

# Submission – CNC Downstream Effects Mitigation Plan

J Pickles

4<sup>th</sup> April 2019

Thank you for providing the opportunity to comment on these developments.

## Observations on the Management Plan

About ten years ago I noted in a submission to council on the Urban Development Strategy that the way the council handled cycling on Cranford St. would be a litmus test of its commitment to active modes of transport. At the council meeting on 14<sup>th</sup> February this year the council's adviser stated that the changes proposed for Cranford St. to increase its capacity for motor vehicles would make it a dangerous place to ride a bike and he recommended that cyclists should avoid it.

The "designation conditions" for the report appear to restrict its ability to tackle important areas such as traffic demand management and work on this and other relevant areas is carried out in different streams by different groups, sometimes within other organisations such as NZ Transport Agency, Canterbury Regional Council or the Waimakariri District Council. This makes the development of a coherent overall plan very difficult and in some cases appears to rule out obvious solutions.

The recommendations run counter to the council's policies on active transport, sustainability and many other areas, particularly creating "safe, healthy and liveable communities". The recommendations as they stand would result in less safe, less healthy and less liveable communities.

The management plan needs to come up with ideas which will substantially reduce the damage to inner city communities, not just allocate the pain across various parts of those communities.

## Recommendations

### **Transport Demand Management needs to take top priority.**

The current proposal reads as a plan to accept whatever number of vehicles want to use the CNC and distribute the resulting downstream pain as sensibly as possible. There is no way to do this without causing serious damage to St Albans and surrounding suburbs. Far more effort needs to be placed on minimizing the number of vehicles arriving on Cranford Street by adopting serious Transport Demand Management actions.

### **The only options are public transport and cycling.**

The plan's proposal for TDM is to look into a High Occupancy Vehicle lane. The evidence that HOV lanes reduce vehicle numbers or congestion is flimsy and contested by academic reports ([Effectiveness of California's High Occupancy Vehicle \(HOV\) System, Jaimyoung Kwon and Pravin Varaiya](#)). A HOV lane could actually increase travel times and have very limited impact on vehicle numbers. Damage to

inner city suburbs is unlikely to be reduced.

Suburban rail transport of any kind in Christchurch has been ruled out on several occasions and the chances of any progress before the opening of the CNC are very low. This leaves only two options for managing traffic demand, namely buses and cycling. Improved bus services to points North of Christchurch would no doubt help if done well and this has been proposed elsewhere([Axel Wilke – Alternative Plan of Downstream Effects of Northern Arterial Extension](#)).

### **Cycling should be taken seriously as a solution to the problem.**

Cycling could play a crucial role in reducing the downstream congestion and all of its related negative consequences so long as the new cycleway being built alongside the CNC is treated as a critical part of the city's transport network and not simply designed for recreational rides on the weekend.

### **Take note of the rapid move to e-bikes and design accordingly.**

Imports of e-bikes have increased approximately tenfold in the past three years with around 17,000 being imported in 2018. Overseas studies have found that the distance people are prepared to commute on an e-bike has extended cycle commuting from around 5km with a standard bike to about 15km on an e-bike. Some countries are encouraging the switch from car to e-bike for longer commutes.([E-bike to get commuters out of car](#)). The suburbs of Belfast, Northwood, Casebrook, Redwood and Northcote are all well within range of the city centre and could take advantage of the new cycleway given proper access.

### **Provide Park and Pedal facilities for long distance commuters.**

While Belfast is within e-bike commuting range of the city centre there would be few in Rangiora, Kaiapoi or points north who would choose to commute to the city centre by bike. Another alternative is needed. While past multi-modal commuting has concentrated on combining driving and public transport there has been rapid uptake in the past four years of Park and Pedal where part of the trip is by car and the rest by bike.

There is a large scheme in [Boston, MA](#) which has been running for several years and has been expanded several times. Park and Pedal has also started recently in [Canberra, ACT](#). There are also several schemes in the UK including [Oxford](#), [Canterbury](#), [York](#) and [Salford](#). Park and Pedal is a viable and growing option being implemented in cities around the world and no city is more suited to making it succeed than Christchurch.

The various schemes differ in many respects including whether they are free or paid and whether there are bike storage facilities. Christchurch has a big advantage in that a high proportion of cars have bike racks and those that don't can have them added at a reasonable cost. Long distance commuters can drive up to the Park and Pedal car park, offload their bike in a matter of minutes and be on their way. There is no need for bike storage facilities or anything else other than room to park a car. Implementing a Park and Pedal scheme is therefore a low cost option.

### **Locating Park and Pedal facilities**

The precise location(s) of Park and Pedal car parks would need careful study but an obvious possibility

is to the North East of the CNC/QEII Drive junction. Access and egress could be via the slip road from the CNC to QEII Drive Eastbound. This would allow commuters to easily get back on the CNC via the junction roundabouts to head back North. A bike tunnel under QEII Drive would be needed to connect with the cycleway on the south side which then gives access to the Papanui Parallel and other cycling routes via the planned tunnel under the CNC.

Use of a Park and Pedal option conforms with council policy to “Develop a culture of innovation around the future of transport and new/emerging technologies which allows for pilot and demonstration projects.” It has the potential for use elsewhere in Christchurch to relieve serious traffic congestion, particularly on the Southern Motorway/Brougham St.

### **Construct the proposed cycleway east of Cranford Street quickly.**

The most recent report recommends a high quality north-south cycleway east of Cranford St. The proposed Park and Pedal site would be perfectly placed to link with such a route which would give rapid access to the city centre. This cycleway should be progressed urgently and not left to a later phase of development. The east-west cycle links to the Papanui Parallel should also be completed early to allow quick access to a range of destinations.

### **Provide easy and abundant access to the cycleway for suburban residents.**

The [map](#) and [flyover](#) provided by NZTA both appear to show very limited access to the new cycleway with only three access points along its entire length, Belfast Rd., Radcliffe Rd. and Prestons Rd. It seems that the cycleway is being treated as if it was a motorway with limited access points. There should be far more access points all the way along the cycleway so that residents in the outer suburbs have direct routes from their homes onto the cycleway.

There are very few cycle lanes or cycleways in the outer suburbs near the new cycleway. Residents need safe access to encourage them to use it, especially across Main North Rd. The improvements related to the new cycleway appear to go only a few metres off the main route and then disappear. This needs to be reviewed and improved.

### **Beef up the cycleway.**

The cycleway is shared with pedestrians. From the information supplied by NZTA there appears to be no physical separation of cyclists from pedestrians nor any lane markings. The detailed design of the cycleway should be looked at by experts in the field to make sure that it is designed to standards that ensure the safety of all users bearing in mind that some of those users will be riding e-bikes.

### **Provide a direct and safe cycling route.**

Where the CNC crosses QEII Drive motorists have a direct route over the top while cyclists have to make a lengthy detour. Consideration should be given to providing a bridge for cyclists to shorten the route. The crossing of Winters Rd on the flyover video also looks dangerous with no facilities for cyclists and if this is still the case it needs to be improved.

### **Involve more cycling expertise in building the best possible solution.**

Cycling has been given very little consideration in the latest downstream effects report and this may

be due to more cycling expertise being needed on this project. The Electric City research programme at Auckland University has produced a very useful report on [e-bikes and the future of cycling in New Zealand](#) and their staff obviously have a lot of expertise in this area. Either they or their colleagues at the University of Canterbury should be used to provide advice.

### **Other important factors**

- Timing of completion is critical and cycling infrastructure should be completed and open for use before the CNC.
- The 30 km/hr zones should come before the opening of the CNC to improve safety for cyclists and pedestrians in the downstream area.
- Consider including Cranford St. between Innes Rd. and Berwick St. in the 30 km/hr restriction. This would allow safer cycling on Cranford St.
- Provide ample parking and recharging facilities in the city centre for both standard bikes and e-bikes.
- Work with employers to encourage employees to travel to work by bike.
- Provide lease of e-bikes short term to those considering their use.
- Promote the cycling option in every way possible.
- Provide good lighting on the cycleway.

### **Conclusion**

The Southern Motorway feeds into Brougham St. which is two lanes each way but still gets seriously congested at peak times. The Northern Motorway will feed into Cranford St. which is one lane each way. Without Transport Demand Management of the kind suggested here the congestion will be far worse than on Brougham St. and the consequences for residents serious.

I believe that a Park and Pedal scheme would be popular with commuters for many reasons. It provides a door to door trip with no delays at the switch from car to bike, it saves on parking fees, provides healthy exercise and given likely traffic congestion is probably just as fast as driving all the way.

Proposals in the latest plan conflict with other council policy in a wide range of areas and cause damage to the downstream suburbs and their residents. The suggestions raised here would go some way towards reducing that damage and I hope that you will consider them seriously.

# Now is the time to do something for community

by Axel Wilke

The Christchurch Northern Corridor, as initiated by the previous government, is coming. It would never have happened under the current government's transport priorities. Despite that, Christchurch City Council (CCC) and the Transport Agency are continuing with the existing agenda and no corrective action appears to have been taken. Come mid-2020, St Albans will be flooded with a greatly increased number of cars as there is no suitable road space.

This article describes a proposal that will not result in those negative effects. Under that proposal, the Downstream Effects Management Plan (DEMP) by CCC would not be needed. A more detailed version of this proposal, including many illustrations, can be found online: xxx

The Northern Arterial, first put forward in 1960, is part of the car-centric planning that New Zealand has pursued since the 1950s. The 1964 version proposed an elevated motorway half-way between Madras and Barbadoes Streets, and a new arterial through North Hagley Park linking Fendalton Road with the central city. The 1987 plan had the Northern Arterial terminate at Bealey Avenue. The version currently under construction finishes at Innes Road.

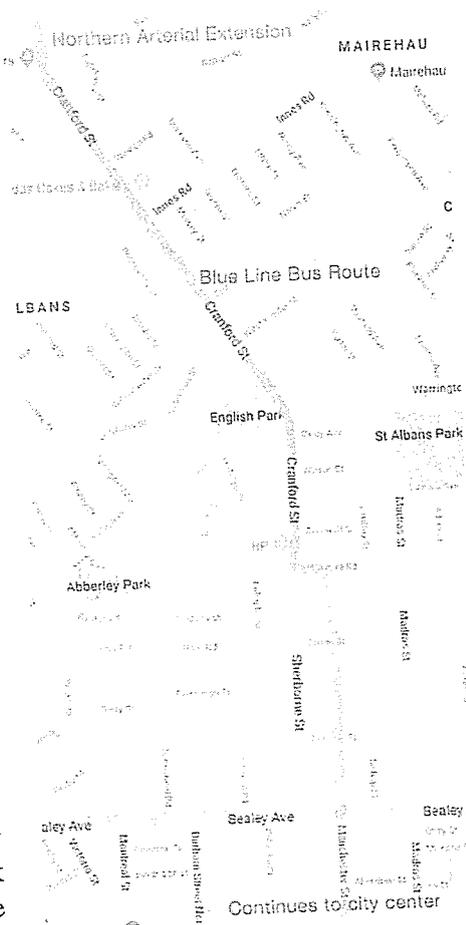
Feeding a busy four-lane motorway into a four-lane arterial controlled by traffic lights doesn't work, and such misguided thinking has turned Brougham Street into Christchurch's biggest car park. The Northern Arterial is a four-lane motorway that ultimately feeds into a two-lane arterial road; much narrower than Brougham Street. That idea is utter lunacy and drivers will try and find their way through St Albans' back streets to get out of the resulting congestion. To minimise these adverse effects, CCC is proposing to spend \$15m over the next few years; most of it long after the road will have been opened.

How about we accept that the road will open but do something completely different with it? So different that

the adverse effects don't arise either because we don't have an increase in the number of cars, or because we even achieve a decrease? How could that possibly be accomplished?

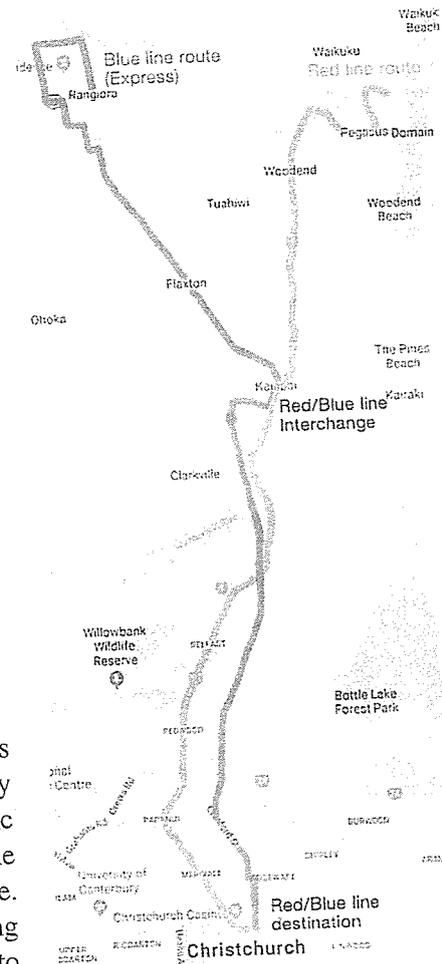
cars per 1000 population (2017 data). Those rates are 737 and 661 cars per 1000 population for Auckland and Wellington, respectively.

What we should focus on is to get people – not cars – from the north into Christchurch. People (he tangata) are the lifeblood of the economy. Cars are a drain on the economy; \$5 billion leaves New Zealand every year to purchase fuel oil, and that's money that is lost from our economy. A successful proposal would be one that make



Blue Line bus route

The proposal is based on "carrots and sticks". Carrots as an analogy for making the use of public transport, coming from north of the Waimakariri, much more attractive. Sticks as an analogy for making driving less appealing. We need to recognise that people will always do what is most convenient to them. It's rather inconvenient to be stuck in traffic. But right now, it's easy (for many) to find a car park at or near their destination. On balance, driving is more convenient than taking buses (which currently are painfully slow and packed to the brim during the morning peak). Hence the amount of driving we observe. How much more convenient driving is compared to public transport expresses itself in car ownership. In Canterbury, we own 913



Blue- Red Line bus route

taking public transport attractive many people that those who ne want to continue to drive don't re such large roads.

There are three componer the alternative proposal. The fi these is a new high-frequenc route from Rangiora and Kaia the city via the Northern Arteri Manchester Street (the blue line map) complementing the much

## Can the road plan still be canned?

*continued from page 1*

“The consultation document states ‘feedback from the community helped shape the management plan’, yet the things most important to the community are to be studied AFTER the traffic has been funnelled through our community for three to 12 years. So far in this plan the community have been forgotten,” Mark says.

“Our community essentially needs to make a decision, do we go along with traffic mitigation, and focus on stopgap measures and ongoing studies to have an ever decreasing level of public access to our community and live with more dangerous roads, pollution, noise, more judder bars, traffic islands, and traffic lights.

“Or, do we push for traffic reduction, with effective public transport at its core and healthier streets in a city we all want to live in. The choice is ours, please have your say.”

The St Albans Residents Association (SARA) has come out in favour of the latter and would like to see the plan canned. (Emma Twaddell outlines SARA’s view in Chairchat on page 2).

The council is seeking feedback on the traffic management plan by April 15. Moves are being made at community level to promote greater use of public transport and the council is also working behind the scenes on ways to reduce traffic that is estimated to increase by 30 per cent coming down Cranford St and fanning out onto Barbadoes and other St Albans streets.

### Looking at community needs

While the independent traffic engineer Dr Shane Turner may have been constrained under legal requirements for the DEMP to focus on car mitigation, other parts of the city council are able to focus on community needs.

Several working groups with members from different agencies and councils, operating on a more regional basis, have been looking at ways to reduce traffic coming down from the motorway. These groups may address residents’ concerns and compliment the work being done mitigating the impact of increased traffic in St Albans. Cr Pauline Cotter would like to see resident views better represented on these groups. These are:

1) A high occupancy vehicle (HOV) lane, led by the NZTA running from Tram Rd to the end of motorway. A decision on funding is yet to be made. If this comes through St Albans it would use clearways and block on street parking.

2) A sub regional travel demand management group involving Waimakariri District Council, CCC, Ecan and NZTA, is talking about a park and ride scheme in the Waimakariri district and then a bus service into Christchurch.

3) The Public Transport (PT) business future case looks at the freeing up other routes for public transport, with the shifting traffic demands following the opening of the NART, eg: more public transport down Main North Rd / Papanui Rd as it’s freed up with more traffic

moving down Cranford Street. Use of rail networks comes under this working group’s brief but it is not likely to be discussed or implemented in the near future. There are also developments overseas that don’t involve tracks or electric wiring that could come under their brief in future.

These are not the only ways of reducing traffic. CCC is backing the use of electric vehicles as increased use of these (cars and buses etc) will help reduce noise and air pollution. Mike Davidson has suggested some kind of toll system and a park and ride system based near the off ramp of the northern arterial as another option. There has been a lot of talk on these sorts of things but it is difficult to gain an accurate view of what is actually being done at the council level.

At the February 14 meeting, Mayor Liane Dalziel pointed out that the road plan was decided by previous Government and council and if she had to make a decision to increase access for vehicle traffic into the city she would say: No.

“If we don’t get people out of single occupant vehicles and onto public transport then the whole premise this was designed on simply fails.”

If you would like to find out more about the February 14 council meeting, check out the video online on the council website [www.ccc.govt.nz](http://www.ccc.govt.nz). A timestamped guide (an interpreted transcript) has also be uploaded to the St Albans News website [www.stalbans.gen.nz](http://www.stalbans.gen.nz).

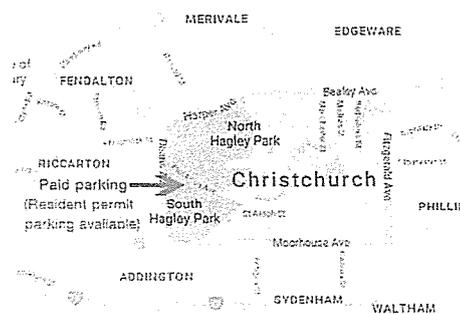
### Make your views heard

Have your say on the traffic management plan. You can say you support the alternative plan and not the DEMP. Put the community before cars. Ask for more community mapping and modelling if you think the plan needs that. Ask questions about what the council plans to do about noise or air pollution. These aspects may not be part of the DEMP but they affect the quality of life of people living in St Albans and these are things the community board and city council should be taking into account in planning for the future, not just the legal requirements of a decision under the Resource Management Act. Just make sure you do it before April 15 online at <https://ccc.govt.nz/the-council/consultations-and-submissions/haveyoursay/show/226>.

✂

bus route from Pegasus that uses Main North and Papanui Roads (the red line).

The second component is provision of bus priority measures. Permanent (24/7) bus lanes are proposed from north of the Waimakariri to Edgware Road rather than the proposed short



Parking in Hagley Park

high-occupancy morning peak lane on the existing Northern Motorway. A further priority component is for restricting the north-south movement on Manchester Street across Bealey Avenue to buses only; this is so that other traffic is deterred from using this corridor and there would thus be no further need for any priority measures on this corridor.

The first two components are “carrots” but those, by themselves, won’t be enough to deter people from driving. The third component is the “stick” and that entails parking management. Free all-day parking for commuters on roads is abundant in most of Christchurch. The closest free central city parking is just 430 m from the centre of Cathedral Square. Free all-day parking needs to go if we want to see behaviour change. Parking around areas that create high-parking demand should be charged for (with residents given the option of a paid-for permit) and this should apply around the central city, Riccarton Mall, the university, Northlands Mall, etc. The paid area for the central city needs to extend to the 4 Avenues at a minimum. Park & Ride (P&R) north of the Waimakariri could also be considered and that should ideally be established where it can, in the future, continue to be used when we reintroduce passenger rail services. P&R charges

should be set so that the income pays for land purchase and the operation of those facilities.

There are several organisations that need to work together to make this happen: The Transport Agency as the owner of the Northern Arterial north of QEII Drive, the CCC as owner of the roads south of there, ECan to organise the new bus services, and Waimakariri District for new bus stops. This proposal would save CCC the \$15m it has budgeted for the downstream effects work and this funding, plus increased parking revenue, needs to be given to ECan so that they can afford the additional buses.

A similar model was used to fund the new (November 2017) bus service in Queenstown, which saw bus use treble from one month to the next. On a per-population basis, Queenstown has since had more bus use than Christchurch.

Technically, this is all very easy. What it needs is political will. All that is needed is for the key stakeholders to agree that the priority needs to be for enabling people to move, not cars to drive. Hold your local politicians accountable as many want to be re-elected in October 2019. ☹

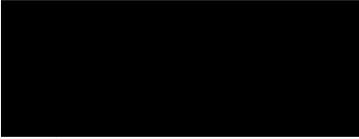
*Axel Wilke is a traffic planner based in Christchurch. A fuller version of this article is available on <https://talkingtransport.com/2019/03/17/can-the-plan/>*



Buses should play a bigger part in the city's traffic management in future

## **CNC Downstream Effects Mitigation Plan Feedback.**

Clarrie Pearce



14<sup>th</sup> April 2019.

While there are many things to be concerned about in Dr Turner's DEMP report, I am most concerned about two issues being :

### **My personal safety**

#### **The process being used**

### **My personal safety :**

I have become "a person who rides a bike" over the last year. I frequently cycle to work, the city and various other places. Almost always using the Papanui Parallel MCR to go both North and South from my home.

I can currently ride quite safely on Cranford St to and from Edgeware Rd in order to connect to the MCR at the top end of Colombo St. I ride south and move into the right hand lane to turn into Edgeware. Riding North from the City, I exit at Edgeware and ride north on Cranford giving a right turn signal to turn into Oxley Ave.

If heading North, I turn right out of Oxley onto Cranford and then left through English Park. For the return journey, I exit onto Westminster St and turn right onto Cranford at the traffic lights.

These moves all involve an element of danger but I find that manageable.

### **Under the proposed changes :**

I will need to ride South in the morning in an HOV lane, hogging that lane such that I can't be dangerously passed. That will reduce the speed of the HOV to somewhere between 20 & 30kph. I would then do a hook turn into Edgeware to go right, which is ok.

Heading home in the evening going North I would stay on the MCR and exit through by English Park and then use the proposed crossing lights to cross Cranford and head South on Cranford to Oxley, a bit of a detour but acceptable.

If I need to go North from home then I will need to walk up to the traffic lights at Berwick and use the pedestrian crossing to then connect to English Park. Heading home will be fine as I'd exit the MCR at English Park and use the Cranford St crossing.

There are no other options for me. The proposed new cycle route means I would have to travel too far East and find a way to cross two major roads. That is if the proposed cycleway is ever built, currently out to 2031.

**Dr Turner suggests :**

**7.6.2 Safer Cycle Facilities** A key impact of the additional CNC traffic and the need for peak period clearways on Cranford Street and other routes is a deterioration in the facilities provided for cyclists on these routes. Not only is there additional traffic on the clearway routes, there is not adequate room to provide cycle lanes or adequate room for cyclists when clearways are in use. **The 3.7m wide kerbside lane is not adequate for a truck or bus to safely pass a cyclist.** When parking is occurring in the clearway lanes then cyclists have some space between the parked car and main traffic lane. Such a facility is only suitable for confident cyclists and not the new cyclists that Christchurch City Council want to encourage into cycling. It is also a poorer option than the cycle paths that are provided down the CNC and on Cranford Street down to McFaddens Road. **The option of a shared path on the berm is not considered suitable due to safety concern associated with backing vehicles from residential properties. Because of issues associated with visibility from backing vehicles, narrowing the berm and widening the carriageway to accommodate cycle lanes is also not considered a safe option.** With the Papanui Parallel nearby and with the provision of additional infrastructure and suitable wayfinding (at each end of clearway sections), the majority of cyclists can be accommodated on alternative routes. Some cyclists will choose to cycle on Cranford Street anyway, mostly the confident cyclists that will use the space when available **or cycle in the traffic lane.** Others with origins or destinations on routes like Cranford Street **will most likely ride on the footpath or cycle in the traffic. If the Government do pass a law allowing footpath cycling like some Australian States and other countries, then**

***we would recommend that Christchurch City Council consider applying this to these routes.***

***I fail to see how riding on the footpath, albeit illegal, can be considered more safe than a shared path?***

***My possible solutions for safe travel are thrown into disarray by the absence of the Cranford St Crossing in all but a few words as "possible". In the Engagement document on pages 7, 9 and 11 are maps of the possible outcomes. Not one of them show a crossing on Cranford St near English Park.***

Of further concern is Colombo St South of Edgware. Currently the best shortcut heading South by car is Cranford St to Edgware, down Colombo St into the City. Dr Turners DEMP has no mention of Colombo St yet it has Caledonian Rd?. Surely this can't be a mistake as I raised it in the previous engagement. To me this raises the possibility that there is a predetermined and undisclosed option for Colombo St. If I am wrong then what are the possibilities? My concern is that other motorists will discover this gem and clog the Edgware intersection for those who cycle.

## **The process being used :**

To date, Dr Turner's DEMP has been made available to the public as an "Engagement". The document is quite complex and it appears that a decision was made to simplify the "Engagement" by doing it again with a covering document.

The current document has no "will" only "consider", "assess", "scope" etc. This is fine if the engagement feedback is turned into full consultation.

When "engaged" on the subject of consultation, staff said that only small, localised consultation would take place. This means that a small, localised consultation at point A could predetermine all the down stream solutions making further consultation meaningless.

At one drop-in session, I heard Dr Turner telling about 20 attendees that “we will do this” as a definitive solution. That is contrary to the engagement document which has nothing definitive.

DEMP submission by John Lieswyn

## ***SUBMISSION FOR DOWNSTREAM EFFECTS MASTER PLAN (DEMP)***

15 April 2019

### **INTRODUCTION: GOVERNMENT POLICY DIRECTION**

The Government Policy Statement on Land Transport 2018 key strategic priorities are around safety, accessibility, transport choice, and resilience. The priorities are guided by three themes: (1) a mode neutral approach to transport system investment (2) use of technology and innovation to achieve improved performance and (3) integration of land use and transport planning and delivery activities.

Aligning investment with these strategic priorities will deliver a modal shift in urban areas from single occupancy vehicles to public transport and active modes. There is a new emphasis on the role of transport infrastructure in 'urban place-making' to support liveable cities and on reducing deaths and serious injuries.

### **DOWNSTREAM EFFECTS MASTER PLAN KEY SUBMISSION POINTS:**

1. **Scope definition.** Whilst it is appreciated that the Downstream Effects Management Plan (DEMP) has been produced to comply with the Notice of Requirement for the Christchurch Northern Corridor, it appears that the scope of the DEMP study has been narrowly defined, and that using the NZ Transportation Agency Business Case Approach could have led to better outcomes for the communities affected by the additional traffic being generated by the Northern Corridor. The document states that:

*...the focus of the plan is to mitigate the impacts of the additional traffic that will enter the local network at Cranford Street. Even if travel demand management measures reduce future traffic volumes it is expected that most of the additional traffic as estimated from the transport models will still impact on this network and require various interventions.*

The issue here is the use of traffic models using estimated traffic growth at 2031 and networks being designed to accommodate that number of vehicles, which in turn can induce traffic. It does not focus on the number of people trips and how these trips could be accommodated more efficiently. Continuing to plan and invest primarily for single occupancy vehicle trips contributes to congestion, the lack of accessible and alternative transportation options, road traffic casualties, environmental degradation and health impacts, urban sprawl and ultimately climate change.

It is appreciated that the DEMP mentions TDM and it is understood that the NZ Transportation Agency has commissioned more work on TDM.

**Recommendation 1.** More can be done to show that ECAN, NZ Transportation Agency, and the councils are working together on a coordinated approach to land use and transport. The Draft DEMP is basically a one-party plan, while the Final DEMP could highlight collaboration by expanding the options to reflect current and potential packages of work/services/operations. This aligns with the Government's direction with a Housing and Urban Development Authority that seeks better land use and transport outcomes<sup>1</sup>.

2. **Supported elements** of the plan include:
  - 2.1. The provision of traffic calming measures on local streets affected by rat-running traffic. This could be through temporary and transitional measures to send a clear message to drivers from the opening day.

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<sup>1</sup> <https://www.hud.govt.nz/urban-development/housing-and-urban-development-authority/>

- 2.2. All traffic calmed local streets should be designed to operate at 30 km/h<sup>2</sup>.
- 2.3. The creation of nine safe speed (community) areas.
- 2.4. AS1 and AS2 - Safe access to schools.
- 2.5. SC1 to SC5 - Safe access to cycle facilities.
- 2.6. AP1 and AP2 - Safe access to parks.
- 2.7. AC1 to AC5 - Safe access to Commercial Centres: it is unclear as to how MR3 can be completed without understanding the needs of the users of the local centre over the efficient movement of strategic traffic.

**Recommendation 2:** these supported elements of the plan should be delivered in their entirety as soon as possible.

3. **Unsupported elements** of the plan should be reviewed:

- 3.1. **Vehicle capacity increases on Madras Street and Barbadoes Street by the provision of three lanes.** It is evident that in Christchurch, this cross-section is inefficient where there are large numbers of driveways serving trip generators along the route (middle lane becomes a turning lane) such as Gasson Street. The presence of cross-road intersections on these links further increases rear-end and sideswipe crash risk such as at the black spot of Byron Street/Gasson Street intersection.

**Recommendation 3:** Avoid any constrained three-lane cross sections where there are high turning movements.

- 3.2. **Shared paths along constrained arterial routes.** Multiple driveways and private boundary treatments limit the effective path width and intervisibility, increasing crash risk between motorists and people on bicycles. It is also less comfortable for people on bikes traversing each vehicle crossing. People on foot should not be forced to share the space with people travelling at higher speeds on bicycles and e-scooters.

**Recommendation 4:** Do not implement constrained width shared paths along arterial routes with high numbers of driveways

- 3.3. **Alternative cycle routes in lieu of providing for safe access on main routes.** While consideration of alternative routes is laudable, interventions on the main routes that increase the safety risk to a legal road user group is inconsistent with the majority of the government's key priorities, as stated in the GPS.

**Recommendation 5:** do not increase the safety risk any one legal road user group (people on bikes) in the interest of improving capacity for another road user group (motorists).

4. **Major Road (MR) option recommendations:**

- 4.1. **Don't try to play rugby on a squash court.** The main road options all involve works only within the existing (constrained) road corridor. Because property acquisition has not been considered, there is not enough space for the proposals to meet arterial road and access management design best practices.
- 4.2. **Do it once and do it right.** Rather than construct a road that does not meet best practice, and then have to do it over again sometime in the future, it is

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<sup>2</sup> Koorey, G (2019) The mechanics and politics of changing a speed limit: <https://az659834.vo.msecnd.net/eventsairaeuprod/production-harding-public/d60e2f523206445aa91ec158ea80e610>

recommended that substantial physical changes be postponed until enough space has been obtained to do it right.

- 4.3. **Don't panic.** Any major road capacity increases do not need to be in place before the CNC opens. There will be congestion on day one, as there was on Manchester Street when it re-opened. However, the CNC will not make the total number of car trips or housing units increase overnight. Individuals will shift routes, but a system equilibrium will be reached. Accommodating 2031 traffic demands on the network from day one will create unnecessary capacity and make the use of the private vehicle more attractive (in contravention of mode shift targets<sup>3</sup>).

**Recommendation 6:** take the time to implement any changes safely, even if it means that they must be moved to later phases after property has been acquired.

- 4.4. MR1 - to better support mode shift, consider lane management approaches that tie-in to the separate study for TDM and CNC management., this use would be straightforward to implement, operate, and understand compared to clearways<sup>4</sup>.
- 4.5. MR2 - the focus should be on the provision of safe crossings for school children and the safety of other active modes using the intersection including less mobile people travelling on foot.
- 4.6. MR3 - traffic signal coordination should be provided to minimise the need for double right turns into Cranford Street and road widening between intersections. Consider the use of flush medians with pedestrian refuges and cycle lanes on Madras Street and Barbadoes Street (excluding the extension of the one-way).
- 4.7. MR4 and MR5 - consider options where any additional capacity created by the link is restricted to use by public transport or HOV vehicles.
- 4.8. The conceptual cross sections shown in Appendix F indicate 3.7m kerbside lanes (including buffer space where indicated). These should be designed as per MOTSAM and the CNG (4.0m - 4.5m, 4.2m desirable). This can be achieved by reallocating buffer space and narrowing other lanes, or by widening the road.

**Recommendation 7:** manage the main road segments to support non-single occupant vehicle travel.

- 4.9. Some of the proposal details appear to increase safety risk for each road user group.

**Recommendation 8:** publicly release the SANF report

- 4.10. **In summary**, council and partners should consider the option of an integrated traffic management, parking management and PT service offering that has a significant impact on generated traffic, thereby minimising the need to manage downstream impacts on the main routes.

Thank you for your consideration,

John Lieswyn

Master of Engineering (Transportation) | Institute of Transportation Engineers Certified Professional Transportation Planner registration no. 351.

[REDACTED]

<sup>3</sup> <https://www.transport.govt.nz/assets/Uploads/Research/Documents/5623462411/System-thinking-in-our-towns-and-cities.pdf>

<sup>4</sup> While outside the scope of the DEMP, it is also recommended that the four lane cross section of Cranford Street north of Innes Road (that is Council road, and currently under construction) should also match operational plans for the motorway and for the main routes south of Innes Road.



April 15, 2019

### **Submission on Downstream Effects Management Plan**

Thank you for the opportunity to submit on the Downstream Effects Management Plan in respect of the Christchurch Northern Corridor (CNC) which will open in the near future. The movement of people and goods is of course not an end in itself.

#### **Introduction**

I observe at the outset that there is no invitation to submit on the CNC itself. This disjunct between the CNC and what goes on in the city of Christchurch is unfortunate. The two are clearly indivisible and any conversation about one must involve the other.

Transport is a benefit only in so far as it improves the lives of citizens. We need therefore to ensure that any traffic project is aimed at achieving this. Balance of course needs to be struck between immediate and long-term costs and benefits, and the effects on all communities (both those which are the origin of the traffic and the destination).

I suggest that the council should prioritise its response to the downstream effects on a principled basis. Those priorities should be:

1. Public safety
2. Carbon neutrality as a goal
3. Strengthening and preserving communities

I am concerned that the current plan appears to have as its primary priority the effective movement of vehicles (largely cars) more swiftly from origin to destination through the downstream area. While this will give greater convenience to the driver and passenger, this will be in addition to the shortened travel time by the use of the CNC itself.

I suggest that the primary focus should be on the protection of the community from the adverse impacts of the increased traffic flows, not on the more effective movement of traffic through the suburbs of St Albans and Edgeware.

I therefore submit that in terms of timing the steps aimed at public safety, non-car transport and protecting communities should be prioritised.

## **Engagement**

I am making this submission as the Member of Parliament for Christchurch Central.

In that role a large number of affected residents were contacted by telephone to discuss their priorities in respect of the CNC and downstream affects.

In total over 658 telephone calls were made, 183 detailed conversations were undertaken, and numerous unsolicited emails were received. Meetings were also held with residents.

While this is my own submission (and not a summation of the engagement) it is very much informed by the fact that safety and community were very significant concerns for members of the community in that engagement.

## **Public safety**

Cranford Street is already a very busy corridor and a somewhat perilous place for cyclists and pedestrians. To maintain and encourage cycle and foot traffic it is important to improve the ability of cyclists and pedestrians to access local amenities. While schools (such as St Albans Primary School) are important, so are other amenities like shops, pubs supermarkets, parks and the like.

As such priority should be given to that infrastructure which makes a safe and pleasant walking and cycling environment. This will include:

- Ensuring that cycleways are well marked and signposted
- Priority is given to pedestrians at safe and regular crossings
- Introduction of low-speed areas
- Traffic calming to reduce higher speeds in local back streets.

## **Carbon Neutrality as a goal**

It is disappointing that the ambition for the CNC is to move more vehicles, more quickly, and further. That cuts entirely across the carbon zero ambitions of the current Government (and I hope the ambition of the council). The downstream effects plan should seek to mitigate this by prioritising strategies which encourage no-carbon or low-carbon transport options.

This includes the often-overlooked importance of walking. In many cases people will choose to take car trips of less than 800m. Accordingly, to reduce the impact of the CNC, and to reduce further vehicles on it (and the surrounding streets) efforts need to be made to make walking more pleasant, convenient and safe. This will include ensuring that footpaths are sufficiently wide and well maintained, and that there is an adequate barrier from local traffic.

Similar steps need to be taken to encourage cycling, including prioritising the marking and signing of existing cycleways, and the construction of new cycleways.

I also endorse the slowing of traffic at critical areas to ensure that the environs feel safer for cyclists in particular, but pedestrians as well.

The more it is pleasant as well as convenient for people to use non-car transport to get to places of work, education, recreation, and to shop and socialize, the fewer cars will need management on our road. Accordingly this should be the focus of the downstream management to reduce excess traffic flows.

## **Strengthening and preserving communities**

Communities are comprised of people that live in them, and they are strengthened when they do things together, and in the local environs.

A major concern of the downstream effects of the CNC is the risk that it will separate communities and act as an effective barrier between people, and between people and the places that they would otherwise like to be. Obvious examples of amenities where people may become less likely to cross the road (or will be more likely to travel by car) include English Park, St Albans Primary School and the Cornwall Street kindergarten. There are however also a number of less salubrious establishments like the fish and chip shop or Kidds Bakery. All of these (and many more small places) make up important meeting hubs and amenities for the community.

It is therefore important that the connectedness of the community is enhanced and preserved. While the increase in traffic will itself adversely affect this, this may be mitigated by preserving and enhancing pedestrian and cycle access. Consideration should also be given to ensuring that where a vehicle trip is necessary that it is still possible to easily drive from a home on one side of Cranford Street to an amenity on the other. Accordingly care should be taken before instituting any traffic control measures which prevent a right turn, or other crossing of Cranford Street which has the effect of requiring a circuitous route to get from a place on one side of the street to the other.

### **Wider matters**

While some of the methods of reducing the number of vehicles, such as encouraging ridesharing, the use of public transport and active transport, require work to happen outside of the area considered by the plan we also need to make sure that the “downstream” area is managed in a way which is consistent with those methods. This will include making sure that any work on the downstream area accommodates:

- Upgrading the bus network to ensure there is timely, comfortable, quick and affordable bus transport for everyone, include express buses;
- Keeping cars outside of the inner city as far as possible by providing facilities and networks which enable people to get into the city by walking, cycling, or using public transport (such as through a park and ride system);
- Encouraging non-car transport in the inner city by restricting free and low-cost long term parking close to the city centre.
- Further developing the existing cycle network to ensure it is safe and convenient for all potential users.

### **Conclusion**

The Christchurch Northern Corridor and the Downstream Effects Management Plan are part of a wider package of transport projects to improve travel to and from northern Christchurch and dormitory centres to the north of Christchurch. However caution is needed to ensure that efforts to smooth traffic flow do not simply incentivise growth based on long-distance commuting.

Accordingly the first priority for the Christchurch City Council must be the enhancement and preservation of safety and amenity of local residents in the management of downstream effects. Along with those priorities, we also need to pursue with urgency the reduction of carbon emissions by encouraging wherever possible non-carbon and low-carbon based transport.

Ngā mihi,



Dr Duncan Webb  
MP for Christchurch Central



**Parliamentary Office**

☎ 04 817 8783 or 021 244 3346  
✉ [duncan.webb@parliament.govt.nz](mailto:duncan.webb@parliament.govt.nz)  
✉ Parliament Buildings,  
Private Bag 18 888  
Wellington 6160

**Christchurch Electorate Office**

☎ 03 366 5519  
✉ [chchcentral@parliament.govt.nz](mailto:chchcentral@parliament.govt.nz)  
✉ 282-290 Durham St North  
(Science Alive complex, Riverside)  
Christchurch

 /DuncanWebbLabour

 @Duncan\_Webb\_

Authorised by Dr Duncan Webb, Parliament Buildings, Wellington





## **Submission on Christchurch Northern Corridor Traffic Mitigation**

This submission is made on behalf of Generation Zero - a nationwide youth-led advocacy group, with a vision to see New Zealand achieve net zero Greenhouse Gas emissions by 2050.

We support the Council's decision that infrastructure must be created now to facilitate the future of the Northern Corridor, and we are fully in support of the reinforcement and development of cycleways. However, we are concerned that the addition of more car lanes will exacerbate the problem, as it will encourage more car usage. The corridor must plan for transporting people more efficiently, rather than transporting cars.

Generation Zero believes that the most effective way to mitigate increased traffic as the CNC opens is to focus on moving towards higher density transportation in the form of cycle lanes and bus lanes, as well as public transport and cyclist friendly roads. This is particularly pertinent as Ōtautahi/Christchurch's population continues to grow. Generation Zero's views align well with both the National and Regional governments' vision for transport development, that put an emphasis on long-term sustainability, environmental wellness, and value for money. High public transport, cycling and pedestrian engagement are environmentally sustainable, a great long-term solution for traffic congestion as the population grows, and also ultimately much better value for money than cars<sup>1</sup>.

Generation Zero asserts that Ōtautahi needs to move quickly away from car-centric transportation, and towards convenient mass public transport options, in light of our rapidly expanding city, and the pressing issue of climate change.

### Cycling

We commend the Major Cycle Routes project, and support all of the Safe Cycling Route developments proposed. We encourage these major cycleways to have funding priority.

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<sup>1</sup>Davis, A. (2010). "Value for Money: An Economic Assessment of Investment in Walking and Cycling". *Government Office for the Southwest*.

The proposed developments to Cranford Street make this road inaccessible for cyclists. If this is to go ahead, it is important that alternative cycling routes are developed before/at the same time as the Cranford St changes are made. We suggest that cycling infrastructure should be provided on Weston Rd, Knowles St, Malvern St, Canon St and Purchas St, so that cyclists will have good connections across Cranford Street between the alternative routes. We also propose that the alternate north/south cycle route proposed to the east should be built within three years of CNC opening, and that this should be extended to Northern Corridor shared path.

With an improved cycle network, which Christchurch has already begun to implement with the UniCycle way and the Nor'West Arc, Christchurch transitions toward a low-emission city, and keeps up with many successful cities of the world such as Copenhagen or Strasburg. It also provides substantial additional benefits, such as improved health outcomes, lower costs to the rate payer, lower pollution levels and economic benefits<sup>2</sup>.

### Buses and Public Transport

We also believe that CNC provides an opportunity to significantly increase the use of public transport in Christchurch. CNC in and of itself does not help reduce car dependency currently, and so we highly recommend a dedicated public transport lane on the entire CNC, as well as arterial roads, instead of the currently proposed High Vehicle Occupancy (HOV) lanes on a part of the CNC (southbound direction but ending before the QEII interchange) and on some arterial roads. This would mean that public transport options would have high reliability and good travel times compared to cars (and public transport without its own lane). This would incentivise the use of public transport, and decrease car congestion. Furthermore, bus lanes can be used by cyclists, making a dedicated public transport lane conducive to many forms of non-car transportation. This proposal was suggested by Axel Wilke, and was supported by the St Albans Residents Association and the CHAT Club<sup>3</sup>. Currently, bus-only lanes are opposed in DEMP because of the low frequency of buses, but bus-only lanes would be effective if developed in conjunction with an increased frequency of buses along this route.

However, we believe that HOV lanes are a better option than general traffic lanes as public transport can be sped up by the presence of HOV lanes, and more efficient car travel is incentivised.

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<sup>2</sup> Deenihan, G., & Caulfield, B. (2014). "Estimating the health economic benefits of cycling". *Journal of Transport & Health*, 1(2), 141-149.

<sup>3</sup> Wilke, A. (2019). Talking Transport. <https://talkingtransport.com/2019/03/17/can-the-plan/>

We also propose that bus and other public transport development be considered with a future of rail public transport in mind for Christchurch. This would inform the redevelopment of various arterial roads so that future rail/light rail lines and stations stations could easily be added.

### Other Recommendations

We support the proposed Safe System Community Areas plan to reduced speed limits to 30/40km in community areas. This would make the areas safer for more sustainable methods of transport - particularly walking and cycling.

We support all efforts outlined in the Access to Parks, Schools and Commercial Centres proposals to allow easier access to pedestrians, cyclists and motorists, but believe that pedestrians and cyclists should be prioritised in these plans. This would have positive impacts on community cohesiveness and health<sup>4</sup>, as well as reducing greenhouse gas emissions.

Other factors such as a reduction of city centre free parking will also help to reduce congestion, as people will be less inclined to travel via personal transport. This will work in conjunction with a permanent bus lane to encourage more public transport usage. As we know this is beneficial for personal health, as well as for the environment.

### Summary

Our main concern with the Northern Corridor Traffic Mitigation plan is that it should be used to push our city towards more efficient and environmentally sustainable methods of transport - public transport, cycling and walking. This is an imperative move to mitigate traffic congestion in the city, particularly as the CNC is developed, and the population of Ōtautahi continues to increase. Moving away from car-centric transportation is also imperative to the future of the country and the planet, as rapid action is needed to stop the dire consequences that climate change poses.

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<sup>4</sup> Litman, T. (2018). "Community Cohesion as a Transport Planning Objective". *Victoria Transport Policy Institute*.