## **Heather Goh**

From: Benjamin Love <Benjamin.J.Love@outlook.com>

**Sent:** Monday, 24 April 2023 3:47 p.m.

**To:** Submissions

**Subject:** Benjamin Love, Request to speak and evidence, Private Plan Change 79

Dear sir/madam

My name is Benjamin Love, and I wish to speak/make an oral submission at the Private Plan Change 79 hearings. I would like as much time as possible to speak, and it would just be me speaking.

I will apologies that my original written submission was hastily made and lacked detail as well as academic references.

So, I would like to extend that submission and provide academic references/articles on the subject matters of suburban sprawl, low density residential in comparison to high density, car centric/dependent planning, zoning, walkability, and other relevant subjects. Here is my evidence, from peer reviewed academic studies. I have only briefly referenced or linked them, but please read them in full using the links provided.

Low density car centric suburbs like the proposed Birchs Village are terrible for the environment, society, and long-term economy. If the Selwyn District council cares about the environment, they should not let it go ahead.

On average personal transport usage (car usage) in low density areas is 3.7 times higher than in higher density areas. This also means 3.7 times more vehicle emission. People are forced to travel further distances to get places. More driving, more greenhouse gas emissions which are a major contributing factor to climate change [1].

In Low density suburbs distances are too far for people to walk, so most people are forced to drive. This is often made worse by euclidean/single use zoning typically found in low density suburbs. Not only is this bad for the environment, but also the economy and society.

It is difficult to provide quality public transit in low density suburban areas, as it is hard to provide ample coverage, as well as make the route economically sustainable [2]. Public transit that is not within walking distance is often considered unattractive by residents, and they chose to drive instead [3][4].

A 2015 report found that the average New Zealand commuter pays \$11,852.98 per annum in car ownership and running costs. This is a substantial amount of the average annual income. However, commuters who did not own a car and used public transportation to commute spent on average \$1,879.32 for transportation costs (saving of \$9,065.78). Car owners that used public transportation to only commute to work spent on average \$9,733.95 for transportation costs [5]. Car transportation costs have likely increased since. Car ownership and usage is extremely expensive. People need access to quality public transportation, but also the ability to live car-free in an

urban/suburban environment. This is very important during a cost-of-living crisis, but also for improved long-term economic stability.

Since people living in low density car dependant areas drive more, they have transportation costs as they spend more on fuel and other car running costs. However, more money is also spent on roading infrastructure, parking, and road maintenance. There is also an economic loss from increased traffic congestion, crashes, and environmental impacts [6].

People living in low-density, single-zoned, and car dependent areas typically have low levels of physical activity, often below recommended levels. Since walking to destinations is unfeasible, and driving is the only option. This is linked to higher rates of obesity, and other health problems. Those in denser, more walkable areas mixed-use areas, with good access to public transport have higher and healthier rates of Physical Activity [7].

Car dependency strips the independent mobility of those who cannot drive. This often affects the elderly, people with certain disabilities, adolescents too young to legally drive, those who can afford to drive, people without access to a car and those who simply choose not to drive. Without access to walkable areas and public transport these people are forced to rely on others who can drive, which is often costly and not always feasible. People without independent mobility often unwillingly have sedentary lifestyles, as well as higher rates of loneliness, depression, obesity, and less of a sense of community [8][9][10][11].

Creating more greenfield car-dependent suburbs increases car traffic and congestion across area [12]. However, attempting to decrease congestion by expanding and widening the roading network leads to induced demand, meaning that overtime car usage will increase, and traffic congestion will become even worse [13][14].

While the supporting infrastructure (i.e., roading, water pipes, electricity) for Birchs Village will likely be paid for by the property developers (costs passed on to home buyers), overtime the council will be responsible for maintenance and other costs (costs passed on to ratepayers).

Low density areas have higher supporting infrastructure costs than denser areas, especially for long term maintenance and replacements. These costs put stress on both local councils and government. Rates are often increased, as well as more tax money is spent attempt to fix these problems. Sprawling low density is often deemed economically unsustainable [15][16].

Low density car dependent sprawl areas also negatively impact stress, productivity, and the rate of innovation, as people are spending more time commuting and higher amounts on transportation costs, leading to less free time and disposable income [17][18][19][20].

Selwyn District Council, and the greater Christchurch metropolitan does not need more low-density car-dependent greenfield suburban sprawl, like Birchs Villages. Instead to improve the economy, society, and lessen the impact on the environment, it needs intensification of existing urban/suburban areas, walkability, mixed-use zoning, and improved public transportation [21][22][23][24][25][26][27][28].

While I do not have exact evidence on soil quality for the area were Birchs Villages is planned, I know it is highly productive and viable soil. Also, it will lead to the destruction of native bird habits, and other negative environmental impacts [29][30][31][32].

The World Resource Institute put out a report in 2018 outlining many global and local benefits of switching to dense cities. Some of the main benefits included (note the calculations for these started in 2018, proper planning has not

been implemented in all cities/countries since then):

1. \$17 Trillion USD in economic savings by 2050 from having to do less climate change prevention, countering, and

carbon offsetting.

2. \$26 Trillion USD in general economic benefits by 2030. Denser, more walkable cities have higher GDPs, and are

more productive. People also spend less time commuting, as well as spending less money on fuel and other car

related costs.

3. \$3 Trillion USD reduction infrastructure costs. Low density areas and infrastructure cost more

money, resources, and labour (both for utilities, residences, and other buildings).

4. 700,000 less premature deaths caused by air pollution. In well planned dense cities with good walkability and

public transit people drive significantly less or not at all. This of cause cuts down on vehicle emissions.

5. 3.7 gigatons of CO2e savings will occur annually. This is like the CO2e of the EU. Once again this is due to people

driving less.

[33]

Thank you very much for reading my submission. Please read the academic references I have provided, as well as other related topics. It will be the wrong decision to pass Private Plan Change 79, and allow Birchs Village to be built.

It will only benefit the property developers, and negatively impact everything else.

I look forward to speaking at the hearing.

Regards.

Benjamin Love

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