

Passenger Transport Deregulation in New Zealand and the Emergence of the Bus-Taxi

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Abstract:

One of the features of passenger transport deregulation in New Zealand has been the emergence of taxis to provide scheduled fixed route services.

The most notable example of this has occurred in Wanganui (population 45,000) and Palmerston North (70,000). In these cities the heavily subsidised bus services have been replaced by commercial services provided by 10-seater taxis. A concession fare scheme, enabling the young, elderly and disabled to travel at lower than standard fare, is operated by the local regional council.

The changeover from company owned large buses to owner operated vans was not without its problems. Operating a scheduled fixed route flat fare service was a new experience for taxi drivers. Passengers, used to travelling on half empty buses, now had to travel in relatively small vehicles, sitting close to other passengers. If the van was full, they had to wait for a backup vehicle.

After five months of operation the regional council undertook a survey of passengers travelling on the bus-taxis to gauge responses to the changes. A phone survey also contacted those who had used the previous service but did not now use the bus-taxis.

In Wanganui a big bus service began competing with the bus-taxi, thus giving passengers a choice of vehicle size. Their response to this choice was also surveyed.

This paper looks at the Wanganui and Palmerston North experiences as examples of the bus-taxi phenomenon and the customer response to the changes. The processes associated with the change are discussed, with comments offered as to the translation of the New Zealand experiences to other organisations.

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Introduction

Major reform of the New Zealand passenger transport industry occurred with the passing of the Transport Amendment Bill in 1989. Commonly referred to as deregulation, the reform was based on changes which had occurred several years previously in the U.K.

This paper describes one of the results of New Zealand deregulation - the emergence of the taxi industry as a provider of scheduled passenger services. It looks at factors which lead to taxis becoming involved in an industry which previously was the sole domain of the bus companies. The paper looks at the Wanganui and Palmerston North experiences as examples of the new Bus-Taxi phenomenon, and the passenger response to these new services. The processes associated with the changes are discussed, with comments offered as to the translation of the New Zealand deregulation experience to other organisations.

Public Transport Deregulation

Scheduled passenger services in New Zealand have traditionally been provided by subsidised big buses, often owned by the local authority. Taxis have operated in their traditional area and there has been little, if any, venturing outside these boundaries. Both buses and taxis have operated in a licensed and protected environment. The 1980's saw a move from protectionism to an environment where competition was the dominant feature and where the boundaries between taxis and buses were removed.

The 1962 N Z Transport Act requires all those operating for hire or reward to first obtain a licence. Until 1984, the criteria for the issue of a licence were designed to achieve a large measure of stability in the industry by limiting entry to those who could show that their presence would not unduly harm existing licensees. After 1984, this changed for bus operators. The previous emphasis on stability was replaced by the need to prove the service of the applicant will be carried on in a safe and reliable manner.

Under this new qualitative system, as it was known, however, a licensee could only operate a scheduled service over a specified route if the service was specifically authorised by the licence. Existing licensees were able to object to applications to operate similar services. Objections would be successful if it could be shown that the existing service already adequately met the demand, that the granting of a new licence would materially affect the economic stability of the current operator, and that the current operator was just as efficient as the applicant.

In addition, the 1980 Urban Transport Act required that any financial assistance to support the operation of an urban transport service should first be offered to the current operator.

Baxter and Gammie (1988) found that the legislation, combined with the subsidy system, guaranteed operators a satisfactory level of income, and that the usual commercial pressures did not exist. They found that there was little incentive for

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operators to take risks or act in an entrepreneurial fashion, and that this was only likely to happen if competition existed. This was perhaps a factor in declining passenger numbers experienced over the last three decades and predicted to continue in the future (Travers Morgan (NZ) Ltd, 1990).

In 1989 legislative changes removed the licensing and subsidy protection and provided for competition both on the road and for any available subsidy.

Based on the British deregulation process, the 1989 changes were, according to the government aimed at integrating all passenger transport modes into a single management system to provide the most cost effective and appropriate services for passengers (Ministry of Transport, 1989). It was also expected to provide opportunities for innovation in service development and appropriate technology.

The Deregulation Process in New Zealand

Scheduled Passenger Transport Services

The Transport Services Licensing Act became law on 1 October 1989 and it was this Act which introduced most of the changes, including new administrators of passenger transport. This task was given to regional councils. Local government had itself been re-organised in 1989 and regional councils, which had previously only existed in Auckland, Wellington, Canterbury and Otago, were set up throughout the country. There were 14 in all, 10 of which had no experience in public transport. In these 10 regions public transport administration had previously been the responsibility of local councils. However for efficiency reasons, and because many bus companies were owned by the local council (raising questions of impartiality in a tender situation), the administration was passed to the regions.

D-Day for the new regime was 1 July 1991. However there was a lengthy transition period, which began in October 1989 and ended in February 1992.

The first step in the deregulation process was for the regional councils to prepare passenger transport plans. These plans (one per region) were required to set out those services considered to be necessary in the region, including routes, timetables and fares. Only those services designated as necessary could eventually be financially supported.

Operators were then invited to register with the regional council any services which they were prepared to provide on a commercial basis. This registration was required by 1 February 1991. Any service registered on that date was required to commence operation on 1 July 1991 and could not be altered or abandoned until 1 February 1992. Between 1 February and 31 October 1991 the regional council was still able to accept registrations but only if that service would not have a material adverse affect on the financial viability of another registered service.

Thus if a service was registered on 1 February 1991 it had protection until 31 October, but it was required to operate until 1 February 1992. This provision was to encourage early registration of services and at the same time prevent frivolous

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registrations.

Regional Councils were able to tender those services which they considered necessary but which had not been registered as commercial.

The overall level of commercial registrations in New Zealand was quite low, with approximately 20% of existing services being registered on 1 February. Most of these registrations were from the current provider of those services (Wallis, 1991).

Taxi Services

The taxi industry was successful in avoiding the changes which affected the bus industry in 1984. Taxis continued to operate in their protected quantitative environment, with the number of licences and taxi fares strictly controlled by the Ministry of Transport. In order to obtain a taxi operator's licence it was necessary to either buy an existing licence or prove to the Ministry that sufficient demand existed for the creation of another licence. The latter proved almost impossible as the taxi industry was generally over-licensed as a result of declining demand (Baxter and Gammie, 1988).

The taxi industry was not, however, excluded from the 1989 changes. The taxi licence was abolished and taxis were effectively placed in the same position as bus operators. The new legislation distinguished only between small (12 seats or less) and large passenger vehicles. Scheduled services could be provided by either vehicle, however taxis were restricted to small vehicles. This was a very significant change because taxis were previously restricted to vehicles with 7 or less seats. The change to 12 seats allowed for the use of the 10 and 11 seater vans which were readily available in New Zealand. Unless exempted, the operators of small vehicles were required to comply with certain regulations, such as the requirement to have a meter.

The new passenger service licence, still issued by the Ministry of Transport, was now granted so long as the applicant was a fit and proper person. No other criteria could be considered.

Fare setting became the responsibility of the operator.

Deregulation of the passenger transport industry came at a time when taxi operators were facing severe problems. The March 1990 edition of "Taxi" stated, "the declining trend of taxi hire apparent for the last year or more continues. All centres report that demand is even lower than the corresponding period a year ago, which was itself a low point." (New Zealand Taxi Proprietors Federation, 1990).

In 1991 the workload fell even further, with Federation figures showing a 18-30% decrease throughout the country compared to 1989. These figures showed the average hourly take in New Zealand in 1989 to be \$19.18. In 1991 it was \$13.58.

To add to this, within 12 months of the changes introduced in October 1989, Ministry of Transport figures showed taxi licenses had increased by 20% nationally (Ministry of Transport, 1991), with most of these increases occurring in the main centres. This increase continued in 1991, with smaller centres becoming affected as well.

By 1991, when bus deregulation began in earnest, the taxi industry faced a continuation in the growth of licensees, and a continuation in the decline in workloads.

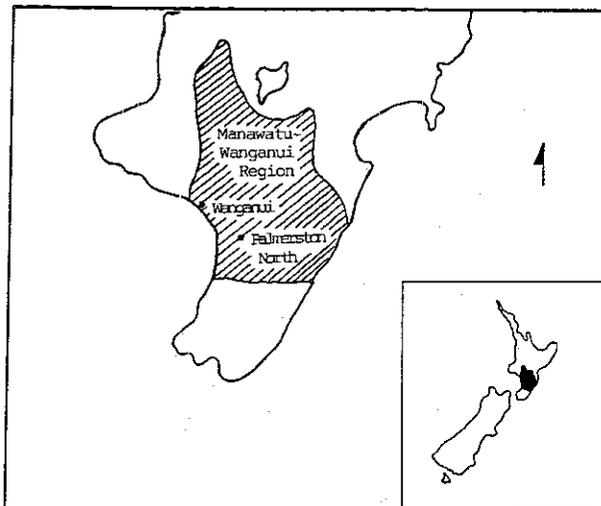
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Prior to 1991 the taxi industry had effectively been shut out of scheduled passenger service work. Deregulation however opened this door. The poor current state of the taxi industry and the equally bleak future pushed them through the door.

Case Study: Manawatu-Wanganui Region

The Manawatu-Wanganui Region is a largely rural region in the Central North Island. See figure 1. It has two major urban centres; Palmerston North and Wanganui, both of which have a long history of local bus services. The Manawatu-Wanganui Regional Council was established during the 1989 local government organisation and was an amalgamation of 40 previous organisations. The new regional council was given responsibility for passenger transport administration within the region.

Figure 1: Manawatu-Wanganui Region



At the time of deregulation the taxi industry in the Manawatu-Wanganui Region was experiencing the same difficulties as elsewhere in the country. In Palmerston North, by mid 1992, there had been an approximately 40% increase in taxi licences, adding

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competition in a limited passenger market. Wanganui's only taxi company (Wanganui Taxis), like most other taxi companies, had suffered a severe decline in work. In 1989 the earning power of the then 35 cabs before tax averaged \$12,000 (O'Brien, 1991). In 1990 the situation continued to worsen and the company reduced to 31 licensees when 4 licences were purchased by the remaining licensees. Vehicle utilisation was poor and cars were rostered on for a maximum of 40 hours a week.

By 1 February 1991 one significant registration for a commercial scheduled service from a taxi company was received. This was from Wanganui Taxis, and it marked the beginning of the taxis involvement in bus work. Soon after the Palmerston North Taxi Company decided to follow Wanganui's lead and they too registered a commercial service covering all of Palmerston North. In both centres, the taxis planned to use their vehicles as both buses and as taxis.

Wanganui: From Buses to Taxi-Buses

Wanganui has a population of 45,000 and is on the west coast of New Zealand's North Island.

Prior to deregulation Greyhound Buses Ltd provided all urban bus services in Wanganui with a fleet of 13 large buses and had for many years been subsidised. During the year ended 30 June 1991, for example, Greyhound received a total subsidy of \$185,000 for their services (Transit NZ, 1991). Greyhound operated a 6 section fare system ranging up to \$1.70 with most passengers paying approximately \$1.50 to \$1.60. Children travelled at half price, with limited concessions for the elderly and disabled.

The taxi company was aware of the opportunities arising from deregulation and was also aware of the relatively light loadings on the Greyhound buses. An idea of a Taxi-Bus service was formed.

By 1 February the only registration received in Wanganui was from Wanganui Taxis who registered a complete network of services. The Regional Council decided to tender anyway and received only one tender, that of Greyhound Buses.

The Regional Council compared the tender price, adjusted for expected revenues, with the estimated cost of the Council itself providing a concession fare scheme on the Taxi-Buses. The taxi option was by far the cheaper and so the tender was rejected. The taxi registration remained in place, and because it was made prior to 1 February, it meant the taxis were protected from competition until 1 October.

The Taxi-Bus service was to operate to a timetable and over fixed routes in a similar fashion to any bus service. However the vehicles would be taxis, called up from the nearest taxi stand shortly before the bus run was about to commence. That vehicle would follow the route until full, when it would call for a back-up vehicle. The first vehicle would then proceed directly to its destination. The back-up vehicle would continue the run in the same manner. All vehicles would carry a full set of destination signs.

Initially most of the vehicles used were standard cars. However the taxi company was aware that it needed more bigger vehicles to cope with the loads and encouraged its licensees to buy mini-vans. The licensees themselves realised that a van

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full of passengers at \$2 a head was better than a car full and quickly many of the cars in the previously all car fleet were replaced by vans. The new legislation effectively restricted the size of a taxi to having no more than 12 seats. As the intention of the Taxi-Bus scheme was to have dual purpose vehicles, 11 seater vans, which were readily available, were the popular choice of vehicle.

The original timetable proposed by the taxi company had a higher frequency service than the previous big bus service, on about a 2 to 1 ratio. It soon became clear however that the passenger numbers did not justify this extra level of service and the ratio eventually dropped back to closer to 1 to 1.

After only a few weeks operation of the new service the taxi company also realised that better utilisation of the vans together with a bus roster was needed and at this stage the taxi fleet split into two parts. The 21 cars did the taxi work with occasional bus back-up, and the 10 vans did bus work and occasional taxi work. The car owners were pleased with the 50% increase in taxi work and a similar increase in income. The van owners also calculated earnings levels similar to the cars. Everyone in the taxi company was happy.

The fare for the new service was a flat \$2.00. However the Manawatu-Wanganui Regional Council introduced a concession fare scheme, also the first of its type in the country, which enabled certain categories of passengers to travel at a reduced fare. The scheme enabled children to travel at \$1.00 and students, the disabled, the over 60's and all beneficiaries to travel at \$1.30. Concession tickets, purchased only at ticket outlets, are handed to the Taxi-Bus driver and the drivers are then reimbursed by the Regional Council for the full \$2. Other than children's tickets, the concession tickets are not sold on the Taxi-Buses.

Passenger Reaction in Wanganui

Initial public reaction to the Taxi-Bus proposal in Wanganui was generally negative. Greyhound Buses had provided urban services in Wanganui since 1950, when the City Council-owned trams ended their service. Greyhound was established at that time by local businessmen with the specific intention of providing local bus services. Ownership of the company is still retained by about 400 local residents. The company and its drivers had a loyal following and when it was learned that buses would be sold and drivers laid off there was a great deal of sympathy and support for Greyhound. Coupled with the fact there was also some resentment that the Palmerston North based Regional Council had made the decision about Wanganui's transport future, and the scepticism that the taxis could cope, the taxis were faced with a difficult debut. However, despite some teething problems, the new service soon settled down.

In December 1991, at the end of the protection period for new services, an ex Greyhound driver decided to start a service in competition to the taxi service, using leased, distinctive Greyhound buses. The timetable for the Taxi-Buses and the new big bus service were almost identical, as a result of the taxis introducing extra services to match the new operator. Passengers were therefore faced with a choice of which service they wanted. The Regional Council took the opportunity to survey passengers to find

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out why they had chosen the service they did. The results are summarised in Table 1.

Table 1: Survey Responses In Wanganui

Why Choice of Service	Taxi Bus (%)	Big Bus (%)
Didn't know about choice	17	3
Timetable more convenient	39	25
Runs more often	21	8
Speed of service	27	10
Location of stops	26	33
More comfortable	27	59
Cheaper	8	25
Friendlier drivers	31	49
Other	14	15

The results indicate comfort and friendly drivers were the major factors for choosing the big bus service. However, these factors also featured in the choice of the Taxi-Buses along with more convenient timetable and speed of service.

To ascertain patronage changes passengers were asked how often they used public transport now and prior to 1 July. Analysis of the response data showed a slight decrease in the frequency of public transport usage since the introduction of the Taxi-Buses. Of those who indicated they used the buses less, 30% had done so because they didn't like the changes. There was a significantly higher number of big bus passengers who indicated they were using the Taxi-Buses less often than the former Greyhound service because they were not happy with the minibus system.

However the figures indicate that while some passengers appear to be using the service less frequently than before the changes, others use them more often.

The profile of passengers on the two services was similar in terms of sex and employment status. The only significant difference was that the big bus had more passengers than the Taxi-Buses in the 30-44 year range (27% compared with 12%) and less in the over 60 group (34% compared with 45%).

The Regional Council survey was complemented by a general community views survey carried out by the Wanganui District Council. This extensive survey, conducted in December, included a number of public transport questions.

That survey indicated 68% of Taxi-Bus users rated the service as satisfactory or better than satisfactory. 8% were neutral and 22% said the service was either

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unsatisfactory or worse.

89% said the Greyhound service was satisfactory or better, 3% were neutral and 7% said it was unsatisfactory or worse.

Those who said public transport was unsatisfactory were asked to give reasons. One third cited vehicle related matters such as size and difficult entry and exit. A further third cited unsatisfactory timetable and the rest gave a variety of other reasons.

Findings regarding frequency of use were consistent with the Regional Council survey.

The survey results indicated sufficient approval of the new service for the Regional Council to continue its support for the Taxi-Bus concept. Despite this, old loyalties to big buses and Greyhound still appear to remain.

The new Wanganui big bus service lasted only three weeks before it ceased operations for profitability reasons.

Palmerston North: From Buses to Bus-Taxis

Palmerston North is a city of 70,000 people and is a neighbour of Wanganui. Prior to 1991 the City Council-owned bus company provided all urban services within the city with a fleet of 15 buses and at a subsidy in the year to 30 June 1991 of approximately \$1.4m (Transit NZ, 1991). A flat fare of \$1.20 was in existence. Children travelled at half fare and limited other concessions also applied to the disabled.

No services had been registered in Palmerston North at 1 February 1991 and the Manawatu-Wanganui Regional Council tendered all the services. The local taxi company had been watching developments in Wanganui and the day prior to tenders closing, registered a commercial taxi-bus service covering the whole city. As with Wanganui's Taxi-Buses, the service was to be operated with 10 seater mini vans, and at a flat fare of \$1.50, with no concessions. Just to be different, Palmerston North Taxis called their service Bus-Taxi.

The tenders were compared to the estimated cost of providing concessions to the taxis and again, as in Wanganui, the cost of the taxi service was much less.

The Palmerston North Taxi Company has 50 licensees and, when it began the Bus-Taxi service, was the only taxi company in Palmerston North.

Almost exactly the same scheme as in Wanganui was to be put into operation in Palmerston North. The major difference was that the Palmerston North Taxis purchased two large buses to operate on the busy university run in the city. The flat fare in Palmerston North was \$1.50 and the same concession fare scheme to that introduced in Wanganui was also put in place.

Initial reaction to the news that the taxis were to take over the provision of bus services in Palmerston North was mixed. The changeover from big buses to Bus-Taxis was well publicised. The Manawatu-Wanganui Regional Council ran a comprehensive advertising campaign, including the development of a new Bus-Taxi logo, radio and newspaper advertising, and printing a bright new timetable and delivering it to every household.

Other less contrived publicity also occurred. It was announced that the City

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Council owned bus company was to be dismantled. Buses were to be sold off and drivers were to be made redundant. Drivers promptly went on strike during the last three weeks in June over redundancy payments and all this attracted a great deal of media attention. The taxi company was regarded by some as the cause of these events. There was also widespread scepticism that 10 seater vans could cope with the peak loadings.

Others, however, welcomed the move to smaller vehicles. Full buses in Palmerston North had been a rare sight and the estimated \$1m saving to local ratepayers in subsidy payments was welcomed.

Because the Palmerston North Bus-Taxi proposal was developed later than had occurred in Wanganui, Palmerston North Taxis were not fully prepared for the 1 July takeover and there were some initial settling in problems. Taxi drivers, unfamiliar with the routes, went the wrong way or took short cuts when they had only a few passengers on board. After a few weeks, however, the service began operating smoothly, particularly when, like Wanganui, Palmerston North dropped the concept of calling up the nearest available vehicle and instead introduced a van-only bus roster.

Passenger Reaction in Palmerston North

The Manawatu-Wanganui Regional Council conducted surveys in early December to gauge reaction to the new services. At this stage the new service had been in place for 5 months. The first survey was a user survey and the second a random telephone survey. The user survey involved handing a questionnaire to all passengers travelling on the Bus-Taxis over two days. In total 447 forms were handed out with 301 questionnaires returned, giving a satisfactory response rate of 67%.

The user survey was designed to seek passenger reaction to the changes. Passengers were asked to return their completed forms to the Regional Council using a stamped addressed envelope provided. An incentive was offered for all those who returned their forms of a chance to win a dinner for two at a local restaurant.

The major findings from the survey were that the vehicles were comfortable (70%), safe (71%), easy to recognise (81%) and reliable (77%). Ninety one percent of passengers said the drivers were helpful. However 58% said the vehicles were not easy to get in and out of.

Some of the results from the survey are shown in Table 2.

When the data was analysed according to age groups some surprising variation in response was revealed. For example, to the statement about comfort of the mini-buses, 10% of the over 60's and 11% of the under 18's indicated they disagreed that the vehicles were comfortable, while a significantly higher 25% of the 30-44 age group indicated their disagreement. However, some of the responses of the different age groups were predictable. 60% of the over 60's indicated they found the mini-buses difficult to get in and out of while a smaller 46% of the under 18 year group indicated the same.

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Table 2: Palmerston North Survey Responses

Statement	Response (%)					
	S.A	A	Ind.	D	S.D	D.K
The Mini-Buses are comfortable	14	56	13	11	5	1
The Mini-Buses are easy to get in and out of	5	22	14	37	21	1
The vehicles are safe	14	57	15	8	2	4
The timetable is convenient	13	55	11	13	7	1
The timetable is easy to understand	17	59	7	12	4	1
It is easy to buy concession tickets	19	43	7	9	4	18
The drivers are helpful	40	51	5	3	1	0
The Bus-Taxis are easy to recognise	25	56	6	9	4	0
The Bus-Taxis are reliable	24	53	10	8	3	2

Notes: S.A = Strongly Agree
 A = Agree
 Ind. = Indifferent
 D = Disagree

 S.D = Strongly Disagree
 D.K = Don't Know

When asked to compare the Bus-Taxis with the previous big bus service, the response was as follows:

Better than the previous services	19%
Same as the previous service	39%
Worse than the previous service	33%

Again, separated into age groups it was the over 60's who appear most happy with the changes (even allowing for their difficulties in getting in and out of the vehicles). The under 18's were least satisfied, with 50% of that group indicating the new service was worse than the previous one.

When asked if their use of the service had changed, 75% said they used the previous big bus service at least 2-3 times per week. 67% said they use the Bus-Taxi that often now. Of those that had changed, 29% said they had done so because they

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didn't like the new service. The rest gave other reasons.

Other interesting findings were that 80% of passengers were female, and the majority of trips were for shopping and personal business reasons.

The second survey, the telephone survey, covered 200 people chosen at random from the telephone book. This survey was designed to identify those who had stopped using public transport and to find out why. 22.5% said they had used the buses prior to 1 July, and 5.5% had used them since. Of those who had used the service prior to 1 July but not since, 48% gave factors relating to problems with the new service as the reason for non use. These ranged from the new timetables and stops not suiting to not liking sitting next to others and difficulty getting in and out. When asked in what circumstances they would use the service again, 25% said never, 54% said if personal circumstances changed, and the rest said if the service changed.

Despite a relatively small percentage of responses which were quite critical of the new services, the surveys indicated to the Regional Council general approval for the changes. They also highlighted some specific concerns regarding the vehicles which could be addressed by physical modification of the vehicles. These may include the addition of extra steps and handrails.

The relatively high number of people who expressed dissatisfaction with the new service highlights the need for further monitoring. It may have been that more time was needed by passengers to feel comfortable with the new service.

Overseas Experiences

The results obtained from the surveys were consistent with overseas experiences. For example, U.K. evidence shows that mini-buses have proved very popular with passengers (Wallis, 1990). Major factors favouring mini-buses were frequency, 'hail and ride', convenience and speed. Frequency is not likely to be a factor in Palmerston North and Wanganui because the Bus-Taxis operate on a similar frequency to the previous service. Hail and ride however is likely to be a factor here. The Palmerston North and Wanganui services have nominal bus stops but will pick up and set down almost anywhere along the route, and sometimes even off the route. Speed is also likely to be a factor in favour of the Taxi-Buses as services often take only half the time of the previous services.

Friendly drivers and the personalised nature of the service were other reasons cited in the U.K. for favouring mini-buses.

On the negative side, lack of luggage space was a major complaint of UK mini-bus passengers, and boarding problems also featured. Not being able to get on the first vehicle arriving because it was full up was also a major problem in some areas.

These passenger reactions, both positive and negative, are remarkably similar to those from NZ passengers.

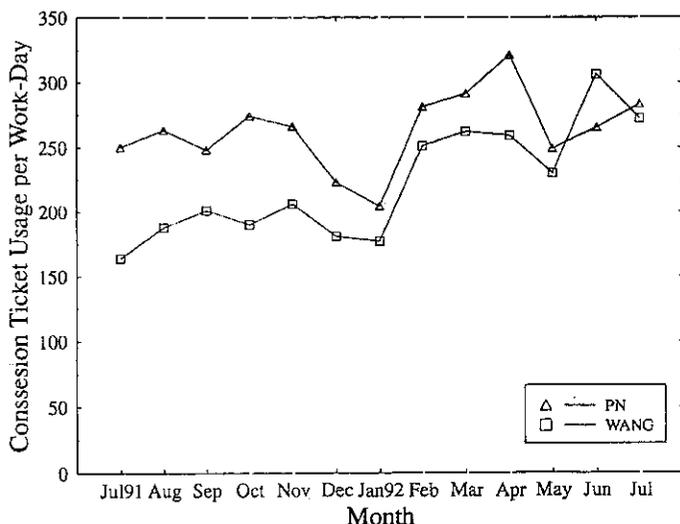
Passenger Numbers

The ultimate test of the success of any passenger service must always be passenger numbers. Unfortunately comparisons between the big bus services and the Taxis are difficult. In Palmerston North, the old bus company made only limited figures available to the Regional Council and many of these proved to be unreliable. In addition, the three week bus driver strike in Palmerston North in June would have had an effect on subsequent passenger numbers.

The Taxis also do not keep records of passenger numbers. The only indication of passenger numbers comes from concession ticket usage. Concession ticket usage increases almost every month and it is reasonable to assume from this that passenger numbers are also increasing. The Taxi-Bus drivers confirm this to be the case.

Longer term trends in concession ticket usage are difficult to predict as only 13 months data is available and seasonal effects, school holidays and Christmas holidays all influence usage. This is particularly so in Palmerston North where university holidays have a dramatic effect on student concession ticket usage, (student ticket usage accounts for almost 50% of total concessions used at peak student times). Figure 2 shows concession ticket usage calculated on an average weekday basis (there are few

Figure 2: Concession Ticket Usage



services at weekends) for each month. For reasons stated above students tickets have been excluded. The figures indicate that concession ticket usage has increased significantly in Palmerston North and in Wanganui since the service began. As

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mentioned, these figures should be treated with some caution but give some indication of the increase in patronage. It can be assumed from this increase that the Taxi-Bus service are meeting the requirements of the passengers.

Subsidy Saving

One undeniable benefit from the introduction of the Taxi-Buses has been the reduction in subsidy levels. This is not surprising given that bus costs are likely to be at least twice those of taxis.

Figures for Palmerston North and Wanganui are shown in Table 3. The subsidy levels shown are the actual figures for the big buses in their last year of operation and the estimated cost of the concession fare scheme for the Taxi-Buses.

Table 3 - Comparative Subsidy Levels

City	Subsidy Levels		
	1990/91	1991/92	Savings
Palmerston North	\$1,400,000	\$50,000	\$1,350,000
Wanganui	\$185,000	\$40,000	\$145,000

A better comparison would have been the estimated Taxi-Bus costs with the best tender price received from the big bus companies when the services were tendered. Unfortunately the tender prices cannot be disclosed; however it can be said that the Palmerston North subsidy levels for a big bus service would have been less in 1991/92 than 90/91, although still well above the Bus-Taxi costs. In Wanganui, the big bus tender was well above the level of big bus costs in 90/91, making the Taxi-Bus advantage even greater.

Other New Zealand Experiences

Wanganui and Palmerston North were initially the only centres with commercial taxi-operated scheduled services in New Zealand. However in other parts of the country taxi companies adopted the concept and tendered for, and were successful in obtaining, a number of contracts. In Gisborne (population 30,000) the local taxi company won the contract to provide all services. The taxi company planned to provide the service with

a mixture of vehicles, ranging from 20 seater to 50 seater vehicles. Conventional taxis were only to be used if needed as a back-up. The vehicles were to be driven by off-duty taxi drivers, giving the drivers greater income and the opportunity to share in the profits.

In New Plymouth, a city similar to Palmerston North, all services were provided prior to 1 July by the heavily subsidised, Council-owned bus company. No services were registered on 1 February 1991 but prior to 1 July a new operator registered a commercial network of services in New Plymouth. The new operator was soon in trouble, however, and abandoned all services just prior to Christmas 1991. At that stage a local bus company and the local taxi company stepped in and between them took over the provision of the service. The bus company operated large buses on the four busiest routes and the taxi company provided services on the two least patronised routes. The taxi company purchased two mini vans and hired drivers to provide the service. The vans doubled as taxis only occasionally at weekends or evenings.

In the main centres, especially Wellington and Christchurch, taxi companies picked up many of the low demand off peak contracts. In some cases, where these contracts were won by bus companies, the work was then sub-contracted by the bus companies to taxi companies. In most of these cases, the taxi companies provided the services with 10 or 11 seater vans which worked as taxis when not doing bus work.

As in the Manawatu-Wanganui Region, a reduction in subsidy payments have been experienced in other centres. In Gisborne the subsidy costs for 1991/92 are expected to total \$130,000. This compares with the previous big bus costs of \$152,000. This relatively small saving is not surprising given that while the new services in Gisborne are operated by the taxi company, they are doing so with buses rather than taxis.

In other centres the cost savings from the use of taxis are unable to be precisely calculated because of the unknown costs associated with the previous services (these costs are known on an aggregate basis only). However it is reasonable to assume that costs are lower, given that the taxis won contracts ahead of the big bus operators who had previously provided the services, and that bus companies have subcontracted work out to taxis.

Opportunities for the Future

The initial success of taxi involvement in the provision of scheduled passenger services should increase further in the future. During the second round of tendering regional councils will be more aware of the opportunities to use taxis and separate tenders for low demand services are likely to become more prevalent. Bus companies are also aware of the opportunity to subcontract and thus increase profitability, although some are unwilling to give hard won work away and then perhaps face resulting labour problems.

Opportunities for commercial services similar to the Wanganui and Palmerston

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North Taxi-Buses also exist. These services are ideally suited to the provincial cities with low demand and often highly subsidised bus services, and under-utilised taxi fleets. The South Island city of Invercargill is an obvious candidate. Deregulation in Invercargill saw the City Council owned bus company bought out by the drivers and a reduced service introduced using midi buses. Subsidy levels fell by approximately 40% but are still in excess of \$600,000 per annum and there are no commercial services.

Opportunities for Outside New Zealand

The involvement of taxis in the provision of scheduled passenger services in New Zealand was largely a result of changes in the legal framework governing passenger transport services. These changes included:

- i the removal of quantitative licensing for taxis, and the creation of an open entry regime, thus encouraging innovation/competition;
- ii. the removal of restrictions on the involvement of taxis in the provision of scheduled services;
- iii. the removing of restrictions (at least partially) on the size of vehicle to be operated as taxis. Further easing of this restriction in New Zealand would allow greater opportunities for taxi companies with consequent improvements in service; and
- iv the allowing of at least limited competition among transport operators (including taxis) in the provision of bus services. It is possible that this change alone might have produced the desired results.

Wherever these factors exist there appears to be no reason why taxis cannot become involved in providing bus services. While the over-supply of taxis and general decline in the industry was a factor in New Zealand, the presence of this factor only hastened taxi involvement in bus services and was not a prerequisite. Taxis are likely to remain, however, in their present traditional work areas unless forced by competition or economic necessity to look elsewhere.

Conclusions

Legislative changes in New Zealand in 1989 created an environment where the taxi industry was able to compete with large buses for scheduled passenger transport work.

Passenger Transport Deregulation in NZ

In Palmerston North and Wanganui the local taxi companies took advantage of this opportunity and set up a Taxi-Bus service which used taxis to provide all scheduled services in these centres.

Passenger survey results indicated an encouraging but mixed reaction to the new Taxi-Bus services, with some strong opinions being recorded both for and against the new service. A number of issues were identified as being a problem, such as entry and exit from the vehicles. Many of these problems have since been addressed; for example extra steps and handrails have been installed. Many of the problems will be addressed in the future as second generation Taxi-Bus vehicles are purchased. Ease of entry and exit will be high on the list of vehicle specifications.

There appears to be, at least in Wanganui, some remaining loyalty to the big buses. When given the choice a number of people in that city clearly opted for a big bus over a new minibus, for reasons of comfort. Likewise in Palmerston North a small number of people appear to be dissatisfied with the changes, although most passengers indicated they were quite happy with the new Bus-Taxis.

The new services had some initial problems and this appears to have resulted in some disaffected customers. This could account for some of the negative feedback from the now non-users contacted in the Palmerston North telephone survey. It is also clear from the phone survey that many of those who used the big bus services prior to 1 July and don't use the Taxi-Buses had never actually tried the new service. Presumably negative publicity or stories from friends put them off.

It is clear however that patronage on the new services is increasing. This may indicate that those previous users are coming back, or new users are appearing, or that the regular users are making more trips. Regardless of where the new users are coming from, it is a sign of increasing satisfaction levels.

It can be concluded that passengers are reasonably satisfied with their new service. There are a number of strongly positive aspects to it such as speed, convenience, and comfort. There are also a number of negative aspects such as vehicle entry and exit, and having to wait for a back-up vehicle. The negative aspects are being addressed and will diminish over time and as passengers become accustomed to the current service. The increase in passenger numbers indicates that this is already beginning to occur.

Those who have to pay the subsidy costs of the service are also presumably satisfied. Eighty percent of the local population of Palmerston North have never used big buses or Taxi-Buses and they are no doubt pleased with the reduction in their contribution as ratepayers to the new service.

The effect on the taxi industry has also been positive and dramatic. In Wanganui some taxi drivers were saved from bankruptcy and now have a 50% increase in income. Other taxis now involved in bus work also have increased income as a result. The taxi industry gain has of course been at the expense of the bus industry. However it was likely that high subsidy demands caused by decreasing passenger numbers would have resulted in a curtailing of many services in any event, with consequential job losses and redundant equipment.

Overall, then, it can be concluded that the new services in Palmerston North and Wanganui are a success, and becoming more successful all the time.

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This success is shared, to a limited extent, elsewhere in New Zealand. It could be expected that in the future more will take advantage of the opportunities that exist, with the subsequent advantages of lower costs at no expense to the customers. The opportunities are mainly in smaller urban centres, such as Wanganui and Palmerston North, which have relatively low patronage and heavily subsidised bus services, and off-peak services in bigger centres. Opportunities, presumably, exist outside of New Zealand as well, given the right mix of operating conditions.

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