

5 ACHIEVING THE OUTCOMES: PARKING POLICIES

This chapter sets out the basis of a new approach to regional parking policy aimed at achieving the strategy's goal, objectives and outcomes and addressing the regional parking issues identified (in Section 4).

Policies are expressed using a hierarchy of terms. These are: ensure, support, encourage and facilitate or advocate. In many instances the terms encourage or advocate are used as the Auckland Regional Council does not have a direct role or responsibility.

In order to contribute to the outcomes, the following policies, derived from the key issues identified, are proposed:

Policy 1: Link District Plan Parking Standards to PT Accessibility.

Policy 2: Give Priority to Short Stay Parking.

Policy 3: Support Land Use Intensification.

Policy 4: Reduce Parking Provision in High Density Residential Development.

Policy 5: Control Public Long Stay/Commuter Parking Provision in Buildings & Lots.

Policy 6: Provide Regional Guidance on Parking on Arterials.

Policy 7: Prepare Comprehensive Parking Management Plans for Centres.

Policy 8: Prepare Regional Plan for Implementation of Park and Ride Facilities.

Policy 9: Provide Public Parking Facilities that Encourages Alternatives to the Single Occupant Car.

Policy 10: Communicate the Need for Change.

Many of the policies and actions outlined in the following section contribute to more than one of the desired outcomes. The relationship between outcomes and policies is shown in the table over page.

Outcome	Policy/Action									
	1	2	3	4	5	6	7	8	9	10
Land Use Intensification - Support plans for land use intensification around selected mixed use high density centres and corridors	√	√	√	√		√	√			
Travel Behaviour Change - Encourage travel behaviour changes for a more sustainable, less car-use intensive future	√			√	√		√	√	√	√
Centres Economy - Support the economy of the region's activity/commercial centres		√				√	√			
Integration with public transport - Integrate parking supply and management & implementation actions with planned improvements to the public transport system	√		√				√	√	√	
Public Transport & Active Travel - Support increased travel by public transport and active modes	√		√		√			√	√	√
Parking Resource Use - Make better use of existing parking resources		√		√			√		√	√
Regional Consistency - Achieve consistency in District Plan rules and standards for parking provision and operation among equivalent developments and centres throughout the region		√	√				√			√
Urban Design of Centres - Contribute to improved urban design, particularly in high density centres and corridors.		√	√	√			√	√	√	√

5.1 Policy 1: Link District Plan Parking Standards to PT Accessibility

Encourage all agencies responsible for regulating parking to incorporate parking standards that are progressively lowered and made more flexible as accessibility by non-car modes is improved.

There is a need for guidance at regional level on the management of the supply of parking in new developments to achieve the outcomes sought by the RGS, RPS and the ARLTS.

The region-wide application of measures to manage the growth in parking supply, and specifically long stay parking, requires the identification and application of an agreed mechanism for ensuring that parking controls are applied on a common, consistent, equitable and transparent basis that reflects differing and changing circumstances. Without such a mechanism, the Territorial Authorities may be unwilling to implement controls that might weaken the competitive position of the centre concerned. ARTA may be less willing to invest in PT improvements to a centre where more parking is available than necessary.

On the other hand, where improved public transport allows accessibility of a centre to be maintained or improved, lower parking requirements will reduce the cost of development, support the viability of passenger transport by rebalancing the relative attractiveness of modes, and leave land available for more productive uses.

Parking management measures should not, however, be applied uniformly. The various centres have different characteristics. In particular they can differ markedly in economic strength and accessibility by passenger transport. Future transport investments and land use changes will affect the various centres at different times and to varying extents. Policy tools must be packaged and 'tailored to fit' the circumstances.

It follows that the mechanism should facilitate a staged and progressive tightening of standards. It should be objective, measurable, transparent, easy to understand and relatively straightforward to apply and update. The mechanism should be perceived as being equitable. As far as practicable, it should provide some flexibility to allow individual Territorial Authorities to adapt it to the specific circumstances applying to each centre.

5.1.1 Public Transport Accessibility Level (PTAL) - Based Approach

Establishing a public transport accessibility level (PTAL) approach links changes in standards to improvements in the accessibility of the centre or area concerned by public transport and other non-car modes of transport. It involves the calculation of

an index that primarily reflects public transport accessibility, but could take other factors such as walking and cycling accessibility into account.

PTALs are used in the UK and an accessibility-based approach has been developed for potential application in central Sydney. Further information is contained in Appendix B.

The advantages of the PTAL approach are:

- it is a relatively straightforward concept,
- it can provide an objective, numeric basis for setting variable parking standards,
- it has been applied in London and has been investigated for use in Sydney and hence there is a body of knowledge on which to base further investigations, and
- the Sydney research indicates that the approach is capable of adaptation to residential parking.

The disadvantages are:

- it requires developing a process for determining the appropriate PTALs which is easy to apply and update and linking this to the appropriate parking standard, and
- it does not fully reflect the influences on car parking requirements

Although the PTAL approach does not take all relevant factors into account, it avoids subjective assessments of the readiness of individual centres and the inevitable disagreements that would arise. Further research may identify improvements which enable other factors to be included while ensuring that the accessibility index can be calculated readily for all locations and can be updated easily.

5.1.2 Determining the Parking Standards for New Developments

This section outlines a possible approach that may apply to determining the appropriate parking standards for new development throughout the region. It assumes the development of PTAL's or an equivalent alternative. PTAL level 1 is the lowest and PTAL level 6 is the highest.

The parking standards are indicative only. The basis for the variation in the standards is outlined in the Appendix C.

Table 1: An Indicative PTAL-based Approach

Accessibility Index	Minimum Standard	Maximum Standard
1 (lower)	Current minimum standard(s)	= Current minimum standard(s)
2	1 space per 40m ²	1 space per 40m ²
3	1 space per 50m ²	1 space per 40m ²
4	1 space per 65m ²	1 space per 40m ²
5	None	1 space per 60m ²
6 (higher)	None	1 space per 100m ²

The above table shows no change in the current minimum standards for centres with the lowest PT accessibility. Maximum standards are introduced initially through setting the maximum standard equal to the current minimum standard. This would introduce the concept of maximum standards in the short term, and would strictly limit the ability of developers to provide more than the existing standard rate(s) set out in the district plans

All centres with a PTAL of 2 would have a minimum parking standard and a maximum of 1 space per 40m². At PTAL 3, the minimum standard is reduced to 1 space per 50m², and a maximum standard is kept at 1 space per 40m². At PTAL 4, the minimum standard is further reduced to 1 space per 65m². The maximum standard is unchanged at 1 space per 40m². At PTAL 5, the minimum standard is abolished and the maximum standard is reduced to 1 space per 60m². At PTAL 6, the maximum standard is further reduced to 1 space per 100m².

This process introduces change gradually initially, then more quickly as the PT accessibility approaches "CBD" levels. As the PT accessibility improves from level 2 to level 4, minimum standards are reduced by 40% while the maximum standard is held constant. At PTAL 5 minimum standards are abolished and are replaced by maximums.

Changes to the parking standards resulting from PTAL changes would be introduced through the district plans. TAs would be able to introduce changes to standards for individual centres, or part of a centre, at a faster rate than indicated, should they wish to do so.

5.1.3 Providing Parking in Excess of the Maximum

Maximum parking standards need to be strictly applied if they are to be effective. There may, however, be special circumstances under which parking provision above the stipulated maximum may be appropriate. This strategy recommends that Comprehensive Parking Management Plans (discussed in Section 5.7.1) include the criteria which would be used to assess applications for excess parking. These criteria would also be incorporated into the relevant district plan and apply to new developments, and to change in use applications for existing developments.

5.1.4 Application to Existing Developments

The inclusion of provisions in district plans allowing existing developments to reduce their existing parking in line with changes to the accessibility index, without the need to apply for planning consent, is desirable. This would provide a low cost means of reducing private non-residential parking supply, and could enable more efficient use to be made of the available building space.

5.2 Policy 2: Give Priority to Short Stay Parking

Encourage an emphasis on providing an adequate supply of short stay parking in centres.

The provision of convenient and secure short stay parking for customers and visitors is essential for businesses and for the economy of an activity centre.

5.2.1 Short Stay Parking

Due to its economic importance, the highest priority for the use of available public parking should be for short stay parking and loading purposes. To ensure the spaces that are the most attractive and most convenient for visitors to a centre are available for their use, measures are required to limit the duration of stay. These consist of controls over the length of stay and/or parking charges that encourage a high turnover of the spaces in most demand.

Charges can be designed to increase sharply beyond a certain time, say 3 or 4 hours, to discourage longer stay parking in parking facilities without needing to impose and enforce a restriction on the duration of stay.

5.2.2 On-street Parking

Measures to discourage the use of scarce parking spaces by a single vehicle parked throughout the day, need to be extended to cover a wider area as a centre develops and the available land is used more intensively. In addition parking charges may need to be increased to ensure efficient use of short stay spaces.

In centres (specifically those identified for higher density, mixed use, passenger transport supportive development) reductions or limitations in the supply of long stay parking should be accompanied by measures to manage on-street parking. This will ensure that long stay/commuter parking is not displaced to nearby streets. This both reinforces parking management policies and ensures that on-street parking is used effectively.

Residential areas adjacent to major developments and activity centres can come under pressure from long stay parking by people employed in such centres. Resident parking schemes limiting parking duration and prioritising use by residents could be an appropriate response.

5.2.3 Off-street Parking

Well-located public off-street parking lots or a parking building serving a centre, can be an efficient means of providing parking for visitors and customers. A parking facility serving a number of destinations and land uses requires less space than would be the case if each destination was to provide its own on-site parking.

Provided the facility is well located, perceived as secure and is served by a network of attractive pedestrian routes, it can encourage a park once and walk mentality, avoiding short car trips between destinations within the centre. This has potential advantages of reducing the overall parking in the centre, thus freeing up land for other uses including open space, and reducing car travel within the centre.

Funding can be through payment-in-lieu, through a special rate for the centre or through general rates. The facility could potentially provide all parking for a number of developments (refer "centralised parking") in which case some or all of the cost may be met by the developer(s). If it is replacing parking that otherwise would be provided by individual developments, it would need to be in place along with, or prior to completion of these developments.

While the private sector can and does provide public car parking, it generally prefers to provide long stay (early bird or leased) car parking as this usually provides higher net revenues. Council ownership of the land or facility can ensure that it has control over its use, whether parking charges are in place, and the pricing regime.

5.3 Policy 3: Support Land Use Intensification

Support land use intensification through:

- The application of good urban design principles with regard to the provision of car parking in high density centres;
 - district plan rules and other appropriate methods that will encourage and facilitate shared parking
 - The provision of public transport improvements in advance of, or phased with new developments in order to give developers the confidence to provide a reduced parking supply in new developments.
-

5.3.1 Parking and Urban Design

The location, amount and physical provision of parking can have an important effect on the amenity and quality of the urban environment. Current car parking requirements for developments in high density centres can result in large areas of off-street surface parking in parking lots. Surface off-street parking can be low cost, but has a number of disadvantages:

- it can potentially create a pedestrian barrier,
- is often visually unattractive,
- can contribute to crime and other anti-social behaviour,
- does not promote active frontage development or facilitate veranda cover,
- reduces overall density of high density centres,
- reduces opportunities for public open-space, and
- takes up land that could be more productively used.

The negative effects of off-street surface car parking can be lessened through the following techniques:

- Minimise the number of spaces required while ensuring that visitor/customer short stay parking needs are adequately accommodated. Means of achieving this include shared parking and lower parking standards.
- Encourage a "park once and walk mentality" by providing a well located and convenient facility with well defined, attractive and safe pedestrian linkages to key parts of the centre
- Locate parking to the rear of retailing, office and residential development, avoiding direct vehicle access onto main pedestrian thoroughfares.
- Include high quality landscaping and attractive lighting.

Ideally, off-street car parking within high density centres and corridors should be provided in underground car parks or basements, but this is not always economically

viable. If car parking buildings are the solution, these should preferably be placed to the rear of main pedestrian areas so they are screened by offices, retail or apartments.

Key urban design objectives relating to parking buildings are:

- ensure access/ egress does not affect pedestrian movement and amenity,
- avoid a visually unattractive structure impacting on built environment,
- ensure security issues are recognised and managed,
- include an active frontage or provide veranda protection,
- provide floor heights that are adaptable for other purposes, and
- avoid inappropriate locations.

The preparation of formal guidance would assist in the consistent application of good urban design principles in regard to the provision of car parking throughout the region.

5.3.2 Shared Parking

Shared parking is the use of parking spaces for two or more different land uses at different times rather than each having their own parking spaces, e.g. office use during the day and restaurants in the evenings. Efficient sharing of spaces can significantly reduce the total amount of parking needing to be supplied although it does not reduce the total amount of traffic generated.

Permitting shared parking arrangements in higher density mixed use areas can significantly reduce the amount of land required for parking, freeing up the land for other purposes including open space or walkways. By facilitating higher density, mixed use development it can indirectly encourage the use of alternative modes of transport.

Shared parking requires a different, more flexible approach in district plan parking rules. It generally requires additional administration and enforcement resources. It creates a potential for spillover effects on adjacent areas, but these can be anticipated through the development and implementation of parking management plans.

5.3.3 Coordinated Public Transport Improvements & Parking Policy Implementation

It is very desirable that the provision of the planned public transport infrastructure and services to greenfield high density development areas be firmly committed in advance to give developers the confidence to provide a lower amount of parking and to enable residents and businesses to make decisions on parking requirements knowing that the alternative of using public transport will be there from the outset.

One way of achieving this can be to require developers to fund the provision of bus services to the developing area for a period of time after which ARTA commits to taking over responsibility. Another can be for ARTA to directly commission services. A commitment to funding the required level of services must be in place.

5.4 Policy 4: Reduce Parking Provision in High Density Residential Development

Reduce the parking required in higher density residential developments

There is evidence that parking requirements can, and indeed should be reduced for higher density residential development located within walking distance of good quality public transport or where a range of factors exists that reduces the need for car use and/or individual ownership². Where standards are reduced, it should be ensured that an adequate amount of convenient visitor parking is available, preferably on-street.

Unnecessarily high provision for parking in higher density residential developments increases development costs, reduces affordability, is inconsistent with the objective of encouraging greater use of public transport, can reduce urban design quality and does not support urban intensification.

Reductions in the use of the car may not, however, be matched by an equivalent reduction in car ownership and residential parking requirements. Households are likely to choose to own a car (even though its use may be limited) because of the convenience, accessibility and independence benefits it confers.

Looking to the future, options such as joint ownership of or access to a pool of cars through car clubs could reduce the need for individual ownership.

² Other factors include: the number and range of jobs in walking distance; ability to be able to obtain daily needs within walking distance; provision of storage of bicycle in development; car sharing; unbundled parking; demographics; availability of parking in nearby parking lots...etc

5.4.1 Regional Guidelines on Parking Standards

Parking standards for higher-density developments vary considerably across the region. Auckland City's residential 8 zone parking standards for two bedroom apartments with a gross floor area over 75m² are a minimum of 1 space and a maximum of two spaces per unit, plus one visitor space per five units. North Shore City requires a minimum of two spaces plus 0.5 visitor spaces per unit for units with a gross floor area greater than 50m². The corresponding minimum requirements for a 10 unit development are 12 parking spaces and 25 spaces respectively.

It could be argued that the current residential parking standards are a response to the historically poor quality of passenger transport serving parts of the region, and high car ownership. In addition some high density residential developments were located in areas which had poor passenger transport service. This situation is changing. Auckland City is introducing what are in effect reduced minimum residential standards for growth areas such as Panmure. Waitakere City is intending to remove minimum parking requirements for any residential activity on small lot sizes (essentially apartments) in the New Lynn Town Centre core.

As there is no agreed mechanism for adjusting parking provision in relation to circumstances, there is the potential for the process of change to result in a variety of approaches producing a range of differing standards for similar circumstances across the region.

Shared Parking

The encouragement and facilitation of shared parking can potentially assist in reducing parking needs by making more effective use of the available parking. For example, parking required for office development during the day or public parking facilities could be available for residential parking overnight. Security concerns would have to be overcome in both instances.

Unbundling Parking

The cost of parking for residential (and commercial) units is conventionally passed on to the owners or tenants indirectly through the purchase price or rental payment ("bundled") rather than directly through a separate charge. This means that tenants or owners are not given the opportunity to purchase only as much parking as they need, and are not able to save money by using fewer parking spaces. By including the parking cost with the unit's cost, the parking is automatically paid for, even if it is not wanted or needed. If people can save money by having fewer cars, they may make different choices.

The removal (or reduction) of minimum parking requirements permits developers to offer apartments without parking or with a single space rather than two spaces thus providing choice and improving affordability. Care must be taken to ensure that adjacent streets are protected from displaced resident parking. The availability of adequate on-street short stay parking for visitors should also be ensured.

An alternative is to enable unbundled parking, i.e. renting or selling parking spaces separately, rather than automatically including them with the building space.

High minimum parking requirements discourage developers from unbundling parking because the development is required to provide enough parking to satisfy the demand when parking is free, rather than only the number of spaces that residents would pay for, if given the option.

For unbundled parking to function efficiently, building owners must be able to lease or sell excess parking spaces (such as through a parking brokerage service), and local government needs to regulate on-street parking to avoid spillover problems that could result if residents use on-street parking to avoid paying for parking spaces. The role of unbundled parking in higher density residential developments and techniques for facilitating it, should be investigated.

Integrated Transport Assessments

The ARC in conjunction with ARTA has recently introduced a requirement for Integrated Transport Assessments (ITA's), where major new areas of high-density development are planned, to facilitate the integration of land use and transport, including parking.

The main role of an ITA is to ensure that developments are designed and implemented in such a way that they promote access by all modes and manage demand to avoid unacceptable impacts on local road networks and the state highways.

The identification and implementation of consistent parking standards for new residential or commercial developments in high density, mixed-use centres and corridors would assist the preparation of ITA's.

5.5 Policy 5: Control Public Long Stay/Commuter Parking Provision in Parking Buildings & Lots

Control the supply of public long stay/commuter off-street parking to ensure it is effectively incorporated into a policy of parking restraint.

5.5.1 Long Stay Parking in Off-Street Facilities

Stand-alone public parking lots and buildings are provided for under the various district plans across the region (unless otherwise indicated under a prevailing structure plan) provided it can be demonstrated that the traffic consequences are manageable either with or without mitigation.

Such facilities can be owned and operated by the public sector, owned by the public sector and operated under contract to the private sector, or can be commercially owned and operated. A number of town centres have council owned parking lots. These are usually provided to support the economy of the centre concerned and normally limit parking to short stays.

For the Auckland Central Area, parking buildings are assessed as a discretionary activity on some types of road. The assessment criteria relate primarily to the ability of the road network to accommodate the generated traffic, with particular emphasis on the adjacent road network. There is currently no direct link between the amount of parking provided in this manner, and the Central Area Parking Policy of restraint applying to new developments. (The one exception is at Wynyard Quarter where no new (permanent) long stay parking may be provided.)

This situation can potentially lead to a greater supply of long stay commuter car parking than was anticipated in the parking policy, undermining its effectiveness. Long stay parking in public facilities within centres should only be permitted once a need has been identified and quantified through the development of a Comprehensive Parking Management Plan (or equivalent), or using a process or criteria applied consistently across the region.

Assuming maximum standards are in place, one way of controlling the amount of long stay parking in new special purpose parking facilities is to limit it to the difference between the amount of parking permitted in new developments by the district plan, and the amount actually provided in new developments in a given area over a specified period of time.

5.5.2 Licensing

The provision of short stay or visitor car parking is generally encouraged by councils if it is important to the commercial vitality of the area concerned, and has limited impact on weekday peak period congestion. However, enforcement of short-term parking in commercially run public facilities is necessary to ensure that it remains allocated for short stay use. There is a risk that such parking might be used for long-stay parking in the absence of monitoring.

A possible alternative is the use of licensing rather than the application of consent conditions to ensure ongoing compliance. The concept is to issue the developer or operator with a license to operate paid public parking, renewable annually or over a longer time frame, with conditions attached.

Territorial authorities would become parking facility licensing agencies. Anyone wishing to provide paid public parking would need to apply for a license from the TA concerned, and would need to comply with the conditions of the license. Legislation is likely to be required to give TAs the necessary powers.

Further research is required into the feasibility and implications of this type of approach.

5.5.3 Long Stay Parking

Long stay commuter parking (such as early bird and optional leased parking) is provided in a number of public parking facilities, both publicly and privately owned. As early bird parking typically applies up to the end of the weekday morning peak period, it can reduce the cost of peak period travel to work by car. Bringing forward the cut-off time to say 07:00am and perhaps reapplying the discount between 09:00am and 10:00am would provide an incentive to travel outside the peak, consistent with encouraging travel demand management policy of encouraging more flexible working hours.

Leased parking is also available in council owned parking facilities. Some is provided as a requirement for resource consent, but much is optional.

In principle, both early bird and optional leased parking in council-owned public parking facilities should only be provided where they are consistent with the pertaining parking management policy. Where this is not the case, they should be phased out over time.

5.5.4 Temporary Parking Lots

There are issues relating to long stay parking in temporary lots. It is understood that within Auckland City long stay parking is permitted, provided that it is not inconsistent with the amount of parking that would otherwise prevail once the land has been fully developed. However, there appears to be no clear statement of policy on this issue either here or across the rest of the region. Illegal parking on lots can also add significantly to parking supply. Councils need to be pro-active in dealing with off-street parking that has not been given planning consent.

5.5.5 Pricing Parking

It should be ensured that parking pricing practice for public parking buildings or parking lots, is aligned with parking policy objectives. For example, a council may permit some early bird parking in a parking building whose primary purpose is to provide short stay parking. While the early bird parking may utilise spaces that otherwise might not be used and thus increase revenue without disadvantaging visitors, it provides relatively low cost long stay parking. This can potentially conflict with transport policy objectives.

5.6 Policy 6: Provide Regional Guidance on Parking on Arterials

Include in the Regional Arterial Roding Plan a policy on parking on regional arterial roads

From a transport perspective, the safe and efficient movement of people and goods should have priority over other uses of the available arterial road space.

It is, however, accepted that on-street parking can enhance the vitality of an area by:

- improving the urban amenity particularly where associated with street trees,
- providing a buffer between pedestrians and moving traffic, and
- contributing to the success of adjacent businesses.

To balance transport and land use and economic objectives the policy on parking on arterials should have the following components:

- As a general principle, the safe and efficient movement of people and goods should have priority over on-street parking on arterial roads.
- Parking should only be permitted where it does not compromise safety or add to traffic congestion. This can require the use of no stopping at all times controls (broken yellow lines), or can be limited to the prohibition of parking during peak periods only through the use of clearways.
- An exception can be made where permanent on-street parking on a section of an arterial road makes a key contribution to the economic vitality of a centre or corridor served by the arterial.
- However, any permanent on-street parking must be accommodated safely and without compromising the overall effectiveness of the arterial network in moving people and goods.

5.7 Policy 7: Prepare Comprehensive Parking Management Plans for Centres

Encourage an integrated approach to the supply and management of parking in centres.

5.7.1 Comprehensive Parking Management Plans

Parking management measures should be designed and implemented as a package of complimentary measures. To assist in developing such packages, it is recommended that councils prepare a Comprehensive Parking Management Plan (CPMP) for each centre, with initial emphasis on the high density centres (and corridors) identified in the Regional Policy Statement.

A CPMP is a document which sets out the parking policy objectives for the centre including parking demand management, and the council's policies for the supply and management of car parking, both short stay and long stay.

A CPMP integrates parking policy with land use development and transport improvements for the centre concerned. It indicates the means by which the council is responding to changes in land uses including higher density, mixed use development where appropriate, and to future transport investment (roading and PT) and PT service improvements.

A more market driven approach which results in a reduction in parking associated with new developments will increase pressure on on-street parking. These should be anticipated and measures identified and implemented which will ensure on-street parking is prioritised for short stay parking, and residential areas are protected from any spill-over of commuter parking.

CPMPs would also enable developers to be fully informed of the future parking supply and management regime applying to the centre. This could help give developers the confidence to put forward developments with a more innovative approach to parking.

A further important function of CPMPs is to integrate the supply and management of parking for the centre with planned improvements to the passenger transport system serving the centre. This will assist in giving ARTA confidence that the council will ensure that PT improvements are supported by changes in the supply of long stay parking.

CPMPs can also be the vehicle for setting out the criteria that would be used to assess applications for commercial parking buildings and for applications for parking above the maximum standards set out in the district plan.

5.7.2 CPMP Guideline

The preparation of a guideline would assist in clarifying the scope and content of the CPMPs and in ensuring a consistent approach throughout the region.

5.7.3 Distinguish Short and Long Stay Parking

Short stay and long stay parking have different functions and are subject to different parking supply, management and pricing policies. They should be treated separately in developing plans and policies for centres. Where possible, parking standards should also differentiate between short stay/visitor/operational parking and long stay/employee parking.

5.8 Policy 8: Prepare Regional Plan for Implementation of Park and Ride Facilities

Encourage the development of park and ride facilities that are consistent with the region's strategic direction and policies.

Park and ride can reduce congestion by diverting car trips to public transport during the peak commuter periods. It can reduce the demand for parking at the destination thus freeing space for other uses and reducing development costs.

By encouraging greater use of public transport and reducing car usage on the more congested parts of the road network, park and ride can improve the overall use, efficiency and safety of the transport network and reduce the environmental effects of car travel.

It can be particularly effective with travel to high activity centres, such as the Auckland CBD and the major sub-regional centres, where parking can be relatively expensive and which are relatively well served by public transport (PT). Park and ride can, therefore, be part of a package of measures which includes parking management and higher PT service frequency and quality improvements.

Park and Ride can be an appropriate solution in low density, high car ownership suburban areas, where it is not cost effective to provide attractive levels of PT service.

5.8.1 Location

It should be ensured that the proposed facility is compatible with the area in which it is to be located.

5.8.2 Facilities

5.8.1 Provision of Park and Ride Facilities

5.8.2 Funding

The costs of acquiring the land, building the facility and operating and maintaining it are met by the territorial authority concerned supported by funding from the National Land Transport Fund through applications to Land Transport NZ. For rail-based park and ride, however, the division of responsibilities between ONTRACK, the national rail infrastructure agency, and Land Transport NZ has resulted in funding for new rail park and ride facilities being much more difficult to obtain than bus or ferry park and ride. This situation needs resolution.

5.8.3 Charging for Use

While park and ride can generate revenue in the form of additional fares, it increases overall transport subsidy requirements. Parking is, however, free of charge as the policy is to encourage use of park and ride and charges are seen as a potential disincentive.

The costs of security at the two North Shore Busway stations including manned surveillance are met by the North Shore City Council. The costs of rail station security, which includes CCTV surveillance plus help points, are met by ARTA.

Looking to the future, it may be appropriate to introduce charges to meet the costs of providing security at park and ride facilities.

There may also be a case for introducing charges at some locations where demand exceeds supply, a situation which arose on the North Shore even before completion of the Northern Busway. Such charges could help ration use and could help fund construction of a parking structure to increase the parking supply.

5.9 Policy 9: Provide Public Parking Facilities that Encourages Alternatives to the Single Occupant Car

Advocate the use of public parking facilities to encourage carpooling, vanpooling and cycling.

5.9.1 Bicycle Parking

Bicycle parking should be placed on the same footing as car parking through the provision of bicycle parking standards in district plans.

Guidelines for Bicycle Parking Requirements in New Developments have been developed by ARTA in consultation with the ARC and the Territorial Authorities for inclusion in the Auckland Regional Bicycle Parking Plan³. Appropriate aspects should be incorporated into district plans.

5.9.2 Preference for Bicycle, Carpools and Vanpools in Public Parking Facilities

Public parking facilities can be used to encourage carpooling and vanpooling by giving incentives such as reduced cost or free parking or other forms of preferential treatment. Some form of funding mechanism may be required to compensate for any potential loss of income.

The provision of bicycle parking in public parking facilities encourages cycling by placing bicycles on a more level playing field with cars.

³ These are available on ARTA's web site at \Cycle parking facilities, land use and transport guidelines

5.10 Policy 10: Communicate the Need for Change

Communicate more effectively to the regional community **regarding the need for, and benefits of parking management strategies** that integrate parking with broader land use and transport objectives, to generate support for the changes that are necessary for a more sustainable future.

There is general support across the region for reduction and, where appropriate, the removal of on-street parking on arterial roads. In addition, there is a need which will increase over time for councils to be more pro-active in the management of parking in centres, both on-street and off-street, as part of a package of measures.

The introduction of on-street parking controls is often controversial and sensitive both in commercial and residential areas. There is a widespread view that expectations and attitudes to parking are an obstacle to change. People often expect to be able to park for free at or near their place of employment and may consider that they have a right to be able to park on street even on arterial roads.

Councils may be reluctant to impose or extend such restrictions, particularly as they may come under strong resistance from residents and businesses affected by such measures

This indicates a need to communicate more effectively regarding the need for, and benefits of removing parking on arterials and managing parking within centres to bring it in line with broader objectives including reducing dependence on the private car and encouraging more use of passenger transport, particularly for the trip to work.

REFERENCES

1. Regional Parking Strategy Development Final Situation Paper, Auckland Regional Council, September 2006.
2. Auckland Regional Land Transport Strategy 2005, Auckland Regional Council, November 2005
3. Auckland Regional Parking Study, Booz Allen Hamilton (NZ) Ltd, April 2001,
4. Car Parking Transference Effects – Issues Paper, Booz Allen Hamilton, Auckland Regional Council, June 2002
5. Parking Transference Study, Gravitas Research and Strategy Limited for the Auckland Regional Council, September 2003
6. Location Decisions: Understanding The Location Decisions Of Retail And Business Service Activity In Auckland, Auckland Regional Council, March 2003
7. Regional Parking Strategy – Analysis of Car Parking Transference Effects Survey, Booz Allen Hamilton, November 2003
8. ARC Business Location Strategy, propertyeconomics, March 2004
9. International Approaches to Tackling Transport Congestion: Paper 2 (Final): Parking Restraint Measures, Booz Allen Hamilton for Victorian Competition and Efficiency Commission, April 2006.
10. The demand for public transport: a practical guide, TRL Report TRL593, TRL Limited, 2004
11. Draft Transport Strategy for Waitakere City 2006-2016, Waitakere City Council, April 2006
12. Connecting People and Places (Auckland City's Transport Strategy), Auckland City Council, July 2005
13. Auckland City Central Area Parking Policy, Auckland City Council, June 1999.
14. Review of City Parking Policies, Report to Auckland City Transport Committee's April 2003 Meeting
15. The Effect of Maximum Car Parking Standards Including Inward Investment Implications, Scottish Executive, August 2006.
16. Central Area Parking Policy Review, Sinclair Knight and Partners for Auckland City Council, February 2004
17. Gold Coast Whole of City Parking Strategy Final Report, Eppel Olsen & Partners, May 2005 (downloaded from internet)
18. South Yorkshire PTA Park & Ride Strategy, 2006-2011, South Yorkshire Second Local Transport Plan 2006-2011
19. Bus-Based Park & Ride, UK Department for Transport Information Sheet
20. Suburban Park-and-Ride Demand Estimation Techniques, Parsons Brinkerhoff, downloaded from internet (www.pbworld.com)

21. Rail Stations Upgrade policy and Specification, ARC Rail Project Office (now part of ARTA), March 2004
22. Parking Standards for London for retail, leisure, mixed use development and other uses, SDS Technical Report Twelve, Greater London Authority, August 2002
23. The Mayor's draft London Plan, Report to the Association of London Government: Areas of Intensification, MTRU, January 2003.
24. Controlled Parking Zones, Lewisham Borough Council, Lewisham Online (downloaded from internet)
25. Perth Parking Policy, Transport Report 393, Department for Planning and Infrastructure, Government of Western Australia, May 1998
26. City of Melbourne Transport Strategy 2020: Moving People & freight, July 2006
27. NZS 4121:2001 Design for Access and Mobility – Buildings and Associated Facilities, Standards New Zealand
28. Parking Restraint Measures and Their Implementation, Booz Allen & Hamilton, Transfund NZ Research Report 145,1999
29. Auckland Road Pricing Evaluation Study Executive Summary, Ministry of Transport, 2006
30. Park & Ride Policies & Criteria, Transfund NZ Research Report 136, Booz Allen & Hamilton, 1999
31. Residential 8 Zoning & Code of Urban Subdivision: Code Review, Arup Transport Planning & Transportation Planning Solutions Ltd., January 2004.
32. Public Transport: Possible Alternative Funding Sources, Auckland Regional Council Finance Committee Report from the Chief Executive's Office, 15 August 2006
- 33. Technical Background Report Documents to the Regional Parking Strategy**
 1. Auckland Central Area, CBD Fringe and Sub-Regional Centre Parking Policy Discussion
 2. The London PT Accessibility Level Approach
 3. Techniques for Reducing Parking Requirements
 4. Residential Parking Standards for High Density Developments
 5. Examples of Current District Plan Standards
 6. The Review of the Treatment of Disability Parking in District Plans
 7. Regional Park and Ride policy
 8. Urban Design and Parking: Regional Issues Summary Paper Draft 2007
 9. Parking Statistics

GLOSSARY OF TERMS

- **Centres** refer to areas that have an agglomeration or mix of compatible activities. These activities provide a focus for the community through the provision of social and physical infrastructure and access to housing, employment and recreational needs.
- **High density centres (HDC)** refer to centres identified for intensive growth in the Regional Policy Statement. A HDC means specific localities selected for urban intensification due to physical or locational characteristics that include the intensity of existing development, the locality's generation of, or association with, significant transport movements, and the locality's capacity for further growth
- **Business Areas** are areas of employment that focus on production, including manufacturing, fabricating, processing, storage of goods, servicing and repair and with some associated commercial activities
- **Long stay parking** refers to parking for a period of **4 hours or more**. The availability, management and price of long stay parking influences travel choice by commuters.
- **Short stay parking** refers to parking for a period of **less than 4 hours** and is important for people visiting a centre or location for shopping, personal business or for leisure purposes.
- **Operational parking** refers to parking needed for the successful operation of a business. It includes parking for company vehicles used for business purposes during the day, and parking for business visitors/customers.
- **Residential parking** is parking associated with residential developments.
- **Private non-Residential or Commercial parking** is parking associated with developments such as offices, industrial developments, supermarkets and shopping centres and so forth.
- **On-street parking** is managed by the relevant road controlling authority, either City or District Councils or Transit New Zealand in the case of state highways. The road controlling authorities determine the parking controls and any charges.
- **Public off-street parking** refers to public parking in surface lots or parking buildings. The parking lot or building may be owned and managed by the public sector or the private sector, or may be owned by the public sector and managed by the private sector. Where the council owns it, the council generally sets the parking charges (if any) and the length of stay.
- **Shared parking** is the use of parking spaces for two or more different land uses at different times rather than each having their own parking spaces, e.g. office use during the day and restaurants in the evenings.
- **Early bird parking** is discounted public long stay parking available to vehicles arriving before a certain time, typically 9:00 or 9:30 on weekdays.

- **Leased parking** is parking leased to an individual or company for their exclusive use during a specified time period.
- **Optional leased parking** is leased parking which is not provided as a requirement of a resource consent for the parking facility concerned, but is provided at the discretion of the parking facility operator
- **Park & Ride** is the provision of parking facilities at appropriate rail stations, transport interchanges or bus stops, particularly in suburban and urban fringe areas, to encourage and facilitate passenger transport use. It can also be used to encourage ridesharing (carpooling/vanpooling). Park & Ride can be associated with bus, rail or ferry services.

APPENDICES

APPENDIX A - ARLTS Parking Policy:

Ensure that the planning and management of parking resources in the region supports the region's land use and transport outcomes

Parking facilities are key elements of the regional transport system. All motorised journeys begin from and end at parking places. Well-managed parking facilities are essential to achieve the region's transport outcomes. The way they are managed may reduce congestion, encourage the use of more sustainable modes of travel and improve safety and environmental sustainability, particularly in densely developed town centres and commercial areas that are the growth centres of the regional and national economy.

- 3.4.1 Achieve a balance between the provision of car parking and managing peak period traffic demands in areas of high parking demand such as the Auckland CBD and other regional centres. This should include consideration of parking ceilings in these areas. (ARC, ARTA & TAs)
- 3.4.2 Support the development of the region's public transport and active mode outcomes through appropriate parking policies and measures. This includes parking measures to influence the travel decisions of commuters through pricing and the planning and management of parking supply. (ARC, ARTA & TAs)
- 3.4.3 Support the region's travel demand management outcomes through appropriate parking policies and measures. This will include developing parking management measures, including parking restraint, to complement travel demand management initiatives and improvements to the passenger transport network. (ARC, ARTA & TAs)
- 3.4.4 Support the implementation of the Regional Growth Strategy land use outcomes through appropriate parking policies and measures. To facilitate this policy a better understanding of the dynamics of parking in areas of intensification and its consequential impacts is needed. (ARC, ARTA & TAs)
- 3.4.5 Effectively manage the short-term parking requirements around the region's activity/commercial centres. In areas of high activity the highest priority should be given to short-stay non-residential parking. The provision of long-stay parking should be planned and, if necessary, appropriately priced in areas of lower demand or activity. (ARC, ARTA & TAs)
- 3.4.6 Develop a Regional Parking Strategy to provide regional policy direction on all parking issues including a regional policy position for the provision of park and ride facilities (ARC, ARTA, and TA's)

APPENDIX B - Public Transport Accessibility Level (PTAL) Approach to Setting Parking Standards

PTAL indices are mapped across London by Transport for London. The scores go from 1 to 6, with 1 representing the worst PT access and 6 the best PT access condition. All of central London is assumed to be PTAL 6.

PTALs are now being applied in London to determine the appropriate parking standards. The London Borough of Bromley groups its maximum non-residential parking standards according to the development type and PTAL. It uses three public transport accessibility levels, namely Low, Medium, and High. Some uses such as food superstores (GFA>4,000m²), and non-food warehouse and offices are not normally permitted in areas with low PT accessibility. Industrial and storage & distribution uses are not normally permitted in areas with high PT accessibility.

Maunsell/Aecom has developed an accessibility approach to the City of Sydney's maximum parking standards for potential application by the City. The proposed approach links parking standards for commercial uses with defined PTAL levels (low, medium, high and very high) for both peak and off-peak travel periods.

For residential accessibility in central Sydney Maunsell/Aecom has proposed the application of a Land Use Transportation Index (LUTI). The LUTI (again classed as low, medium, high or very high) is calculated based on the PTAL and the Neighbourhood Service Level (NSL). The NSL is a measure of walk accessibility to weighted core services such as a shopping centre or supermarket within 400m.

APPENDIX C - Relating Parking Standards for Office Developments to PT Use

The following calculation, derived initially from calculations for New Lynn in the HYC High density Centre Parking Study [], gives a basis for determining the potential impact of increasing use of passenger transport for the trip to work on the appropriate parking standard.

The 85% employees coming by car is a 2001 figure and the 75% car modal split is an assumed rate for, say, 10 years hence.

Assume 10,000m² office space with an average of 25m² per employee. This gives 400 employees.

Assume 85% travel to work by car at an average of 1.2 persons per car. This gives a parking requirement of 283 cars or 1 car per 35m² GFA.

At a modal split of 75% by car, the number of cars reduces to 250 and the parking demand to 1 space per 40m².

A reduction to 60% by car reduces the parking demand to 1 space per 50m².

Note: These figures do not include visitor parking. They also do not take into account the availability of other long stay/commuter parking in the area concerned.

Parking Adjustment Factors

The table below lists some parking adjustment factors which should be incorporated into the discretionary process for exceptions to regulatory limits on parking supply.

Category	Factor	Typical Adjustment
Pricing	Pricing	Reduce parking supply 10-30% where parking is priced
	Shared parking	Varies depending on availability in vicinity, but can reduce parking supply 5-40% where shared parking is available
Transport	Unbundled parking	Reduce parking supply 10-30% where parking is unbundled
	Parking and mobility management	Reduce parking supply 10-40% at worksites with well-planned parking and mobility management programs
	Car-sharing	Reduce residential and commercial parking supply by 5-10% if a car-sharing service is located within 750m
	Workplace travel plan	Reduce commercial parking supply by 10-20% where workplace travel plans are implemented
Geographic	Contingency based planning	Reduce parking supply based on the projected effectiveness of parking strategies, such as overflow parking plans
	PT accessibility	Reduce parking supply 10% for housing and employment located within 750m of frequent bus service, and 20% for housing and employment located within 750m of rail transit station
	Active mode accessibility	Reduce parking supply 5-10% in walkable communities, with additional reductions if walking improvements allow more shared and off-site parking
	Availability of end of trip facilities	Reduce commercial parking supply by 5% where end of trip facilities are available, such as showers and lockers are available
	Availability of parking	Reduce parking supply depending on the surplus of parking available in surrounding area. The magnitude of effect of this strategy is highly site specific
Demographic	Travel patterns	Adjust parking supply to reflect variations in vehicle ownership and trip rates in area
	Residential density	Reduce parking supply by 2.2% for each resident per hectare
	Employment density	Reduce parking supply 10-15% in areas with 120 or more employees per gross hectare
Demographic	Land use mix	Reduce parking supply 5-10% in mixed use developments, with additional reductions if parking resources are shared
	Type of land use	Reduce parking supply in response to the type of land use and demographic profile of the target market
	Mobility	Reduce parking supply by 20-40% for housing or developments designed to serve young, elderly, or disabled users
	Income	Reduce parking supply 10-20% for the lowest 20% income households and 20-30% for the lowest 10% income households
Housing tenure		Reduce parking supply by 20-40% for rental versus owner-occupied housing

56