The American Heresy: Half a century of transport planning in Auckland

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Abstract: Transport planning in Auckland since 1950 has been dominated by a stronger policy bias towards the private car than is found in Australian, Canadian and in most US cities. Per capita utilisation of public transport in Auckland is lower than even Los Angeles. This paper examines Auckland's transport policy from the 1950s, and explores how notions of modernisation derived from the United States were central to the establishment of a bias in favour of the automobile. Discussion then considers the 1960s, when the notion of 'balanced transport' gained favour. But this Americanism reinforced, rather than challenged, automobile dominance. By the 1990s, pro-automobile policies had become entrenched, both institutionally and intellectually, whereby total automobile dominance was characterised as the 'normal' policy option and 'balanced transport' as the 'radical' alternative. Ironically however, by the 1970s such a narrow range of options in policy discourse had been supplanted even in most United States cities.

Introduction

Transport policy is the subject of public debate and dissatisfaction in most cities, but few can match the intensity of feeling found over recent years in Auckland. New Zealand's largest city has the kind of pollution levels and traffic problems usually only found in much bigger urban areas. Everyone agrees that something has to be done. Everyone seems to agree that past planning has failed.

This paper will examine the history of transport planning in Auckland since the 1950s. It will seek to identify the main reasons Auckland now finds itself in a difficult transport situation, and critically assess current attempts to ameliorate these transport problems. We concentrate on the formal plans prepared over this period, the rhetorical strategies of persuasion employed in the plans and the ideologies these approaches reflect. We are seeking to contribute to understanding a problem, and do not pretend to offer a complete explanation.

Our contention is that current transport policy debates in Auckland remain trapped in a series of paradigms and proposals that have been inherited from past policies and administrative arrangements. The failure to seriously re-examine these casts the likely success of current policies in some doubt.

Historically, Auckland's transport planning has followed the most extreme pro-car American models, far more closely than has been the case in Australian or Canadian cities, or even many cities in the USA. The Auckland transport system has been centred around freeways for much longer than other comparable cities, and this is one of the major reasons for the extremely low usage of public transport. Current proposals, which involve substantially expanding the freeway system at the same time as an attempt is made to establish a rapid transit system, are likely to fail.

The extent of the problem

The first master transportation plan for Auckland was produced in 1955. The survey conducted as part of the planning process found that public transport catered for the majority of motorised travel, some 58% of trips; cars carried the remaining 42% (ARPA, 1956: 117). But even this overstated the importance of the car, because the study did not count walking and cycling. So between a quarter and a third of trips in Auckland were by car. Public transport usage was high, with an estimated 105 million trips annually, or 290 trips per resident.

Auckland's population tripled, from 360,000 to 1.1 million, between 1955 and 2000. But public transport patronage plummetted during that period to only 37 million trips, and the per capita rate to only 33 trips per annum (see table below). The 89% decline in per capita patronage is, as far as can be ascertained, the

largest decline in public transport patronage recorded over this period in any large city in the world. Of all trips taken within the Auckland metropolitan area, only 2% are now by public transport.

In the 1950s, public transport usage in Auckland was comparable with Australian and Canadian cities and considerably higher than most American urban areas. But now, patronage is among the lowest in the world – lower than any big city in Australia or Canada, lower than all but the worst United States examples, lower even than Los Angeles (see table 1).

Urban area	Population (mill.)	Per capita trips (per annum)	Year
Los Angeles	8.9	55	1990
Washington DC	3.6	106	1990
Atlanta	1.2	121	1998
Portland (Oregon)	1.2	46	1990
Houston	3.5	26	1990
Ottawa	0.7	107	1997
Winnipeg	0.6	88	1997
Montreal	1.8	221	1991
Toronto	2.3	350	1991
Vancouver	1.5	117	1991
Perth	1.3	50	1996
Canberra	0.3	89	1991
Brisbane	1.3	69	1991
Melbourne	3.0	101	1991
Adelaide	1.0	76	1991
Sydney	3.5	160	1991
Auckland	1.1	33	1998

Table 1: Public transport use in selected cities

Sources: Jane's Urban Transport Systems 2000-2001 edition; Kenworthy et al (1999).

Looking for explanations

With lower rates of public transport usage even than most US cities, it is small wonder that Auckland's road system cannot cope with even current traffic levels. And car usage is predicted to double in the next twenty years!

The simplistic response would be to expand the road system, but Auckland's freeway system is already more extensive than those of much larger Australian, Canadian and European cities. Perhaps it is worth studying what has produced the extraordinary fall in public transport usage before embarking on another cycle of financially and environmentally expensive road building.

Auckland's transport planners have tended to blame high car ownership and the spread-out nature of the city. The 1998 Draft Auckland Regional Land Transport Strategy says:

Aucklanders are making more trips per person than ever before and a greater (and increasing) proportion of these trips are being made by cars... At current trends, car use is expected to double in the next 20 years... At approximately one car for every second Aucklander, the region has one of the highest car ownership rates in the world, comparable to the United States, Canada and Australia... The decline in [public] transport ridership has been fuelled by increases in car ownership [and] decentralised development... (pp. 14-5).

But this explanation is unconvincing. Auckland has much lower public transport usage than Australian and Canadian cities, and even many US cities, despite having similar car ownership rates and lower average incomes. And development is no more dispersed in Auckland than in most Australian, US or Canadian cities.

This paper proposes an alternative explanation, namely that Auckland has pursued one of the most extreme pro-automobile transport policy mixes in the world for half a century, and has, simply, got what it planned for.

America's most faithful disciple

The Master Transportation Plan of 1955 came about as a result of a dispute among planners over urban transport priorities.

The New Zealand Railways Department engaged British consultants Halcrow & Partners to plan for the electrification of the Auckland rail network, following completion in the late 1940s of rail electrification in Wellington. The consultants reported in 1950 and recommended electrification and a city underground railway, from Auckland station to Kingsland via the city centre. The underground was intended to address the poor location of Auckland station, which is some distance from the central business district. The consultants recommended that the rail scheme be supported by integrating rail and bus services to form a multi-modal transport system. They proposed the establishment of a single public authority to plan and coordinate all forms of public transport in the metropolitan area.

At the same time, proposals were developed by municipal road planners and the National Roads Board (the predecessor to Transfund: see later discussion) for a network of motorways and a bridge across Auckland Harbour.

There was considerable debate as to which of the two schemes should have priority. The railway consultants argued that "expenditure on arterial streets in the Auckland Metropolitan Area be restricted until the results of the recommended [public transport] schemes are seen." (ARPA, 1956: 129). The reason, apart from the fact that there was not enough money available for both schemes, was that the motorway network would compete with the rail-bus system, and prevent the latter attracting sufficient patrons to become financially viable.

Naturally, the road-building agencies and road engineers argued the reverse. They appear to have been supported by bus interests, particularly the Auckland Transport Board, which operated road-based public transport in the City of Auckland and inner suburbs, since the rail proposal involved downgrading the role of buses to act as feeders to rail.

The national Minister of Works, who had responsibility for roads (there was a separate Minister for Railways), also supported a motorway solution, on the advice of the National Roads Board. The Auckland City Council engineer agreed, and persuaded the council to suggest that a Master Transportation Plan be prepared to decide the railway–motorway controversy. The study was conducted under the auspices of the Auckland Regional Planning Authority (the predecessor to the Auckland Regional Council), which appointed a technical advisory committee to oversee production of the Master Plan.

The Technical Advisory Committee was dominated by road engineers, and chaired by the Auckland City Engineer. Each of the 22 municipalities in the region appointed its traffic engineer as its representative to the Committee, as did the national government. The only rail advocate was the solitary representative of the New Zealand Railways, although the professor of Town Planning at Auckland University, an architect, was also appointed.

Since the road engineers had the 'numbers' on the committee, it is not surprising that the report recommended in favour of the motorway scheme, rather than the railway scheme. Even so, the report's strident tone and contemptuous dismissal of public transport – which at the time carried more passengers

than cars – is remarkable. Perhaps more significant is the fact that the report carried the day with the public, the media and elected decision-makers. It is worth examining it to see the devices employed so successfully to persuade this diverse audience.

Given the heated nature of the controversy, it is surprising how little effort the report's authors devoted to justifying the selection of the motorway scheme and rejection of the rail scheme. The basic argument is stated in the report's foreword:

The form and structure of Metropolitan Auckland through the years has been largely determined by developments in... transportation. During the last 25 years, the overall effect of motor transportation has so radically changed the pattern that Auckland is now one of the most dispersed cities in the World.

The individual has been freed from absolute dependence on tramways and railways with their inflexible fixed routes... The pattern of travel has become more diffused and traffic cannot now be channelled along a few fixed routes with the same destination. There is a rising curve of motor usage and a decline in the use of public transportation. (ARPA, 1956: 5)

This is the 'dispersed city' argument in favour of automobile domination still employed by transport planners in Auckland today (as noted above). Very little analysis was presented to justify these conclusions, other than some extremely optimistic costings for the motorway network. Some comparative density figures were cited apparently showing Auckland's population density as much lower than the density of cities such as Paris, New York and Sydney (ARPA, 1956: 31). But the source cited for these figures is a book titled *X-Ray the City!*, by Dr. Ernest Fooks, and the figures are taken from a table that Fooks introduced with the following statement:

The artificial nature of legal and administrative urban boundaries makes overall density figures meaningless. A study of the two accompanying tables make this clear. (Fooks, 1946: 48)

Fooks also states that such figures "cannot be used for comparative purposes" (p. 48) and refers to "the many biassed conclusions deduced from such figures" (p. 55)!

The most powerful argument for motorways was, however, presented in pictorial form. The Master Plan report opens with eight full-page photographs showing traffic congestion in Auckland, which are then followed by are followed by eight pages of photos of freeways and multi-storey car parks from American cities. A powerful impression is created of a contrast between a backward Auckland and an American ideal of modernisation. The contrast is accentuated by the greyness of the Auckland scenes (some of which were clearly photographed during rainy weather) and the sunny American utopia. The Auckland photographs were sourced from local newspapers, while the American photos came from American transport engineering journals.

So while the logic and analysis behind the Master Plan may not have been irresistible, the need to follow the pattern of the United States certainly was.¹ The Master Plan's authors make this explicit in a breathless-sounding parenthetical comment:

[R]oad development must have first claim on the limited resources of manpower, materials, and finance. (This is borne out by experience and conditions all over the World; after the USA, New Zealand has the highest ratio of motor vehicles to population and is following the USA in traffic and transport trends and it is to be noted that in the whole of the USA there is not one city comparable with Auckland which has mass passenger rail facilities, and in that country there are three cities only which have such mass transit facilities – New York (8,000,000), Chicago (3,500,000), Philadelphia (2,000,000).) (ARPA, 1955: 31).

¹ An analogous proposition in Catholic theology was condemned by Pope Leo XIII in 1897, and came to be called "the American Heresy".

The conflation of "all over the world" with the USA here illustrates neatly the dominance of the American model in the authors' thinking. And professional road engineering journals provided ample visual material to buttress this dominance.

The 1955 Auckland Master Plan, while explicitly drawing on American models, was actually more extreme in its orientation towards the automobile than many American urban transport plans of the same era. The plan rejected the rail proposals (although it gave lukewarm support for a modest extension of the rail terminus into the centre of Auckland, a scheme similar to the current Britomart proposal), and even cursorily rejected the proposal for a regional body to co-ordinate and integrate the different public transport systems:

There is no evidence before the Committee which would indicate any radical change being necessary in the present system of passenger transport service control, or which would justify the setting up of any other authority, although some minor changes may be found beneficial. (p. 50)

By contrast, in the US, a notion called 'balanced transport' gained currency in the 1950s. This saw investment in public transport upgrading as well as freeways and in some cities saw the establishment of regional public transport authorities of the kind proposed for Auckland, but rejected by the 1955 Master Plan. Most Australian and Canadian cities also opted for the 'balanced' approach at this time.

But in Auckland, an explicit decision was made to favour the car over public transport. The Master Plan was "enthusiastically hailed as the most realistic and practical approach to the solution of the metropolitan transport problems that had ever been made" (Introduction, p. 3). The National Roads Board promptly agreed to fund 75 per cent of the cost, and the Ministry for Works agreed to build the motorway network.

The result was that Auckland acquired a substantial motorway network one to two decades ahead of Australian cities. By the end of the 1970s, the basic motorway network proposed in the 1955 plan had been completed, except for a South Eastern Motorway proposed to follow the route of the main rail route through Orakei and Glen Innes. A further result was that public transport was allowed to wither, and patronage collapsed more rapidly and more completely than in other places.

'Balanced transport' arrives

By the early 1960s, it became apparent that Auckland's population was growing more quickly than had been anticipated in 1955. Traffic congestion had also grown more rapidly than anticipated, thanks largely to the collapse of public transport. In 1963, the Auckland Regional Authority hired De Leuw Cather & Co, a firm of American transport engineers to prepare a revised highway plan for the metropolitan area.

Two significant differences can be observed between De Leuw Cather's work and the 1955 Master Plan. Firstly, the insistent rhetorical tone and pictorial persuasion has been dropped. American highway engineers had developed a far more effective method of legitimation, in the form of computerised transport modelling. The incomprehensibility and apparently scientific nature of the models guaranteed acceptance of their outcomes, as planning historian Karl Fischer (1984: 68) observes:

[Traffic models] introduced the precision of objectively determined measurement into one aspect of town planning. Since scarcely any other field of town planning possessed such precision . . . traffic engineering soon gained absolute superiority in town planning, almost replacing 'town planning' in the 1950s and 1960s in a march of victory through countless motorised nations.

The second difference is that De Leuw Cather's expressway plan was accompanied by a rapid transit plan, commissioned the following year by the ARA, but apparently at the consultants' request. So American consultants were responsible for the revival of rapid transit plans for Auckland, which had been rejected in 1955 using American trends as justification.

De Leuw Cather justified the rapid transit plan on the basis that computer analysis confirmed that only a "balanced" system of expressways and rapid transit could cope with the urban area's traffic problems (De

Leuw Cather, 1965: i), but the reality is more prosaic. 'Balanced transport' had become the accepted policy among US transport planners, as a result of the establishment in 1962 by President Kennedy of the Urban Mass Transit Agency (Mees, 2000: 78-81), and the consultants reprogrammed their computer models to reflect this new funding reality. De Leuw Cather had also suffered, late in 1963, the discomfiting experience of being sacked by the Canberra planning agency, the National Capital Development Commission, partly for being insufficiently sympathetic to public transport (Fischer, 1984: 85).

The two De Leuw Cather reports proposed considerably more expenditure than the 1955 Master Plan. A much larger expressway network was advocated, plus an expensive rapid transit system (although on a less-effective alignment than suggested in the 1950 plan), fed by co-ordinated buses. But De Leuw Cather did not deal with the salient point made by Halcrow & Partners in 1950, namely that the expressways would draw patrons away from public transport, rendering the system financially non-viable.

In the late 1960s and the 1970s, many North American cities rejected the 'balanced transport' approach in favour of policies that actually gave preference to public transport and attempted to encourage a shift of travel modes away from the car. Suddenly, Los Angeles became the model of what to avoid, rather than what to emulate. The new models were European cities like Vienna, with their car-free central areas and excellent, rail-based public transport. The freeway components of 'balanced' transport plans from the 1960s were either scaled back substantially or abandoned (as, for example, in Vancouver and Portland), and funds devoted to rapid transit systems instead.

In Auckland, the reverse occurred. The national government, which through the National Roads Board was funding Auckland's motorway system, refused to fund rapid transit, despite a campaign lasting from the mid-1960s through to 1976 by Auckland Mayor Dove Meyer Robinson. Robinson published his case for rapid transit in 1969, in a report replete with descriptions and photographs of rail systems from US and Canadian cities (Robinson, 1969). Although the politics of the issue are complex, it is significant that Robinson's enthusiasm was undermined by regional transport planners (who, after all, were not the ones who had suggested a rapid transit plan in the first place).

So the principal contribution of the De Leuw Cather reports to transport planning practice in Auckland was an expanded motorway network. In 2001, although the motorways recommended in the 1955 Master Plan have basically been completed, Auckland's road lobby still calls for "completion of the motorway network", to the plans of the 1960s. In virtually no other cities in the world does one find completion of the extravagant freeway plans of the 1960s seriously proposed. Transport planning rhetoric in Auckland had advanced as far as the 'balanced transport' notion from the 1960s, but transport planning reality continued to reflect the road orientation of the 1955 plan.

And not surprisingly, public transport has remained marginal. In its 1976 review of the De Leuw Cather studies, the Auckland Regional Authority's Technical Advisory Committee noted that population growth had fallen short of the predictions of the 1960s, and that finance was very much scarcer than anticipated. Although the plan was prepared before the National government rejected Robinson's rapid transit proposals, it nevertheless ignored them in favour of recommitting Auckland to the De Leuw Cather motorway scheme from the 1960s. As a concession to financial reality, the existing and proposed motorways were renamed "corridors" (for example, De Leuw Cather's proposed Dominion Road Motorway became the Central Isthmus Corridor; the South-Eastern Motorway became the South-Eastern Corridor, and so on), and the more expensive projects deferred. The way to manage demand, the authors argued, was to limit employment growth in the city centre. By 1983, the ARA was seriously proposing closing the Auckland rail system altogether (ARA, 1983), but was defeated by public opposition.

Blaming the public

The Auckland Regional Authority's next major transport study, in 1987, reaffirmed the thrust of the 1976 report, retaining the new "corridor" designation for motorways, and paid even less attention to public transport. By this time, however, the planners had decided that the public was to blame for the dominance of the automobile, referring to the "need for a change in attitude of society" (ARC, 1987: 32). A new discursive strategy emerged, replacing the stance of previous decades, in which transport planners had at

least openly admitted that they were planning for a road-based future. Now, planners are 'forced' to build roads by a public which has a 'love affair' with the car and refuses to patronise public transport.

The planners were, of course, offering rationalisations, not explanations. These rationalisations divert attention from the fact that transport planning itself has been a major factor responsible for the dramatic shift to the car in Auckland. Auckland had been planning for a totally car-based city since the 1950s, and the plans had worked.

Transfund: institutionalising bias towards roads

The bias towards road building has been enshrined institutionally at the level of the national Government since the 1920s. Taxes levied on motor vehicles are paid into a fund which can only be expended for transport projects. Initially, the fund was administered by the National Roads Board, which only funded roads; now the body is called Transfund and will consider funding public transport projects where they can be shown to benefit motorists.

What is remarkable to an observer from outside New Zealand is the strangeness of this arrangement. There is no national trust fund for schools, hospitals, public transport or any other area of government expenditure. There are only two countries in the developed world in which taxes collected from motorists are paid into a central fund that can must be expended on roads: the United States and New Zealand. Such funds are unknown in Europe and Britain. There is no such fund at national level in Canada, and not one province has one; similarly, in Australia neither the Federal government nor any state earmarks road taxes for road use.

Naturally, earmarked road funds distort transport planning. Instead of funding the best solution to a transport problems, road funds promote roads. Even the small amounts currently paid by Transfund for public transport are justified on the basis of their benefits to motorists, not to society generally, let alone to the environment. As discussed below, this has distorted public transport planning through a focus on relieving peak-hour traffic congestion, as opposed to providing a viable alternative to the car for a range of trips.

The results

Compared with peer cities, Auckland today has an extensive and well-connected motorway system, converging on a massive central city 'spaghetti junction' rivalled by few cities in the world. But Auckland has a level of public transport use lower than any comparable-sized Australian or Canadian city, and less than that found in the majority of cities in the United States.

The result is traffic congestion and air pollution problems that are usually only found in much larger cities. The problem is worst in the central city, where the expressway system debouches onto regular streets that cannot handle the large volumes of traffic. The result is a city centre dominated by cars, and traffic jams that back up onto the expressway system, blocking traffic wishing to bypass the city centre, as well as traffic headed for the centre. While Auckland's congestion levels are not particularly serious by world standards, they are especially galling to residents old enough to remember the first few years following completion of the spaghetti junction, when congestion-free motoring was possible at all times.

The traffic problems have occurred despite the fact that overall employment in the city centre has not grown for decades. This has failed to produce the results predicted by Auckland's transport planners in the 1970s, because many more of these employees now arrive by car. The share travelling by public transport fell from 42 per cent in 1973 (ARA, 1976: 34) to 24 per cent in 1994 (McCormick Rankin, 1999: 12).

One might expect that there would by now be a widespread consensus that the automobile-dominated policy approach should be abandoned. But five decades of automobile-dominated public discourse have created a 'world' of policy alternatives in which 1960s-style 'balanced transport' is seen as the 'radical' alternative, contrasting with the 'normal' policy of ignoring alternatives to the car. The idea of actually favouring public transport as an alternative to further expansion of the motorway network, the 'normal'

policy course in most Canadian, British and European cities, and even in many US cities, has been discursively 'erased' from public consciousness. So complete has been this erasure that, at the 2000 national election, not even the Greens Party proposed abolishing Transfund.

Such enthusiasm as there is for public transport comes primarily from politicians and community groups, rather than the Auckland Regional Council's transport planners. But even these moderate views incur severe criticism. In May 2000, the head of Transfund called for "a more balanced debate on public transport and roads" and expressed concern that roads were not receiving sufficient attention in transport debates in Auckland! (NZ Herald, 9/5/2000) In January 2001, a former Auckland City Council transport planner criticised plans for a rapid transit system, comparing them to "the body counts of the Vietnam War, the miracles of Soviet productivity.. and the claims of Mao's great leap forward." (NZ Herald, 4/1/2000)

What has passed as the alternative to relying solely on building motorways has been ongoing road building with supplementation by a secondary public transport system intended for peak-period commuters to the city centre. The current official position which seeks to improve the public transport system in conjunction with road building simply brings Auckland in line with what Australian and Canadian cities were talking about in the 1950s and early 1960s. While some politicians are attracted to a more normal (by world standards) policy of preference for non-automobile modes, such a policy appears impossibly radical in the Auckland transport policy environment.

The lack of a history of improvements to the public transport system has also meant that a void presently exists in the knowledge and expertise of those now charged with making changes to that system. As a result of not having had experience with comprehensive public transport planning, transport planners tend to concentrate on isolated projects such as 'rapid transit corridors'. Considering that a city like Winnipeg, without any rail or busway infrastructure, performed nearly three times as well as Auckland using only buses, it should be clear that more than big projects will be required to change transport patterns (see Mees, 2000 for more details).

Current plans

The historical dominance of roads and the accompanying difficulty of envisaging alternatives is reflected in the current transport plans for the region. The 1998 draft Land Transport Strategy was prepared to complement a regional growth strategy which deliberately intensified residential and commercial development around public transport nodes. The land-use planners who prepared this strategy were seeking to promote a shift away from the car. But the Auckland Regional Council transport planners who produced the accompanying transport plan were much more pessimistic about the potential for public transport, citing the same reason as the 1955 Master Plan.

analysis has shown that heavy investment in passenger transport is not likely to dramatically increase the overall proportion of people using passenger transport because of the dispersed nature of trips in the Auckland urban area. (ARC, 1998: 29)

Consequently:

The Strategy proposes substantial investment in extending the major components of the transport network. Most of this investment will be in roading... Significant passenger transport investment is also proposed... (pp. 7-8)

The road investments are then set out, using the corridors derived from the 1976 report, which are in turn derived from the motorways in the 1964 De Leuw Cather report.

When the draft report was released for public consultation, it was severely criticised by community groups and elected politicians for its pro-road bias. The planners responded by modifying their rhetoric:

The strategy proposes substantial investment in extending the major components of the transport network. Much of this investment will continue to be in roading... The most significant change proposed by this strategy is an increase in passenger transport investment... (ARC, 1999: 15-16)

But the modelling work underlying the revised (1999) plan is the same as that from the 1998 plan, and both plans propose precisely the same road projects and basically the same public transport projects (see ARC, 1998: 7; ARC, 1999: 15-16). And the problem, identified by Halcrow Thomas in 1950, remains: unless increased expenditure on public transport is accompanied by a curtailment of motorway building, it is unlikely to be effective.

The regional public transport study conducted for the 1999 Land Transport Strategy (McCormick Rankin, 1999) shows the results of half a century of road-dominated thinking. It sets targets for increased public transport ridership by calculating how many cars would have to be removed from the (expanded) motorways for them to operate free of peak-period congestion, and notionally transferring these trips to rapid transit. In public transport plans that are not so distorted by the requirement to act as a congestion-reliever for roads, the patronage targets are set by reference to social and environmental goals, and generally involve providing a service intended for the whole community, not just a minority of commuters.

The results of the policy distortions can be seen in the products of the plan. Firstly, a completely unrealistic scenario is proposed in which a dramatic improvement in the ease of peak-period motorway travel is accompanied by a dramatic shift in travel demand away from motowrays. Secondly, since motorway congestion is not a problem outside peak period, no attention is paid to non-peak travel. But with the advent of increasingly flexible work hours, peak-only public transport systems cannot attract significant ridership (see Mees, 2000: 125-133). Thirdly, and as a result, the proposed rapid transit system is predicted to attract very low patronage of 14 million trips per annum, presumably almost all in peak period. This figure may look impressive compared with the regional rail system's current pitiful performance of 2.5 million trips per annum, but compared with peer cities represents an extremely low per capita trip rate, making the level of ionestment required appear excessive in relation to the benefits. The low overall patronage, and its dominance by peak period commuters, also ensures a very poor operating performance, and an dramatically increased annual subsidy.²

Conclusion

Half a century of motorway-dominated transport policy has made Auckland a car-dominated city. This dominance is reflected in the on-the-ground reality of congested roads and pitiful public transport, but also in the intellectual reality of a transport debate that cannot make a decisive break with the past. Many of Auckland's citizens, community groups and elected politicians wish to make such a break, but are constrained from doing so by a policy discourse which renders such an option impossibly radical.

This paper has identified some of the reasons behind the current policy impasse, but does not claim to tell the whole story (for example, more work is clearly required around issues of politics and personalities). Nor does it set out a detailed set of alternative proposals (the authors propose to do this, but at another time). But we do conclude that an improvement in Auckland's transport situation is being prevented not by low densities, dispersed employment or the public's irrational love-affair with cars, but instead by a mind-set which has been established over the last half century.

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² We are not suggesting that Auckland does not need an effective rapid transit system here; rather, that current plans appear likely to deliver an ineffective one.

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