

## **1. Introduction**

The Proposed District Plan (PDP) Chapter 29 Transport seeks to establish Park and Ride facilities (PnR) as a restricted discretionary activity. Discretion being restricted to the effects on the transport network, including active modes of travel as well as the feasibility of public transport, the location, design and externalities, such as amenity on adjoining sites and street scape, compatibility with surrounding areas including nuisance effects and suitability with surrounding activities, and finally the safety of its users. All these items of discretion are considered while trying to address the various objectives being, but not limited to; facilitating an increase in walking and cycling, reducing the dominance and congestion of vehicles in the Town Center, while also reducing traffic generation and contributing towards addressing the effects of climate change.

The Frankton Community Association (FCA) view is that the use of PnR to address these objectives is erroneous. The use of PnR can have the perverse effect of doing the exact opposite of the stated objectives. The FCA seeks relief that PnR facilities are not a restricted discretionary activity and be notified in each case to allow proper scrutiny, as the effects of PnR are obviously not well understood by QLDC, and the items of discretion are limited and do not address the Chapter 29 objectives.

## **2. History of Park and Rides.**

Park and ride is the name given to the form of intermodal transport that specifically involves the interchange of private to public transport<sup>1</sup>. Meek et al describes the development of PnR facilities in the UK in four distinct phases, Emergence phase, National awareness phase, Promotion phase and the Cautionary development phase.

The Emergence phase is usually championed by local authorities as a solution to infrastructure constraints. In the UK context this was due to historic centers where the building of new roads is restricted by existing historic structures with road widths being narrow as they were initially developed in the Roman era. This is not too dissimilar to the Queenstown context, where instead of the historic constraints to road infrastructure it is the topography that binds us.

The National awareness phase occurs by being acknowledged by Central Government authorities (NZTA) the role PnR can have on a transport system. The Promotion phase is an extension of the national awareness phase with the increased support by way of policy and sometimes funding. Finally the Cautionary development phase is the retreat in political support as a result of the uncertainty over the effects of PnR in addressing transport issues, but continues to be adopted by local authorities as they identify them as a positive “carrot” measure<sup>3</sup>.

## **3. Effects of Park and Ride**

Parkhurst (1995)<sup>2</sup> provides a summary of benefits and dis-benefits of PnR.

The benefits being:

- a. An enabling effect on plans for economic and environmental enhancement.
- b. Vehicle movements can be removed from part of the urban road network
- c. Parking space provided at the edge of the city can increase the overall parking supply, while freeing up central land to be used for a more beneficial use.
- d. Parking in the central area can be restrained without reducing the overall access to the center of town.
- e. The opportunity to have a favourable travel experience into the town center stress free. While a favourable experience with public buses will encourage further use of public transport.
- f. By increasing the accessibility of the central core, pressures for suburban development and out of town relocation may be reduced.

The dis-benefits being:

- a. The environmental impact of constructing large car parks in sensitive land especially on the urban fringe and green belt.
- b. The ineffectiveness of PnR in reducing traffic downstream of the sites. **No long term reductions in traffic levels have been attributed to PnR schemes.** (our emphasis)
- c. A cost-benefit assessment may show that if a subsidy is warranted for a PnR scheme, the cost is usually fallen onto the ratepayer.
- d. PnR schemes encourage car use as this is usually the only way to access such facility, which also leads to an equity problem since local people are denied the opportunity to walk or cycle to the site, to take advantage of the bus service, despite contributing financially towards the facility.
- e. Although the increased accessibility may favour the center of the urban area. The natural result is more trips from greater distances

Stacey (June 2009)<sup>3</sup> explains Parkhurst(1995) further by stating that PnR is generally successful in attracting cars, however it can cause diversion of journeys , generate more car trips and abstract trips from walking, cycling and public transport. Parkhurst (1999) further suggests that PnR can contribute towards an increase reliance on the car, a reduction in travel via other modes and have a negative impact on social exclusion for those without the use of a car.

Parkhurst (2014)<sup>4</sup> concludes evidence on the effects of PnR from a review of studies in the UK since 1970, that the belief that it contributed to overall car traffic reduction was generally contradicted, and that, for urban areas downstream of PnR sites the evidence was variable in terms of direction of change, and arguably modest in magnitude where reduction was achieved. Parkhurst went further in the conclusion to state: *Indeed, hitherto, the dominant forms of PnR have reflected the wider development of transport and land use systems which embody the aspirations and needs of motorists and run counter to the promotion of active travel, transit-orientated development and reducing climate change emissions.*

The NZ Transport Agency<sup>5</sup> (NZTA) summarises the impact that PnR schemes have, by noting: It should not be assumed that all PnR schemes will result in net reductions in Vehicle Kilometers Travelled (VKT), fuel consumption and hence GHG (CO<sub>2</sub>) emissions even though such reductions may be the primary objective of many schemes..... For bus based schemes, the conclusions tend to be much less favourable. Based on UK and EU evidence, the case of P&R sites relatively close to the main (CBD) destination area, increases in car VKT appear to have occurred in most cases. For such cases, any negative impact will be made worse to the extent that additional bus services are introduced to serve the PnR facility.

#### **4. Cost Park and Ride**

A basic Park and ride facility can be incredibly expensive. NZTA<sup>5</sup> estimate that the cost of construction for a PnR is approximately \$2800 per space plus 20% for planning and design. This is without considering any purchase of land required which is approximately 30m<sup>2</sup>/space. These figures seem to be on the low side compared with the recent Airport PnR whereby a publically published figure of \$1.3M was required to establish 300 spaces<sup>6</sup> (\$4333/space), but at least more affordable than the \$2.5M for 136 carparks in Swanson, West Auckland<sup>7</sup>.

The FCA would like to see this sort of expenditure be spent on providing more efficient Public transport and bus priority initiatives than car parking in our green spaces.

#### **5. Conclusion**

Detailed analysis of traffic reduction benefits in PnR schemes in the UK confirm broad findings that PnR facilities are often well patronised but many schemes result in net traffic increase, increased car reliance, reduced active mode travel and in some cases reduced Public Transport patronage. Hence they are most likely regarded as a success when the objective is not to reduce car use by shortening car trips, but to provide parking more where it can more easily and cheaply be made available. Enthusiasm for PnR amongst local authorities in Europe has waned by the realisation that it has limited traffic reduction benefits<sup>4</sup>.

The FCA requests that the restricted discretionary activity in respect to PnR be changed to a notified activity due to:

- a) QLDC do not fully understand the effect of PnR facilities
- b) The cost of such facilities
- c) The reliance on cars to access such facilities
- d) The impact on green spaces especially on the urban fringe
- e) The increase in vehicle kilometers travelled (congestion)
- f) The reduction in active mode participation
- g) Any benefit is limited to the CBD while the costs are externalised to the suburbs

## REFERENCES

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