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Lessons from Auckland in road transport planning: Making trade-offs transparent

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During the period 2011–15, Auckland City undertook a concerted effort to find acceptable solutions to the problem that existing funding sources fall well short of the levels of investment necessary to provide the transport outcomes demanded by Aucklanders. This chapter provides an overview of the combined policy and political strategy that was used and reflects on the related lessons it provides. A key focus is the necessity and value of making policy (and political) trade-offs explicit and transparent, and taking the time to ensure that all stakeholders clearly understand both the trade-offs and the associated constraints.

Context

Context is, arguably, everything. A transport planner I worked with once told me that the peak load passenger capacity for a bus in northern China during the winter is one-third less than during the summer, because everyone wears such bulky clothes to survive the cold. It is always important to know and understand the context within which you are working. In this chapter, I will discuss the issue of hypothecation in the context of funding and reinvesting in New Zealand's transport infrastructure.

Since 2008–09, all national transport funding in New Zealand has been hypothecated. For land transport, for example, all vehicle licensing, excise tax and distance-based road user charges for diesel-powered vehicles go straight into the National Land Transport Fund. This is administered by the New Zealand Transport Agency (NZTA), a Crown entity at arm's length from political interference (in theory) that allocates that funding to land transport across the country.

As well as controlling funding, the NZTA also owns the state highway network. This is a clear point of difference with Australia, where major roads are state-owned but often federally prioritised and funded. Local authorities own the remainder of the road network in New Zealand (streets and minor roads), and raise most of their revenue from property taxes, comprising levies on property based on either land value or capital value. In broad terms, local authorities receive matched funding from the NZTA for their approved road and public transport program. There are considerable constraints on and parameters around what projects can be funded and how they must be procured. So it is a slightly different funding framework, and that is part of the context.

The discussion here is focused on Auckland, and again context is important. As a geographer, I tend to think spatially in terms of topography and the physical layout of streets, businesses, homes and offices. Auckland is set on an isthmus between two harbours: Waitemata Harbour to the north-east and Manukau Harbour to the south-west (see Figure 8.1). Otahuhu, the narrowest point between what is in essence the west coast (and the Manukau Harbour) and the east coast of the city, is only 1,200 metres wide—the narrowest point in the country. State Highway 1 forms the principal road corridor connecting the various parts of Auckland. As a matter of historical accident, the railway line also runs more or less along the same route.

Auckland is characterised by low-density settlement, with 1.5 million people spread around the two harbours. As New Zealand's largest city, Auckland is growing quite rapidly, attracting 75 per cent of New Zealand's growth, with two-thirds of that coming from natural population increase. Demographically, Auckland is quite different from the rest of New Zealand, with a large, young and growing population. The population level in most of the rest of the country is static or in decline. This presents particular challenges for the government of the day in terms of how to raise and allocate revenue.



Figure 8.1 Map of Auckland showing major road networks

Source: Based on and including data from Land Information New Zealand, reused under the Creative Commons Attribution 4.0 International licence.

While a system of national hypothecation for the funding of roads has obvious benefits in terms of transparency and equity, trying to raise the national fuel tax to fund expensive road projects in Auckland is a difficult and unpopular political proposition.

Since 2010, a single local authority has administered Auckland, and that has changed things quite dramatically. Having one powerful authority representing the city, rather than the previous eight local authorities,

has also changed the context nationally. The unending fighting between local authorities has been removed, as has the opportunity for the central government to play one authority off against another. Amalgamation dramatically changed the balance of power between the central government and the mega local authority, the Auckland Council.

Transport funding gap

Over the next 30 or so years, an important issue for Auckland’s growth is the marked gap between the level of future spending required to satisfy the city’s expected transport projects (the dotted line in Figure 8.2) and the anticipated actual funding Auckland is likely to receive (the blue line). The red lines shown in Figure 8.2, adapted from a 2014 study (Alternative Transport Funding Project Team 2014), reflect the NZTA’s expected program for the next 30 years for Auckland, including the Auckland Council’s own program. The blue line aggregates the expected amount to be raised from local property rates by the Auckland Council on current policy settings, plus the proportion of national funding that would arrive in Auckland over that period. The shortfall is significant. To amplify the issue, this funding gap exists in a context where almost every citizen of Auckland thinks not enough is being done to improve transport infrastructure and transport mobility.



Figure 8.2 Funding gap: \$300 million per annum over 30 years

Source: Adapted from Alternative Transport Funding Project Team (2014).

Finding an Auckland solution

With little progress made in previous efforts to address this funding gap, something different was needed. Rather than approaching the question of what is the most appropriate way to raise funds from an academic or esoteric framework, the debate in Auckland has focused on finding politically feasible ways to raise enough money to build the network that is necessary. In the face of a city that is growing rapidly, all of the transport solutions—whether public transport or roads—are expensive. The integrated policy and political process was designed so that it built community support for, and understanding of, the solution as it was developed.

It was obvious the primary challenge was not technical or analytical, but political. Obviously, there are many ways to raise money, all of which are technically feasible. The challenge for jurisdictions is how to get the politics right to make them possible. In Auckland, some work had already been undertaken, with these issues addressed in 2003 by a joint officials group and the associated funding issues fed into the 2007 Auckland Transport Alignment Project. Most of that work, however, has focused on making the right transport investments; trying to get the national government of the day engaged in how to pay for it has been an altogether different challenge.

About three years ago, the Mayor of Auckland asked: How do we change the government's thinking? How do we come up with options that are politically palatable and that will build enthusiasm for the necessary action? The approach adopted—through the combined thinking of the mayor's political strategists, planners and consultants—was to follow a consensus collaborative decision-making model. My role in that process was as the project manager and facilitator.

From the outset it was clear that, if the key issue was to change the politics, what we needed to do was get all the 'movers and shakers' in one room and sort out the politics. So we brought together representatives from all of the major stakeholders. Among the interest groups were some very important players, including unions, employers, infrastructure advocates, the Automobile Association, property investors and the international airport, not to mention local environmentalists, walking and cycling advocates, the tourism industry association and so on. We assembled a 'who's who' of key players in this area and formed a really interesting,

challenging, but effective deliberative group. One of the more interesting dynamics to emerge was observing a representative of the child poverty action group advocating staunchly for the least well-off in the community and how that interplayed with both the union movement and local employers and manufacturers, all against a backdrop of working out how to pay more for roads and transport.

Framed in this way, decision-making really became quite simple, albeit not all that quick. We put a group of people in a room and provided a facilitator and whatever resources were necessary to inform them in terms of expert advice and further investigative work, and then asked them to address the issue of road funding on which they would have to reach a consensus. The question they were asked was not how to optimally price the transport network, but how to best raise the extra \$300 million a year to build the Auckland Plan's transport network. They were never asked about what, in their opinion, was the best network—and that was really important, because, within the stakeholder group, there were some markedly different views on some of the particular projects that were included in the proposed investments. We would never have achieved consensus on prioritising the projects. What we were able to do instead was work through a platform for raising enough money to implement the whole program.

The first stage to build a consensus involved working through a large number of completely 'blue-sky' or 'off-the-wall' ways to raise money. Topics discussed included regional lotteries, a regional goods and services tax or regional payroll tax, and a raft of things that went in and very quickly went out the other side. A proposal to adopt a betterment tax on improved land values was another of the ideas that went in and disappeared in the first round. We relied on a number of technical reports as to whether these ideas had merit and to work out which of the different options could be dismissed as impractical. During this stage of the process, there was significant engagement with the public on a draft report that enumerated all of the options that had been considered and provided the reasons some had been discarded. At the same time, all of the key stakeholders who were part of the consensus-building group had an obligation to engage with their own member and/or community constituents. This consultation process was part of a very overt campaign to get people focused on the options and choices. The depth of that engagement, for instance, started a number of fascinating debates, such as one that occurred in the union

movement about how to charge for transport. It triggered an entrenched political-philosophical debate about the appropriateness or otherwise of user charging of transport, and that debate has continued.

We concluded the first stage of our deliberations with a narrowed field of options, all of which were, in essence, various forms of user charges and conventional mechanisms of rates and fuel taxes (see Table 8.1). We then embarked on a second stage of work, which was designed to take those preferred options and turn them into two funding pathways that could be formally considered by the council and the people of Auckland. Why did we select two funding pathways? As part of the first stage of work, we looked in detail at what other countries had done when they were considering introducing charging schemes, and there were a number of things that stood out. The most blindingly obvious was that when governments go to their communities and ask them whether they would like to pay a new and additional tax, the answer is invariably a definitive 'no'. For obvious reasons, we avoided that trap.

Another thing that was readily apparent to us was that, in the realm of taxation reform, striving for total perfection could be the enemy of the good. Jurisdictions that opted to implement an idealised 'big bang' change or a complicated 'bells and whistles' scheme invariably failed. Hence, we came to the conclusion that it would be far easier to adopt a series of incremental steps in a preferred direction that might take some years to progress. If we were able to get to the first step of introducing a standardised user charge, we reasoned that we would then be able to progressively refine or expand that as a second or third step in the process. It was our view that, over time, we might be able to get closer to an optimum pricing model that charged travellers fairly for usage. If we went out with a complicated scheme straight up, however, set at prices that were optimal, it would almost certainly have failed. All the participants in the consensus-building process, from the very beginning, were conscious that any solution would be not simply a technical question, but rather a political question. How can we get the politics to line up?

Table 8.1 Rates and fuel tax option

	Average annual rates increases	Average annual fuel tax increases (GST incl.)
Annual increases already signalled	2.5% to 3.5% p.a. (Mayoral proposal)	1.6 cents per litre per annum (Draft Government Policy Statement)
	+	+
Annual increase proposed by the IAB for Pathway 1 (dedicated to transport)	0.9% p.a.	1.2 cents per litre per annum
	=	=
Total combined annual increases	3.4% to 4.4% p.a.	2.8 cents per litre p.a.

Source: Alternative Transport Funding Project Team (2014).

The two options that were settled on gave Aucklanders real choices (see Figure 8.3), the first of which was between two different levels of investment: a basic transport network, which was effectively what Auckland could afford based on existing funding sources, or the transport program contained in the Auckland Plan, which required sourcing an additional \$300 million a year to implement. So, the first question was very simple: would people prefer the basic option, which would not work, or the expanded option, which would be much more effective? The answer to that question was equally straightforward. Everyone wanted the second option; they were prepared to pay more.

Having established this preference, we then introduced a series of payment options. We asked, if people wanted the more extensive transport plan, how were they prepared to pay for it? The choice we provided Aucklanders was between a flat \$2 toll charge for using the motorway system or a combination of increases in property rates and fuel taxes. Reaching a consensus on this question was more of a challenge. The toll charge hit motorists who crossed the isthmus using the designated motorways. The option to increase rates and fuel tax added another 1 per cent per annum (compounding) to people's rates. Combined with the rate increases already contained in the council's budgets, this would result in increases of about 4–4.5 per cent per annum. The proposed fuel tax increase was structured to permanently add about 1.2 cents per litre of petrol.



Figure 8.3 Two transport options

Source: Alternative Transport Funding Project Team (2014).

By design, the resulting debate focused entirely on what needed to be raised in Auckland to pay for the city's transport needs. We quite deliberately sidestepped the question of what ought to be done nationally to avoid a debilitating debate about the South Island not wanting to pay for Auckland's infrastructure—an argument Auckland would have lost. We recognised that rates and fuel tax changes were easy to implement, spreading the funding more broadly and delivering critical revenue. Conversely, motorway user charging would be complex, costly to implement and required legislation, but had a range of other economic benefits in terms of aligning cost with benefit.

To impose a local motorway charge, there were two possible user charge options (see Table 8.2). Some of the group wanted to go for simplicity, while others were determined to look at a variable pricing regime. The group eventually managed to agree on a flat rate fee structure. How did we end up there? The answer lies in the fact that the motorway network dominates the transport system in Auckland. A simple charge on the motorway would collect the revenue needed at a reasonably low per use charge. There are quite defined entry and exit points, so tolling is quite straightforward. It is, in essence, a closed system, and it dominates the performance of the network, so it is the easiest solution with the most direct demand consequences. The low level of the necessary charge also helped alleviate the social impact concerns that a number of the group had.

Table 8.2 Motorway user charge option: Two possible approaches to charging

FLAT RATE per use charge				OR	PEAK DEMAND RATE per use charge									
Weekdays		Weekends			Weekdays								Weekends	
6am – 7pm	7pm – 6am	6am – 7pm	7pm – 6am		Off peak	AM peak	Off peak	Inter-peak	Off peak	PM peak	Off peak	Nights	6am – 7pm	7pm – 6am
					6-7 am	7-9 am	9-10 am	10 am – 3pm	3-4 pm	4-6 pm	6-8 pm	8pm – 6am		
\$2.00	Free	\$2.00	Free		\$2.00	\$2.80	\$2.00	\$1.30	\$2.00	\$2.80	\$2.00	Free	\$1.30	Free

Source: Alternative Transport Funding Project Team (2014).

In comparing the options, a number of issues were raised, such as transport impacts and the demand for public transport. Figure 8.4 compares the basic network with the impact of the three different charging regimes. Importantly, all of the charging schemes were designed to deliver the same amount of revenue and each delivered the Auckland Plan’s transport network. The biggest differences were the future outcomes from the Auckland Plan transport network (compared with the basic network), and obviously this required the additional investment. It is worth noting that, despite the level of investment in the Auckland Plan transport network, our modelling suggested average speeds would get worse over time (see Figure 8.5), so we certainly were not proposing an optimised level of investment. But performance was significantly improved under a motorway user charge compared with rates and fuel tax increases.

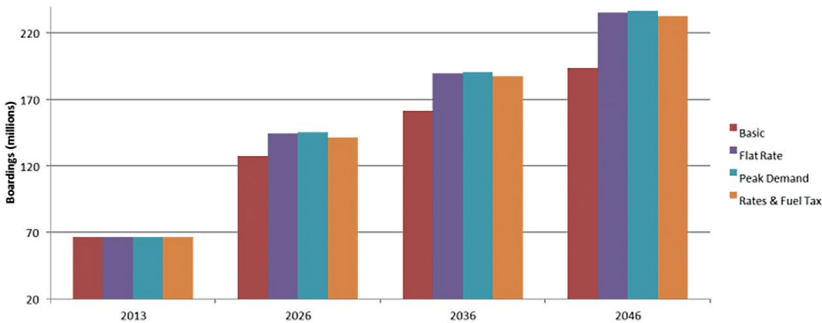


Figure 8.4 Annual passenger transport boardings

Source: Alternative Transport Funding Project Team (2014).

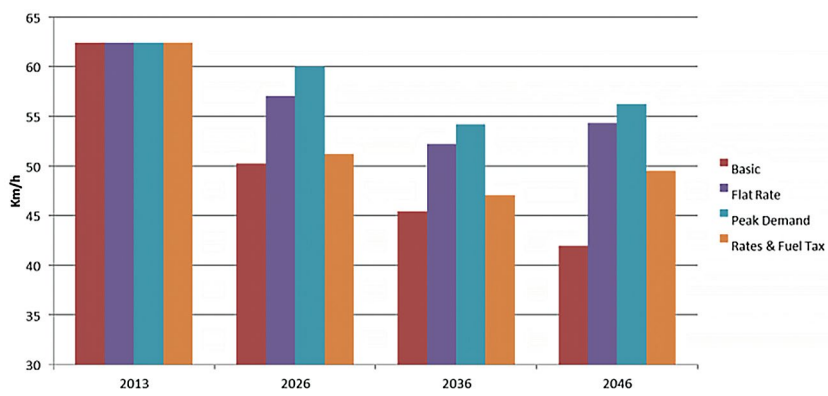


Figure 8.5 Average AM peak speed on the strategic freight network

Source: Alternative Transport Funding Project Team (2014).

Figures 8.6 and 8.7 set out the expected level of congestion under each of the different payment options (with the basic program included as a comparator). Figure 8.6 shows projections of the time spent in morning peak hour congestion and performance under each of the charging options. The outcomes for commuters are significantly better by 2046 with the Auckland Plan transport network, and better again once a variable motorway user charge is introduced to reduce peak demand. Figure 8.7 indicates the similar effects in the inter-peak periods during the day.

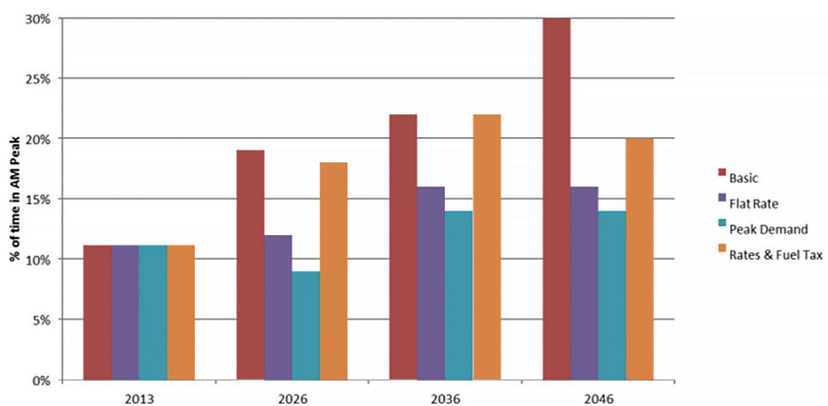


Figure 8.6 Percentage of AM peak spent in severe congestion on the strategic freight network

Source: Alternative Transport Funding Project Team (2014).

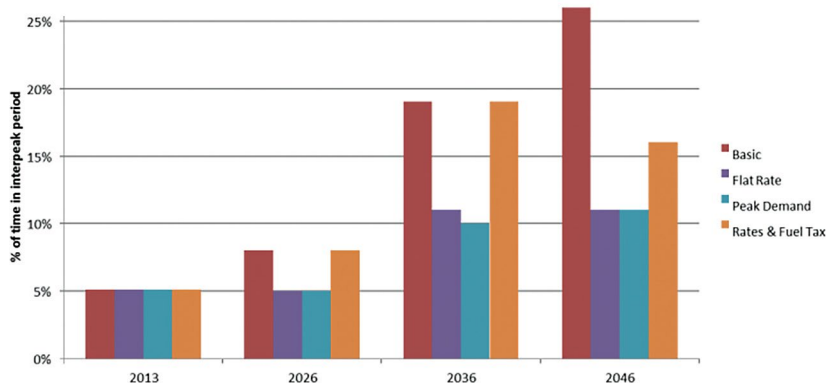


Figure 8.7 Percentage of inter-peak spent in severe congestion on the strategic freight network

Source: Alternative Transport Funding Project Team (2014).

Before making any final decisions, we undertook impact assessments, looking at who wins and who loses. We asked not only which charging option we should adopt, but also who was most likely to pay. We were able to determine that businesses would pay 34 per cent of the rates and fuel tax increases and, if a motorway toll was introduced, they would pay 41–46 per cent of the charge (see Table 8.3). The analysis indicated, however, that the benefits to business exceeded the costs. It was an indication of the strength of the consensus-building process that all the business representatives in the consultative group were able to say: ‘Yes, we can “swallow” that.’

The average impact on households is much the same between the two schemes, but the incidence of the charges is quite different. Drivers who are regular users pay a significantly greater proportion of the motorway user charge. Moreover, vulnerable households end up paying more under either pathway. In terms of economic impacts, we had interesting and ongoing debates about how these would be calculated, and determining the base case. But the bottom line was that a better return was delivered by implementing the motorway user charge than with rates and fuel tax increases.

Table 8.3 Fairness/impact of charging options

Rates and Fuel Tax	Motorway User Charge
<ul style="list-style-type: none">• Business pays 34%• Savings to business exceed costs• Avg cost per h'hold \$348 pa by 2026• Extra rates apply irrespective of use• Vulnerable h'holds pay 15% of charges• For 12% of vulnerable h'holds increased charges are more than 1.75% of net income• Changing travel behaviour will not reduce costs• Tolls on only some new roads is unfair	<ul style="list-style-type: none">• Business pays 41%-46%• Savings to business exceed costs• Avg cost per h'hold \$345 pa by 2026• Regular M'way users (8% of h'holds) pay 26% of charges – \$1500 pa per h'hold• Other h'holds pay as little as \$150 pa• Vulnerable h'holds pay 11% of charges• For 7% of vulnerable h'holds increased charges are more than 1.75% of net income• Changing travel behaviour can reduce costs

Source: Alternative Transport Funding Project Team (2014).

The consensus-building group reported its findings to the Auckland Council, which then put the two choices to the people of Auckland as part of their three-yearly long-term planning process. In a month, through a large consultation process, the council received 15,000 submissions on this issue, and, of those, as shown in Figures 8.8 and 8.9, more than 50 per cent supported the Auckland Plan transport network as opposed to the basic network. Unfortunately, during the consultation process, Generation Zero, a young people’s lobby group, started advocating for another network altogether, which had the effect of diluting somewhat the clarity of the message delivered by the consultation.

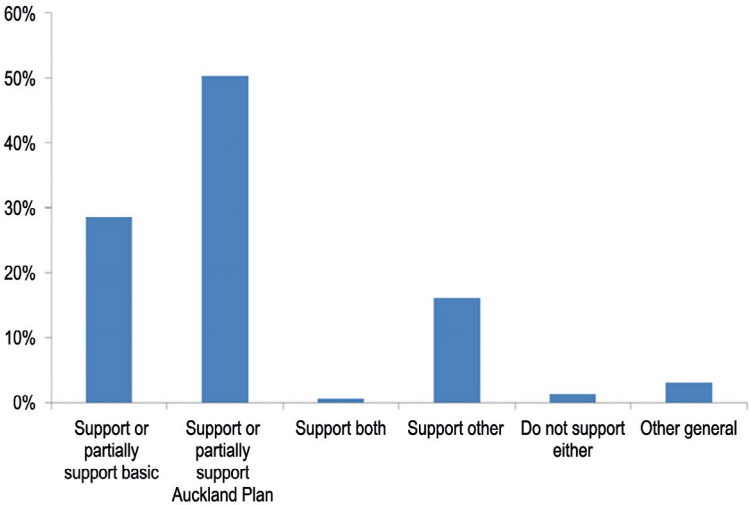


Figure 8.8 Submissions relating to the proposed networks

Source: Alternative Transport Funding Project Team (2014).

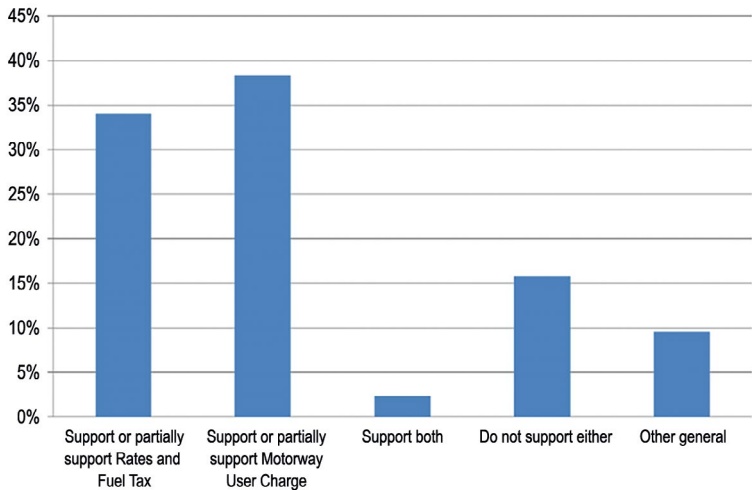


Figure 8.9 Submissions relating to proposed funding options

Source: Alternative Transport Funding Project Team (2014).

Figure 8.8 shows there was more popular support for the motorway user charge than for an increase in rates and fuel tax. Unfortunately, a material number of people bought into the ‘other’ network and therefore concluded that an increase in cost was not necessary. In parallel, the council conducted a random survey of 5,000 Aucklanders that showed similar results (Tables 8.4 and 8.5), but with a stronger preference for the Auckland Plan because in this survey the third alternative was not in the choice set for respondents. In terms of a preference for charging frameworks, there was evidence of significant support for the motorway user charge.

Table 8.4 Preferred transport network survey results

Preferred transport network	Support
Basic transport network	32%
Auckland Plan transport network	58%
Neither	5%
Don't know / other	5%

Source: Alternative Transport Funding Project Team (2014).

Table 8.5 Preferred funding option survey results

Preferred funding option	Support
Motorway User Charge	57%
Fuel taxes and rates	31%
Neither	10%
Don't know	2%

Source: Alternative Transport Funding Project Team (2014).

So what did we learn from all of this? The surveys showed that by deliberately making this a public discussion about choices, and in turn making both the choices and their consequences explicit, we were able to get to a rather different point than critics of the process had expected. We arrived at a point where we had the consensus-building group—and all of the key stakeholders—more or less saying this is the right way to go. We had the public of Auckland saying yes, we are prepared to accept something different to improve transport outcomes.

At this point, it was the political reaction that was all important. The Auckland Council does not have the legislative ability to introduce road user charges or a motorway charging scheme for highways in its own jurisdiction and the central government indicated it was not yet convinced by Auckland's arguments. As a result, the council resolved to continue its advocacy efforts and implement a targeted rate in the interim to bridge some of the gap. There remained majority support on the council to implement a motorway user charge and to continue to argue the funding issue with the national government.

The national government, however, remains unconvinced. Other participants who attended the 'Shifting the Transport Infrastructure Debate in Australia' workshop have mentioned a time frame of three hours between a policy being floated and the government saying 'no'. However, through this deliberative process, there had been a succession of 'nos'. The period of lapsed time between when Auckland Council releases something and when the national government says 'no' is getting longer, and the reasons for the 'no' are changing and diminishing. To maintain progress, the Auckland Council and the national government have agreed

on the need to set up another study, the Auckland Transport Alignment Project (ATAP). Importantly, the terms of reference for that work include both parties agreeing with the suite of projects *as well as* agreeing on funding. So the government is continuing to materially shift its position in response to what Auckland Council has done, to the point that now it is willing to formally consider funding, whereas previously it would not.

ATAP remains a work in progress. Following the local and general elections in 2016 and 2017 (respectively), the original ATAP has been updated to take into account the latest population forecasts (Ministry of Transport 2018). Whether the government will be prepared to move on something as significant as this in the year-long window between the two elections remains a big question.

In conclusion, my principal message from the Auckland case study is that it is possible to discuss and scope many items of important public policy considered controversial, unpopular and even esoteric. If, however, those involved cannot take people with them and therefore change the politics associated with their proposals and win support, nothing much will happen. At the end of the day, it's all about the politics.

References

- Alternative Transport Funding Project Team. (2014). *Funding Auckland's Transport Future: Two Pathways*. Auckland: Auckland Council. Available from: www.shapeauckland.co.nz/media/1182/section-113-alternative-transport-funding-informationa4.pdf (accessed 23 May 2015).
- Ministry of Transport. (2018). *Auckland Transport Alignment Project*. Wellington: Ministry of Transport. Available from: www.transport.govt.nz/land/auckland/atap

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