cheaper costings, soothing words, misleading graphics applied to one option then we believe public feedback results are questionable if not invalid.

Q12 Design Your Own Package

The Priority lanes package but with the following changes

- Allowing trade vehicles, not just freight and buses, to use the priority lanes
- Only 2 laning Rocks Road but providing a carparking lane all the way around on the seaward side to buffer the 5m wide walking and cycling esplanade from moving traffic
- Upgrade the seawall for the above parked car buffer and build the 5m wide shared path immediately - do not delay this. The seawall needs immediate attention and should be done properly straight away rather than as a repair job that will just need to be redone later.
- Design the walking/cycling esplanade 200mm higher than the road to specifically stop waves coming onto the road in storms. Building it in low carbon (or indeed CO2 negative) materials like timber that doesn't rust or corrode with simple legs into the sea rather than the more difficult and costly option of building the seawall out to the outside of the esplanade. (This deck and leg option would also mean rock pools could remain under the esplanade)
- Include a protected cycle path on landward side of Rocks Road as illustrated in Appendix so avoiding the need for crossing over the road.
- Stop the Priority Lanes initially at the bottom of the hospital hill at Motueka Street
- Trial Priority Lanes just on the morning-into-Nelson side of the road initially (if people have already made the decision to take the bus to avoid the car congestion, then the priority lane is not needed in the afternoon). If this was

done then the “flush medians” could be retained to make it easier to turn right into houses on this stretch when driving.

- Extend and enhance the linear park that is the railway reserve walking and cycling arterial along Beatson Road making a more direct and appealing connection between the two halves of the railway reserve - joining the Stoke and Bishopdale sections together seamlessly.
- Include crossing points with central refuges every 200m along arterials
- Blanket city 30kph zone, only making exceptions to roads that have protected cycle paths (this would immediately encourage more people to cycle)
- Include protected cycle paths on every road that has a 30kph or higher limit even if the cycle paths are only 1.2 m wide and alongside the walking path. Don't hesitate to remove on-street motor vehicle storage (car parks) to make this possible: in so doing moving the need for far more people to avoid the need to drive, and not need car parking.
- Express buses running from Wakefield and Motueka at no more than half hourly intervals at peak times with limited stops into the centre of Nelson, running on priority lanes on Gladstone Road, the Richmond Deviation, Whakatu Drive and then as the Priority Lanes package.
- Encourage more residential housing close to transport corridors and town centres, not just by the means allowed for in the Future Development Strategy but also by allowing “partitioning” of existing houses into two that the FDS specifically does not count (the FDS infill is assumed to only occur where there is a big enough section to build a second stand alone dwelling. Here we are talking about allowing a large 3 & 4 bedroom house that has just two people rattling around inside be partitioned into two 1 or 2 bedroomed houses for which we have a huge undersupply). This requires no extra infrastructure (the 3 waters have capacity for the number of bedrooms on a piece of land and the number of bedrooms is not increasing in fact may be reduced) and so can be done without delay by a simple plan change or easier still easing up on approving Resource Consents to do this, without charging development contributions. See Appendix for a worked real world example of a small villa in Seymour St. being partitioned into two dwellings, the new dwelling created for less than \$120,000 all up. The reason this is so significant is that if a large quantity of well located larger houses were partitioned into two, this could take a lot of the growth that is assumed to be happening on the outskirts of towns. The resultant transport demands would be quite different when you live close to transport routes or indeed the centre of the city, the centre of the town or suburban centre.

Q13 Prioritise Crossing or Through Traffic

A. Yes more Crossing Points

While people in motor vehicles might enjoy shorter journey times with fewer crossings, this would result in longer journey times for people walking. We should not assume people using active transport walking are not on a journey too. They should not be seen as second class citizens because they haven't surrounded themselves with 2 tonnes of metal and are not taking up 10m² of roadspace. More crossings make areas more liveable. We want more people living closer into the city centre and we need to make that more attractive, more crossings help with that and help to limit car traffic growth which is a good thing.

Lastly more crossings slow traffic down which is a good thing from an emissions point of view, an urban living attractiveness point of view

Covid Questions

People and businesses have got seen the possibilities of working from home at least some of the time. The broadband rollout will assist on this. Even if only some people work from home some of the time that will mean predictions of congestion could be significantly wrong (congestion is non-linear - a little bit fewer cars at peak time can make a huge difference to how free flowing traffic is)

Zoom meetings have been shown to be able to replace some face to face meetings - meaning you don't have to drive to a meeting, but have it from your laptop or at your desk. People have rediscovered the joys of cycling particularly under low motor vehicle traffic situations. This shows how important it is to make cycling safe pleasant and convenient as it was during lockdown if we are serious about "mode shift" away from everyone car commuting.

Covid discouraged people from using the buses, but in NZ's situation with the virus eliminated, this has or will bounce back as everything else seems so normal now. If covid did appear in NZ, we can all wear masks as they do on public transport in Germany now and they have got a flat Corona virus rate: we need to attract people back to the buses (and away from car commuting as the most attractive option)

3. FURTHER ISSUES

3.1 Concerns Modelling May be Overestimating Future Traffic

3.1.1 Ground Truthing Models - One of the things the previous Parliamentary Commissioner for the Environment Jan Wright stressed was the need to ground truth

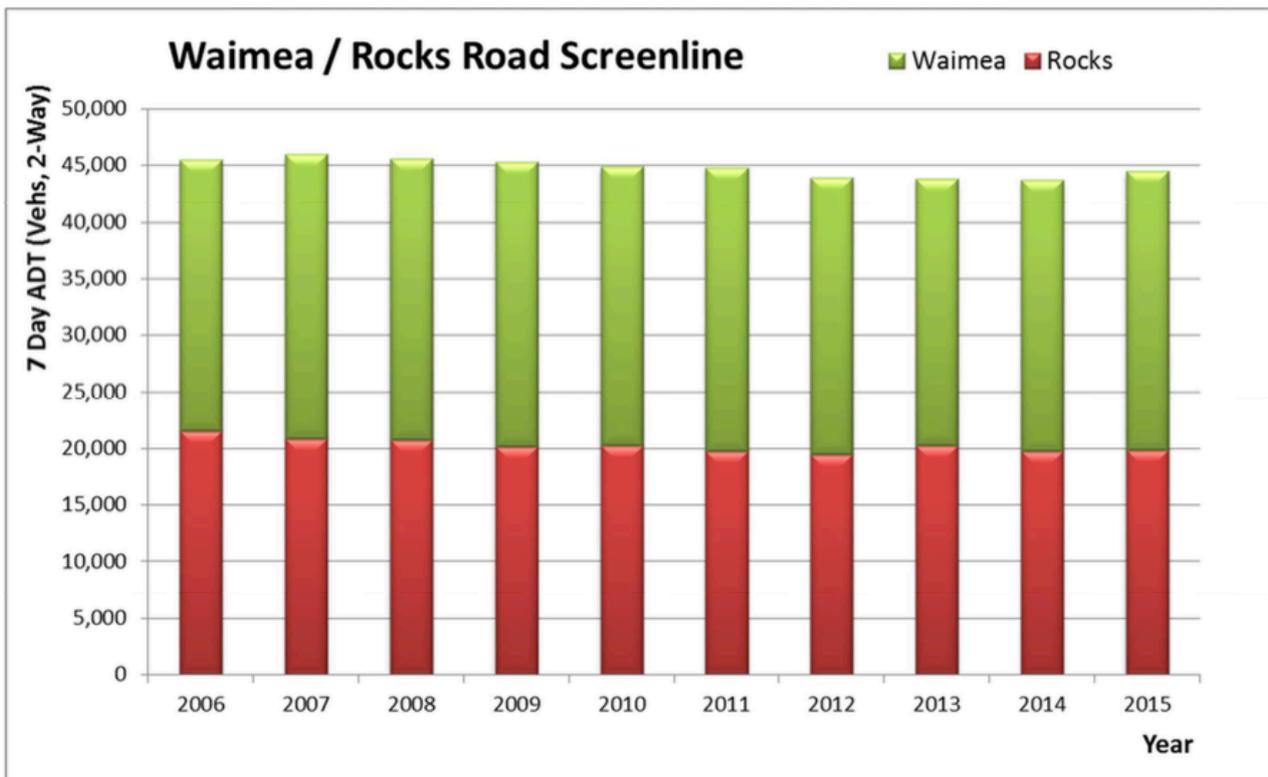


Figure 2 SH6 Rocks / Waimea Rd screenline traffic volumes

models in reality. It concerns us that your modelling is showing significant increases in traffic numbers due to population growth when we had record regional population growth

for years now yet in the decade 2006-7 to 2016-17 we had flat to declining traffic levels. It is only in the last two years that traffic numbers now are more than they were 15 years ago. So from past experience increases in population in the region have not resulted in increased traffic. If your models are now showing an increase in traffic with increased population, when this did not happen in the past, you need to reconfirm the validity of your models. Validating the models for current traffic conditions is not the same as validating it for future population characteristics.

3.1.2 Covid Changes At the very least Covid has increased the uncertainty levels of modelling future motor vehicle transport growth. With people being forced into setting up and trialling working from home it would be unreasonable to assume some of that won't continue. Likewise we have gotten used to having Zoom meetings rather than face to face meetings and the covid enforced newfound or rekindled love of cycling when the conditions are right (like our 30kph blanket zone across the city - other than protected paths) could be expected to significantly change peoples habits. Tourism typically gave congestion spikes in Nelson and although some of that was local tourists, a lot was overseas tourists. There is good reason to think that the international tourism numbers in Nelson will not be replaced by equivalent local tourists. Furthermore the climate change imperatives of avoiding the massive emissions from long haul flights may well mean the covid dearth of internal tourists may well be followed by the flight-shame significant reduction due to climate emissions concerns if not inevitable significant carbon charges. We note that modelling assumes significant growth airport activity and employment that should now be questioned, not just from covid reductions, but the rapid follow-on of climate-change-emission enforced or encouraged reductions:

“Nelson Airport – the passenger numbers supplied by the Airport are a direct input to the model so will be interpolated directly from Nelson Airport forecasts. 2018 has 1,019,000pax, 2028 is forecasted for 1,274,000pax (24.9%) 2035 is forecasted to 1,411,000pax (38.4%). Continuing the 2028 to 2035 annual growth the estimated 2048 passenger numbers is 1,693,000pax (66.0%). Employment growth at the airport shall also increase at the same rate which is 24.9% growth to 2028 and 66.0% growth to 2048. It is understood that more recently Nelson Airport have suggested recent growth of 8% per annum and this may continue forwards, however this is not reflected in their Masterplan and corresponding traffic forecasts.” (TSMDC-J002 Nelson 2018 Model Update Future Forecasting Report V6 P12)

3.1.3 Mode Shift Modelled as Complete Failure We question the assumptions in the modelling showing just 10 extra public transport trips 2018 to 2028 and 46 trips 2028-48 but 5445 extra car trips (P20 TANZL-J004 FDS High 2 December 2019 Growth Forecasting Report). Is this credible? If so it would amount to a complete failure of Nelson as a Smart Little City aspirations. Are you then assuming complete failure of Nelson City aspirations? Would you not think that as results came in of bus patronage not increasing that NCC would do nothing to make bus commuting a more attractive option? The document does say *“Care must be taken in forecasting public transport in the future and when introducing infrastructure changes, acknowledging the limitations of the model in this regard.”* So is this really saying that really the modelling is really only suitable for assuming most people car commute as they do now and the significant mode share that NCC and NZTA are committed to does not in fact occur?

3.1.4 Car use based on Auckland Figures It appears that the number of car trips is modelled as a relationship with the number of cars per household available. The figures they use to back this up is an Auckland Household survey that found that in Auckland if you have X number of cars available per household, that generates Y numbers of trips.

But in Auckland very few things are close, everyone drives all the time. Whereas in Nelson many things (like going to the pool, going to the doctors, the cinema the concert venues, the restaurants are within 5km for most yes most) people.

The Auckland Household Survey assumes larger households and so give more travel per household. Modelling is based on assuming a certain number of trips per household, yet the size of households don't well match Nelson households. The modelling assumes 5% fewer 1 & 2 person households and 4-6% more 3 and 4 person households than the 2013 census says is the case. The document* itself says the modelling "*may be over-representing trip rates by up to 20% based on the modelled split of households by size category, and an over-representation of approximately 10% based on the vehicle category composition*" (*p12 TSMDC-J002 NZTA Nelson-Tasman 2018 Model Update Report 2nd draft peer rev response). It is troubling if you are using modelling that overestimates trips by 20% and have not corrected for this.

3.1.5 Population numbers in the FDS vary wildly depending on the scenario chosen. The high Growth has 40,000 pop growth, mid point (most likely?) scenario has 18,000. It appears you have taken the high growth scenario to model that has more than double the population growth of the mid growth scenario. Furthermore the affect of this is amplified by there being smaller households so there is more than proportional growth in households (and assumed travel) than the population growth. It would seem the model might be quite sensitive to assumptions in this regard and a sensitivity analysis to different population growth rates would be appropriate.

Population still working after 65 - You are assuming a certain percent are still working after 65 which seems realistic however we would suggest that most of the over 65s still working won't be working full time. We hope you are allowing for that.

3.2 Decongestion Pricing Modelling Has this been modelled and If not, why not?

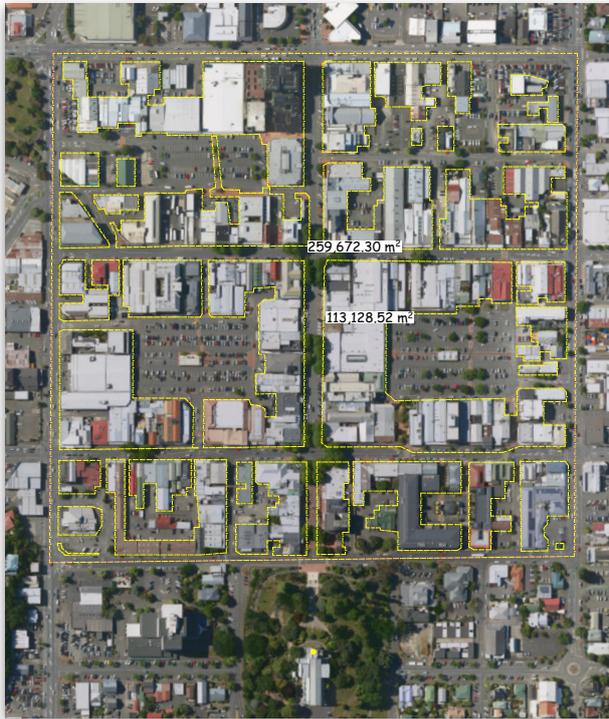
In a climate constrained world where the actual building of infrastructure has significant carbon footprint, all other methods should be exhausted before falling back on capacity expansion. Whilst we understand it does need government regulation to allow peak hour decongestion pricing (as distinct from road tolls - note clear difference), that is no reason for you not to flag it as a possible solution and encourage legislation to this method of traffic evaporation (yes it disappears - NZTA study conclude that overseas experience showed a 15-30% decrease in peak hour traffic - very significant as traffic non linear, a little bit of a drop in numbers and you can be back to free-flow again)

PTO for Appendix

APPENDIX

*44% of Inner City taken up by Cars and Car Parking

Here we have carefully measured the area given over to cars from the centrelines of the ring roads. On the left hand side you can see those areas given over to cars outlined in yellow dashes, it is 113,000m² as shown by the shaded fill on the right hand side. The total area inside the centrelines is 260,000m².



** Images of our proposals for the Rocks Road Esplanade and Road layout



Rocks Road Esplanade Nelsust Proposal

(Esplanade 4m, parking/planterboxes 2m, cycle lane 1.8m, traffic lanes 2 x 3.5m, space 0.2, planter 0.6m, protected cycle path 1.2m, footpath 1.5m)

December 2018