Introduction/General Points:

- -I'm very pleased to see that decision-making will be guided by Te Tiriti o Waitangi, its principles, and acknowledgement of the obligation to partner with Maori. I hope that isn't just lip-service. The time to honour Te Tiriti is long overdue.
- -I am just a regular citizen of Aotearoa with no expertise in much of what is considered here other than as a regular user of infrastructure, like any other person in this country. I do have a background in finance and economics, so I will be making some suggestions in that area.
- -I want to say how happy I am with the proposals in the document. It seems we are finally putting away the 'government bad/private market good' paradigm that has dominated our decision-making for over 3 decades. Finally, we are talking about government-led, coordinated, long-term planning and attempting to maximise the social benefits whilst minimising resource use.

All too often, we have merely maximised private return or even worse, made decisions based on political considerations instead of sound, independent analysis. The result is a misallocation of capital and resources that fail to deliver good outcomes.

A prime example is the 'Roads of National Significance' or 'Roads of Significance to National'. My understanding is that in one case, Treasury calculated the project did not even have a 1:1 payback (the Holiday Highway possibly?). Terrible misallocation of resources. The Key Government was not only a wasted decade, but actually took the country down a path of ill-considered development where only the short-term financial or political aspects were valued. Climate change was irrelevant and instead we invested in pivot irrigators, stadia and convention centres and more cows, cars, camper vans and tourist coaches.

Since we signed up to the Kyoto Protocol, our emissions have grown instead of declining. We have built systems that increase our dependency on fossil fuels and made energy efficiency more difficult. This needs to change. We have wasted limited capital and resources building the wrong things and going in the wrong direction. From now on, we need to invest with a 'Climate Change Lens' firmly in place. Anything else risks further wasting resources and time.

-I'm pleased to see Well-Being as the goal, rather than the simplistic Cost/Benefit Analysis where the 'true costs' (or externalities) are ignored whilst at the same time, intangible benefits that accrue to people, society or nature are also ignored because the market can't profit from them. Many of the true costs and benefits are difficult to quantify on a spreadsheet, but that's no reason to not try to add them to the calculation. Well-being measures (or 5 capitals) need to be at the heart of our decisions, or else we will get it wrong. We will shift costs to future generations or poorer countries and fail in our responsibility and opportunity to do better.

-Returning to the problem of Infrastructure as political football, the Ardern Government has done little better. The prime example is the Covid-19 Response \$1.5 billion MPI 'shovel-ready' projects, a hodgepodge of largely roading projects that were approved simply because the Government wanted to appear to be doing something to support the economy. Well the road construction sector wasn't where the unemployment was occurring; retail and hospitality were. Plus, the construction sector in general is at capacity so pointing the *money hose* in that direction just stimulates inflation in that sector. There are better ways to help those who've lost their jobs than mindlessly pouring tar seal. Our Government is again wasting resources, creating more future fossil fuel dependance and increasing future maintenance costs.

I truly hope that The Infrastructure Commission's prioritised pipeline of work will lead to a more disciplined and coherent process in the future and stop this sort of nonsense. I would like to see a consideration of recreating The Ministry of Works. It wasn't perfect, but we are largely limited to a couple of foreign owned duopolies or, even worse, considering Chinese contractors - part of the Belt & Road to indebtedness with potential loss of sovereignty, see numerous examples, most recently Montenegro.

https://www.npr.org/2021/06/28/1010832606/road-deal-with-china-is-blamed-for-catapulting-montenegro-into-historic-debt

Hopefully the cost blowouts for Transmission Gully are also ending the view that 'public/private partnership' are cost-effective.

Covid has shown that we can do very well on our own. It has given us a pause to question the benefits of growth and globalisation. Perhaps we are better off with less and coping with what we already have, taking the slower path instead of madly chasing after more and more. I hope we will go forward in a more considered, planned manner that will allow us to create something that works better for both people and nature.

Now to more specific discussions...

Population Strategy - Woohoo!

I was ecstatic to see a Population Strategy mentioned. Finally! Yes, please!

We have had the highest per capita immigration in the world for the past few years and it is simply unsustainable. We added more people, much faster than all projections and we are now struggling with the crippling costs of trying to keep up. Add to that the fact that Mr. Key, the Minister for Tourist, doubled visitor numbers from 2 million annually to 4 million. This was another big mistake. The

infrastructure costs of dealing with all these people needs to be included in the wellbeing calculations. We also need to consider that Tangata Tiriti have had little say in this and statistics seems to bear out that Pacifica and Maori have been the most adversely affected by the increasing competition for jobs and housing.

Dr. Ranginui Walker, 1993-1994, New Zealand Immigration and the Political Economy Indigenous Decry Switch from Biculturalism to Multiculturalism; Claim Right to Restrict, https://www.thesocialcontract.com/artman2/publish/tsc0402/article 316.shtml

I would propose that we strictly limit further immigration (whilst taking our fair share of refugees) to allow infrastructure to catch up and the country as a whole to have take stock and adjust. Enough already. The rest of the country is tired of Auckland's incessant demand for more infrastructure. There is net out-migration of Kiwis from Auckland; what does that tell you? We also have decades of ageing infrastructure that needs replacement or expensive maintenance. The ridiculous cost of housing is driving our young people to leave for other countries where they have a chance of owning a home. We need to take a breather and sort all this out.

Tourism

I propose that we also limit annual tourist/visitors to 2 million at the highest. How we ration that amount is up for debate, but it needs to be done. What we had pre-Covid was simply unsustainable and made parts of the country and economy vulnerable to international shocks. The Climate Commissioner, Rod Carr, has suggested that we could run Aotearoa like a national park. I agree. Numbers are limited at the Grand Canyon and Yosemite. This ensures a better experience for people and protects nature.

No freedom camping for visitors. To freedom camp, you need to produce a NZ passport or driver's licence. Visitors should be required to pre-book accommodation for every night they are here and 50% max can be in DOC campgrounds. I'm sick of them shitting everywhere or ducking out of the DOC campground before the warden shows up.

Drastically reduce (or preferably eliminate) cruise ship visits. I've read studies that there is little net benefit to communities given the huge infrastructure costs required for these vessels.

We are islands, we can control our population and need to do so. We need an impartial assessment of the costs and benefits in term of wellbeing to both immigration and tourism. Many feel that things were much better when our population was 3.5 million. Now we are at 5 million. When did we, the citizens, agree to this? When did we have a say? Some think we need an even bigger population. Who is deciding this and on what basis? We need to have an open debate and make well-considered decisions, simple as that.

Funding and Financing:

There is much discussion of funding and financing in your discussion document. It is probably the biggest piece of this puzzle.

<u>I propose that we recreate The Superannuation Corporation</u>. This was the program that Muldoon misrepresented and demonised with "The Dancing Cossacks" advert: https://nzhistory.govt.nz/media/video/dancing-cossacks

Of all the stupid things Muldoon did, my vote is that destroying The Superannuation Corporation was the worst.

A couple years ago, Brian Gaynor (Milford Asset Mgmt) wrote "The abolition of the compulsory contribution scheme was a disaster for the country, as Labour's scheme would now be worth more than \$500b and we would probably be the Switzerland of the Southern Hemisphere." and "The defunct Superannuation Corporation could have partially funded the country's infrastructure, including a far better highway system than we now have."

https://www.nzherald.co.nz/business/news/article.cfm?c id=3&objectid=11940232

I don't know that we need more highways, but much of the infrastructure we do need will produce a reliable revenue stream, comparable to AAA-rated bonds. Tolls roads, water and renewable electricity generation projects are examples of low-volatility revenue sources. Regular Kiwis could fund these projects and reap that benefit, but there is currently no investment vehicle, no intermediate product they can access, except purchasing government bonds either directly or indirectly via their Kiwisaver/Investment Funds.

I am tired of hearing that NZ needs foreign investment. There is plenty of money here already. Currently, banks have about \$400 billion in transactional, savings & term deposit accounts.

https://www.rbnz.govt.nz/statistics/s10-banks-balance-sheet

Hundreds of billions are in property investments! At the same time we have private foreign interests investing or considering investments in renewable projects here - Tiwai & hydrogen, solar farms in Northland and wind farms in Taranaki:

https://www.odt.co.nz/business/aussie-billionaire-eyes-tiwai-hydrogen-production https://www.stuff.co.nz/business/green-business/124224899/new-zealands-largest-solar-farm-proposed-for-top-of-country

https://www.rnz.co.nz/news/business/441767/oceanex-energy-eyes-taranaki-for-offshore-wind-farms

https://www.nzherald.co.nz/whanganui-chronicle/news/tilt-renewables-board-to-proceed-with-south-taranaki-wind-farm/AR7DD5CDGZKUTBJLUSKRZ6MXVM/

We need an investment vehicle that will funnel our capital into the development and ownership of NZ assets other than residential property speculation. Kiwis put their money into the banks (and then they put 2/3s of that into the housing market) or Kiwis invest directly into the housing market, because they don't have confidence in the alternatives! We think we're getting richer by selling ever more expensive houses back and forth, but actually we are building a debt-fuelled bubble. This results in an enormous transfer of wealth out of our country. Pre-Covid, the big 4, Australian-owned banks had profits of about \$5.5 billion per year - that is roughly 10 times the profit of our biggest company, Fonterra. This is a massive revenue source that is being sucked out of our economy every year.

We can recreate the Superannuation Corporation and instead call it The Kiwi Wealth Fund. We can repurpose Kiwibank's KiwiWealth managed funds and put the Guardians of the Superfund in charge. The Guardians have a proven record of excellence. Through this investment vehicle, Kiwis could supply a pool of capital for an Infrastructure Fund and also the Green Investment Fund, the Venture Capital Fund and other ventures that would direct the *money hose* away from the housing market bubble and instead toward building the climate conscious society we will need whilst directing the revenue from these projects back into Kiwis investment account instead of to overseas interests.

As the famous Chinese proverb says, "The Best Time To Plant A Tree Was 20 Years Ago, The Second Best Time Is Now."

Local Gov't Issues and Funding

I feel that Local Gov't needs much better funding, for many reasons, but mainly because so much of the effort required to decarbonising Aotearoa will happen at the local level. Appropriate decision making is all too often at the local level, yet central gov't holds the power and the purse strings. I feel this remoteness leads to disconnection and bad results.

For example, it was ridiculous to have 4 Cabinet Ministers deciding what MPI Covid stimulus 'shovel ready' projects should get funding. Another is the Christchurch rebuild where the City Council's *Share an Idea* program showed people wanted a 21st century, green, sustainable CBD. The Key Gov't threw that in the bin and imposed 'The 100-Day Plan' on us. Sustainable design was specifically excluded, accessibility was excluded, cycling groups were not consulted, bus drivers were not consulted. The Gov't should have provided funding and support for a bottom up design approach instead of a top-down dictatorship. We need to learn from this experience.

We can look to China for an alternative. When the GFC began, their central bank directed member banks (basically extensions of the Government) to increase their lending to local government 'Special Purpose Vehicles' for local infrastructure

projects, as a way to stimulate the economy. Unfortunately, some of this money was wasted on 'ghost cities' and stadia in the middle nowhere, but the point I'm trying to make is that central and local governments need to work together to determine what infrastructure is needed. Central government shouldn't dictate. The best outcomes are from central government funding and a bottom-up approach to determining what is needed.

I would also mention the concept of Overt Monetary Financing (OMF) which is "defined as running a fiscal deficit (or a higher deficit than would otherwise be the case) which is not financed by the issue of interest-bearing debt, but by an increase in the monetary base - i.e. of the irredeemable fiat non-interest-bearing monetary liabilities of the government/central bank."

Adair Turner, The Case for Monetary Finance – An Essentially Political Issue, https://www.imf.org/external/np/res/seminars/2015/arc/pdf/adair.pdf

It is controversial and considered unconventional, but as quantitative easing seems to cause unintended consequences such as asset bubbles, it is high time we considered other forms of economic stimulus such as having the central bank directly fund Government expenditures. Raf Manji proposed this last year as preferable to QE: https://www.interest.co.nz/opinion/104075/raf-manji-says-nz-shouldnt-get-sucked-overseas-style-ge-or-asset-purchasing-and

Transportation:

Aotearoa spends about \$8 billion on transport fuel imports *every year*. Our trade deficit began in the 70s; that's no coincidence. It's when OPEC organised and quadrupled the price of oil. This year we will likely have a small surplus - because we aren't burning so much transport fuels. Every year, our current account deficit increases and we become more indebted to the rest of the world - to pay for transport fuel. Plus, our economy is vulnerable to shocks when the oil price goes up or our currency moves lower on international markets. Imagine if we could end this addiction! This is the promise of converting to <u>electric</u>, active and <u>public transport</u>.

Imagine if, instead of spending \$8 billion every year on imported transport fuel, we spent that amount on eliminating our need for transport fuel? Again, this is simply ending the misallocation of our capital and resources. We just need the political will, vision and leadership to do it.

There are co-benefits of cleaner air and better health from active transport.

My main mode of transport has been cycling for 30 years. I do have a car. I've filled it 7 times in the last 2 years. I've driven it 65,000km in the 13 years I've owned it. It is likely the last car I will own and I look forward to the day when I can book a shared e-car, a short walk (100meters perhaps?) from my home. Then I won't need my own car and all the expense, resources, and hassle that requires. There's

enormous benefits and savings for all of us if we move to shared vehicles.

The 'market' will not do this fast enough. Profit should not determine our pace. Actually, the risk is that 'the market' will make Aotearoa a dumping ground as other countries transition. So, at a minimum, we need to ban the import of ICE vehicles as soon as practicable.

The Gov't can subsidise e-cars and e-bikes. The Gov't can support share e-car systems. The Gov't can offer a buy-back program for used e-vehicles to both encourage purchases and to help poorer communities to transition. We need the Gov't to really step up its support in this transition.

I support congestion charging. It encourages the efficient use of the road networks whilst encouraging a shift to other transport modes. It is true user pays. London's Congestion Charge exempts low-emission vehicles thus creating another incentive to ditch the ICE SUVs.

There seems to be an error on page 52, F1.4. It says "Lowering the cost of public transport at *non-peak* times", surely you'd want to lower the costs/encourage public transport use at *peak* times?

We need education programs to encourage people to make more short trips by cycle and make it safer to do so.

I would also like to see more public education about the road damage costs of heavy trucks vs. what they pay via the RUC. Heavy trucks cause most of the damage, but their RUCs payments don't cover that cost. The taxpayers subsidise those users.

We also need more public information about the costs of 'free' parking.

The Gov't needs to subsidise public transport. This is another area where privatisation was supposed to deliver efficiencies, but instead delivers profits to private companies. In Christchurch, Redbus was recently sold because it wasn't delivering a profit and the Council needed money. Councils are pushed into making poor decision because of funding shortfalls.

Air transport assumes either continued low fuel costs or new, low-carbon technologies. Both are uncertainties and we should hold off on further investment in this area.

We used to have overnight ferry services between Christchurch and Wellington. Is this something to consider again? What about coastal shipping instead of overland?

Regarding Question 21: I definitely favour a 30 year lapse period; 10 years is not enough. All too often it is more than 10 years later when the inadequacy and planning limitations start to show. I left Auckland 20 years ago because I could see

that they weren't building sufficient transport capacity for the development that was happening. Now the situation is so much worse and the costs are so much higher to retrofit something that will meet the needs.

Electricity Generation

Pity about the privatisation of the electricity generators (thanks again to the Key Gov't and also Max Bradford's 'reforms'). Infrastructure that was built up over generations was privatised and is now subject to the imperative of maximising shareholder return instead of the wellbeing of society. Just when we need a cohesive, coordinated system to maximise efficiency, we have a 'competitive system' of multiple generators and retailers. The generators were partially privatised at pretty much the bottom of the post GFC market lows, so we cannot afford to buy them back. Incredibly stupid.

However, the Kiwi Wealth Fund described above can finance the building of new renewable capacity. Windfarms, solar, other new technologies including repurposing Tiwai. These new assets will generate the revenue that will flow into Kiwis retirement & investment funds. Kiwis will own them. No future Government would be able to flog them off again for short-term gains.

Same goes for Wellington's power grid. Never should have been privatised. Another Council pushed into a bad decision due to short-term funding issues.

<u>Urban Design - retrofit existing and new</u>

First there is always, always Susan Krumdieck and her advice. For example, the classic - From the Ground Up:

https://www.youtube.com/watch?v=fTrj2f9t3So

Quite simply, our leaders need to pay much more attention to this lady.

<u>For existing housing and neighbourhoods</u>, I'm inspired by the EcoBlock program in Berkeley that looks at things on a neighbourhood perspective, not individual houses:

"EcoBlock is a radical retrofit of existing residential homes, creating a block that is more resilient to power outages, has improved indoor air quality, and allows residents to co-own the main means of their energy production. The Oakland EcoBlock project is creating a technical, legal, financial, and social roadmap to decarbonize cities through block-by-block urban retrofits that reduce energy and water consumption and reduce tailpipe emissions from gasoline powered cars through support of electric mobility and carshare."

https://ecoblock.berkeley.edu/

This project improves each home's efficiency and sustainability, but also creates neighbourhood, solar power generation to buffer individual home's power needs and charge EVs. Doing this on a block-by-block basis creates opportunities and efficiencies where separate home systems create unnecessary redundancy. Brilliant! We are much better off doing things collectively rather than separately.

New developments - urban sprawl vs. smart 21st century design

We are still building the car-dependent design of the 1970s. I live in Christchurch and have been utterly appalled to see the Key Gov't rebuild that expanded both the city's boundaries and motorways. It has made many people more car-dependent and undermined the development of a decent public or active transport system.

Yet, here's is a proposed example of 'more of the same':

https://www.stuff.co.nz/business/property/300256988/large-subdivision-plan-could-transform-rapidly-growing-rural-canterbury-town

The new southern motorway extension was literally opened just 5 months ago. Projects like this, further expanding housing development around Lincoln will soon have people calling for further extension and expansion of the roads whilst ignoring the nearby rail system. Perhaps it makes sense for Christchurch to expand out to the west, but it needs to be done in a smart, 21st century way, with everything critically analysed through a 'climate change lens'. This looks like more of the 'same-old, same-old' where private developers profit and the taxpayer will pay the costs.

At the same time we have the current Gov't failure to support and as a consequence, the abandonment of the model urban residential design project that was supposed to be built in the CBD as per 'the 100-Day Plan'. This was the only part that the Gov't failed to fund. We got the stadium and the convention centre (yippie-sarc), but not the innovative urban community.

https://www.stuff.co.nz/the-press/news/124273640/central-christchurch-site-up-for-sale-assustainable-village-anchor-project-finally-abandoned.

This project failed because it did not receive support from both the Key and the Ardern Gov'ts. Around the world, these project succeed because of government support. Even Thatcher recognised that. See Prof. Lin Robertson: https://thevivaproject.org.nz/index.php/2017/12/30/the-breathe-urban-village-competition-why-did-it-fail-to-deliver/

The Viva Project/Madras Sq. didn't fail because it was an unrealistic project, it failed because of the immaturity of our capital markets. It failed because of high land prices and the CERA/Otakaro Ltd's insistence that the project go to the private markets to finance the entire land purchase cost up front. In other markets, there is *patient capital*, typically insurance companies or pension funds. We don't have that here because these sorts of projects are new here and *scary* to more conservative capital. In other countries, the governments have supported these projects until the capital markets have become comfortable funding the new housing models.

So here, in Aotearoa, banks decide what we'll have for housing and they prefer to lend to private developers and what we get is projects that maximise both of their returns. That's basically trophy homes and 2 or 3-story little boxes. We don't get communities. We don't get accessibility (lifts add to costs). We have an ageing population and pretty much all that's being built is ad hoc infill boxes with stairs or expensive, high-end multi-level apartments.

Where else in the world are they building low-rise apartments in the CBD? The suburbs around our CBDs are being redeveloped in an unplanned, haphazard way. This is madness. I don't think people are opposed to intensification, I think they're opposed to the cheap, ugly buildings going up on random quarter-acres sections. We keep expanding out, over productive soils whilst failing to support good urban redevelopment. I could go on, but I despair at the stupidity of it.

Finally, I refer to this article by Brendon Harre:

https://brendon-harre.medium.com/reinventing-public-works-to-rebuild-new-zealand-1985512c754c

Brendon references: "Professor Alan Evans in his book Economics and Land Use Planning, (2004, P.176–180). He describes two types of plans for the built environment:

- Positive planning where the government buys the land (outright or in partnership with the landowners) and builds what it understands should be there, benefiting from the capital value uplift the developed properties creates, to fund, in part or in whole, the infrastructure provided (note local or central government may also gain rising tax revenue as a result of the economic activity induced by the public works that could also fund the infrastructure provided).
- Negative planning is the use of district plans and planning rules to prescribe or proscribe what types of land-use development can occur in an area. Yet how much and what type of built environment that is actually constructed is determined by the private sector, as long as they act within the boundaries of the planning rules."

We have been doing the latter; we should be doing the former. e.g. don't just plan a light-rail corridor down Dominion Road. Instead, plan an entire urban redevelopment and use the Public Works Act to acquire the land that will benefit from the new transport.

Under the current Anglo/American model, the Gov't builds and retains the infrastructure that loses money, the bit that need to be subsidised, whilst privatising the capital value uplift and then the Gov't tries to recover a bit of that through taxes. Instead we should masterplan urban redevelopment with the Gov't keeping a significant portion of the commercial area, using that income to subsidise the public

transport. Again, these investments could be publicly owned via the Superfund or ACC or a fund owned by Kiwis. We could consider public/private partnerships, but the public needs to keep a substantial part of the betterment. We need to socialise the benefits as well as the costs.

Finally, I want to reiterate the point, that if we had a viable intermediary, the Kiwi Wealth Fund, we would have investment money to support better residential development, better transport and renewable energy projects. We need good planning and the products to provide the funding and return the cash flows back to Kiwis.