

## **The Long and Winding Road: The Christchurch Southern Motorway as an illustration of the disconnect between financial, transport and land-use planning in New Zealand.**

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*In the second semester of 2010 the third year Bachelor of Environmental Management and Planning students taking the Professional Practice course (SOCl 314) were set an assignment to write a short, topical article of local interest. This related directly to the content of the course SOCl 314, which provides a critical study of issues in the provision of professional services in environmental planning, design, social sciences, tourism, sport and recreation. As part of the assessment the articles were subject to the LPR review processes.*

### **In the beginning was “the immediate and urgent question”**

In their 1929 report *The Economics of Motor Transport in Relation to Highways* the Canterbury Progress League stated:

*...the 1926 report of the Highways Board shows that although Canterbury possesses roughly 20 per cent of the motor vehicles and, presumably contributes 20 per cent of the motor revenue, only 8 per cent of the Highways Board expenditure was incurred in Canterbury... It is claimed, and justly claimed, that it is cheaper for the motorist to pay the tax than to run his car on bad roads, but the outstanding fact at the present time is that the Canterbury motorist is paying the taxes but is failing to secure the road improvements he is taxed to provide. This is the immediate and urgent question in Canterbury.*

This author’s own analysis of financial data from the New Zealand Yearbook and annual accounts of the Main Highways Board (and its successors) from 1924 through to 2008 reveals that this “immediate and urgent question” has never been addressed, as is amply illustrated by figures 1 to 3. Figure 1 illustrates the fact that the percentage of Canterbury’s motor taxation spent on Canterbury roads has consistently been below that of other regions and, within the last 17 years, significantly below that of Auckland and Wellington.

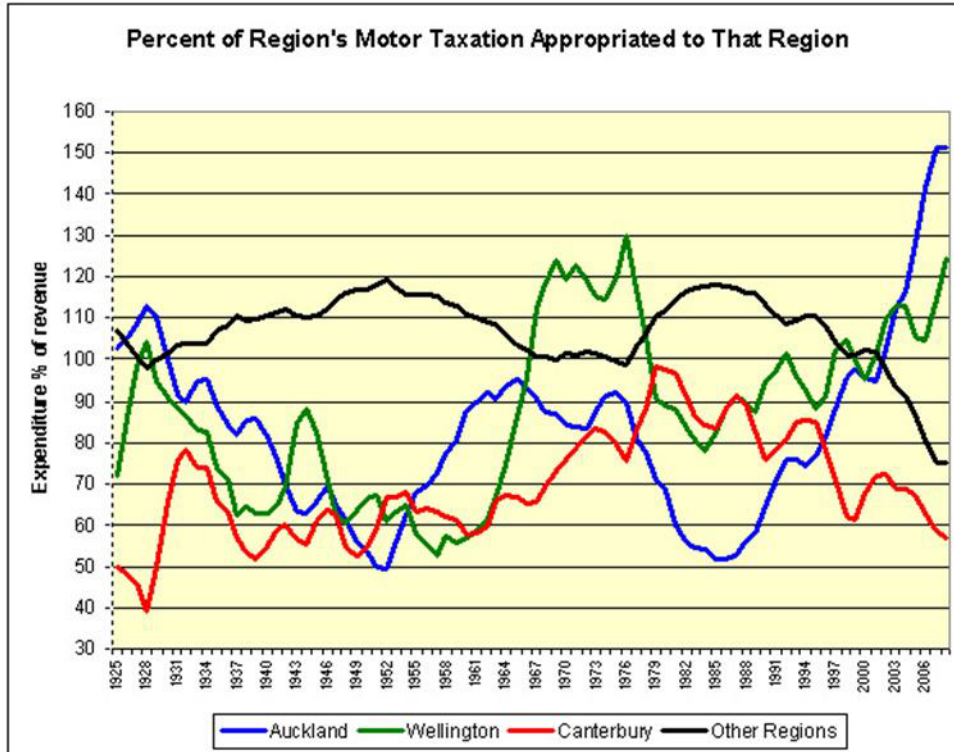


Figure 1: Percentage of each region's petrol taxes and road user charges appropriated to that region.

Figure 2 illustrates cumulative financial loss to the three most populous regions as a result of these highway funding policies. Figure 3 illustrates the disproportionate funding provided to the three main centres to upgrade roads to cope with traffic growth.

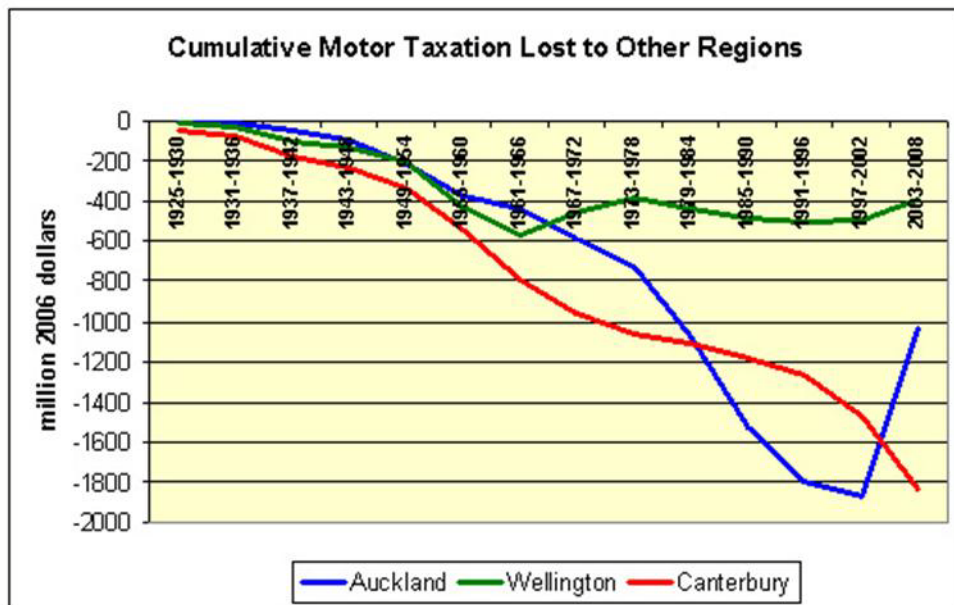


Figure 2: Cumulative millions of dollars of petrol taxes and road user charges the major urban regions have lost to other regions.

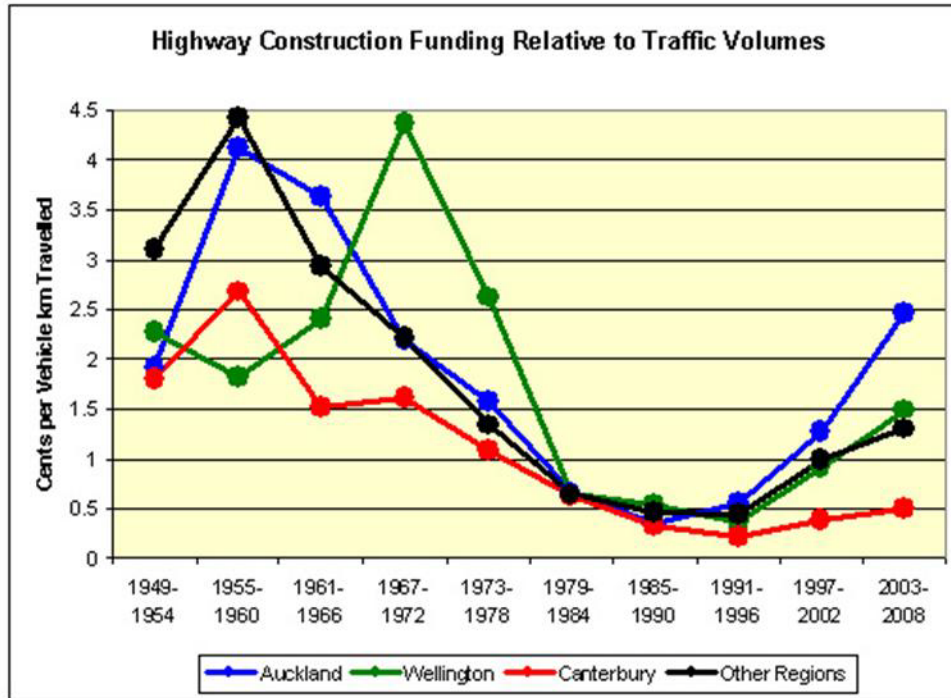


Figure 3: Highway construction appropriations in constant 2006 cents per vehicle km travelled since the inception of the Main Highways Fund, in six year increments.

It is clear from table 1 that Canterbury’s largest city, Christchurch, has been seriously disadvantaged in the number of lane kilometres of motorway per capita, compared not only to Auckland and Wellington, where the topography has resulted in widely dispersed settlement patterns, but also compared to much smaller cities such as Tauranga and Napier-Hastings which generally share Christchurch’s compact urban layout.

City	lane-km per capita
Tauranga	6.3
Auckland	5.6
Wellington	4.4
Dunedin	3.8
Napier-Hastings	3.5
Nelson	2.9
Christchurch	1.6

Table 1 Lane kilometres of motorway/expressway per capita [Source: GoogleEarth/Statistics NZ]

### Financial speed-bumps almost disintegrate an integrated plan

In 1964, fifteen years after motorway construction commenced in Wellington and Auckland, the Christchurch Regional Planning Authority’s *Christchurch Master Transportation Plan* identified the need to provide modern “limited access” highways to the north and south of the Christchurch CBD.

The original motorway plans for Auckland and Wellington had been included in Statutory Regional Plans developed by the Ministry of Works immediately after World War Two. These central Government statutory plans integrated land-use planning and transport planning and removed land-zoning powers from the affected borough and county councils. The plans were scrapped in 1953 when a new Town and Country Planning Act established Regional Planning Authorities.

The new Regional Planning Authorities had the power to co-ordinate urban planning for both land-use and transport [through the development of regional plans]. However, unlike the Ministry of Works, they could not compel the region's borough and county councils to implement the new regional plans. Furthermore, because the State Highways passing through the region's planning areas were the financial and planning responsibility of the National Roads Board<sup>11</sup>, the Regional Planning Authorities were inclined to make urban motorways the major focus of their transport plans as this absolved the borough and county councils from most of the financial responsibilities for implementing the regional plans.

Placing responsibility for major roading improvements with the National Roads Board also minimised the ongoing internecine conflict between neighbouring boroughs. This inclination towards motorway focused transport planning was also partly derived from the belief that rapid construction of high-speed arterial routes would promote appropriate zoning of land around the motorway interchanges, consistent with the earlier statutory plans, out of self-interested avoidance of rate-payer spending on upgrading existing main roads.

This approach was at the heart of the 1964 Christchurch Master Transport Plan which, in the absence of a Master Land-Use Plan, was intended to encourage industrial development in a corridor between Addington and Hornby, constrained on the north and south by the existing Main South Railway and the proposed Southern Motorway.

The motorway system proposed in the 1964 Master Transport Plan was intended to remove the growing volumes of trucks and arterial traffic from the ordinary city roads that were designated as the State Highway One outlets to the north and south of Christchurch.. This was to accommodate future traffic movements between the CBD, the Port of Lyttelton, new industrial areas at Sockburn and Hornby , and the anticipated development of dormitory towns outside the Christchurch Green Belt. The Christchurch motorways and expressways in the current Roads of National Significance are justified for exactly the same reasons and follow very closely the routes in the 1964 plan (see Figures 4 and 5 below).

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<sup>1</sup> Since 1936, the designation of a local road as a State Highway has automatically transferred ownership, control and financial liability to the Crown.

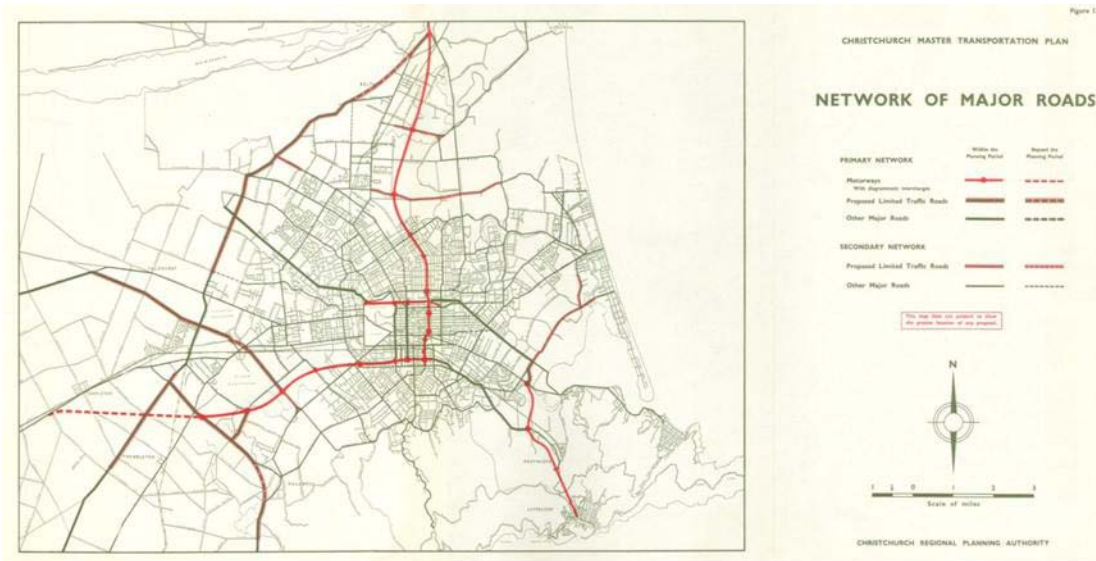


Figure 4: Proposed Motorways, Christchurch Master Transport Plan, Christchurch Regional Planning Authority, 1964.

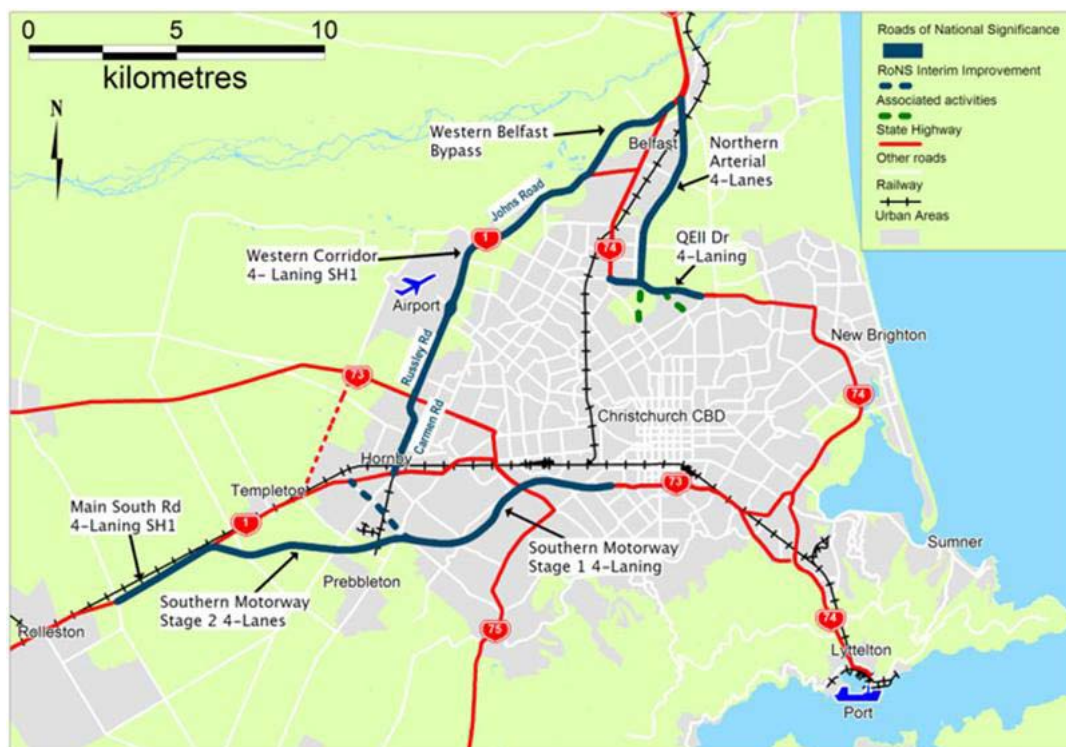


Figure 5: Proposed Christchurch Motorways, Roads of National Significance, NZ Transport Agency, 2011.

The first step in implementing the Christchurch Master Transport Plan was to obtain the National Roads Board's assent to transfer the State Highway 1 designation to the proposed motorways, thereby shifting the cost from the region's ratepayers to the region's road users. This was done in 1966, and by the time the first stage of the Northern Motorway was completed



in late 1969 the Ministry of Works had completed geotechnical studies to determine the optimum [Southern?] motorway alignments and needed only to determine the construction priorities.

However, since 1961, Christchurch petrol taxes have been diverted to assist “shovel-ready” motorway projects in Auckland and Wellington, amounting to almost \$300 million dollars (in 2006 constant dollars). Despite formal protests to the National Roads Board from the Christchurch Regional Planning Authority in 1969, this diversion of funds northwards continued for a further nine years. By 1978 this diversion of funds amounted to \$500 million dollars. At 1970s land and construction prices, this would have been sufficient to complete the proposed motorway network, excluding the central city components which were cancelled in 1973.

The economic recession that began in the wake of the 1973 OPEC oil embargo hit Christchurch hard. The city’s population and traffic volumes began slowly shrinking and these facts became core arguments used by motorway opponents in Addington and St Albans at Planning Tribunal hearings during the 1980s.. While this local opposition was only targeting those parts of the Master Transportation Plan that were most destructive to the inner city, it was seen by central government as a convenient excuse to not curtail Auckland’s motorway expansion in order to repay petrol taxes borrowed from the Christchurch motorway program over the previous 15 years.

The Southern Motorway’s termination halfway along Blenheim Road instead of at Hornby or Rolleston meant that, with the resurgence of growth in Christchurch in the 1990s, the city’s industrial expansion was accommodated by using former railway workshop and marshalling yard land between Addington and Wigram, instead of land at Hornby. This has required considerable upgrading of the existing roading network in this area to accommodate a volume of heavy vehicles not envisaged in the Christchurch Master Transportation Plan. This also resulted in the Hornby industrial area languishing due to its relative remoteness from the most convenient access to the Port of Lyttelton.

In the mid-1990s, the Christchurch City Council identified the Halswell-Wigram area as a key residential growth area, and moved to rezone hundreds of hectares of land for housing. It promoted the area largely on the basis of undertakings given by Transit New Zealand, the Government agency responsible for State Highways from 1989 until 2008, that it was committed to building the southern arterial motorway(The Press, 31/3/2003).

On 26 March 2001 The Press reported that planning for the completion of the Southern Motorway was “being fast-tracked [by Transit] because of an explosion of housing in the area.” Completion of the original expressway to motorway standards and construction of the next stage to Hornby were to begin in 2003 with construction of the final stage to Rolleston to commence in 2008. On 31 March 2003 The Press reported that “this year [Transit] announced it

*was pushing the [Southern Motorway] project off its State Highways programme for the next decade, so that more money could be spent on Auckland road projects.”*

Due to these funding priority changes Transit had been unable to lodge a motorway designation over the land favoured for the final stage of the Southern Motorway. During the 2000s, land use changes encroached into the preferred motorway corridor south of Hornby closest to the industrial zone, and at the same time residential development was permitted to the north of Prebbleton, constraining Transit further. For example, by 2005 the rural land located between Marshes Rd and Hornby Junction Rd, to the east of Shands Rd, had been purchased by industrial land developers who lodged Proposed City Plan Change #47 and #54, to rezone the land from rural to industrial. The change of ownership of this rural land has prevented the New Zealand Transport Agency<sup>2</sup> from locating the motorway in the originally preferred motorway corridor.

As a result, purely for cost reasons, the two Southern Motorway alignment options that went out for public consultation in 2010 were located several hundred metres further south than had been indicated in preliminary design sketches released in 2001. During the same ten year delay the Aberdeen residential subdivision had been approved on the north-east side of Blakes Rd, north of Prebbleton. Perhaps not surprisingly, when NZTA was finally able to commence public consultations for the new range of Southern Motorway corridor options there was strong objection from residents of the newest Prebbleton subdivisions due to the motorway being hundreds of metres closer to their homes than had been intimated by subdivision sales staff.

## **Conclusion**

The failure to construct the 1964 Master Transport Plan in a timely manner has resulted in unplanned land use changes, leading to unplanned expenditure to increase capacity on local roads, combined with a billion dollar loss of transport funds from Christchurch to other cities that has led to one of Christchurch’s vital arteries being squeezed between the self-interests of industrial property developers and sprawling “country-town” dormitory suburb home-buyers.

## **References**

- Canterbury Progress League (1929), *The Economics of Motor Transport in Relation to Highways*. Canterbury Progress League, Christchurch, New Zealand.
- Christchurch City Council (2010), *PL/CPO/3/47 Proposed Plan Change 47*. Christchurch City Council, Christchurch, New Zealand.

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<sup>2</sup> The Main Highways Board (1924-1954), National Roads Board (1954-1989), Transit New Zealand (1989-1995) and New Transport Agency (2008-) have or had responsibility for both administering the revenues from motor taxation and operating the State Highway system. From 1995 to 2008 a funder/provider split created a separate agency, Transfund, to administer the motor taxation revenues. During this period Transit NZ became a Road Controlling Authority competing with other RCA’s (which were all Territorial Local Authorities) for a share of the motor taxation revenues.

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