

## Local Transport 'Deregulation' New Zealand Style: Experience to Date

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### Introduction

The local passenger transport system in New Zealand was radically reformed in 1991. This transport law reform (sometimes referred to as 'deregulation') was broadly based on the UK deregulation model introduced in 1986 but with a number of important differences.

This paper summarizes the New Zealand experience to date with 'deregulation' and some of the lessons learned. It does not attempt a comprehensive description of the new legislation and associated procedures. Rather, the main emphasis is on what has happened in practice as a result of the reforms - in terms of effects on users (services, fares, etc.), effects on operators (staffing levels, efficiency, new entrants, etc.), and effects on subsidy levels. The effects have been complex and not uniform across the country; nevertheless it is possible to draw some tentative conclusions from the evidence so far.

### The New Zealand Local Passenger Transport Market

By way of background, I will first give a few key facts and figures about the local passenger transport situation in New Zealand, prior to the recent changes:

\* New Zealand's total population is some 3.4 million of which 2.9 million live in urban areas and 1.5 million of these in the three major cities: Auckland (0.85 million), Wellington (0.33 million) and Christchurch (0.30 million).

\* There were three main groups of local public transport operators:

Municipal bus operators	10 operators, ranging in size from 540 buses (Auckland) to nine buses, providing the majority of services in major urban centers, and carrying some 70 percent of all local public transport passengers.
NZ Rail	providing urban rail services in Auckland (loco-hauled) and Wellington (suburban electric units); also provided bus services in seven regions, but these have since been divested to the private sector (and the whole rail operation is currently being privatized).
Private operators	a large number of bus operators ranging in size from some 50 buses downwards, and often providing route, school, contract, and charter services (also a few ferry operators, principally in Auckland).

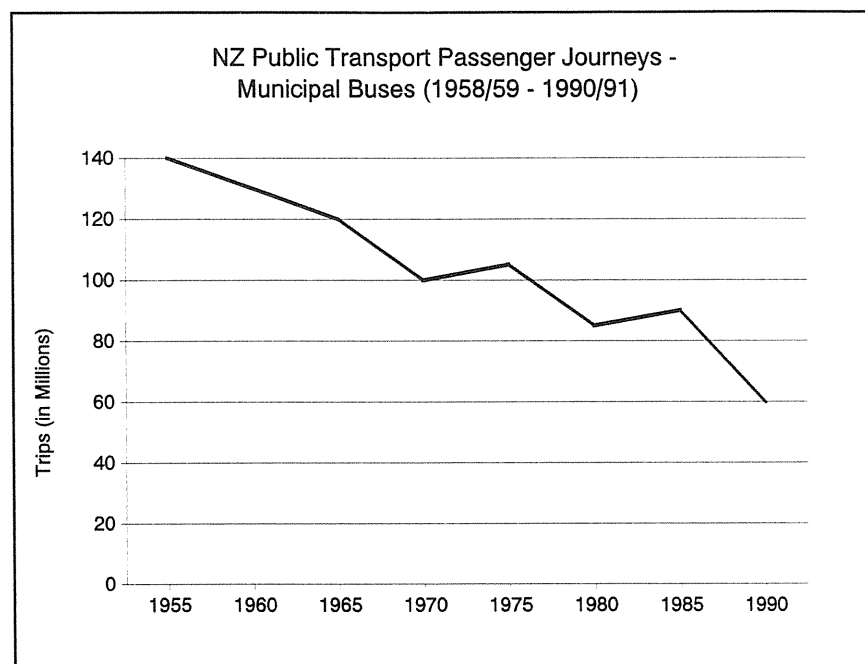
\* Average public transport trip rates in the three major centers were in the range of 40-100 journeys per person per year. This is on a par with trip rates in Australia and Canada — higher than in the USA but considerably lower than Europe. (Car ownership in New Zealand is one of the highest levels in the world after the USA.)

\* Public transport patronage has been declining rapidly since the mid-1980s at over 10 percent per year (Figure 1). This decline is largely the result of an adverse combination of circumstances: - rapidly increasing car ownership (aided by reduced restrictions and tariffs on car imports), economic recession, substantial falls in CBD employment, real fare increases, and some cut-backs in services.

\* Average cost recovery for urban public transport services was 50-60 percent prior to 1991. The subsidy was funded approximately 45 percent by taxpayers (via central government), 55 percent from ratepayers (via regional councils).

\* In 1990/1991 (prior to deregulation), the total subsidy to passenger transport services throughout New Zealand was some NZ\$108 million or around NZ\$30 per person per year. This is very much lower than the subsidy level in Australian cities.

**Figure 1**



By the late 1980s, it could reasonably be claimed that the local passenger transport industry in New Zealand was in need of reform, and that the time was ripe for such reform:

- Patronage had been declining rapidly for some years (see above)
- Subsidy levels had been tending to increase, although the rate of increase was already being curtailed by restrictions on central and local government funding levels
- Cost levels of the public sector operators were substantially higher than their private sector counterparts.
- For many years there had been a general lack of innovation in the industry, with long-established operators enjoying their grandfather rights and having little incentive to adopt a consumer orientation.
- The previous national wage arrangements were being replaced by local agreements, and the introduction of the Employment Contracts Act (1990) further extended the flexibility of the local enterprise bargaining system.

In many respects, this environment was similar to that applying in the United Kingdom prior to the 1986 deregulation.

### **The Legislative Changes**

Structural reform of the land transport sector in New Zealand occurred throughout the 1980s. The major reforms of passenger transport services were contained in the Transport Law Reform Bill, which was passed by the NZ<sup>®</sup> Parliament in September 1989. This introduced what is commonly known as 'deregulation' of the passenger transport sector - but has been referred to as 're-regulation' by many involved in trying to understand the legislation and translate it into practice. In the remainder of this paper,

I shall refer to it as Transport Law Reform (TLR).

The NZ Transport Law Reform legislation was based in many respects on the UK bus 'deregulation' legislation (the UK 1985 Transport Act) but with a number of very significant differences. The NZ Government studied the UK legislation and its impacts and developed the NZ legislation to be in many ways more comprehensive than the UK legislation and to attempt to avoid some of the undesirable effects observed in the UK.

I cannot in this paper attempt to describe all important facets of the NZ legislation (see Knight, 1991 for more details); but the following summarizes some of the key features, particularly where they differ significantly from the policies followed in the UK:

**(A) Comprehensive Nature of Legislation**

- The Transport Law Reform legislation comprised four Acts, which together constituted a complete overhaul of the passenger transport system.
- The legislation covered all passenger transport modes on a similar basis. (The UK legislation covered bus services only: the NZ attempt to treat urban rail services in particular on the same basis as bus services has presented substantial problems, as noted later)

**(B) Key Roles for the Regional Councils**

- Public transport policy and procurement of services would be under the control of the 14 regional councils.
- Regional councils are required to prepare a Regional Passenger Transport Plan, which has to specify any services to be publicly funded.

**(C) Clear Separation of Policy from Operations**

- Regional councils are not permitted to own any passenger transport operation, either directly or indirectly. (The largest bus company in NZ, in Auckland, was previously owned by the regional council).
- Local authorities are not permitted to engage in passenger transport operations except indirectly through corporatized Local Authority Trading Enterprises. (Thus the municipal bus companies could not continue as local government departments but had to be either corporatized or privatized).

**(D) Means of Securing Services**

- Any licensed operator could notify (to a regional council) its intention to operate any service at 21 days' notice (giving details of timetables, fares, etc.).
- The regional council could only reject such a 'commercial' notification on certain specified grounds, eg. if it would adversely affect a contracted service. Regional councils may also "contract over" a commercial service that does not fully meet its specified requirements (eg. too high fares). In these respects, the NZ legislation gives regional councils significantly more power to interfere with (potential) commercial services than is the case in the UK.

- Regional councils may contract for (subsidized) services from licensed operators, subject to following competitive pricing procedures determined by Transit New Zealand (the national land transport authority).

### **Putting the New Procedure into Practice**

While some provisions of the new legislation came into force in November 1989, the key date for the start of 'deregulated' services ('D'-day) was 1 July 1991. In the year or so prior, government authorities and operators involved in passenger transport prepared, under great time pressure, for the introduction of the new regime. New services to operate from July 1991 started being determined from December 1990 (following a broadly similar process to that which occurred in the UK):

- December 1990 - January 1991: any operator could notify services to be provided commercially from July 1991 (with the regional council able to reject the notification only on traffic management or environmental grounds).
- February/March 1991: regional councils determined what additional services were required (to fill the 'gaps' between the commercial services) and developed and issued 'Requests for Tender' (RFTs) for these.
- April/May 1991: operators submitted tenders, which were evaluated by regional councils and tenders awarded.
- May/June 1991: successful tenderers undertook detailed timetable planning, scheduling, etc. for the new services to start on 1 July (in many cases, also negotiating new award conditions with their staff over this period).

This was an ambitious timetable, particularly as the whole commercial notification and competitive tendering process was new to all concerned. It is to the credit of all those involved that the new services started up with very few substantial problems.

On deregulation in the UK (outside London), over 80 percent of previous services were notified for commercial operation, in the context where average cost recovery previously had been around 85 percent. In New Zealand, where average cost recovery had been around 55 percent, it was not surprising that only some 20 percent of services were notified as commercial. This difference results firstly from the greater density of demand in the UK, and secondly from the higher average fares which prevail in the UK. The difference has a major implication for the two markets: in UK, there have been many potential opportunities for commercial services, which operators have been encouraged to seek out; whereas in NZ these opportunities are relatively rare, operators have not had as strong reason to develop commercial entrepreneurial skills, and the regional councils have retained the prime powers for planning of services.

Very broadly, the commercial services which have emerged have been characterized by:

- operating on weekday daytimes (say 0600 - 1800), but often not providing the full peak service or school special services
- involving a relatively even level of service all day
- operating in the major urban corridors.

There is no clear-cut pattern to the differences in commercial service proportions between regions,

although the present fare and cost recovery levels and the regional council's attitude to higher fares are major factors behind the differences. Commercial services have been by no means confined to the largest urban centers: almost all the services in some smaller centers are being operated commercially (in some cases with 10-seater taxi-buses).

Given that the majority of the new services are contracted, the tendering and contracting procedures adopted are of considerable importance. The overall 'Competitive Pricing Procedures' were developed by Transit NZ following broad requirements set out in the legislation; and then translated into detailed procedures and specifications by each regional council. The procedures and their operation are described in detail elsewhere (Wallis, 1991). Brief mention is made here of some key features of interest:

- The maximum size of individual tenders was limited to about 12 buses (although 'group' tenders were generally permitted).
- Contracts could be for between one and five years, with three to five years being chosen in the majority of cases.
- Contracts could be of gross cost type (where revenue is returned to the regional council) or net subsidy type (where the operator retains and takes the risk on revenue). Most contracts have been of the latter type, which has generally been preferred by both regional councils and operators (although there has been little assessment of the cost implications of the two types).
- Tenders have sometimes been evaluated on the 'lowest price conforming tender' basis, while in other cases trade-offs have been made between price and service quality features using weightings developed by individual regional councils.

### **Effects on Users - Services and Fares**

Under this heading, I will cover four issues: (1) the amount of service provided; (2) modes and vehicle types; (3) innovations in services, and (4) fares.

#### **The Amount of Service Provided**

Overall the total amount of public transport service provided in the urban areas, as measured by vehicle kilometers, has changed very little with TLR, although in some cases services are now provided by smaller vehicles than previously. Generally, regional councils have contracted services in such a way as to restore the previous service levels in total. (A similar approach prevailed in the UK on deregulation.)

#### **Modes and Vehicle Types**

In the case of urban rail, there have been some cuts in peak service frequency in Wellington but otherwise very little change in previous services.

The trolley buses in Wellington have been protected from competition (on environmental grounds) and are running approximately the same levels of daytime services as before. At the initiative of the operator, trolley services have been extended into evenings and weekends: this is despite the previously held view that this would be unreasonably expensive. It has been made viable through more flexible staffing arrangements for maintenance of the overhead wiring system.

Taxi-buses (mini-vans with about 10 seats) have replaced conventional large buses almost entirely in two

medium-sized towns (Palmerston North and Wanganui) and are also operating commercial services in a few other areas (see Baxter 1992). Taxi-buses have been successful in tendering for quite a number of low-demand services in several centers (including Auckland, Wellington and Canterbury). In almost all cases, taxi-buses are being operated by 'traditional' taxi operators rather than bus operators (which tended to happen in the UK): this is partly a result of the bias in the present licensing rules, which requires separate (small passenger vehicle) licenses for vehicles with 13 seats or fewer.

There has been no significant growth in conventional mini-buses (15-25 seats) as occurred in the UK prior to and following deregulation. Dunedin remains the only place with significant urban service of this type.

There has been virtually no investment in new conventional city buses since 1989/1990. This is partly a natural short-term response to the uncertainty associated with deregulation and the tendering process. It is also partly a reflection that, so far, regional councils' tendering specifications and tendering evaluation procedures mean that operators are more likely to win tenders with vehicles of lower capital value. Thus the average age of buses used on urban services has increased sharply over the last two to three years, and to that extent passengers may perceive some deterioration in service quality. This mirrors what happened in the UK on deregulation. It is now starting to be addressed in New Zealand by the introduction of more stringent vehicle quality standards by some regional councils.

### **Service Innovations**

One of the claimed benefits of deregulation, certainly in the United Kingdom, was that it would provide operators with the opportunity to introduce innovative services that were better suited to the needs of the market; and that such innovation would not occur under a route contract system (as adopted in London and several European countries). In my view the extent of service innovation in New Zealand has been small. As noted above, this is perhaps not surprising in a situation where the majority of services are not commercial at the fares now prevailing, and, therefore, most services have been designed by regional councils rather than by entrepreneurial operators. Even where new vehicle types have been introduced, there has been limited innovation. For instance, the taxi-bus services in Palmerston North and Wanganui are largely based on previous bus routes and timetables.

However, there are cases where operators have had success in significantly improving their services and developing their markets in a way that would have been very unlikely to have happened pre-deregulation because of the lack of appropriate incentives. I can think of one operator who has worked very hard to introduce services into areas hardly served previously, has found the market has responded and has had to further increase services to accommodate the demand. The ironic point about this case is that putting on extra peak services at the prevailing fares is barely (if at all) economic. However, it does demonstrate what can be done by close attention to the market and a lot of hard work by operator managements.

Also worthy of mention are the efforts of some regional councils (particularly Wellington) to comprehensively review their services prior to deregulation and to introduce a revamped network (with a combination of commercial and contracted services) from July 1991. However, such innovation would have been achievable, perhaps more easily, in the absence of the new regime.

### **Fares**

In a fully deregulated market, one might expect a range of fare and service levels to emerge on a commercial basis on different routes. However this has not happened in New Zealand and previous fare levels and structures have generally changed little. Reasons for this include:

- The regional councils have generally been keen to retain previous fare levels and structures without substantial change - partly because of the fragile state of the national economy and the public transport market, partly because they did not want to further complicate the onset of deregulation with changes in fares.
- In the New Zealand situation where the majority of services are contracted, the regional councils have effectively been price-makers and operators contemplating providing commercial services are being price-takers. In many cases, this role has been forced on the operators through the regional councils threatening to 'contract over' any commercial service offered at a fare substantially higher than the prevailing fares in the area.

Generally, there were few changes in fares at the time of TLR. One regional council (Canterbury) was brave enough to convert from an operator-based section fare system to a zonal-based system as a step towards a fully integrated ticketing system in the Christchurch area: however, this was the exception. Wellington Regional Council took the opportunity to make a start towards rationalizing fare levels (and concession fare rates) that had previously shown substantial disparities between the services of different operators.

Overall, fare increases over the last three years have been modest, generally lower than increases in average earnings in the economy. In the short-term, there is no evidence that TLR itself has resulted in fare increases greater than would otherwise have occurred.

In the medium-term, I believe that TLR and the resultant cost reductions will result in lower fares than would otherwise have been the case, and this process may already have started. In the absence of TLR, with both central and regional governments keen to restrain public transport funding levels, fares would probably have increased by now to a greater extent with resultant further adverse effects on patronage.

### **Effects on Users - Patronage**

As noted earlier, patronage on almost all bus services in New Zealand has been falling rapidly for the last five years with rates of decline up to 10-15 percent per year (Figure 1). These downward trends have been the result of a combination of factors, which were all adverse to public transport and which were mostly outside the control of those involved in public transport management. Major factors have been increasing car ownership, reducing employment levels (especially in central city areas), higher fares, and the general effects of the recession on travel demand.

The most recent (albeit imperfect) evidence is that the national rate of patronage decline has now reduced to five percent or rather less. It seems highly probable that this slackening of the rate of decline is unrelated to TLR. It is primarily the result of the economy 'bottoming-out' and starting to show some signs of recovery during 1992 and 1993: employment levels have stabilized, real retail sales have begun to increase, and car ownership is no longer increasing at its earlier rapid rate.

While patronage is affected by many factors, the level of patronage is one key indicator of the attractiveness of services to users. It is frequently suggested that regulatory reform and the introduction of greater contestability in the passenger transport market would result in increased patronage, as operators are given increased incentives to match their services to the needs of users. Thus the impact of TLR on patronage is an important issue.

In NZ, as TLR did not result in substantial changes in fare and service levels, it might be hypothesized that it would not have any substantial effect on underlying patronage trends. However, UK experience

indicates that 'deregulation' (outside London) resulted in patronage falls of 5-10 percent greater than would have been expected due to identified factors only (i.e., fares, service levels, car ownership, employment, retail sales), and this fall appears to be permanent. This effect is attributed to the bad publicity, uncertainty, lack of information, poor service coordination, etc. associated with UK deregulation.

In New Zealand, the best data available to examine the effects of TLR on patronage is that from Christchurch (Figures 2, 3, and 4). This data indicates that:

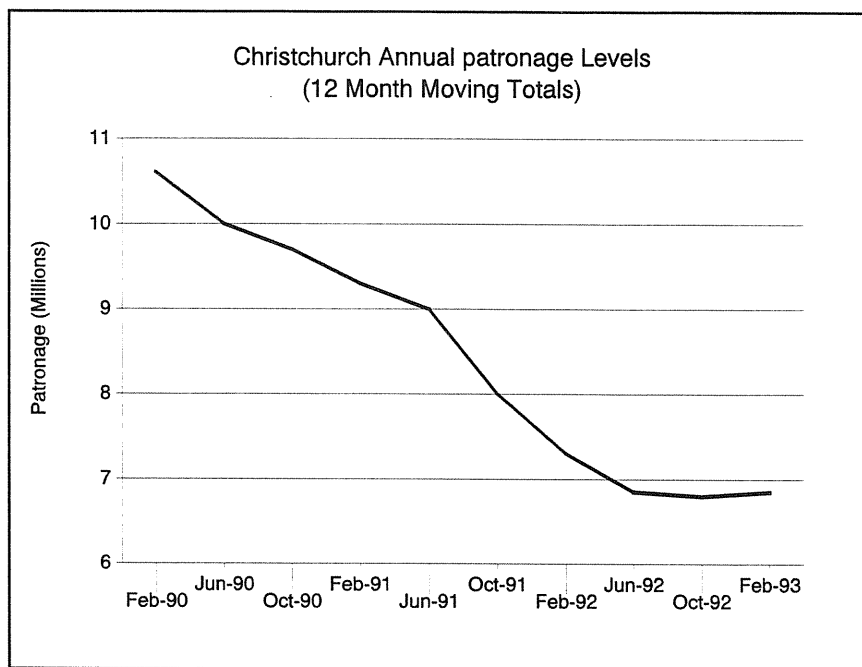
- Prior to March 1991, patronage in Christchurch had been declining at about 10 percent per year.
- This trend changed dramatically in April/May 1991. By July 1991, patronage was 25-30 percent below the level 12 months previously, and this rate of annual decline continued for six months.
- Through the first half of 1992, this dramatic rate of decline eased and by August 1992 the year-on-year decline had reduced to around zero (i.e., monthly patronage was the same as 12 months earlier). The most recent figures (February/March 1993) are four to five percent above the level 12 months earlier.
- However, patronage is still significantly (six to seven percent) lower than it would have been if the 1990/1991 rate of decline of about 10 percent had continued for the last two years; and 12-15 percent lower than if the 10 percent rate of decline had halved to five percent over the last 12 months.

Our conclusions from this data are that TLR and events associated with it have had a marked impact on patronage in Christchurch, causing a fall of 15-20 percent just prior to and in the six months following July 1991. While patronage has recovered somewhat from this dramatic decline, present patronage levels are about 10 percent lower (most likely between five and 15 percent lower) than would have been expected in the absence of TLR.

This patronage loss is probably more the result of the bad publicity associated with TLR rather than the result of a real deterioration in the level of service or other service aspects. There was extensive adverse publicity in Christchurch in the few months prior to TLR, relating to the tendering process, the loss of routes by the incumbent operator, staff redundancies, etc. There were also industrial disputes and service disruptions in this period. Most of the patronage fall appears to have occurred prior to D-Day, in response to these disruptions and the adverse publicity, rather than after the new services were implemented.

What is not yet clear in Christchurch, but may become apparent in the next six months, is whether the patronage loss associated with TLR is permanent (as appears to be the case in UK) or whether patronage

**Figure 2**



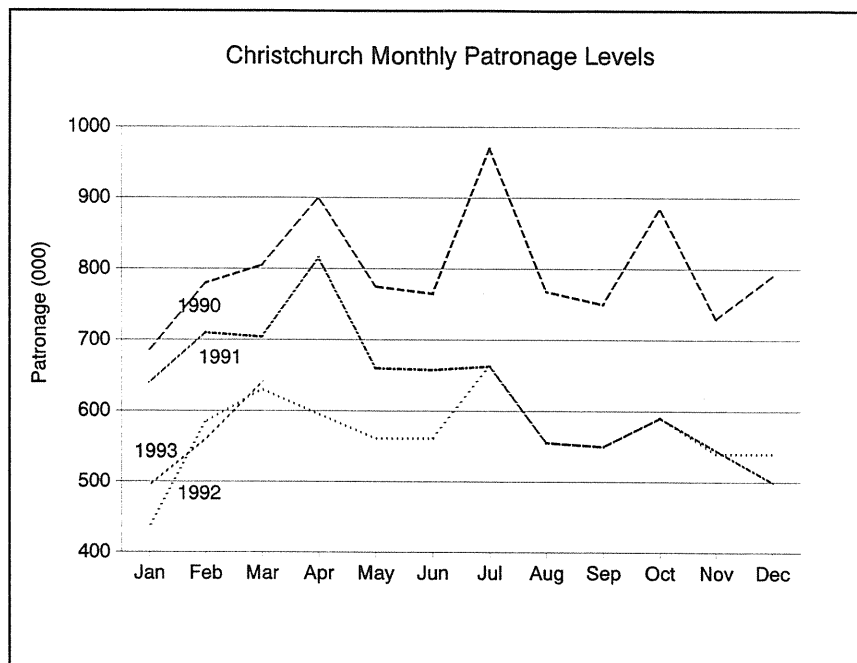


will recover back to the 'underlying' trend line.

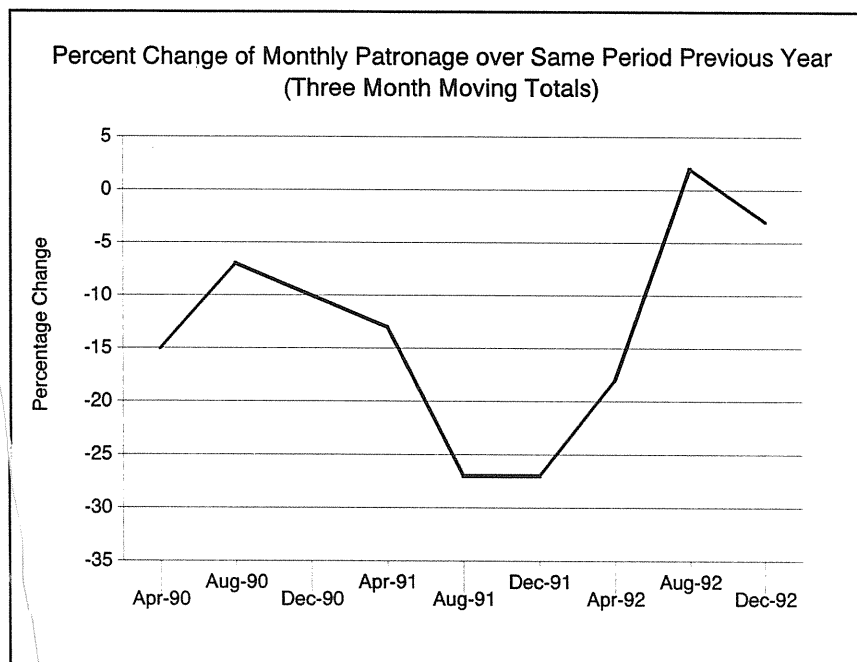
The patronage data for other centers in NZ is much less comprehensive and conclusive than Christchurch. There is little hard evidence from other centers that TLR has caused a significant patronage decline, although it is not possible to be categorical because of the poor quality of data. A number of operators suggest that there may have been some decline in patronage just before and following TLR, probably resulting from the bad publicity, unfamiliarity with changed services, etc.; but it is unclear whether this has been a temporary effect (less than six months) or a permanent loss. It appears likely that the loss has been more limited than occurred in the UK metropolitan areas and certainly more limited than in Christchurch. Christchurch appears to have suffered particularly badly because of the extensive adverse publicity: generally in New Zealand it appears the transition has been more 'managed' than in the UK with better information, limited changes of services and operators, and more efforts to coordinate services through the regional councils.

In the medium/longer term, perhaps the impacts of TLR on patronage will be rather more positive than the above comments might suggest. It seems quite probable that TLR will result in higher patronage than would otherwise have occurred: the cost efficiencies obtained should enable higher levels of service and/or lower fares to be provided for a given funding level; and there is some hope that operator and regional council innovation will result in more attractive services.

**Figure 3**



**Figure 4**



### Effects on Operators - Survival and Restructuring

There are three main groups of operators in New Zealand. Two of these groups have experienced fundamental changes as a result of TLR and associated policy changes of the last few years.

#### NZ Rail Ltd

NZ Rail has been corporatized for some years and was, therefore, not directly affected by the Transport Law Reform legislation. However, as a result of policy decisions by the competition board and the Government, there have been major changes:

- The railway bus services (in seven regions) were divested. Some of these were purchased by private bus operators in the locality, while the two largest, in Papakura (Auckland) and the Hutt Valley (Wellington), were purchased by Wellington City Transport. This is the first case of a municipal bus operator operating outside its 'home' municipality.
- The remaining national railway system (NZ Rail Ltd) is in the process of being sold to the private sector. This affects the suburban rail passenger services in Wellington (electric units) and in Auckland (recently revamped with second-hand diesel units from Perth).

#### Municipal Operators

The TLR legislation required the 10 municipal operators to be either corporatized or divested. Prior to July 1991, most were corporatized with ownership being retained by the local councils. Two of the smaller ones were divested, as their councils took the view that, with the transfer of passenger transport policy and planning powers to the regional councils, there was no merit in continuing to be involved in bus operations.

Subsequently, there have been several further developments:

- Another of the municipal operators (Palmerston North) has been divested, and almost all services in its area were notified commercially by a taxi-bus operator.
- Wellington City Transport Ltd has been sold to Stagecoach (UK). This is the first incursion of a 'foreign' operator into the New Zealand bus sector.
- A number of the other ex-municipal operators (particularly Christchurch) have been gradually downsized, as they have lost contracts to other (private) operators.

The last two years have certainly seen dramatic changes in the municipal bus sector, which has traditionally been the core of the NZ passenger transport industry.

#### Private Operators

Traditional private operators in New Zealand have not changed as much as might be expected to take advantage of the new competitive regime. In the lead-up to July 1991, in many cases their main concern was to preserve their monopoly over their traditional operating area, rather than attempt to expand into new areas. There were exceptions to this, where private operators have competed successfully with ex-municipal operators in the tendering process and, thereby, expanded their operations into new centers. In other cases, private operators have purchased an ex-municipal operator and expanded their territory.

Other than the cases of taxi operators expanding into the operation of fixed route services (with taxi-buses), there have been virtually no cases of new entrants to the bus industry in NZ (except for Stagecoach, noted above).

### Effects on Operator - Efficiency Levels and Staffing

This section focuses on the technical efficiency of operators, i.e., their unit cost levels. I have not attempted to examine profitability, which is obviously an important issue to operators. First I focus on the **municipal** operators, who have undergone the most dramatic changes with deregulation.

### What Has Happened To Average Costs

I have examined the trends in annual working expenses (i.e., excluding bus capital charges) per bus kilometer for three of the four largest municipal operators in New Zealand for the years since 1989/1990. The results are shown in Figure 5. It is clear that the average cost per bus kilometer has reduced by around 30 percent with the majority of that reduction occurring between 1990/1991 and 1991/1992, i.e., over the period of TLR.

Figure 5

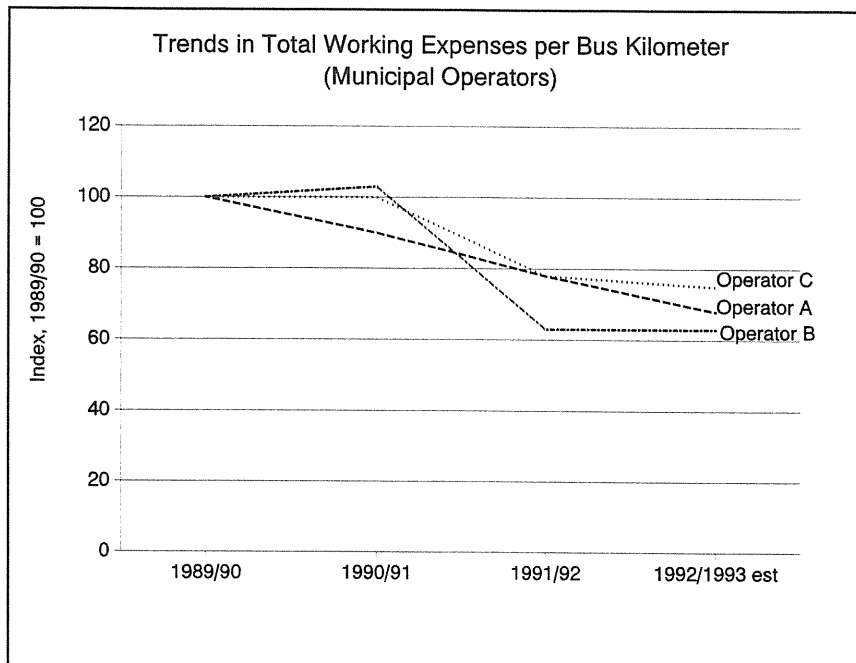
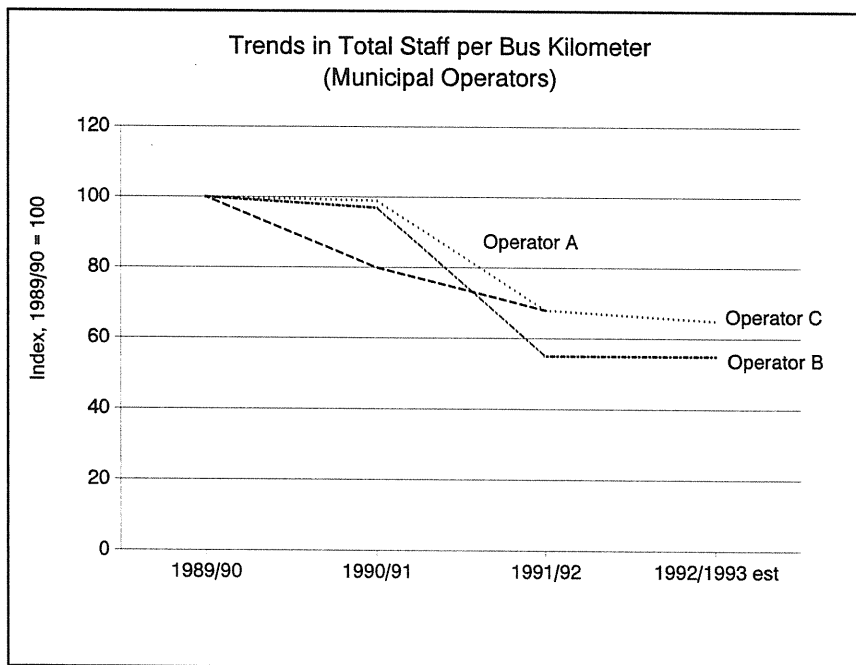


Figure 6



### How Have These Cost Reductions Been Achieved?

The single largest factor behind the cost reductions is increased staff productivity, i.e., fewer staff are being used to undertake the same task. Figure 6 shows the trends in number of staff (equivalent full time staff) per bus kilometer. While there is considerable variability between the three operators, two of them reduced their number of staff per bus kilometer by around 40 percent.

### What Has Happened To Driver Costs and Staff Levels?

Drivers account for roughly two-thirds of all staff and half of total working expenses, so they are a crucial component in any efficiency changes. The driver trends are shown in Figure 7. The first part of the figure indicates that the costs of employing a typical full-time driver have not reduced since 1989/1990 but, in fact, have increased slightly in most cases.

The second part of the figure shows that driver productivity has substantially increased, i.e., drivers per bus kilometer has substantially reduced. For instance in the case of Operator B, productivity per driver has almost doubled. There are several factors contributing to this change:

- longer hours worked per full-time driver
- tighter vehicle and driver scheduling
- less unused time in the depot (partly the result of re-timetabling, partly the result of use of part-time drivers and more flexible shifts).

The overall outcome shown in the last part of the figure is that driver labor costs per bus kilometer have substantially reduced by around 30 percent in two out of the three cases.

### What Has Happened To Other Staff Costs?

After drivers, the next largest group of staff is engineering/maintenance staff. There the productivity increases appear even greater than for drivers. The number of engineering staff per bus kilometer has fallen by about half or more than half for all three of these operators. While these figures should be viewed with some caution, because of possible changes in the amount of work contracted out, there is little doubt that engineering staff productivity has generally broadly doubled.

The reductions in other types of staff (management, administration, general) have also been at least as great as the reduction in the number of drivers.

### Conclusions on Unit Costs

Since 1989/1990 and particularly since 1990/1991, municipal operators' average working expenses per bus kilometer have reduced by around 30 percent, principally due to fewer staff working longer, harder, and more productively. Generally, overall pay per staff member has not reduced, but many staff have to work longer hours to earn the same amount. (I have not attempted to speculate on whether changes of the magnitude observed would have occurred in the absence of the Employment Contracts Act or in a more buoyant national economic situation.)

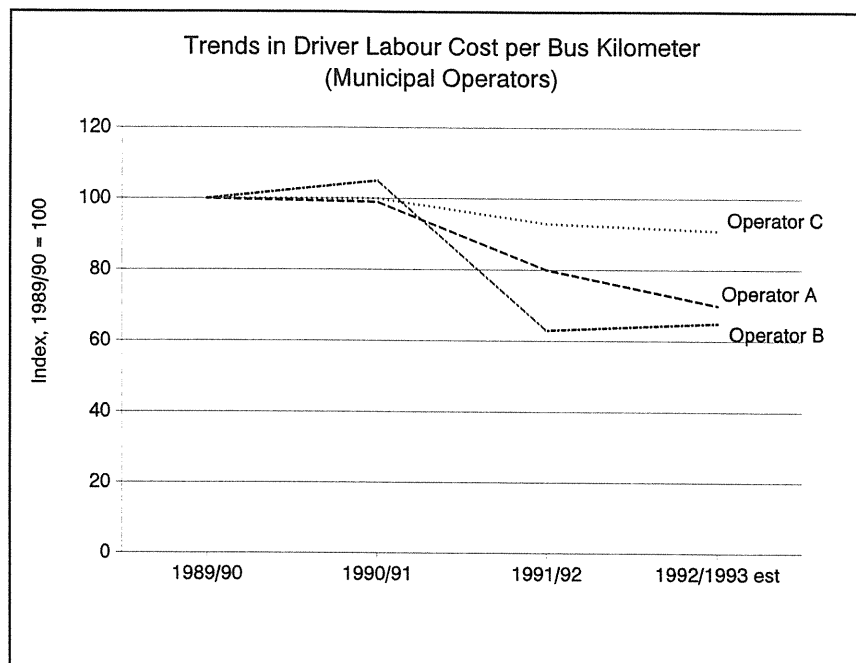
Over the same period, work practices and productivity among **private operators** have hardly changed. Typically costs have increased three to four percent in money terms, due to an award rate increase in 1990/1991 (there has been no general award increase since then). Thus the municipal cost reduction relative to the private operators is rather higher than 30 percent, approaching 35 percent.

Nationally, over this period the average weekly earnings for all full-time male employees increased by about 14 percent (August 1989 - August 1992). Thus earnings throughout the bus sector have not kept up with national average increases over this period.

All the figures above relate to working expenses only, excluding vehicle capital charges (depreciation, interest, etc.). These have also tended to reduce due to the lack of new vehicle purchases.

In short, private operators have hardly changed in their practices or real cost levels since deregulation. Municipal operators have become much more like private operators in terms of cost levels, work practices, and pay rates. Competition (or the threat of it) has brought the previously 'high cost' (municipal) operators down towards the level of the 'low cost' (private) operators.

**Figure 7**



There are no real surprises here. In a paper I gave to the 1989 Thredbo Conference (Wallis, 1989), I noted that the private operator unit cost levels in New Zealand were 30-40 percent below those of municipal operators, and that unit cost reductions approaching this level would be necessary if the municipal operators were to compete with reasonable success under deregulation. Unit cost reductions of at least the magnitude expected have occurred, certainly in the three municipal operators reported on here. All staff are working harder and more productively with little general change in their overall pay. What has essentially occurred is a one-off adjustment of productivity levels and pay rates in the previously 'inefficient' municipal sector to match the levels of the more efficient part of the bus industry.

### **Effects on Governments - Funding Support**

In 1990/1991, the total subsidies to public transport services in New Zealand were around \$108 million shared between central and regional governments. Following deregulation, in 1991/1992 the total subsidy to provide similar service reduced by nearly \$20 million: this was about 18 percent in money terms or over 20 percent in real terms.

The proportionate subsidy reductions varied from around 10 percent in Auckland and Otago to 50 percent or over in four of the rural regions. Figure 9 shows the trends in subsidy levels in the four main regions since 1989/1990 (relative to 1990/1991 in each case). Features of note are:

- The dramatic falls in bus subsidies in both Wellington and Canterbury of one-third or more in each case.
- The modest falls in subsidies in Auckland (mostly bus, but including small rail and ferry components) and Otago - around 10 percent in each case.
- The small fall in the Wellington rail subsidy, of around 10 percent.

- In each case the 1992/-1993 estimated subsidies are similar to the new lower levels achieved in 1991/1992.

It is worthy of comment that, in two of the three cases where subsidies have fallen by only around 10 percent, a truly competitive market did not occur and has yet to be created:

- In Auckland, competition was undoubtedly discouraged by the Regional Council's announced intention that it might apply the Minister's directive to favor incumbent operators by up to 25 percent in the tender evaluation process (Auckland was the only regional council to adopt such a policy).

- In the case of Wellington rail, most rail services were the subject of a negotiated non-competitive subsidy arrangement between the operator and the regional council after the council had rejected notifications of competing bus services on environmental/-traffic management grounds. Obviously it is difficult to bring full competitive pressures to bear in such a situation (see discussion below).

In my view, two of the challenges still to be overcome in Transport Law Reform are to achieve the efficiency gains

in the Auckland region's bus system and Wellington's rail system that have been achieved in other parts of the country's public transport system. The achievement of subsidy reductions in these two parts of say 30 percent from the 1990/1991 level would provide a further cost saving of around \$13 million per year. In terms of cost savings and subsidy reductions nationally, it might be said that only 60 percent of the potential benefits from the new competitive system have so far been secured; the remaining 40 percent are still to be achieved.

Figure 8

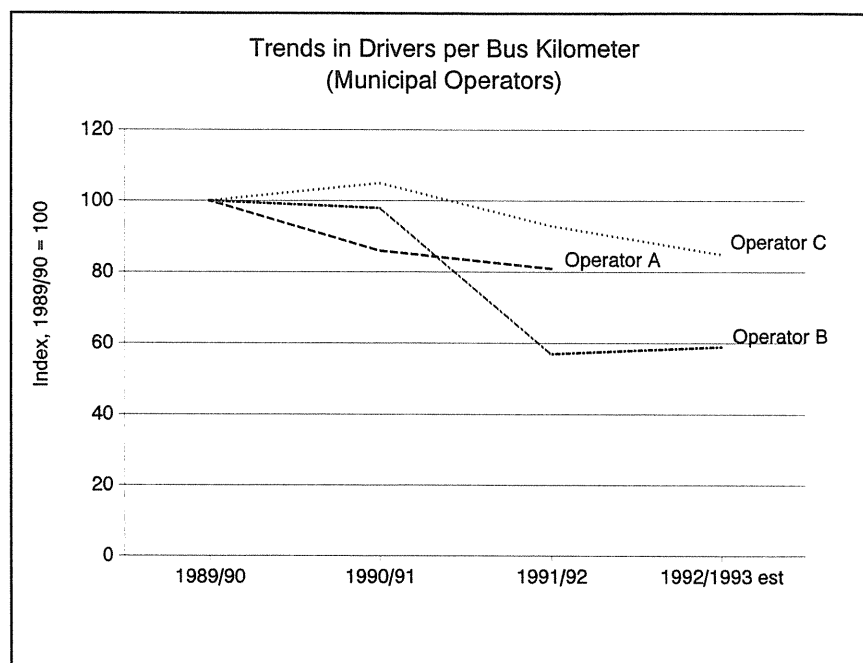
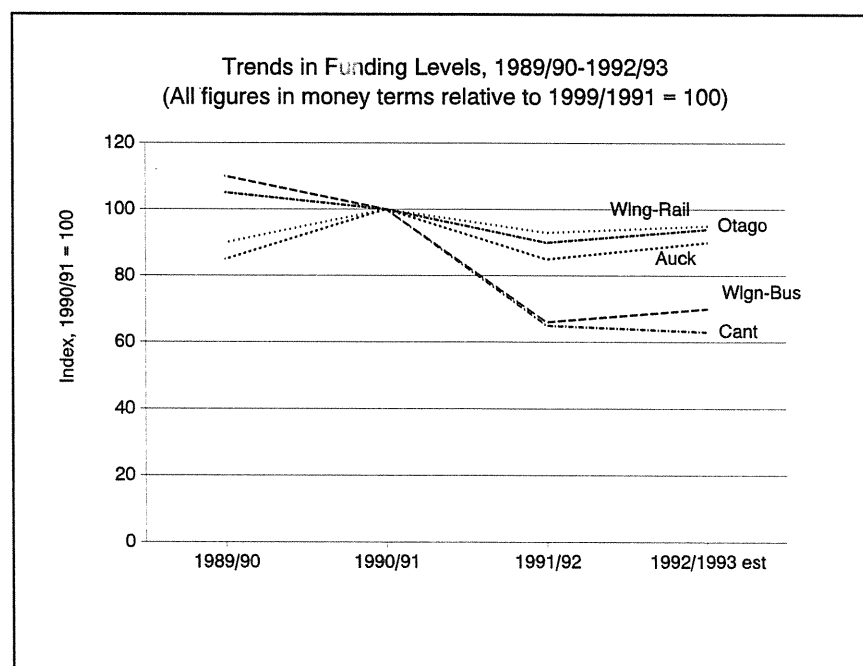


Figure 9



## Some On-going Issues

### Issues for Urban Rail Services

The original intent of the TLR legislation was to treat urban rail passenger services identically to bus services, i.e., involving them in the process of registering commercial services and tendering for additional (non-commercial) services required. It would thus have been expected that urban rail services would have had to compete with parallel bus services either 'on the road' or for non-commercial contracts. In practice, this has not been allowed to happen, and the rail services have largely been protected from competition.

In Auckland, although the rail system plays only a minor role in local passenger transport, the Auckland Regional Council considered it important to retain the services on strategic grounds. It recently negotiated a non-competitive contract with NZ Rail Ltd to continue to provide rail passenger services for the next 10 years. This contract is notable for being longer than the normal 5 years maximum specified in the Competitive Pricing Procedures; the 10 year duration was necessary for NZ Rail Ltd to agree to invest in upgraded rolling stock (second-hand diesel multiple units from Perth, Western Australia).

In Wellington, the urban rail system plays a major role in local passenger transport. It became clear at an early stage in the TLR process that rail services could not readily compete on a 'level playing field' with bus services: the rail operation would be at a disadvantage in notifying commercial services and in competing for tendered services, both because of its high overall cost levels relative to bus and its high proportion of fixed costs.

The Wellington Regional Council decided, on traffic management and environmental grounds, to reject any commercial notifications of new bus services which would directly compete with rail services. It then decided to secure the basic rail service through a 'sole supplier' Competitive Pricing Procedure. In effect, this has meant negotiations between the Regional Council and NZ Rail Ltd to agree a price for the service required, rather than determining a price through a competitive tendering process. Factors being taken into account in such negotiations include:

- The costs of providing an equivalent service by bus
- The need for NZ Rail Ltd to earn a reasonable return on its investment and for new investment to be funded (eg. for rolling stock renewal or refurbishment)
- The scope for further efficiency gains in the rail operation
- The greater passenger attractiveness of rail, and its likely benefits in reducing car travel (and hence on road traffic and environmental conditions).

Since 1991, contracts for the Wellington rail services have so far been negotiated on an annual basis only. Negotiations are currently proceeding on longer-term arrangements, perhaps similar to the 10 year contract agreed for the Auckland services.

The developments to date in relation to urban rail services have shown the difficulties in treating them on a 'level playing field' with bus services. As long as they are treated separately, and regarded as a 'sole supplier', then the difficulty is in bringing appropriate pressures to bear so as to reduce public funding requirements to a level reflecting 'efficient' operations and costs. While this has not been achieved to date (as noted in the previous section), there is reasonable prospect that the present negotiations will result in further progress in this regard.

## **Vehicle Standards and Fleet Renewal**

Under the TLR regime, there are no special standards imposed on buses providing commercial services (other than minimum safety and construction standards). For tendered services, the minimum vehicle standard policies vary from region to region:

- Some regions have specified only mandatory maximum vehicle ages and/or overall fleet ages
- Some regions have additionally specified other minimum features as mandatory
- Other regions have not only specified such mandatory minimum features, but have also adopted a weighting system in tender evaluation to favor vehicles which have better than the minimum features. Such weighting might apply for example to vehicle ages, step heights, and fuel types. In practice, the price benefits for vehicles with better than the minimum features have been so small that operators have had little incentive to provide anything better than the minimum mandatory standard.

These policies have meant that most operators have not had to invest in new vehicles since TLR. In practice, there has been little purchase of new route buses by the industry since 1989/1990 as:

- It has not been essential in order to comply with contract requirements (above)
- Operators have been minimizing expenditure in the short term because of the limited contract durations and their general uncertainty about their future under the new system.

The New Zealand experience in this regard is very similar to that in the UK following deregulation.

This situation is of concern both to the established operators, who see their fleets deteriorating, and to the regional councils, who are concerned about progressive decline in vehicle and service quality. The main bus body builder in New Zealand has recently gone out of business.

Some councils in New Zealand are now addressing this situation by the development of improved minimum vehicle and fleet quality standards for all contracted services. In this regard, they are strongly supported by the major established operators. The standards being proposed comprise two main aspects:

- Firstly, each vehicle is scored against a range of attributes to ensure that it qualifies by at least meeting a certain pre-defined standard. In scoring each vehicle a number of attributes are taken into account, such as vehicle age, appearance, and accessibility.
- Secondly, qualifying vehicles must pass a fleet assessment to ensure that the overall fleet qualifies by at least meeting a pre-defined standard. The fleet assessment allows a three-year phase-in period during which the minimum fleet standard is progressively raised. This is done to allow operators time to make investment/divestment decisions and to allow suppliers to respond to the virtual re-commencement of vehicle construction in New Zealand.

These minimum standards must be met at any given time and not just at the commencement of a contract period.



While these improved standards seem likely to increase the overall costs of service provision in the medium term, this is regarded by those involved as a reasonable price to pay to achieve a more attractive and more consistent standards of service, which should help to attract patronage.

### **Local Monopolies and Contestability**

In the UK, deregulation was accompanied by the enforced splitting up of the National Bus Company and later the Scottish Bus Group into their constituent companies, followed by the sale of these companies. A similar process is now happening with London Buses Ltd. These measures were designed in part to reduce the dangers of monopoly and to encourage competition. However, since deregulation there have been extensive mergers and takeovers in the British bus industry, and some very large groupings have emerged with subsidiaries in many parts of the country (eg. the Stagecoach group). This has given rise to some concerns in UK about monopoly power in the industry and its possible abuse: this issue has been examined by the UK Monopolies and Mergers Commission in a number of merger/takeover cases.

There are some concerns about similar trends occurring in New Zealand. For instance, in the Wellington region there are now only two substantial operator groups: one is owned by Stagecoach (was previously the local municipal operator), the other comprises two private operators with a measure of common ownership. Also, given the relatively long distances between urban centers in NZ (compared with UK), there is less likelihood of these operators being challenged by operators from outside the region.

While this issue of local monopolies is of concern to some, the extent to which it is perceived as a potential major problem will be influenced by views as to what extent local bus service provision is a contestable market or a natural monopoly. Others have examined this issue in depth, and further comment is not attempted here.

### **Reforming the Reforms - Area Franchising and Alternatives?**

It will be clear from previous sections of the paper that TLR in New Zealand has brought a number of benefits - perhaps most notably in terms of improvements in the operating efficiency of the public sector operators and consequent reductions in the level of public funding required to provide a given level of service. There are other aspects in which the new regime is perceived by particular parties involved to be unsatisfactory and modifications are seen as desirable.

One of these aspects is the operation of the commercial notification/competitive tendering process, where there is seen (by established operators and some regional councils) to be undue emphasis on accepting the lowest price bid in the tendering process. This results in:

- long-established operators of a particular service likely to be displaced by other operators, maybe only because the other operator has over-estimated the likely revenue in his tender bid
- lack of fleet upgrading (see previous section) and deterioration in the perceived quality and image of services
- lack of incentive for incumbent operators to develop the service over an extended period, knowing they might well be displaced

- lack of public confidence in the service because of changes in operator
- a process of tactical notification of commercial services by incumbent operators who do not succeed in the tendering process, so as to keep out a new operator, followed later by re-tendering of part (or all) of the service.

In the light of these perceived deficiencies, there have been proposals by some industry representatives that the present system should be replaced by an area franchise system. Such a system could have the following characteristics:

- The division of services into commercial and contracted categories with different procedures for each would be abandoned
- Operators would be given sole rights to provide services within a defined area for a given period.
- The initial contract bids for this area franchise would be evaluated on some combination of fare levels, service levels and quality, and public funding requirements (the details of how this would work are not yet defined).
- The contract may be re-tendered after a number of years (say five to seven years), or the existing operator may even have his contract extended if performance has been satisfactory.

This system would be broadly similar to that adopted in certain urban areas in Australia (private operators in Sydney and more recently Melbourne). An area franchising system has also been put forward for further examination in London as an alternative to full deregulation by the recent House of Commons Transport Committee Report (House of Commons, 1993).

To date, no detailed work has been done in the NZ context to examine the practical details and merits of an area franchising system; or on other ways in which the perceived deficiencies of the present system might be overcome.

### **Conclusions - An Overall Balance Sheet**

In the United Kingdom, some commentators have suggested it will take 15 years before the success (or otherwise) of UK deregulation can be assessed. Undeterred by such caution, I shall try to summarize the main effects of New Zealand Transport Law Reform to date.

Table 1 provides a provisional planning balance sheet of these effects, and the following provides brief comments:

- **Passengers.** Overall any changes in services and fares have been relatively modest. TLR has not resulted in the major cuts in services or increases in fares feared by some; but neither has it seen substantial innovation in services, although it has undoubtedly been a spur for both regional councils and operators to re-examine the match of services to changing patterns of demand.
- In one major center (Christchurch), TLR appears to have resulted in a short-term patronage loss of 15-20 percent with patronage still in the order of 10 percent lower than would otherwise have been expected.

Table 1

Impacts of New Zealand Transport Law Reform - Provisional Balance Sheet		
Stakeholder	Indicator	Impacts
Passengers	Fare Levels	<ul style="list-style-type: none"> <li>• Little change in short term</li> <li>• Lower fares probable in medium term</li> </ul>
	Service Levels	<ul style="list-style-type: none"> <li>• Little overall change</li> <li>• Some limited increase in innovation and matching services to markets</li> </ul>
	Service Quality	<ul style="list-style-type: none"> <li>• Little change so far</li> <li>• Dangers of future deterioration (vehicle quality etc)</li> </ul>
	Patronage	<ul style="list-style-type: none"> <li>• Substantial loss in Christchurch (maybe due to bad publicity as much as poor service quality)</li> <li>• Believed to be less substantial or no losses in most other centers</li> <li>• Reasonable prospect of no net loss or some increase in medium term</li> </ul>
Operators and Employees	Employment Levels	<ul style="list-style-type: none"> <li>• Municipal operator staff reduced 30-40% (to provide similar level of service)</li> </ul>
	Employee Earnings	<ul style="list-style-type: none"> <li>• Little change in overall earnings per employee, but increased hours of work in some cases (municipal operators)</li> </ul>
	Employee Productivity	<ul style="list-style-type: none"> <li>• Substantial increases (municipal operators)</li> </ul>
	Vehicle Replacement	<ul style="list-style-type: none"> <li>• Very low rate of vehicle replacement since 1991, not sustainable in longer term</li> </ul>
Funding Authorities	Return on Assets	<ul style="list-style-type: none"> <li>• (?? Unknown)</li> </ul>
	Overall Public Funding	<ul style="list-style-type: none"> <li>• Reduced c. \$20 M pa (18%) to date</li> <li>• Potential to reduce a further \$10M+pa nationally (major proportion in Auckland)</li> <li>• Not clear whether all cost reductions can be sustained in long term (without deterioration in service quality)</li> </ul>

In other centers, any adverse patronage impacts appear to have been much smaller. In the medium term, TLR may well result in somewhat higher patronage than might otherwise have occurred, principally because of the higher service levels/lower fares obtained with a given level of public funding.

- **Operators and employees.** Municipal operators in particular have experienced dramatic changes (in a sector which had previously changed very slowly). Several operators have gone out of business, with the others corporatized and in some cases considerably down-sized. There has been an influx of new management and substantial changes in awards, work practices and efficiency levels. Employee numbers have fallen substantially, while remaining employees are working harder and in some cases longer hours for similar pay. The better municipal operators have now achieved efficiency levels comparable with their private sector counterparts; indeed, the distinction between the two sectors is gradually being eliminated. To date, there has been a very low level of vehicle replacement.

- **Funding authorities.** There has clearly been a substantial reduction in public funding requirements

as a result of the new regime. Previous subsidy levels have been reduced to date by in the order of 20 percent, and this saving will probably increase to around 30 percent or so over the next few years.

Very broadly the outcome of Transport Law Reform in NZ is similar to the outcome of deregulation in the UK:

- There have been similar effects on operators, efficiency levels, and public funding
- In NZ, there appears to have been less instability in services and probably less detrimental effects on patronage. There has also been less innovation. This may be largely due to the higher proportion of contracted services in NZ and the lesser exposure to the vagaries of the commercial market.

Some of the problems which have emerged in the UK are also present in New Zealand. Particular mention might be made of the lack of investment by operators (in vehicle replacement) and the tactical games which have developed in relation to the tendering process and the notification of commercial services.

Overall, the system that has emerged in New Zealand is something of a hybrid between the more 'pure' deregulation which has occurred in the UK (outside London) and the publicly-controlled route contracting process in London. The New Zealand Government hope would be that the NZ system combines the best points of each of these models; however, the jury appears to be not yet persuaded by the evidence.

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An earlier version of this paper was presented at an Urban Transport Conference in Sydney, Australia (IIR Conferences, March 1993).

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