

# ACT Parking and Vehicular Access General Code Review

**Final Report**



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## Final Report

Client: ACT Environment and Planning Directorate

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## Executive Summary

The purpose of this report is to recommend changes to the Parking and Vehicular Access General Code (*the Code*) to reflect the ACT Government's approach to the strategic management of parking. The proposed changes are designed to:

- Make *the Code* simpler for users, including the public, applicants and government staff.
- Implement the shift of Government policy away from car parking demand satisfaction to demand management through *the Code*.
- Ensure *the Code* supports a shift in travel behaviour and the achievement of the Government's mode share targets for public transport and active travel.
- Ensure *the Code* supports realising higher density development in the city centre, town and group centres, and along major transport corridors that are served by rapid public transport services.
- Improve linkages to other parts of the Territory Plan in *the Code*.

### Snapshot of review findings

*The Code* sets the requirements for car parking provision in the ACT and it is important that it supports the ACT government's planning, transport and sustainability policy objectives. *The Code* has not been holistically updated for some time, and an update is now needed to ensure that it reflects contemporary thinking in line with current transport and land use policy. As such, a comprehensive review of *the Code* has been undertaken. The review examined changes that could be made to *the Code* to ensure that it supports the Government's policy objectives and how *the Code* could be simplified for users.

The review found that ACT has the most complicated parking code of any jurisdiction examined. It also revealed that the ACT's parking rates are broadly comparable with other similar jurisdictions in Australia, but rates for office and residential in City and town centres is lower than similar jurisdictions. It also found that changes to *the Code* are needed to ensure that it aligns with the Government's broader strategic planning, transport and sustainability policy objectives.

To address the above fundamental changes needed to *the Code*, the review found that the existing parking code has to be updated. This is the best way to resolve current complexities and inconsistencies, and to ensure that *the Code* can achieve the objectives of the ACT Government. In re-writing the code, this review recommends to:

1. Remove different rates by zone and locational requirements from *the Code* to create a simpler and more user-friendly framework.
2. Introduce a maximum rate for different land uses and geographical areas, to be referred to as the standard rate. Applicants will be able to request a reduction to the standard rate using adjustment factors or a higher rate in special circumstances (e.g. business need to provide additional parking).
3. Applicants will be able to use the adjustment factors to request a reduction to the standard rate when preparing applications. This is intended to support greater mode shift away from the private car mode and a more flexible approach for balancing parking supply and demand. The review recommends allowing a 30% reduction from standard rates as a reasonable starting point. Applicants will be able to apply adjustment factors in preparing applications and these can then be assessed by the ACT Government.



## Broad overview of the report

### Context

As government policy is moving away from car parking demand satisfaction to demand management, this review considered how parking provision rates could be applied or adjusted within this context. Particular consideration is given to how *the Code* could better support mode share targets for public transport and active travel and the focus for realising higher density development in the city centre, town and group centres, and along major transport corridors that are served by rapid public transport services. To improve the mode share of sustainable transport and deliver on many of its broader policy objectives, the ACT Government is investing in Canberra's first light rail route between City and Gungahlin and have commenced planning for a City to Woden route for stage 2 of a city-wide light rail network.

The primary reforms proposed by the review include:

- Simplifying the application of the rates.
- Introducing adjustment factors for reducing standard car parking rates in order to support the achievement of broader policy objectives.
- Flexibility in assessing the requirements for parking to suit particular circumstances.

### Reform in other jurisdictions

Some Australian cities have undertaken reforms to their parking codes and begun transition towards managing car parking supply and demand and moving away from car parking demand satisfaction. Similar parking code reforms have been evident for many years in UK, USA and European cities. UK led the way by implementing sustainable transport policies at a national level and supporting this by changes in their parking codes. Common parking code reforms implemented in USA and European cities include:

- Maximum parking rates rather than minimum parking rates.
- No parking rates and allow commercial forces to determine parking provision.
- Merit based assessment.
- Reduced parking rate for development depending upon proximity to public transport.
- Reduced parking through car-pooling, car share and other related schemes.
- Reductions for green travel or active travel plans.
- Substitution of car parking (e.g. for bike sharing schemes).

A number of parking codes were reviewed across most states in Australia as part of this study. The nature of the codes varies significantly in relation to differentiation of rates (by use, location or zoning), the description of objectives and criteria, and opportunities for parking discounts. Common themes emerged from the more innovative codes and a number of aspects of interstate codes could be of benefit if applied to ACT. These include:

- Most codes do not differentiate rates by land-use zoning, but they generally differentiate by location. Where they exist, differences in location are often as simple as CBD/other or within proximity of major public transport hubs or not.
- Setting maximum parking rates in certain areas (typically inner city areas) or a range (maximum and minimum rates) for consideration within a precinct to help provide better guidance.
- Payment in lieu for provision reductions associated with private developments to enable funding of consolidated public car parking or where there are constraints to development (e.g. heritage).
- Generally, reductions in parking provision are not quantified (in terms of % reduction) but can occur if justified by the applicant. A number of jurisdictions provide examples where discounts may apply or payments in lieu are possible, if they are in line with Council development and planning objectives.

- Reductions for provision of end of trip facilities for active travel above the minimum requirements.
- Unbundling of parking spaces (some jurisdictions set a minimum % requirement for residential use).
- Reductions in parking rates based on other amenity aspects such as urban form or connectivity.
- Some jurisdictions provide guidance for service vehicle parking for alternative uses.

These elements were seen to enable better alignment with sustainable transport policies.

### Options for a new ACT Parking Code framework

This review recommends that *the Code* be re-written to simplify it, make it more user friendly and to support changes to government policy. The review found that there are several options available to consider for a new simplified code framework. Three possible new frameworks were explored in this review:

1. Adding broader policy considerations, high frequency (rapid) public transport corridors and new adjustment factors to the existing framework.
2. A new simplified framework with one table of standard parking rates by land-use and a comprehensive set of adjustment factors. Different parking rates by zoning for the same land use would be removed.
3. A new simplified framework with the standard parking rates by general geographic areas, including the city centre, town centres, group centres and the Northbourne Avenue corridor. Different parking rates by zoning for the same land use would be removed as above.

Framework 3 was selected for further progression as it was seen to present the best option for creating a simpler, more user-friendly code and supporting the Government's mode shift targets, whilst being considered an implementable reform that is likely to be broadly acceptable to a range of stakeholders. It offers a clearer structure for defining parking rates for different centres, and enables further incremental change to be implemented over time. It also provides more flexibility than the current approach. It is structured around:

- The use of maximum rates rather than minimum rates, with the maximum rates generally reflecting current minimum rates. Maximum rates will be referred to as standard rates in *the Code*.
- Adjustment factors to enable reductions to standard rates of up to 30%, reflecting ACT policies designed to achieve less reliance on private vehicles, reduced traffic congestion in centres and greater opportunities for future redevelopment of centres.
- More transparency for rate reductions and greater flexibility for applicants.

A table of suggested standard parking rates for various uses and types of centres is included in the report. The setting of these rates was based on the following general considerations:

- Setting the maximum or standard rate for a land-use at its current maximum, unless considered pertinent to change it.
- Lowering rates for City or town centre locations, where considered reasonable to do so. This was done for most uses.
- Reducing the rate for numerous uses in the Northbourne Avenue precinct, to better align with rates in City and town centres.

There is a need for flexibility to adjust parking rates where individual circumstances warrant the consideration of parking reductions. This will generally be enabled by applying adjustment factors to the nominated standard (or maximum) rates. In addition, a rate above the standard rate may be considered if justified by the proponent, to satisfy likely customer needs and business objectives.

Adjustment factors are recommended as percentage reductions from the standard parking rate set for each land use and corresponding geographic area, up to a maximum of 30% of the standard rates for each land use. A table of adjustment factors is included in the report, for the following elements:

- Within 400 m walking distance of a high frequency public transport route.
- Within 800 m walking distance of an existing or future light rail route.
- Car sharing.
- Unbundled parking.
- A parking management plan which establishes either how parking within a proposed development will be controlled and managed to encourage efficient use of parking through technology, or incorporates other parking demand reduction measures.
- Other travel demand measures, provision of public transport facilities, provision of additional end of trip facilities or amenity improvements to nearby public places and/or streets.

*The Code* should also allow flexibility for parking provision in special circumstances (e.g. amenity / historical considerations, such as development on City Walk with limited vehicle access).

### **Additional recommendations**

Other recommendations proposed as part of the review for the new code framework include:

- Revise the Introduction to *the Code*, to contain a concise statement clarifying its role and relationship with other parts of the Territory Plan and the National Capital Plan, comparable to that used in other Precinct and Development Codes.
- Include more specific step-by-step details on how to use the new Code, including when special arrangements may be negotiated to improve transparency.
- Remove details of physical and community safety aspects of the Code, but instead refer to other relevant guidelines and design standards.
- Include parking space design requirements not consistent with AS/NZS 2890, but instead refer to other relevant guidelines and design standards.
- Inclusion of requirements for motorcycle parking and add that the provision for motorcycle parking is to only be applied to non-residential development, except in relation to visitor parking.
- Cross reference relevant sections of the Bicycle Parking General Code to *the Code*, especially offsets which may be allowable in lieu of a greater provision of bicycle parking spaces and end-of-trip facilities.
- Accommodate parking objectives for different zonings in the relevant zonings Development Codes, as these will not be required in the new parking code. A general overview of objectives could also be included in the new parking code.
- Incorporate an appropriate methodology for determining parking requirements for mixed use developments, to enable consideration of an adjustment to parking provision requirements to account for multi-use of nearby public car parking, at different times of day and week.
- Create consistency between the terms for uses in *the Code* and the uses defined in the Territory Plan.
- Develop fact sheets and practice notes to supplement *the Code*, to assist applicants with understanding terms (e.g. unbundled parking) and use of *the Code*.
- Incorporate live links from the revised parking code to other Territory Plan documents to make *the Code* more user friendly.



## Next steps for Government

Suggested further work for the ACT Government to support the revision of the code includes:

- Undertake internal and external stakeholder engagement to work through the ramifications of the proposed changes. This engagement should include:
  - Discussion and review of the standard rates proposed to capture any corporate knowledge existing within the ACT Government that may provide further guidance.
  - Discussion and review of the proposed adjustment factors and how they should be applied, including the scale of the maximum reduction in standard rates (30% has been adopted in this report).
  - Review of additional development case study examples to provide confidence that the new rates and adjustment factors will provide reasonable and expected outcomes.
- Analysis of City, town centre and group centre case studies to estimate how the changes in *the Code* would impact vehicle parking and Centre master planning.

Other additional work that would be desirable for the ACT Government to undertake includes:

- Changes to *the Code* to avoid inconsistencies with the existing Multi Unit Housing and Commercial Zone Development Codes.
- Research and investigation of different rates for primary schools and high schools, as well as specific rates for college and tertiary education institutions, which currently do not exist.
- Surveys and analyses of alternative rate calculations for the vehicle sales use.
- Surveys of child care centres of different sizes to inform any changes to rates, to ensure that the rates reflect changed operating conditions and larger centres being developed in recent years.
- Further investigations into possible means for managing lease variations that could result in high parking requirements. This is needed to help address difficulties arising where it is proposed to increase the GFA in a lease that facilitates a broad range of uses, or where additional uses are proposed either with or without a GFA limitation.
- Investigate the inclusion in the new Code of provision for car parks for electric vehicle charging in commercial and multi-unit residential developments, together with a discount for other car parking, at a rate to be determined.
- Surveys to create a database of parking demand by time of day and day of week for common uses that form part of mixed use developments, for a range of geographic locations and sizes of development. This will enable more consistent calculations of adjustments to parking provision requirements to account for multi-use of nearby public car parking, at different times of day and week.
- Revise standard controls in Precinct Codes that address development on nominated carparks, to clarify the intent of the control, and clarify the term 'makes substantial contribution to the long term parking supply for the town centre as endorsed by the Territory'.
- Investigate new legislation to enable payment in lieu for the provision of car parking in the ACT. This would be dependent on establishing and managing appropriate governance structures and demonstrating a clear link between payments in lieu and the delivery of parking / transport related outcomes.

## 1.0 Introduction

### 1.1 Background

The Parking and Vehicular Access General Code (*the Code*) sets for car parking provision in the ACT and it is important that it supports the ACT government's planning, transport and sustainability policy objectives. *The Code*, which seeks to ensure development achieves the relevant objectives of the Territory Plan, is used by the Environment and Planning Directorate in the assessment of development applications of new developments, redevelopment and lease variations.

*The Code* has not been holistically updated for some time, and an update is now needed to ensure that it reflects contemporary thinking in line with current transport and land use policy. This includes simplifying the application of rates and reviewing the appropriateness of the parking generation and provision rates for both on-site and off-site parking. There are a number of drivers for the amendment and modernisation of the provision rates of *the Code* including policy and planning arrangements and the limitations of *the Code* including *the Code's* inability to allow for dispensation, the relationship of *the Code* with policy objectives and the inflexible nature of *the Code*.

Transport for Canberra (TfC) sets out principles and actions to guide integrated transport and land-use planning in order to achieve an efficient and cost effective, socially inclusive, accessible and safe ACT transport system. The revisions to *the Code* are to align with the objectives of TfC.

Another key driver for the review and revision of *the Code* is the building of an integrated transport network through the Parking Action Plan. The Parking Action Plan aims to encourage the use of public transport, active travel and reduce parking in the town centres. This includes the ACT Government's plan to make parking more accessible by improving the availability of different types of parking to support different needs, aligning short-term parking to better support access to businesses and services, and by making parking easier to locate.

The Territory Plan contains precinct codes that cover the City centre, town and group centres, which may contain parking requirements such as replacement parking or land to be reserved for publically available parking. Special arrangements can be negotiated at the discretion of the Territory. The legislative requirements of the Territory Plan for developments to comply with *the Code* need to be considered within the future amendments to *the Code*.

As government policy is moving away from car parking demand satisfaction to demand management, this review considered how parking provision rates could be applied or adjusted within this context. Particular consideration is given to how *the Code* could better support mode share targets for public transport and active travel and the focus for realising higher density development in the city centre, town and group centres, and along major transport corridors that are served by rapid public transport services. To improve the mode share of sustainable transport and deliver on many of its broader policy objectives, the ACT Government is investing in Canberra's first light rail route between City and Gungahlin and have commenced planning for a City to Woden route for stage 2 of a city-wide light rail network.

Current parking planning practices are inefficient, resulting in some instances of parking supply delivering poor economic returns (value of land, increased travel, etc.) and increased automobile traffic contributing to various economic, social and environmental problems. The appropriate revision to *the Code* is focussed on creating a more efficient use of parking resources for commuter parking (by not increasing the parking supply requirements for this group) whilst retaining the social benefits of adequate retail and recreation parking.

### 1.2 Purpose of Report

The purpose of this report is to recommend changes to the Parking and Vehicular Access General Code (*the Code*) to reflect the ACT Government's approach to the strategic management of parking. The proposed changes are designed to:

- Make *the Code* simpler for users, including the public, applicants and government staff.

- Implement the shift of Government policy away from car parking demand satisfaction to demand management through *the Code*.
- Ensure *the Code* supports a shift in travel behaviour and the achievement of the Government's mode share targets for public transport and active travel.
- Ensure *the Code* supports realising higher density development in the city centre, town and group centres, and along major transport corridors that are served by rapid public transport services.
- Improve linkages to other parts of the Territory Plan in *the Code*.

### 1.3 Scope of Work

The scope of works for this report is as follows:

- A detailed review of *the Code* and identify issues associated with *the Code*. The review includes an examination on the existing code format, structure and content. The review establishes the existing requirements in the code that are recommended for updating including qualifying circumstances in which amendments/variances to provision rates are warranted. Further, the report includes a review of *the Code* in relation to how it fits into the overall the Territory Plan.
- A review of the existing ACT policy documents including the Transport for Canberra documentation and the ACT Parking Strategy.
- An analysis of ABS data, parking survey data and transport data including GIS analysis.
- A review of codes from other Australian jurisdictions including discussion with industry experts throughout Australia.
- The consultation of stakeholders in the form of an issues workshop. This includes the robust interrogation and knowledge of stakeholder's to determine objectives and issues associated with *the Code*.
- A review of national and international practice including identifying key trends and features of international parking codes.
- Development of draft and final reports which outline the key recommendations drawn from the associated project works.



## 2.0 Parking Code Review

This chapter provides a review of the current code, including:

- An outline of the purpose and structure of *the Code*
- A description of issues with *the Code*
- The relationship of *the Code* to the Territory Plan
- A summary of anomalies with current parking rates in *the Code*

A more detailed review of specific elements of *the Code* is included in Chapter 6 and 7, together with recommendations for changes to *the Code*.

### 2.1 Purpose and Structure of Parking Code

#### 2.1.1 Purpose and role of the Parking and Vehicular Access General Code, and its users

Section 1.1 of *the Code* sets out its purpose, in the following terms:

*“This document sets out the provision for vehicular access and parking in the ACT.*

*The code seeks to ensure that development achieves the relevant objectives of the Territory Plan and will be used by the Authority in the assessment of development applications involving development, redevelopment and lease variations. The code specifies vehicular access and parking requirements for development.”*

This clearly sets out the role which *the Code* plays relative to the assessment of development applications. However it does not recognise that *the Code* is used by a broader range of stakeholders, including those sitting outside Government, for a broader range of purposes.

In addition to being an assessment tool used by the Environmental and Planning Directorate, *the Code* is also used by:

1. Lease purchasers and development proponents, who will consider *the Code* and its requirements when considering site and project viability, and to inform concept and detailed development.
2. Consulting professionals (including consultant planners, transport engineers and valuers) who will consider *the Code* when providing advice to clients.
3. The broader community, who look to *the Code* as a framework for expectations regarding the delivery of car parking in particular areas or with particular developments.

Each of these three groups has particular requirements / characteristics in terms of:

- Their understanding of the role of *the Code*, within the hierarchy of Territory Plan Codes,
- The level of technical understanding which they bring to their reading of *the Code*
- The level of certainty or flexibility they wish to see embodied within *the Code*
- The level of certainty or flexibility they wish to see exercised through *the Code*.

The following comments reflect our perception of the characteristics and requirements of each user group:

1. Lease purchasers and development proponents will look to *the Code* themselves in the first instance, but are likely to obtain advice from consulting professionals as their ideas sharpen. It is therefore not essential for this group to have an understanding of the role of the code within the Territory Plan, or technical understanding. Lease purchasers and development proponents will generally wish to see a high level of flexibility embodied and exercised through *the Code*. Persons purchasing multi tenancy commercial leases are more likely to want a higher level of flexibility to allow them to change their tenancy mix over the course of a building's lifetime, as opposed to development proponents who will be required to justify parking for a particular development at a particular point in time.

2. Consulting professionals will have a good understanding of the role of *the Code*, and technical understanding. It is likely that they will wish to see a high level of flexibility embodied in *the Code* for areas that are characterised by mixed uses, or which are likely to experience considerable change in the near future. They are likely to express a need for transparency in the application of *the Code*, including more clearly articulated precedents or criteria for the application of that flexibility.
3. The broader community will exhibit diversity in the level of understanding, technical ability and desire for flexibility. In general terms, there is a lack of understanding regarding the structure of the Territory Plan, and in particular the role of rules and criteria. This often leads to confusion and a perceived lack of transparency when developments are approved based on criteria compliance. With regard to parking, the community may not understand why developments are approved with parking provision below that specified in *the Code*, potentially leading to appeal situations. They are also less likely to understand the broader policy drivers informing the preparation and application of *the Code*.
4. Of these three user groups, we anticipate that the community would be assisted considerably from clearer advice within the introduction of *the Code* clarifying its role, relationship with other parts of the Territory Plan, and the intent of delivering flexibility that can be exercised.

**Recommendation 1**

Revise the Introduction to *the Code*, to contain a concise statement clarifying its role and relationship with other parts of the Territory Plan and the National Capital Plan, comparable to that used in other Precinct and Development Codes. It would be appropriate to cross reference broader policy which has informed the preparation of the Code.

**2.1.2 The application of the code for development application assessment purposes**

Development applications fall in one of two broad categories:

- Design and siting development applications, which deal with the physical development of land
- Lease variation development applications, which deal with amendments to Crown leases.

**Design and Siting Applications**

The approach of and ability to implement *the Code* is generally well suited to design and siting development applications, where the specifics of a development (which include the type of uses proposed and the amount of gross floor area proposed) are known and articulated in the development application materials. Under these circumstances, it is a reasonably simple exercise to apply parking requirements to the development to ascertain whether the requirements are met. Where a shortfall is proposed, this can be negotiated with regard to the characteristics of the proposed development, including for example the site's proximity to public transport, and publically available car parking, the anticipated hours of operation of proposed uses and, in the case of mixed use development, opportunities for shared parking and any other relevant factors.

Difficulties arise where development applications precede commercial occupant details. This most commonly occurs with larger developments within commercial centres. Because of the lead time between development application and occupancy, proponents may not have settled on a final mix of tenants or determined the floorspace allocated to each tenancy. This uncertainty is typically addressed by a flexible approach which recognises that a mix of commercial uses is likely to occur on the site over its lifetime, and a negotiated outcome is delivered. This approach was most recently expounded in *Amarso Pty Ltd & Ors v ACT Planning and Land Authority* (2012, AT11/62), in which the ACAT determined that application of the highest parking ratio for all possible uses that could be activated in the space (in that instance restaurant, at 10 spaces per 100m<sup>2</sup>) was inappropriate on the basis that it was highly improbable that all the commercial demand would occur at peak hours at the highest level. Instead, the ACAT adopted a moderated ratio (in that instance 5 spaces per 100m<sup>2</sup> GFA) as a reasonable compromise (para 135).

A methodology commonly used to assess parking requirements for mixed use developments involves:

1. Calculate the expected maximum parking demand for each use that forms part of the development. Often this is assumed to be the required parking provision, which may not be an accurate representation of true peak demand.
2. Obtain an estimate of the potential hourly variation in parking demand for each use on a typical weekday and weekend, as well as on a Friday (for late night shopping peak) if this is likely to be critical for the uses proposed. Limited data is available to create the hourly demand profiles for different uses. Typically, it relies on previous surveys of similar uses elsewhere.
3. Make assumptions with regards to the likely proportion of multi-purpose trips within the development. In this context, restaurant use is often seen as being complimentary to other uses in a mixed use development. This often relies on professional judgement and is dependent on the nature and location of the development.
4. Aggregate the total demand for the development by time of day and days analysed, summing the data for each proposed use in the development. This will result in a summary parking demand chart in a form similar to that shown in Figure 1.

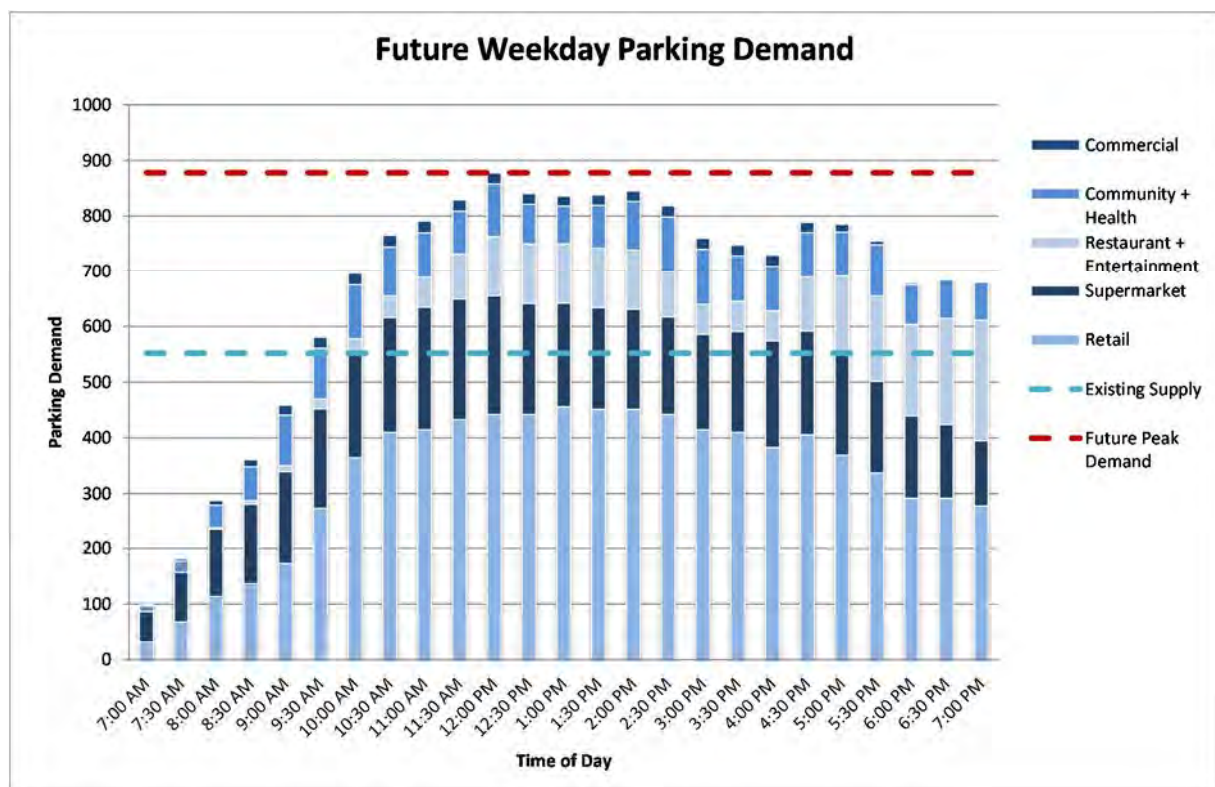


Figure 1: Sample time-series parking demand chart for multi-use development

## Recommendation 2

- a. Incorporate an appropriate methodology for determining parking requirements for mixed use developments, to enable consideration of an adjustment to parking provision requirements to account for multi-use of nearby public car parking, at different times of day and week.
- b. Surveys to create a database of parking demand by time of day and day of week for common uses that form part of mixed use developments, for a range of geographic locations and sizes of development. This will enable more consistent calculations of adjustments to parking provision requirements to account for multi-use of nearby public car parking, at different times of day and week.

## Lease Variations

Lease variation development applications most commonly propose changes to the lease purpose clause (for example through the addition of new land uses) or changes to maximum gross floor area limitations. The parking implications of changes to gross floor area limitations are easily defined where a single use is enabled by the crown lease. Difficulties arise where it is proposed to increase the GFA in a lease that facilitates a broad range of uses, or where additional uses are proposed either with or without a GFA limitation.

In most cases a change of use between uses, already authorised in a lease, would be exempt from development approval. Potential conflicts resulting from changes in demand for car parking due to an exempt change of use or a changeover of tenancies is not assessed against the current Code. Currently the variation of a Crown lease may be the only point at which a specific permitted use is considered against Section 120 of the Act and the car parking requirements in the Code.

The Crown lease purpose clause identifies a range of uses that can be activated on the site without further development approval. It is commercially advantageous to have a broad lease purpose clause within commercial and industrial areas, as it provides the opportunity to lease space to a broad range of tenants without the need for further development approval. Consequently many crown lease variations occur on a speculative basis. This is evidenced in the Land Development Agency's practice of releasing crown leases with purpose clauses enabling the full spectrum of uses assessable under the relevant land use zone.

While development approval may still be required for building works to accommodate a new use, or where the change of use results in the change of building class under the BCA, the possibility is that a particular building will support a range of uses throughout its lifetime without further oversight. It is also possible that a particular building will support a changing mix of uses over its lifetime, of which some or none may be subject to GFA limitations.

Lease variation development applications are assessed by a separate team within Environment and Planning Directorate. It is standard practice for the ratio requirements of *the Code* to be applied without dispensation to all uses being contemplated for inclusion. Where the parking ratios for applied uses are less than those associated with existing permitted uses, the additional use will be approved. If the proposed use has a higher ratio than existing permitted uses, the proponent must demonstrate where these spaces will be accommodated. This assessment does not take into account factors such as the likelihood of particular uses establishing on the site (which in turn may be influenced by the duration of existing subleases or market conditions), anticipated changes in transport and travel patterns over the lifetime of the Crown lease, or the characteristics of particular uses (for examples, hours of operation).

The adoption of *the Code* ratios without dispensation is a rational response to these uncertainties. However, where parking to Code requirements is not immediately identifiable, proposed uses will be subject to GFA restrictions. This means that the flexible long term use of the site is capped relative to potential forecast car parking shortfalls that may never eventuate. This is problematic as it limits the ability of leaseholders to respond to market conditions quickly. It also elevates the delivery of car parking as a major consideration in development application assessment, contrary to broader planning policy and the status of a Code as a General Code.

Crown leases provide a unique opportunity to impose additional obligations, or convey additional rights, on Crown lessees. Older Crown leases often contained clauses specifying the delivery of car parking on a site. New leases are typically issued with a standard clause which reads:

*"That the lessee shall provide and maintain an approved drained and sealed car parking area on the land to a standard acceptable to the Authority in accordance with plans and specifications prepared by the Lessee and previously submitted to and approved in writing by the Authority".*

However many leases do not contain any clauses addressing car parking at all.

Lease variations to replace older style clauses with the modern standard clause are routinely approved without issue. The modern clause enables the proponent to propose parking delivery as part of a design and siting development application, for approval by Environment and Planning Directorate. Implementation and continued compliance with the approved plan ensures lease compliance, noting that there is no active program of lease compliance monitoring.

It may be pertinent in some situations to introduce a standard clause addressing the delivery of car parking, where uses that have a high parking requirement are proposed in a lease variation development application. Effectively a Parking Plan (or similar) would then need to be approved prior to the use being activated. However, there are concerns that this will entail a greater risk of conflict and further lessen the ability for the impact of demand for car parking to be assessed or regulated as part of, or regulated following, any DA development (those not for lease variations).

This option was briefly considered and applied in some leases in Braddon, but it was considered impractical and unenforceable through the current systems/processes. It is likely that a lessee could change their car parking area or change the mix of uses to negate the parking plan without approval. Without there being supporting legislation, and the willingness to enforce the actual tenancy/use on the land (over a specific period of time and based on specific conditions), similar to other States and Territories, such an approval for car parking could only be speculative; as if it were carried out in a lease variation because any such requirement would most likely be unenforceable.

A departure would then only be subject to discovery via audit, or only be able to be enforced based on complaints once the activity has commenced. It would also weaken the Territory's position because it would be in the position of taking action in most cases after a tenant/lessee has purchased the right in the lease and committed to the desired end use. However, with less change to current process/legislation, a more comprehensive set of provisions might be created that are aimed at a more accurate case by case strategic assessment of potential future conflict/demand for car parking when a lease variation is proposed.

It is recommended that further investigations be undertaken into this issue.

### **Recommendation 3**

Instigate further investigations into possible means for managing lease variations that could result in high parking requirements. This is needed to help address difficulties arising where it is proposed to increase the GFA in a lease that facilitates a broad range of uses, or where additional uses are proposed either with or without a GFA limitation. It will allow more flexible long-term use on such sites, without undue constraints.

## **2.2 Issues with *the Code***

It is important to recognise that *the Code* is an administrative document which sets out criteria for the adequate supply of parking to meet the needs of business, government and the community at large to facilitate access to locations and services. Nevertheless, *the Code* exists within a network of policies set by government to achieve a wide range of community benefits, including broader issues of adaptation to climate change, encouragement of greater use of active travel modes to achieve community and health benefits.

If it is retained in its existing format, the broader objectives may be incorporated in the preamble to *the Code*, as well as being reiterated in the objectives set out for each land use zoning category. If a revised format along the lines of the rules and criteria set out in, for example, the Multi Unit Housing Development Code, the broader policies should be outlined in the criteria sections of a revised Code. Flexibility in application of specific parking provision rates could then be applied with reference to those broader objectives of government policy, with, for example, criteria which allow a lower parking provision rate where those objectives can be achieved.

Previous work has highlighted a number of issues with *the Code*, detailed in Appendix A. In summary, key issues are:

- How to achieve reductions in off-site parking provision for employment-based developments having regard to the principles enshrined in *Transport for Canberra* to encourage greater use of public transport and other alternatives to private car travel.
- The development of parking plans for the major centres (City, the town centres, other major employment destinations and group centres) to achieve a high level of accessibility while minimising the increase in publicly available parking provision consistent with ensuring adequate functioning of the centres.
- Maintaining flexibility in assessing the requirements for parking while making *the Code* easier to use for developers and the community.
- Clarifying the extent to which demand management policies and practices can be used to reduce excess parking provision in areas where alternative transport modes provide a high level of accessibility to land uses.
- Coordination of *the Code* provisions with those of master plans and precinct codes, noting that few precinct codes refer to parking provision requirements in accordance with *the Code*, although all development codes do.
- The currency of existing parking provision rates and the extent to which these might be altered.
- Consideration of the potential for reductions in residential parking provision where suitable car share spaces are proposed and/or provided in residential apartment developments.
- Whether parking maximums should be set rather than the existing minimum parking requirements and where these should apply.

Parking Code issues and reforms were also the subject of a stakeholder workshop across ACT Government Directorates. The notes from the workshop are included in Appendix B.

## **2.3 Relationship of *the Code* to the Territory Plan**

### **2.3.1 Territory Plan - structure**

The Territory Plan comprises a land use zone map, zone objectives and development tables, definitions of uses and a series of 'codes'. Collectively these components describe the policy which development must comply with to be approvable.

There are three types of codes. Precinct Codes typically address specific areas (for example, the Civic Precinct Code or Northbourne Avenue Precinct Code). Development Codes address types of development, or development within specific land use zones (for example the Multi Unit Housing Development Code or the Community Facilities Zone Development Code). General Codes, such as the Parking and Vehicular Access General Code, address discrete aspects of development. In the event of inconsistency, the provisions of a Precinct Code trump those of a Development Code, which in turn trumps those of a General Code.

Precinct and Development Codes typically include:

- An introduction which sets out the purpose and structure of *the Code*, its position within the code hierarchy and additional information to assist with interpretation.
- Rules and criteria. Rules are typically quantitative whereas criteria are qualitative. Where an application is assessed in the Merit track, the applicant has the option of complying with either a rule or criteria. Development that complies with a rule is not open to further challenge on the basis of that compliance. If the applicant proposes criteria compliance, it is up to the applicant to demonstrate that compliance. Compliance with criteria may be subject to further challenge.
- Rules and criteria are arranged into 'elements' which deal with similar types of issues. For example, all rules and criteria addressing parking and traffic issues would be grouped under a single element.



- The Code may specify the 'intent' of an element or individual rules and criteria within an element. The Intent describes the purpose of the development controls. Codes may also include figures, maps and diagrams necessary to aid interpretation of the rules and criteria.

As a consequence, any rules and criteria addressing parking and vehicular access that are located in Development or Precinct Codes will trump the provisions of the Parking and Vehicular Access General Code, to the extent of the inconsistency.

### 2.3.2 Territory Plan – strategic context

The Territory Plan's Statement of Strategic Directions sets the principles which give effect to the main object of the Territory Plan as required by the Planning and Development Act 2007. It does not comment much on parking demand or delivery. The only direct reference to parking is found in Section 2.7 of *the Code*, which confirms the desirability of integrated land use and transport planning, and the delivery of sustainable transport options, and which reads:

*"Development will be planned to encourage use of public transport, walking and cycling, including commuter cycling. Routes will be reserved for an enhanced inter-town public transport system. Requirements of vehicle parking will be related to commercial needs and transport policy objectives".*

The reference to 'commercial needs and transport policy objectives' is not easily interpreted. The statement does not comment on residential needs; we assume that this is subsumed into the term 'transport policy objectives'. The focus on parking to meet 'commercial needs' is at odds with the emerging focus on demand management, as opposed to demand satisfaction. The Statement does not qualify who establish 'need'.

Irrespective, it is evident that the delivery of parking is considered to be a lower tier issue relative to matters such as urban form and design, and sustainability, which the Statement of Strategic Direction deals with in greater depth.

The lack of emphasis on parking as a planning policy issue is further illustrated through a comparative assessment of land use zone objectives. Commercial land use zone objectives link the location and development of commercial land with public transport accessibility and access to transport corridors. None of the Commercial land use zone objectives promote or even comment on car parking, or recognise it as part of the transport network. Only the CZ6 objectives comment specifically about parking, recognising that the delivery and placement of parking can have amenity impacts on nearby residential areas.

The higher density Residential Zones objectives share a similar emphasis on access to public transport. The objectives do not comment on the delivery of or impact of the delivery of car parking on residential uses, although the Residential RZ2 to RZ5 zones inclusive share broadly framed objectives which seek to 'mitigate the unreasonable negative impacts of development on neighbouring properties'.

Amongst the other land use zones, only the CFZ and PRZ2 zones comment on parking, again relative to the impact of parking on neighbouring or surrounding residential amenity.

### 2.3.3 Interface with Territory Plan definitions

The Territory Plan includes a set of standard definitions for land uses. In some instances, uses may be grouped under umbrella terms. These definitions are essential to the interpretation of land use zone and precinct development tables, which in turn define whether particular uses are assessable or prohibited in any given location. These definitions are also inserted into crown leases to ensure consistency between the Territory Plan and Crown leases, and to ensure that any subsequent change in Territory Plan definitions does not lead to an inadvertent uplift in rights or value in the Crown lease.

The Parking Code utilises the Territory Plan definitions, but in some instances expands beyond these. For example, 'indoor recreation facility' is further subdivided in *the Code* into:

- Basketball, netball
- Skating rink, swimming pool

- Squash courts
- Fitness centre, gymnasium
- Other

Whereas 'Indoor Recreation Facility' in the Territory Plan identifies the following as some common terminology:

- Fitness centre
- Gymnasium
- Indoor sports stadium
- Indoor swimming pool
- Squash court

Categorisations within *the Code* are on occasion used as an aid to the interpretation of the defined uses. As another example, the parking ratio provided for 'hotel' use includes ratios for retail floorspace, whereas the definition of hotel in the Territory Plan does not identify retail as an associated facility.

#### **Recommendation 4**

Create consistency between the terms for uses in *the Code* and the uses defined in the Territory Plan.

### **2.3.4 Interface with other Territory Plan codes**

The purpose of *the Code* confirms that it 'will be used by the authority in the assessment of development applications involving development, redevelopment and lease variations'. This is a catch all line ensuring that all relevant development applications are assessed against its terms.

In addition, *the Code* is called up by several other codes. This occurs in one of two ways:

1. The Code may be identified in the introductory sections of a Code as one which may be relevant. See for example page 4 of the Commercial Zones Development Code or page 2 of the Multi Unit Housing Development Code
2. The Code may be called up in a control within another Code. For example both Criteria's 2 and 3 of the Lease Variation General Code that sufficient parking be provided on site or is available off site in accordance with the Parking and Vehicular Access General Code.

The latter approach was a feature of the 2007 Territory Plan review. Its intent was to allow *the Codes* to direct the user to all other relevant codes, but does result in duplication. It appears that Environment and Planning Directorate are moving away from this approach, as evidenced by more recent Code's treatment of National Capital Plan and Development Control Plan requirements.

#### **Recommendation 5**

As other Codes are revised, the appropriate mechanism for calling up *the Parking Code* (and all other general codes) should be reviewed for consistency between Codes and guidelines in the Territory Plan.

The design attributes of the delivery of car parking is also dealt with in other Codes. For example the Commercial Zones Development Code sets out controls governing the integration of parking structures with other development and the landscaping of at grade parking areas.

The possibility exists for Precinct Codes to include controls addressing the rate at which car parking should be delivered in particular locations, by specifying ratios or assessment requirements that are specific to the characteristics of that area. As Precinct Codes, the controls within would take precedence over both Development and General Codes. Consequently, and in addition to specifying controls based on geographic locations, the Precinct Codes could also be used to provide further criteria against which dispensations to parking numbers are assessed.

Controls could also incorporate a temporal aspect, with rates changing as certain timeframes or development milestones are reached. The Gungahlin Precinct Code includes controls addressing heights on this basis. The use of Precinct Codes for this additional level of detail ensures that the content of *the Code* reflects its General Code status, while working within existing Territory Plan architecture.

#### Recommendation 6

Introduce site specific parking requirements, or assessment criteria, in Precinct Codes, including the use of temporal triggers. The use of Precinct Codes for this additional level of detail ensures that the content of *the Code* reflects its General Code status, while working within existing Territory Plan architecture. This would be a gradual process that could be integrated with future centre master plans.

### 2.3.5 Treatment of car parking within commercial areas and for commercial developments

The Commercial Zones Development Code sets out a number of general controls that aim to manage the urban design impacts of development; these are not considered contentious and reflect a considered approach to the assessment of all attributes of development.

Additional controls are provided for town, group and local centres. The delivery of parking does not feature in any of these, except in relation to group centres. The intent of Element 13, which imposes GFA restrictions on shop and office uses within CZ2 and CZ3 land in group centres, is described as including '(f) to ensure there is sufficient off road parking to serve commercial areas'. This reflects an outdated demand satisfaction approach, but also reflects an approach whereby development outcomes may be limited in order to facilitate parking outcomes, as opposed to the other way around.

Several Precinct Codes for town and group centres include a standardised control addressing the delivery of replacement car parking where existing at grade carparks are redeveloped. Nominated car park areas are identified in a map and the control reads:

Development on nominated car parking areas	
<p><b>Rx</b></p> <p>This rule applies to the shaded area shown in figure 1.</p> <p>Development complies with all of the following:</p> <p>a) the existing number of car parking spaces is retained on the site and made available for public use at all times</p> <p>b) provides car parking that is generated by the development on site in accordance with the <i>Parking and Vehicular Access General Code</i> in addition to the spaces required by item a)</p>	<p><b>Cx</b></p> <p>Development achieves all of the following:</p> <p>a) any additional parking provision requirements (under the <i>Parking and Vehicular Access General Code</i>) for the development</p> <p>b) makes a substantial contribution to the long term parking supply for the town centre as endorsed by the Territory</p>

At grade carparks are highly valued for the convenience they provide to commercial centre operators and patrons, whereas basement car parking is not generally perceived as favourably. In addition these sites are typically released for intensive urban development, removing the public spaces from the pool during the construction period. Consequently these proposals are often the subject of intensive public scrutiny.

Both the rule and criteria require compliance with *the Code*. While proponents and government will understand that compliance may be a negotiated outcome, the broader community may not, potentially leading to tension through the development application process. This was recently evidenced in the Coles Dickson development; in that instance local traders were particularly concerned with the loss of public parking throughout the construction period. The Government attempted to address this by requiring the developer to deliver a temporary carpark, which was rejected by the community for a range of amenity reasons.

While the criteria enables consideration of alternative parking solutions, this is muddled by Criteria (b)'s requirement that development makes a 'substantial contribution to the long term parking supply'. 'Substantial contribution' is not quantified, and there may be a disconnect between the existing role of the nominated carpark in meeting parking demand and the requirement to make a 'substantial' contribution.

While town centres are exempt from third party appeal, this could become a point of contention as carparks in group centres are redeveloped, consistent with planning strategy.

#### **Recommendation 7**

Revise standard controls in Precinct Codes that address development on nominated carparks, to clarify the intent of the control, and clarify the term 'makes substantial contribution to the long term parking supply for the town centre as endorsed by the Territory'. 'Substantial contribution' is not quantified, and there may be a disconnect between the existing role of the nominated carpark in meeting parking demand and the requirement to make a 'substantial' contribution.

The implementation of this recommendation will enable a better understanding for when full retainment of parking is required including during construction. This should not be part of the revision of the Code, but needs to be better addressed in individual Precinct Plans via master-planning processes. The meaning of 'substantial contribution' will vary by locality.

### **2.3.6 Treatment of car parking in residential developments**

The Multi Unit Housing Development Code sets out controls governing the placement and presentation of car parking spaces, and the treatment of roofed car parking spaces for the purpose of calculating plot ratio. Element 7 deals exclusively with parking and vehicular access and include controls addressing:

- Ramps to basement car parking
- Driveway verge crossings
- Internal driveways
- Residents car parking
- Visitor parking
- The number of collocated parking spaces
- Delivery and removalist vans.

As a development code, the provisions of the Multi Unit Housing Development Code prevail in the event of inconsistency with *the Code*. We are not aware of any particular inconsistency but recommend a full review as the text of the revised Parking Code emerges. This is of particular importance given the likelihood that multi-unit housing development occurs in conjunction with mixed uses, and perceived spill over effects of multi-unit residential parking into surrounding suburban locations. This also applies to other development codes.

**Recommendation 8**

Changes to *the Code* are considered within the context of existing Multi Unit Housing and Commercial Zone Development Codes, and changes made to avoid inconsistencies between Codes and guidelines in the Territory Plan.

The Residential Zones Development Code provides limited commentary on the provision of car parking. It requires supportive housing, residential care accommodation or retirement village dwellings to comply with Class C of the Australian Standard AS4299 – Adaptable Housing, which requires all units to be accompanied by an adaptable car space, and provides additional requirements for secondary dwellings. Concerns with this have been addressed elsewhere.

**2.3.7 Treatment of car parking in other zones**

Parking is not specifically addressed in the Community Facilities General Code, noting that mandatory Rules 1 and 2 require supportive housing and retirement village dwellings to comply with Class C of the Australian Standard AS4299 – Adaptable Housing. We recommend that the parking requirement for adaptable units are modified to state that one of the spaces to be provided for the adaptable unit is to have a minimum width of 3.2m, as per the current practice.

Guidance notes separate to *the Code* could be provided that demonstrate alternative arrangements for adaptable car parking. For example, a retirement development containing 100 self-care units with no hostel or nursing home, and no staff residential units was proposed with the provision for residents, staff, and visitors plus 1 bus parking bay. The car parking to be provided for the Independent Living Units is to be managed separately from the units. In the event a unit is required to be adapted, arrangements can be made to ensure an accessible car parking space is provided in close proximity to the lift provided to serve the adapted unit. 34% of the parking provided in the basements was accessible from the outset of the development. This was in place of providing each residence with an accessible car space.

The Industrial Zones Development Code references *the Code* as a relevant consideration in the introduction, and also calls up *the Code* in Criteria 27 with the intent of 'to provide for safe and efficient access, circulation and parking facilities for vehicles and pedestrians'. It provides additional controls regarding the placement and presentation of entrances and parking facilities.

Both the Parks and Recreation Zones and Transport and Services Zone Development Codes reference the parking code in their introductions, but only in relation to residential zones. This is misleading and could be rectified by technical variation to clarify that the listed general codes may be relevant to development in any zone including these zones. Both also directly call up *the Code* via criteria. The stated intent is:

- a. To encourage design of access and parking as part of the overall design of the development
- b. To provide for safe, convenient access to meet the needs of all users and visitors.

We recommend review of these intent's, and in particular intent (b) which reflects a historic demand satisfaction approach.

**Recommendation 9**

- a. Vary the introductions to the Parks and Recreation Zones and Transport and Services Zone Development Codes to clarify that the specified General Codes are relevant to development in these zones, and not just in residential zones.
- b. Vary the Parks and Recreation Zones and Transport and Services Zone Development Codes to remove controls directly calling up *the Code*, OR to adjust intent to reflect the transition from demand satisfaction to demand management.

### 2.3.8 Commentary regarding the interface with the CPTED Code

The CPTED General Code applies to all developments across all zones in the ACT, except developments in rural and broadacre zones, and for proposals for single dwellings. Consequently it is likely to apply to all commercial and multi-unit residential developments (including mixed use developments), and those in commercial zones or centres.

Elements 4 and 6 of the CPTED Code addresses built form and travel and access respectively.

Many of the community safety objectives detailed in the parking code have comparable objectives within the CPTED Code or are addressed by other codes.

### 2.3.9 Summary of the interface between the Codes with regard to parking

Other than in *the Code*, the Territory Plan is relatively quiet on issues surrounding parking. The Statement of Strategic Direction frames the delivery of car parking within the context of commercial needs and transport policy objectives. Zone objectives do not typically address parking, and while development codes provide additional guidance addressing the urban design aspects of parking delivery, comment regarding the delivery of parking is contained exclusively within *the Code*.

As a consequence, all development in the ACT (Except exempt development) is subject to the terms of *the Code*. This provides certainty, but also reduces the opportunity for a more nuanced approach to parking delivery assessment, based on statutorily recognised features of particular locales. The opportunity exists to develop a single underpinning Parking Code, and augment this with controls in the Precinct Code. Precinct Code controls could include different assessment criteria, or information requirements to assist assessment.

## 2.4 Current Parking Rates

The rates for the various land-uses incorporated in *the Code* are structured around various zonings in the Territory Plan, as follows:

- Residential
- Commercial (excepting CZ5 and CZ6)
- Commercial CZ5 mixed use
- Commercial CZ6 leisure and accommodation
- Industrial
- Community facility
- Restricted access recreation
- Services
- Other

All the land-uses in *the Code*, other than equestrian facility, are defined in the Territory Plan. Some land-uses that exist (e.g. data centre) are not defined and would fall into a category called 'any other land-use not specified'.

For the commercial zoning, rates are further disaggregated by Centre type:

- City
- town centre
- group centre
- local centre
- Other "Centre" (Northbourne Avenue Precinct)



A summary of current parking rates by use across the various zonings in the Code is given in Appendix C. The main findings from a review of this summary are:

- The primary difference in rates by use are due to different geographic locations (i.e. City, town centre, group centre, local centre, Northbourne Avenue Precinct)
- Only seven uses have relatively minor variations in rates for different zonings (if variations in rates due to geographic location are excluded):
  - Camping ground / caravan park
  - Guest house
  - Health facility
  - Tennis court
  - Public agency
  - Retirement village
  - Veterinary hospital

Some of the differences may be due to errors in *the Code*.

- A large number of uses (33) do not have minimum rates, but instead are subject to individual assessment

This analysis indicates that there is no strong reason to specify parking rates by zonings, but there is reason to specify different rates by geographic location. The breakdown of rates by zoning unnecessarily complicates *the Code*.

#### **Recommendation 10**

- a. Remove the breakdown of parking rates by zonings and create a single rate table differentiated by major geographic locations (e.g. City, town centre, group centre, Northbourne Avenue corridor, other suburban). Proposed changes to area/geographic definitions used in *the Code* should be workshopped with key stakeholders. This will significantly simplify *the Code* making it easier to follow and apply.
- b. Accommodate parking objectives for different zonings in the relevant zonings Development Codes, as these will not be required in the new parking code. A general overview of objectives could also be included in the new parking code. This change is needed to enable proposed changes to the structure of *the Code* that will include removal of rates by zonings.

It is common to recommend individual assessment for certain uses because of a lack of data and / or significant variability in parking demand for certain uses. It also reflects significant variability in the nature of these uses and reliance on a description of the operation of the facility to estimate likely parking demand (e.g. staff numbers, likely visitor numbers, etc). Uses subject to individual assessment are:

- Agriculture
- Animal care facility
- Animal husbandry
- Aquatic recreation facility
- Bulky landscape supplies
- Cemetery
- Corrections facility (for Commercial and Community zoning)
- Defence installation

- Educational establishment – pre-school, primary or high school (for restricted access recreation zoning)
- Educational establishment - tertiary institution / college
- Equestrian facility
- Group or organised camp
- Home business
- Land fill site
- Land management facility
- Major service conduits
- Major utility installation
- Nature conservation area
- Other indoor recreation facility
- Other outdoor recreation centre
- Pedestrian plaza
- Plantation forestry
- Playing field
- Public transport facility (other than Services zoning)
- Railway use
- Religious associated use
- Scientific research establishment (other than office or laboratory space)
- Stock / sale yard
- Tourist facility
- Transport depot
- Woodlot
- Zoological facility
- Any other land use not specified

Some of these uses have a specified rate in one zoning, but is subject to individual assessment in other zonings:

- Corrections facility - 4 spaces per 100m<sup>2</sup> GFA in the 'Other' zoning category
- Educational establishment (pre-school, primary or high school) - 0.08 / student + 0.4 set-down / pick-up / 10 students
- Public transport facility - 1 space per peak shift employee in the Services zoning

It is likely that these rates should apply more broadly across other zonings.

**Recommendation 11**

- a. Review validity of assigning rates to some of the uses subject to individual assessment, so as to provide more certainty and consistency for the assessment of these uses.
- b. Correction facility, educational establishment (pre-school, primary or high school) and public transport facility should not be subject to individual assessment. This change will correct inconsistencies in rates used for these uses in *the Code*.
- c. Instigate research and investigation of different rates for primary schools and high schools, as well as specific rates for college and tertiary education. Different rates should apply for primary and secondary schools. The establishment of a rate for colleges, in particular, will assist planning of future schools and colleges.

## 3.0 Parking Data Analysis

### 3.1 Introduction

In order to support and inform the recommendations of changes to *the Code* an analysis of relevant data sources has been undertaken. Analysis has been undertaken on a number of data sources including parking surveys, ABS data and public transport data. A summary of the analysis undertaken is provided in this Chapter and more details are included in Appendix D and E.

### 3.2 Limitations of Existing Data Sources

The existing data sources used in the analyses presented in this Chapter have a number of limitations or shortcomings which need to be addressed in future in order to better monitor changes in parking supply and demand. The primary shortcomings of this data are:

- The parking data surveys undertaken by Environment and Planning Directorate in 2012 and 2014 presented a number of inconsistencies between the data sets. Namely the capacity of the car parks surveyed varied in many instances, some by a considerable quantity (up to 2000 car spaces). Some of these discrepancies can be attributed to changes in the person / company undertaking the survey, modifications in the layout / size of the car parks, miscommunication in survey areas or human error. Consistency in parking data is the key priority in data collection.
- The parking data available for Gungahlin town centre was considered to be impractical for the use of analysis of the changes in parking occupancy due to the extent of development in Gungahlin in recent years. As such, this data has not been analysed in this report.
- The ABS data analysed in this report was collected as part of the 2006 and 2011 Censuses. The forthcoming 2016 Census data will form a better data set and subsequently a more robust analysis when it becomes available.

### 3.3 Parking Data Analysis

#### 3.3.1 Observed parking supply and occupancy

Parking availability at the point of destination greatly influences mode share decisions by commuters and other travellers. The occupancy of parking facilities provides an indication of the existing demand and supply of parking within a given area.

Major centre parking surveys were undertaken for the ACT planning and Land Authority in 2009 and the Environment and Planning Directorate in 2012. These surveys were 'full' surveys, including publicly provided on-street and off-street parking and privately provided off-street parking (but excluding parking provided for residents in basement, under-croft and surface parking areas). The major centres included the City, town centres and the more developed group centres, including Kingston and Manuka, as well as the major employment centres in the Parliamentary Triangle (Parkes) and Barton, and West Deakin. These two surveys were required to count parking supply and demand at each site within defined boundaries between 10am and 12 noon on a mid-week day (Tuesday, Wednesday and Thursday) during a Commonwealth/ACT Public Service pay week in May and June.

The parking survey undertaken for the Environment and Planning Directorate in 2014 was more limited in its scope, seeking to identify supply and demand changes in publicly provided and private for public pay parking areas in the City and town centres, as well as on-street spaces publicly provided in these centres. This survey looked at parking supply and demand for selected carparks on Thursdays and Saturdays. For the purposes of this review of the ACT Parking Code, a comparison of the publicly provided and the private for public pay parking facilities has been undertaken.

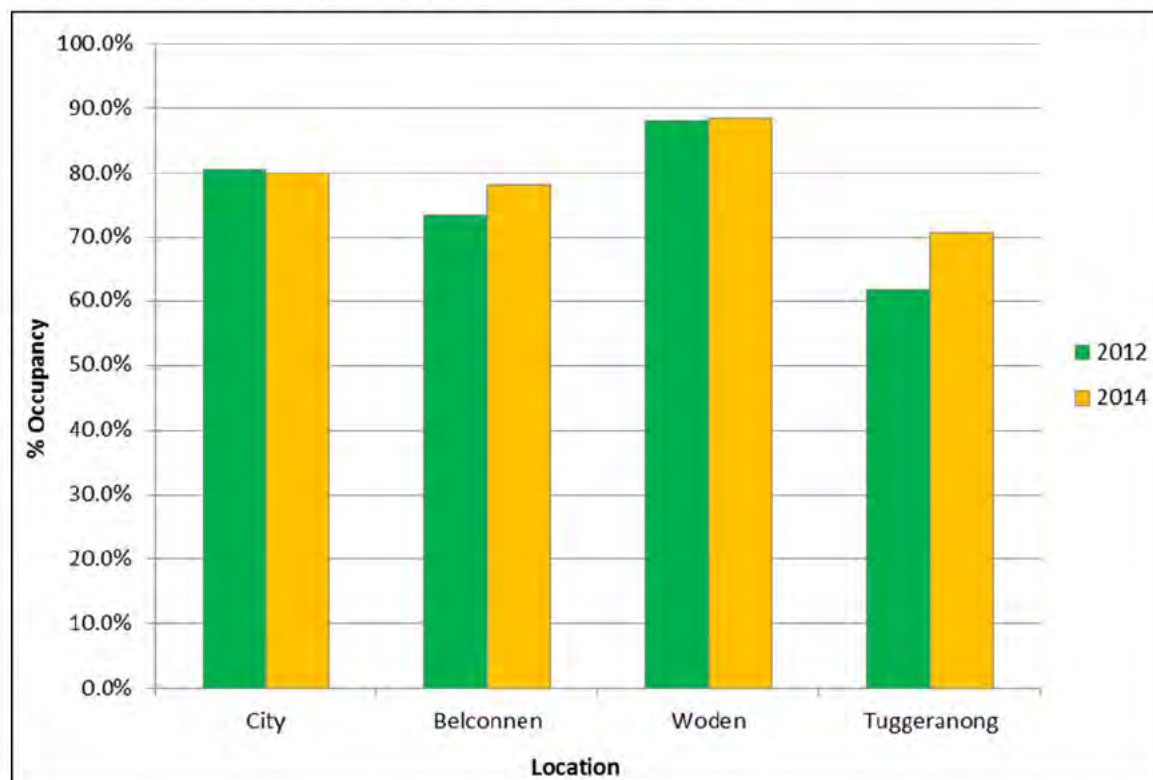
The available 2012 and 2014 parking data for the City, Belconnen, Woden and Tuggeranong town centres has been analysed after corrections to errors in some locations. (The data for Gungahlin town centre have been omitted owing to the reasons stated above). The parking surveys include both long-stay and short-stay parking spaces. For the purposes of the current analysis, most short-stay, on-street parking spaces have been excluded from the data in the following table. The results of the parking surveys are best used as a guide to the current parking trends due to the limitations of the data sets outlined above and because they represent a snapshot of the mid-morning, mid-week day demand. They also do not show peak demand in the major centres, which tends to be during the lunch-time period between 12 noon and 2pm. The comparison of the results of these two parking surveys is summarised in Table 1 and Figure 2 below.

Table 1: ACT Parking Surveys 2012-2014 (modified)

	2012			2014		
	Capacity	Occupancy	% Occupancy	Capacity	Occupancy	% Occupancy
<b>City</b>	13730	11080	80.7%	13540	10830	80.0%
<b>Belconnen</b>	5870	4310	73.4%	5800	4530	78.1%
<b>Woden</b>	6300	5540	87.9%	6140	5430	88.4%
<b>Tuggeranong</b>	4620	2850	61.7%	4550	3220	70.8%

Source: Environment and Planning Directorate Parking Survey 2012 and 2014

It is also worth noting that the apparent spare capacity in publicly available parking areas is mostly found in the more peripheral carparks (other than the main retail centre parking structures, where casual parking fees are highest) in each of the major centres.



Source: Environment and Planning Directorate Parking Survey 2012 and 2014

Figure 2: Parking Occupancy (2012-2014)

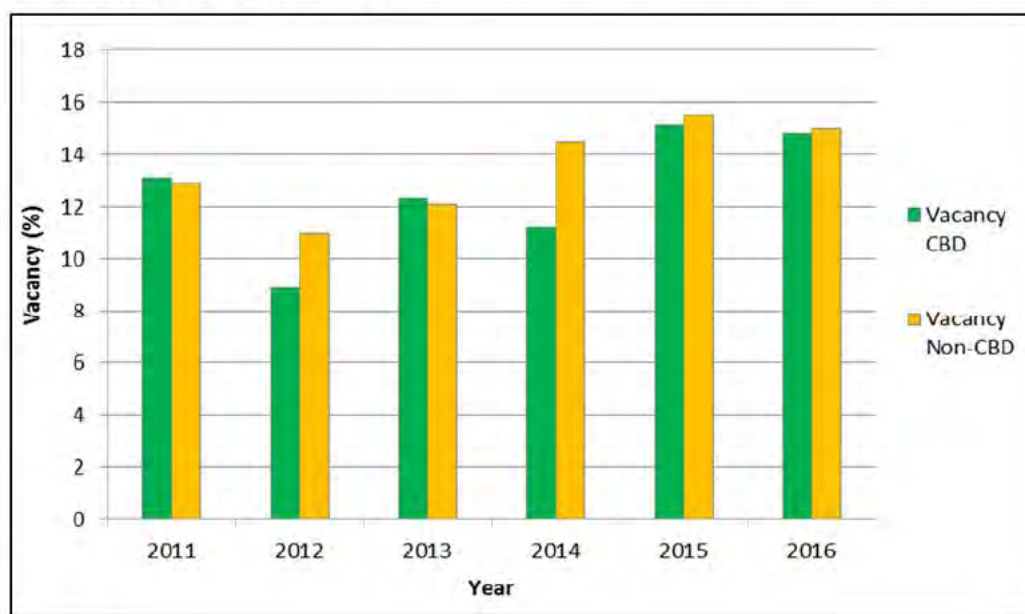


Allowing for a level of error in any parking survey, the results indicate that parking demand was relatively stable in the City and Woden between 2012 and 2014. There was an increase in parking demand between 3-8% in Belconnen and Tuggeranong in the same period. This is probably largely attributable to the occupation of new offices for the Commonwealth Department of Human Services in Greenway (Tuggeranong town centre) and the consolidation of the former Departments of Customs and Immigration into the Australian Border Force in Belconnen. It should be noted that these results only represent single points in time and therefore are only indicative of the actual demands and occupancy of parking in these locations. Further, the limitation stated in the section above should be considered when interpreting this information.

It is also impractical to operate car parks at 100% occupation levels as empty spaces are generally not easy to find when occupancies exceed 85% for car parks which do not use a parking guidance system.

### 3.3.2 Office vacancy

The percentage of office vacancies within the ACT is calculated by the Property Council of Australia twice per year. A summary of the office vacancies between 2011 and 2016 is provided in Figure 3 below. An analysis of the office vacancy data provides an indication of a likely reason for fluctuations in parking demand in the Canberra CBD and the non-CBD town centres, other than that due to changes in mode use for example.



Source: Property Council of Australia

Figure 3: Office Vacancy Percentage (2011-2016)

The office vacancy data indicates a general increase in the office vacancy percentage in the ACT between 2011 and 2015, before a small decrease in 2016. The increases in vacancies between 2012 and 2014 impacted parking demand and occupancy in Canberra's centres.

## 3.4 ABS Data Analysis

### 3.4.1 Journey to work

An analysis of journey to work (JTW) data from the 2011 Census was undertaken to determine the peak vehicular movements between the town centres within the ACT. This data was sourced from the Australian Bureau of Statistics. For the analysis undertaken the data examined included the town centre JTW data and the JTW data of the bordering suburbs to each of the town centres. The suburbs analysed in the JTW analysis are summarised in Table 2 on the next page.



Table 2: JTW Analysis Suburbs

	City	Belconnen	Gungahlin	Woden	Tuggeranong
Suburbs	City	Belconnen	Gungahlin	Phillip	Greenway
	Acton	Page	Palmerston	Garran	Kambah
	Reid	Florey	Ngunnawal	O'Malley	Wanniassa
	Braddon	Evatt	Amaroo	Mawson	Oxley
	Turner	McKellar	Forde	Pearce	Monash
		Lawson	Harrison	Chifley	Bonython
		Bruce	Franklin	Lyons	
		Macquarie		Curtin	
				Hughes	

Source: AECOM

It should be noted that Journey to Work data shows all work types including shift workers who may not travel during commuter peaks or require day time parking and that typically on most days about 10% of workers do not travel to work.

Some GIS plots of the analysis of ABS data are included in Appendix D. Some summary data and commentary from this analysis follows.

The key notable findings of the JTW analysis are as follows:

- Approximately 44% of the workforce analysed live and work in the same area and drive by car.
- The greatest proportion of the workforce moving between town centres for their JTW was from Gungahlin to the City (NB: this data was collected when Gungahlin did not have any significant commercial development).
- Approximately 40% of the workforce analysed travelled to work in the City.
- A low proportion (approximately 23%) of the workforce analysed travelled between the other town centres (excluding City) for their JTW.

Table 3 summarises the car driver JTW trip distribution for 2011, for the suburbs shown in Table 2.

Table 3: Journey to Work Car Driver Matrix (2011)

		To				
		Belconnen	Gungahlin	City	Tuggeranong	Woden
From	Belconnen	4160	222	3333	279	782
	Gungahlin	2236	2370	4660	296	950
	City	403	37	3563	118	396
	Tuggeranong	678	40	2776	4370	2867
	Woden	461	19	2296	687	3777

Source: ABS 2011 JTW

### 3.4.2 Car ownership / vehicle occupancy / mode share / household population

An analysis of car ownership, vehicle occupancy and mode share data from the 2006 and 2011 Census was undertaken to better understand car ownership, occupancy and mode share in the town centres within the ACT. As with the previous ABS data analysis, the data was extracted for the town centres and suburbs bordering the town centres, as shown in Table 2 above.

The analysis of car ownership data indicated the following key statistics:

- The greatest % increase in car ownership between 2006 and 2011 occurred in the Woden area, with an increase of approximately 6%.
- The average vehicle ownership per household was found to be generally higher for the town centres the furthest from the City geographically (Gungahlin and Tuggeranong).
- The City had an average vehicle ownership of approximately 1.12 veh/household in 2011.
- Woden had an average vehicle ownership of approximately 1.57 veh/household in 2011.
- Belconnen had an average vehicle ownership of approximately 1.64 veh/household in 2011.
- Gungahlin had an average vehicle ownership of approximately 1.80 veh/household in 2011.
- Tuggeranong had an average vehicle ownership of approximately 1.86 veh/household in 2011.
- There is a correlation between the average vehicle ownership for a town centre and the average travel time from a town centre to the City.

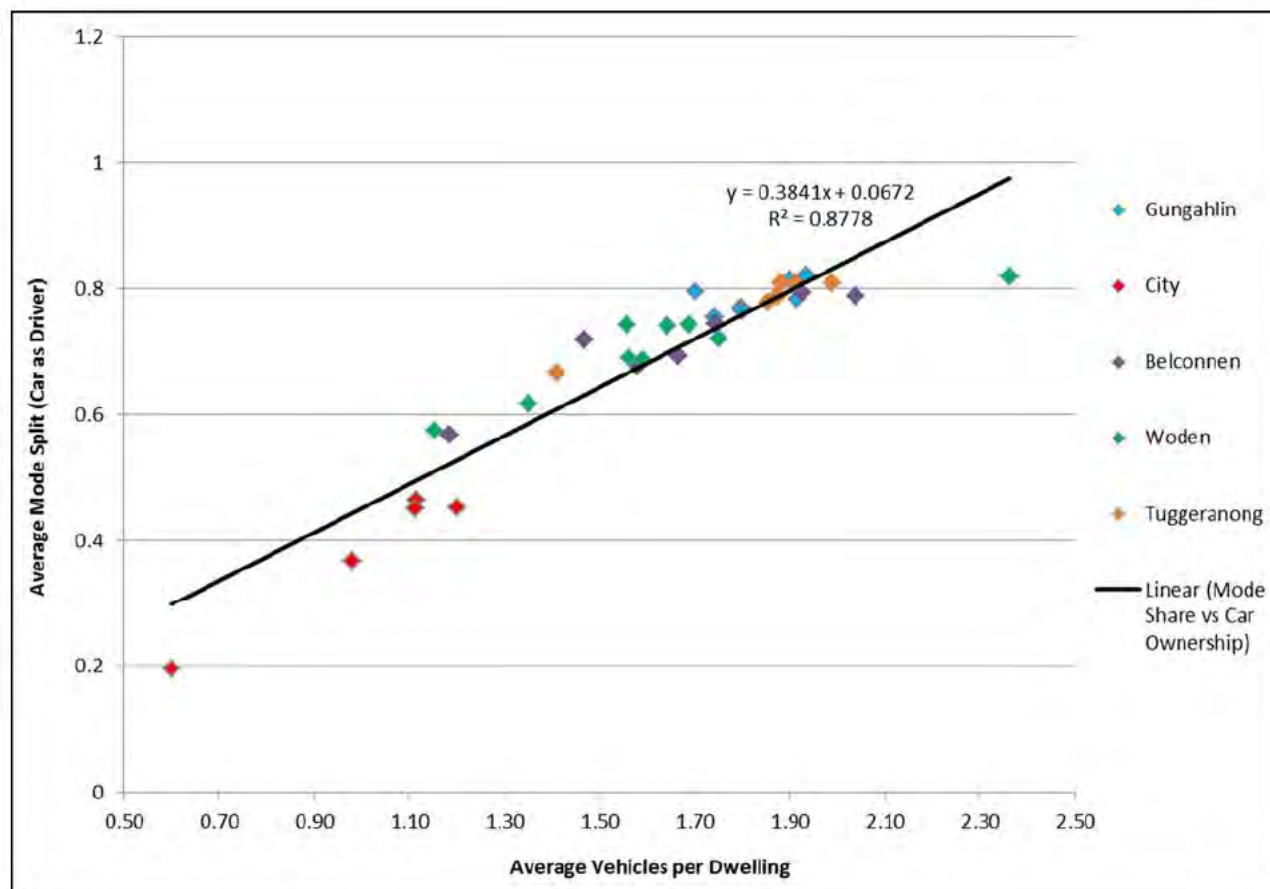
The analysis of vehicle occupancy data for journey to work trips (ie. vehicles with passengers as well as drivers) indicated the following key statistics:

- The greatest reduction in car mode share by destination between 2006 and 2011 was found for the City, with a reduction of 2.6%. All other town centres showed minor increases in the % of car mode.
- The average car occupancy by destination was found to increase for all town centres between 2006 and 2011. The greatest increases were noted for Tuggeranong and Woden with increases of 5.5% and 4.8% respectively.

The analysis of mode share data indicated the following key statistics:

- The greatest % decrease in “car as driver” mode share between 2006 and 2011 occurred in the City, with a decrease in car usage of approximately 0.88%.
- The greatest % increase in “car as driver” mode share between 2006 and 2011 occurred in the Gungahlin area, with an increase in car usage of approximately 0.86%.
- The City had an average mode share (car as driver) of approximately 42% in 2011.
- Woden had an average mode share (car as driver) of approximately 70% in 2011.
- Belconnen had an average mode share (car as driver) of approximately 71% in 2011.
- Gungahlin had an average mode share (car as driver) of approximately 78% in 2011.
- Tuggeranong had an average mode share (car as driver) of approximately 79% in 2011.

Regression analysis was undertaken between the number of vehicles per dwelling and the percentage of mode share (car as driver) for each of the suburbs listed in Table 2. The results of the analysis can be seen in the graph in Figure 4. The trend line from the analysis indicates a very strong linear relationship between the data sets. The results of this analysis indicate that the increase in the average number of vehicles per dwelling directly relates to an increase in the average mode share (car as driver) in that location.



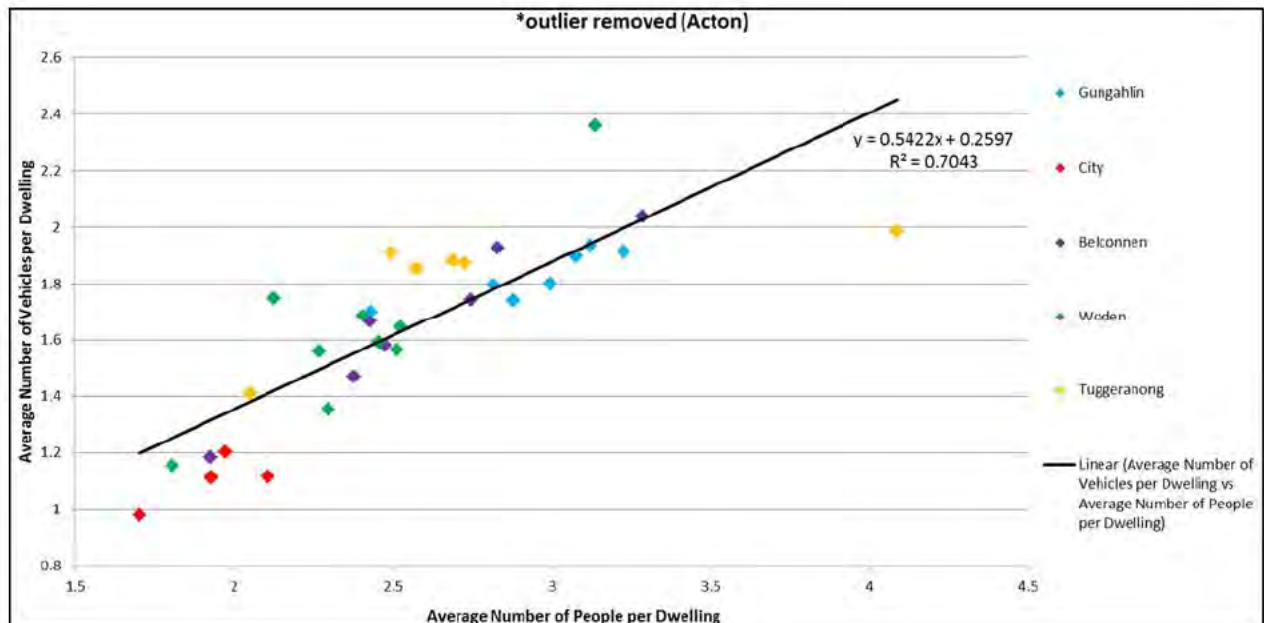
Source: ABS 2011 and AECOM

Figure 4: Vehicles per Dwelling vs Journey to Work Mode Share (2011)

The analysis of the household population data indicated the following key statistics:

- There was an average percentage decrease in the number of persons per household for each of the town centre areas assessed.
- The greatest % decrease in the number of persons per household between 2006 and 2011 occurred in the Gungahlin, with a decrease in average persons of approximately 8.3%.
- It was noted that the average household population generally increased the further the suburb was located from the City centre.
- The City had an average number of persons per dwelling of approximately 1.94 in 2011.
- Woden had an average number of persons per dwelling of approximately 2.34 in 2011.
- Belconnen had an average number of persons per dwelling of approximately 2.54 in 2011.
- Tuggeranong had an average number of persons per dwelling of approximately 2.69 in 2011.
- Gungahlin had an average number of persons per dwelling of approximately 2.85 in 2011.

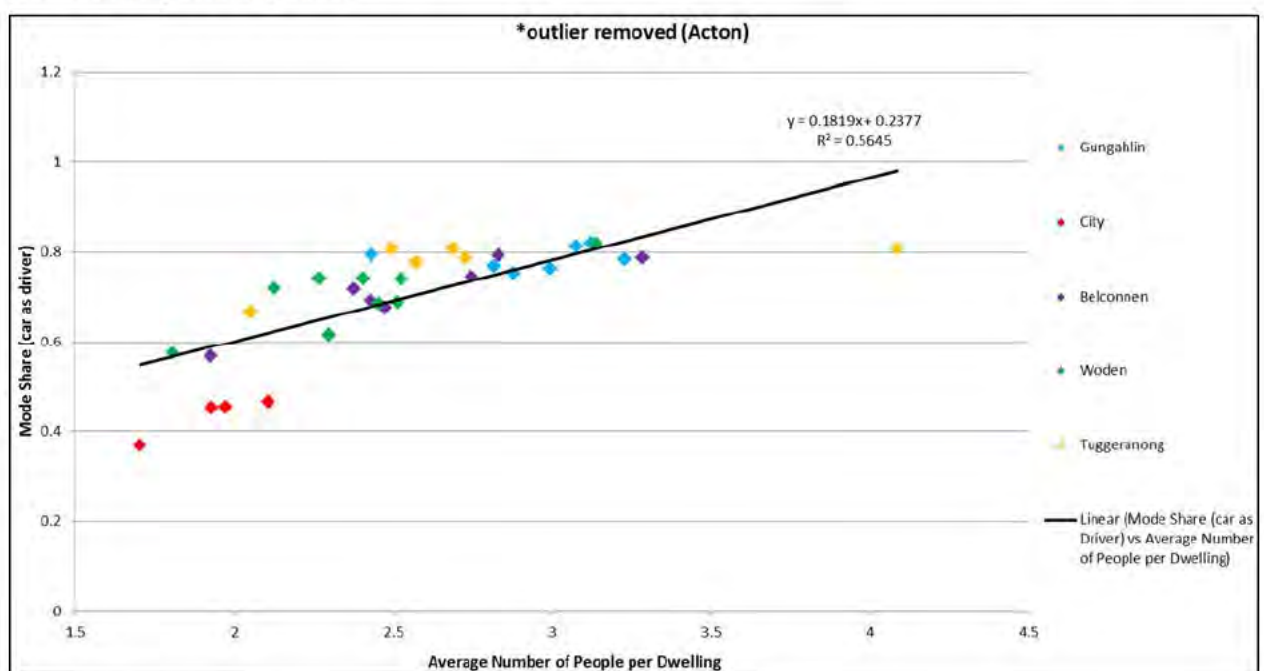
Regression analysis was undertaken between the number of vehicles per dwelling and the number of persons per dwelling for each of the suburbs listed in Table 2. The results of the analysis can be seen in the graph in Figure 5. The trend line from the analysis indicates a strong linear relationship between the data sets. The results of this analysis indicate that the increase in the average number of persons per dwelling generally relates to an increase in the average number of vehicles per dwelling in that location.



Source: ABS 2011 and AECOM

Figure 5: Vehicles per Dwelling vs People per Dwelling (2011)

Regression analysis was also undertaken between the average mode share (car as driver) and the number of persons per dwelling for each of the suburbs listed in Table 2. The results of the analysis can be seen in the graph in Figure 6. The trend line from the analysis indicates a moderate strength linear relationship between the data sets. The results of this analysis indicate that an increase in the average number of persons per dwelling generally relates to an increase in the average mode share (car as driver) in that location.



Source: ABS 2011 and AECOM

Figure 6: Mode Share (car as driver) vs People per Dwelling (2011)



### 3.5 Public Transport Accessibility Level Analysis

The Public Transport Accessibility Level (PTAL) analysis is a method of measuring the accessibility of a single point to the public transport network by assessing the walk access time and the service availability from a singular location. This analysis method provides in essence a density plot of the accessibility of the public transport network to urban development.

The advantages of PTAL are:

- It implicitly reflects the reliability for multiple modes of public transport (could be modified for future light rail applications).
- It is a proven methodology given its established usage in the UK.
- It considers the actual frequency of public transport rather than frequency bands.
- It can optionally incorporate topographical impacts (i.e. steep gradients) - this was not incorporated into the analysis in this report.







The shortfalls of the PTAL analysis are:

- The walking distances used for the analysis are not accurate. Distances “as the crow flies” were used due to limitations in the existing GIS pedestrian network provided by TCCS.
- The analysis was only performed for AM peak directional services.
- The analysis does not consider the public transport services destination; only the service frequency.
- It does not consider the relative attractiveness of different types of public transport services (e.g. local versus express).
- The relative accuracy of the analysis is affected by the size of the Blocks in the Territory Plan; the smaller the blocks the more accurate, as distance to bus stops is measured from the centroid of Blocks.

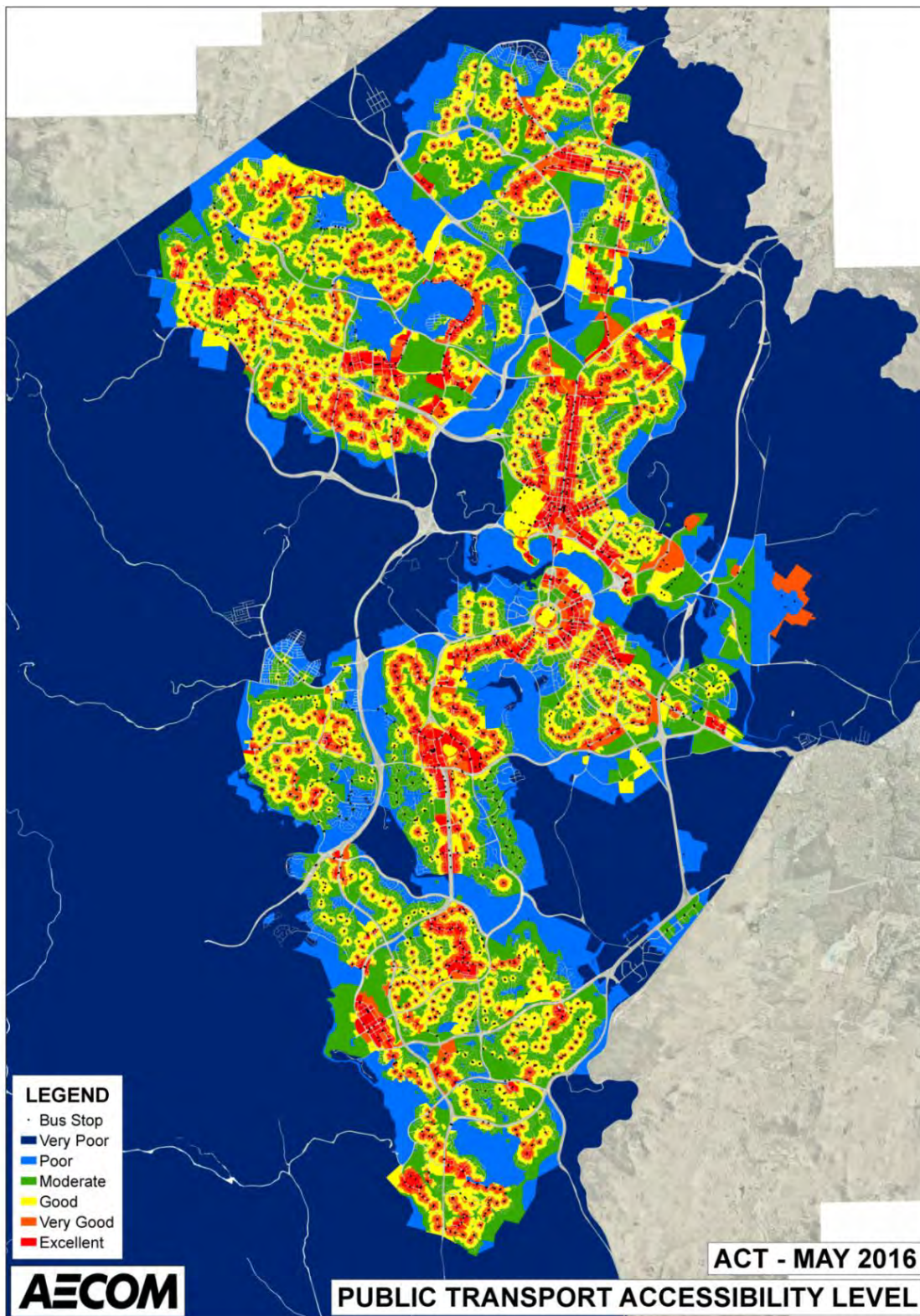
A number of formulas and calculations are utilised to determine the PTAL score for each ACT city Block. The key components are the walk access time from each Block and the average wait time from each bus stop. The walk access time is determined via the total distance to a bus stop. A walk speed of 4.8 km/h was used to reflect an average person. The average wait time is calculated as the time between a passenger arriving at an access point and the departure of the next service. For example, a ten minute service frequency would have an average wait time of five minutes.

The model determines the walk access time and average wait time for each point of interest in relation to the nearest 10 service access points (bus stops). A limit of 10 service access points was set to reduce the total calculation time for the model. As of May 2016 there were 2580 bus stops (service access points) and 131,000 Blocks (points of interest) in the ACT. A reliability factor of 2min was applied for bus arrivals. Using these parameters the key factors are determined to calculate the equivalent doorstep frequency which is used to determine each Block's accessibility index (PTAL). Six accessibility levels were set for the visual mapping; they are summarised in Table 4.

Table 4: PTAL Index Ranges

PTAL	Range of Index	Map Colour	Access Description
1	0-2		Very Poor
2	2-3		Poor
3	3-4		Moderate
4	4-5		Good
5	5-6		Very Good
6	6+		Excellent

The above methodology was used to develop a PTAL model for the entire ACT. The output of the model for the whole of the Canberra urban area is shown in Figure 7. More detailed PTAL maps of each of the town centres were also developed and are provided in Appendix E.



Source: AECOM

**Figure 7: ACT Public Transport Accessibility Level Map**



### 3.5.1 PTAL regression analysis

Regression analysis plots were produced to determine the relationship between the PTAL indices for a given location and key statistics from ABS data. This analysis is limited by the difference in the age of the data analysed as the PTAL indices were developed in 2016 and the ABS data was collected in 2011. The R-squared value provides an estimate of the strength of the relationship between the two data sets.

A plot of the relationship between the average PTAL indices and the percentage of mode share for each of the suburbs listed in Table 2 has been undertaken and is shown in Figure 8. The graph indicates that there is a relationship between average PTAL rating and the average mode share for the suburbs analysed. The trend line from the analysis indicates a moderate strength relationship between two data sets. This relationship can be attributed to the fact that there are multiple factors that influence mode share, however it is clear from this regression analysis that the accessibility to and frequency of public transport services is one of these influential factors.

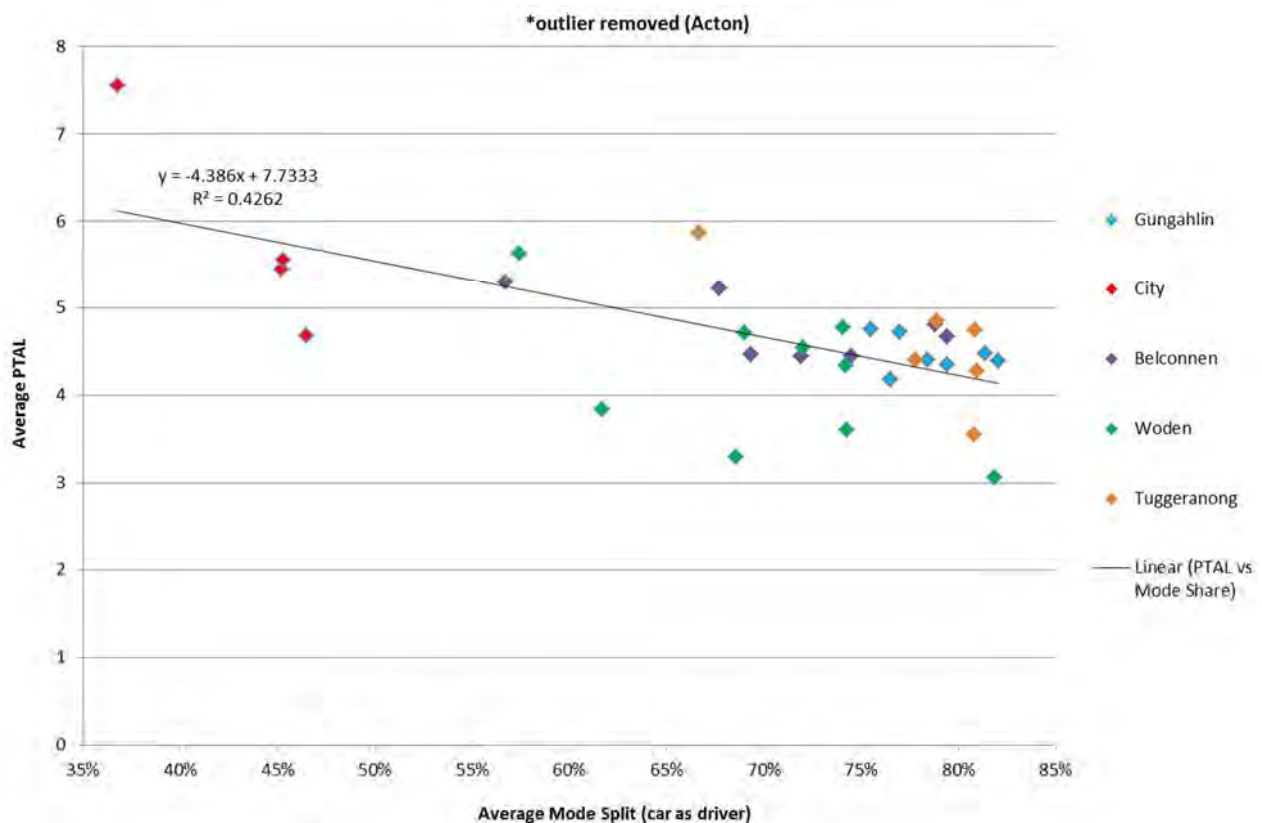
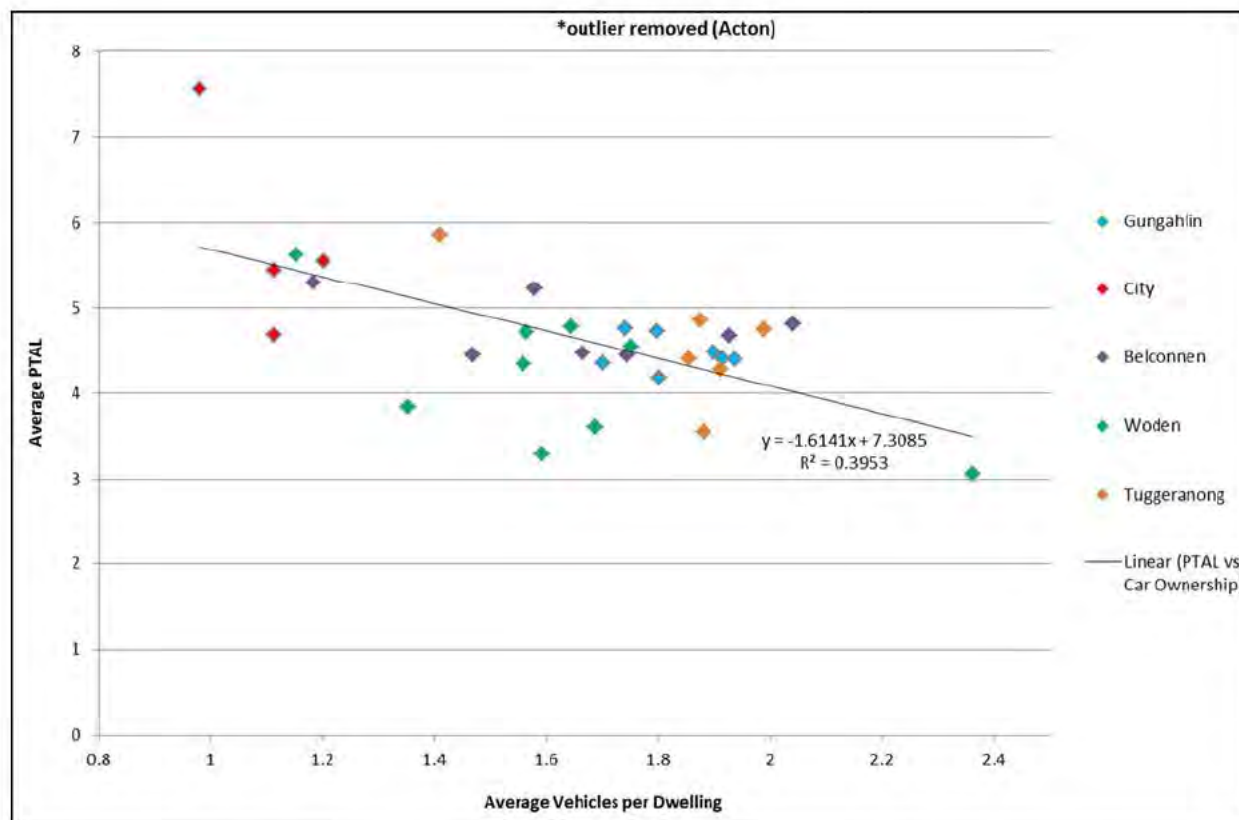


Figure 8: PTAL vs Mode Share

A second PTAL regression relationship was discovered between the average PTAL indices and the average number of vehicles per dwelling for each of the suburbs listed in Table 2, as shown in Figure 9 overleaf. The graph indicates that there is a relationship between average PTAL rating and the vehicle ownership for the suburbs analysed. The trend line from the analysis indicates a moderate relationship between two data sets. Similarly to the relationship shown above, the relationship can also be attributed to the fact that there are multiple factors that influence vehicle ownership and mode choice other than PTAL; however it is clear from this regression analysis that the accessibility to and frequency of public transport services is one of these influential factors.



Source: ABS 2011 and AECOM

Figure 9: PTAL vs Vehicles per Dwelling

### 3.6 Other GIS Public Transport Accessibility Analysis Methods

There are a number of other methods of analysing public transport, public facilities and accessibility within a geographic region. These analysis methods can be utilised to determine the necessity of car ownership in a particular location and drive decision making on parking rates or policies. Two additional forms of analysis that are recommended for use in this decision making process are outlined below.

#### 3.6.1 Neighbourhood Service Level

The need to own a car is not only related to the coverage of public transport, but also to the availability of essential services within walking distance and a household's population. The Neighbourhood Service Level (NSL) is a determination of how "liveable" a location is in terms of access to various fundamental services. The determination of fundamental services used in the analysis is specific to the region of analysis or the perception of the basic needs of a community or neighbourhood. Typical fundamental services include the following:

- ATM/Bank
- Post Office
- Supermarket
- Newsagent
- Chemist
- Schools/Hospitals etc.



The general approach for this type of analysis is to determine the key parameters for walking accessibility for these services. For example, areas with a high NSL would be defined as having less than a 400 m walking distance to greater than 10 fundamental services. Further to this, the weighting of the core services can be scaled depending on the importance or the priority of a particular service. From these key steps a rating scale / range can be developed and applied to a map of the area of analysis. An example of a Neighbourhood Service Level Plan for the Sydney CBD can be seen in Figure 10 below.

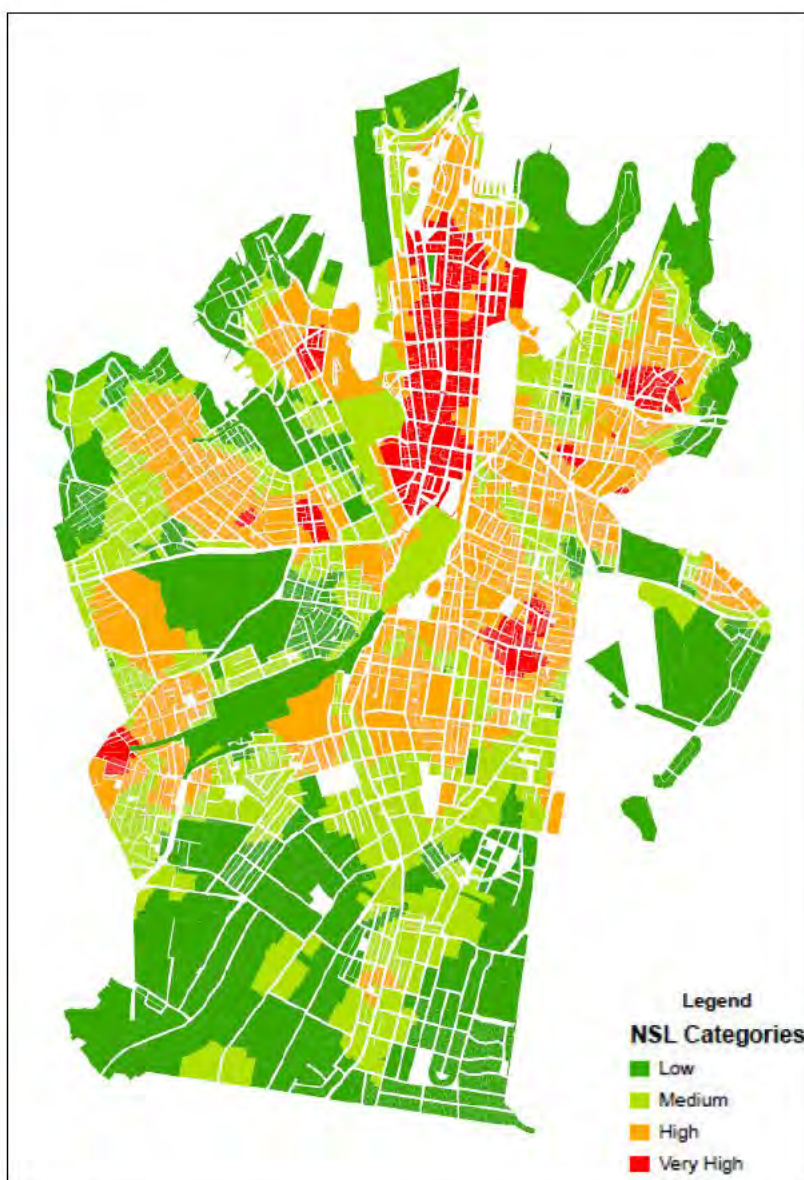


Figure 10: Example Neighbourhood Service Level Plan

### 3.6.2 Land Use and Transportation Index

The two key factors that relate to parking requirements for a particular location are the availability of reliable and frequent public transport services and the access to key essential services. The Land Use and Transportation Index (LUTI) is a combination of the PTAL indices and the NSL indices. PTAL and NSL are combined in a matrix to determine the range for the LUTI results. An example output plan for a LUTI analysis for the Sydney CBD is shown in Figure 11.



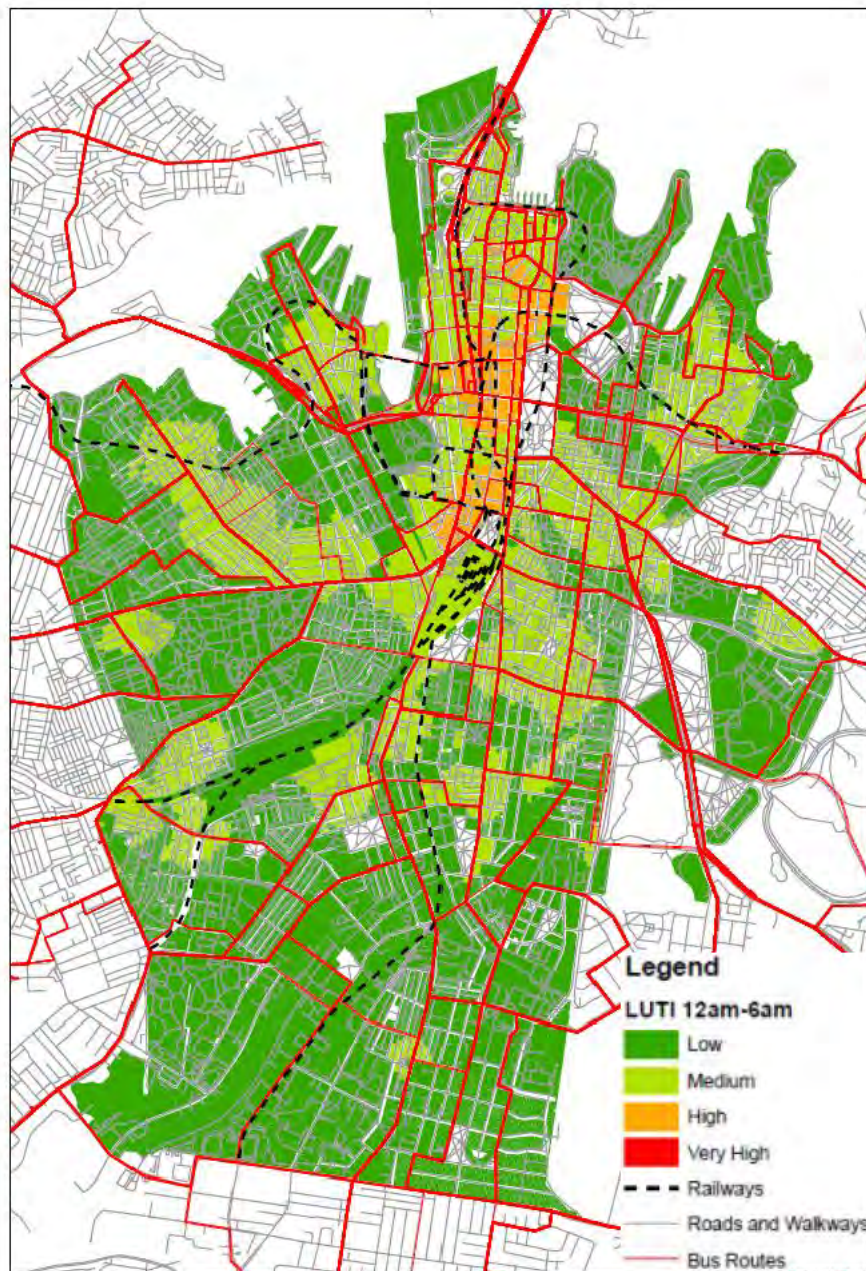


Figure 11: Example Land Use and Transport Index Plan

## 4.0 International Codes and Good Practice

### 4.1 Introduction

The process of improving parking codes involves finding a balance between flexibility (avoiding unintended consequences related to particular site situations) and predictability (providing an understandable expression of the rules of the game to all stakeholders). The goal is to reduce unintended urban form consequences and ensure that codes are supporting urban planning and transport policy goals.

The social, economic, and environmental harms created by over-requiring parking are substantial. Moreover, the risks of not requiring enough parking are less serious than many believe, and they can be minimised with parking management strategies, such as shared parking and on-street parking controls. Where to come down on the balance of “too much” and “not enough” has everything to do with local context and policy goals.

According to Willson parking requirements stand in the way of making cities liveable, equitable and sustainable'. In his book 'Parking Reform made Easy' Willson states that the need for parking requirements for land use zoning is 'the most wasteful elements of transportation and land use systems'. This is especially relevant in the Canberra, where the city has a minimum requirement for parking in its parking code.

The use of parking requirements for many developments in particular shopping centres or the like often leave spaces underutilised and in some cases specify requirements greater than the amount of parking used. This current approach to parking leads to much of the available parking supply to be underutilised and for parking infrastructure to be over built and over supplied. This also leads to inefficient sharing of parking amongst various land uses, which also affects the liveability, urban form of cities and the environment. However, with reform to parking policy and requirements it is possible for parking requirements to encourage certain types of developments depending on their access to parking or their proximity to transport.

In Willson (2013) a number of parking code initiatives are identified, such as:

- The measuring of existing parking utilisation. This is measured as a rate such as square metres of an occupied building area or per residential apartment.
- The consideration for future parking utilisation. This involves considering how regional trends will affect future parking utilisation levels.
- The beginning of moving from utilisation rates to prospective parking requirements. This requires a policy choice about whether parking requirements should be based on the expected average use or other values such as the 33<sup>rd</sup> or 85<sup>th</sup> percentile use levels.
- The adjusting of the prospective parking requirement to account for the particular characteristics of the project or land use category and area land use and transport conditions (e.g. less parking near bus stops).
- Taking account of market conditions and policies regarding parking pricing, unbundling of parking costs from rents, or parking cash-in-lieu programs.
- Consideration of plans for facilities and programs to increase public transport and shuttle services, cycling and walking; improvements to other travel modes can reduce parking use levels and justify an adjustment to parking requirements.
- Assessing the impacts of local practices and policies that affect the efficiency of car spaces and how they are used.
- The recognition for new development that existing public parking can justify a reduction in the parking requirement.
- The conduct of a shared-parking analysis, which applies when parking requirements are being developed for mixed-use zoning categories or blended requirements.

- The evaluation of the prospective parking requirements from a shared parking analysis and consideration of whether it supports community goal and plans. These plans take into account transport, design, urban form, economic development, environmental sustainability and social equity considerations. A community like Canberra would be able to create a system where parking reflects the communities' goals.
- Addressing regulations about the minimum size of parking spaces to allow an efficient yield of spaces per square metre of parking area.
- The consideration of regulations allowing for tandem parking, valet parking and automated parking. These measures can increase the yield of parking spaces per square metre of parking area, with policies allowing these measures, differentiated by land use category and local conditions.

There are a number of reasons for such initiatives to parking codes. Firstly, these reforms form part of the 'Smart Growth' or good urbanism ideology which is common in many cities around the world, where cities can become liveable places with characteristics of compact urban. Smart Growth incorporates:

- Pedestrianism,
- Environmental sustainability,
- Social, economic and land use diversity,
- Connectedness,
- Good public spaces,
- Equitable access to services, and
- Support of human health.

Secondly, they enable a better interconnection between parking requirements, transport, sustainability, economy and urban design and form. They enable an alternative to setting a parking requirement based on a neighbouring city's requirement or a national average and aim to:

- Establish parking requirements for particular zones such as:
  - Land use category,
  - A district or,
  - A particular project.
- Develop parking codes which vary by context features, such as public transport accessibility, mixed-land uses and density.
- Integrate parking reform with regional planning and modelling activities.
- Work with stakeholders and the community to achieve a parking code which reflects the communities view on parking and accessibility.

The initiatives enable an incremental approach to parking reform. This allows planners to rethink parking requirements while they consider the basic organisation and functioning of the code. It also engenders changed travel habits towards private transportation and makes private transportation to be viewed as only one of the options of travel and not the only option.



## 4.2 Parking Reforms

Some Australian cities have undertaken reforms to their parking codes and begun transition towards managing car parking supply and demand and moving away from car parking demand satisfaction. Similar parking code reforms have been evident for many years in UK, USA and European cities. UK led the way by implementing sustainable transport policies at a national level and supporting this by changes in their parking codes. Common parking code reforms implemented in USA and European cities include:

- Maximum parking rates rather than minimum parking rates.
- No parking rates and allow commercial forces to determine parking provision.
- Merit based assessment.
- Reduced parking rate for development depending upon proximity to public transport.
- Reduced parking through car-pooling, car share and other related schemes.
- Reductions for green travel or active travel plans.
- Substitution of car parking (e.g. for bike sharing schemes).

Some reforms to *the ACT Code* are needed to help reduce the potential impacts of more cars in urban areas, consistent with ACT Government policies.

Reforms are needed to parking codes to help reduce the potential impacts of more cars in urban areas, consistent with ACT Government policies. Parking code reforms are slowly occurring in Australian cities, but have been evident for many years in UK, US and European cities. UK led the way by implementing sustainable transport policies at a National level, including policies that have affected parking Codes. Some examples implemented in US and European cities are provided in Table 5, with more details provided in the report addendum<sup>1</sup>.

Table 5: Initial Summary of Some Parking Reforms

Reform	Cities	Comments
<b>Maximum parking rates rather than minimum parking rates</b>	San Francisco, Sacramento, Seattle and New York	New developments in designated areas do not require to provide on site parking with no minimum rate applying in general. The elimination of car parking requirements reflects the need to minimise and reduce vehicle traffic and congestion for the purpose of providing a better liveable urban environment for people rather than for cars.  Mobile phone applications (apps, such as <i>SFpark</i> ) are available to the general public (requiring subscription) identifying the location of vacant car parks, thereby for maximising parking occupancy and reducing traffic circulation and congestion.
<b>No parking rates</b>	London and local Borough Councils and other UK Cities (Newcastle upon Tyne, Liverpool and Manchester)	There are no minimum requirements for most developments. Nearly all reports rely on the TRICS database (see <a href="http://www.trics.org">www.trics.org</a> ) for parking rates and the database is continually upgraded. The observed parking rate reflect private car usage, access to public transport, availability of vacant car spaces, average people per car etc.
<b>Merit based assessment</b>	The City of Los Angeles (in California)	The City of Los Angeles has parking regulations (requirements) for many "common" landuses. Parking variances (term used in their planning scheme) is permitted on a project to project basis and generally requires a detailed parking assessment. The acceptance of the parking variance is at the discretion of The City of Los Angeles.

<sup>1</sup> A separate background report by AECOM provides more details of the review of international and interstate codes. The Addendum is entitled "A Review of International and Interstate Parking Codes", AECOM, November 2016.



Reform	Cities	Comments
<b>Reduced parking rate for development depending upon proximity to public transport</b>	Portland in Oregon (USA)	The parking requirements are dependent upon proximity to public transport: "For sites located less than 1500 feet from a transit station or less than 500 feet from a transit street with 20-minute peak hour service, the minimum parking requirement standards apply".
<b>Reduced parking through car pooling and other related schemes</b>	Portland in Oregon (USA)	Substitution of car sharing spaces for required parking is allowed if all of the following are met: a. For every car-sharing parking space that is provided, the motor vehicle parking requirement is reduced by two spaces, up to a maximum of 25 percent of the required parking spaces; b. The car-sharing parking spaces must be shown on the building plans; and c. A copy of the car-sharing agreement between the property owner and the car sharing company must be submitted with the building permit.
	Travel Plans in the UK are a measure to allow for reduced parking provision for medium to large developments.	A Travel Plan is a management strategy for a site that seeks to deliver sustainable transport objectives. It involves identifying an appropriate set of measures aimed at promoting sustainable travel, with an emphasis on reducing reliance on single occupancy car journeys. Travel plans can assist in increasing accessibility whilst reducing congestion, greenhouse gas emissions, local air pollution and noise.
	Car share schemes (carpooling) UK	Policy based car share schemes are encouraged by many Councils in England. Development applications with car share schemes fall under a merit based assessment where Council may accept a small reduction in car spaces.
<b>Substitution of car parking</b>	Portland Oregon (USA)	Substitution of a bike sharing facility for required parking. Substitution of a bike sharing facility for required parking is allowed if all of the following are met: a. A bike sharing station providing 15 docks and eight shared bicycles reduces the motor vehicle parking requirement by three spaces. The provision of each addition of four docks and two shared bicycles reduces the motor vehicle parking requirement by an additional space, up to a maximum of 25 percent of the required parking spaces; b. The bike sharing facility must be adjacent to, and visible from the street, and must be publicly accessible; c. The bike sharing facility must be shown on the building plans; and d. Bike sharing agreement. (i) The property owner must have a bike sharing agreement with a bike-sharing company; ii) The bike sharing agreement must be approved by the Portland Bureau of Transportation.

## 5.0 Interstate Codes

### 5.1 Introduction

A review of a selection of parking codes was undertaken in other jurisdictions within Australia. The purpose of this review was to identify key differences, initiatives or applications to parking codes that could be considered for application to the ACT, particularly in relation to making it easier to use and enable better alignment with sustainable transport policies.

In determining suitable jurisdictions consideration was given to current and future populations, urban form and public transport accessibility profiles comparable to the ACT, as well as jurisdictions with innovative changes to their codes in recent years. This was directed by discussions with local AECOM transport professionals in each State and Territory.

While comparison in terms of population, density, accessibility to public transport or city area typically desirable, to ensure suitability of application, our research found that of good examples of modern parking codes were typically associated with jurisdictions that have higher population density or greater congestion or accessibility to public transport.

The review was primarily concerned with the structure and processes associated with *the Code*. Parking rates from interstate codes were also reviewed in comparison to the existing ACT Parking Code rates. To enable consistency in the review, a comparison framework against the ACT Code was developed, using the following key code attributes:

- Character of jurisdiction
- Broader policy context
- Structure and content
- General approach – number of car parking spaces
- General approach – location of car parking spaces
- Current residential rates
- Current commercial rates
- Other forms of parking
- Provision for offsets
- Recognition of parking innovation
- Interface with other forms of transport

### 5.2 Overview of Key Aspects of Codes

In undertaking the interstate jurisdiction reviews, some of the key queries as part of this review were:

- How their Code integrates into their planning scheme (or equivalent).
- What mechanisms they used for differentiating parking areas/zones; is it land use based or proximity based.
- How is parking provision controlled / regulated? Do they have parking maximums, ranges? Does the jurisdiction have a sustainable or active travel mode share target? How does the parking code align / influence the parking code?
- Does the code / legislation allow for payment in lieu? How are special areas such as major shopping precincts assessed? Do they have separate dispensation / application of the code or their own parking guidelines?
- Do they have a rating for public transport accessibility and does this impact parking rates? (e.g. public transport accessibility level (PTAL), often used in the UK)

Overviews of some of the key comparisons for different jurisdictions are outlined by State and jurisdiction in the remainder of this Chapter. Detailed summary tables that formed the basis of this overview are included in the report addendum.

The comparisons include some commentary on the provision rates for residential and commercial uses. A more detailed comparison of all uses is included in the report addendum. A summary of parking code reforms is included in Section 5.9.2, with an indication of the cities where it is effectively utilised and some commentary.

The jurisdictions selected for further explanation were:

- Gold Coast City Council, Brisbane City Plan - Queensland
- City of Darwin Council – Northern Territory
- Marrickville Council, Waverley Council, Liverpool Council, Waverley Council, Parramatta City Council, City of Sydney Council – New South Wales
- City of Perth Council – Western Australia
- Victorian Planning Provisions - Victoria
- South Australia Development Plans (Planning Schemes) – South Australia

Victoria and South Australia have Guidelines that present a state wide framework with the ability for councils to modify and nominated differences as they see fit. As such, the Victorian and South Australian guidelines have been discussed in the state wide context rather than the individual jurisdictions.

### 5.3 Queensland

Recent changes to the Gold Coast and Brisbane parking codes have been influenced by a Queensland Government publication “*Transport Oriented Development Guide*” (Queensland Government 2010). Comments made with regards good practice for parking provision were:

- Manage demand for traffic and parking to ensure it does not compromise pedestrian movement and local amenity.
- Set maximum parking standards and encourage low-car developments.
- Unbundled car parking from the sale of residential dwellings.
- Consolidate and share parking between developments.
- Consider introducing car-share schemes and residential-parking permits.

It provides a base maximum and a preferred maximum parking rate for residential, retail and office land uses in transit orientated development precincts (see Table 6). It encourages planners to adopt the preferred maximum where possible.

**Table 6: Indicative parking rates for transit orientated developments in Queensland**

Precinct types	Residential (car spaces per unit)		Retail and office (square metres per car space)	
	Base maximum	Preferred maximum	Base maximum	Preferred maximum
City centre	0.75	0.5	400	600
Activity centre	1	0.75	100	200
Specialist activity centre	1.25	0.75	100	150
Urban	1	0.75	200	300
Suburban	1.25	1	75	100
Neighbourhood	1.25	1	50	100

Source: “*Transport Oriented Development Guide*” (Queensland Government 2010)

### **5.3.1 Gold Coast City Plan Version 3 (2016) - Transport Code**

#### **5.3.1.1 Jurisdiction summary**

The City of Gold Coast is a linear coastal city with high tourist population, a CBD and other shopping or industrial precincts, with some areas of high density but the majority low density. Light rail has recently been implemented in Gold Coast and this is reflected in their code in the locational requirements set. Gold Coast was selected as it has just undergone an overhaul of its Car Parking, Access and Transport Integration Constraint Codes as part of the release of the City Plan earlier this year (2016). This included a revision to the code layout, content, land use definitions and better integration of “transport” into the parking code.

The Gold Coast code outlines what is required in a parking assessment and traffic impact report. It outlines performance criteria and acceptable solutions for each aspect and allows for development that is Self-Assessable, Code Assessable or Impact Assessable. Parking provision is based on material change of use and car parking minimums. If a development that does not meet specified requirements it may be approved subject to demonstrating compliance with objectives.

Similar to the ACT the planning code is used within the context of a planning scheme. Where a domain or LAP (local area precinct) Place Code contains car parking requirements that differ from this code, the LAP requirements take precedence.

The code outlines performance outcomes and acceptable outcomes which is effectively rules and criteria.

The Gold Coast code is divided into geographic locations within a transport hub area and their distance from light rail stations. This idea could be applied in the ACT in a similar manner. The areas outlined have several sub areas similar to ACT’s town, group and local centre philosophy. It incorporates minimum car parking requirements and endeavours to encourage use of other modes of transport.

The code outlines potential dispensation or reductions in parking supply for travel demand measures such as car sharing, unbundled parking and motorcycle parking. It also outlines the requirements for service vehicles in terms of both GFA and minimum class of service vehicle meaning that not all developments have to cater for Heavy Rigid Vehicles (HRV) which is effectively the case within the ACT presently where no other guidance is provided.

The code includes a map for transport hub areas which qualify for parking rate reductions. It is bound linearly representing where both light rail and bus services intersect. The level of detail is relatively low and could be improved for application within the ACT. Specific provision is made in relation to distances from light rail stations. The Gold Coast City Plan also allows for payment in lieu if certain conditions apply.

The City Plan has a number of external guidelines related to but not incorporated within its codes. These are referred to as fact sheets and practice notes. They provide clarification, guidance and examples of how to apply certain aspects of the City Plan without encumbering the actual code documents. One such example is the practice notes on unbundled car parking. A sample practice note is provided in Appendix F.

#### **5.3.1.2 Comparison of rates**

The key notable differences in the parking rates of the City of Gold Coast Council's parking code and the ACT Code are:

- Residential parking was lower across the board including residential visitor rates – it also set a minimum of 17.5% of spaces to be unbundled.
- The office and retail uses are similar; however, the high density areas within the transport hubs are much lower with a zero requirement for some land uses abutting a light rail platform.

### **5.3.2 Brisbane City Plan - Transport access, parking and servicing code**

#### **5.3.2.1 Jurisdiction summary**

Brisbane City was selected as it is Queensland's largest city and consists of various land use zones and density. The urban characteristics of Brisbane City include a mixture of high density, low density, dense commercial, light commercial and industrial. The city is home to a number of shopping precincts, and is well connected with public transportation which is reflected in the locational requirements and maximum parking rates set. The code outlines what is required within a parking assessment and traffic impact report.

The codes split the jurisdiction into several areas with differing parking provisions rates. Parking rates for residential development are based on their location. All rates are framed as maximums. Commercial rates differentiated relative to type of centre and also zone. All rates are framed as minimums.

Provision requirements for bicycle parking vary depending on their location and proximity to major transport corridors. There is no commentary regarding offsets for particular uses under particular circumstances, other than in relation to car parking when it is in close proximity to bike ways or major public transport interchanges, where Council may consider dispensation upon merit.

#### **5.3.2.2 Comparison of rates**

The key notable differences in the parking rates of the City of Brisbane's parking code and the ACT Code are:

- Residential rates are lower with a combination of maximums within the city core and minimums for most other areas.
- Office and retail rates are typically higher than ACT although similar in local centres or other zones outside town centres.

## **5.4 Northern Territory**

### **5.4.1 City of Darwin Council**

#### **5.4.1.1 Jurisdiction summary**

The Northern Territory is initially categorised into Metropolitan and Regional areas with areas like Jabiru having separate planning schemes. The categories are based on population density, closeness to CBD areas and access to public transport. The planning scheme aims to cover the whole of the Northern Territory.

The Darwin Planning Scheme is categorised into planning zones and sub-zones including residential, commercial, industry, rural, infrastructure and recreation.

Darwin Council provides ample provision of public on-street and off-street parking opportunities and permits throughout the CBD area. As such Council subsidies can be made for discrepancies in parking provisions. Parking requirements ensure that sufficient off-street car parking, constructed to a standard, is conveniently located to service new development sites.

Darwin Council utilises on-street car parking zones in the CBD which include parking time restrictions and variations on hourly parking fees dependant on location.

The planning scheme for the City of Darwin Council does acknowledge and incorporate public transport accessibility into the parking rate requirements and allows for reductions of parking provisions based on the adequacy of access to public transport.

#### **5.4.1.2 Comparison of rates**

The key notable differences in the parking rates of the City of Darwin Council's parking code and the ACT Code are:

- Parking rates provide for a greater differentiation of residential housing types including seniors housing, serviced apartments and independent units.

- Rates are separated into metropolitan and regional areas.
- There is a lower parking rate for seniors housing.
- Commercial parking rates in Darwin CBD are lower.
- Office parking rates in Darwin CBD are higher.

## **5.5 New South Wales**

### **5.5.1 Marrickville Council**

#### **5.5.1.1 Jurisdiction summary**

The Marrickville local government area is a highly urbanised area located six kilometres from the Sydney CBD in Sydney's Inner West. The area consists predominantly of a mixture of low and medium density suburban development and light commercial with the exception of the Newtown area which has intensive activity. The area also has a supply of light industrial land uses and has good connections with public transport; however, traffic congestion is a major issue.

Marrickville local government recognises the strong link between the provision of private and public domain parking and promotes integrated land use and transport planning. The code recognises that parking provision and design can be complemented by parking management measures.

The code is generally structured in the form of performance criteria and acceptable solutions and uses demand management by constraining parking in certain areas with lower parking rates. If a development does not meet the specified requirements but demonstrates compliance with other objectives in Council's DCP it may be approved.

Parking rates for Marrickville local government area are generally set out in a three tier structure depending on their proximity to public transport and their location.

The Marrickville local government parking code also recognises the use of car share and demand management as parking innovation concepts.

#### **5.5.1.2 Comparison of rates**

The key notable differences in the parking rates of the Marrickville Council's parking code and the ACT Code are:

- All rates are framed as minimums.
- Residential rates are generally lower than the ACT Code rates.
- Considers shop-top housing developments and backpackers accommodation within the residential land uses.
- Office rates are lower than the ACT Code rates.
- Office rates are divided into four sub-land uses dependant on the range of total office floor space.

### **5.5.2 Waverley Council**

#### **5.5.2.1 Jurisdiction summary**

The Waverley local government area is an inner ring highly urbanised area located in the eastern suburbs of Sydney. The area consists of localised commercial centres, high tourist population with the national landmark Bondi Beach, a main CBD with other shopping or industrial precincts, some areas of high density and medium to low density.

Waverley Council local government area is divided into parking provision zones, A, B, C and Bondi Junction. These zones are each nominated minimum and maximum parking rates for each of the land uses in the code. In some instances no minimum rate is listed indicating that the rate is market driven in this location.

Waverley Council promotes a sustainable and integrated transport and land use planning approach. The Waverley Council transport policy follows a demand management approach for the area and outlines that a priority for Waverley is to encourage walking, cycling, and the use of public transport. It recognises the strong link between the provision of private and public domain parking and recognises that parking provision and design can be complemented by parking management measures.

The code adopts locational requirements for the delivery of car parking. The locational requirements are based on the location of a development to existing public transport services and the availability of on-street parking. The overall intent of the locational requirements is to balance the need to meet parking demand on site with the need to contain parking and promote sustainable transport.

The Waverley Council code also recognises the use of car share, demand management and maximum parking rates as parking innovation areas.

#### **5.5.2.2 Comparison of rates**

The key notable differences in the parking rates of the Waverley Council's parking code and the ACT Code are:

- Provides rates for a number of other forms of parking including motorcycle parking and bicycle parking.
- Allows for payment in lieu if certain conditions apply which is acceptable under the NSW Planning and Assessment Act 1979.
- Generally residential and commercial parking rates are lower than ACT rates across all land uses.

### **5.5.3 Liverpool Council**

#### **5.5.3.1 Jurisdiction summary**

The Liverpool local government area is located in south-west Sydney on the fringe of the Sydney metropolitan area. The area consists of localised commercial centres with the Liverpool CBD and shopping district being the major centre and with good connections to public transport. The area largely consists of very low density suburban and light industrial land uses with average public transport accessibility.

The Liverpool parking code outlines what is required in a parking assessment and traffic impact report as well as outlining performance criteria and acceptable solutions for design. The code recognises the strong link between the provision of private and public domain parking and recognises that parking provision and design can be complemented by parking management measures.

The code recognises other forms of parking such as motorcycle parking, bicycle parking and disabled parking.

Within the Liverpool CBD the code allows reductions of parking supply for good public transport and pedestrian access, as well as bicycle parking provision with lower parking rates than the rest of the Liverpool LGA.

#### **5.5.3.2 Comparison of rates**

The key notable differences in the parking rates of the Liverpool Council's parking code and the ACT Code are:

- All rates are framed as minimums.
- The code allows for payment in lieu if certain conditions apply which is acceptable under the NSW Planning and Assessment Act 1979.
- Parking rates are separated into the Liverpool CBD Area and the Liverpool Local Government Area.
- Residential and commercial developments had varying rates for ranges of total land uses which simplifies the requirements of the code.
- Typically has a lower number of residential and commercial land use types outlined in their rates.



- In a comparison of rates, the Liverpool Council rates were observed to be similar to or less than the typical ACT parking rates.

#### **5.5.4 Parramatta City Council**

##### **5.5.4.1 Jurisdiction summary**

The City of Parramatta has Sydney's second largest CBD. Parramatta is a high employment area and an educational precinct. The area is undergoing a transformation and development is increasing. The LGA consists of Parramatta CBD (the major commercial area), educational areas (Western Sydney University and Westmead Hospital) and a range of mixed-use, residential and industrial land uses ranging in low, medium and high density.

The Parramatta DCP 2011 in conjunction with Transport for NSW and the NSW State Government collectively promote integrated land use and transport planning. Emerging government policy is moving away from a demand satisfaction to a demand management approach to combat congestion and to increase public transport usage.

The Parramatta City Council code also recognises the use of car share parking and maximum rates within the code.

##### **5.5.4.2 Comparison of Rates**

The key notable differences in the parking rates of the Parramatta Council's parking code and the ACT Code are:

- The Parramatta City Council code is separated into three zones, not within 400 m of public transport, within 400 m of public transport and R4 / B2 zones.
- Maximum rates are provided for R4 / B2 zones in residential and commercial zones.
- Residential rates are similar to or less than ACT parking rates.

#### **5.5.5 City of Sydney Council**

##### **5.5.5.1 Jurisdiction Summary**

The City of Sydney is home to Australia's largest economic area. The city is a high employment area (it is the main employment precinct for the Sydney metropolitan area), educational precinct, tourist area and residential area. The LGA consists of main employment areas within the central CBD area with intensive activity with high public transport accessibility, educational areas (Sydney University, University of Technology Sydney and TAFE Ultimo) near Central and Redfern (along George Street / Broadway / Parramatta Road) where congestion is a major issue. The rest of the City of Sydney LGA consists of areas of medium to high density residential development with good access to public transport.

The Sydney DCP 2012 in conjunction with Transport for NSW and the NSW State Government collectively promote integrated land use and transport planning. Emerging government policy is moving away from a demand satisfaction to a demand management approach to combat congestion and increase public transport usage.

The residential and commercial land uses are split into 6 zones, A-F depending on land use.

Rates are included for other parking options including motorcycles, buses, tandem parking, car share, bicycle parking.

##### **5.5.5.2 Comparison of rates**

The key notable differences in the parking rates of the City of Sydney Council's parking code and the ACT Code are listed as follows:

- Rates are framed as minimums.
- Residential rates are generally lower than the ACT Code rates.
- Commercial rates are generally lower than the ACT Code rates.
- Has a detailed outline of bicycle parking rates for varying land uses.

- Car share rates are categorised and listed as minimums.
- Has a detailed outline of service vehicle rates for varying land uses.

## **5.6 Western Australia**

### **5.6.1 City of Perth Council**

#### **5.6.1.1 Jurisdiction summary**

The City of Perth has seen a rapid growth in population fuelled by strong industrial sector growth. The City of Perth is the capital city of the world's most significant mining regions. Perth is characterised by a central business and commercial precincts with small to medium residential developments on the outer areas of the City of Perth boundary. Good public transport is available throughout the area.

The Perth Parking Policy sees the need for vehicular access to and from central Perth to ensure continual economic and social viability. A well balanced transport network is to be provided to manage congestion as well as efficient operation of public transport networks.

The Council prefers developments to move away from heavy car park based developments and move towards ride share and more efficient transport where possible. This can be seen by the implementation of a maximum parking rate opposed to a minimum, as well as the commitment to constantly improve infrastructure to better enable active modes and public transport access.

The local Council is encouraging travellers to use public transport and ride sharing facilities as their main transport choice. It encourages carpooling to take place along streets such as Roe Street and Mayfair Street during early peak hour periods, offering incentives such as lowered parking prices. The Council also make an effort to encourage the use of bicycle based transport, providing ample bicycle parking throughout CBD areas and encouraging bike maps and information brochures.

#### **5.6.1.2 Comparison of rates**

The key notable differences in the parking rates of the City of Perth Council's parking code and the ACT Code are:

- The City of Perth Council's rates are generally maximum rates.
- Parking rates for residential developments were found to be similar to ACT parking rates.
- Commercial parking rates in the City of Perth are divided into four categories which were generally found to have lower parking rates than the ACT.
- The residential parking code has two categories - Location A and Location B. Location A is any area within 800m of a train station on a high frequency rail route or any area within 250m of a high frequency bus route. Location B is any location not within the distances outlined for Location A.

## **5.7 Victoria**

### **5.7.1 Victorian Planning Provisions**

#### **5.7.1.1 Jurisdiction summary**

The Victorian parking code is contained within the Victoria Planning Provisions (VPP) scheme, which forms a template for all Victorian planning schemes. Each area of Victoria can have specific variants to the planning scheme. Parking provision can be argued via a Car Parking Demand Assessment which considers a multitude of criteria, for example, availability of public transport, convenience of pedestrian and cyclist access to the land, variation of car parking demand etc.

The code outlines car parking rates by land use, permit requirements for dispensation of car parking and design of parking spaces / arrangements. Each area or council within Victoria has specific requirements for offsets which outline cash-in-lieu requirements as a part of car parking provision.

A review of the VPP was undertaken in 2008 of three different approaches to managing car parking, 'specify and supply', 'limit and respond' and 'assess and reduced demand'. The result of the review was 'assess and reduce demand' approach was the most appropriate for the majority of areas in Victoria and formed the key principal of the VPP Committee approach to establishing the rate at which parking is to be provided.

#### **5.7.1.2 Comparison of rates**

The key notable differences in the parking rates of Victoria's parking code and the ACT Code are listed as follows:

- The VPP permits a reduction in car parking spaces by considering the following factors in ascertaining whether a reduced number of parking spaces is warranted:
  - Multi-purpose trips.
  - Variation of car parking demand over time.
  - Short-stay and long-stay parking demand.
  - Availability of public transport.
  - Anticipated car ownership rates.
  - Pedestrian and cyclist site access.
  - Off-site car parking.
  - On-street parking availability.
  - Adverse economic impacts.
  - Preservation of vegetation or amenity.
  - Creation of safe, attractive and functional car parking areas.
- It recommends to reduce the parking rate to encourage developers to provide a higher quality walking / cycling / public transport environment than they otherwise would have by offering discounts as an incentive or bonus.

## **5.8 South Australia**

### **5.8.1 Jurisdiction summary**

South Australia (SA) has a hierarchy of planning controls. At the top is the planning strategy for SA – the 30 year plan for Greater Adelaide. This includes key directions on:

- New transit corridors.
- Growth areas.
- Transit-oriented development.
- Revitalising activity centres.
- Reconsidering car parking demand.

The next level is the Development Plan which translates strategic thinking into planning policy. This outlines the Zones / Policy Areas / Precincts and includes parking requirements for selected land uses. Then, there is the development assessment which outlines assessment against the relevant provisions of the Development Plan for local jurisdictions.

Development in South Australia has historically been guided by Development Plans, which are statutory documents prepared for individual local government areas or regions. These Plans contain policies against which development proposals must be assessed, including car parking provisions in most cases.

There is an overarching advisory document entitled “South Australian Planning Policy Library Version 6” (South Australian Government, 2011) that provides extensive guidance for development plans in South Australia. It was introduced to allow councils to align their development plans with the vision of the 30-Year Plan for Greater Adelaide and to achieve the objectives of the South Australian Planning Strategy and South Australia’s Strategic Plan.

One of its policy aims is to encourage and promote infill development in transport corridors and activity centres, with good access to alternative modes of transport and high public realm standards, with the effect of encouraging commuters and residents to choose a mode of transport other than the car. As such the car parking rates for land uses in these zones have been reduced.

The policy document also suggests that car parking rates for dwellings should be further reduced by meeting the requirements of various incentives, such as a 30% reduction in car parking provision if 15% of dwellings are classed as affordable housing. The percentage reduction, depending on incentives achieved, can be accumulated to a maximum of 30%.

### 5.8.2 SA Parking Guidelines

The current document is Planning Bulletin – *Parking Provisions for Selected Land uses, 2001* forms the basis of car parking requirements within Development Plans (Planning Schemes) in South Australia. Recently, the SA Government commissioned a consultant to update this document, producing “*Parking Spaces for Urban Places: Car Parking Study, Guideline for Greater Adelaide*” in 2013. This study has not yet been endorsed for updating of car parking requirements within Development Plans.

Some of the key aspects or points of difference from this guideline are outlined below.

- Consideration of capped parking  
Centres and business parks could have a pre-imposed maximum cap on total parking based on a ‘congestion threshold’. It is assumed that at the threshold commuters would switch to public transport. Once the cap is reached an annual levy is charged with funds directed to public transport. It was noted that this requires public transportation options and strong economic performance of centre
- Provision and consideration of fuel efficient vehicles  
The Green Star rating tool recommends that between 10% and 25% of spaces be provided for small cars, hybrids, motorbikes/scooters or car-pooling (Green Building Council of Australia, 2013).
- Elderly Parking  
Spaces reserved for senior citizens could be considered further. Age related conditions often result in impaired mobility, however, this is not recognised under the disable
- Families or Parents with pram parking  
Adelaide City Council Development Plan (2013) specifies a general parking requirement (minimum rate for reserved spaces) for people with a disability of 1 car parking space in every 15 spaces provided with any form of development. Although, it should be noted that this rate is intended to function as a car parking space suitable for use by people with disabilities and other people with small children and prams, however this would be difficult to enforce.

The new study recommends maximum allowable discounts for all land uses. Stakeholder reference groups were set up and feedback indicated that the discount categories defined below could be used to form the Suggested Parking Discounts Table, with discount possibilities available with respect to:

- Discounts that directly reduce parking demand
- Accessibility including public transport and active travel amenity
- Shared parking (while a discount has been proposed here consideration should be careful not to discount for shared space use and temporal profiling)
- Bonus discounts that do not directly reduce parking demand

- Improved outcomes including urban or landscape amenity
- Planning constraints such as heritage or adaptive re-use

## 5.9 Conclusions

A broad array of parking codes has been reviewed across most states in Australia. The nature of the codes varies significantly in relation to differentiation of rates (by use, location or zoning), the description of objectives and criteria, opportunities for parking discounts. It is evident that parking rates vary in each local council area and the codes address different issues.

The ACT code has the most complex array of rates. It has the largest number of uses (almost 100) and is unique in the manner in which it divides parking rates by numerous land-use zonings and geographic locations.

Previous work has highlighted a number of issues with the existing ACT code. Three of the primary issues that need to be addressed are:

- Simplifying the application of the rates.
- Introducing adjustment factors for reducing standard car parking rates in order to support the achievement of broader policy objectives.
- Flexibility in assessing the requirements for parking to suit particular circumstances.

Some reforms to *the Code* are needed to help reduce the potential impacts of more cars in urban areas, consistent with ACT Government policies.

A number of parking codes were reviewed across most states in Australia as part of this study. The nature of the codes varies significantly in relation to differentiation of rates (by use, location or zoning), the description of objectives and criteria, and opportunities for parking discounts. Common themes emerged from the more innovative codes and a number of aspects of interstate codes could be of benefit if applied to ACT. These include:

- Most codes do not differentiate rates by land-use zoning, but they generally differentiate by location. Where they exist, differences in location are often as simple as CBD/other or within proximity of major public transport hubs or not.
- Setting maximum parking rates in certain areas (typically inner city areas) or a range (maximum and minimum rates) for consideration within a precinct to help provide better guidance.
- Payment in lieu for provision reductions associated with private developments to enable funding of consolidated public car parking or where there are constraints to development (e.g. heritage).
- Generally, reductions in parking provision are not quantified (in terms of % reduction) but can occur if justified by the applicant. A number of jurisdictions provide examples where discounts may apply or payments in lieu are possible, if they are in line with Council development and planning objectives.
- Reductions for provision of end of trip facilities for active travel above the minimum requirements.
- Unbundling of parking spaces (some jurisdictions set a minimum % requirement for residential use).
- Reductions in parking rates based on other amenity aspects such as urban form or connectivity.
- Some jurisdictions provide guidance for service vehicle parking for alternative uses.

These elements were seen to enable better alignment with sustainable transport policies.

### 5.9.1 Overall Comparison of Rates

A summary comparison of residential and commercial rates in ACT and four other relatively similar Australian jurisdictions is given in Table 7 and Table 8, for commercial centres and other areas respectively. Rates for six other jurisdictions are given in Appendix G. It is important to note that this comparison is based on a limited number of jurisdictions. A greater sample would provide more confidence with comparisons.

Table 7: Comparison of Parking Rates for Centres

Land Use	ACT	Darwin	Brisbane	Liverpool	Wollongong
1 bedroom apartment (per unit)	0-1.25	1	0.7	1.4	0.95
2 bedroom apartment (per unit)	0-2.25	1.5	1.2	1.4	0.95-1.45
3+ bedroom apartment (per unit)	0-2.25	1.7-2.0	1.7	1.9	1.45
Office (per 100m <sup>2</sup> GFA)	1-2.5	3	3	1	1.67
Shop (per 100m <sup>2</sup> GFA)	4-5	3	5	1	1.67

Note: 1. In this comparison, ACT centres include CBD, town and group centres

2. The ACT residential rates have no minimum requirement in CZ1 and CZ2 zones in City and town centres

Table 8: Comparison of Parking Rates for Areas Outside Centres

Land Use	ACT	Darwin	Brisbane	Liverpool	Wollongong
1 bedroom dwelling (per unit)	1.25	2	1.5	2	1.2
2 bedroom dwelling (per unit)	1.75-2.25	2	1.7	2.5	1.2-2.2
3+ bedroom dwelling (per unit)	2.25	2	1.9	3	2.2
Office (per 100m <sup>2</sup> GFA)	2-2.5	2.5	3	2.85	2.5
Shop (per 100m <sup>2</sup> GFA)	6	6	5	3.33-5	4

Note: In this comparison, ACT centres include CBD, town and group centres

The findings from a comparison of ACT rates for centres (Table 7) shows:

- A wide range of residential rates in ACT, compared with other jurisdictions. The upper rate is generally higher than rates elsewhere. However, the low rate (for CZ1 and CZ2 zones) is much lower than similar centres elsewhere. The rates for CZ3 zones are similar to those for Brisbane CBD.
- The rates for office also vary significantly in ACT, compared with other jurisdictions. The rates are much lower than those used in Darwin and Brisbane.
- The rates for shop in ACT are very high compared with Wollongong CBD and Liverpool.

The comparison of ACT rates for other locations (Table 8) shows:

- A relatively low rate for 1-bedroom dwellings in ACT, but the rates for other dwellings are reasonably comparable.
- A relatively low rate for office in ACT.
- A relatively high rate for shop in ACT.

An inspection of the rates for other jurisdictions given in Appendix G indicates that these findings are consistent over a broader range of jurisdictions than those shown above.

The comparison of rates by land-use in Appendix G highlights:

- A large number of uses in ACT with no comparable rates elsewhere.
- A wide range of indicators for estimating parking requirements for different uses.



- A large amount of blank spaces in the tables, indicating a low correspondence between uses and rate indicators in ACT compared with elsewhere.
- Few uses with rates that are comparable across a large range of jurisdictions - residential, office and shop are the only uses that are comparable in this regard. Hospital, club, restaurant, bulky goods, indoor / outdoor recreation, warehouse, general industry and light industry also have a reasonable range of comparable rates to ACT across jurisdictions, but not other uses.
- The indicators used to determine parking rates for hotel, motel and child care centres is different in ACT to other jurisdictions, so a comparison is not possible for this use.

The ACT has many more defined uses than any other parking code in Australia (about 100 in ACT) and land-use definitions and terminology varies across jurisdictions. In addition, no other jurisdiction has such a complex layering of rates by areas and zonings. Thus, it is not possible to compare rates for many of the uses in the ACT code.

Previous changes to rates in the Code have relied on comprehensive surveys done in ACT (e.g. for apartments) and not inter-state Codes, because of different urban environments and operation conditions. Recommendations can be made for uses requiring additional surveys to justify changes in rates, especially for uses with less certainty in relation to rates.

It is noted that previous comprehensive parking surveys by RTA / RMS, or elsewhere, has shown some substantial fluctuations in actual rates for the same uses in different localities. This shows that even when comprehensive parking data is available it can vary substantially, making it very difficult to nominate any rate with scientific certainty. Nominating suggested rates with no data is even more problematic; not being able to justify a change to the rate.

There is no relevant benchmarking in Austroads, but NSW jurisdictions have taken the RMS as the basis of many of the rates in use today.

#### **Recommendation 12**

Any changes to rates in the Code should be validated by comprehensive ACT surveys and then workshopped with Government stakeholders. This provides a basis and justification for any change in rates.

### **5.9.2 Parking Reforms**

The following section identifies reforms to help reduce the potential impacts of more cars in urban areas, consistent with ACT Government policies. Relevant parking code reforms occurring in Australian cities are summarised in Table 9. Most codes have reference to other travel demand measures that need individual assessment and approval by council.

There was difficulty in determining how changes in other jurisdictions were received and what impact it has had on mode use as these have typically been undertaken with other initiatives. There is no definitive quantitative evidence on data before and after a specific change to a parking code. The application of actual maximum use was also difficult to determine; from the opinion of our interstate colleagues the commercial decision on provision was seen as the key driver rather than minimal provision. This has similarities within the ACT where developments are providing some parking where there are no minimum requirements (e.g. residential development in the City).

Table 9: Initial Summary of Relevant Interstate Parking Reforms

Reform	Cities	Comments
<b>Reduced parking rate for development depending upon proximity to public transport</b>	<i>City of Darwin Council</i> The Northern Territory is initially categorized into Metropolitan and Regional areas with areas like Jabiru having separate planning schemes. The categories are based off population density, closeness to CBD areas and access to public transport.	The Planning Scheme along with the City of Darwin Council does acknowledge and incorporate public transport accessibility into the parking rates and requirements. This can be seen in Clause 6.5.2 of the planning scheme which is used to allow for reductions of parking provisions based on the adequacy of access to public, depending on the local authorities' consent.
	<i>Liverpool Council</i> The area consists of localized commercial centres with the Liverpool CBD and shopping district being the major centre of the Liverpool LGA with good connections to public transport.	The Liverpool CBD is a public transport precinct. The Code allows reductions of parking supply for good public transport and pedestrian access, as well as bicycle parking provision with lower parking rates than the rest of the Liverpool LGA.
<b>Maximum parking rates rather than minimum parking rates</b>	<i>Parramatta City Council</i> Parramatta LGA consists of the Parramatta CBD, educational areas, mixed-use, residential and industrial land uses.	Structured in the form of performance criteria and acceptable solutions and uses a demand management by use of maximum parking rates and deemed to comply approach to the delivery of car parking. If development does not meet the specified requirements depending on its location but demonstrates compliance with other objectives in parking from councils DCP it may be approved.  Council prefers developments to move away from heavy car park based developments and move towards ride share and more efficient transport where possible. This can be seen by the implementation of a maximum parking rate opposed to a minimum, as well as the commitment to constantly improving the infrastructure around the local council to better allow for public transport access.
	<i>City of Sydney Council</i> The LGA consists of main employment areas within the central CBD area with intensive activity with high public transport accessibility, educational areas (Sydney University, University of Technology Sydney and TAFE Ultimo) near Central and Redfern (along George St / Broadway / Parramatta Rd) where congestion is a major issue. The rest of the City of Sydney LGA consists of areas of medium to high density residential development with good access to public transport.	
	<i>City of Perth Council</i> The City of Perth is the capital city of the world's most significant mining regions. Perth is characterized by a central business and commercial precincts with small to medium residential developments on the outer areas of the City of Perth boundary. Good public transport is available throughout the area.	

Reform	Cities	Comments
<b>No parking rates (market driven)</b>	<i>Waverly Council</i> The area consists of localized commercial centres, high tourist population with the national landmark Bondi Beach, a main CBD with other shopping or industrial precincts, some areas of high density and medium to low density.	There are no minimum requirements indicated for developments. The observed parking rates reflect private car usage, access to public transport, availability of vacant car spaces, average people per car ,etc.
<b>Payment in Lieu</b>	<i>Gold Coast City Council</i> Lineal coastal city with high tourist population, main CBD with other shopping or industrial precincts, some areas of high density but majority low density, recent introduction of light rail which code reflects in the locational requirements set.	The code sets out criteria and acceptable solutions for design criteria (access and parking related items) service vehicles, parking rates, as well as cash in lieu and traffic impact solutions. The code provisions allow for payment in lieu if certain conditions apply.
<b>Unbundled Parking</b>	<i>Gold Coast City Council</i>	The code acknowledges the benefits of unbundled parking and offers a reduction in the minimum rate of up to 30% when 20-50% of parking is unbundled. Minimum percentages of residential parking for new developments are to be unbundled within the transport hub area.
<b>Car Sharing</b>	<i>Gold Coast City Council</i>  <i>Marrickville Council</i> The area consists predominantly of a mixture of low and medium density suburban development, light commercial with the exception of the Newtown area which has intensive activity.  <i>Waverly Council</i>  <i>Parramatta City Council</i>	The Gold Coast code acknowledges that each car share vehicle offsets 5 spaces. This equates to the relaxation of 4 spaces. The code encourages development with lower parking requirements through measures such as car sharing initiatives.  Marrickville, Waverly and Parramatta City Councils also recognise the advantages of car share programs and permits reduced parking supply through the implementation of these initiatives.
<b>Motorcycle / motor scooter parking</b>	<i>Gold Coast</i>	Every 2 motorcycles spaces can replace 1 car space, up to 15% of the minimum parking requirement.
<b>Dispensation where active travel facilities provided in excess of the relevant requirement</b>	<i>Gold Coast</i>	The provision to every 6 bicycles above the required provision offsets 1 car space, up to 15% of the minimum parking requirement.

Reform	Cities	Comments
<b>Additional guideline documents that provide support or further explanation</b>	<i>Gold Coast</i>	This enables a location for clarifications and examples to be provided for documents within the City Plan without encumbering the individual codes. This is seen as an effective way to simplify the main codes. Another perceived benefit in relation to it possible application in the ACT is that while linked / related to the general codes or other documents within the Territory Plan they would not need to sit within the Territory Plan. These can be updated and new supporting documents created as needs arise, not as part of a Territory Plan Variation, providing greater flexibility.

## 6.0 Review of Key Elements of *the Code*

### 6.1 Overview of Key Conclusions and Recommendations

The conclusions and recommendations of the review of key elements of *the Code* are framed in five parts as shown below. Key findings from each part are summarised below, with more details following in the remainder of this Chapter.

**Section 6.2:** Amendments to key elements of the existing Parking Code, revolving around a commentary on each section of *the Code*, which should be considered for the revised Code; as well as suggestions for a revised structure to *the Code*.

- The purpose of *the Code* should be broadened to acknowledge it is also to support the achievement of mode share targets for public transport and active travel.
- The format of *the Code* should be made consistent with the provision of Rules and Criteria as found in Development and Precinct Codes.
- Dropping the reference of parking rates to zonings may be a way forward in terms of restructuring the Code.
- Section 1.3 of *the Code* ('Using *the Code*') could also be expanded to clarify the role of TAMS and Environment and Planning Directorate Transport Planning and Strategy Section in assessing development applications and using this Code.
- The role of operational parking compared to long and short stay should be clarified.
- If *the Code* has elements that are the same as Australian Standards, Austroads or BCA then it should simply cross reference the standard; if an exemption or exception to those is appropriate then include only those parts in *the Code*. There should be a mechanism to review the standard to ensure ongoing appropriateness, particularly where the revised Code provides exceptions. A comment in *the Code* should be made to this effect to ensure clarity.
- The Code should not specify any physical requirements for car parking but rather refer to the relevant Australian Standard (apart from exemption or exception).
- Car parks, community safety and landscaping of car parks (Sections 2.5 and 2.6 of *the Code*) should not form part of *the Code*, but should instead refer to other relevant ACT Government documents. It would also be appropriate to review these requirements with those of existing Development Codes to ensure consistency of approach.
- The proportion of parking set aside for small car spaces, or future alternative energy vehicles, will require review from time to time as the composition of the ACT vehicle fleet changes.
- Greater clarity is required around shared use and reciprocal parking arrangements. This is currently subject to individual assessment however there may be an opportunity to codify this arrangement for identified uses.

**Section 6.3:** Suggested changes to parking provision rates for different land-uses and zones. It is recommended that these be supported by additional surveys.

- Includes suggested changes to rates for:
  - retail & commercial
  - offices
  - multi-unit parking in residential areas
  - residential parking in core commercial areas
  - adaptable and supportive housing
  - independent retirement living
  - restaurant



**Section 6.4:** Potential matters for parking code amendments, including a possible new framework for dispensation of parking supply or payments in lieu.

- Maximum rates should be introduced for most uses, especially in city, town centre or group centre locations.
- A range (minimum – maximum) rate should be introduced for most uses.
- There are benefits in changing the requirements for operational / service vehicles, especially for smaller developments.
- The provisions in *the Code* for small commercial tenancies needs to be tightened, as the description ‘commercial tenancy’ covers a multitude of possible uses and the difficulty in determining exactly what those uses will be at the DA stage presents problems.
- The incorporation in *the Code* for provision for the preparation of a parking management plan for major developments, with scope for dispensation of parking provision, depending what’s in the plan and how it’s managed.
- Cross reference those sections of the Bicycle Parking General Code (BPGC) which may be taken into account when considering offsets which may be allowable in lieu of the provision of bicycle parking spaces and end-of-trip facilities in excess of the minimum requirements so specified in the BPGC.
- Develop a framework for dispensation of parking provision in the new Code, wherein the minimum number of car spaces to be provided may be reduced where the applicant can satisfy the Territory, or its delegate, that less provision is justified.

**Section 6.5:** Minor corrections to *the Code*, which mainly involve minor wording changes, as well as changes in formatting.

**Section 6.6:** Future data needs in relation to parking surveys, census data and GIS.

- Additional parking surveys are recommended to help justify suggested changes to parking rates.
- Enhancements to GIS database showing more detailed walk links.
- Greater care in the design and review of parking surveys done in future to assist with temporal comparisons of parking supply and demand.
- Revision of analyses in this report when new Census data becomes available.

## 6.2 Amendments to Key Elements of *the Code*

A commentary of suggested changes to *the Code* follows, using *the Code* headings.

### 6.2.1 Code Section 1.1 - Purpose

The stated purpose of *the Code* is confined to the provision for vehicular access and parking in the ACT. This purpose should be broadened to acknowledge it is also to support the achievement of mode share targets for public transport and active travel.

This section is the most appropriate place for statements on the ACT Government’s objectives in relation to sustainability, health and climate change strategies to set the broad policy parameters against which parking provision is considered. An alternative is to have separate statements of objectives included in each of the statements of objectives for each of the land use zones set out in Section 3 of *the Code*.

The Parking Guidelines from October 2000, which preceded the current Parking Code, had a stated purpose to advise developers on their parking provision and assist development assessment to avoid detrimental impacts. “A parking shortfall can hinder commercial activity ... and create a nuisance where parking spills into nearby residential streets to the extent that residents and visitors are impeded from parking there”. These concerns are engrained in development assessment and insufficient car parking and increased traffic are commonly raised as a reason for objection to a development.

Government Policy is moving away from demand satisfaction to demand management. A key issue for *the Code* is to reflect and articulate this change in Government Policy.

**Recommendation 13**

The purpose of *the Code* to be broadened to acknowledge it is also to support the achievement of mode share targets for public transport and active travel, consistent with policy documents and encourages achievement of Canberra's transport objectives.

**6.2.2 Code Section 1.2 – Structure of the Code**

The Parking Code incorporates three sections:

1. A description of the purpose of *the Code* and how to use *the Code*.
2. General design and vehicular access requirements, including:
  - a. General parking location
  - b. Accessible parking requirements
  - c. Physical requirements with extracts from Australian Standards
  - d. Community Safety (CPTED)
  - e. Landscape of car parks
3. Parking and vehicular access provisions for each zone. This includes stated objectives to be met and parking provision rates for defined uses in each of the Territory Plan's zones.

The format of *the Code* is not consistent with the provision of Rules and Criteria as found in Development and Precinct Codes. This is not unusual for a General Code as they are often the result of an evolution of a guideline document and therefore contain guidance material.

The manner in which *the Code* is structured does not enable easy identification of the matters against which development will be assessed. Assessment requirements and exemption/dispensations are scattered throughout the document. Successful navigation and understanding of *the Code* requires a full appreciation of its content, not all of which is directly relevant or necessary for development assessment purposes, and which may not be readily achievable for those who only interface with *the Code* on an infrequent basis.

In contrast, adopting a structure consistent with the rest of the Territory Plan will enable users to more easily pinpoint key information and increase the utility value to lay readers.

The guidance format of *the Code* creates potential uncertainty around general requirements that should be considered such as landscaping of car parks and those requirements that are more prescriptive.

**Recommendation 14**

Physical design guidance material should be removed from *the Code* and provided as a separate document.

The rates incorporated in *the Code* are structured around various zonings in the Territory Plan (refer Section 2.4). This allows a potentially different description in terms of the objectives for the provision for parking in different zones, as well as alternative parking rates.

Many other jurisdictions have a single set of rates for different areas. ACT is unique in the way it differentiates rates by numerous zonings, as well as areas, making the ACT Code more complex and difficult to follow. Dropping the reference of parking rates to zonings is likely to be a positive way forward in terms of restructuring the Code. This could mean introducing a range of rates for certain uses where rates vary across zonings; as noted in Section 2.4 rates do not vary across zonings for many uses in the ACT Code making it unnecessarily cumbersome.

Furthermore, the number of areas to apply parking rates in the ACT Code is more numerous than other codes in Australia. It is worth considering reducing the number of areas. The ACT Code is structured around the centre definitions in the Territory Plan, as well as CZ2 zones outside centres and the Northbourne Avenue precinct.

Other jurisdictions commonly have CBD / other, or define areas according to proximity to major public transport routes or stations. Consideration could be given to a similar approach in ACT, potentially utilising various public transport data to inform the definition of areas (e.g. the accessibility data from PTAL, proximity to rapid routes or major interchanges).

Effectively, the ACT Code uses the knowledge that public transport accessibility is higher in City and relatively high in parts of town centres and some group centres to allow different parking rates for different centres. Setting lower rates in City or town centres also reflects a policy to reduce car parking and increase public transport at these locations. It is noteworthy that public transport accessibility varies markedly even within City or the various town centres, or between group centres. Hence, the definition of areas needs to consider both public transport accessibility and policy directions.

#### **Recommendation 15**

A simplified structure for the specification of rates in *the Code*, including a reduction in the number of references to alternative parking rates for different zonings and areas. This should also include consideration of a reduction in the number of uses referred to in *the Code*. Proposed changes should be workshopped with key stakeholders to ensure adequate thought in relation to consistency with policy and the application of the changes. This will simplify the structure of *the Code* making it easier to follow and apply.

### **6.2.3 Code Section 1.3 – Using *the Code***

This section does not explicitly describe how to use *the Code*, but rather Section 1.4 is more explicit in this regard.

It mentions that the minimum parking provision rates for the various zones and Centres in the Territory Plan are based on a range of factors, including:

- Availability of public parking
- Potential for shared parking with neighbouring developments
- Accessibility of the location to public transport
- A range of travel demand management measures

While it seems intuitive that allowing adjustments for public transport accessibility to a site and the utilisation of active travel warrant consideration in reducing on-site parking provision rates for development, this needs to be based on data analysis to draw out the extent to which such measures lead to reductions in car parking demand.

The Code enables special arrangements to be negotiated in cases where the physical constraints of a site make on-site provision impracticable. Importantly, it states that specific requirements for the provision of parking and access subject to the National Capital Plan or precinct codes of the Territory Plan take precedence over the requirements in this Code. This reflects an established statutory hierarchy.

This section of *the Code* could also be expanded to clarify the role of TAMS and Environment and Planning Directorate Transport Planning and Strategy Section in assessing development applications and using this Code. The contents of Sections 2.8 and 2.9 provide the basis for this.

**Recommendation 16**

Include more specific step-by-step details on how to use the new Code, including when special arrangements may be negotiated to improve transparency (e.g. in cases where the physical constraints of a site make on-site provision impracticable). Improve understanding of how to use *the Code* for all users and identification of special circumstances where the Territory is willing to be flexible with parking requirements.

**6.2.4 Code Section 1.4 – Calculations of parking provision requirements**

Total parking requirements are calculated by multiplying relevant provision rates by the scale of the development. The performance approach adopted in this Code provides the flexibility to enable a proposal to be supported where the proponent can demonstrate to the satisfaction of the Territory that the objectives can be met whether by provision of a lesser on-site rate or by utilising capacity in publicly available on-street or off-street parking. To this end, different locational requirements apply to long-stay and short-stay / visitor parking. However, the utilisation of spare capacity in existing car parks is at the discretion of the Territory, having regard for the potential demand (as distinct from parking requirements) which may be generated by a proposal and to future nearby expansion at the time of the proposal.

The stated minimum parking provision rates are deemed to meet the relevant zone objectives as stated in *the Code*. The parking provision rates in conjunction with the scale of development are used to calculate the parking requirement that, in normal circumstances, would be deemed to meet the relevant objectives' – suggesting that compliance is not assured.

**6.2.5 Code Section 1.5 – Definitions**

While 'long stay' and 'short stay' parking is defined, no definition is provided for 'operational parking'. The role of operational parking compared to long and short stay could be clarified, if these are to remain in a new code.

**6.2.6 Code Section 2.2 – Parking for people with disabilities**

Disabled parking is an issue with inconsistencies in BCA, AS 1428, adaptable housing code etc. The dimensions and provision rate (one per adaptable unit) should come from either 1428 or the adaptable housing code and not building code or PVAG. Disabled parking also has a minimum lighting level requirement - the same levels as a pedestrian crossing so very bright that is rarely met in private developments.

If *the Code* is the same as AS, Austroads or BCA then it should simply cross reference the standard; if an exemption or exception to those is appropriate then include only those parts in *the Code*. A notable exception is the clause for kerb ramps in Section 2.2.3.

Another inconsistency between the BCA and *the Code* relates to the minimum provision rate for people with disabilities. The existing 3% provision is higher than the standard provision rates in the BCA for most uses. It is considered adequate for all but medical facilities. This should not change.

**Recommendation 17**

Remove details of physical and community safety aspects of *the Code*, but instead refer to other relevant guidelines and design standards. Where available, provide connecting links in *the Code* to navigate to other relevant guidelines and standards in the Territory Plan or elsewhere. This will enable better use and understanding of *the Code* by users, with the ability to click and go straight to other referenced documents.

### 6.2.7 Code Section 2.3 - Physical requirements

Duplication between various codes and guidelines must be avoided so that there is no chance of conflicting requirements. Thus, *the Code* should not specify any physical requirements for car parking but rather refer to the relevant Australian Standard. Note that in Government contracts there is a requirement that where conflicting standards or guides occur the higher standard is to be used, often ending up in debates about what such a criteria actually means.

If *the Code* is the same as AS, Austroads or BCA then it should simply cross reference the standard; if an exemption or exception to those is appropriate then include only those parts in *the Code*. There should be a mechanism to review the standard to ensure ongoing appropriateness, particularly where the revised Code provides exceptions.

The same recommendation applies to car parking physical requirements as stated in Section 6.2.6.

### 6.2.8 Code Section 2.4 – Parking for motorcycles and motor scooters

The current Code does not clearly specify if the criteria relating to motorcycle parking relates to non-residential development only. The provision for motorcycle parking in residential development is left to the discretion of individual owners, except in relation to visitor parking – or at least that was the intention. This needs to be clarified.

Motorcycles require a much smaller area for parking than a car. The existing 3% provision in *the Code* was based on TAMS registration data collected five years or so ago. Because motorcycles are not charged for parking at present, their use may increase if greater areas of parking are provided.

It should be noted that the provision rate for motorcycles is in addition to the provision for car parking.

#### Recommendation 18

Inclusion of requirements for motorcycle parking and add that the provision for motorcycle parking is to only be applied to non-residential development, except in relation to visitor parking. The current Code does not clearly specify if the criteria relating to motorcycle parking relates to non-residential development only, as is the intention.

### 6.2.9 Code Section 2.5 – Car parks and community safety

This material should not form part of *the Code*, but should instead refer to other relevant ACT Government documents. It would also be appropriate to review these requirements with those of the Crime Prevention through Environmental Design General Code to ensure consistency of approach.

The same recommendation applies to car parks and community safety as stated in Section 6.2.6.

### 6.2.10 Code Section 2.6 - Landscaping of car parks

This material should not form part of *the Code*, but should instead refer to other relevant ACT Government documents. It would also be appropriate to review these requirements with those of existing Development Codes to ensure consistency of approach.

The same recommendation applies to car park landscaping as stated in Section 6.2.6, subject to further consultation with Environment and Planning Directorate Planning Delivery and TPV teams. One option may be the preparation of a practice note for landscaping within car parks.

### 6.2.11 Code Section 2.7 – Small car spaces

Suggested amendment to the text is as follows:

“Up to 10% of car parking spaces may be provided for small cars in any development. Minimum dimensions for small car spaces are 2.3m wide by 5.0m long. For residential apartment development up to 10% of parking spaces may be for small cars, provided that at least one (1) space per apartment meets the minimum dimensions for User Class 1A set out in Figure 2.2 of AS2890.1:2004.”

The proportion of parking set aside for small car spaces will require review from time to time as the composition of the ACT vehicle fleet changes. The proportion set in *the Code* were derived using 2007 ACT vehicle registration data and analysis of the lengths of small vehicles and the width required to allow access with car doors open to the first door stop. In future, a similar provision will need to be made for alternative energy vehicles.

#### **6.2.12 Code Section 3 – Parking and vehicular access**

This section of *the Code* describes zone objectives and states minimum parking rates for various uses within each zone. Specified objectives should be reviewed for currency and consistency with more recent Government policy.

The departure from parking requirements is dependent on actual parking survey results and the consideration of access to public transport, reciprocal car parking, active travel, car pooling and car share. However, *the Code* is unclear on the amount of adjustment that can be made to the specified rates.

Greater clarity is required around shared use and reciprocal parking arrangements. This is currently subject to individual assessment however there may be an opportunity to codify this arrangement for identified uses.

##### **Car pooling**

In relation to car pooling, there are presently '3-for-free' schemes operating within the Territory, whereby if three people arrive at designated parking entry points, an operator issues the driver with a free, all-day parking ticket. One Commonwealth Government employer – IP Australia in Woden town centre – operated its own '3-for-free' system for its employees, making available a dozen or more parking spaces within its on-site basement car park for sets of three employees who signed agreements that they would commute in one or other of the vehicles which belonged to any of the three employees on any particular day. This is an option worth exploring with IP Australia and could be considered as allowing a small offset for parking provision for future large office developments.

##### **Car share**

In relation to 'car share' arrangements, these are unlikely to warrant consideration of reduced on-site parking provision in the initial stages of their introduction. Analysis of data on employees' utilisation of car share arrangements for commuting may allow some small reduction in on-site parking provision in future years. It is something for subsequent review of *the Code* every five years or so.

##### **Reciprocal parking arrangements**

In relation to reciprocal parking arrangements, this is a potentially fraught area on which to base permanent reductions in on-site parking provision. There have been arrangements approved in past years in the Territory, but they are very few. There was at least one informal arrangement by mid-2013 which was entered into between a commercial office operator and residents in a multi-use development in City West whereby the residents (or a proportion of them) have accepted payment to allow the commercial user to utilise specified parking spaces on the site between the hours of 8am and 6pm on week days. Outside those hours, the spaces were for the residents' sole use. How successful this has been over time remains to be seen.

A major issue mitigating against permanent on-site parking discounts is that a commercial operator may relocate at some future stage. The parking spaces are not then publicly available.

##### **Car parking dispensation**

Car parking dispensation is available where the proponent can demonstrate that the objectives for the zone are met. The extent of dispensation granted has traditionally relied upon key government officers. The approach was to consider the claims from a particular proponent and assess the extent of other developments, actual or potential, which may also have some claim on any spare capacity.



Within the City area, there may be little scope other than to allow credits for on-street parking spaces which are immediately adjacent to the block which is the subject of development. In other areas, some calculation of spare capacity in publicly provided parking areas, taking account of undeveloped blocks or existing developed blocks which still have potential for expansion within their existing leases, may allow allocation of a proportion of any spare capacity to a particular development. The lack of a table of such allocations is an inconvenience.

Because the availability of existing spare capacity in publicly provided parking areas in the major centres reduces over time, it is essential that any development of such publicly owned and provided car parks have a requirement for replacement of the number of publicly provided spaces in any sales documentation and in planning approval conditions. This could be defined in the precinct codes, rather than *the Code*.

### **6.3 Potential New Additions to *the Code***

#### **6.3.1 Parking provision rates – maximums**

The approach in the Territory to date has been to set minimum parking provision requirements for most land uses (excluding residential uses in the City and town centre CZ1 and CZ2 zones). Other jurisdictions are moving to set maximum limits on parking provision, particularly in the central city areas of State capitals and major centres where public transport accessibility is high.

While there is no requirement for parking to be provided for residents and their visitors in the City and town centre CZ1 and CZ2 zones, there are no incentives for developers to do anything other than meet market demand, which currently reflects Canberra residents' general attachment to their cars, even where there are high levels of access to public transport. Because of high transit accessibility in these centres, and consistent with the ACT Government's commitments in terms of sustainability and climate change policies, the establishment of maxima for residential use in these centres warrants attention. This also applies to commercial and other land use activities in the City and town centres.

The actual rates to be set depend on the extent to which maximum limits will be accepted by people who seek to live in the City and town centres. However, as a minimum, the rates which apply to apartments could be set as a maximum. These reflect the results of studies on suitable parking provision rates for apartments and units, although more detailed study would give more accurate results.

#### **Recommendation 19**

Set maximum provision rates to supplement the minimum parking provision requirements in City, town centres, group centres and public transport corridors. Proposed changes should be workshopped with key stakeholders. The adoption of maximum rates will assist achievement of sustainable transport and urban design objectives.

It is clearer when specifying a maximum rate to also specify a minimum. Actual rates for different uses and geographic locations should be determined as part of a future consultative process.

#### **6.3.2 Parking provision rates – range**

A number of Councils in SA and Queensland have implemented or are implementing a range of parking rates, from a minimum to a maximum, especially in urban centres and public transport corridors. This is worth consideration for Canberra and is consistent with the recommendation in Section 6.3.1. It would be necessary to augment the specified ranges with assessment criteria. These could be drawn from the existing objectives.

### 6.3.3 Mix of short-stay and operational parking

The existing parking provision rates implicitly allow for a mix of shorter and longer parking periods for different users at different destinations within a particular location and/or zone. There is insufficient data presently available on the proportion of short-stay versus long-stay parking for any particular land uses.

The term 'operational parking' and the column in the table in Section 3.2.4 of *the Code* could be deleted. It can reasonably be expected that organisations will provide for their operational parking on-site wherever possible in centres.

#### Recommendation 20

Remove reference to short-stay, long-stay and operational parking in *the Code*, except where necessary in relation to specific uses (e.g. child care). It can reasonably be expected that organisations will provide for their operational parking on-site wherever possible in centres.

### 6.3.4 Various commercial developments in one development

The description 'commercial tenancy' covers a multitude of possible uses and the difficulty in determining exactly what those uses will be at the DA stage presents problems. These problems are accentuated when considering lease variation development applications, which may propose a broad range of uses for the purpose of providing long term flexibility within a high level GFA cap. There is also a need to support the Government's focus on delivering mixed use developments in commercial centres.

The uses likely to generate higher requirements for parking outside of the major centres are 'restaurant' and 'shop'.

In past years, an approach similar to the provisions in Section 3.2.2 of *the Code* has been applied to the areas identified for commercial tenancies in developments at the various centres along Flemington Road in Harrison and Franklin to deal with this problem. This could be spelt out in *the Code*, and it could be applied to all commercial areas outside those identified in existing Schedule 2 in *the Code*.

It will always be a matter of judgement as to the most appropriate 'average' parking provision rate for areas identified as being for commercial uses'. An analysis of the parking demand at some of these existing developments along Flemington Road could be undertaken to establish the existing parking demand given the current uses. An aggregate provision rate of around five (5) spaces per 100m<sup>2</sup> GFA may be a reasonable alternative.

The recommendation given in Section 2.1.3 applies here too.

### 6.3.5 Intended use of parking facilities

It has been suggested that for any office development or redevelopment attracting a requirement to provide 10 or more parking spaces to prepare a parking management plan. In the City and town centres, this would apply to developments of 1000m<sup>2</sup> GFA and above in CZ1 and CZ2 zones, but would apply to developments of 400m<sup>2</sup> GFA to 500m<sup>2</sup> GFA in other commercial zones. These appear to be very low limits and it is suggested that the figure of 30 parking spaces identified for non-office uses be applied more generally.

Parking management plan requirements have been outlined in the studies undertaken for Environment and Planning Directorate by Luxmoore, the parking arm of ARRB, in 2012. These could be incorporated into *the Code*, although this will increase the complexity of the document.

#### Recommendation 21

Incorporate a reduction in parking requirements for parking management plans for larger scale developments (size to be agreed), with an associated discount for parking provision of up to 5% depending upon features incorporated in the plan. The requirements for such a plan could be linked to the introduction of car sharing schemes, such as in the City of Vincent in Western Australia. This will encourage better management and utilisation of car parking.

### 6.3.6 Bicycle parking

The Bicycle Parking General Code (BPGC) has the same status as *the Code* within the Territory Plan. There is no need for *the Code* to call up the BPGC in its entirety. However it would be appropriate to cross reference those sections of the BPGC which may be taken into account when considering offsets which may be allowable in lieu of the provision of bicycle parking spaces and end-of-trip facilities in excess of the minimum requirements so specified in the BPGC.

#### Recommendation 22

Cross reference relevant sections of the Bicycle Parking General Code to *the Code*, especially offsets which may be allowable in lieu of a greater provision of bicycle parking spaces and end-of-trip facilities. This will better integrate important transport elements of the Territory Plan.

### 6.3.7 Unbundling of parking in multi-unit dwellings

Unbundled parking, sometimes referred to as decoupled parking, is an arrangement where property can be purchased separately from car parking. It is for the use of residents or tenants of a building. Unbundled parking is not for use by the general public or visitors.

The benefits of unbundled parking include:

- reduced purchase and lease costs of development
- reduced building costs associated with car parking
- increased buyer choice *e.g. purchase of a dwelling unit with or without a car parking space*

Various jurisdictions in Australia and overseas provide a discount in the required number of off-street car parking spaces where the developer allocates a minimum proportion of unbundled parking (typically 20% - 50%). This is commonly managed by the Body Corporate.

#### Recommendation 23

Enable provision for unbundling of parking spaces in multi-unit dwellings in the new Code. This will enable greater flexibility for development in future.

### 6.3.8 Parking for electric vehicle charging

Electric powered vehicles are becoming more common and there is a growing need to provide suitable infrastructure for recharging such vehicles, especially in commercial and multi-unit residential developments. To meet this need it is necessary to consider incorporating a requirement for providing electric vehicle charging spaces in new developments.

As an example, the California Building Code requires a varying amount of electric vehicle charging spaces to be provided in relation to the size of the proposed car park associated with new development. This is shown in Table 10.

A discount should be provided in the required number of off-street car parking spaces where the developer builds such spaces, to encourage the construction as such spaces and the use of sustainable transport modes.

**Table 10: Sample requirement for electric vehicle charging spaces**

TOTAL NUMBER OF PARKING SPACES*	NUMBER OF REQUIRED SPACES
1–50	1
51–200	2
201 and over	4

Source: Californian Building Code

**Recommendation 24**

Investigate the inclusion in the new Code of provision for car parks for electric vehicle charging in commercial and multi-unit residential developments, together with a discount for other car parking, at a rate to be determined. This will provide an incentive to construct car parks with electric vehicle charging in new developments, to meet a growing demand for electric vehicles and in line with Government sustainable transport policy.

**6.3.9 Car parking assessment report**

There are a number of entertainment, community and recreation uses that do not have a specific parking provision and are subject to individual assessment. These should be informed by a car parking assessment report, which should include the following details:

- a. the specific nature of the development to be undertaken and the method of operation and all facilities proposed to be provided;
- b. the maximum number of employees likely to be engaged on the premises;
- c. the maximum number of persons, other than employees, anticipated to attend the premises at any time;
- d. the hours of operation of the development;
- e. the location of the site and the nature of existing and likely development in the vicinity of the site;
- f. the existing on-road parking situation and operating conditions of the road in the vicinity of the site;
- g. the anticipated demand for on-site loading by trucks and other delivery vehicles;
- h. the anticipated demand for bus, coach and taxi set down and parking;
- i. the likely use of other modes of transport or pedestrian access, and the frequency and proximity of existing public transport services;
- j. the assignment of development generated traffic to the road network, and prediction of operating conditions within and without the proposed development for the appropriate design years; and
- k. any other relevant information requested by the Territory or its delegate.

The Territory can then form a view on the appropriate minimum number of car parking spaces and other facilities to be provided for the new development, based on the above information and any other relevant matter.

Furthermore, a report is needed from the applicant to justify any requests for parking discounts.

**6.3.10 Framework for dispensation**

*The Code* does not have a framework for dispensation. This needs to be addressed.

**Recommendation 25**

Incorporate a section in the new Code that describes a framework for dispensation, following simplification of the structure of rates in *the Code*. This is a fundamental change and brings together in one place clear directions for proponents to base a case for dispensation or parking discounts, aligned with sustainable transport and broader Government policy objectives.

In reference to dispensation framework, here's a suggested statement to include in the future ACT parking code:

The number of car spaces to be provided may be reduced where the applicant can satisfy the Territory, or its delegate, that less provision is justified, having regard to any one or more of the following:

1. the extent to which the development is serviced by public transport;
2. the proposed development is located within areas of high public transport accessibility;
3. the car spaces that are available on nearby land and suitable roads;
4. any new car spaces that can be provided by the applicant on nearby land;
5. the existing development on the site;
6. the overall pedestrian accessibility of the site;
7. the intensity of the use of the land;
8. the proposed hours of operation of the development or use;
9. any Territory traffic management or parking scheme for the area;
10. the effect of any additional traffic generated by the lack of parking spaces;
11. the mix of land uses on the site or nearby (for example, whether the site is included within an identified activity centre);
12. the car parking area is directly connected to the parking area of an adjoining development;
13. the parking spaces are to be individually allocated to tenancies or consolidated into a common area available to all tenants and to visitors;
14. the provision of cyclist facilities, including showers and lockers and additional secure bicycle parking;
15. For lease variations, the degree to which existing on-site development / uses meet existing parking rates and any known issues arising from this and
16. The application of time limitations on nominated visitor / operational car parking spaces.

In terms of public transport accessibility measures, the simpler the better. The Code inherently includes such dispensations by using lower rates in centres or Northbourne Avenue.

Other considerations for reductions are summarised in Table 11.

Table 11: Examples of parking reforms

Reform	Comment
Reduced minimum rates	Common; should there be a maximum?
Maximum rates	Most UK cities, especially in centres
Payment in lieu	Needs legislation change in ACT
PT access discount	Common; many PT access measures
Amenity, active mode, PT discounts	Some major cities, especially in centres
Car pool or alternative fuel spaces	IP Woden, some overseas cities
Car or bicycle share scheme	Uncommon; better as part of Precinct Codes
Unbundled parking discounts	Quite common in residential blocks

Reform	Comment
Shared parking discounts	Two types – City, Mall
Parking efficiency discounts	New technologies
PT card discounts	Workplace via salary sacrifice

### Recommendation 26

Following a revision to the structure of the rates in *the Code* (referred to in Recommendations 10, 15 and 19), enable a basis for discounts for the following items:

- a. the extent to which the development is serviced by public transport, by defining high public transport accessibility areas; for all uses in City, town centres, group centres and public transport corridors
- b. Shared use of car parking for mixed use developments or developments in City or centres
- c. Amenity and active travel facility provision, especially for trunk infrastructure, in City, town centres, group centres and high frequency public transport corridors
- d. Unbundled parking for residential uses in multi-unit developments
- e. Car sharing, in City, town centres, group centres and public transport corridors
- f. Parking efficiency, especially when linked with the development of a parking management plan for large mixed use developments

The introduction of discounts for car sharing arrangements in ACT has a number of barriers to implementation. One barrier to such a scheme would be that owners of other units in an apartment block may object to having a secure car park and common property that's accessible by strangers. Additionally, car sharing requires an operator and owner of a shared car (and maybe the shared car space) to make it available to others. It is unclear how this could be enforced through the current legislation for taxation, rates, development / land use, leasehold, land title, and unit titles. It may require a new land use administered / defined similar to car park (or maybe like supportive housing if the schemes are to be government approved).

To introduce a dispensation framework ACT would need to move away from the complicated variety of rates for different geographic locations and zonings inherent in *the Code*. The structure of the Code would need to greatly simplified. Thus, it is not valid to specify percentage discounts until a new code structure is agreed, which can only be formulated through a consultative process.

Percentage discounts cannot be scientifically justified, so they would need to rely on discounts elsewhere and judgement, unless further research and investigations are undertaken. It is also a function of policy. The confirmation of these judgements could be through a Government workshop.

For information, some discount rates observed elsewhere are as follows:

- ACT
  - 1 car space less for each four of Class1 or 2 bicycle parking spaces, up to 5% of total car spaces required
- City of Vincent, WA
  - Development is located within 400 m of a rail station or bus route (20%)
  - Development is located in a town centre (10%)
  - Development is located within 200-400 m of a car park with more than 25-75 car bays (varies from 5 to 20%)
  - Development with mix of residential and commercial uses, with at least 50% residential use (20%)
  - On-site end of trip facilities (10%)



- Active use on the ground floor (20%)
- Heritage constraints (20%)
- City of Bayswater, WA
  - Development in a town centre (25-50% depending on use)
  - Development within 400m of a train station or 100m of a high frequency bus route (10-25% depending on use)
- City of South Perth, WA
  - For non-residential development within 400 m of a bus stop / station (15%)
  - For non-residential development within 400 m or 800 m of a rail station (15-20%)
  - The proposed non-residential development provides 'end-of-trip' facilities for bicycle users (5-10% depending on facilities provided)
  - The proposed development contains a mix of uses, where at least 45% of the gross floor area is residential, provided that the required provision of visitor bay's for each use are made available to visitors at all times (20%)
  - The proposed non-residential development is within 50 m to 400 m of public car parks (5-20% depending on size and location of car park, irrespective of car park utilisation)
- Gold Coast, Qld
  - Car sharing (each car share vehicle offsets 5 spaces)
  - Unbundled parking (30%, if 20-50% unbundled)
  - Any other travel demand measure (to be approved by Council)
  - Development within 400 m or 800 m of a light rail station in the Transport Hub geographic area of Gold Coast (varies from 30-100% depending on use and proximity to station)
- South Australian Government planning policy document
  - Recommends a maximum reduction of 30%.

Note that this is by no means a comprehensive list and does not cover the various provisos that may apply to these discounts. The ACT rates already have inherent discounts in the rates applied to Centres, as do a number of other centres throughout Australia. However, jurisdictions which apply discounts generally have one set of rates that apply to the whole jurisdiction, then rather than applying different rates for centres offer a discount.

The Gold Coast code allows different parking rates for alternative walking distances to light rail stations – 400 m and 800 m. It also allows different parking rates for the transport hub area, centre zones, special purpose zones and priority development areas. The reductions are summarised in Table 12; they include an inherent reduction due to the high accessibility of the Transport Hub Area as well as due to the proximity of light rail, similar to Centres in the ACT Code.

Gold Coast Council indicates that where off-street car parking cannot be reasonably provided, Council may consider improvements to active and public transport to offset the shortfall in car parking spaces. They do not quantify these discounts and leave it open to the applicant to justify discounts and then Council chooses to approve a discount or not. Many other Australian and international jurisdictions also avoid quantifying discounts but instead allow reductions on merit, if justified by the applicant.

There must be a clear link between the factors allowing discounts and actual reduction in parking need as well as to current policies. It is not possible to determine discounts or what is a 'fair trade' in value without further research, investigations and stakeholder consultation.

Table 12: Inherent adjustment factors used in Gold Coast for Transport Hub Area

Area / Location	Reduction (%)	
	Residential	Non-residential
Centre Zone adjacent to light rail station	n/a	100
Centre Zone within 400 m walking distance of light rail station	40	80
Centre Zone within 800 m walking distance of light rail station	30	70
Southport adjacent to light rail station	40	100
Southport within 400 m walking distance of light rail station	40	80
Southport outside 400 m walking distance of light rail station	30	70

Note: 1. The reduction is an estimated average reduction for residential and non-residential uses, compared with base rates in suburban Gold Coast zones.

2. Southport is the Southport Priority Development Area and has different rates for three precincts in this area.

#### Recommendation 27

Formulate preferred discount items and percentage reductions to rates through current research and stakeholder consultation, with a view of the introduction of parking discounts noted in Recommendation 26.

Consideration should also be given to a payment in lieu arrangement, however this is dependent on the Government establishing and managing appropriate governance structures and a clear link between payments in lieu and the delivery of parking / transport related outcomes. This could provide more flexibility in relation to where new parking is located and managed, as well as opportunities for shifting funds to other amenity and transport improvements consistent with Government policies.

#### Recommendation 28

Investigate new legislation to enable payment in lieu for the provision of car parking in the ACT. This would be dependent on establishing and managing appropriate governance structures and demonstrating a clear link between payments in lieu and the delivery of parking / transport related outcomes. This will provide more flexibility in relation to where new parking is located and managed, as well as opportunities for shifting funds to other amenity and transport improvements consistent with Government policies.

## 6.4 Changes to Parking Provision Rates in the Code

Some discussion and recommendations regarding parking rates has already occurred in Section 2.4 and Section 5.9.1. More specific comments on new proposed rates are included in this section.

### 6.4.1 Retail and commercial

While the parking provision rate for retail and non-office commercial land uses in the City and town centres is presently four (4) spaces per 100m<sup>2</sup> GFA, work undertaken by Arup Transportation in the late 1990s indicated that an 'agglomeration effect' is associated with large-scale developments. Essentially, it was accepted that in the highest order centres in Canberra (the City followed by the town centres), people driving to those centres make more multi-purpose trips to more destinations within the centres when compared with trips to lower order centres. After consideration of the data provided in that study, the ACT Planning Authority agreed to a 15% discount on the provision of parking spaces for retail and non-office commercial uses in such large-scale developments.

Subsequently, in the 2000s, the introduction of parking guidance systems was accepted as reducing substantially the time needed for drivers looking for a parking space within the major centre car parks, reducing the circulation time and congestion within the car park structures. The net effect of these two factors ('agglomeration effect' and reduced circulation time in structured car parks) could allow a reduction in the parking provision, at least in City. However, it is likely that a reduction is not appropriate at town centres. For example, there is evidence to suggest that the observed rate at Westfield Belconnen is close to or exceeds 4 spaces per 100m<sup>2</sup> GFA.

**Recommendation 29**

Undertake an analysis and review of minimum retail and non-office commercial parking rates in City and town centres, with a view to potentially reducing these rates. This will bring the rates more in line with current expected demand.

**6.4.2 Offices**

The differences in the office parking provision rates reflect changes over the years taking account of proximity to the centre and the spare capacity in publicly available parking. The rate for City CZ2 and the Northbourne Avenue Precinct could now be reduced to one space per 100m<sup>2</sup> GFA given the significant public transport accessibility along Northbourne Avenue coupled with requirements to encourage greater public transport and active travel modes for commuting.

Although there is a high level of demand for parking in Woden town centre, the CZ2 zones include large areas of publicly provided parking and are all within a reasonable walking distance of the Woden bus station. There does not appear to be a case at present for increasing the parking provision rate for CZ2 zones in the Woden town centre.

With Belconnen, some of the areas zoned as CZ2 are directly across Lathlain Street from the Belconnen bus station, while others are close to the bus stop adjacent to the Belconnen bus depot on Cohen Street. The on-site parking provision rates may have been reduced in earlier years in light of the availability of publicly provided surface parking and the proximity to high frequency bus services.

**Recommendation 30**

Reduce the minimum office parking rate to one space per 100m<sup>2</sup> GFA in City CZ2 and the Northbourne Avenue Precinct. This will bring the rates more in line with current expected demand.

**6.4.3 Multi unit parking provision in residential areas**

In relation to residential parking permits, these were only ever issued to a very small number of older residential or quasi-residential developments across the whole of Canberra. Such permits were issued because of the very limited on-site parking available in these 1950s or 1960s developments. The pressure for re-introduction of such schemes should be strongly resisted and in no circumstances should consideration be given to allowing such permits for residents of units which have been approved without any on-site car parking spaces. Consideration should be given to appropriately worded clauses for insertion into Crown leases and Unit Titles to ensure future purchasers are aware of this restriction.

**6.4.4 Residential parking provisions in core commercial zones**

The current on-site parking provision rates (an average of 0.8 parking spaces per studio or one bedroom unit, 1.3 spaces per two bedroom unit and 1.8 spaces per three bedroom unit) were introduced in 2012 / 13 following surveys of selected multi-unit developments in both North Canberra and South Canberra. The results were similar both north and south of Lake Burley Griffin. Because of the proximity of the apartment development areas in Braddon and Kingston to high frequency public transport services, an increase in on-site parking provision is not justified.

The current market led strategy of requiring a minimum nil parking rate for residential development in City and town centres should be retained, with consideration given to the application of a maximum. Consideration could be given to an explicit statement enabling residential parking to be decoupled from residential uses, enabling more flexibility in use.

#### 6.4.5 Adaptable and supportive housing

The approach to date with adaptable housing parking provision in multi-unit developments has been to require the adaptable spaces to be presented with much the same marking as spaces for people with disabilities. However, it may be preferable to simply require wider spaces where the parking is for on-site residential use. Where garages are to be provided for adaptable units supplied with two parking spaces, whether at-grade or in residential apartment building basements, these should have a minimum entry width of 6.2 m, allowing for one wide space (3.8 m) and one of standard width (2.4 m).

For supportive housing, the parking provision requirements in *the Code* currently assume that residents will not have vehicles. Where they are able to drive and have vehicles, some allowance will need to be made. The Code should allow applicants for supportive housing and special dwellings to propose more parking where they deem necessary / appropriate.

##### Recommendation 31

- a. For adaptable and supportive housing, change parking space requirement to wider spaces rather than the same marking as spaces for people with disabilities, where the parking is for on-site residential use. Where garages are to be provided for adaptable units supplied with two parking spaces, these should have a minimum entry width of 6.2 m, allowing for one wide space (3.8 m) and one of standard width (2.4 m). This will enable more efficient use of space consistent with actual needs.
- b. *The Code* should allow applicants for supportive housing and special dwellings to propose more parking where they deem necessary / appropriate. It currently assumes that residents will not have vehicles, which is not always correct.

#### 6.4.6 Independent retirement living

Another residential land use category which may warrant further consideration of parking provision rates is that of retirement villages or independent retirement living. The current provision in *the Code* is for one (1) space per unit/dwelling. This rate is common across many jurisdictions throughout Australia where it has been assumed that retirees are unlikely to have more than one car per dwelling and some will have none.

Experience with retirement living developments suggests that, for the ACT at least, a fair proportion of retirees seeking this type of living arrangement want more than one car parking space. One response to this may be to consider setting maximum rates along the lines of those for apartments, allowing the developers of these facilities to allocate a proportion with two parking spaces and some with none.

##### Recommendation 32

Set minimum and maximum rates for independent retirement living in retirement villages. The current provision in *the Code* is for one (1) space per unit/dwelling, yet a fair proportion of retirees seeking this type of living arrangement want more than one car parking space. This change will allow developers to allocate a proportion with two parking spaces and some with none.

#### 6.4.7 Restaurant

There is no minimum provision requirement in the City and town centre CZ1 zones and this should continue. The bulk of demand for restaurant services during business hours comes from people working within or near those centres and there is sufficient spare capacity in private for public parking facilities to cater for increases in demand generated from areas outside these zones.

With CZ2 and CZ3 zones in the City and town centres, the provision rates were included to ensure that new restaurants had sufficient parking to support their operation. As with CZ1 zones, the bulk of demand is likely to come from areas within or near CZ2 and CZ3 zones, and consideration could be given to reducing the on-site parking provision rates.

In the case of restaurants establishing in the Braddon Commercial Area, the on-site parking provision rate reduces to three (3) spaces per 100m<sup>2</sup> GFA where the restaurant use is one of two or more land uses set out in Section 3.2.2 of *the Code*. Reduction in the on-site parking provision could be considered in CZ2 and CZ3 zones in the City area.

The requirements for CZ5 and CZ6 zones have in the past been based on the types of uses permitted in those zones and the different parking demands likely in each. The mixed use zone (CZ5) could have scope for reduction of the parking provision rate for restaurant uses, given the likely peak demand times for restaurant and other uses in these zones are unlikely to be concurrent. A reduction to five (5) spaces per 100m<sup>2</sup> GFA is worth consideration.

With CZ6 zones, there is likely again to be non-concurrence between the peak demands for restaurants and for other uses, with demand from visitors staying in accommodation on sites within CZ6 zones reducing the total demand for car parking during evenings when restaurants are generally busiest. Again, a reduction to five (5) spaces per 100m<sup>2</sup> GFA is worth consideration.

If mixed use development has a predominant restaurant use, the concurrence of use would be primarily after hours and on weekends. The current car parking requirements in these areas has been used to limit restaurant use in size when it has been proposed without a limit in a lease variation. CZ5 & CZ6 Zones may abut residential areas away from other commercial zones. Any reduction of car parking requirements in these zones should only be linked with collocation with other daytime uses and a restriction that off-site car parking is not considered where it is within or adjoining a residential zone.

#### **Recommendation 33**

Consider reductions in parking provision rates for restaurants, where justified. This is best implemented by introducing a range in allowable rates. This will bring the rates more in line with current expected demand.

#### **6.4.8 Vehicle Sales**

'Vehicle Sales', where located in an Industrial Area, *the Code* requires 6 spaces/service bay plus 6 spaces/100m<sup>2</sup> of sales area. There has been confusion as to whether the vehicle sales area is the building sales area where the transactions occur as measured by the gross floor area (GFA) or, if the sales area includes where vehicles are displayed outside of the showroom.

A preliminary review on how to apply rates for car sales has been undertaken using the RMS method, which appears more straight forward than the current ACT method. This was tested at a number of sites using roughly scaled aerials and the numbers were seen to vary comparing the total site areas to indicative sales area.

The RMS rate of 0.75 spaces / 100 m<sup>2</sup> of site area plus six spaces per work bay is a possible option for ACT. It is recommended that local surveys and analyses are undertaken to determine the suitability of the rate for vehicle sales or alternative rates for the ACT.

#### **Recommendation 34**

Local surveys and analyses need to be undertaken to determine the suitability of the rate for vehicle sales or alternative rates for the ACT. This is needed to eliminate confusion in *the Code* as to whether the vehicle sales area is the building sales area where the transactions occur as measured by the gross floor area (GFA) or, if the sales area includes where vehicles are displayed outside of the showroom.



#### 6.4.9 Child care centres

There are three issues that need to be addressed with regards child care centres:

1. The current code only applies to centres with up to 90 child care spaces, but there are now a number of child care centres that exceed 150 child care spaces. The requirements for visitor car parking should be increased to reflect this trend.
2. Staffing requirements for child care centres has increased in recent years and this is not reflected in the current code requirements.
3. There is currently no definition of pick up / set down parking currently in the code and recent changes to regulations relating to dropping off or picking up children mean that pick up /set down facilities are no longer appropriate. Short-stay (15 minute) parking is now more appropriate, due to parent sign in / sign out requirements that have been introduced.

Surveys of child care centres of different sizes are needed to enable a recommendation for larger centres, or changed conditions (e.g. higher staff / child ratios). The survey should involve consultation with a range of child care centres to determine how their parking needs vary.

##### Recommendation 35

Surveys of child care centres of different sizes to inform any changes to rates, to ensure that the rates reflect changed operating conditions and larger centres being developed in recent years. This will provide justification for new rates, reflecting recent changes in operating conditions and size of centres.

### 6.5 Minor Corrections to the Existing Code

#### 6.5.1 Editorial changes

The review has identified a number of minor editorial corrections required to *the Code*, detailed in Appendix H.

The arrangement and formatting of *the Code* should be reviewed so as to ensure it more closely aligns with other Precinct and General Codes. It may be appropriate to consolidate all parking rates within a single appendix which is referenced by a Rule contained in *the Code*, rather than distributing them throughout the body of *the Code* itself. Locational requirements could be similarly consolidated.

The revised Code should have online interactive links to planning scheme documents to replace the isolated nature of the Territory Plan and provide live links to other documents or precinct codes.

##### Recommendation 36

- a. Implement minor corrections to *the Code*, which mainly involve minor wording changes, as well as changes in formatting, referred to in Appendix H.
- b. Where appropriate, incorporate live links from the revised parking code to other Territory Plan documents, to simplify *the Code* and better integrate it with other related Territory Plan documents.

#### 6.5.2 Car park use

The current parking provision for this use is based on a “pay parking structure” similar to the City West car park rather than more modern models that include integrated pay car parking. If this use is approved or the lease includes car park use, then it could be allocated to off-site users rather than for the purpose for which is approved/intended by *the Code*. Some finite rules/criteria should be considered to ensure that the car park use is managed as short-stay, long stay, public, private, or operational car parking as part of an approval.

**Recommendation 37**

Some finite rules/criteria should be introduced into the new Code to ensure that the car park use is managed as short-stay, long stay, public, private, or operational car parking as part of an approval for this use. This is to ensure the use car park is used for what it is intended for.

**6.5.3 Locational requirements**

There are four types of parking in relation to locational requirements: long stay, short stay, operational and visitor. In the parking schedules of *the Code* it is not clear what types of parking should be provided and what should be the optimum ratio of different types of parking. It would be preferable to remove locational requirements from the future code, but allow consideration of dispensation for use of available public parking where it can be demonstrated to not have significant impact on adjoining uses.

**Recommendation 38**

Remove reference to locational requirements in the new Code and allow dispensation for use of available public parking where it can be demonstrated to not have significant impact on adjoining uses.

**6.6 Guidance Material for *the Code***

The City of Gold Coast has a number background practice notes, guidelines and fact sheets to support their City Plan documentation, covering a broad range of planning topics; some aspects of parking being one of them – see <http://www.goldcoast.qld.gov.au/city-plan-practice-notes-30532.html>. These are not legal documents, but simply support documents such as the Gold Coast Parking Code. Such documents could also be created for the Environment and Planning Directorate website. These can be updated and new supporting documents created as needs arise, not as part of a Territory Plan Variation, providing greater flexibility.

A sample practice note is given in Appendix F. More examples are in the above link.

**Recommendation 39**

Develop fact sheets and practice notes to supplement *the Code*, to assist applicants with understanding terms (e.g. unbundled parking) and use of *the Code*, similar to the example in Appendix F. This will provide supporting user-friendly guidance material for *the Code*, independent of the Territory Plan.

**6.7 Future Data Needs**

The existing data sources reviewed as part of this report have shown to have a number of limitations or shortcomings which need to be addressed in order to provide a more reliable and robust case for variations to the structure and rates of *the Code*. The primary shortcomings of this data is summarised as follows:

- The parking data surveys undertaken by Environment and Planning Directorate in 2012 and 2014 presented a number of inconsistencies between the data sets. Namely the capacity of the car parks surveyed varied in many instances, some by a considerable quantity (up to 2000 car spaces). In order to provide a reasonable comparison or analysis of the data sets, consistency in the data collected in terms of location and methodology is required.
- Additional parking surveys are recommended to help justify suggested changes to parking rates that may be a point of contention.

It is noted that while additional surveys help give a better understanding of the current usages and demand patterns, their value in aligning current practice with future targets and objectives of policy may be of less relevance.

In defining future rates alignment what the policy objectives could take precedence over current demands as long as new rates were considered reasonable. This moves to supply management rather than demand management.

Any additional surveys could be targeted to land uses that have a high level of uncertainty or those that have come under scrutiny in the past.

**Recommendation 40**

- a. In order to provide a reasonable comparison or analysis of the parking data survey sets in Canberra's centres, consistency in the data collected in terms of location and methodology is required in future. This will provide a more reliable and consistent comparison of changes in parking supply and demand in centres.
- b. Additional parking surveys for select land uses to determine appropriate changes – could limit to rates which have a high level of uncertainty or likelihood for potential scrutiny. This will help justify changes to parking rates.

## 7.0 Recommendations

This Chapter brings together the recommendations of this review, which has concluded that a total re-write of the Code is the best way to create a contemporary approach to parking controls in the ACT, within a simplified and easier to understand framework (Section 7.1).

Three potential options for the underpinning framework for a new Code are then presented (Section 7.2.1), with one option used to create a draft table of parking provisions for consideration and consultation. This draft table implements many of the recommendations of the review, and shows how they might work in practice.

Finally, this section then provides a list of further recommendations that need to be considered when re-drafting the Code (Section 7.2.4) and the next steps required to progress the development of the new Code (Section 7.2.5).

### 7.1 Summary of Findings

*The Code* sets the requirements for car parking provision in the ACT and it is important that it supports the ACT government's planning, transport and sustainability policy objectives. *The Code* has not been holistically updated for some time, and an update is now needed to ensure that it reflects contemporary thinking in line with current transport and land use policy. As such, a comprehensive review of *the Code* has been undertaken. The review examined changes that could be made to *the Code* to ensure that it supports the Government's policy objectives and how *the Code* could be simplified for users.

The review found that ACT has the most complicated parking code of any jurisdiction examined. It also revealed that the ACT's parking rates are broadly comparable with other similar jurisdictions in Australia, but rates for office and residential in City and town centres is lower than similar jurisdictions. It also found that changes to *the Code* are needed to ensure that it aligns with the Government's broader strategic planning, transport and sustainability policy objectives.

The review has examined how *the Code* can be improved to achieve the Government's broader strategic objectives, including recommendations on how *the Code* could be simplified to aid implementation and understanding by users.

As government policy is moving away from car parking demand satisfaction to demand management, this review considered how parking provision rates could be applied or adjusted within this context. Particular consideration is given to how *the Code* could better support mode share targets for public transport and active travel and the focus for realising higher density development in the city centre, town and group centres, and along major transport corridors that are served by rapid public transport services. To improve the mode share of sustainable transport and deliver on many of its broader policy objectives, the ACT Government is investing in Canberra's first light rail route between City and Gungahlin and have commenced planning for a City to Woden route for stage 2 of a city-wide light rail network.

Parking management, both in Australia and globally, has also moved away from a 'car parking demand satisfaction' model towards balancing parking supply and demand and addressing broader transport policy. This supports government's objective to update *the Code* to better manage parking supply and demand and address broader policy.

The existing code allows the planning and land authority the flexibility to support a proposal where the proponent can demonstrate that the objectives for the provision of parking in a particular zone can still be met either by providing a lesser on-site rate and/or by utilising spare capacity in publicly available on-street or off-site parking. The typical means to estimate the impact of any departure from the standards is parking surveys and the consideration of other complementary demand management measures. However, *the Code* is vague on the extent to which other demand management measures such as accessibility to public transport, reciprocal parking arrangements, utilising active travel, car pooling or car share should be applied as an adjustment factor for the rates specified. The review has found that formal adjustment factors, such as for car share and proximity to public transport, should be included in the update of *the Code*.

To address the above fundamental changes needed to *the Code*, the review found that the existing parking code has to be updated. This is the best way to resolve current complexities and inconsistencies, and to ensure that *the Code* can achieve the objectives of the ACT Government. In re-writing the code, this review recommends to:

1. Remove different rates by zone and locational requirements from *the Code* to create a simpler and more user-friendly framework.
2. Introduce a maximum rate for different land uses and geographical areas, to be referred to as the standard rate. Applicants will be able to request a reduction to the standard rate using adjustment factors or a higher rate in special circumstances (e.g. business need to provide additional parking).
3. Applicants will be able to use the adjustment factors to request a reduction to the standard rate when preparing applications. This is intended to support greater mode shift away from the private car mode and a more flexible approach for balancing parking supply and demand. The review recommends allowing a 30% reduction from standard rates as a reasonable starting point. Applicants will be able to apply adjustment factors in preparing applications and these can then be assessed by the ACT Government.

## 7.2 Recommendations

### 7.2.1 Options for a New Code Framework

This review recommends that *the Code* be re-written to simplify it, make it more user friendly and to support changes to government policy. The review found that there are several options available to consider for a new simplified code framework. Three possible new frameworks were explored in this review:

1. Adding broader policy considerations, high frequency (rapid) public transport corridors and new adjustment factors to the existing framework.
2. A new simplified framework with one table of standard parking rates by land-use and a comprehensive set of adjustment factors. Different parking rates by zoning for the same land use would be removed.
3. A new simplified framework with the standard parking rates by general geographic areas, including the city centre, town centres, group centres and the Northbourne corridor. Different parking rates by zoning for the same land use would be removed as above.

A comparison of key elements of alternative frameworks is summarised in Table 13. A discussion of each of these elements follows.

Table 13: Comparison of frameworks

Element	Framework 1	Framework 2	Framework 3
Zoning	As exists in current Code	Remove, except where different adjustment factors may need to be applied	
Min / max rates	Minimum, as exists in current Code	Introduce a maximum rate to apply to different land-uses; to be referred to as a standard rate	
Adjustment factors	Introduce factors to encourage sustainable transport initiatives, applied to recommended rates across all frameworks, up to a maximum reduction of 30%		
Public transport corridors	Incorporate in adjustment factors		
Geographic areas	As exists in current Code	Incorporated in adjustment factors	May include an amalgamation of areas in the current Code
Land-uses	As exists in current Code	Amalgamate land-uses for specifying rates	



Element	Framework 1	Framework 2	Framework 3
General design and vehicular access requirements	As exists in current Code	Remove some or all of these from Code, with reference to relevant other standards and guidelines where they apply.	
Other	As exists in current Code	A range of recommendations could be applied	

#### 7.2.1.1 Zoning

Zoning primarily defines allowable land-uses, densities and urban form. In most instances it does not have a strong relationship with parking rates. Many of the parking rates for land-uses in different Zonings have the same or similar rates. This is why it is desirable to remove reference to Zoning in the parking code, reflected in Frameworks 2 and 3.

The main change to structure in Frameworks 2 and 3 would be the removal of the specification of parking rates by Territory Plan Zoning. The Zoning objectives for parking could then be moved to relevant Zoning Objectives and Development Tables.

A new overall set of objectives for parking need to be created to replace the objectives by various Zonings.

#### 7.2.1.2 Minimum and maximum parking rate changes

Most parking codes traditionally specify minimum parking rates for various land uses, including Canberra. However, many jurisdictions have moved towards maximum rates to better manage parking supply and demand, and to address broader policy objectives such as a greater shift towards sustainable travel modes. This move away from a 'demand satisfaction' model reflects the Government's adoption of a balanced approach to parking supply whereby the parking provision on-site is intended to be set below the level of theoretical demand (in support of encouraging access by other modes and the achievement of other land use and place making objectives). This is also recommended for Canberra (i.e. Frameworks 2 and 3), by recommending maximum rates for various uses and geographic locations.

Parking rates should reflect the inherent accessibility at a particular location, such as reducing parking requirements for developments in activity centres or areas where there is already a supply of publicly available parking, and/or there is potential for trips to be made by public transport and active travel. This approach also places greater emphasis on managing demand for the number of car trips in locations where the concentration of land uses enables multi-purpose travel (where users can combine several trip purposes into the one parking event) resulting in an aggregate reduction in parking demand.

#### 7.2.1.3 Adjustment factors

There is a need for flexibility to adjust parking rates where individual circumstances warrant the consideration of further parking reduction. This is enabled by applying adjustment factors to the nominated rates. Adjustment factors are recommended as percentage reductions from a recommended parking rate or range of rates set for each land use and corresponding geographic area. The adjustment factors give the mechanism for proponents of developments to put forward a case for reduced parking. *The Code* should also allow negotiation to occur in special circumstances (e.g. amenity / historical considerations, such as development on City Walk with limited vehicle access).

Adjustment factors could be applied to recommended rates across all frameworks, to a maximum reduction of 30%.

#### 7.2.1.4 Public transport corridors

Figure 7 indicates that there are a number of corridors around Canberra where there is relatively good public transport access, yet the current parking Code only recognises good public transport in Centres and along the Northbourne Avenue corridor. This needs to be addressed and has become more urgent as a result of the construction of light rail. This will enable a reduction in parking rates for public transport in suburban areas outside of Centres and the Northbourne Avenue corridor, to reflect greater accessibility in these corridors. It is preferable to base these factors on relatively simple criteria.

Adjustment factors need to be introduced for these corridors and can be introduced via each of the frameworks.

#### 7.2.1.5 Geographic areas and land-uses

Each alternative framework could incorporate various extents of amalgamations of land-uses and geographic areas. Other jurisdictions have considerably fewer land-uses and geographic definitions and a reduction in these would simplify *the Code*.

The current code inherently incorporates a reduction in parking rates for centres and Northbourne Avenue. The reduction in rates for centres effectively accounts for good accessibility to activities in centres and thus more walk trips to multiple uses.

New adjustment factors for geographic areas would need to be created in Framework 2, using the current inherent reductions as a basis. Framework 3 could continue to adopt the inherent reductions in parking rates for geographic areas imbedded in the current code to some degree with a smaller impact from adjustment factors as the rates are already lower. For example, it would provide a lower base rate for town centres as opposed to local centres or suburban areas.

#### 7.2.1.6 Other elements

Other elements (e.g. locational requirements, payments in lieu, guidance material) could be considered as part of any new framework. This review recommends the removal of locational requirements and guidance material, which best aligns with Frameworks 2 and 3.

### 7.2.2 Preferred Framework

The first option offers a way to more quickly introduce key changes to *the Code*, especially to address light rail corridors and to encourage innovative sustainable transport initiatives. This could be implemented as an interim measure if necessary, prior to the introduction to more significant changes to the structure of *the Code*. It would not however offer a long-term solution to simplify the code and make it more user-friendly.

An alternative to implementing Framework 1 would be to incorporate amendments to rates for the light rail corridor in a Precinct Code. However, it would be more desirable to implement a more comprehensive set of desirable changes, which is best achieved through Frameworks 2 and 3.

Options 2 and 3 would involve significant restructuring of *the Code*. The main change to structure in these would be the removal of the specification of parking rates by Territory Plan Zoning.

Consistent with the objectives of revising *the Code* it is preferable to adopt a simplified framework to the existing (i.e. Framework 2 or 3). It is likely that the amount of time and effort involved in adopting the simplified framework would not be much different to modifying the current framework.

There is minimal difference between Framework 2 and 3. The only difference is the manner in which parking rates are treated for geographic areas.

Framework 3 was selected for further progression as it was seen to present the best option for creating a simpler, more user-friendly code and supporting the Government's mode shift targets, whilst being considered an implementable reform that is likely to be broadly acceptable to a range of stakeholders. It offers a clearer structure for defining parking rates for different centres, and enables further incremental change to be implemented over time. It also provides more flexibility than the current approach. It is structured around:

- The use of maximum rates rather than minimum rates, with the maximum rates generally reflecting current minimum rates. Maximum rates will be referred to as standard rates in *the Code*.
- Adjustment factors to enable reductions to standard rates of up to 30%, reflecting ACT policies designed to achieve less reliance on private vehicles, reduced traffic congestion in centres and greater opportunities for future redevelopment of centres.
- More transparency for rate reductions and greater flexibility for applicants.

### 7.2.3 Key Elements of the Preferred Framework

New permissible parking rates and adjustment factors are key elements of the preferred framework. The review has found that there are a number of options in how to structure this framework, including:

1. Specifying a parking rate as per the current code.
2. Specifying a range, with or without adjustment factors.
3. Specifying the parking rate as a maximum, with freedom to provide less parking.
4. Specifying a parking rate with set adjustments available for different circumstances.

The latter approach has been adopted, with a maximum allowable adjustment of 30%, as this was consistent with the findings in Chapter 6.

The second option was also considered, with adjustments to the minimum rate in the range, but it creates the risk of developers providing too little car parking to minimise costs, thus putting increased pressure on nearby existing parking and complaints from existing residents and businesses. The range of rates suggested in this option is included in Appendix I.

Adjustments elsewhere are made to 'standard' rates that are typically similar to ACT's 'standard' rates. Minimums are just that – adjustments are made to 'standard rates' or 'maximums', but rates cannot fall below minimums. The alternative of adjusting minimums creates little incentive for applicants to consider sustainable alternatives.

#### 7.2.3.1 New Parking Rates

Table 14 presents a table of suggested standard parking rates for various uses and types of centres. As noted previously, a reduction from the minimum rate can be justified using the adjustment factors given in Section 7.2.3.2.

The setting of the rates in Table 14 was based on the following general considerations:

- Setting the maximum or standard rate for a land-use at its current maximum, unless considered pertinent to change it.
- Lowering rates for City or town centre locations, where considered reasonable to do so. This was done for most uses.
- Reducing the rate for numerous uses in the Northbourne Avenue precinct, to better align with rates in City and town centres.
- Suggested reductions in rates noted below should be reviewed via surveys.

Table 14: Permissible parking rates

Land– use	Rate Measure	Standard Rate				
		City	town centre	group centre	North-bourne Precinct	Suburban
Amusement Arcade, night club, music hall, discotheque	per 100 sqm GFA	5	5	10	n/a	10
Boarding House	Per employee	0.4	0.4	0.5	0.4	0.5
	Per bedroom	0.4	0.4	0.5	0.4	0.5
Bulky Goods Retailing	Per 100 sqm GFA	n/a	n/a	n/a	n/a	2.5
Business Agency	Per 100 sqm GFA	4	4	5	4	6
Camping Ground / Caravan Park	Per 100 sqm GFA office space	n/a	n/a	n/a	n/a	2.5
	Per site or unit (tenant)	n/a	n/a	n/a	n/a	1
	Per site or unit (visitors)	n/a	n/a	n/a	n/a	0.25
Child care centre	Per Centre	2	2	2	2	2
	Per 15 children (staff parking)	2	2	2	2	2
	Per 30 children (visitor parking)	3	3	4	3	4
Cinema	Per 12 seats	3	3	3	3	3
Club	Per 100 sqm GFA	6	8	10	8	15
Commercial Theatre	Per 12 seats	2	2.5	3	2.5	3
Communications Facility	Per peak shift employee	0.8	0.8	1	0.8	1
Community Activity Centre	Per 100 sqm GFA	2.5	2.5	3	2.5	4
Community Theatre	Per 12 seats	1	1	2	1	3
Craft Workshop	Per 100 sqm GFA	2.5	3	3	3	3
Cultural Facility	Per 100 sqm GFA	0.5	0.5	1	0.5	2
Drink Establishment	Per 100 sqm GFA	6	8	10	8	15
Educational Establishment (excepting school, secondary college or tertiary college)	Per 10 students	1	1	1.5	1	2.5
Emergency Services Facility	Per peak shift employee	0.8	0.8	1	0.8	1
Financial Establishment	Per 100 sqm GFA	4	4	5	4	6
Funeral Parlour	Per 100 sqm GFA floor area (excluding chapel area)	2	2	2	2	2
	Per 20 seats	0.8	1	2	1	3
General Industry	Per 100 sqm GFA	n/a	n/a	n/a	n/a	2
Guest House (up to 36 rooms)	Per 3 employees	0.6	0.8	1	0.8	1.5
	Per guest room	0.6	0.8	1	0.8	1
Guest House (36 + rooms)	Per guest house	18	22	25	22	25
	Per guest room	0.2	0.25	0.3	0.25	0.3



Land- use	Rate Measure	Standard Rate				
		City	town centre	group centre	North-bourne Precinct	Suburban
Hazardous Industry	Per peak shift employee	n/a	n/a	n/a	n/a	1
Hazardous Waste Facility	Per peak shift employee	n/a	n/a	n/a	n/a	1
Health Facility	Per practitioner	3	3.5	4	3.5	4
Hospital	Per peak shift employee	0.7	0.7	0.8	0.7	0.8
	Per bed	0.5	0.5	1.3	0.5	1.3
Hotel or Motel (up to 36 units)	Per 3 employees	0.8	1	1.5	1	1.5
	Per unit	0.1	0.6	0.8	0.6	1
	Per 100 sqm GFA of bars and function rooms	6	8	10	8	10
	Per 100 sqm of retail space	2	2	3	2	3
	Per 10 restaurant seats	1	1	1	1	1
Hotel or Motel (more than 36 units)	Per hotel or motel	18	22	25	22	25
	Per unit	0.2	0.25	0.3	0.25	0.3
	Per 100 sqm GFA of bars and function rooms	6	6	10	6	10
	Per 100 sqm of retail space	2	2	3	2	3
	Per 10 restaurant seats	1	1	1	1	1
Incineration Facility	Per peak shift employee	n/a	n/a	n/a	n/a	1
Indoor Recreation Facility	Per basketball and netball court	15	15	20	15	20
	Per 100 sqm skating rink and swimming pool area	5	5	5	5	15
	Per squash court	1.5	2	2	2	2
	Per 100 sqm GFA fitness centre or gymnasium	1	1	2	1	3.5
Industrial trades	Per 100 sqm GFA	2	2	2.5	n/a	2.5
Light Industry	Per 100 sqm GFA	2	2	2.5	n/a	2.5
Liquid Fuel Depot	Per peak shift employee	n/a	n/a	n/a	n/a	1
Municipal Depot	Per peak shift employee	0.5	0.5	1	n/a	1
Offensive Industry	Per peak shift employee	n/a	n/a	n/a	n/a	1
Office, Civic Administration	Per 100 sqm GFA	1.5	2	2.5	2	2.5
Outdoor Recreation Facility	Per 100 sqm skating rink and swimming pool area	5	5	12	5	15
	Per bowling green	1 <sup>st</sup> green: 25 2+ green: 10	1 <sup>st</sup> green: 25 2+ green: 10	1 <sup>st</sup> green: 25 2+ green: 12	1 <sup>st</sup> green: 25 2+ green: 10	1 <sup>st</sup> green: 30 2+ green: 15
	Per tennis court	2	2	4	2	4
Personal Services	Per 100 sqm GFA	4	4	5	4	5
Place of Assembly	Per 20 seats	1	1.5	2	1.5	5



Land- use	Rate Measure	Standard Rate				
		City	town centre	group centre	North-bourne Precinct	Suburban
Plant and equipment hire establishment	Per 100 sqm GFA	1.5	.5	2	1.5	2
Produce Market	Per 100 sqm GFA	10	10	10	10	15
Public Agency	Per 100 sqm GFA	4	4	5	4	5
Recycling Facility	Per peak shift employee	0.8	0.8	1	n/a	1
Residential Care Accommodation	Per bed or unit (for visitor parking)	n/a	n/a	n/a	n/a	0.25
	Per residential employee	n/a	n/a	n/a	n/a	1
	Per non- resident peak shift employee	n/a	n/a	n/a	n/a	1
Residential Use <sup>1</sup>	Per unit per single bedroom unit	0-0.8	1	1	1	1.25
	Per unit per two bedroom unit	0-1	1.3	1.4	1.3	1.75
	Per unit per three plus bedroom unit	0 - 1.2	1.8	1.9	1.8	2.25
Restaurant <sup>2</sup>	Per 100 sqm GFA	0 - 3	5	8	5	12
Retail Plant Nursery	Per 100 sqm GFA	n/a	1.8	2	n/a	2
Retirement Village	Per self care unit	n/a	n/a	n/a	n/a	1
	Per hostel bed or unit	n/a	n/a	n/a	n/a	0.5
	Per residential employee	n/a	n/a	n/a	n/a	1
	Per non- resident peak shift employee	n/a	n/a	n/a	n/a	0.5
Scientific Research Establishment	Per 100 sqm GFA office and laboratory	n/a	n/a	n/a	2	2.5
	Provision for other activities	n/a	n/a	n/a	Subject to individual assessment	
Secondary College	Per 10 students	1	1.5	2	1.5	2
Service Station	Per service bay	4	4	4	4	4
	Per 100 sqm GFA shop area	4	4	5	4	6
School (pre-, primary- and high-school) <sup>2</sup>	Per 10 students <sup>1</sup>	n/a	1.2	1.2	n/a	1.2
Shop	Per 100 sqm GFA	4	4	5	4	6
Special Dwelling	Per dwelling (for visitor parking)	n/a	n/a	n/a	n/a	1
	Per resident employee	n/a	n/a	n/a	n/a	1
	Per non- resident peak employee	n/a	n/a	n/a	n/a	1
	Per operational vehicle	n/a	n/a	n/a	n/a	1
Store	Per 100 sqm GFA	1.5	2	2	2	2
Vehicle Sales	Per service bay	4	4	4	n/a	4
	Per 100 sqm GFA shop area	3	3	6	n/a	6
Veterinary Hospital	Per 100 sqm GFA	n/a	3.5	3.5	n/a	3.5

Land- use	Rate Measure	Standard Rate				
		City	town centre	group centre	North-bourne Precinct	Suburban
Warehouse	Per 100 sqm GFA total floor area	1	1	1	n/a	1
	Per 100 sqm GFA office area	2	2	2.5	n/a	2.5
Waste Transfer Station	Per peak shift employee	n/a	n/a	n/a	n/a	1

*Notes:*

1. Apartment, attached house or detached house; includes one visitor space per four dwellings outside City, town centres and Northbourne Avenue corridor. A range of rates is given for residential use in City.
2. A range of rates is given for restaurant use in City.
3. Includes 0.4 spaces / student for pick-up set-down at pre-, primary- and high- schools
4. A reduction from the standard rate can be justified using the adjustment factors given in Table 15.
5. The suburban category includes all other locations. Reductions for proximity to frequent public transport corridors or light rail stops in suburban areas are included in Table 15.
6. Uses not identified in this table are subject to an individual assessment.
7. A rate above the standard rate may be considered if justified by the applicant, to satisfy likely customer needs and business objectives.
8. Where more than one rate measure is shown for a given land-use, add the parking for each rate measure to get the total parking requirement for that use.
9. Where the calculated number of car spaces is not a whole number, the number of car parking spaces required must be the next higher whole number.

In addition, there were specific changes or corrections for different uses, as follows:

- Simplifying of child care centre rates, to enable provision for centres bigger than 90 child care places and cater for changed operating requirements, such as the need for parents to sign children in and out of centres.
- Removing differentiation of rates for different sized clubs in City and town centre, effectively decreasing the rates for larger clubs in CZ1/2 zones, but increasing rates for smaller clubs in CZ3 zones. The latter change could optionally reflect current rates using adjustment factors.
- Adjusting the standard rates for club and drinking establishments in CZ3 City. For CZ3 in City the rate is currently 10 spaces per 100 sqm GFA, higher than the requirement for CZ3 in town centres (5 – 10 spaces per 100 sqm GFA). This rate was reduced to 6 for City and 8 for town centres.
- Adjusting the standard rate for commercial theatre in City. For City the rate is currently 4 spaces per 12 seats, higher than the requirement for other centres (3 spaces per 12 seats). This rate was reduced to 2 for City and 2.5 for town centre. The rates for commercial theatre are still significantly higher than community theatre (1 space per 12 seats in centres), so lower rates are justified.
- Increasing the standard rate for community theatre in group centres to bring it closer into alignment with commercial centres. This rate was increased from 1 space per 12 seats to 2 spaces per 12 seats; still lower than the commercial theatre rate in group centres (3 spaces per 12 seats).
- Adjusting the standard rate for community theatre in local centres (suburban), which is currently higher than the rate for commercial theatres. This rate was increased from 4 spaces per 12 seats to 3 spaces per 12 seats, to align with the rate for commercial theatre in suburban areas (local centres).
- Removing differentiation of rates for different sized drinking establishments in CZ3 zones of town centres, effectively decreasing the rates for larger clubs, but increasing rates for smaller clubs in CZ3 zones. The latter change could optionally be adjusted to reflect current rates using adjustment factors.

- Adjusting the standard rate for educational establishment in suburban locations; this is currently much higher than the rate for group centres. This rate was decreased from 4 spaces per 10 students to 2.5 spaces per 10 students, to better align with the rate for group centres (1.5 per 10 students).
- Modifying the standard rates for funeral parlour in suburban and group centre locations; the rate for suburban is currently much higher than the rate for group centres. This rate was decreased from 5 spaces per 20 chapel seats to 3 spaces per 20 chapel seats for suburban and increased from 1 spaces per 20 chapel seats to 2 spaces per 20 chapel seats for group centres, to better align rates by location.
- Different rate measures are used for health facility in the current code – 3.5 spaces per 100 sqm GFA for City and town centres, whilst 4 spaces per practitioner for Group and local centres. The latter measure has now been adopted across all centres (ie., per practitioner).
- Removing differentiation of rates for different sized bars in hotels and motels in City and town centres, effectively decreasing the rates for larger clubs, but increasing rates for smaller clubs in CZ3 zones. The latter change could optionally be adjusted to reflect current rates using adjustment factors.
- Reducing the standard rate for basketball and netball courts for suburban locations to 20 spaces per court; currently varying from 20 to 25 spaces per court by different zonings in suburban locations.
- Reducing the standard rate for swimming pools and skating rinks for suburban locations to 15 spaces per 100 sqm; currently varying from 15 to 20 spaces per 100 sqm by different zonings in suburban locations.
- Increasing the standard rate for industrial trades and light industry in industrial zoning in suburban locations from 2 spaces per 100 sqm GFA to 2.5 spaces per 100 sqm GFA, so as to align with the rate for group centres, local centres and other suburban locations.
- Changing the standard rates for office and civic administration to align the rates for all town centres. This includes reducing the rate for City CZ2 zones to align to rates for Belconnen and Woden town centres. It also includes reducing the rates for Gungahlin and Tuggeranong town centres to align them with other town centres.
- Changing the standard rate for outdoor tennis courts for suburban locations to 4 spaces per court; currently varying from 2 to 5 spaces per court by different zonings in suburban locations. However, this rate is currently 5 spaces per court in City and town centres, but is reduced to 2 spaces per court.
- Increasing the standard rate for personal services in industrial zoning in suburban locations from 4 spaces per 100 sqm GFA to 5 spaces per 100 sqm GFA, so as to align with the rate for group centres.
- Changing the standard rate for public agency in suburban locations to 5 spaces per 100 sqm GFA; currently varying from 4 to 6 spaces per 100 sqm by different zonings in suburban locations. This brings it in line with group centres.
- Reducing the standard rate for residential uses in group centres, to bring them more in line with CZ3 zones in town centres.
- Changing the standard rate for restaurant in suburban locations to 12 spaces per 100 sqm GFA; currently varying from 10 to 15 spaces per 100 sqm GFA by different zonings in suburban locations.
- Increasing the standard rate for veterinary hospital in suburban locations to 3.5 spaces per 100 sqm GFA to bring it in line with the rate for Centres; currently varying from 3 to 3.5 spaces per 100 sqm GFA by different zonings in suburban locations.



### 7.2.3.2 Adjustment Factors

There is a need for flexibility to adjust parking rates where individual circumstances warrant the consideration of parking reductions. This will generally be enabled by applying adjustment factors to the nominated standard (or maximum) rates. In addition, a rate above the standard rate may be considered if justified by the proponent, to satisfy likely customer needs and business objectives.

Adjustment factors are recommended as percentage reductions from the standard parking rate set for each land use and corresponding geographic area, up to a maximum of 30% of the standard rates for each land use. The adjustment factors give the mechanism for proponents of developments to put forward a case for reduced parking.

A reduction from the standard rate can be justified using the adjustment factors given in Table 15. In addition, a rate above the standard rate may be considered if justified by the proponent, to satisfy likely customer needs and business objectives.

**Table 15: Adjustment factors**

Element	Reduction
Within 400 m walking distance of a high frequency public transport route (for group centres and suburban areas only)	10%
Within 400 m walking distance of an existing or future light rail route (all locations)	10%
Within 401 m to 800 m walking distance of an existing or future light rail route (all locations)	5%
Car sharing	Each car share vehicle offsets 5 spaces
Unbundled parking	20% to 50% unbundled – 5% reduction
Parking management plan which establishes either how parking within a proposed development will be controlled and managed to encourage efficient use of parking through technology, or incorporates other parking demand reduction measures (such as a workplace or site-based travel demand management program, education and promotion of sustainable travel incentives, shared use)	Up to 5% for developments with more than 100 car parking spaces, to be approved by ACT Government
Other travel demand measures, provision of public transport facilities, provision of additional end of trip facilities or amenity improvements to nearby public places and/or streets	Up to 5%, to be approved by ACT Government

Notes:

1. Reductions can be applied to the standard rates in Table 14.
2. High speed public transport routes are defined on the EPSD website. It includes light rail and major bus routes. A development within 400 m walking distance of a high frequency public transport route and 400 m walking distance of a light rail stop can apply a 20% reduction in total.
3. Adjustments are additive.
4. A maximum total reduction of 30% is allowable for these adjustment factors. Additional deductions can be negotiated for special site circumstances or where mixed uses can enable reductions due to shared use of car parking.

This approach make allowances for site specific circumstances where either public transport accessibility, supportive workplace travel incentives or parking management measures further enhance the attractiveness of travel by alternative modes, or facilitate using parking spaces more efficiently. The Code should also allow flexibility for parking provision in special circumstances (e.g. amenity / historical considerations, such as development on City Walk with limited vehicle access).

Currently, there is limited evidence of what level of adjustment should apply for different initiatives and how it should differ for different jurisdictions, as noted in Section 6.3.10. The choice of discount has to be based on subjective judgement. Some guidance is provided by the adjustment factors noted in Section 6.3.10 and in *Austroads Guide to Traffic Management - Part 11: Parking, and recent trends towards personalised or shared transport services*. It is acknowledged that no formula can realistically deal with all circumstances and therefore the application of these adjustment factors will need to rely upon the Planning Authority exercising professional judgement and discretion.

An adjustment factor to recognise a number of corridors with very good public transport access is an important aspect of the new Code. Other jurisdictions apply discounts within a certain distance of a station or bus stop on high frequent public transport routes. Separate adjustments may be considered for light rail and bus corridors. Consideration should continue to be given to the unique nature of the Northbourne Avenue corridor, distinct from other corridors in Canberra.

The setting of adjustment factors in Table 15 is based on limited applications of adjustment factors used elsewhere in Australia (e.g. as noted in Section 6.3.10) and observing the 20% reduction in office rate currently applied to the Northbourne Avenue precinct.

Two examples of application of the adjustment factor follows to show how they could work in practice. It is suggested that more case study examples are worked through as part of the development of the new Code to ensure parking outcomes are aligned with policy objectives.

**1. 20,000 sqm GFA office building in City, within 400 m walk of light rail, with a parking management plan**

Rate from Table 14 – 1.5 spaces per 100 sqm GFA (i.e. 300 car parking spaces)

The applicant can apply for the following adjustments:

- 10% for 400 m walk of light rail and up to 5% for a parking management plan; assume 15% in total, given a comprehensive plan including most of the elements described in Table 15
- 15% of 300 is 45 spaces, so a minimum of 255 car parking spaces needs to be provided in the development

The previous Code would have calculated the parking requirement as 200 spaces, if the development is in a CZ1 zone (i.e. 55 less) or 400 spaces (i.e. 145 more) if in a CZ2 zone.

**2. 100 unit apartment building in group centre, with 20 one-bedroom units and 80 two-bedroom units within 400 m walk of a high frequency public transport route, with 20% unbundled parking**

Rate from Table 14 – 1 space per one bedroom unit and 1.4 spaces per two bedroom unit (i.e. 132 car parking spaces)

The applicant can apply for the following adjustments:

- 10% for 400 m walk of a high frequency public transport route and 5% for 20% bundled parking (i.e. 15% adjustment in total)
- 15% of 132 is 19.8 spaces, so a minimum of 112 car parking spaces needs to be provided in the development (rounding to the next highest number)

The previous Code would have calculated the parking requirement as 165 to 205 spaces, depending on the number of spaces allocated to two-bedroom units (i.e. 53 to 93 more).

#### **7.2.4 Additional Recommendations**

Other recommendations proposed as part of the review for the new code framework include:

- Revise the Introduction to *the Code*, to contain a concise statement clarifying its role and relationship with other parts of the Territory Plan and the National Capital Plan, comparable to that used in other Precinct and Development Codes.
- Include more specific step-by-step details on how to use the new Code, including when special arrangements may be negotiated to improve transparency.

- Remove details of physical and community safety aspects of the Code, but instead refer to other relevant guidelines and design standards.
- Include parking space design requirements not consistent with AS/NZS 2890, but instead refer to other relevant guidelines and design standards.
- Inclusion of requirements for motorcycle parking and add that the provision for motorcycle parking is to only be applied to non-residential development, except in relation to visitor parking.
- Cross reference relevant sections of the Bicycle Parking General Code to *the Code*, especially offsets which may be allowable in lieu of a greater provision of bicycle parking spaces and end-of-trip facilities.
- Accommodate parking objectives for different zonings in the relevant zonings Development Codes, as these will not be required in the new parking code. A general overview of objectives could also be included in the new parking code.
- Incorporate an appropriate methodology for determining parking requirements for mixed use developments, to enable consideration of an adjustment to parking provision requirements to account for multi-use of nearby public car parking, at different times of day and week.
- Create consistency between the terms for uses in *the Code* and the uses defined in the Territory Plan.
- Develop fact sheets and practice notes to supplement *the Code*, to assist applicants with understanding terms (e.g. unbundled parking) and use of *the Code*.
- Incorporate live links from the revised parking code to other Territory Plan documents to make *the Code* more user friendly.

### 7.2.5 Next Steps for Government

Suggested further work for the ACT Government to support the revision of the code includes:

- Undertake internal and external stakeholder engagement to work through the ramifications of the proposed changes. This engagement should include:
  - Discussion and review of the standard rates proposed to capture any corporate knowledge existing within the ACT Government that may provide further guidance.
  - Discussion and review of the proposed adjustment factors and how they should be applied, including the scale of the maximum reduction in standard rates (30% has been adopted in this report).
  - Review of additional development case study examples to provide confidence that the new rates and adjustment factors will provide reasonable and expected outcomes.
- Analysis of City, town centre and group centre case studies to estimate how the changes in *the Code* would impact vehicle parking and Centre master planning.

Other additional work that would be desirable for the ACT Government to undertake includes:

- Changes to *the Code* to avoid inconsistencies with the existing Multi Unit Housing and Commercial Zone Development Codes.
- Research and investigation of different rates for primary schools and high schools, as well as specific rates for college and tertiary education institutions, which currently do not exist.
- Surveys and analyses of alternative rate calculations for the vehicle sales use.
- Surveys of child care centres of different sizes to inform any changes to rates, to ensure that the rates reflect changed operating conditions and larger centres being developed in recent years.
- Further investigations into possible means for managing lease variations that could result in high parking requirements. This is needed to help address difficulties arising where it is proposed to increase the GFA in a lease that facilitates a broad range of uses, or where additional uses are proposed either with or without a GFA limitation.



- Investigate the inclusion in the new Code of provision for car parks for electric vehicle charging in commercial and multi-unit residential developments, together with a discount for other car parking, at a rate to be determined.
- Surveys to create a database of parking demand by time of day and day of week for common uses that form part of mixed use developments, for a range of geographic locations and sizes of development. This will enable more consistent calculations of adjustments to parking provision requirements to account for multi-use of nearby public car parking, at different times of day and week.
- Revise standard controls in Precinct Codes that address development on nominated carparks, to clarify the intent of the control, and clarify the term 'makes substantial contribution to the long term parking supply for the town centre as endorsed by the Territory'.
- Investigate new legislation to enable payment in lieu for the provision of car parking in the ACT. This would be dependent on establishing and managing appropriate governance structures and demonstrating a clear link between payments in lieu and the delivery of parking / transport related outcomes.



# Appendix A

Issues with Current  
Code

### Building an Integrated Transport Network: Parking

1. In the Brief, Environment and Planning Directorate notes that "... parking to meet off-site demand from offices and major employment will gradually reduce and either be met through other modes (of transport), or alternatives such as car share ..."
2. It is worth noting that the existing office parking provision rate for the City and town centres is one (1) space per 100m<sup>2</sup> GFA. This rate was derived from office occupancy figures when the average space per employee was around 20m<sup>2</sup> GFA. ACT Government policy seeks to reduce this to around 15m<sup>2</sup> GFA for major ACT Government offices. Achievement of this rate progressively across the board will see the proportion of parking provided to meet car parking demand reduce from around 20% to around 15% of employee parking demand. (Note that employee parking demand includes operational and executive parking.)
3. The position of the Property Council of Australia (PCA) was, at least until mid-2013, that a minimum parking provision for offices in the City and town centres should be one (1) space per 100m<sup>2</sup> GFA.

### Methods of Determining Supply and Application of Car Parking Provision Standards

4. The first paragraph under this heading refers to 'standards', whereas 'rates' would be preferable. It notes that *the Code* is vague on the extent to which a range of demand management measures should be applied as adjustment factors for the parking provision rates specified in the various schedules in the current version of *the Code*.
5. While it seems intuitive that allowing adjustments for public transport accessibility to a site and the utilisation of active travel warrant consideration in reducing on-site parking provision rates for development, this needs to be based on data analysis to draw out the extent to which such measures lead to reductions in car parking demand.
6. Among the other measures identified, 'car pooling', 'car share' and 'reciprocal parking arrangements' warrant further comment.
7. In relation to car pooling, there are presently '3-for-free' schemes operating within the Territory, whereby if three people arrive at designated parking entry points, an operator issues the driver with a free, all-day parking ticket. The Commonwealth Government employer – IP Australia in Woden Town Centre – operates its own '3-for-free' system for its employees, making available approximately 12 parking spaces within its on-site basement car park for sets of three employees who signed agreements that they would commute in one or other of the vehicles which belonged to any of the three employees on any particular day. It is understood that the spaces allocated for this scheme represented between 5% and 10% of the total on-site parking provision. This is an option worth exploring with IP Australia and could be considered as allowing a small offset for parking provision for future large office developments.
8. In relation to 'car share' arrangements, these are unlikely to warrant consideration of reduced on-site parking provision in the initial stages of their introduction. Analysis of data on employees' utilisation of car share arrangements for commuting may allow some small reduction in on-site parking provision in future years. It is something for subsequent review of *the Code* every five years or so.
9. In relation to reciprocal parking arrangements, this is a potentially fraught area on which to base permanent reductions in on-site parking provision. There have been a limited number of arrangements approved previously within the Territory in relation to this. An example of such a provision includes a development in Fyshwick whereby a proponent was permitted to utilise unused parking capacity on an adjacent lease which was held in the same ownership, but only provided an easement was taken over the car parking spaces attributable to development on the adjacent block.
10. An informal arrangement was entered into between a commercial office operator and residents in a multi-use development in City West whereby the residents (or a proportion of them) have accepted payment to allow the commercial user to utilise specified parking spaces on the site between the hours of 8am and 6pm on week days. Outside those hours, the spaces were for the residents' sole use. How successful this has been over time remains to be determined.

11. A major issue mitigating against permanent on-site parking discounts is that a commercial operator may relocate at some future stage. The parking spaces are not then publicly available. Another issue which must be considered is if a resident who owns a space needs to use it during the day between the specified hours in the agreement for reciprocal use. This is something for private negotiation, not *the Code*.

12. In terms of meeting sustainable transport policy objectives, there is an issue with unused car parking capacity in residential apartment building car parks and, sometimes, on residential blocks in suburban areas abutting the City and town centres. The issue is that it is simply to search the internet looking for privately-owned car parking spaces for rental. Many are advertised on sites such as Gumtree and Parkhound. Whether or not such small scale commercial arrangements are permitted under the leases for particular sites, and, if not, how such private arrangements might be controlled, is a matter for Environment and Planning Directorate to consider.

13. In relation to the flexible approach undertaken to date in allowing proponents of development to lay claim to a proportion of the spare capacity in publicly provided car parks, either on-street or off-street, the approach was to consider the claims from a particular proponent and assess the extent of other developments, actual or potential, which may also have some claim on any spare capacity. Within the City area, there may be little scope other than to allow credits for on-street parking spaces which are immediately adjacent to the block which is the subject of development. In other areas, some calculation of spare capacity in publicly provided parking areas, taking account of undeveloped blocks or existing developed blocks which still have potential for expansion within their existing leases, may allow allocation of a proportion of any spare capacity to a particular development. An example of this would be at the Jamison Centre, Macquarie. It is agreed that the lack of a table of such allocations is an inconvenience, although there are calculations available within the papers relating to recent developments which would indicate a rough allocation.

14. Because the availability of existing spare capacity in publicly provided parking areas in the major centres reduces over time, it is essential that any development of such publicly owned and provided car parks have a requirement for replacement of the number of publicly provided spaces in any sales documentation and in planning approval conditions.

### **Some Current Rates of Provision Within *the Code***

#### Parking provision rate – retail and commercial

15. While the parking provision rate for retail and non-office commercial land uses in the City and town centres is presently four (4) spaces per 100m<sup>2</sup> GFA, work undertaken by Arup Transportation in the late 1990s for the initial stages of the Canberra Centre development indicated that an 'agglomeration effect' is associated with such large-scale developments. Essentially, it was accepted that in the highest order centres in Canberra (the City followed by the town centres), people driving to those centres make more multi-purpose trips to more destinations within the centres when compared with trips to lower order centres.

16. After consideration of the data provided in that study, the ACT Planning Authority agreed to a 15% discount on the provision of parking spaces for retail and non-office commercial uses in such large-scale developments.

17. Subsequently, in the 2000s, the introduction of parking guidance systems was accepted as reducing substantially the time needed for drivers looking for a parking space within the major centre car parks, reducing the circulation time and congestion within the car park structures.

18. The net effect of these two factors ('agglomeration effect' and reduced circulation time in structured car parks) could allow a reduction in the parking provision to around 3.4 spaces per 100m<sup>2</sup> GFA where parking is within surface car parks without guidance systems and to around 3 spaces per 100m<sup>2</sup> GFA where parking is provided in structures with parking guidance systems.

19. ARRB undertook studies for the ACT Planning Authority in 2004, looking at, among other parking matters, the adequacy of the parking provision rates for retail and non-office commercial land uses in the City and town centres. Their study confirmed that generally this was so. This work preceded the introduction of parking guidance systems.

### Parking provision rate - offices

20. The differences in the office parking provision rates reflect changes over the years taking account of proximity to the centre (in the case of Braddon STA / commercial area, in which the CZ2 zones attract a higher rate than CZ2 zones in Belconnen or Woden), and the spare capacity in publicly available parking (in Tuggeranong) and the relative lack of spare capacity in earlier years at Gungahlin. Arguably, the rate for City CZ2 could now be reduced to one space per 100m<sup>2</sup> GFA given the significant public transport accessibility along Northbourne Avenue coupled with requirements to encourage greater public transport and active travel modes for commuting.

21. Although there is a high level of demand for parking in Woden Town Centre, the CZ2 zones include large areas of publicly provided parking and are all within a reasonable walking distance of the Woden bus station (both at its existing site and at the new, slightly more northerly proposed site). Developments approved in recent years have not led to excessive demand, although there is evidence of some overflow parking in residential streets in Curtin, Hughes and Lyons which is being managed by time zoning of on-street spaces coupled with enforcement activity. There does not appear to be a case at present for increasing the parking provision rate for CZ2 zones in the town centre.

22. With Belconnen, some of the areas zoned as CZ2 are directly across Lathlain Street from the Belconnen bus station, while others are close to the bus stop adjacent to the Belconnen bus depot on Cohen Street. The on-site parking provision rates may have been reduced in earlier years in light of the availability of publicly provided surface parking and the proximity to high frequency bus services linking to City, Woden and Tuggeranong, as well as other major employment centres along the route.

### Multi unit parking provision in residential areas

23. The problem which the community councils (and residents themselves) have identified stem from units being occupied by two or more people, each of whom has a vehicle. In some cases, there are three or more people sharing a 2-bedroomed unit, with four cars to park. Given that, among other things, an objective of the current review is to encourage travel behaviour consistent with sustainable transport policies, such residents will have to use on-street parking where possible or consider alternative residence locations where there is adequate parking.

24. In relation to residential parking permits, these were only ever issued to a very small number of older residential or quasi-residential developments across the whole of Canberra; understood to be the former Havelock House in Turner and parts of the Bega Flats in Reid and the former Allawah Flats in Braddon. Such permits were issued because of the very limited on-site parking available in these 1950s or 1960s developments. No new residential parking permit scheme inclusions were made in the past 25 years (and possibly longer)

25. The pressure for re-introduction of such schemes should be strongly resisted and in no circumstances should consideration be given to allowing such permits for residents of units which have been approved without any on-site car parking spaces.

### Residential parking provisions in core commercial zones

26. The current on-site parking provision rates (an average of 0.8 parking spaces per studio or one bedroom unit, 1.3 spaces per two bedroom unit and 1.8 spaces per three bedroom unit) were introduced in 2012 or 2013 following surveys undertaken by the Integral Services Group for the Transport Planning Unit within the then ESDD in mid-2011. Surveys of selected multi-unit developments in both North Canberra and South Canberra were separately reported on. The results were similar both north and south of Lake Burley Griffin. Because of the proximity of the apartment development areas in Braddon and Kingston to high frequency public transport services, an increase in on-site parking provision is not justified.

27. In relation to Narrabundah, it is not clear where the problem lies. If the concerns expressed relate to parking demand in the Narrabundah local shopping centre, the problem is not one of residential parking but that of parking demand generated by the commercial land use activities in and adjacent to the shopping centre.

### Shared use of parking spaces or reciprocal parking arrangements

28. The application of the mixed use development rate of 3 spaces per 100m<sup>2</sup> GFA in Braddon (City CZ3 zone) is quite specific, in that it may be used where a development includes two or more of the land uses specified in Section 3.2.2 of *the Code*. This provision implicitly recognises the benefits associated with variable peak demand periods for different land uses and the likelihood that car park users would generally have multiple trip destinations/purposes.

29. This is, as noted in the Statement of Work, the basis for the differing rates for retail shops in the City and town centres when compared with group centres and local centres. car sharing

### Parking provision rates – maximums

30. The approach in the Territory to date has been to set minimum parking provision requirements for most land uses (excluding residential uses in the City and town centre CZ1 and CZ2 zones). Other jurisdictions are moving to set maximum limits on parking provision, particularly in the central city areas of State capitals and major centres serviced by frequent transit routes where public transport accessibility is high.

31. While there is no requirement for parking to be provided for residents and their visitors in the City and town centre CZ1 and CZ2 zones, there are no incentives for developers to do other than meet market demand, which currently reflects Canberra residents' general attachment to their cars, even where there are high levels of access to public transport.

32. Because of high transit accessibility in these centres, and consistent with the ACT Government's commitments in terms of sustainability and climate change policies, the establishment of maxima for residential use in these centres warrants attention. This also applies to commercial and other land use activities in the City and town centres.

33. The actual rates to be set depend on the extent to which maximum limits will be accepted by people who seek to live in the City and town centres. However, as a minimum, the rates which apply to apartments could be set as a maximum. These reflect the results of studies on suitable parking provision rates for apartments and units undertaken for the Environment and Planning Directorate in 2011 by ISG. An examination of web sites in Canberra advertising parking spaces for short or long term rental appears to support these rates as reflecting the likely level of parking demand by residents, although more detailed study would give more accurate results.

### **Potential Matters for Parking Code Amendments**

#### Location requirements for each zone

35. The existing parking provision rates implicitly allow for a mix of shorter and longer parking periods for different users at different destinations within a particular location and/or zone.

#### A suitable level of short-stay parking

36. See the notes on the previous heading. There is insufficient data presently available on the proportion of short-stay versus long-stay parking for any particular land uses. This may be gleaned from data collected from the new ticket machines.

37. The term 'operational parking' and the column in the table in Section 3.2.4 of *the Code* could be deleted. It can reasonably be expected that organisations will provide for their operational parking on-site wherever possible in centres.

38. In relation to the distances within which a proponent may lay claim to a proportion of spare capacity in publicly provided on-street and/or off-street parking, the distances specified in the table in Section 3.2.4 of *the Code* are intended as direct or straight-line distances. The practice over many years has been to take the distance from the nearest point on the boundary of a block to the nearest boundary of a location at which parking spaces are available.



39. Obviously, there will be situations which arise from time to time where spare capacity exists in parts of car parks which may be immediately adjacent to, or within 10-50 metres of a polygon developed using the specified distance applied to various points around a block boundary. There should be some discretion retained to allow utilisation of such capacity in public provided parking in approval of a particular development, subject to any claims from other developments nearby. An example where this was applied some years ago was for the development of 46/50 Macquarie (in the Jamison Centre).

#### Motorcycle parking

40. *The Code* does not clearly specify that the criteria relating to motorcycle parking relate to non-residential development only. The provision for motorcycle parking in residential development is left to the discretion of individual owners, except in relation to visitor parking. This needs to be clarified.

41. Motorcycles require a much smaller area for parking than a car. The existing 3% provision in *the Code* was based on TAMSD registration data collected approximately 5 years ago. Because motorcycles are not charged for parking at present, their use may increase if greater areas of parking are provided. It is worth checking with major employers to assess whether existing end of trip provision is adequate.

#### Parking for people with disabilities

42. The existing 3% provision is higher than the standard provision rates in the BCA for most uses. It is considered adequate for all but medical facilities. The rates may need to be revised from time to time if, due to other changes, demographic or otherwise.

43. The existing provisions for aged care facilities are generally for employees and visitors, although it is accepted that a very limited number of spaces may be used by residents. The existing provision is considered to be adequate.

44. With supportive housing, this type of accommodation meets the needs of a number of categories of residents who are not necessarily mobility-impaired. Standard parking spaces would suffice in most cases. An option would be to include space dimensions for spaces which are required for people with a disability but without the markings specified for such spaces.

#### Small parking spaces

45. It is agreed that amendments to the text in Section 2.7 would be preferable. A draft change is suggested as follows:

“Up to 10% of car parking spaces may be provided for small cars in any development. Minimum dimensions for small car spaces are 2.3m wide by 5.0m long. For residential apartment development up to 10% of parking spaces may be for small cars, provided that at least one (1) space per apartment meets the minimum dimensions for User Class 1A set out in Figure 2.2 of AS2890.1:2004.”

46. The proportion of parking set aside for small car spaces will require review from time to time as the composition of the ACT vehicle fleet changes. In recent years, there appear to be more smaller cars on the road, but it is also clear that the sizes of some ‘small’ cars (some Toyota Corolla models, for example) are trending towards medium size. The proportion set in *the Code* were derived using 2007 ACT vehicle registration data and analysis of the lengths of small vehicles and the width required to allow access with car doors open to the first door stop.

#### Parking provision rates for residential zones

47. The categories “supportive housing” and “special dwelling” are clearly different under the Territory Plan definitions. They are outlined below.

Supportive housing means the use of land for residential accommodation for persons in need of support, which is managed by a Territory approved organisation that provides a range of support services such as counselling, domestic assistance and personal care for residents as required.

Although such services must be able to be delivered on site, management and preparation may be carried out on site or elsewhere. Housing may be provided in the form of self-contained dwellings. The term does not include a retirement village or student accommodation.

Special dwelling means a dwelling used or to be used by a government agency or community organisation receiving government funding or housing assistance, to provide shelter and support for persons with special accommodation needs.

48. Adaptable housing is not defined in the Territory Plan at present, but this category of dwelling is clearly intended to provide for people who may become disabled or who have a disability to acquire a dwelling which removes mobility constraints within and accessing the dwelling, whether attached, detached or part of a multi-unit complex. The main issues with adaptable housing parking spaces are:

- a. The requirement for a minimum of one wide space (3.8m) and
- b. The marking of those spaces.

49. The approach to date with adaptable housing parking provision in multi-unit developments has been to require the adaptable spaces to be presented with much the same marking as spaces for people with disabilities. However, it may be preferable to simply require wider spaces where the parking is for on-site residential use. Where garages are to be provided for adaptable units supplied with two parking spaces, whether at-grade or in residential apartment building basements, these should have a minimum entry width of 6.2m, allowing for one wide space (3.8m) and one of standard width (2.4m).

50. For supportive housing, the parking provision requirements in *the Code* currently assume that residents will not have vehicles. Where they are able to drive and have vehicles, some allowance will need to be made. The Code should allow applicants for supportive housing and special dwellings to propose more parking where they deem necessary / appropriate.

51. In relation to visitor parking provision for residential developments in the City and town centres, this issue is discussed in the following section on commercial land uses.

52. Another residential land use category which may warrant further consideration of parking provision rates is that of retirement villages or independent retirement living. The current provision in *the Code* is for one (1) space per unit/dwelling. This rate is common across many jurisdictions throughout Australia where it has been assumed that retirees are unlikely to have more than one car per dwelling and some will have none.

53. Experience with retirement living developments in Isabella Plains and Ngunnawal suggests that, for the ACT at least, a fair proportion of retirees seeking this type of living arrangement want more than one car parking space. One response to this may be to consider setting maximum rates along the lines of those for apartments, allowing the developers of these facilities to allocate a proportion with two parking spaces and some with none.

#### Parking provision rates for commercial zones (except CZ5 and CZ6)

54. Because no residential visitor parking space provision rate is specified in Schedule 2, there is an implied decision that there is no requirement for visitor parking provision in these zones. However, the suggestion in the table on the second page of Attachment A to the Statement of Work about inclusion of the words "Residential visitor parking – no minimum requirement" is a sensible clarification to remove any uncertainty.

55. There are two main reasons for not specifically requiring residential visitor parking in these zones. Firstly, there is generally publicly accessible pay parking areas where people may park. Secondly, experience has shown that where there are on-site visitor parking spaces in residential developments, these are often used by commuters and others unless they are pay parking areas. Some timed off-street parking spaces on residential development sites are patrolled by Parking Operations staff with agreement of the relevant ACT Government Directorate. Those that are not appropriately identified with signage and other means are considered 'fair game' by a proportion of commuters. It is a difficult issue for owners' corporations/body corporates to manage, and the use of these spaces becomes practically unenforceable.

56. Regarding disparities between land uses permitted in the CZ2 Zone areas outside centres (i.e. the City Centre, town centres and group centres), there clearly is clarification required in respect of the 6<sup>th</sup> column in Schedule 2 of *the Code*. That part of the Northbourne Corridor Precinct between Barry Drive / Cooyong Street and Masson Street / Girrahween Street is effectively covered by the City Precinct.

57. The provision rates for land uses need to be in accordance with the land uses generally permitted in CZ2 zones outside centres and the 6<sup>th</sup> column requires revision.

### Restaurant

58. There is no minimum provision requirement in the City and town centre CZ1 zones and this should continue. The bulk of demand for restaurant services during business hours comes from people working within or near those centres and there is sufficient spare capacity in private and public parking facilities to cater for increases in demand generated from areas outside these zones.

59. With CZ2 and CZ3 zones in the City and town centres, the provision rates were included to ensure that new restaurants had sufficient parking to support their operation. On reflection, it appears that, as with CZ1 zones, the bulk of demand is likely to come from areas within or near CZ2 and CZ3 zones, and consideration could be given to reducing the on-site parking provision rates. In the case of restaurants establishing in the Braddon Commercial Area, the on-site parking provision rate reduces to three (3) spaces per 100m<sup>2</sup> GFA where the restaurant use is one of two or more land uses set out in Section 3.2.2 of *the Code*. Much of the Braddon Commercial Area lies within 400m of parking on 1/96 City and associated parking structures in the Canberra Centre. There is also opportunity for utilisation of long-stay leased spaces on the Northbourne Oval site. In both cases, there is commonly spare capacity available. Reduction in the on-site parking provision could be considered in CZ2 and CZ3 zones in the City area.

60. The concept of providing an estimated 'average' parking provision rate was accepted by the ACT Civil and Administrative Tribunal in the Amarso decision [2012] ACAT 9, where an average parking provision rate of five (5) spaces per 100m<sup>2</sup> GFA was accepted for a larger area of mixed, but unidentified, commercial uses at the former Jamison Hotel site in the Jamison Group Centre in Macquarie.

61. The requirements for CZ5 and CZ6 zones has in the past been based on the types of uses permitted in those zones and the different parking demands likely in each. The mixed use zone (CZ5) includes more employment generating uses and there should be scope for reduction of the parking provision rate for restaurant uses, given the likely peak demand times for restaurant and other uses in these zones are unlikely to be concurrent. A reduction to five (5) spaces per 100m<sup>2</sup> GFA is worth consideration.

62. With CZ6 zones, there is likely again to be non-concurrence between the peak demands for restaurants and for other uses, with demand from visitors staying in accommodation on sites within CZ6 zones reducing the total demand for car parking during evenings when restaurants are generally busiest. Again, a reduction to five (5) spaces per 100m<sup>2</sup> GFA is worth consideration.

### Large residential dwellings

63. Large residential dwellings with five or more bedrooms, each with attached ensuite bathrooms, in locations close to tertiary education establishments, suggest that the intended use is similar to that of a boarding house or guest house. If it appears likely that the use may be for student accommodation, the parking provision rates could be adjusted to reflect this.

64. Provision for parking for university students living on-campus is 'subject to individual assessment'. A check of the assessments undertaken in relation to the new accommodation buildings on the ANU campus near Clunies Ross Street and Dixon Drive and for the student residential accommodation in the Karmel Building near Barry Drive/Marcus Clarke Street should indicate the rate set for this type of use. From memory, it was in the order of one (1) parking space per five (5) or perhaps ten (10) student bedrooms.

65. Perhaps a criterion could be that there be 0.5 spaces per bedroom in excess of five (5) bedrooms. This would allow accommodation of larger family homes while providing for some additional on-site parking to accommodate future residents' vehicles. This requirement would probably need to be absolute, i.e. not allowing claims to be made against on-street parking which would most likely be required to meet any visitor parking. It would need modifications to the definitions in the Territory Plan, to the Residential Zones Development Code and possibly to the other residential development codes.

### Various commercial developments in one development

66. The description 'commercial tenancy' covers a multitude of possible uses and the difficulty in determining exactly what those uses will be at the DA stage presents problems. The uses likely to generate higher requirements for parking outside of the major centres are 'restaurant' and 'shop'.

67. For group centres and local centres, the 'shop' requirement is presently five (5) spaces per 100m<sup>2</sup> GFA. For local centres, this requirement rises to six (6) spaces.

68. In past years, an approach similar to the provisions in Section 3.2.2 of *the Code* has been applied to the areas identified for commercial tenancies in developments at the various centres along Flemington Road in Harrison and Franklin to deal with this problem. This could be made clearer within *the Code*, and it could be applied to all commercial areas outside those identified in existing Schedule 2 in *the Code*. In such commercial areas (currently included in CZ4 zones), provisions for 'shop' uses require six (6) spaces per 100m<sup>2</sup> GFA and restaurants require 10 spaces per 100m<sup>2</sup> GFA. Non-retail commercial uses also require six (6) spaces per 100m<sup>2</sup> GFA, while for offices the provision rate is 2.5 spaces per 100m<sup>2</sup> GFA.

69. It will always be a matter of judgement as to the most appropriate 'average' parking provision rate for areas identified as being for commercial uses'. An analysis of the parking demand at some of these existing developments along Flemington Road could be undertaken to establish the existing parking demand given the current uses. The differences in patterns of demand among uses also require consideration. An aggregate provision rate of around five (5) spaces per 100m<sup>2</sup> GFA may be a reasonable alternative.

### Adaptable Housing

70. One issue with the current approach to provision of parking for adaptable housing in multi-unit developments is to require parking spaces identified as being for adaptable housing to be marked as parking spaces for people with disabilities. In many cases, the individuals requiring adaptable housing may have mobility issues restricting their ability to enter and leave a vehicle in a normal parking space or limiting the distance they can walk, but they may not need to use mobility devices such as wheel chairs. They often need access to a wider parking space. It may be preferable to simply provide parking spaces which are 3.8m wide but without the painted markings used for parking spaces for people with a disability (and without the painted common area between pairs of spaces for people with disabilities).

71. Wherever possible, such spaces should be provided as close as practicable to entry/exit points in carparks (in the case of basement carparks) or to building entry/exit points in the case of surface carparks.

### Intended use of parking facilities

72. The Statement of Work referred to the possibility of preparation of a parking management plan for any office development or redevelopment attracting a requirement to provide 10 or more parking spaces to prepare a parking management plan. In the City and town centres, this would apply to developments of 1000m<sup>2</sup> GFA and above in CZ1 And CZ2 zones, but would apply to developments of 400m<sup>2</sup> GFA to 500m<sup>2</sup> GFA in other commercial zones. These appear to be very low limits and it is suggested that the figure of 30 parking spaces identified for non-office uses be applied more generally.

73. Parking management plan requirements have been outlined in the studies undertaken for Environment and Planning Directorate by Luxmoore, the parking arm of ARRB, in 2012. These could be incorporated into *the Code*, although this will increase the complexity of the document.

### How distance is measured in applying locational requirements

74. Practice in past years has been to apply the distance criteria specified in various sections of *the Code* relating to specific land use zonings as being measured from any point on a block or blocks which are the subject of a development application. They have not been applied using the geographic centre of a block or blocks, nor a nominal main entry. In some circumstances, this leads to actual route access distance exceeding the criterion values specified in *the Code*. In centres, this is, in most cases, not an unreasonable outcome.

75. Critics of the use of straight line distances from any point on a block boundary in a centre argue that the distance should be measured from the block's centroid, or from a main entry to existing or proposed premises. They argue these reflect the way in which people consider walking distance from parking their car to get to a particular destination.

76. The definition of walking distance is elusive. There is no clear legal definition. From a practical perspective, the approach taken to date in the Territory offers a more flexible basis for ensuring the best use of parking resources serving a centre, irrespective of its scale.

77. The Code should be modified to include a statement on how the distances from parking areas to land uses on blocks are applied. This could form a new Section 2.11. ACAT decisions (including Mainore [2010 ACAT 18], Amarso [2012] ACAT 9 and Ibbotson [2015] ACAT 57) relating to this issue might be a useful guide.

#### Bicycle Parking

78. A new section in *the Code* (possibly Section 2.10) identifying the need to consider the requirements of the Bicycle Parking General Code (BPGC) is needed, particularly in relation to any offsets under that Code which may be allowable in lieu of the provision of bicycle parking spaces and end-of-trip facilities in excess of the minimum requirements so specified in the BPGC.

#### Vehicle Sales

79. For 'Vehicle Sales', where located in an Industrial Area, the *Parking and Vehicular Access General Code* requires 6 spaces/service bay plus 6 spaces / 100m<sup>2</sup> of sales area. There has been confusion as to whether the vehicle sales area is the building sales area where the transactions occur as measured by the gross floor area (GFA) or, if the sales area includes where vehicles are displayed outside of the showroom.

80. It is understood that 30m<sup>2</sup> per parking space would typically be required to provide for parking and vehicle movement. Even only accounting 18m<sup>2</sup> for the car parking space (3m x 6m), therefore no access aisle for the moving of cars, you could only accommodate 5 vehicles in 100m<sup>2</sup>. If the sales area was to also apply to the area where vehicles are displayed you would require more than 1 parking space for every vehicle displayed for sale in addition to the parking required by the building for the vehicle sales and the service bays.

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# Appendix B

## Workshop Notes



## Attachment: Workshop Comments

### ACT Parking Code Review

Subject	Progress Meeting	Date	26-May-2016
Venue	L3 North DPMH	Time	14.00 – 17.00
Participants	As per below		
File/Ref No.	6049 4625		

### Small Groups

Three groups were established (see below table). There were one host per table (Consultant), who stayed at the table to make notes and presented on each theme. Please find notes from each group in Section 1.

No.	Name	Title	Table
1	Shaun Allen	Strategic Planning Division - Policy Officer	A
2	Ben Essery	Strategic Planning Division - Policy Officer	A
3	Gabriel Joseph	Senior Manager, Asset Acceptance	A
4	Damien McNamara	Economic Development - Project Director	A
5	Tim Wyatt	Strategic Planning Division - Manager, Transport Policy	A
6	Abu Chowdhury	Infrastructure, Roads and Public Transport	A
7	Bala Kanapati	Planning Delivery Division	A
8	Owen Pankhurst	Planning Delivery Division	A
9	Tony Carmichael	Strategic Planning Division - Executive Director	A
	Sch 2, 2.2(a)(ii)		A
1	Maggie Chapman	Senior Manager, Leasing	B
2	Alix Kaucz	Planning Delivery Division - Senior Manager	B
3	Robert Sorbara	Strategic Planning Division - Senior Planning Officer	B
4	Benjamin Hubbard	Infrastructure, Roads and Public Transport	B
5	James Cargill	Planning Delivery Division	B
6	Anna Gurnhill	Strategic Planning Division	
7	Mark Towart	Planning Delivery Division	
8	Omar Rahman	Infrastructure, Roads and Public Transport	
	Sch 2, 2.2(a)(ii)		B
1	Steven Gianakis	Acting Senior Manager	C
2	Robyn Hawkins	Manager, Traffic Investigations	C
3	Suzanne Jurcevic	Acting Senior Manager, Transport and Major Projects	C
4	Petra Oswald	Acting Manager Major Projects	C
5	Richard Siddall	Parking Operations	C
6	Stephan Walter	Project Manager	C
7	Sch 2, 2.2(a)(ii)		C
8	Chris Seddon	Parking Operations	C
	Sch 2, 2.2(a)(ii)		C

## 1.0 Notes from workshop

### Parking Code related

1. It was suggested to remove parking requirements and let the market decide
  - Owner would then be responsible
  - Concern that it will then fall on Government/TAMS to provide public parking to compensate
  - Tenant may not be aware that no or little parking is provided
  - Would be out of step with current expectations
  - Could consider for specific areas
  - This would assist the sale of restricted sites by the LDA
  - Broad purpose clauses create an uncertainty at the time of sale on the amount of parking required as it is based on the type of uses and the number can vary considerably.

By letting the market decide it is intended that the responsibility of the parking requirements would be placed on the owner of the site. Key concerns with this action including expected government public parking compensation, inadequate parking supply for tenants and uncertainty of parking requirements during sale of land. This suggestion was not strongly supported.

2. Maximum Parking Rates
  - Campbell 5 provides a current example where only 1 car space is provided.
  - Minimum parking - leads to oversupply
  - Maximum set on a locational basis
  - What has the UK experience been? Are there any unintended consequences?
  - Use Rules and Criteria based on location
  - Parking maximums or market driven rates should be allowed in some zones / precincts – could tie in at precinct code level to assist with specific objectives / targets.
  - Maximum rates – related to discussion on point 1 above. Benefits in City and town centres recognised, but concern about shifting demand to adjacent destinations (especially retail shoppers and other non-office activity users/customers/patients)
  - Implications of residential parking supply restraint (e.g. maximum rates) on on-street parking in residential areas peripheral to centres and difficulty of access for residents and service vehicles in narrower streets.

It was suggested that maximum rates for parking be added to the code. This was a common idea raised and was generally seen as a positive practice. This comment was raised due to the know use of this practice in the UK and some other jurisdictions and the ability to utilise this practice to assist with meeting specific policy targets/objectives. It was suggested that maximum rates be used on a locational basis possibly utilising rules and criteria similar to other ACT codes. Benefits in City and town centres was recognised, but concerns were raised about shifting demand to adjacent destinations (especially retail shoppers and other non-office activity users/customers/ patients).

3. Unbundling of parking from residential apartment units
  - Considered a great idea!
  - Need to remove the nexus with dependence on public parking.
  - Still get occupants asking Government why they don't have a space – Requires increased education/communication.
  - Could result in developers selling/leasing excess car spaces.
  - The Parking Code allows reliance on on-street parking to provide for parking requirement.

- The location requirements can create issues with on-street reliance or overprovision where there may be ample parking slightly outside the target area. It effectively works on a first in best dressed approach where a development can lay claim to all on street spaces if they are not currently utilised. This has resulted in minimal on-site provision historically and burden newer developments with provision for adjacent sites.

It was suggested that parking from residential apartment units be unbundled from the code. This was generally seen as a good idea. The comment was raised that there was a need to remove the link between residential parking and public parking dependence. It was also noted that there was concern around the reliance of the parking code on on-street parking to meet the residential parking requirement.

#### 4. Public Transport/ Active Travel

- Provision of Rapid Transport – opportunity to specify max. parking numbers (London example)
- Helps to drive modal shift.
- Parking code touches on dispensation for access to public transport - should be more explicit
- Reliance/reference to Public Transport Accessibility Level (PTAL) should be clear in parking code
- Discounts to parking provision rates in locations close to high frequency public transport services were supported.

It was suggested that there should be some parking dispensation allowed for in areas with better public transport facilities and access. It was generally seen as a good idea to have the code referenced to a public transport requirement such as the PTAL plan presented. It was agreed that the code should be more explicit towards dispensation for access to public transport. This was seen as a positive addition to encourage and drive mode shift. The process for determining the amount of dispensation needs to be clear.

#### 5. Implementation of parking changes

- Parking management trigger required in parking code.
- These changes will need to be iterative in terms of impacts and should enable flexibility to make changes to reflect policy intent, new technology, market demands.
- Replacement of existing publicly available parking when blocks sold for development – needs to be addressed in policy or in the Code.

It was suggested that the code should include explicit actions for the implementation of parking changes including triggers for parking management and the replacement of existing public available parking when a block is sold for development. It is agreed that the code should detail the correct action for the implementation of these parking changes however maintain flexibility to reflect possible changes to policy, technology and market demands.

#### 6. Town Centres and City centre

- Opportunity to provide shared parking in a central facility
- CZ2 rates of provision in town centres, particularly Belconnen TC. Whether office provision rate needs to be raised to that for the City was raised as an issue.

It was suggested that the code should include shared parking in central facilities. It was generally supported that shared parking guidelines should be included in the code.

#### 7. Payment in-Lieu for parking

- How is contribution set if parking is specified at a maximum rate?
- Enforcement is difficult e.g. where parking is provided across Crown leases
- Cannot allow for residential parking on street
- If this is implemented as policy, it will be necessary to identify locations for off-site parking (preferably publicly available). – Opportunity for GOV to drive locations to suit policy and other planning objectives especially in Town centres.

It was suggested that the payment in-lieu for parking be introduced into the code. Concerns were raised including how this will be enforced, how the contribution is set if parking is specified at a maximum rate and that it wouldn't allow for residential parking on street. On a positive note it would give government more opportunity to drive policy in specific locations.

## 8. Existing Bicycle parking

- Discounts to parking for tenant and visitor if bicycle parking and end of trip facilities are provided beyond requirements (how does this balance if standard/base requirements active travel facilities are increased)
- Consider if this should also be specified in parking code
- Types of trips could be targeted – e.g. bike policy to provide more bike parking, better active travel links, and end of trip facilities at local shops. Perhaps the opposite could apply for parking?

It was suggested that discounts could be applied to parking if bicycle parking end of trip facilities are provided beyond requirements. This idea was generally supported as it encourages mode shift and can be incorporated within the code. It was also raised whether this could be applied in a sense to discourage car usage in certain areas / for certain trips with the same notion.

## 9. Reduced parking provision should be more difficult for isolated areas e.g. Industrial Zones.

- Individual assessment is too open ended
- Reliance on public car parking (what can be claimed / used rather than first in first served)

It was suggested that reduced parking provision rates be restricted for isolated areas. This idea was generally supported, however it was noted that the individual assessment of locations/application would be too open ended and specific zoning inclusions/exclusions would be required.

## 10. Alternative fuels/ shared parking providers

- Could make allowance for electric vehicle charge point and shared parking facility
- credit could be provided through a reduced parking rates
- Identify for priority locations – set a threshold and use type (e.g. office use)
- Need to specify requirements for charge facility

It was suggested that parking rates should be included for alternative fuel parking and shared parking options. It was generally agreed that this should be included in the code although thresholds should be set for use types. It was noted that dispensation could be provided through reduced parking rates.

## 11. Provision rates for different user groups

- Review provision for different uses as part of code including possible non strand / non blanket approach to rates. E.g. motor cycle parking, disabled parking, parents with prams. – should different land uses have different rates?
- Consider location requirements for motor cycle users including ability to park on kerbs (in select areas) similar to what they do in Melbourne.
- Allocation of spaces within developments could consider higher public accessible mixed uses areas which could accommodate, visitors or commercial uses. E.g. provide max of one resident space and require rest to be publically accessible 24/7. Case study Carlton United Brewery SYD redevelopment.
- Green travel or active travel plans should enable changes to provision rates from standard rates. Code needs to allow flexibility to encourage this and could provide guidance on how to undertake / achieve an active travel plan
- Parking provision rates – need to explain reasons for variations in rates among different levels of centre and any other non-standard areas to users and the public more generally.
- Visitor parking – clarify extent to which on-street spaces and spare capacity in off-street public car parks within walking distance of developments can be considered. It was noted that this needs to be adequately addressed at the DA stage of approvals.

It was suggested that the code should include provision rates for different user groups included a non-blanket approach to rates. This was seen as including amendments to the code in terms of motorcycle parking, disabled parking, parents with prams etc. Various ideas relating to this were raised. Provision rates for different user groups was mostly supported for groups such as motorcycle parking, disabled parking, parents with prams, active travel users and visitor parking. The need for varying user group rates was generally supported.

## 12. Adaptive reuse

- The need for adaptive reuse needs to be considered and opportunities for reuse should not be unduly burdened by parking supply increase requirements

It was suggested that the code should include provision for adaptive reuse needs. This includes reducing the burden placed upon parking supply increase requirements for new land uses. This is seen as a positive addition to the code to allow for more flexible requirements for redevelopment sites. This would most likely need to be implemented in a case by case basis.

## 13. Development Application considerations

- Issue that code only applies to DA Stage of overall design development. Can't enforce how car parks are run. E.g. restrictions, parking guidance, valet etc.
- How change of use is managed – what happens if development is exempt from DA but there are changes to parking demands?
- Need for better guidance, regulation of how individual DA's are managed, planned, assessed to ensure there is consistency and effectively create "precincts" comprised of many individual DAs that complement / link together rather than isolated buildings

It was suggested that the code should have better guidance for the regulation of the development application process. It was generally agreed that the code should ensure consistency and regulation of how a DA is managed, planned and assessed. Concerns were also raised with regards to the code only applying to the DA stage of the development process and does not provide any guidance in terms of how the parking enforcement is to be implemented.

## 14. Code structure

- Code should be restructured to the rules and criteria approach for consistency with other codes and assessment integration

It was suggested that the code should be restricted to the rules and criteria approach to be consistent with other codes. It is agreed that the code should be harmonious with other codes in the ACT, however only where practicable.

## Other Comments Issues or Recommendations

Upon review of the code and as a result of the workshop undertaken a number of other issues were raised that were not directly related to the code itself, however were of notable inclusion and should be addressed outside of the PVACG review. These issues are summarised as follows:

### 1. Sites released with a broad range of land uses

- Creates uncertainty at the time of the sale as the car parking requirements can vary considerably on the type of use.
- The range of flexibility in uses and parking generated should be lower.
- Concern that a higher parking generating use could occur on the land without the requirement for a further development application.
- Better link to zoning what other maps / tools can be used to assist in policy development – should these be fixed or rigid – link to ACTMAPi rather than static?
- Cars are still required to get to most places (perception) better planning consideration of other land use / density changes.

### 2. Temporal nature of parking demands

- How many spaces should be provided
- How available outside of peak time
- The code should outline the frameworks for determining temporal profiles / sharing of spaces – individual assessment may still be required but the framework for assessment should be clear and consistent.

### 3. Implementation of parking changes

- The approval of a DA may require on-street car parking to be altered – Need to ensure that the changes occur.
- The code should be developed to ensure future adaptability
- Visitor parking may be limited to 1-2 hours
- Parking time limits could be applied during work hours to allow for resident parking, or 24hrs if required.
- How to ensure access to basement visitor car parking.
- Medical facilities have a tendency to restrict access to practitioners
- Clarity over how implementation of code changes is required and how they will be assessed.
- Need clarity for users – remove motherhood statements as they do not provide adequate guidance. Consider specific rules or criteria.
- Does there really need to be separate sections for separate zones? Is there a better way to structure / organise the code?
- Changes to the way the proximity is outlined could enable better flexibility
- Policies to limit number of vehicles per dwelling need to be clearly stated.
- There is a need to clearly communicate Government's aims for parking to meet community needs in the context of other policies, including climate change, health, active travel, etc.
- Communicating Government policy – Government won't provide parking to meet demand.

### 4. Allow vacant car parking spaces to be traded

- Limitations through Crown lease – car parking is required as a permitted use
- Taps into existing parking supply

### 5. On-street parking

- Limitations, developers expense, TaMS Standards to be applied

### 6. Small single person cars

- Compact car one person vehicles/ free parking like Motorbikes
- Could result in under-utilised car spaces (as they don't fill the whole space)
- Do we want to be pushing for these alternate modes over standard cars?

### 7. Priority areas

- Cost benefit analysis is required to justify priority areas

### 8. Mode shift

- Link mode shift to target different areas / zones – at a recent level seems the best way to tie this in. Inner areas typically have higher mode share, as they should, but what policy supports this to help achieve overall targets?
- Pricing of parking is an important tool to encourage mode shift.
- Provision of adequate infrastructure (for pedestrians, cyclists, bus travellers) is a necessary precursor to any policies designed to restrain parking demand by, for example, restricting the growth in parking supply
  - better public transport access
  - improvements to reduce PT travel time
- Behaviour change was identified as being needed to achieve mode shift, sustainability and other objectives, but the difficulty in achieving this was noted



## 9. Restrictions and enforcement

- Consideration of restricting parking volumes in certain areas, along certain routes / routes to match traffic capacity of road network - planned areas or precincts – dense urban areas. Reduce network capacity amenity as well as parking amenity.
- As much of the parking as possible should be publicly accessible parking and not be restricted 24hrs. Basement areas should be accessible after business hours to cater for more than just commuters. – needs legislation to enforce otherwise historically it has been shown that building owners / managers are not willing to take on the risk.
- Enforcement issues – introduction of camera-based drive by systems is being considered, along with in-space sensors. Should improve parking enforcement and could be expected to assist in encouraging other mode use.
- Parking policy needs to be backed up with appropriate enforcement to ensure parking amenity is optimised. E.g. preventing on-street parking in residential areas being used all day by commuters.

## 10. Current trends

- Understanding that once people have a car they are less likely to change their patterns unless there is a significant life change or tangible benefits. – consider generational change policies at transition periods e.g. low parking rates at high school or uni to make car ownership less attractive. Look at trends over time and reduction in vehicle ownership amongst younger generation.

## 11. De-coupling

- Decoupling should be introduced for development – needs clear and transparent structure – how is this managed post DA?
- Need to enforce regulation of decoupling spaces and ensure “savings” are passed on to consumer.

## 12. Car sharing

- How car share can be incorporated – great success in other cities could assist long term with changing behaviours and ownership for some users

## 13. Technology

- Need for more advanced / adaptable parking signage / restrictions to best tie in with different demand peaks – automated spaces.
- Would be great to develop data base of how and when people parking in town / group centres with the implementation of smart parking and provide tie in to assist with demand management

## 14. Journey to work

- Recognition of need to better align where people live to where they work
- Important to focus on distributing employment across centres
  - discussion on residential location v employment location
  - some scepticism about residential re-location, but Tuggeranong example noted
  - surveys in Greenway ~year 2000 indicated most employees of HIC and then Department of Social Security showed most workers resided in Tuggeranong or in Woden/Weston Creek for agencies based in Greenway for 6 or more years.

## 15. Park and Ride

- Park and ride came up in discussion. Problem in West Deakin with commuters to the City and Barton/Parkes displacing spaces used by local workers. Similar problems noted in Cooleman Court, Weston. Observation also that 3-for-free in City is not appropriately used, with fewer than 40 users in total and with a fair proportion of those apparently ‘roting’ the system. This may be overcome by RFID tags on drivers’ licences in future years.
- Park and ride – need to remove from town centres and town centre peripheries. Such areas need to be sufficiently distant from town centres to discourage park and walk by commuters.



# Appendix C

## Summary of Current ACT Parking Rates

Land Use	Residential	Commercial (Centre)	Commercial (Other)	Industrial	Community	Restricted Access Recreation Zone	Services Zone	Other Zones
Agriculture								SIA
Amusement Arcade, night club, music hall,		5 - 10 spaces/100m2 GFA (location)						
Animal Care Facility								SIA
Animal Husbandary								SIA
Any other land use not specified						SIA		
Apartment	1 bed: 1 2 bed: 1.5 3+ bed: 2 Visitors: 1 per 4 dwellings (if more than 4 dwellings)							
Aquatic Recreation Facility						SIA		SIA
Attached House	1 bed: 1 2 bed: 1.5 3+ bed: 2 Visitors: 1 per 4 dwellings (if more than 4 dwellings)							
Boarding House	0.5/staff + 0.5/bedroom							
Bulky Goods Retailing		2 - 2.5 spaces/100m2 GFA (location)	2.5 spaces/100m2 GFA	3 /100m2 GFA				
Bulky Landscape Supplies				SIA				
Business Agency		4 - 5 spaces/100m2 GFA (location)	6 spaces/100m2 GFA	6 /100m2 GFA				
Camping Ground / Caravan Park								
Office Space			2.5 spaces/100m <sup>2</sup> GFA of office space					2.5 spaces/100m <sup>2</sup> GFA of office space
Sites or unit			1 space/site or unit					
Visitors			0.25 visitor spaces/site or unit					0.25 visitor spaces/site or unit
Car Park		1 /peak shift employee				1 /peak shift employee		1 per peak shift employee
Cemetery							SIA	SIA
Child care centre								
Per Centre		1 space/centre	1 space/centre			1 space/centre		
Employee parking (per 15 children)		2 spaces/15 child care places	2 spaces/15 child care places			2 spaces/15 child care places		
Visitor Parking for <30 children		2 spaces	2 spaces			2 spaces		
Visitor Parking for 30-59 children		3 spaces	3 spaces			3 spaces		
Visitor Parking for 60-90 children		4 spaces	4 spaces			4 spaces		
Plus 1 pick-up/set down bay (per 10 children)		1 space/10 child care places	1 space/10 child care places			1 space/10 child care places		

Land Use	Residential	Commercial (Centre)	Commercial (Other)	Industrial	Community	Restricted Access Recreation Zone	Services Zone	Other Zones
Cinema		1 space/12 seats	3 spaces/ 12 seats					
Civic Administration		As per Office						
Club		5-10 spaces/100m2 GFA (Size, Zoning, Location)	15 /100m2 GFA	15 /100m2 GFA		15 /100m2 GFA		
Commercial Theatre		1 space/ 12 seats	4 spaces/ 12 seats					
Communications Activity Centre		3 - 4 spaces/ 100m2 GFA (Zoning)						
Communications Facility		1 /peak shift employee		1 /peak shift employee			1 /peak shift employee	1 per peak shift employee
Community Activity Centre	4 / 100m <sup>2</sup> GFA			4 /100m2 GFA	4/100m2 GFA	4 /100m2 GFA		
Community Theatre		1 -4 spaces/12 seats (Zoning)			1 / 4 seats			
Community Use		As per community facility zone schedule						
Corrections Facility		SIA			SIA			4 /100m2 GFA
Craft Workshop		3 spaces/ 100m <sup>2</sup> GFA						
Cultural Facility		0.5-1 / 100m <sup>2</sup> GFA (location)	2/100m2 GFA		2/100m2 GFA			
Defence Installation		SIA		SIA				SIA
Detached House	1 bed: 1 2 bed: 1.5 3+ bed: 2 Visitors: 1 per 4 dwellings (if more than 4 dwellings)							
Drink Establishment		5 -15 / 100m2 GFA (Zoning & location)	15 /100m2 GFA	15 /100m2 GFA				
Drive In-Cinema		SIA						
Educational Establishment		N/A - 1.5/10 students (Location)		4 spaces/10 students				
Pre-school, primary & high schools					0.08/student + 0.4 set-down/pick-up/10 students	SIA		
Tertiary Institution, college					SIA	SIA		
Emergency Services Facility		1 /peak shift employee		1 /peak shift employee	1 /peak shift employee		1 /peak shift employee	
Equestrian Facility		SIA				SIA		SIA
Financial Establishment		4-5 spaces/ 100m2 GFA (Location)	6 / 100m2 GFA	6 / 100m2 GFA				
Freight Transport Facility		SIA		SIA			SIA	
Funeral Parlour								
Floor Area (excluding chapel area)		2/100m2 GFA excluding chapel area		2/100m2 GFA excluding chapel area				
Seats		1/20 chapel seats		1/4 chapel seats				
General Industry				2 /100m2 GFA				
Group or Organised Camp		SIA						SIA

Land Use	Residential	Commercial (Centre)	Commercial (Other)	Industrial	Community	Restricted Access Recreation Zone	Services Zone	Other Zones
<b>Guest House</b>								
Employees	0.5 / staff	1 space/ peak shift employees				0.5/staff		
Guest rooms	1/guestroom	1 space/guest room for establishments of up to 36 units OR 25 spaces plus 0.3 spaces/guest room for	1 space/guest room for establishments of up to 36 units OR 25 spaces plus 0.3 spaces/guest room for			1/guestroom		
<b>Hazardous Industry</b>				1 /peak shift employee				
<b>Hazardous Waste Facility</b>				1 /peak shift employee			1 /peak shift employee	
<b>Health Facility</b>	4 /practioner	3.5/100m2 GFA - 4/practitioner (location)	4/ practioner	3 /practioner	4/ practioner			4 /practioner
<b>Home Business</b>	SIA							
<b>Hospital</b>								
Employees		0.8/ peak shift employee			0.8/ peak shift employee			
Beds		0.5/bed			1.3/bed			
<b>Hotel</b>		Varies by location and zoning - see Note A at bottom of table		As for Restricted Access Recreation Zone		plus 1 spaces/guest room or unit for establishments of up to 36 units OR 25 spaces plus 0.3 spaces/guest room or unit for establishments of more than 36 units plus 10 spaces/100m2 GFA of bars and function rooms plus 1 space/10 restaurant seats plus 3 spaces/100m2 of retail space		
<b>Incineration Facility</b>				1 /peak shift employee			1 /peak shift employee	
<b>Indoor Recreation Facility</b>								
Basketball, Ne ball		15-20 spaces/court (location)	20 /court			25 /court		
Skating Rink, Swimming Pool		5 spaces/100m <sup>2</sup> of actual pool or rink area	5-20 spaces/100m2 of actual pool or rink area (Zoning, location)			20 /100m2 of actual pool or rink area.		
Squash Courts		1-2 /court (location)	2 /court			2 /court		

Land Use	Residential	Commercial (Centre)	Commercial (Other)	Industrial	Community	Restricted Access Recreation Zone	Services Zone	Other Zones
Fitness Centre, Gymnasium		1 space/100m <sup>2</sup> GFA	2 - 3.5 space/100m <sup>2</sup> GFA			3 5 /100m <sup>2</sup> GFA		
Other		SIA						
Industrial trades		2-2.5 spaces/100m <sup>2</sup> GFA	2 5 /100m <sup>2</sup> GFA	2 /100m <sup>2</sup> GFA				
Land fill site							SIA	
Land Management Facility								SIA
Light Industry		2-2.5/100m <sup>2</sup> GFA (location)	2 5 /100m <sup>2</sup> GFA	2 /100m <sup>2</sup> GFA				
Liquid Fuel Depot				1/peak shift employee				
Major service conduits								SIA
MAJOR UTILITY INSTALLATION				SIA			SIA	SIA
Motel		As per Hotel				As per Hotel		
Municipal Depot		0.5-1/peak shift employee (location)		1 /peak shift employee			1 /peak shift employee	1 /peak shift employee
Nature Conservation Area								SIA
Offensive Industry				1 /peak shift employee				
Office		1-2.5/100m <sup>2</sup> GFA (zoning, location)	2-2.5/100m <sup>2</sup> GFA (zoning, location)	2.5 /100m <sup>2</sup> GFA				
Outdoor Recreation Facility								
Skating Rink, Swimming Pool		5/100m <sup>2</sup> of actual pool or rink area	15 /100m <sup>2</sup> of actual pool or rink area.			20 /100m <sup>2</sup> of actual pool or rink area.		20 /100m <sup>2</sup> of actual pool or rink area
Bowling Green		30 spaces for first green plus 15 spaces/additional green	30 spaces for first green plus 15 spaces/additional green			30 spaces for first green plus 15 /additional green		30 for first green + 15 /additional green
Tennis Court		5 spaces/court	2 spaces /court			2 spaces /court		5 spaces/court
Other		SIA						SIA
Parkland	SIA	SIA		SIA	SIA	SIA		SIA
Pedestrian plaza		SIA						SIA
Personal Services		4-5 spaces/100m <sup>2</sup> GFA (location)		4 /100m <sup>2</sup> GFA				
Place of Assembly		1 -2 spaces/20 seats (location)	2-5 spaces/20 seats (Zoning, location)					
Plant and equipment hire establishment		2 spaces/100m <sup>2</sup> GFA		2 /100m <sup>2</sup> GFA				
Plantation Forestry								SIA
Playing Field						SIA		SIA
Produce Market		10 spaces/100m <sup>2</sup> GFA		15 /100m <sup>2</sup> GFA				
Public Agency		4-5 spaces/100m <sup>2</sup> GFA (location)	5-6 spaces/100m <sup>2</sup> GFA (Zoning, location)	4 /100m <sup>2</sup> GFA		6 /100m <sup>2</sup> GFA		
Public Transport Facility		SIA					1 /peak shift employee	SIA
Railway Use				SIA			SIA	
Recyclable materials collection		1 space		1 space			1 space	



Land Use	Residential	Commercial (Centre)	Commercial (Other)	Industrial	Community	Restricted Access Recreation Zone	Services Zone	Other Zones
Recycling Facility				1 /peak shift employee			1 /peak shift employee	
Religious Associated Use		SIA			SIA			
Residential Care Accomodation	0.25/bed + 1/residential unit staff + 1/non-resident peak shift staff				0.25/bed + 1/residential unit staff + 1/non-resident peak shift staff			0.25/bed + 1/residential unit staff + 1/non-resident peak shift staff
Residential Use			As per residential code					
CZ1 and CZ2 Zones		No minimum requirement						
CZ3 Zone (Single Bedroom Unit)		0.8 spaces per single bedroom unit						
CZ3 Zone (Two Bedroom Unit)		1.3 spaces per two bedroom unit						
CZ3 Zone (3+ Bedroom Unit)		1.8 spaces per unit with three or more bedrooms						
Restaurant			10/100m2 GFA	15 /100m2 GFA				
CZ1 Zone		No Minimum Requirements						
CZ2 and CZ3 Zones		5-10 spaces/100m <sup>2</sup> GFA (Size, Zoning)						
Retail plant Nursery		2 spaces/100m <sup>2</sup> GFA						
Retirement Village								
Self Care Unit	1/self-care unit				1/self-care unit			
Hostel Beds	1/hostel bed				1/hostel bed			
Residential staff	1/residential unit staff				1/residential unit staff			
Non-resident peak shift staff	1/non-resident peak shift staff				0.5/non-resident peak shift staff			
Road								No Requirements
Scientific Research Establishment								
Office and laboratory		2.5 /100m2 of office and laboratory						2.5 /100m2 of office and laboratory
Provision for other activities		SIA						SIA
Service Station								
Service Bay		4/service bay	4/service bay	6/service bay				
Shop area		4-5/100m <sup>2</sup> shop area (location)	6/100m <sup>2</sup> shop area	4/100m2 shop area				
Shop		4-5/100m <sup>2</sup> GFA (location)	6/100m <sup>2</sup> GFA	4 /100m2 GFA				
Special Dwelling	1/resident staff + 1/non-resident peak shift staff + 1/operational vehicle + 1				1/resident staff + 1/non-resident peak shift staff + 1/operational			
Stock/sale yard								SIA
Store		2 /100m2 GFA		2 /100m2 GFA			2/100m2 GFA	

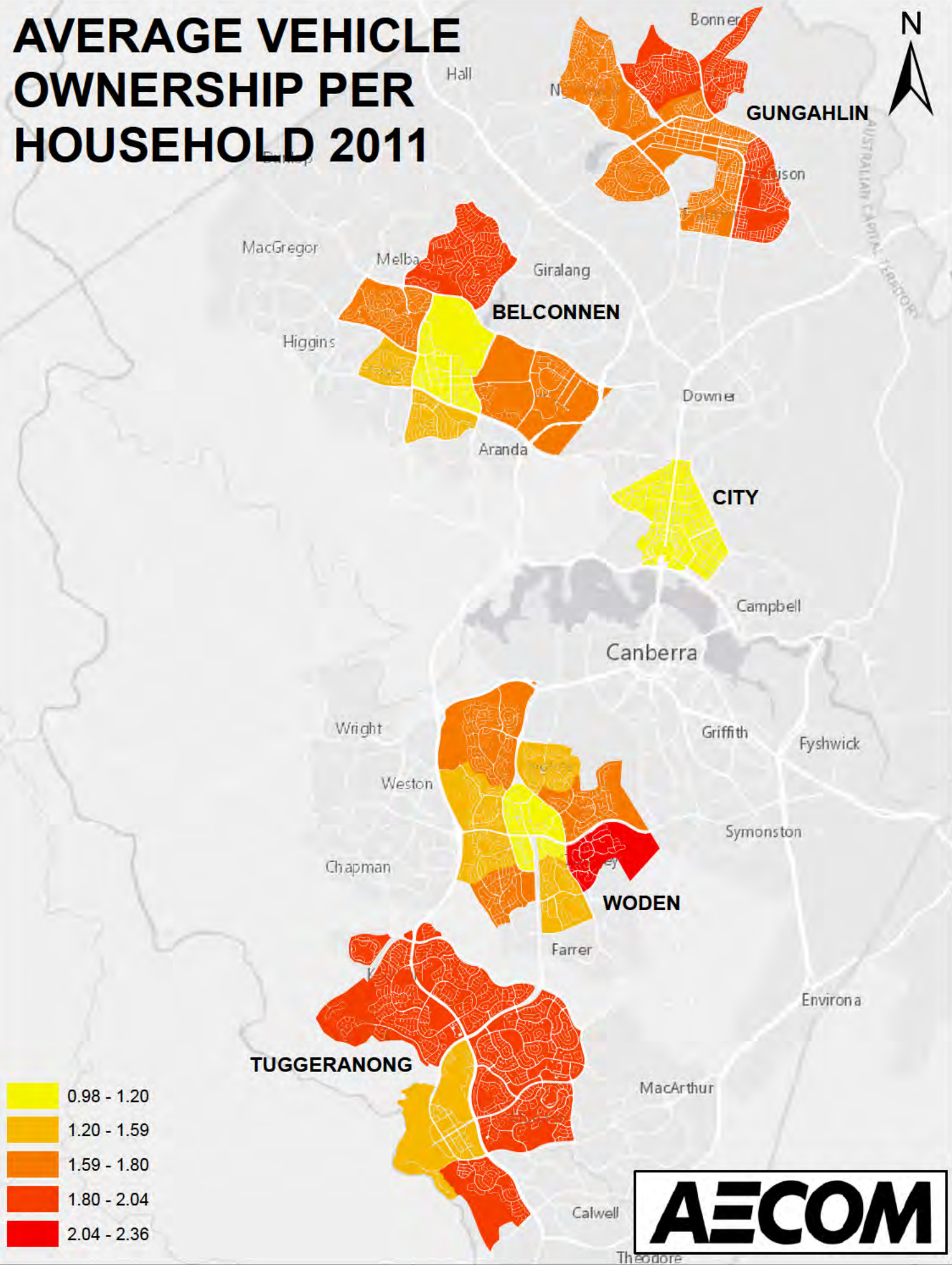
Land Use	Residential	Commercial (Centre)	Commercial (Other)	Industrial	Community	Restricted Access Recreation Zone	Services Zone	Other Zones
Tourist Facility		SIA						SIA
Transport Depot		SIA		SIA			SIA	SIA
Vehicle Sales								
Service Bay		4 spaces/service bay		6 /service bay				
Shop area		3-6/100m <sup>2</sup> of shop area		6/100m2 shop area				
Veterinary Hospital		3.5/100m <sup>2</sup> GFA	3 5/100m <sup>2</sup> GFA	3.0 /100m2 GFA	3.5/100m2 GFA			3.5 spaces/100m2 GFA
Warehouse								
Floor area		1 space/100m <sup>2</sup> GFA		1/100m2 GFA				
Office Area		2.5 space/100m <sup>2</sup> GFA		2.5/100m2 GFA				
Waste Transfer Station							1 /peak shift employee	
Woodlot								SIA
Zoological Facility		SIA						
Assumptions/ definitions:								
City Centre:	Consists of City, Town Centres and Group Centres. Includes commercial mixed use zone							
Other	Consist of Local Centres and CZ2 zones outside centres and Northbourne Avenue Precinct							
SIA:	Subject to individual Assessment							
Note A: Hotel Rates	CZ1 zone 1 space/3 employees plus 0.1 spaces/guest room or unit plus 5 spaces/100m2 GFA of bars and function rooms plus 2 spaces/100m2 of retail space	CZ2 and CZ3 zones 1 space/3 employees plus 1 space/guest room or unit for establishments of up to 36 units OR 25 spaces plus 0 3 spaces/guest room or unit for establishments of more than 36 units plus 0.3 spaces/guest room or unit for establishments of more than 36 units plus 5 spaces/100m2 GFA of bars and function rooms up to 5000m2 plus 10 spaces/100m2 over 5000m2 plus 1 space/10 restaurant seats	Town Centre: 1 space/3 employees plus 1 space/guest room or unit for establishments of up to 36 units OR 25 spaces plus 0 3 spaces/guest room or unit for establishments of more than 36 units plus 5 spaces/100m2 GFA of bars and function rooms up to 5000m2 plus 10 spaces/100m2 over 5000m2 plus 1 space/10 restaurant seats plus 2 spaces/100m2 of retail space	Group Centre: 1 space/2 employees plus 1 spaces/guest room or unit for establishments of up to 36 units OR 25 spaces plus 0.3 spaces/guest room or unit for establishments of more han 36 units plus 10 spaces/100m2 GFA of bars and function rooms plus 1 space/10 restaurant seats plus 3 spaces/100m2 of retail space				



# Appendix D

## GIS Outputs from JTW Analysis

# AVERAGE VEHICLE OWNERSHIP PER HOUSEHOLD 2011





# JOURNEY TO WORK DATA (2011)



Dunlop

MacGregor

Melba

Higgins

Hall

Giralang

Bonner

from  
**GUNGAHLIN**

ison

Downer

Aranda

from  
**CITY**

Campbell

Canberra

Wright

Griffith

Fyshwick

Weston

from  
**WODEN**

Symonston

Chapman

Farrer

Enviro

MacArthur

from  
**TUGGERANONG**

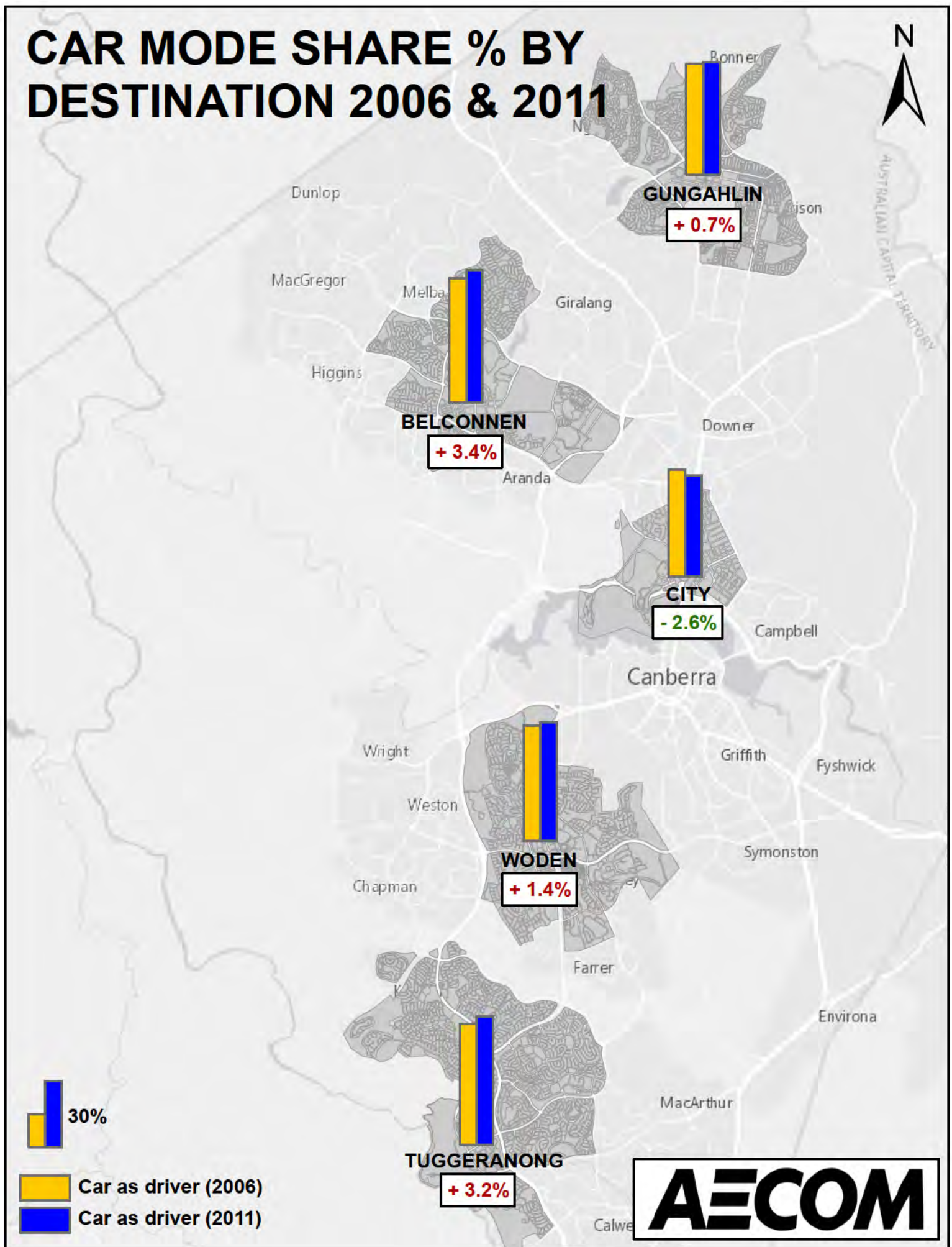
Calwe



- to City
- to Belconnen
- to Gungahlin
- to Woden
- to Tuggeranong

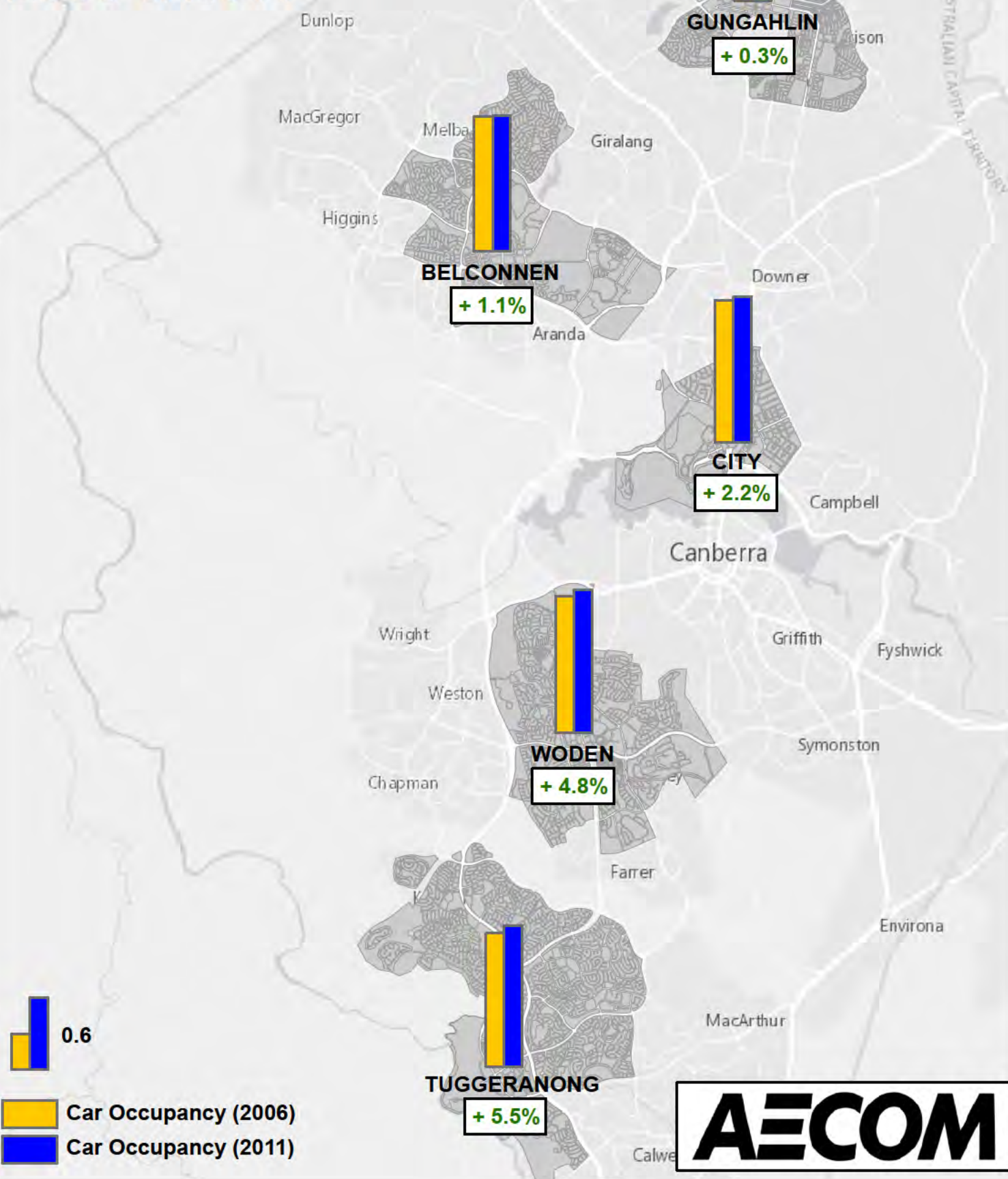


# CAR MODE SHARE % BY DESTINATION 2006 & 2011

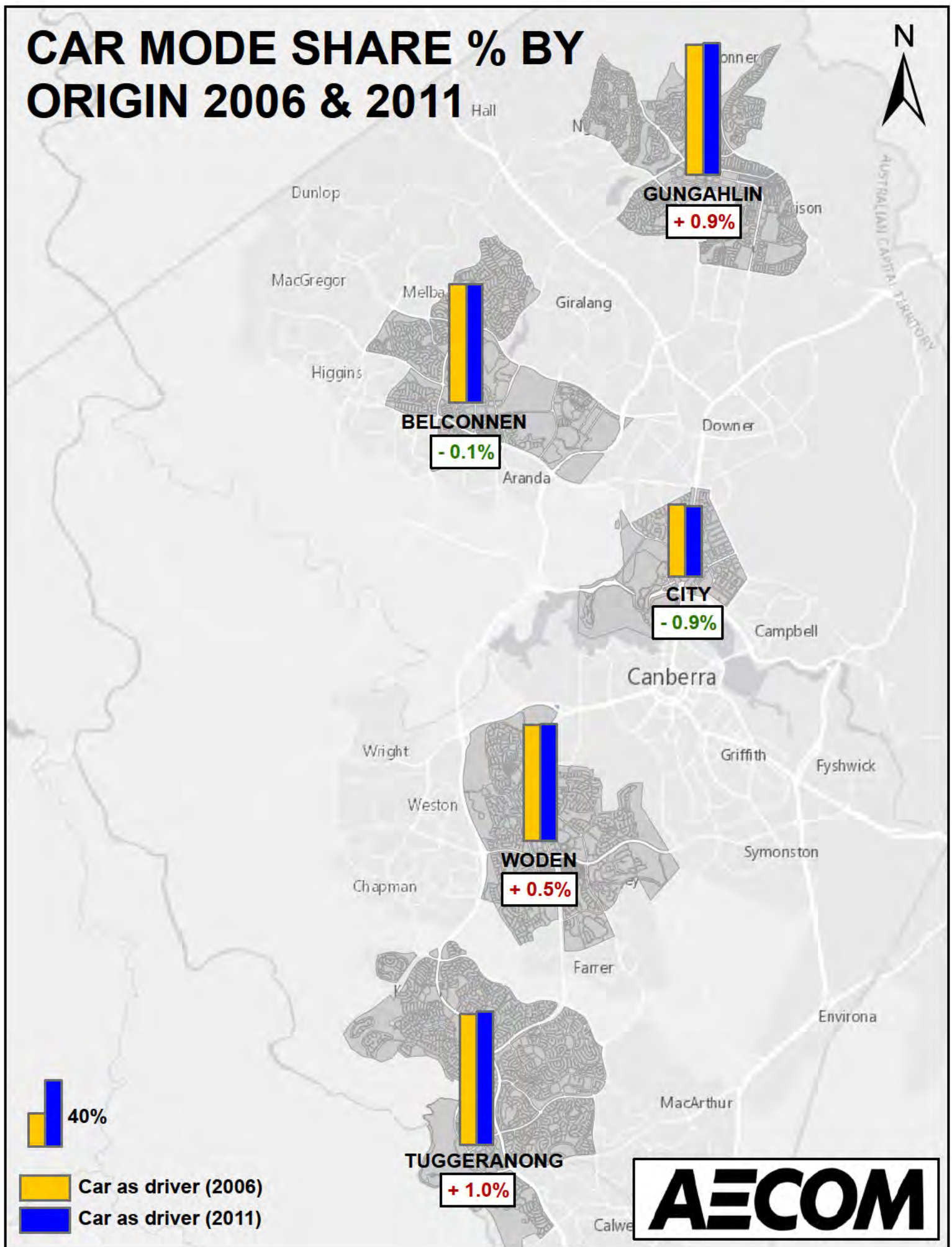




# AVERAGE CAR OCCUPANCY BY DESTINATION 2006 & 2011



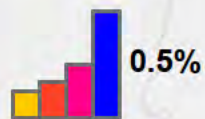
# CAR MODE SHARE % BY ORIGIN 2006 & 2011



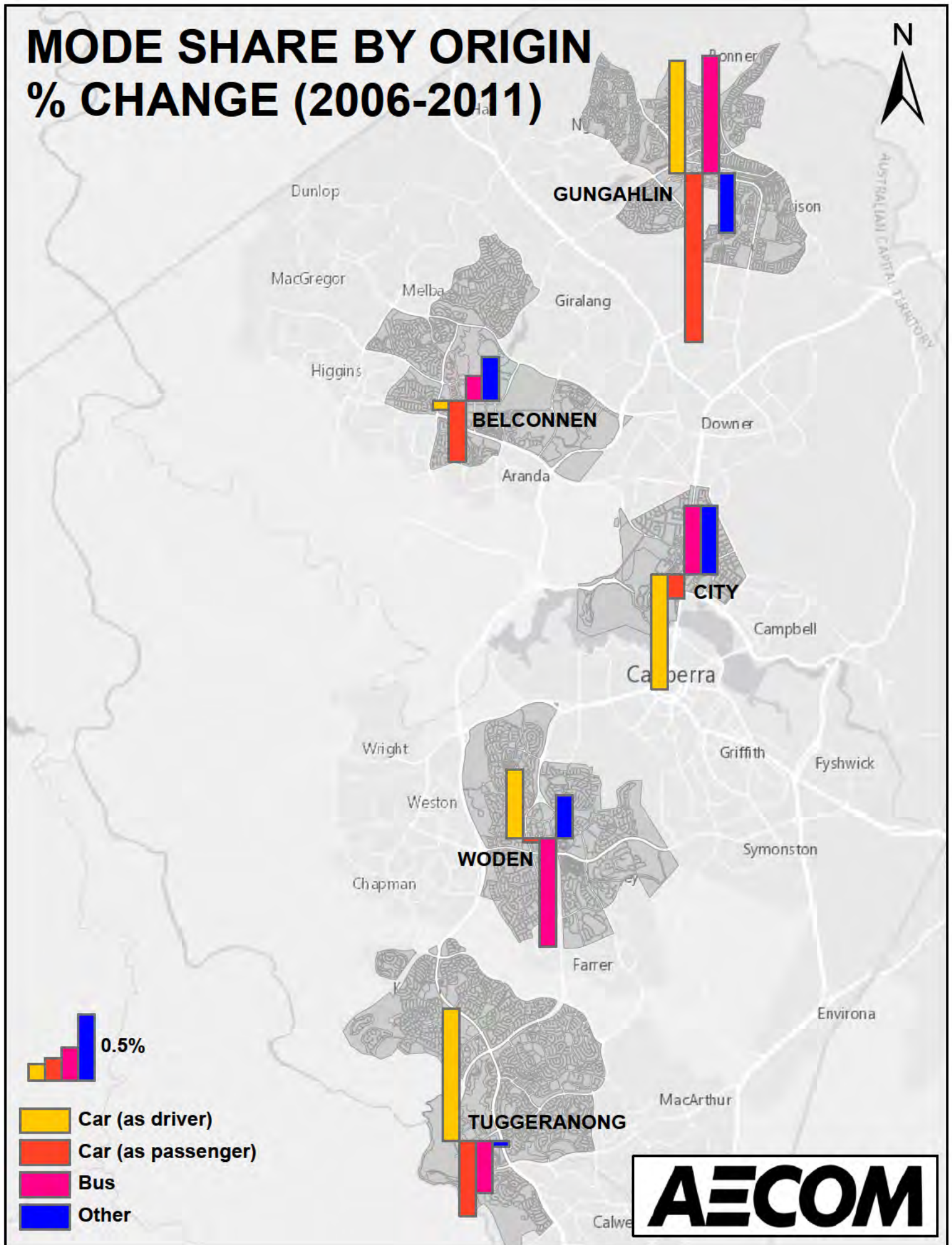


# MODE SHARE BY ORIGIN

## % CHANGE (2006-2011)

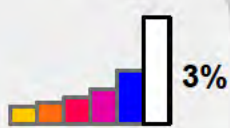
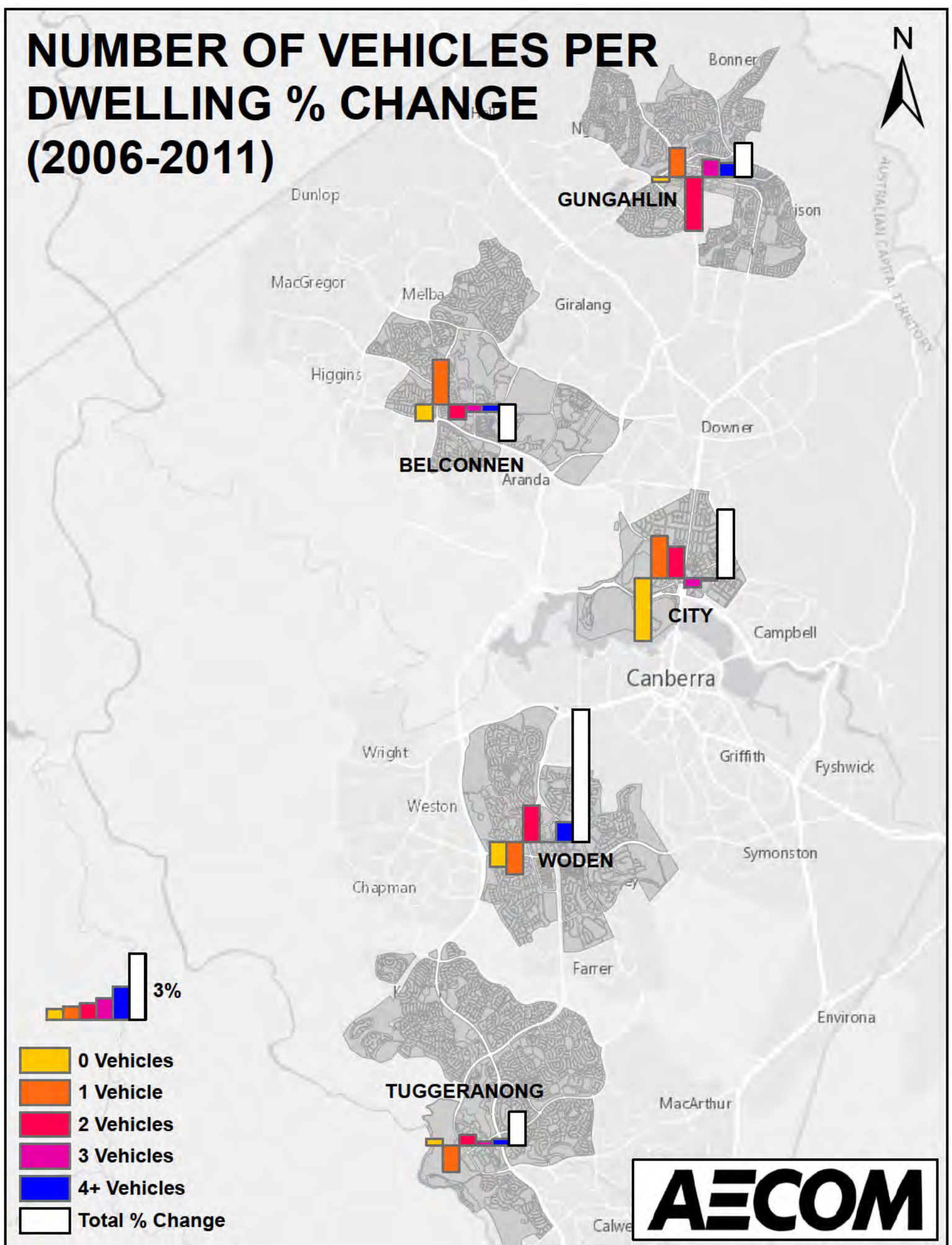


- Car (as driver)
- Car (as passenger)
- Bus
- Other



**AECOM**

# NUMBER OF VEHICLES PER DWELLING % CHANGE (2006-2011)

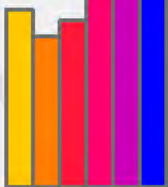
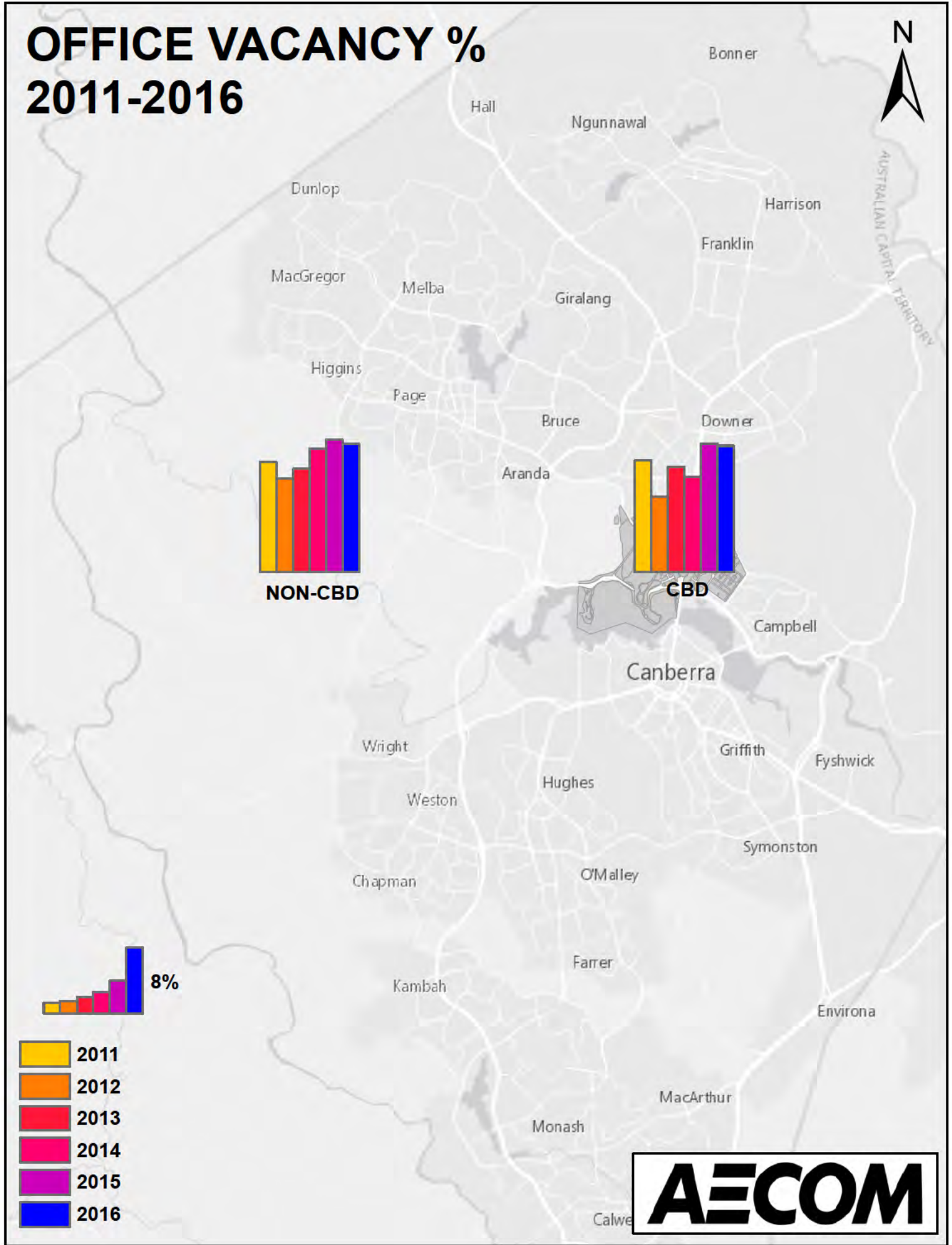


- 0 Vehicles
- 1 Vehicle
- 2 Vehicles
- 3 Vehicles
- 4+ Vehicles
- Total % Change





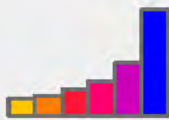
# OFFICE VACANCY % 2011-2016



**NON-CBD**



**CBD**

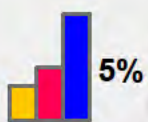


8%

- 2011
- 2012
- 2013
- 2014
- 2015
- 2016



# PERSONS PER DWELLING BY TYPE - % CHANGE (2006-2011)



- House
- Townhouse
- Apartment

**TUGGERANONG**

**WODEN**

**CITY**

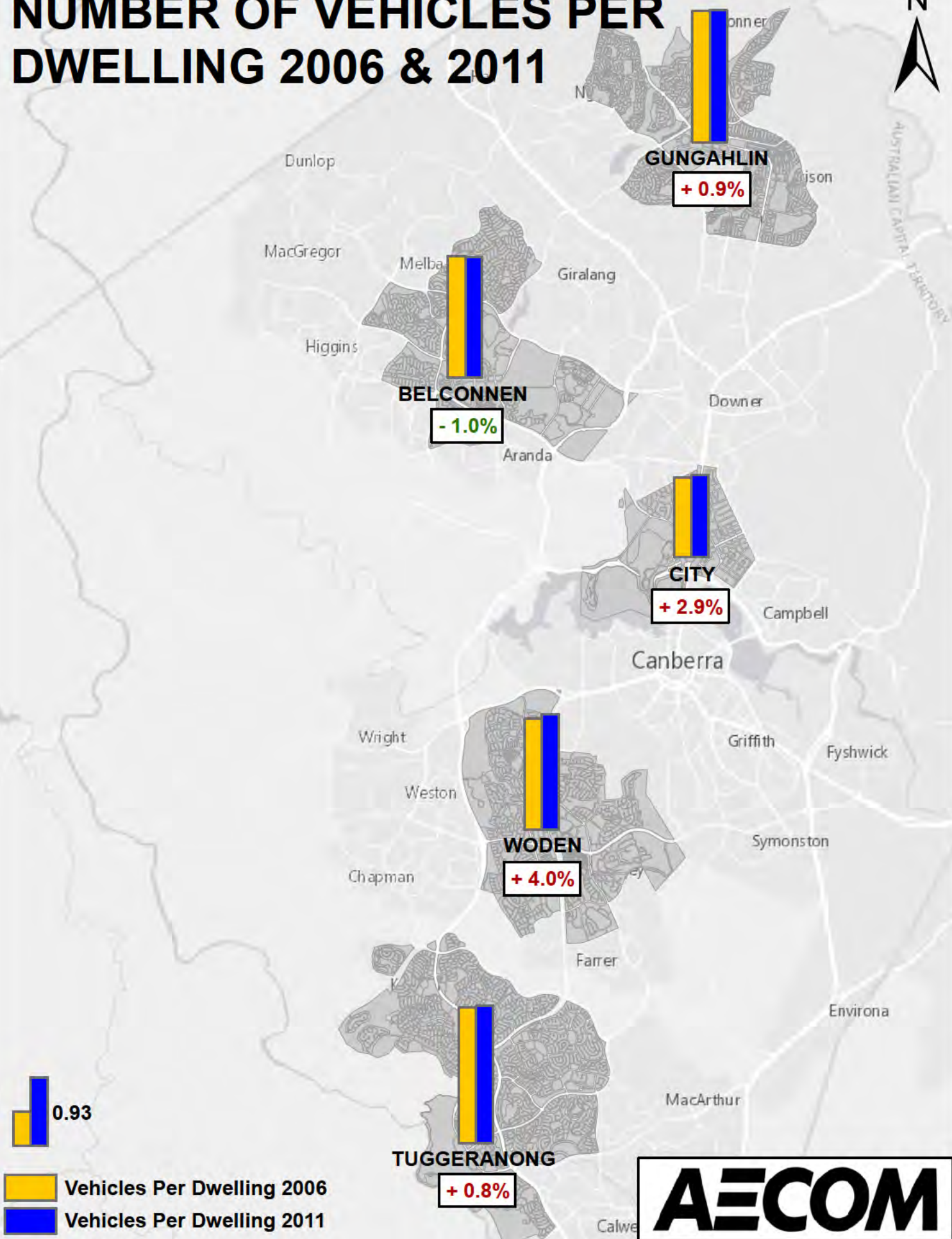
**BELCONNEN**

**GUNGAHLIN**

**AECOM**



# NUMBER OF VEHICLES PER DWELLING 2006 & 2011

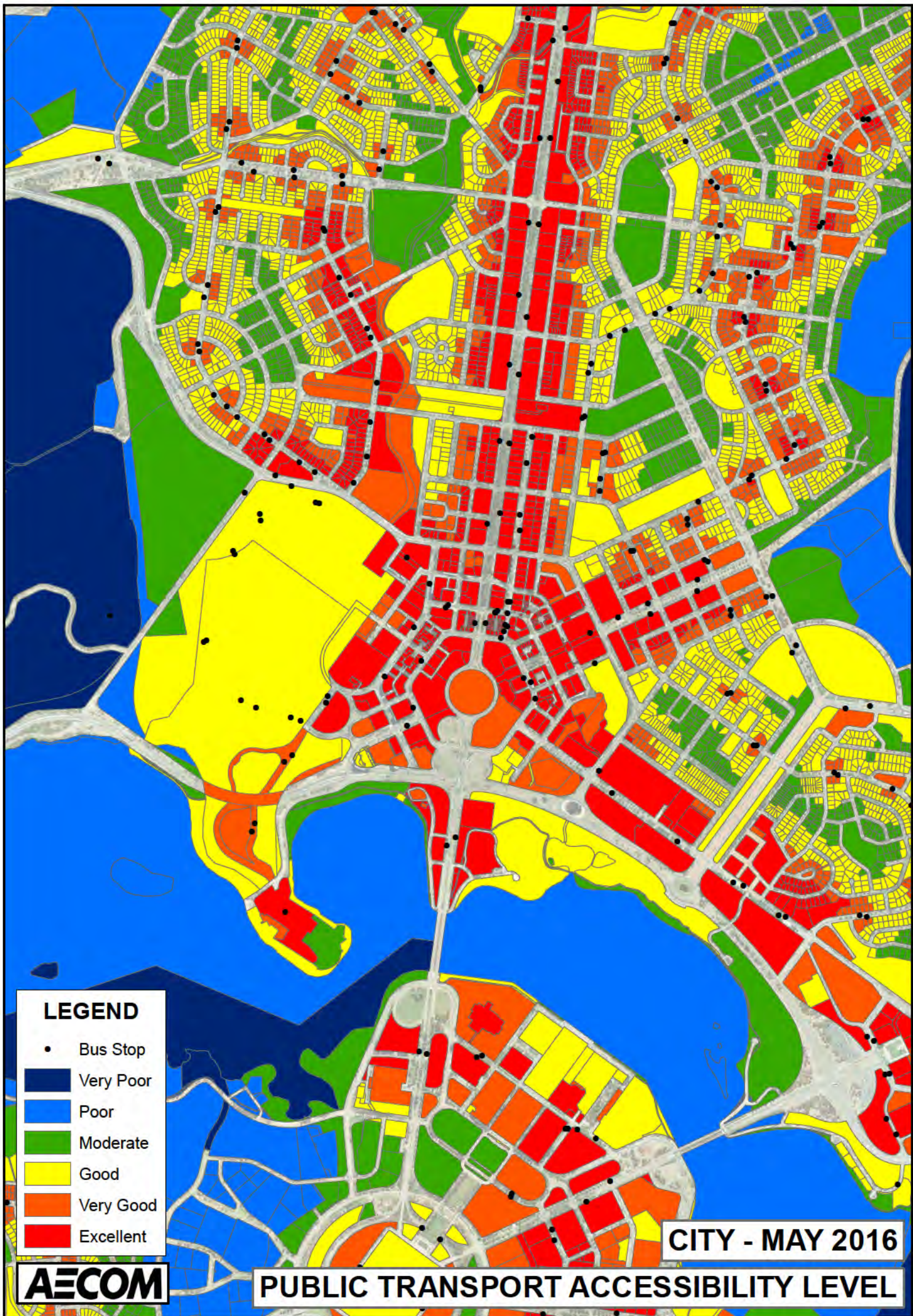




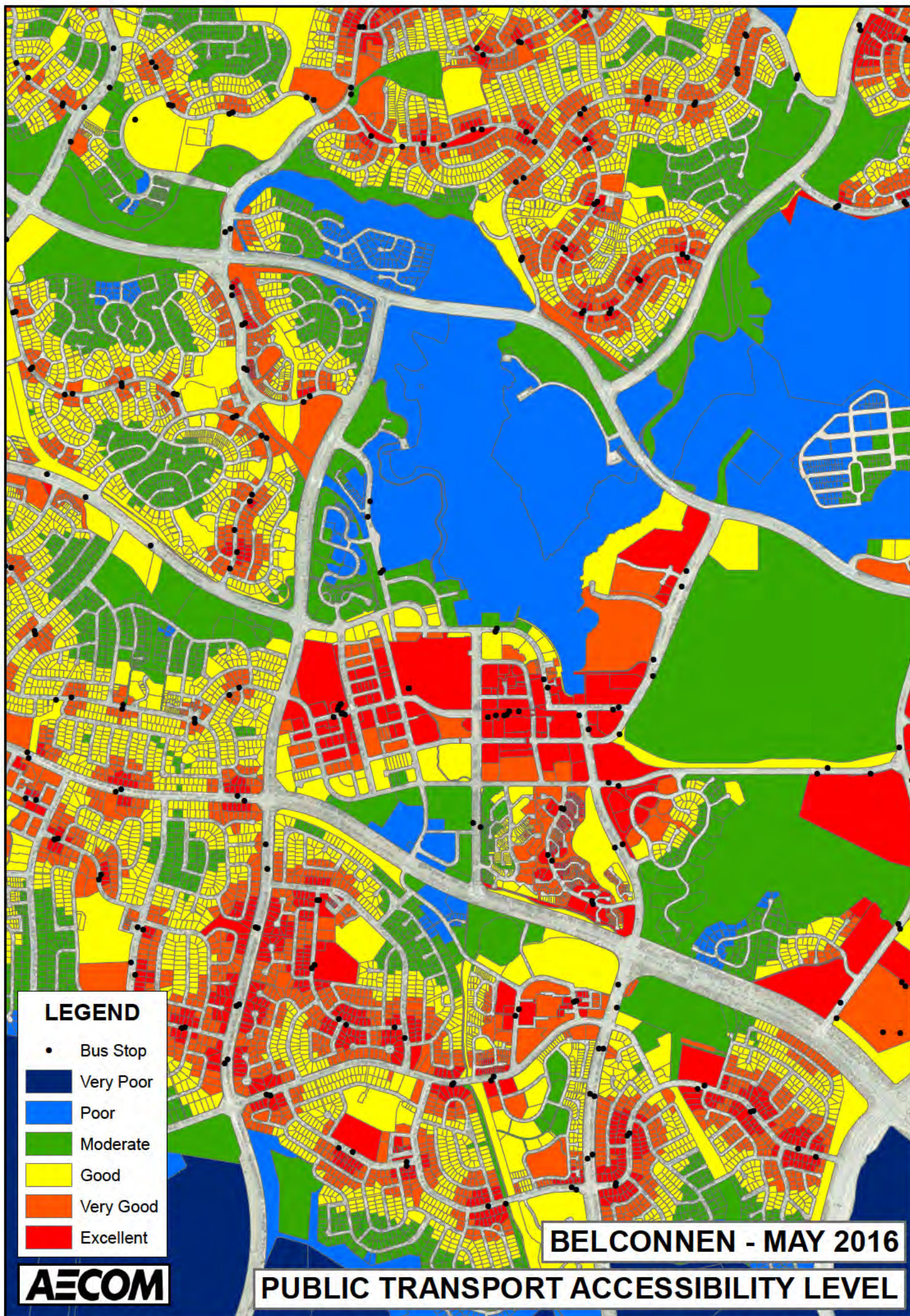
# Appendix E

## Mapping of PTAL Scores









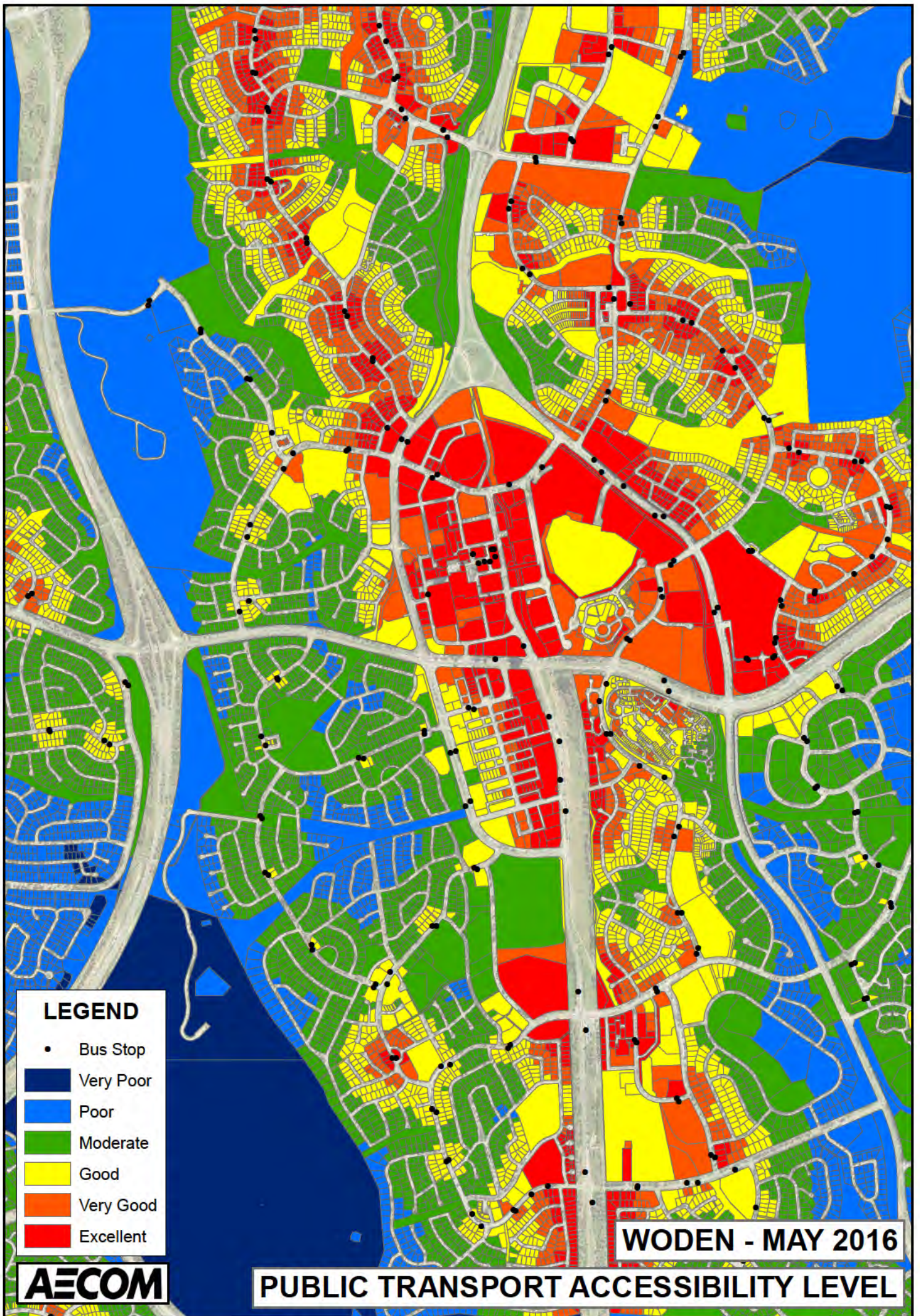




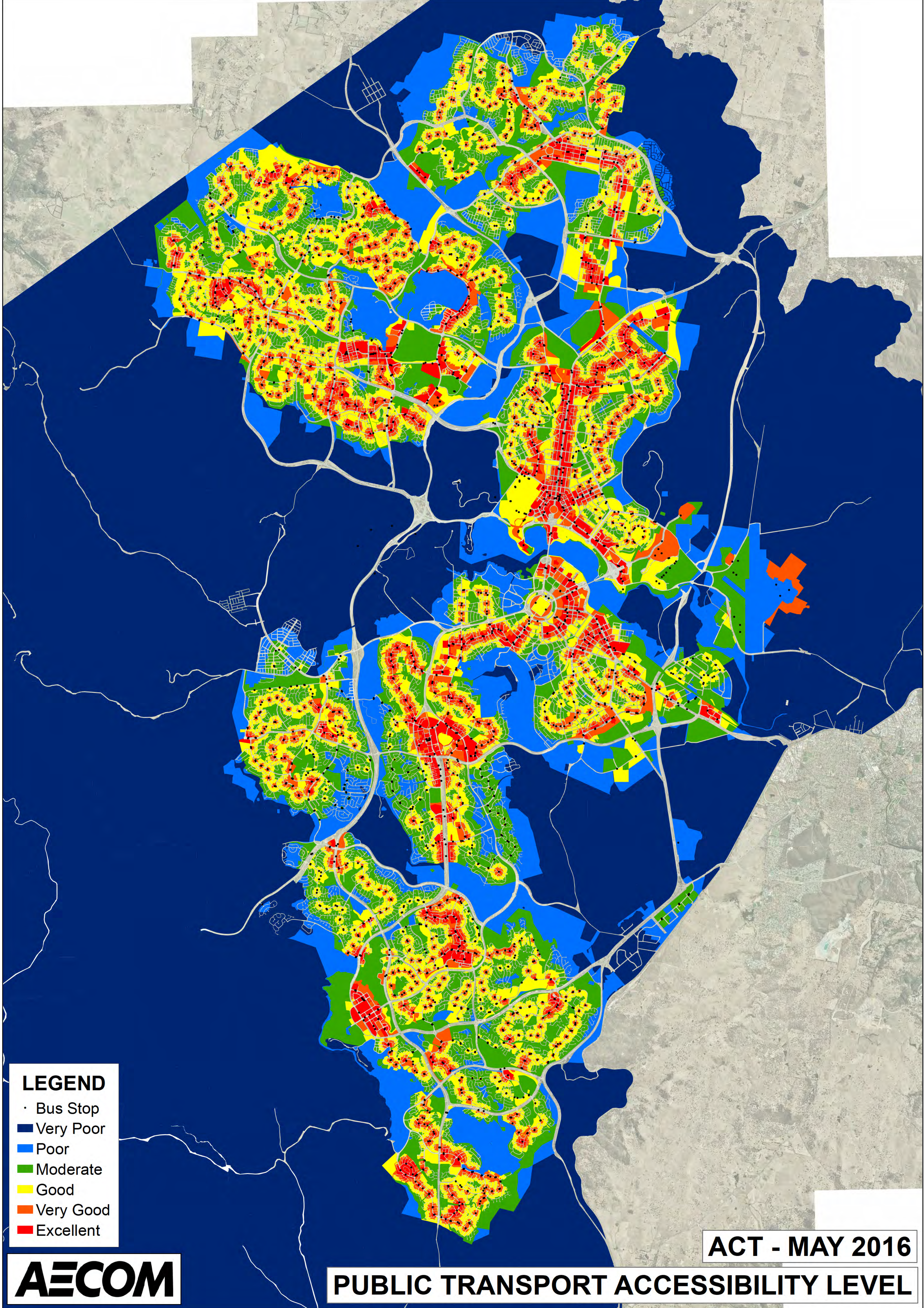












**LEGEND**

- Bus Stop
- Very Poor
- Poor
- Moderate
- Good
- Very Good
- Excellent

**ACT - MAY 2016**

**AECOM**

**PUBLIC TRANSPORT ACCESSIBILITY LEVEL**





# Appendix F

Sample Gold Coast  
Practice Note



## Unbundled parking

### General information

A key focus of the City Plan is to facilitate integrated land-use and transport outcomes. This integration will provide benefits in the form of increased connectivity across the city, reduced cost of congestion and the use of convenient alternatives to private car use.

A new initiative brought about by the City Plan is the use of travel demand measures. Unbundled parking is just one of the City Plan's travel demand measures to support integrated land-use and transport outcomes.

### What is unbundled parking?

Unbundled parking is an arrangement where property can be purchased separately from car parking.

Unbundled parking is for the use of residents or tenants of a building. Unbundled parking is not for use by the general public or visitors.

The City Plan allows for a 30% reduction in the required number of off-street car parking spaces where development:

- is located within the mapped Transport hub area (Figure 9.4.13-1)
- allocates 20% - 50% of its car parking stock as unbundled parking

The 30% reduction does not apply to visitor parking and parking spaces allocated as unbundled parking.

*Note: Where development is required to provide a mandatory amount of unbundled and/or pooled parking, this amount must be incorporated as part of the 20% – 50%.*

### What is pooled parking?

Pooled parking refers to a group of parking spaces within a development which are not specifically owned or assigned. Pooled parking provides residents access to car parks on a non-permanent basis. Pooled parking spaces are to be kept as a body corporate/common use area and managed by body corporate or building management.

### What is the benefit of unbundled and/ or pooled parking?

The benefit unbundled and/or pooled parking provides is:

- reduced purchase and lease costs of development
- reduced building costs associated with car parking
- increased buyer choice e.g. purchase of a dwelling unit with or without a car parking space





### Example scenario

To assist in understanding unbundled parking and how it applies to the reduction in off-street car parking spaces an example scenario has been provided below.

### Example development

An applicant proposes a development which is:

- A 100 unit Multiple dwelling
- Within the Transport hub area
- Within a Centre zone
- Within 400 metres walking distance of a light rail station

### Steps in calculating the required number of parking spaces

The applicant goes through the following steps to determine the number of envisaged off-street car parks they need to provide:

#### Step 1 – Determine the required base number of parking spaces

The parking rate for Multiple dwellings is 0.75 off-street car parking spaces per unit or dwelling and 1 per 10 units or dwelling for visitors. As a result, 75 parking spaces are required for residents and 10 parking spaces are required for visitors.

In addition, the development is located within a Centre zone and within 400 metres walking distance of a light rail station. This requires 17.5% of residential parking stock to be unbundled. As a result, 14 parking spaces of the 75 parking spaces are required to be available for purchase separate from a unit.

#### Step 2 – Determine the percentage of residential parking stock to be allocated as unbundled parking (optional)

The applicant decides to increase the amount of unbundled parking from the mandatory amount to be eligible for a 30% reduction. An additional 2.5% of total parking stock is then allocated as unbundled parking.

As a result, 20% of residential car parking is unbundled parking. Therefore, the 75 residential car parking spaces are now made up of 15 unbundled parking spaces and 60 parking spaces tied to units.

#### Step 3 – Apply the 30% reduction (if step 2 is taken)

With a 20% allocation of unbundled parking achieved, the development is now eligible for a 30% reduction. This results in a reduction of 18 car parking spaces i.e. 60 car parking spaces to 42 car parking spaces.



### Example scenario continued

#### The required number of parking spaces

After applying the 30% reduction, the number of off-street parking spaces required is:

- 57 resident parking spaces (includes 15 unbundled resident parking spaces)
- 10 visitor parking spaces

If steps 2 and 3 are not taken, the number of off-street parking spaces required is:

- 75 resident parking spaces (includes 14 unbundled resident parking spaces)
- 10 visitor parking spaces

#### Further information

For any further information, please contact the City of Gold Coast Planning and Enquiries Centre on 5582 8708.



# Appendix G

## Comparison of ACT and Interstate Rates



Land Use	ACT	Darwin	Brisbane	Gold Coast	Marrickville	Liverpool	Blacktown	Wollongong	Victoria PS	Perth
Agriculture	SIA									
per staff				1						
Other than Offices (per 100 sqm UNIT)		1	3 GFA							
Office (per 100 sqm UNIT)		4	3 GFA							
Outdoor Storage (per 100 sqm)		0.4								
Amusement Arcade night club music hall										
discotheque (per 100 sqm GFA)	10								4 NFA	
Animal Care Facility	SIA									
Animal Husbandry										
per 100sqm UNIT	SIA			1-2 (size)						
per staff				1						
Any other land use not specified	SIA									
Aquatic Recreation Facility	SIA									
Boarding House										
per employee					1					
per bedroom			0.15		0.25					
1 bedroom			1			1				
2 bedroom			1.25							
3+ bedroom			1.5							
Bulky Goods Retailing (per 100 sqm GFA)	3				1	0.667- 3.33 (size)	2.22	1.33-3.33 (size)		
Bulky Landscape Supplies										
per 100sqm UNIT	SIA			1-2 GFA (size)		0.5				
per tenancy				2		15				
% site area									10	
Business Agency (per 100 sqm GFA)	5-6 (Zoning)									
Camping Ground										
Office Space(per 100 sqm GFA)	2.5					1				
per site or unit	1			1.1						
Visitors (per 4 sites or units)	0.25									
Car Park per peak shift employee	1									
Cemetery	SIA									
Child Care Centre										
Per Centre	1									
Employee parking (per 15 children)	2									
Visitor Parking for <30 children	2									
Visitor Parking for 30-59 children	3									
Visitor Parking for 60-90 children	4									
per 10 children (pick-up/set down)	1		2	2		1	1.67	1.67	2.2	
per employee				1		1	1	1		
per 100 sqm of UNIT		2 NFA			2 GFA					
Cinema										
per 12 seats	4	3								
per 100 sqm NFA										
per patron permitted									0.3	
Civic Administration	N/A									
Club										
per 100sqm UNIT	15 GFA	10		6 GFA			5.4 GFA	20 GFA		
Lounge Area or beer garden (per 100 sqm NFA)		10								
Bar (per 100 sqm NFA)		20								
Dining (per 100 sqm NFA)		3								
per staff								0.5		

Land Use	ACT	Darwin	Brisbane	Gold Coast	Marrickville	Liverpool	Blacktown	Wollongong	Victoria PS	Perth
Commercial Theatre										
per 12 seats	4	3								
per 100 sqm NFA										
Communications Facility (per peak shift employee)	1									
Community Activity Centre (per 100 sqm GFA)	4									
Community Activity Centre (per 100 sqm UNIT)	4 GFA	5 NFA								
Community Theatre										
per 12 seats	4			1.5						
Floor Area (per 100 sqm)			10							
Community Use	As per community schedule									
Corrections Facility	N/A									
Craft Workshop (per 100 sqm GFA)	3								4 NFA	
Cultural Facility (per 100 sqm GFA)	2									
Defence Installation	SIA									
Demolition (per peak shift employee)	1									
Drink Establishment										
per 100sqm GFA	15						12	4		
per 5 seats							1 or			
per 10sqm dining area							or 1			
Drive-In Cinema	SIA									
Emergency Services Facility (per peak shift employee)	1									
Equestrian Facility	SIA									
Financial Establishment (per 100 sqm GFA)	5-6 (Zoning)									
Freight Transport Facility	SIA									
Funeral Parlour										
per 100sqm of UNIT			10 GFA	10 GFA						
per 100 sqm GFA (except chapel area)	2									
per 20 chapel seats	5				4			5		
per patron									0.3	
per service area									1	
General Industry										
Floor Space other than offices (per 100 sqm NFA)	2	1						0.67-1.33 GFA (size)	2.9 NFA	
Office Space (per 100 sqm NFA)	2	4							2.9 NFA	
Outdoor Storage (per 100 sqm)		0.4								
Group or Organised Camp	SIA									
Guest House										
per dwelling	0.5	2								
per employee	0.5	1								
per guestroom	0.3-1 (Zoning)	1								
Base Rate	25	1								
per 10 people		2								
Hazardous Industry										
per peak shift employee	1									
Floor Area (per 100 sqm UNIT)									2.9 NFA	
Hazardous Waste Industry										
per peak shift employee	1									
Floor Area (per 100 sqm UNIT)									2.9 NFA	



Land Use	ACT	Darwin	Brisbane	Gold Coast	Marrickville	Liverpool	Blacktown	Wollongong	Victoria PS	Perth
Health Facility										
per practitioner	3-4 (location)						1			
Base			0-14 (Size)				2-3.33 (type)			
Health Care Services (per 100 sqm UNIT)			5-6 (Size)	5 GFA						
per consulting room								4		
per staff								0.333		
Home Business										
	SIA									
Hospital										
						SIA				
Employees (per peak shift employee)	0.8		0.8	0.8	0.2			1		
Beds (per bed)	1.3	0.25	0.5	0.5	0.5			0.5		
Administration Space (per 100 sqm UNIT)		4 NFA								
(if medical clinic) (per consulting room)		4						4		
Hotel										
Base Rate	25									
Guest Room or Unit plus (per guest room or unit)	0.3			1		1	1	1		
Bars and Function Rooms (per 100 sqm GFA)	10						1 per 3 seats			
Retail Space (per 100 sqm GFA)	3									
Restaurant Seats (per 10 restaurant seats)	1									
Floor Area (per 100 sqm UNIT)				6 GFA						
Lounge Bar and or Beer Garden (per 100 sqm NFA)		16								
Bar (per 100 sqm NFA)		50								
Drive in-bottle shop (Each)		10								
Dining (per 100 sqm NFA)		3					10			
per staff				0.33		0.5	0.5	0.5		
per resident				0.5					0.4	
Incineration Facility (per peak shift employee)	1									
Indoor Recreation (Basketball Netball)										
per court	20-25 (location & zoning)		20	20						
Floor Area (per 100 sqm UNIT)					2 GFA					
Indoor Recreation(Fitness Centre Gymnasium) (per 100 sqm UNIT)	2-3.5 (Zoning)		10 GFA	5 GFA	2 GFA	4.54 LFA	4 GFA			
Indoor Recreation(Other)	SIA				2 GFA					
Indoor Recreation(Skating Rink Swimming Pool)										
per 100sqm UNIT	5-20 GFA (Location and Zoning)		1 GFA	1 GFA	2 GFA				5.6 per 100 sqm of site	
Base			15	15						
Indoor Recreation(Squash Court) (per court)										
per court	2	4	3	6		3				
per 100 sqm of UNIT					2 GFA					
Industrial Trades (per 100 sqm GFA)	2.5				0.5					
Land Fill Site										
	SIA									
Land Management Facility										
	SIA									
Light Industry										
Other than offices (per 100 sqm NFA)	2.5 GFA	2			0.5		1.33 GFA	4 GFA	2.9 LFA	
Office (per 100 sqm UNIT)	2.5 GFA	4			0.5	2.85 LFA	2.5 GFA	4 GFA	2.9 LFA	
Outdoor Storage (per 100 sqm)		0.4								
per employee						0.5				
Liquid Fuel Depot										
per peak shift employee	1									
% site area									10	

Land Use	ACT	Darwin	Brisbane	Gold Coast	Marrickville	Liverpool	Blacktown	Wollongong	Victoria PS	Perth
Major Service Conduits	SIA									
Major Utility Installation	SIA		Transport Depot							
Minor Use	SIA									
Motel										
Base Rate	25						1			
Guest Room or Unit plus (per guest room or unit)	0.3	1					1 per 3 seats	1		
Bars and Function Rooms (per 100 sqm GFA or seats)	10	16								
Retail Space (per 100 sqm GFA)	3									
Restaurant Seats (per 10 restaurant seats)	1									
Dining (per 100 sqm NFA)		3					10			
Per staff							0.5	0.5		
All other areas (per 100 sqm UNIT)										
Municipal Depot (per peak shift employee)	1									
Nature Conservation Area	SIA									
Offensive Industry										
per peak shift employee	1									
Floor Area (per 100 sqm UNIT)									2.9 NFA	
Office (per 100 sqm UNIT)	2-2.5 GFA (Location and Zoning)	2.5 NFA	3 GFA	3 GFA	1.66 GFA	2.85 LFA	2.5 GFA	2.5 GFA	3.5 NFA	
Other Leisure and Recreation				20						
Floor area (per 100 sqm NFA)		10								
Indoor spectator Facility (per 4 seats)		1								
Outdoor Education Facility	SIA									
Outdoor Recreation (Bowling Green)										
per green	15 + 30 for the first green	20		20	10 + 15 for the first green	30 + 15 extra spaces for the first green			6 + 0.5*any other use	
Floor Area (per 100 sqm of NFA)										
Outdoor Recreation (Skating Rink Swimming Pool)										
per 100sqm rink area or actual pool Base	15			1 GFA 15						
Outdoor Recreation (Tennis Court) (per court)	5			4	1	3	3		4 + 50% of any other uses	
Outdoor Recreation(Other)	SIA									
Parkland			10-30 Spaces							
Parkland	SIA									
Pedestrian Plaza	SIA									
Personal Services										
per 100sqm GFA base	4				2	1.428 or or 1.5 or 1.5	1	2.5		
per staff							1			
per bedroom			2	1			1			
Place of Assembly										
per 20 seats	5						5 or or 10 seated area			
Floor Area (per 100 sqm UNIT)			10 GFA							
per patron									0.3	

Land Use	ACT	Darwin	Brisbane	Gold Coast	Marrickville	Liverpool	Blacktown	Wollongong	Victoria PS	Perth
Place of Worship										
per 20 seats	1-5 (zoning)									
Floor Area (per 100 sqm of UNIT)		5 NFA	10 GFA		3 333 GFA	1.43 - 20 LFA (zoning)	5 or or 10 seat area	2 or or 5		
Plant and Equipment Hire Establishment (per 100 sqm GFA)	2									
Plantation Forestry										
Playing Field	SIA									
Pre-school primary & high school										
per 100sqm of UNIT										
per 10 students	4 - SIA (Zoning)			0-2 (Age of students)		0.33	0.1 + 2/yr12	0.1 (yr 10-12)		
per staff			1.1	1	0.5	1	1	1	1-1.2	
Base		2								
per classroom		1								
Produce Market (per 100 sqm GFA)	15					2.5				
Public Agency (per 100 sqm GFA)	4-6 (Location and Zoning)									
Public Transport Facility	SIA									
Railway Use	SIA									
Recyclable Materials Collection	1					SIA				
Recycling Facility	SIA									
Other than offices (per 100 sqm UNIT)		1								
Office (per 100 sqm UNIT)		4								
Outdoor Storage (per 100 sqm)		0.4								
% site area									10	
Religious Associated Use	SIA									
Residential Care Accomodation										
per accomodation unit	0.25			0.25	0.833				0.3	
per staff residential unit	1							0.5		
per non-resident peak shift employee	0.5-1 (Zoning)			1						
per bed			0.16666667	1-4 (care)				0.066-0.1 (care)		
Residential Use (Apartment Attached House Detached House)										
per 1 bed	1.25	2	1.5	1		2	1-1.4 (location)	1.2-2.2 (size)	2	1-2 (min/max)
per 2 bed	1.75-2.25	2	1.7	1.25		2.5	1-1.4 (location)	1.2-2.2 (size)	2	1-2 (min/max)
per 3+ bed	2.25	2	1.9	2-2.5		3	2.14	1.2-2.2 (size)	3	1-2 (min/max)
Restaurant										
per patron permitted									0.3	
per employee										
per 100sqm UNIT	10-15 GFA (Zoning)	6 NFA	6-12 GFA (Zoning)		2 GFA	5-14.28 (Zoning)	0.5 10 dining area	0.25 16.66 GFA	3.5 LFA	
Retail Plant Nursery										
base								10		
per 100sqm UNIT								1 GFA		
Outdoor Storage (per 100 sqm)		2 NFA						1 land area		
Retirement Village										per resi
per self-care unit	1		1							
per hostel or nursing home unit	0.25									
per staff residential unit	1									
per non-resident peak shift employee	0.5									
Scientific Research Establishment										
Office and Laboratory Space (per 100 sqm GFA)	2.5									
Other Activities	SIA	0.4 GFA							3.5 GFA	

Land Use	ACT	Darwin	Brisbane	Gold Coast	Marrickville	Liverpool	Blacktown	Wollongong	Victoria PS	Perth
Service Station										
Service Bay (per service bay)	4				0 333	3		3	6	
Shop Area (per 100 sqm UNIT of shop area)	4-6 (Zoning)	2 NFA			2 GFA	5 LFA		4 GFA	5 GFA	
Fuel Outlet per staff						2		0 5		
Shop (per 100 sqm GFA)	6	6 NFA	5	5	2-5 (Location)	3.33 - 5 (Zoning)	3.33-4 55	4	3.5 LFA or 10	
Special Dwelling										
per resident employee	1									
per peak shift non-resident employee	1									
per operational vehicle	1									
per visitor space	1									
per dwelling								0.25-0 5 (type)	0 5-1 (min/max)	
Stock / Sale Yard	SIA									
Store (per 100 sqm GFA)	SIA - 2 (Zoning)									
Subdivision (per peak shift employee)	1									
Temporary Use	SIA									
Tertiary Institution College										
per 10 students	4 - SIA (Zoning)		1	SIA		0.33				
per staff			1.1		0 333	1				
Base		2			0 666					
per 6 students		1								
Tourist Facility	SIA									
Caravan Parks Office Space (per 100 sqm GFA of office space)	2.5									
Caravan Parks (per unit or site)	1.25	1.1				1	1	1		
Tourist Resort	As per hotel									
Transport Depot						SIA				
Other than offices (per 100 sqm NFA)		1								
Office (per 100 sqm NFA)		4								
Outdoor Storage (per 100 sqm)		1								
Base	SIA									
Vehicle Sales										
Service Bay (per service bay)	6							3		
Shop Area (per 100 sqm of shop area)	6							0.75		
Site Area (per 100 sqm GFA)										
Office (per 100 sqm NFA)		4								
per 200 sqm used for vehicle display		1					1.5			
Veterinary Hospital										
per 100sqm UNIT	3.5 GFA	4 NFA	4 GFA			3-5 LFA (Zoning)			3.5 LFA	
per Consulting room						3		3		
per employee						1				
Warehouse										
Floor Area -not offices (per 100 sqm UNIT)	1 GFA	1 GFA	Transport	1-2 GFA (size)		1.33 LFA		0.67-1.33 GFA (size)	1.5 NFA	
Office Area (per 100 sqm UNIT)	2.5 GFA	4 GFA	Depot	1-2 GFA (size)		2.85 LFA or		0.67-1.33 GFA (size)	1.5 NFA	
Outdoor Storage (per 100 sqm)		0.4								
per employee										
per tenancy				2		or 0.5			2	
Waste Transfer Station (per peak shift employee)	1		1 GFA							
Woodlot	SIA									
Zoological Facility	SIA									



Land Use	ACT	Darwin	Brisbane	Gold Coast	Marrickville	Liverpool	Blacktown	Wollongong	Victoria PS	Perth
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#### Assumptions and Notes

SIA - subject to individual assessment

#### ACT

Residential Use includes attached house apartments and detached houses.

ACT - CBD Centre is City Centre Group Centre and Town Centre

All hotels guest houses and motels for ACT are assumed to contain more than 36 units.

Schools are calculated using the set rates if the school was in a community facility zone then it would be:

#### NT

Guest House is assumed to be the same as home based visitor accommodation

ACT Bars and function rooms utilise the same rates as a lounge bar or beer garden

ACT Agriculture compared to NT rural industry

Service Station: 2 for every 100 sqm NFA OR five whichever is greater. Assumes to always be 2 so that a variable rate can be compared.

#### QLD

The non residential rates are not separated by Centre and other as only one rate is provided. These rates are used twice as this is how the code is read.

ACT Agriculture compared to Gold Coast rural industry

Gold Coast uses a more basic code for its city centre that spans a wide array of developments.

#### NSW

Marrickville has three parking zones for the purpose of this comparison both Parking Area 1 and 2 will be considered CBD while Parking Rate C will be considered other.

Liverpool states residential rates in the CBD/Centre but for all other purposes uses a blanket 1 space per 100 sqm floor area

Waverly has four parking zones - parking zone B & C are allocated to other

#### Victoria

Two rates one blanket and one that is applied intermitantly. It is assumed that Column B is CBD/Centre rates while Column A is other.

#### Perth

Location A is considered CBD due to proximity to public transport. B is considered other.

Land Use	ACT	Darwin	Brisbane	Marrickville	Liverpool	Blacktown	Waverly	Wollongong	Victoria PS	Perth
Agriculture										
per staff										
Other than Offices (per 100 sqm UNIT)			3 GFA							
Office (per 100 sqm UNIT)			3 GFA							
Outdoor Storage (per 100 sqm)										
Amusement Arcade night club music hall										
discotheque (per 100 sqm GFA)	5-10 (Location)								3 5 NFA	
Animal Care Facility										
Animal Husbandry										
per 100sqm UNIT										
per staff										
Any other land use not specified										
Aquatic Recreation Facility										
Boarding House										
per employee	0.5			1						
per bedroom	0.5		0.15	0.2-0.25 (Location)						
1 bedroom			1							
2 bedroom			1.25							
3+ bedroom			1.5							
Bulky Goods Retailing (per 100 sqm GFA)	2-2.5 (Location)			0.667-0.8 (Location)						
Bulky Landscape Supplies										
per 100sqm UNIT										
per tenancy										
% site area									10	
Business Agency (per 100 sqm GFA)	4-5 (Location)									
Camping Ground										
Car Park per peak shift employee	1									
Cemetery										
Child Care Centre										
Per Centre	1									
Employee parking (per 15 children)	2									
Visitor Parking for <30 children	2									
Visitor Parking for 30-59 children	3									
Visitor Parking for 60-90 children	4									
per 10 children (pick-up/set down)	1	0.5	2						2.2	
per employee		1								
per 100 sqm of UNIT				1-1.33 GFA (Location)	2.85 LFA					
Cinema										
per 12 seats	1-3 (location)	3				1.5 or				
per 100 sqm NFA		3				or 6.67 GFA				
per patron permitted									0.3	
Civic Administration	As per Office									
Club										
per 100sqm UNIT	5-10 GFA (Location and Zoning)	3 NFA	3-40 (size and licensing)			SIA				
Lounge Area or beer garden (per 100 sqm NFA)										
Bar (per 100 sqm NFA)										
Dining (per 100 sqm NFA)										

Land Use	ACT	Darwin	Brisbane	Marrickville	Liverpool	Blacktown	Waverly	Wollongong	Victoria PS	Perth
Commercial Theatre										
per 12 seats per 100 sqm NFA	3-4 (Location)		3							
Communications Facility (per peak shift employee)	1									
Community Activity Centre (per 100 sqm GFA)	4									
Community Activity Centre (per 100 sqm UNIT)	3 GFA	2 NFA								
Community Theatre										
per 12 seats Floor Area (per 100 sqm)	1		10							
Community Use	N/A									
Corrections Facility	SIA									
Craft Workshop (per 100 sqm GFA)	3								3.5 NFA	
Cultural Facility (per 100 sqm GFA)	0.5 - 1 (Location)									
Defence Installation	N/A									
Demolition (per peak shift employee)										
Drink Establishment										
per 100sqm GFA	5-10 (Size Location and Zoning)									
per 5 seats per 10sqm dining area										
Drive-In Cinema										
Pre-school primary & high school										
per 100sqm of UNIT		2 NFA			2.85 GFA					
per 10 students	1-1.5 (Location)									
per staff Base			1.1	0.2-0.25 (Location)					1-1.2 (Primary or Secondary)	
per classroom										
Tertiary Institution College										
per 10 students	1-1.5 (Location)		1							
per staff Base			1.1	0.2-0.25 (Location)						
per 6 students				0.333-0.4 (Location)						
Emergency Services Facility (per peak shift employee)	1									
Equestrian Facility										
Financial Establishment (per 100 sqm GFA)	4-5 (Location)									
Freight Transport Facility	SIA									
Funeral Parlour										
per 100sqm of UNIT			10 GFA							
per 10 seats					0.833-1 (Location)					
per 100 sqm GFA (except chapel area)	2									
per 20 chapel seats	1									
per patron									0.3	
General Industry										
Floor Space other than offices (per 100 sqm NFA)		2							1 NFA	
Office Space (per 100 sqm NFA)									1 NFA	
Outdoor Storage (per 100 sqm)										
Group or Organised Camp										

Land Use	ACT	Darwin	Brisbane	Marrickville	Liverpool	Blacktown	Waverly	Wollongong	Victoria PS	Perth
Guest House										
per dwelling	0.5	2								
per employee	0.5	1								
per guestroom	0.3-1	1								
Base Rate	25	1								
per 10 people		1								
Hazardous Industry										
per peak shift employee										
Floor Area (per 100 sqm UNIT)									1 NFA	
Hazardous Waste Industry										
Floor Area (per 100 sqm UNIT)									1 NFA	
Health Facility										
per practitioner	3 5-4 (location)									
Base										
Health Care Services (per 100 sqm UNIT)				0-14 (Size)						
				5-6 (Size)						
Home Business										
	SIA									
Hospital										
Employees (per peak shift employee)	0.8		0.8	0.25 - 0.33						
				(Location)						
Beds (per bed)	0.5	0.25	0.5	0.1- 0.125 (Location)						
Administration Space (per 100 sqm UNIT)		4 NFA								
(if medical clinic) (per consulting room)		4								
Hotel										
Base Rate	25									
Guest Room or Unit plus (per guest room or unit)	0.1 - 0.3	0.4	1					0-1 (location)		
	(Location and Zoning)									
Bars and Function Rooms (per 100 sqm GFA)	5-10 (Location)									
Retail Space (per 100 sqm GFA)	2-3 (Location)									
Restaurant Seats (per 10 restaurant seats)	1									
Floor Area (per 100 sqm UNIT)		16 LFA	6 GFA			3.33 GFA		0-2.5 GFA (location)	3.5 LFA	
Lounge Bar and or Beer Garden (per 100 sqm NFA)										
Bar (per 100 sqm NFA)										
Drive in-bottle shop (Each)		10								
Dining (per 100 sqm NFA)		3						0-15 (location)		
per staff					0.2-0.25 (Location)			0-0.25 (location)		
per resident					0.2-0.33 (Location)					
Incineration Facility (per peak shift employee)										
Indoor Recreation (Basketball Netball)										
per court	15-20 (location)		20							
Floor Area (per 100 sqm UNIT)					1-1.33 GFA (Location)					
Indoor Recreation(Fitness Centre Gymnasium) (per 100 sqm UNIT)										
	1-2 (Location)		10		1-1.33 GFA (Location)					
Indoor Recreation(Other)										
	SIA				1-1.33 GFA (Location)					
Indoor Recreation(Skating Rink Swimming Pool)										
per 100sqm UNIT			1 GFA		1-1.33 GFA(Location)				5.6 per 100 sqm of site	
Base	5 Rink or actual pool area		15							



Land Use	ACT	Darwin	Brisbane	Marrickville	Liverpool	Blacktown	Waverly	Wollongong	Victoria PS	Perth
Indoor Recreation(Squash Court) (per court)										
per court	1-2 (location & zoning)		3							
per 100 sqm of UNIT		3 NFA		1-1.33 GFA (Location)						
Industrial Trades (per 100 sqm GFA)	2-2.5 (Location)			0.33 - 0.4 (Location)						
Land Fill Site										
Land Management Facility										
Light Industry										
Other than offices (per 100 sqm NFA)	2-2.5 GFA (Location)	3 NFA		0.33 - 0.4 (Location)					1 LFA	
Office (per 100 sqm UNIT)	2-2.5 GFA (Location)	3 NFA		0.33 - 0.4 (Location)					1 LFA	
Liquid Fuel Depot										
% site area									10	
Major Service Conduits										
Major Utility Installation										
Minor Use										
Motel										
Base Rate	25									
Guest Room or Unit plus (per guest room or unit)	0.1 - 0.3 (Location and Zoning)	0.4				1				
Bars and Function Rooms (per 100 sqm GFA or seats)	5-10 (Location)					1 per 3 seats				
Retail Space (per 100 sqm GFA)	2-3 (Location)									
Restaurant Seats (per 10 restaurant seats)	1									
Dining (per 100 sqm NFA)						10				
Per staff						0.5				
All other areas (per 100 sqm UNIT)		3 NFA								
Municipal Depot (per peak shift employee)	0.5-1 (Location)									
Nature Conservation Area										
Offensive Industry										
per peak shift employee										
Floor Area (per 100 sqm UNIT)									1 NFA	
Office (per 100 sqm UNIT)	1-2.5 GFA (Location and Zoning)	3 NFA	3 GFA	0.8333-1 (Location)		3.33 GFA	0 - 1.0 (area Min/ Max)	1.67 GFA	3 NFA	
Other Leisure and Recreation										
Floor area (per 100 sqm NFA)		3								
Indoor spectator Facility (per 4 seats)										
Outdoor Education Facility										
Outdoor Recreation (Bowling Green)										
per green	15 + 30 for the first green		30	2 - 5 + 5-10 for first green (Location)					6 + 0.5*any other use	
Floor Area (per 100 sqm of NFA)		3								
Outdoor Recreation (Skating Rink Swimming Pool)										
per 100sqm rink area or actual pool	5		15							
Base			1							
Outdoor Recreation (Tennis Court) (per court)	5		6	0.5-1					4 + 50% of any other uses	
Outdoor Recreation(Other)	SIA									

Land Use	ACT	Darwin	Brisbane	Marrickville	Liverpool	Blacktown	Waverly	Wollongong	Victoria PS	Perth
Parkland	SIA									
Parkland	SIA		30-50 spaces							
Pedestrian Plaza	SIA									
Personal Services										
	per 100sqm GFA	5			1-1.25 (location)					
	per bedroom		2							
Place of Assembly										
	per 20 seats	1-2 (location)								
	Floor Area (per 100 sqm UNIT)		10 GFA							
	per patron								0.3	
Place of Worship										
	per 20 seats	1-2 (location)								
	Floor Area (per 100 sqm of UNIT)		2 NFA	8 GFA	2-2.5 GFA (Location)					
Plant and Equipment Hire Establishment (per 100 sqm GFA)	2 GFA									
Plantation Forestry										
Playing Field										
Produce Market (per 100 sqm GFA)	10									
Public Agency (per 100 sqm GFA)	4-5 (Location)									
Public Transport Facility	SIA									
Railway Use										
Recyclable Materials Collection	1									
Recycling Facility										
	% site area								10	
Religious Associated Use	SIA									
Residential Care Accomodation										
	per accomodation unit	0.25			0.4-0.66 (Location)				0.3	
	per staff residential unit	1								
	per non-resident peak shift employee	1								
	per bed		0.16666667							
Residential Use (Apartment Attached House Detached House)										
	per 1 bed	0-1.25 (location)	1	0.7		1.4	0-0.8 (area)	.95-1.45 (size)	2	0-1.5 (min/max)
	per 2 bed	0-2.25 (location)	1.5	1.2		1.4	0-1 (area)	.95-1.45 (size)	2	0-1.5 (min/max)
	per 3+ bed	0-2.25 (location)	1.7-2	1.7		1.9	0-1.5 (area)	.95-1.45 (size)	3	0-1.5 (min/max)
Restaurant										
	per patron permitted									
	per employee									
	per 100sqm UNIT	0-10 GFA (Location Size and Zoning)	3 NFA	6-12 (Zoning)	0.833-1 GFA (Location)	3.33 GFA		0 (if change of use)	0.4-3.5 LFA (type)	
Retail Plant Nursery										
	per 100sqm UNIT	2 GFA	2 NFA							
	Outdoor Storage (per 100 sqm)		0.4							
Retirement Village									per resi	
	per self-care unit	1		1						
	per hostel or nursing home unit	0.5								
	per staff residential unit	1								
	per non-resident peak shift employee	1								
Road										

Land Use	ACT	Darwin	Brisbane	Marrickville	Liverpool	Blacktown	Waverly	Wollongong	Victoria PS	Perth
Scientific Research Establishment										
Office and Laboratory Space (per 100 sqm GFA)										
Other Activities									3 GFA	
Service Station										
Service Bay (per service bay)	4				0.2 - 0.25 (Location)					
Shop Area (per 100 sqm UNIT of shop area)	4-5 (Location)	2 NFA			1-1.25 GFA (Location)					
Fuel Outlet										
Shop (per 100 sqm GFA)	4-5 (Location)	3 NFA	5	1-3 33 (Location Size)		3.33-4.55	0 - 2.0 (Area Min/ Max)	1 67	3.5 LFA	
Special Dwelling										
per resident employee	1									
per peak shift non-resident employee	1									
per operational vehicle	1									
per visitor space	1									
per dwelling										0-0.75 (min/max)
Stock / Sale Yard										
Store (per 100 sqm GFA)	2									
Subdivision (per peak shift employee)										
Temporary Use										
Tourist Facility	SIA									
Caravan Parks Office Space (per 100 sqm GFA of office space)										
Caravan Parks (per unit or site)										
Tourist Resort										
Transport Depot										
Other than offices (per 100 sqm NFA)			1							
Office (per 100 sqm NFA)			1							
Outdoor Storage (per 100 sqm)			1							
Base	SIA		2							
Vehicle Sales										
Service Bay (per service bay)	4									
Shop Area (per 100 sqm of shop area)	3-6 (Location)									
Site Area (per 100 sqm GFA)										
Office (per 100 sqm NFA)		4								
per 200 sqm used for vehicle display		1								
Veterinary Hospital										
per 100sqm UNIT	3.5 GFA	4 NFA	4 GFA							
per Consulting room										
per employee									5 for first + 3 for each one after that	
Warehouse										
Floor Area - not offices (per 100 sqm UNIT)	1 GFA	3 NFA	Transport						1 NFA	
Office Area (per 100 sqm UNIT)	2.5 GFA	3 NFA	Depot						1 NFA	
Outdoor Storage (per 100 sqm)										
per employee										
per tenancy									2	
Waste Transfer Station (per peak shift employee)			1 GFA							
Woodlot										
Zoological Facility										

Land Use	ACT	Darwin	Brisbane	Marrickville	Liverpool	Blacktown	Waverly	Wollongong	Victoria PS	Perth
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Gold Coast uses a more basic code for its city centre that spans a wide array of developments.

#### NSW

Marrickville has three parking zones for the purpose of this comparison both Parking Area 1 and 2 will be considered CBD while Parking Rate C will be considered other.

Liverpool states residential rates in the CBD/Centre but for all other purposes uses a blanket 1 space per 100 sqm floor area

Waverly has four parking zones - parking zone B & C are allocated to other

#### Victoria

Two rates one blanket and one that is applied intermittently. It is assumed that Column B is CBD/Centre rates while Column A is other.

#### Perth

Location A is considered CBD due to proximity to public transport. B is considered other.





# Appendix H

Minor Corrections to  
Existing Code

There are numerous minor corrections needed to update *the Code* text, to reflect, inter alia, changes in the names and responsibilities of ACT Government agencies mentioned in *the Code*, to correct minor typographical errors and to add new clarifying sections to *the Code*. These are identified below.

**Page 1** – Section 1.1: In addition to the existing purpose of *the Code*, this section is the most appropriate place for statements on the ACT Government's objectives in relation to sustainability, health and climate change strategies to set the broad policy parameters against which parking provision is considered. An alternative is to have separate statements of objectives included in each of the statements of objectives for each of the land use zones set out in Section 3 of *the Code*.

**Page 1** – Section 1.3 – Para 3: Reference to Department of Territory and Municipal Services needs to change to Environment and Planning Directorate.

**Page 1** – Section 1.3 – Para 5: Replace 'other codes' with 'precinct codes'.

**Page 2** – Section 1.4 – Para 2: In line 3, add after 'lessees' the following words:

"... whose existing development in terms of GFA is less than permitted under their existing leases ..."

This change is suggested because while it is not possible to determine what future proposals individual lessees requiring Territory Plan or lease purpose changes may have at any point in time, it is possible to estimate potential impacts on off-site parking if lessees with additional existing development rights actually seek development to the full extent permitted under their leases.

**Page 2** – Section 1.5 – Definitions: A definition of the distances included under the various land use zones in Section 3 of *the Code* could be included here. A suggested definition is:

"Distance within which spare capacity in parking on-street or in nearby off-street, publicly provided parking areas is to be measured as a straight line distance from the nearest boundary of a block which is the subject of proposed development to the nearest boundary of the block (or blocks) on which spare parking capacity may be available."

**Page 4** – Section 2.2.4 – Para 1: This paragraph could be modified to include preferred provision rates for parking for people with disabilities for medical and other activities relevant to such people.

**Page 5** – Section 2.3.1 – Table 2: Delete "Note 2" in the table and the associated footnote.

AS/NZS2890-6 has been in force for some years.

**Page 8** – Sections 2.3.1 and 2.3.2: There are four references to the "Department of Territory and Municipal Services" which need to be changed to the name of the agency presently assigned the responsibilities for these issues which were previously the responsibility of TAMS in various subparagraphs. The reference to NAASRA guidelines may also need to be changed to Austroads guidelines.

**Page 9** – Section 2.3.2 (f): This section deals with parking provision for loading areas for goods vehicles, although it is not presently mandatory in nature. Some interstate parking codes make specific provision for parking spaces for heavy vehicles loading and unloading goods, and this can be included in *the Code*.

Presently there is no cross reference to this section of *the Code* in any of the schedules for the various land use zones set out in Section 3 of *the Code*. This can be corrected by inclusion of a footnote at the bottom of each schedule referring to Section 2.3.2 (f).

**Page 10** – Section 2.3.2 (i): As with the comments on Section 2.3.2 (f), there needs to be a cross reference in relation to restaurants with drive through facilities in the various schedules to this section. A footnote for each of the schedules in Section 3 provides a means to alert users of *the Code* to the specific issues in Section 2.3.2 (i).

**Page 10** – Section 2.4: The parking provision rate adopted in *the Code* is derived from an analysis of 2007 vehicle registration data by the then Department of Territory and Municipal Services. Motor cycles and motor scooters then comprised between two and three percent of the ACT vehicle fleet. Three (3) percent was chosen as a suitable provision rate for these (mostly) two-wheeled vehicles. It would be appropriate to review the parking provision in light of potential changes in the proportions of motor cycles and motor scooters in the current vehicle fleet. Some NSW Council codes include a requirement for five (5) percent of spaces to be set aside for motor cycles and motor scooters.

It should be noted, however, that the provision rate under Section 2.3.2 (i) is in addition to the provision for car parking.

**Page 10** – Section 2.5 – Lighting: In sub-section (a) under the heading ‘Lighting’, the reference to the relevant Australian Standard needs to be corrected. It is AS1158.1, not AS158.1

**Page 14** – Section 2.7: To clarify the dimensions of small car spaces, insert the following sentence after the existing first sentence:

“Minimum dimensions for small car spaces are 2.3m wide and 5.0m long.”

In the last sentence in this paragraph, delete the words

“ ... set out in Section 2.3.1 of this code.”

and insert the following:

“ ... for User Class 1A set out in Figure 2.2 of AS2890.1:2004. (See graphic replicated in Section 2.3.1 in this Code.)”

**Page 14** – Section 2.8 – Para 2: Replace “Transport Planning and Strategy Section in the Environment and Sustainable Development Directorate” with “Major Projects & Transport Section, Strategic Planning Branch, ACT Environment & Planning Directorate”.

**Page 14** – Section 2.9 – Paras 1 and 2: Replace “Department of Territory and Municipal Services” with “Major Projects & Transport Section, Strategic Planning Branch, ACT Environment & Planning Directorate”.

**Page 14:** New Section 2.10 – Bicycle Parking: Suggest adding the following text:

#### **“Bicycle parking**

Bicycle parking provision rates and requirements for design and location of bicycle parking facilities are set out in the Bicycle Parking General Code (BPGC). For reductions in provision of car parking spaces where bicycle parking spaces in excess of the minimum set out in the BPGC are provided, see Section 3.5 in the BPGC. “

**Page 14** – New Section 2.11 - Distance criteria for location of car parking: The distance criteria set out for each land use zone specified in Section 3 of this Code are treated as straight-line distances from the nearest boundary of a block or blocks on which development is located or proposed to the nearest boundary of a block or blocks on which there exists spare capacity in publicly owned and provided parking.

Spare capacity in any such publicly owned and provided carpark must be established to the satisfaction of the Territory by completion of parking surveys covering normal busy periods during the times that parking demand is generated by the existing or proposed development, as well as for the area generally. Acceptance of the use of any spare capacity identified in such surveys is at the absolute discretion of the Territory, as is the amount of any spare capacity which may be attributed to any particular developer or development.

**Page 16** – Section 3.1.4: An explanatory footnote to the table in this section would clarify the intent of the distance criteria. A suggested text is as follows:

“Distances specified are generally to be treated as the direct distance from any point on the boundary of the block on which development exists or is proposed to the nearest boundary of publicly owned and provided on-street or off-street parking areas where there is spare capacity available. This may result in actual walking distances exceeding the specified distance criterion. In cases where spare capacity is available a short distance further than the criteria values, this may, at the absolute discretion of the Authority, be taken into account in meeting a proponent’s obligations for the provision of parking.

This footnote should be added to the tables on locational requirements in Sections 3.2.4, 3.3.4, 3.4.4, 3.5.4, 3.6.4, 3.7.4, 3.8.4 and 3.9.4.

**Page 17** – Section 3.1.5 – Schedule 1: The title for Schedule 1 could usefully be improved by adding the words “ ... outside commercial centres included in Schedule 2 of *the Code*.”

The text for ‘apartments’ and ‘attached house’ should be clarified by changing the wording in the second criterion for each of these uses to read:

“An average provision of 1.5 spaces per two-bedroom dwelling, provided that each two-bedroom dwelling is allocated one (1) parking space and no two-bedroom dwelling is allocated more than two (2) parking spaces.”

The provision rates for child care centres may need review by introducing different rates for staff parking for children aged less than three years and those three years or older. The Children and Young People (Child Care Services) Standards 2009 (DI2009-11) make different provisions for the two groups. In addition to a facility director, there must be one (1) staff member per five (5) children less than three years of age, while for children three years of age or older, the rate is one (1) staff member per 11 children (not taking into account additional requirements associated with excursions. Given that most centres will have a mixture of children in the two age groups, the average provision rates are likely to fall within the existing provision rates specified in *the Code*.

These comments notwithstanding, the current schedules need to incorporate visitor parking provisions for centre numbers greater than currently shown. The visitor parking rates should be amended as follows:

- 2 spaces : < 30 child care places
- 3 spaces : 30-59 child care places
- 4 spaces : 60-89 child care places
- 5 spaces : 90-119 child care places
- 6 spaces : 120-149 child care places
- 7 spaces : 150-179 child car spaces

**Page 18** – The provision for ‘detached house’ should be changed to reflect the provision applying to ‘attached house’ on page 17. A minimum of one (1) space per two bedroom dwelling and two spaces per dwelling of three or more bedrooms should be required in RZ1 zones.





# Appendix I

## Potential Range of Rates

Land- use	Rate Measure	Rate (minimum – maximum)				
		City	Town Centre	Group Centre	North-bourne Precinct	Suburban
Amusement Arcade, night club, music hall, discotheque	per 100sqm GFA	2 – 5	2 – 5	5 – 10	n/a	8 – 10
Boarding House	Per employee	0.2 – 0.4	0.2 – 0.4	0.3 – 0.5	0.2 – 0.4	0.4 – 0.5
	Per bedroom	0.2 – 0.4	0.2 – 0.4	0.3 – 0.5	0.2 – 0.4	0.4 – 0.5
Bulky Goods Retailing	Per 100sqm GFA	n/a	n/a	n/a	n/a	2 – 2.5
Business Agency	Per 100sqm GFA	2 – 4	2 – 4	4 – 5	3 – 4	5 – 6
Camping Ground / Caravan Park	Per 100sqm GFA office space	n/a	n/a	n/a	n/a	2 – 2.5
	Per site or unit (tenant)	n/a	n/a	n/a	n/a	0.9 – 1
	Per site or unit (visitors)	n/a	n/a	n/a	n/a	0.2 – 0.25
Child care centre	Per Centre	1 – 2	1 – 2	1 – 2	1 – 2	1.5 – 2
	Per 15 children (employee parking)	1 – 2	1 – 2	1.5 – 2	1 – 2	1.5 – 2
	Per 30 children (visitor parking)	1 – 3	1 – 3	3 – 4	2 – 3	3 – 4
Cinema	Per 12 seats	1 – 3	1 – 3	2.5 – 3	1.5 – 3	2.5 – 3
Club	Per 100sqm GFA	2 – 6	4 – 8	8 – 10	4 – 8	12 – 15
Commercial Theatre	Per 12 seats	1.5 – 2	2 – 2.5	2 – 3	2 – 2.5	2.5 – 3
Communications Facility	Per peak shift employee	0.5 – 0.8	0.5 – 0.8	0.8 – 1	0.5 – 0.8	0.8 – 1
Community Activity Centre	Per 100sqm GFA	1.5 – 2.5	1.5 – 2.5	2.5 – 3	1.5 – 2.5	3 – 4
Community Theatre	Per 12 seats	0.5 – 1	0.5 – 1	1 – 2	0.5 – 1	2.5 – 3
Craft Workshop	Per 100sqm GFA	1.5 – 2.5	2 – 3	2.5 – 3	2 – 3	2.5 – 3
Cultural Facility	Per 100sqm GFA	0.25 – 0.5	0.4 – 0.5	0.8 – 1	0.4 – 0.5	1.5 – 2
Drink Establishment	Per 100sqm GFA	2 – 6	4 – 8	8 – 10	4 – 8	10 – 15
Educational Establishment (excepting school, secondary college or tertiary college)	Per 10 students	0.5 – 1	0.8 – 1	1 – 1.5	0.8 – 1	1.2 – 2.5
Emergency Services Facility	Per peak shift employee	0.5 – 0.8	0.5 – 0.8	0.8 – 1	0.5 – 0.8	0.8 – 1
Financial Establishment	Per 100sqm GFA	2 – 4	3 – 4	4 – 5	3 – 4	5 – 6
Funeral Parlour	Per 100sqm GFA floor area (excluding chapel area)	2	2	2	2	2
	Per 20 seats	0.5 – 0.8	0.8 – 1	1 – 2	0.8 – 1	1.5 – 3
General Industry	Per 100sqm GFA	n/a	n/a	n/a	n/a	1.5 – 2
Guest House (up to 36 rooms)	Per 3 employees	0.3 – 0.6	0.6 – 0.8	0.8 – 1	0.6 – 0.8	1 – 1.5
	Per guest room	0.3 – 0.6	0.6 – 0.8	0.8 – 1	0.6 – 0.8	0.8 – 1

Land- use	Rate Measure	Rate (minimum – maximum)				
		City	Town Centre	Group Centre	North-bourne Precinct	Suburban
Guest House (36 + rooms)	Per guest house	12 – 18	18 – 22	20 – 25	18 – 22	20 – 25
	Per guest room	0.1 – 0.2	0.15 – 0.25	0.25 – 0.3	0.15 – 0.25	0.25 – 0.3
Hazardous Industry	Per peak shift employee	n/a	n/a	n/a	n/a	0.8 – 1
Hazardous Waste Facility	Per peak shift employee	n/a	n/a	n/a	n/a	0.8 – 1
Health Facility	Per practitioner	1.5 – 3	2.5 – 3.5	3 – 4	2.5 – 3.5	3 – 4
Hospital	Per peak shift employee	0.4 – 0.7	0.4 – 0.7	0.6 – 0.8	0.4 – 0.7	0.6 – 0.8
	Per bed	0.3 – 0.5	0.3 – 0.5	0.8 – 1.3	0.3 – 0.5	0.8 – 1.3
Hotel or Motel (up to 36 units)	Per 3 employees	0.4 – 0.8	0.5 – 1	1 – 1.5	0.5 – 1	1.2 – 1.5
	Per unit	0.05 – 0.1	0.3 – 0.6	0.5 – 0.8	0.3 – 0.6	0.8 – 1
	Per 100m2 GFA of bars and function rooms	2 – 6	4 – 8	8 – 10	4 – 8	8 – 10
	Per 100m2 of retail space	0 – 2	1 – 2	1.5 – 3	1 – 2	2 – 3
	Per 10 restaurant seats	0 – 1	0.5 – 1	0.5 – 1	0.5 – 1	0.5 – 1
Hotel or Motel (more than 36 units)	Per hotel or motel	12 – 18	18 – 22	20 – 25	18 – 22	20 – 25
	Per unit	0.1 – 0.2	0.15 – 0.25	0.25 – 0.3	0.15 – 0.25	0.25 – 0.3
	Per 100m2 GFA of bars and function rooms	2 – 6	3 – 6	8 – 10	3 – 6	8 – 10
	Per 100m2 of retail space	0 – 2	1 – 2	1.5 – 3	1 – 2	2 – 3
	Per 10 restaurant seats	0 – 1	0.5 – 1	0.5 – 1	0.5 – 1	0.5 – 1
Incineration Facility	Per peak shift employee	n/a	n/a	n/a	n/a	0.8 – 1
Indoor Recreation Facility	Per basketball and netball court	10 – 15	10 – 15	15 – 20	10 – 15	15 – 20
	Per 100sqm skating rink and swimming pool area	3 – 5	3 – 5	3 – 5	3 – 5	10 – 15
	Per squash court	0.5 – 1.5	1 – 2	1.5 – 2	1 – 2	1.5 – 2
	Per 100sqm GFA fitness centre or gymnasium	0.5 – 1	0.5 – 1	1.5 – 2	0.5 – 1	2 – 3.5
Industrial trades	Per 100sqm GFA	1 – 2	1 – 2	2 – 2.5	n/a	2 – 2.5
Light Industry	Per 100sqm GFA	1 – 2	1 – 2	2 – 2.5	n/a	2 – 2.5
Liquid Fuel Depot	Per peak shift employee	n/a	n/a	n/a	n/a	0.8 – 1
Municipal Depot	Per peak shift employee	0.3 – 0.5	0.3 – 0.5	0.8 – 1	n/a	0.8 – 1
Offensive Industry	Per peak shift employee	n/a	n/a	n/a	n/a	0.8 – 1



Land- use	Rate Measure	Rate (minimum – maximum)				
		City	Town Centre	Group Centre	North-bourne Precinct	Suburban
Office, Civic Administration	Per 100sqm GFA	0.5 – 1.5	1 – 2	1.5 – 2.5	1 – 2	2 – 2.5
Outdoor Recreation Facility	Per 100sqm skating rink and swimming pool area	3 – 5	3 – 5	8 – 12	3 – 5	10 – 15
	Per bowling green	1 <sup>st</sup> green: 15 – 25 2+ green: 5 – 10	1 <sup>st</sup> green: 15 – 25 2+ green: 5 – 10	1 <sup>st</sup> green: 15 – 25 2+ green: 8 – 12	1 <sup>st</sup> green: 15 – 25 2+ green: 5 – 10	1 <sup>st</sup> green: 20 – 30 2+ green: 10 – 15
	Per tennis court	1 – 2	1 – 2	2 – 4	1 – 2	3 – 4
Personal Services	Per 100sqm GFA	2 – 4	3 – 4	4 – 5	3 – 4	4 – 5
Place of Assembly	Per 20 seats	0.5 – 1	1 – 1.5	1.5 – 2	1 – 1.5	3 – 5
Plant and equipment hire establishment	Per 100sqm GFA	1 – 1.5	1 – 1.5	1.5 – 2	1 – 1.5	1.5 – 2
Produce Market	Per 100sqm GFA	8 – 10	8 – 10	8 – 10	8 – 10	12 – 15
Public Agency	Per 100sqm GFA	2 – 4	3 – 4	3 – 5	3 – 4	3 – 5
Recycling Facility	Per peak shift employee	0.6 – 0.8	0.6 – 0.8	0.8 – 1	n/a	0.8 – 1
Residential Care Accommodation	Per bed or unit (for visitor parking)	n/a	n/a	n/a	n/a	0.2 – 0.25
	Per residential employee	n/a	n/a	n/a	n/a	0.8 – 1
	Per non- resident peak shift employee	n/a	n/a	n/a	n/a	0.8 – 1
Residential Use <sup>1</sup>	Per unit per single bedroom unit	0 – 0.8	0.5 – 1	0.8 – 1	0.5 – 1	1 – 1.25
	Per unit per two bedroom unit	0 – 1	0.8 – 1.3	1.2 – 1.4	0.8 – 1.3	1.5 – 1.75
	Per unit per three plus bedroom unit	0 – 1.2	1.2 – 1.8	1.7 – 1.9	1.2 – 1.8	2 – 2.25
Restaurant	Per 100sqm GFA	0 – 4	3 – 5	5 – 8	3 – 5	10 – 12
Retail Plant Nursery	Per 100sqm GFA	n/a	1.5 – 1.8	1.8 – 2	n/a	1.8 – 2
Retirement Village	Per self care unit	n/a	n/a	n/a	n/a	0.8 – 1
	Per hostel bed or unit	n/a	n/a	n/a	n/a	0.4 – 0.5
	Per residential employee	n/a	n/a	n/a	n/a	0.8 – 1
	Per non- resident peak shift employee	n/a	n/a	n/a	n/a	0.4 – 0.5
Scientific Research Establishment	Per 100sqm GFA office and laboratory	n/a	n/a	n/a	1.5 – 2	2 – 2.5
	Provision for other activities	n/a	n/a	n/a	Subject to individual assessment	
Secondary College	Per 10 students	0.5 – 1	1 – 1.5	1.5 – 2	1 – 1.5	1.5 – 2
Service Station	Per service bay	3 – 4	3 – 4	3 – 4	3 – 4	3 – 4
	Per 100sqm GFA shop area	3 – 4	3 – 4	4 – 5	3 – 4	5 – 6
School (pre-, primary- and high-school) <sup>2</sup>	Per 10 students <sup>1</sup>	n/a	1 – 1.2	1 – 1.2	n/a	1 – 1.2
Shop	Per 100sqm GFA	2 – 4	3 – 4	4 – 5	3 – 4	5 – 6



Land- use	Rate Measure	Rate (minimum – maximum)				
		City	Town Centre	Group Centre	North-bourne Precinct	Suburban
<b>Special Dwelling</b>	Per dwelling (for visitor parking)	n/a	n/a	n/a	n/a	0.8 – 1
	Per resident employee	n/a	n/a	n/a	n/a	0.8 – 1
	Per non- resident peak employee	n/a	n/a	n/a	n/a	0.8 – 1
	Per operational vehicle	n/a	n/a	n/a	n/a	0.8 – 1
<b>Store</b>	Per 100sqm GFA	1 – 1.5	1.5 – 2	1.5 – 2	1.5 – 2	1.5 – 2
<b>Vehicle Sales</b>	Per service bay	3 – 4	3 – 4	3 – 4	n/a	3 – 4
	Per 100sqm GFA shop area	2 – 3	2 – 3	4 – 6	n/a	5 – 6
<b>Veterinary Hospital</b>	Per 100sqm GFA	n/a	3 – 3.5	3 – 3.5	n/a	3 – 3.5
<b>Warehouse</b>	Per 100sqm GFA total floor area	0.8 – 1	0.8 – 1	0.8 – 1	n/a	0.8 – 1
	Per 100sqm GFA office area	1 – 2	1 – 2	1.5 – 2.5	n/a	2 – 2.5
<b>Waste Transfer Station</b>	Per peak shift employee	n/a	n/a	n/a	n/a	0.8 – 1

## Notes:

1. Apartment, attached house or detached house; includes one visitor space per four dwellings outside City, Town Centres and Northbourne Avenue corridor.
2. Includes 0.4 spaces / student for pick- up set- down at pre- , primary- and high- schools
3. A reduction from the minimum rate can be justified using adjustment factors, but cannot be below the minimum rate.
4. The suburban category includes all other locations.
5. Uses not identified in this table are subject to an individual assessment.
6. A rate above the maximum rate may be considered if justified by the proponent, to satisfy likely customer needs and business objectives.
7. Where more than one rate measure is shown for a given land-use, add the parking for each rate measure to get the total parking requirement for that use.
8. Where the calculated number of car spaces is not a whole number, the number of car parking spaces required must be the next higher whole number.