Leasehold Policies and Land Use Planning in Canberra

Steven Bourassa, Max Neutze & Ann Louise Strong

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*Series Editor:*
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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>vi</td>
</tr>
<tr>
<td>List of Figures</td>
<td>vii</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>viii</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>x</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>The government and planning of Canberra</td>
<td>4</td>
</tr>
<tr>
<td>Government of the Australian Capital Territory</td>
<td>5</td>
</tr>
<tr>
<td>Planning up to the establishment of self-government in 1989</td>
<td>6</td>
</tr>
<tr>
<td>Planning under self-government</td>
<td>10</td>
</tr>
<tr>
<td>The role and policies of the National Capital Planning Authority</td>
<td>10</td>
</tr>
<tr>
<td>The role and policies of the Territory Planning Authority</td>
<td>12</td>
</tr>
<tr>
<td>Regional planning and the Australian Capital Territory</td>
<td>16</td>
</tr>
<tr>
<td>History of the Canberra leasehold system</td>
<td>17</td>
</tr>
<tr>
<td>Up to self-government</td>
<td>18</td>
</tr>
<tr>
<td>From market rents to market premiums</td>
<td>19</td>
</tr>
<tr>
<td>Planning and the collection of betterment</td>
<td>23</td>
</tr>
<tr>
<td>Under self-government</td>
<td>27</td>
</tr>
<tr>
<td>Rural to urban conversion</td>
<td>27</td>
</tr>
<tr>
<td>Urban to other urban conversion</td>
<td>31</td>
</tr>
<tr>
<td>The economics of betterment</td>
<td>36</td>
</tr>
<tr>
<td>Greenfield sites</td>
<td>38</td>
</tr>
<tr>
<td>The need to determine prices competitively</td>
<td>38</td>
</tr>
<tr>
<td>Controlling the market to prevent speculation</td>
<td>38</td>
</tr>
<tr>
<td>Previously developed sites</td>
<td>39</td>
</tr>
<tr>
<td>How should betterment be defined?</td>
<td>39</td>
</tr>
</tbody>
</table>
Definition of betterment in Canberra under 1993 regulations 40
At what rate should the betterment charge be set? 41
The development of greenfield sites: Palmerston case study 42
Development policies 45
The goal of higher residential density 46
The requirement for three developers 47
Developers' choices 48
An evaluation of Palmerston 50
Planning issues 50
Financial returns 52
Change of use for previously developed sites: Braddon case study 59
Variations to lease purpose clauses 62
The strange case of St James Court 64
Potential adverse effects of current betterment policy 65
The redevelopment district 66
An evaluation of betterment policy 68
Policy recommendations 69
Greenfield development 70
Change of use 71
Lessons from Canberra 73
Appendix: Algebraic analysis of betterment for change of use 76
References 82
List of Tables

Table 1. Population forecasts for Canberra districts when fully developed, 1970 and 1980 9

Table 2. Methods of betterment calculation, Australian Capital Territory 34

Table 3. Block types and sizes, numbers of dwellings and prices, Palmerston 49

Table 4. Returns to ACT Government from alternatives to private development 57

Table 5. Actual and correct betterment fees, Braddon, 1988-1993 60

Table 6. Alternative betterment fees for auctioned properties, Section 13, Braddon 69

Table A1. Hypothetical betterment calculated under alternative rules: change of use with demolition and redevelopment 80

Table A2. Hypothetical betterment calculated under alternative rules: change of use with no demolition or redevelopment 81
List of Figures

Figure 1. Population of the Australian Capital Territory 6
Figure 2. Canberra urbanized area and location of study areas 43
Figure 3. Palmerston land use 44
Figure 4. Braddon land use 63
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Abbreviations

ACT  Australian Capital Territory
ANU  Australian National University
APU  Aged Person's Unit
DELP  Department of Environment, Land and Planning
EPACT  Economic Priorities Advisory Council of the ACT
MBA  Master Builders’ Association
NCDC  National Capital Development Commission
NCPA  National Capital Planning Authority
NSW  New South Wales
PLUZ  Predominant Land Use Zone
TPA  Territory Planning Authority
Leasehold Policy and Land Use Planning in Canberra: A Critical Assessment

Steven C. Bourassa, Max Neutze & Ann Louise Strong

Introduction

Canberrans celebrated the 81st birthday of their city in March 1994, with a week-long festival. The scale of events was impressive: over 30 hot air balloons, including a giant birthday cake balloon from the United States, wafted overhead at dawn; 140 teams from many nations competed in dragon boat races on Lake Burley Griffin; over 100,000 people enjoyed the Wine and Food Festival in Commonwealth Park; and a quarter million dollars’ worth of fireworks lit the Canberra sky.

Canberrans love their city and are proud of it. In 81 years, a capital has been built and a city of 300,000 has taken form in a unique setting of mountains, bush, forests and lakes. It did not happen by chance, and it did not happen overnight.

Early landmarks were: the 1908 selection by Parliament of Canberra as the future site of Australia’s capital; the 1911 delineation of the Australian Capital Territory; the 1912 selection of the plan for the capital by Walter Burley Griffin; and the first public works, including the reforestation and landscaping program launched in 1913—the capital’s “birth date”. Progress was halting, partly due to World War I, and Parliament did not meet in Canberra until 1927. Private development began in 1924, but growth was slow through the Depression and World War II.
With new impetus and new infusion of funds, planning for new towns and major expansion began in the late 1950s. Lake Burley Griffin, the centrepiece of the city, was completed in 1963, and the monumental buildings along the south shore—the National Library, the High Court, and the National Gallery—took shape. The new Parliament House, built to replace the “temporary” Old Parliament House, was completed in 1988, and self-government was granted Canberra in 1989.

With self-government, a worldwide reputation as a beautiful, planned city, and a stable base of people and jobs, Canberra has achieved much. The time has come, not only for birthday congratulations, but also for a look to the future. In particular, we ask how the public sector—now the Australian Capital Territory (ACT) Government—should participate in the growth and development of this future Canberra? More specifically, given the fact that all land is publicly owned and leased to private users, how could the ACT Government best manage this asset?

At first glance, Canberra’s leasehold system might appear to be the ideal tool for the planning, development and management of its land. Public ownership of land has allowed Canberra’s planners to coordinate development with the provision of services and facilities. It has also permitted planners to retain a substantial portion of the land in greenbelts and other forms of open space. Public land ownership means that it is less expensive to build and extend roads, bicycle paths, and utility networks because there is no need to purchase land. Moreover, charges for the use of land allow the public sector to recoup a large part of the cost of providing services and facilities.

Some of the benefits of public land ownership are quite visible to the

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1 The term “new town” refers to the major new districts of the city.
casual observer. Canberra has an extensive and attractive system of open spaces of various types, many trees have been planted, and hills and mountains that have been protected from development. An extensive network of bicycle paths serves both recreation and commuting needs. Congestion is almost non-existent on its well-planned road system. Land use is carefully controlled to avoid many of the unsightly features all too common in other cities: there are no billboards and no automobile-oriented strip commercial areas along the main roads.

The administration of a leasehold system would seem to be a relatively straightforward process. The government would presumably auction sites for development or redevelopment, with the price bid at the auction serving as the valuation for the purpose of determining land rents. Frequent revaluations would ensure that land rents captured increases in land value over time. Leases could also be traded privately. Changes in use would be approved subject to planning guidelines, and would be the occasion for a revaluation, so that future land rents would capture increases in value associated with the change.

All of this seems quite simple; however, the reality of leasehold administration in Canberra is extraordinarily complicated. Although the original system was based on land rents, they were subsequently abolished for all practical purposes, and replaced by a "premium" system that requires an up-front payment of the capital value of land converted from rural to urban use, and subsequent premiums to reflect increases in property value, or "betterment", resulting from granting of permission for a change in use. The issue of how to determine the amount of this betterment is a thorny one, and a succession of policy changes has been implemented in recent years, influenced by a range of planning and political considerations. Unfortunately, some of the changes have not been well-informed by an understanding of basic principles.

It is our intention in this paper to explain the basic principles of betterment
capture that we believe should be applied in Canberra, given its "premium" system. We also describe land use planning in Canberra under its leasehold system of land tenure. We illustrate current issues regarding betterment capture and planning with two case studies, one of a newly developing greenfield site, the other of an older suburb now undergoing redevelopment. We preface our analysis with overviews of the government and planning of Canberra, and the history of its leasehold system. The concluding section of the paper offers some specific policy recommendations. In particular, we recommend that the ACT Government return to playing a larger role in development of greenfield sites and that 100 per cent of betterment be charged when permission is given for a change in land use. Moreover, we argue that betterment should be calculated as the change in total property value resulting from permission for a new use, rather than simply the change in land value as specified in current regulations.

The government and planning of Canberra

The history of the government and planning of Canberra and the ACT establishes the context for the study of leasehold policies. Until 1989, the ACT was administered by the national ("Commonwealth") government, and there was little, if any, formal nexus between the costs of providing urban services and the revenues collected from within the ACT. Consequently, the leasehold system was only occasionally viewed as an important source of revenue, and leasehold policies generally reflected a desire to attract development to the growing city, rather than to safeguard leases as a source of government revenue. In recent

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2 "Canberra" is simply the urbanised part of the Australian Capital Territory; it does not designate a political jurisdiction, and has no government separate from the ACT Government.
years, self-government has dictated that more attention be given to the costs of services and the sources of funding, and also to the relationship between leasehold and development policies. Although, as we will argue, a number of mistakes have been made, we believe that the climate of rethinking and experimentation encouraged by self-government may ultimately lead to a more efficient approach to urban development, without sacrificing the quality of that development.

Government of the Australian Capital Territory

Canberra was designated the national capital in 1911. The site is within the Australian Capital Territory, which is an area of 2,359 square kilometres (911 square miles) carved out of the state of New South Wales. The Seat of Government (Administration) Act of 1910 provided that the Commonwealth should resume and retain title to the land on which Canberra was to be built, and this provision remains the basis for Canberra's leasehold system today. The first resumption of land for the capital by the government—798 hectares in 1911—was in Acton, now home of the Australian National University. After a competition among architects from around the world, Walter Burley Griffin of Chicago was chosen to design the capital in 1912. A ceremony to name the city and to mark commencement of construction was held in 1913. Parliament first met in Canberra when the temporary Parliament House opened in 1927. Growth was slow during the Depression, and Canberra had achieved a population of only 11,000 in 1939. Little further growth occurred during World War II. In the 1950s, some government functions were moved from Melbourne, with the population reaching 38,000 in 1957 (see Figure 1).
From the founding of the ACT until mid-1989, the Commonwealth was responsible for territorial (state) and local government administration in the ACT as well as for the normal functions of a national government. In 1988, the same year in which the permanent Parliament House opened, legislation enabling self-government for the ACT was adopted. The first Legislative Assembly took office in May 1989. The Australian Capital Territory (Self-Government) Act 1988 is the principal law establishing the structure of territorial government and its relation to the Commonwealth Government. The legislation provides for a 17 member Assembly to be expanded in the future as Canberra grows. The first elected government consisted of an alliance of members of the Labor and other parties. This alliance proved unstable and fell in December 1989, to be replaced by a coalition of Liberal, Residents Rally, and Independent members. Although remaining in the minority, Labor regained power as a minority government with the support of smaller parties in 1991, and retained that position after the triennial election in 1992.

Planning up to the establishment of self-government in 1989

The Walter Burley Griffin plan, for a city of 75,000, was geometrically structured with key points set by the topography of Canberra. It provided for a
Leasehold Policies and Land Use Planning in Canberra

government sector (the “Capital”), a commercial sector (“Civic”), separated from the Capital by a lake, sites for monumental buildings, a market, an industrial area, and residential sectors (“garden suburbs”), all interspersed by open lands, and all based on axes sited with reference to the dominant mountains and hills. Griffin continued to work in Canberra on his plan until a falling out with local officials after World War I. Very little had been built by the time he departed.

Parliament established the Federal Capital Commission in 1924, to carry on with implementation of the Griffin plan; however, following rapid growth in the late twenties, development was slow prior to the establishment of the National Capital Development Commission (NCDC), in 1957, under the leadership of Sir John Overall. The NCDC was charged with carrying out the Griffin plan as somewhat modified by Lord Holford in 1958. The lake (Lake Burley Griffin) and bridges were built in the early 1960s, and suburbs multiplied.

The Future Canberra, issued by the NCDC in 1965, was a design for a city of 250,000, with the ridge lines, hilltops, and rivers to be protected while development was to be located in the valleys following the concepts of the Griffin plan. Generous Commonwealth funding starting in the 1960s enabled early construction of physical and social infrastructure in the new towns. The first new town added to the Griffin plan, Woden-Weston Creek, was begun in 1964, and the second, Belconnen, in 1966. Population growth was 75 per cent by migration from outside Canberra, mostly of young families who settled in the greenfield sites. Inner Canberra—roughly the original settlement anticipated by Griffin’s plan—had a population of 84,000 by 1969; Woden-Weston Creek had reached 50,000 by 1972; and Belconnen had reached 68,000 by 1978. The infrastructure had been based on the assumption of 3.9 persons per household for Inner Canberra and the two new towns.

In 1970, the NCDC published Tomorrow’s Canberra, also called the Y-
Plan, because Belconnen, the third new town—Tuggeranong, and the newly proposed Gungahlin new town formed branches of a Y. By 1970, the NCDC's expectations for Canberra growth had been extended much further into the future: now the planners were considering somewhere between 500,000 and one million people, of whom over half a million could be accommodated in the ACT as then delineated. The plan called for a linear series of towns of 75,000 to 150,000, each with a town centre and a substantial number of jobs. The new towns were to be linked to Inner Canberra and each other by peripheral arterials and by a public transport spine. Balanced development, particularly of Commonwealth offices in the town centres, was called for so that Civic would not dominate.

Planning assumptions were that there would be 3.6 persons per dwelling, and that 85 per cent of the population would live in single family detached homes, 7.5 per cent in higher density units, and the remainder in hostels and similar housing. The third new town, Tuggeranong, was begun in 1972, also with a projection of 3.6 persons per household.

By 1980, the NCDC had again lowered its household size projection, now to 3.1, based on lower birth rates, an ageing population, less in-migration, and more women in the work force. In total, this led to reduced estimates for population in each of the towns at full development, as shown in Table 1. The NCDC's 1984 Metropolitan Canberra Policy Plan & Development Plan concluded that residents would prefer to live at the lower projected densities than in suburbs densified through redevelopment to meet the original projections. This conclusion would be overturned only two years later in the NCDC's 1986 Urban Consolidation report. The report called for higher "block yield for

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3 The term "urban consolidation" is used widely in Australia to refer to more intensive use of already developed or serviced areas, by means of infill or redevelopment.
standard housing, a larger range and greater proportion of higher-density housing” (p. 73) for the yet to be developed new town of Gungahlin, encouragement of dual occupancy, urban infill with higher density housing, and redevelopment in Inner Canberra with medium-density housing.

Table 1. Population forecasts for Canberra districts when fully developed, 1970 and 1980

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<th>District</th>
<th>Date of forecast</th>
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<th>Change</th>
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<tr>
<td></td>
<td>1970</td>
<td>1980</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inner Canberra</td>
<td>100,000</td>
<td>64,000</td>
<td>-36.0</td>
<td></td>
</tr>
<tr>
<td>Woden-Weston Creek</td>
<td>90,000</td>
<td>62,500</td>
<td>-30.6</td>
<td></td>
</tr>
<tr>
<td>Belconnen</td>
<td>120,000</td>
<td>83,000</td>
<td>-30.8</td>
<td></td>
</tr>
<tr>
<td>Tuggeranong</td>
<td>150,000</td>
<td>140,000</td>
<td>-6.7</td>
<td></td>
</tr>
<tr>
<td>Gungahlin</td>
<td>110,000</td>
<td>85,000</td>
<td>-22.7</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>570,000</td>
<td>434,000</td>
<td>-21.0</td>
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Faced with funding cuts in the mid-1980s, the NCDC also began exploring ways to shift responsibility for servicing sites and for detailed subdivision design to the private sector, and, by 1988, it was forced to draw back from these roles. These changes resulted from the end of generous funding for Canberra’s development and increasing pressures for Canberra to “pay its way”, after making allowances for the special costs of a national capital. Infill, it was argued, could permit better use of infrastructure in suburbs that had lost population and especially had fewer children of school age. These pressures were to become much stronger as the move toward self-government proceeded and as public expenditure generally was restricted.
Planning under self-government

Both the ACT Government and the Commonwealth have planning responsibilities for the ACT. While the Commonwealth owns the land, the ACT Government manages the leasehold system and retains revenues from lease sales and betterment. The Commonwealth’s planning interests are administered by the National Capital Planning Authority (NCPA), while the Territory’s planning responsibilities are handled by the Territory Planning Authority (TPA), a division of the ACT’s Department of Environment, Land and Planning (DELP). The separate Land Division of DELP has responsibility for the leasehold system; within that Division, the Land Development Branch is concerned with land development and the Lease Administration Branch with management of established leases.

The role and policies of the National Capital Planning Authority

The Australian Capital Territory (Planning and Land Management) Act 1988 is the Commonwealth statute that allocates planning responsibility between the Commonwealth and the ACT Government. The Act:

- disestablished the NCDC and established the NCPA;
- required that NCPA prepare, update, and administer the National Capital Plan, to include general land use and transport policies for the ACT;
- authorised the NCPA to define National Land—land used by or on behalf of the Commonwealth—and to manage such land;
- authorised the NCPA to define Designated Areas—land that has special characteristics related to Canberra’s status as National Capital—and to specify “detailed conditions of planning, design and development” for that

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4 See Wensing (1992) for additional discussion of this topic.
land (Section 10(1)); and

- required that the ACT Government prepare a Territory Plan consistent with the National Capital Plan.

The Australian Capital Territory Land (Planning and Environment) Act 1991 (gazetted January 1992) is the ACT Government’s statute that specifies how planning shall be carried out, and that established the TPA.

Thus, the NCPA sets the strategic framework for development in the ACT and, as well, carries out detailed planning for Designated Areas. Some National Land, as defined by the NCPA, is located in Designated Areas, and, therefore, is within the jurisdiction of the NCPA for detailed planning. Some National Land, such as government offices in the town centres, lies outside Designated Areas, and, therefore, is within the jurisdiction of the TPA for detailed planning. The NCPA published the *National Capital Plan* in 1990. It states a commitment to respect the Griffin plan in its geometry and its intent. It identifies and specifies policies for seven types of land, ranging from Urban to Mountain and Bushland. The Plan calls for “the maximum possible concentration of future urban development within the boundaries of the Territory, compared with alternatives such as extensive urban development outside the Territory boundaries” (p. 13). The Plan forecasts a population of 385,000 by 2007, of whom 85,000 would live in the new town of Gungahlin. It also calls for development of the north-west edge of Belconnen and for urban consolidation in existing towns. Major employment, as in prior plans, is to be located in the town centres. The *National Capital Plan* is the sole plan for Designated Areas, and development there must be approved by the NCPA. If the ACT proposes changes to the *National Capital Plan* for sites in Designated Areas, the Plan must be amended by the NCPA and not then disallowed by Parliament.
The role and policies of the Territory Planning Authority

The Territory Plan was prepared by the TPA and approved in September 1993, following extended discussion of the Draft Territory Plan, released in 1991. The Plan covers non-Designated Territory Land and envisions growth to a population of 400,000. This growth is to be accommodated by “some expansion of existing towns; redevelopment in selected locations at higher densities; and the use of suitable vacant or underdeveloped sites.” Following development of Gungahlin, a fifth new town is envisioned at Jerrabomberra. A maximum of 20 per cent of ACT jobs is to be located in Civic. The Plan is implemented by: (1) wording and enforcement of the lease purpose clause; (2) management of public lands; (3) controlled activities, including lease purpose clause variations; (4) procedures for variations for defined lands; (5) guidelines for 17 policy areas; and (6) planning guidelines.

The Territory Plan places considerable emphasis on redevelopment. The ACT Government’s policy, articulated in June 1993, by Chief Minister Rosemary Follett, stated that in the future there will be a 50/50 split between new development and redevelopment or consolidation. This policy, as well as several others, engendered heated debate prior to adoption of the Plan.

The ACT Government’s presentation to the Commonwealth Government’s Industry Commission Inquiry, in April 1992, had included the 50/50 target as one scenario. The assumptions were that 45,000 dwelling units should be provided by 2005, or 1,750 each per year at greenfield and urban redevelopment or infill sites. The Inquiry found that upgrading existing water, drainage and electricity to cater for redevelopment might cost more than installing new systems on greenfield sites due to the need to replace some of the old systems with completely new ones. Demolition of housing with many years of useful life, loss of considerable vegetation, and the imposition of higher densities, are other social
costs.  

In contrast, the Economic Priorities Advisory Committee of the ACT (EPACT) did an analysis to determine savings for the ACT if the 50/50 policy were to be instituted. EPACT concluded that such a policy would result in savings, although the effects on housing costs needed to be considered (EPACT, 1992, p. 30):

Higher levels of greenfield activity result in lower overall efficiencies in utilisation of all types of infrastructure and in higher costs to the community overall. On the other hand, the type of greenfield development which has traditionally occurred, with greater or lesser subsidies of developments, has ensured access to the housing market for lower income earners. At the same time, the subsidisation of greenfield development and other housing/taxation policies have narrowed both demand and supply in existing areas to the exclusion of the bulk of new households. . . . Higher levels of urban renewal and redevelopment, on the other hand, provide greater efficiencies in the utilisation of existing infrastructure and—since the greater proportion of this infrastructure is funded by Government—result in lower overall costs to the community.

Redevelopment will be encouraged by permitting: conversion of houses for dual occupancy; strata titling for as few as two units as compared to the former minimum of four units; medium density in the designated areas of Inner (North and South) Canberra; and urban infill. A 1993 study by Masterplan Pty

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5 Canberra Times, 19 September 1993.

6 I.e., condominium ownership.
Bourassa, Neutze & Strong

Ltd anticipates that, under the *Territory Plan*, up to 15 per cent, or 450 units per year of additional dwellings, will be dual occupancy.

Eighty per cent of the redevelopment housing would be in Inner Canberra, of which 60 per cent would be in North Canberra (that part of Inner Canberra north of Lake Burley Griffin). The area designated in North Canberra includes some 1,000 homes that average 30 years in age. To qualify for redevelopment, the Plan requires that at least three blocks\(^7\) totalling 0.3 hectares (0.74 acres) be assembled.

Further support for the ACT Government’s 50/50 policy comes from the Commonwealth Government’s Better Cities Program, which is strongly committed to urban consolidation. Total national funding over five years is $816 million. It was announced, in early 1993, that the ACT will receive $14 million for four projects, of which three will be in North Canberra: a joint venture in the suburb\(^8\) of Braddon by the Housing Trust and a private developer that will include affordable housing; planning and infrastructure design for a new residential development in North Watson, a partly developed suburb; housing for the mentally disabled; and an innovative waste water recycling project.

Other issues debated about the *Draft Territory Plan* were the use of zoning (the “Predominant Land Use Zone”, or PLUZ) as one tool for implementation and the level of the betterment charge that should be imposed on redevelopment. The second of these issues will be reviewed in the following section of this paper, in a discussion of the recent history of the leasehold system.

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\(^7\) "Parcels" or "lots" in United States’ usage.

\(^8\) "Suburb" in Australia is roughly analogous to "neighbourhood" in the U.S.; all neighbourhoods except the central business district are referred to as suburbs. Suburbs do not correspond to any political jurisdictions in the ACT. They typically contain a local shopping centre and community facilities, including a playing field and primary school.
In regard to the first issue, the Barton Residents Association, responding to the *Draft Territory Plan*, had objected specifically to its use of the PLUZ and to its proposals for consolidation in North and South Canberra. The grounds for the objection to the PLUZs were:

> The Draft Plan's proposal to introduce a system of Predominant Land Use Zones is reckless and irresponsible. To the extent that a PLUZ gives rise to expectations of new development rights it will further undermine the credibility of the ACT leasehold system, which a number of official inquiries over the last decade or more have concluded must be maintained as the basis of land use and planning in Canberra.\(^9\)

The Chief Minister for the ACT had previously responded to the Barton Residents Association, backing away from use of the PLUZ:

> We have . . . decided that planning for residential areas will not be based on a broad zoning system. Changes to land use in existing residential areas must involve full consultation and rights of appeal.\(^10\)

Although the actual *Territory Plan* does not refer to PLUZs or zoning, it does in fact identify districts where certain changes in land use are encouraged. A notable example of this is the “B1” district, where residential redevelopment in the form of three-storey apartment buildings is encouraged. The implication is that redevelopment projects of this sort will be approved in the B1 area, if they

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\(^10\) Letter from Rosemary Follett, ACT Chief Minister, to Ian Morison, Barton Residents Association, 10 February 1992.
also meet the TPA’s design and siting criteria.

Ed Wensing, long-time Canberra resident, planner, and critic of lease administration, argues that:

One of the basic principles of leasehold in the ACT is that lessees have no presumptive rights in potential or future land uses. . . . New development rights always rest with the ground landlord and never with the lessee. The new planning system encourages the view that presumptive rights do exist and that leasehold tenure is more similar to freehold than it really is (Wensing, 1993, p. 16).

Regional planning and the Australian Capital Territory

Canberra’s location, size and rate of growth make it the centre of an unusual region, by Australian standards. Australia’s total population is 17 million, of whom 39 per cent are concentrated in the Sydney and Melbourne metropolitan areas. Canberra, together with its neighbour municipality, Queanbeyan, is the only large non-coastal urban area in the nation. Between 1986 and 1993, Australia grew at a rate of 1.4 per cent per annum, while Canberra grew at a rate of 2.1 per cent.

There has been a regional planning process under way, since 1990, for an area including the ACT and extending into parts of New South Wales (NSW) whose economic future is closely related to that of Canberra. Participants in the process are the NCPA, the TPA, the NSW Department of Planning, and planners from the affected NSW local governments. The Planning Committee is anticipating a regional population of 538,000 by 2016, which would be a 69 per cent increase over the 1989 population of 322,250, of whom 277,700 lived in Canberra.

In March 1994, the NCPA and the ACT Minister for Environment, Land
and Planning announced an ideas competition for what could be Canberra's fifth new town, Jerrabomberra. Unlike any of the previous new towns, Jerrabomberra is located partly in the ACT and partly in New South Wales, in the municipality of Queanbeyan, and if it proceeds would be designed in cooperation with the governments of NSW and Queanbeyan.

If Jerrabomberra goes ahead, it will be a fundamental change to the Y Plan. . . . The aims of the Y Plan were to avoid a circular mass of city, to allow greenbelts between townships and to prevent Canberra spilling over the border. Jerrabomberra does not have a natural border between it and the city to the north, though there is a line of hills between it and Woden, and there is no reason why it cannot blend into Queanbeyan.  

History of the Canberra leasehold system

To the outside world, Canberra appears to be a model of a leasehold system in which betterment accrues to the public sector. The reality has never matched the image. Betterment collection has evolved over three major periods in Canberra: from 1924, when private leases were first issued, to 1970, when collection of land rents was largely abandoned; from 1970 to self-government in 1989; and since 1989. In the first of the three periods, Canberra had the structure for a simple, transparent betterment system. There was one serious flaw, however. Because land was revalued only once in 10 or 20 years, rents often lagged seriously behind the appreciation in land values. Land rents were replaced in 1970 by premiums for greenfield sites and betterment fees for variations to lease purpose clauses. Provisions were adopted allowing remission

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of 50 per cent of betterment fees in most cases. The five years since self-government have been a time of experiment, of revisions to the betterment laws, and of rethinking the role of betterment.

Up to self-government

In 1901, the six formerly separate colonies in Australia came together to form a single nation. In the Constitutional Conventions during the 1890s that developed the form of the Australian federation, the location, planning and land policy for the national capital were important issues and they continued to be debated in Parliament in the first decade after federation. Land policy, squatting, speculation and the leasing and sale of crown land had been major political issues in the colonies throughout the nineteenth century. The issues were sharpened by the publication of Henry George's *Progress and Poverty* in 1879, and by his visit to Australia in 1889-90 (Brennan 1971). One of the legacies of that influence has been the use in some of the states of the unimproved value of land as a base for local and state government taxes.

Section 125 of the Constitution, the Seat of Government Act 1908 and the Seat of Government (Acceptance) Act 1909 provide for the Australian Capital Territory to be selected and established as the seat of government. The Seat of Government (Administration) Act 1910 provides for the purchase of the site for the National Capital and for the land to remain the property of the Commonwealth Government and be leased rather than sold for housing and business.

There was no option but for the government to take responsibility for building the capital: no private developer would have taken the risk, especially

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12 For more detail, see Brennan (1971) and Neutze (1987, 1988a, 1988b).
when there was a minority view that it was a waste of public funds. One of the main reasons for the decision to acquire the site and lease rather than sell land for urban uses was to permit the government to reap the benefit of the increase in the value of land which would result from the establishment and subsequent growth of the city. There had been many experiences of colonial governments selling crown land cheaply and subsequently having to buy it back at much higher prices for public use.

The founding fathers of the Australian federation were committed to the Georgist view that, since most of the value of property in the city would be created by public expenditure, its “betterment”, or increase in value, should accrue to the public purse. They wanted to prevent the scandalous speculation that had occurred around other Australian cities (Cannon 1966) and expected that revenue from land would meet, in part at least, the cost of building the national capital. Finally, they were firmly committed to a planned national capital, and launched an international competition for its design in 1911. The plan would be implemented through conditions placed on leases to ensure that both the nature and timing of development were in accord with the plan.

*From market rents to market premiums*

The first leases, issued in 1924 under the City Area Leases Ordinance 1924 and Regulations made thereunder, specified the purposes for which sites could be used in only very broad terms such as “residential” or a very broad class of business. They were to be for not more than 99 years, there was a reserve capital value, and they were auctioned with the rent for the first 20 years set at five per cent of the sum bid. At the end of 20 years, and after each subsequent 10 years the site was to be revalued for the purpose of adjusting the land rent. Following some speculative trading in undeveloped leases, special permission
was required for the transfer of undeveloped leases. Regulations required that a building be commenced within two years and completed within three. At the end of 99 years, if the lease was not required by the Commonwealth, the lessee would be entitled to a further lease on conditions laid down at that time.

The Commonwealth Government, as the sole owner of land, had a monopoly on development, which made it very open to criticism when, in the late 1920s, it underestimated the demand for sites. The Federal Capital Commission, which was responsible for the development of Canberra according to the Burley Griffin plan from 1925 to 1930, was blamed for the shortage of serviced sites. Despite the fact that the provisional parliament house was being built, the Commission did not anticipate the level of demand.

The Commission was expected to act in a commercial manner and it was accused of restricting the supply in order to keep up land rents. There was very little immediate financial constraint on the amount bid, since bidders were required to pay only the first year's land rent—five per cent of the amount bid—in order to secure the lease. The Commission was concerned about the artificially high bids that resulted. It yielded to pressure and made more leases available, but its concerns were well-founded: one third of the leases auctioned between 1924 and 1929 were subsequently surrendered; some of them remained vacant for many years.

The leasehold system was criticised almost from its inception. In 1928, the Parliamentary Committee on Public Accounts reported criticisms of: the financial uncertainty that resulted from rent reviews; restrictions on the use of land imposed by the lease conditions; the lower value of a lease compared with freehold title, which reduced its value as security for borrowing; and restrictions on transfer of undeveloped leases. Some of these concerns were genuine: it was well into the 1960s before lenders accepted leases as being as good security as
freehold. The inability to transfer the lease before a building was completed, and the government's right to resume it if the building was not completed within three years, were problems and were eased by understanding, some would say lax, administration: few leases were terminated.

The erosions of the pure rental leasehold system began in 1935, with the extension of revisions of land rent, after the first 20 years of a lease, from 10- to 20-year intervals. On the positive side, in that year, bidders were required to pay any excess bid over the reserve price in cash, and the land rent was based on the reserve price rather than the bid price. This discouraged excessive bids and may have been a necessary change. Nevertheless, it was the first step from a pure rental leasehold system towards a premium system. During the 1930s and 1940s the city grew slowly, and leases could be purchased over the counter at reserve prices. Auctions were reintroduced in 1951, when the rapid post-war growth in the population increased demand: Canberra's population nearly doubled between 1947 and 1955, from 16,000 to 31,000. In 1961, 10 per cent of the population lived in government hostels and 58 per cent of the houses and flats were rented from the government.

In the 1960s premiums increased dramatically. Speculative builders became more prominent in the bidding. To avoid a situation in which aspiring home owners would always be outbid by speculative builders, some sites were reserved for people who had not previously had a lease in the ACT. Rapidly rising prices with land rents adjusted only every 20 years resulted in the owners of lots, which were similar except that they had been auctioned at a different date, paying very different levels of land rent. Land rents on sites released in the 1940s rose to several times their previous level when revalued in the 1960s. Large increases in the early 1960s resulted in a decision, in 1965, to peg residential values for calculation of land rents at their 1962 levels.
During the 1960s questions also began to be asked about whether Canberra was “paying its way”, questions that had not been considered since the 1920s. Property rates (or taxes), based on unimproved values, were introduced in 1925, but were kept at low levels for the next 45 years, partly to help attract public servants to move from Melbourne, the temporary capital, to the raw “bush capital”. Unlike values for land rent, rateable values were adjusted every three years, and rates had the advantage over land rent that, at that time, they could be deducted from taxable income for Commonwealth taxation purposes.

An expedient way was found to deal with all of these problems. In 1970, during a by-election campaign for the seat of Canberra, the then Prime Minister, John Gorton, announced that urban land rents would be reduced to a “peppercorn” rent payable only if and when demanded, and the loss of revenue would be made up by a substantial increase in the level of property rates. Abolition of land rent was a popular move, though not popular enough for the government to win the seat from the opposition Labor party. Although, following a change in government, land rents were reintroduced for business premises in 1974, another change in the law saw business lessees given the opportunity, in 1980, to buy out their future rental obligations. Canberra's leasehold system had become a premium leasehold system.

Recovery of betterment that arises as a result of development of the city was one of the most important objectives of the leasehold system, but its effectiveness in this regard was compromised from the outset by the infrequent revisions of land rents; revisions every two to five years would have overcome this problem. In periods of rapid inflation it was a fatal flaw. The effective abolition of land rents in 1970 resulted in the rates on unimproved values being the only avenue for government recovering part of the increase in value of land that did not experience a change of use. As a result, economically, if not legally,
Canberra’s leasehold closely resembled freehold.

**Planning and the collection of betterment**

The two important objectives of the Canberra leasehold system were to implement the plan for the development of the national capital and to collect for the public a large amount of the increase in land values that would result from its construction.

The lease purpose clauses of the first Canberra leases were used to put flesh on the bones of Burley Griffin’s competition-winning plan for Canberra: leases were issued for the use of land for the purposes shown in the plan. Effectively, the purpose clauses in lease agreements performed the functions that statutory land use controls play elsewhere in Australia. Many of the early leases had very general purpose clauses and these caused legal arguments years later when owners of “residential” leases claimed the right to build flats or motels. In the harsh economic climate of the 1930s businesses were often permitted to use their leases for any purpose that could bring a profit. This continues in prosperous Canberra today in the suburb of Fyshwick, for example, where many retail businesses do not conform with the industrial purposes permitted by their leases.

*Rural to urban conversion.* An important objective of leasehold was to ensure that decisions about land use would be made according to the plan for development of the city rather than being the responsibility of individual land owners. Elsewhere in Australia the profits that can be made from land development have resulted in strong pressures that are frequently opposed to the implementation of land use plans. Land owners exert political and economic pressure on government to permit them to use their land for purposes they judge will yield the highest value.
In Canberra these pressures do not occur at the time of conversion of land from rural to urban uses because there are no private owners of rural land. Rural lessees have never seriously attempted to secure urban development rights. Some indication of what would have happened had rural land been privately owned can be seen in the proposal in the 1970s by the owners of Lanyon, the last freehold property in the Canberra locality, that was then some distance from the developed suburbs of Canberra, to develop it for urban use. When the government moved to purchase the land, the owners had a development plan prepared and claimed the value of the land for urban development as compensation. They were unsuccessful. Without the provisions of the Seat of Government (Administration) Act for the site of Canberra to be purchased, the development proposal could have resulted in urban development that was not in accord with the metropolitan plan.

An early experience of another form of privatisation of development occurred in the 1970s in the small suburb of South Bruce where a private developer was sold a construction lease on raw land and permitted to both subdivide and service residential allotments according to a timetable specified in an agreement with the government. The timetable was not met, and the developer claimed that demand was not sufficiently strong to meet it. It is almost impossible under such circumstances for the government to prevent speculative holding of land because it cannot distinguish between a genuine miscalculation on both its part and the developer’s, and the developer holding land off the market in order to increase its price. That problem has not been resolved in the more recent moves to privatise land development that will be discussed later.

Until 1987, the NCDC was the developer of all greenfield sites in Canberra. As developer, the NCDC carried out (commonly through contracts with private firms) site planning, installation of major and local infrastructure,
subdivision, provision of community facilities, and building of public housing, and made available blocks to be marketed to builders and individuals. There was no role for the private land subdivider. At that time, negotiations to establish self-government were under way, and the Commonwealth budget for the ACT deleted monies for land development by the NCDC, with the intention that many aspects of future development would be by private enterprise. Some thought this a desirable outcome, having doubts as to the NCDC’s skills at financial analysis and marketing. Land supply and major infrastructure construction—including highways, storm water drainage systems, and sewer systems—were to remain the role of government. The NCDC then articulated a set of procedures and standards that it would apply in auctioning greenfield sites for development, and a five year land release program was prepared.

Urban to other urban conversion. If the leasehold system has prevented private pressures on land use plans in the conversion of land from rural to urban uses, it has not done so in the conversion of land from one urban use to another, whether or not this involves redevelopment. There are several reasons for this failure.

The first has been a long history of lack of enforcement of compliance with lease purpose clauses. Perhaps the most common violation has been the use of residential leaseholds close to commercial centres for non-residential purposes. Some of these have been for professional offices, and within limits they have been sanctioned by a legislative amendment that permitted, for example, doctors’ surgeries to be run from the home of a doctor in a residential area. More damaging have been the widespread use of industrial leases, especially in Fyshwick, for retailing and of houses wholly for running businesses.

The second has been an unwillingness of the government to become actively involved in redevelopment as has been the practice of lessors in
leasehold systems in other countries. A major reason for this reluctance has been to avoid any suggestion that leases were less secure than freehold title. That was a legitimate concern until the 1960s but has not been since then. The result has been that Canberra leases are in fact more secure than freehold, but achieving such security has meant that some of the rights and controls the lease gives the lessor have been compromised through lack of use.

The third is that, unlike rural lessees, urban lessees and developers acting with their agreement, have “claimed” development rights. The reluctance of the government to buy out the remaining terms of leases, and especially to compulsorily resume them, has left all of the initiative with lessees and private developers.

One of the most important changes in lease administration occurred in the 1930s when, to accommodate an owner who wished to subdivide two shop leases into four, a new section (Section 11A) was introduced into the City Area Leases Ordinance that allowed a lessee to apply to the ACT Supreme Court for a variation in the lease purpose clause. The responsible Minister had, in effect, the power to veto such applications, but rarely exercised it. In the 1980s, when redevelopment in the central parts of the city boomed, this was the method of obtaining permission for land use changes. The fact that it is initiated by the lessee, or a prospective developer on the lessee’s behalf, rather than the owner of the site, reflects the fact that Canberra leases had come to be seen as much like freehold.

Until 1970, any change in the lease purpose clause was the signal for reassessment of land rents which, in theory at least, recouped for the government the increase in value when a land use change occurred. Starting in 1970, some of the increase in value resulting from a change in use has been recovered through a betterment charge that is the equivalent of the premium paid for a rent-free lease.
The additional premium is payable when permission is granted to use the lease for a more valuable purpose. The charge was set at half of the increase in the value of the lease as a result of the permitted change in use, less $1,500.

The final opportunity to collect betterment under the original leases occurs when they mature and the land and improvements become the property of the lessor. This causes problems when leases approach maturity since lessees have little incentive to maintain their property and the leases decline in value. In 1938, the Commonwealth modified the legislation to compensate lessees for the value of improvements if a new lease is not offered at maturity. By the 1980s, non-residential lessees were permitted to renew their leases well before maturity on payment of a modest fee, and residential lessees can renew their leases without further payment. De facto if not de jure, Canberra leases had become leases in perpetuity. Thus the opportunity was never taken.

Under self-government

Rural to urban conversion

Private development. Sales of leases of raw land for development by restricted public auction began in 1988. Only firms with the financial and technical capability to complete the project could bid. The successful bidder receives a holding lease, with a specified term of three to five years. This enables the developer to obtain financing to service the blocks to be created on the site. When a specified number of blocks have been completed, the developer is granted Crown Leases for individual blocks and may sell those leases to builders or prospective residents.

At the time of the first auction, only one large developer—the predecessor company of Land and National Development, currently a major developer—existed in the Canberra area. The MBA Land Ltd corporation was
established by expanding the Argyle Consultants, a local builder, to include some 20 Master Builders Association members. Similarly, a home builder, John Ainscough, formed Landco with five or six other members. The initial bidders included the above companies and some other consortia from the area and elsewhere.

In the *Canberra Times*, in April 1993, Trevor Kaine, leader of the ACT opposition Liberal Party, alleged that the three largest developers monopolise Canberra development, squeezing others out. “Only the Government can make sure builders and developers have a fair share of land as it comes available.” Bob Winnell, chairman of MBA Land, denied the allegation, saying that there are 10 developers in Canberra.  

There are charges also that the three big developers control the housing market vertically by selling sites to builders tied to them. One person to allege this is a Labor Member of the Legislative Assembly, David Lamont, who called for an end to the practice, which “is uncompetitive and is artificially inflating the price of new homes in the ACT.” Alex Brinkmeyer, head of Land and National Development, as well as of the real estate agency Realty World, and developer of one-third of greenfield projects to date, acknowledged that this had been the case but said that it was no longer so.

Since self-government, the reserve price for an auction is set by DELP after receiving a recommendation from the Australian Valuation Office; it is not made public. Reserve prices are determined in part by consideration of the bids at former auctions. If the bids don't reach the reserve, DELP may, with its Minister's concurrence, negotiate for a price somewhere between the highest bid

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13 *Canberra Times*, 1 April 1993.

14 *Canberra Times*, 2 June 1993.
and the reserve, or it may pass the property in for another auction later.

The Land Division of DELP has a five-year plan for release of sites, based on its annual projections of the number of housing starts needed, further specified by greenfield sites and redevelopment. The current number of starts is 3,300 per year; this is projected to decline to 3,200 and then to 3,100. Hans Sommer, Assistant Secretary, Land Development Branch, DELP, claims that the ACT can obtain good prices for its sites because the developers know that there is little risk. The ACT releases sites in accord with demand and guarantees construction of the major infrastructure.

*Joint ventures between the ACT and private developers.* Bill Wood, ACT Minister for Environment, Land and Planning, has said on several occasions that government should resume its long-time role as land developer, and that joint ventures are the first step. In fact, in the recent ACT budget, the government has committed $5.5 million to recommence public sector land development during the 1994/95 financial year.

Since 1988, the Commonwealth and ACT Governments, as well as the Master Builders Association and the Housing Industry Association, have been concerned that new development has not been providing affordable housing. A market for 200 to 300 blocks per year for such housing was recognised, and development has been realised through the mechanism of joint ventures. There have been regular joint ventures with these Associations since 1989. Joint ventures are also seen as a means of achieving higher quality neighbourhood

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15 Interviews with Hans Sommer, Assistant Secretary, Land Development Branch, DELP, 9 February and 11 March 1994.

16 It is unclear to the authors why the ACT could not borrow the necessary funds if the return to government development is attractive.
development and of realising for the public sector a greater share of the profit from development.

The format that has evolved for joint ventures is that ACT commits the land under a holding lease, thus enabling its private partner to obtain financing. The ACT is paid for the land when leases on the allotments are sold, in accord with a timetable specified in the agreement. The ACT installs major infrastructure, as in private sector developments. The private partner, in accord with a plan developed in concert with the ACT, subdivides and services the blocks. As groups of blocks become ready for sale to builders or individuals, the Holding Lease is replaced by Crown Leases for individual blocks. The ACT receives a minimum of 50 per cent of the before-tax profit.

Apart from major infrastructure works installed by the ACT, financing is provided by the developer. There are now five joint ventures under way with varying financial terms, and with partners other than the Associations. Over 30 companies have registered to participate in the tender process, and, of these, some dozen have qualified as financially and technically competent. Joint ventures are under way at Belconnen and Gungahlin (in the suburbs of Ngunnawal and Nicholls).

An illustration of the financial return to the ACT is the Dunlop urban renewal joint ventures in West Belconnen. There were 20 tenders. The two winning developers bid a combined total of $5.55 million for the land for projects that will produce 610 blocks. The ACT anticipates receiving nearly $5 million in profit share in addition to the purchase price. This, according to Hans Sommer, is substantially more than if the site had been auctioned and developed as a purely private venture. One reason for the higher returns is that the developers bear less risk than in the auction process. Lenders will provide financing on relatively attractive terms (in today's cautious lending market), in part because of
the reduced cash exposure due to the delayed payment regime, and in part because government participation provides a kind of guarantee of the loan. Another advantage for government is that it oversees development more closely as a participant, assuring realisation of its objectives. Minister Bill Wood hailed the project as “the path of the future” providing the government “strong input into the design” and responding to “the need for wider housing choice, cost effectiveness and environmental responsibility.”

_Urban to other urban conversion_

Under self-government, there have been three successive sets of changes to the method of determining the amount of betterment to be paid after permission is given for a change in use. The various methods that have been employed to date are summarised in Table 2. The first of these changes, Method B, superseded what came to be known as Method A, which had prevailed since the abolition of all but nominal land rents in 1970. Method A was based on the change in total property value (land and improvements) due to the granting of permission for a change in use. All of the subsequent methods for determination of betterment have been based on the value of land only.

_Method A._ Under Method A, as defined in Section 11A of the City Area Leases Act (CALA), the “before” and “after” values for the purposes of calculating betterment were both based on the value of land and improvements. The before value was the value of the property in its current use, _i.e._, assuming no variation in the purpose clause would be permitted during the term of the lease. The after value was the value of the land and pre-existing improvements

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18 *Canberra Times*, 13 November 1993.
for the new use. In the case of demolition and redevelopment, the after value was effectively the land value less the cost of demolition. The betterment fee was half the increase in value, less $1,500.

**Method B.** The first change enacted under self-government was in the form of an amendment to CALA, which became effective in February 1990. The before value was defined to be the unimproved value as defined in the Rates and Land Tax Act 1926, with no assumption that the lease purpose would remain unchanged and therefore no requirement to exclude potential for redevelopment. It was, however, assumed that the lease would remain in effect for 99 years, regardless of its actual remaining term. The after value was defined as the unimproved value after the variation had been granted. The change seems to have been made to align valuation for betterment with valuation for property rates without realising that it resulted in inclusion of potential for change of use in the before value.

The law also altered the amount of betterment to be charged. It introduced a schedule of remissions ranging from 50 per cent to none. Holders of leases at least 20 years into their term were to be charged 50 per cent betterment, and the scale rose up to 100 per cent for leases less than 5 years into their term. Most leases on which variations were sought were at least 20 years into their terms and thus qualified for 50 per cent remission. With before value now including development potential, the gap between after and before was significantly reduced, and if trends continued would have become minimal. In the extreme, it

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19 The actual language reads:

"added value" under 11A means ... the amount by which the unimproved value of the land immediately after the order was made would have exceeded the unimproved value of the land immediately before the order was made if the lease had been varied in the manner provided in the provisional order when that order was made.
was likely to consist solely of the cost of the risk that the variation might be rejected and of the legal fees for registering the variation once granted.

Method C. The next changes, known as Method C, became effective in April 1992. As in the 1990 version, improvements were not included. Effectively, the only change from Method B was to omit the previous rule’s assumption that leases would extend for 99 years. This version is contained in the Australian Capital Territory Land (Planning and Environment) Act, Regulation 5. The remission schedule used for Method B was retained unchanged, meaning that most properties qualified for 50 per cent remission.

Reactions to the changes. In early- and mid-1993, a number of commentators began to question recent changes to the betterment regulations. Most were concerned about the fact that the government collected little, if any, of the true betterment. One commentator in the Canberra Times went so far as to argue that the ACT Government should resume and auction leases whenever land use was to be changed:

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20 Section 12 reads as follows:

"added value", in relation to a lease to which a variation is proposed, means the amount by which the value of the lease immediately after the variation would exceed the value of the lease immediately before the variation, it being assumed (a) that there are no improvements to or on the land comprised in the lease; and (b) that the rent payable throughout the term of the lease is a nominal rent."
### Table 2. Methods of betterment calculation, Australian Capital Territory

<table>
<thead>
<tr>
<th>Method</th>
<th>Effective date</th>
<th>Political context</th>
<th>Before value</th>
<th>After value</th>
<th>Calculation of fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1970</td>
<td>Abolition of land rents</td>
<td>Land and improvements assuming no variation in purpose during the term of the lease, <em>i.e.</em>, ignoring potential value</td>
<td>Land and improvements (land only if improvements to be demolished)</td>
<td>Half the increase in value less $1,500</td>
</tr>
<tr>
<td>B</td>
<td>February 1990</td>
<td>Establishment of self-government</td>
<td>Land only assuming a 99-year lease (no requirement to ignore potential value)</td>
<td>Land only assuming a 99-year lease</td>
<td>50 to 100% of the increase in value depending upon the age of the lease</td>
</tr>
<tr>
<td>C</td>
<td>April 1992</td>
<td>New ACT Land Act</td>
<td>Land only (no assumption of a 99-year lease or requirement to ignore potential value)</td>
<td>Land only (no assumption of a 99-year lease)</td>
<td>50 to 100% of the increase in value depending upon the age of the lease</td>
</tr>
<tr>
<td>D</td>
<td>September 1993</td>
<td>Public criticisms of Land Act provisions</td>
<td>Land only assuming no variation in purpose during the term of the lease</td>
<td>Land only</td>
<td>100% of the increase in value except for changes from residential or commercial to residential uses, when the 50 to 100% sliding scale applies</td>
</tr>
</tbody>
</table>
The Government as owner of the land can determine what the tenant (even one with a 99-year lease) does with the land. If the tenant changes the use of the land, the Government as landlord can throw him off. . . . We are paying lip service to leasehold. In the 1980s the change from residential to office purposes in Civic resulted in speculators creaming off. And it seems that the same thing will happen in the 1990s with the change from low to medium density which is all the rage these days. . . . If Canberra’s leasehold is to function in the way intended by its founders, people buying 99-year leases should stick to the original lease purpose. If the Government wants to change the land use . . . it should resume the lease and pay compensation. . . . [I]t should then amalgamate leases as necessary into larger blocks . . . and hold a public auction for them. 

A less radical approach, elimination of the remission scheme, was suggested in a subsequent editorial:

[T]he ACT Government is even now falling into the trap that land development must be encouraged through subsidy, in this case through the form of a gift of increased value through change of lease purpose. The present ACT Government, quite wrongly, permits a developer to pay to consolidated revenue in many cases only 50 per cent of the increased value due to changes in land use. This is a silly . . . view predicated on a nineteenth century perspective that Australia is a barren waste and that people have to be given financial encouragement to do anything with it. . . . The land here

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has great worth that belongs to the community.\footnote{22}{“Land change profits belong to public,” \textit{Canberra Times}, 30 July 1993, p. 10.}

Perhaps the most important point is, as Ed Wensing (1993, p. 16) put it, that: “The granting of development rights at less than their true value is an implicit subsidy.” These criticisms led to the adoption of what we have labelled “Method D”, which, among other things, eliminates the remission schedule for some types of changes in use.

\textit{Method D}. The current regulations became effective in September 1993 following a Ministerial Statement. As in the 1990 and 1992 regulations, calculation of betterment is based on the value of land only. The “before” definition, however, returns in part to the definition that prevailed from 1970 to 1990: the terms of the lease, including the purpose clause of the lease, are assumed to remain applicable for the life of the lease. The after definition is as in the 1990 and 1992 regulations: the unimproved value immediately after the variation is approved. The provisions for remission were retained only for changes from residential to more intensive residential uses or from commercial to residential uses, due to the government’s desire to encourage residential redevelopment of inner areas.\footnote{23}{Special provisions of the new regulations extended the 50 per cent remission policy to Fyshwick for one year only, to encourage owners of leases that are in breach of their lease purpose clauses to apply for variations. Also, the nominal “augmentation levies” that have been charged in lieu of betterment fees for residential redevelopment projects in the suburbs of Kingston and Griffith have been retained.}

\textbf{The economics of betterment}

With public ownership of land, most redevelopment may still be privately
Leasehold Policies and Land Use Planning in Canberra

initiated, as is the case in Canberra. Land use is controlled via the purpose clause in the lease rather than through methods such as zoning. The distinctive feature of a leasehold system, however, is the fact that the government lessor owns the rights to develop and to any increment in land value, or "betterment", that results from conversion of rural land for urban use and from any subsequent, more intensive redevelopment.

Under a leasehold system, betterment can be captured in one of two ways. If land rent is charged, betterment can be obtained from rents which are periodically increased. Rents are normally set at a percentage of market value such that the expected future stream of land rents is equivalent in present value terms to the market value. This would require frequent valuations if land values were changing rapidly. In Canberra, however, land rent is not charged (except for a limited number of commercial leases), and leaseholders are only potentially liable for a nominal "peppercorn" rent. Instead, betterment is charged at the time of initial urban development and on the occasion of any subsequent change in nature or intensity of use.  

Thus the issue of betterment capture arises in Canberra at two key stages in the development process: (1) when previously undeveloped "greenfield" or "broadacre" sites are released for development and (2) when the use of already developed sites changes. The two following sections of this paper are case studies of greenfield and redevelopment areas in Canberra; the balance of the present section is concerned with the principles that will serve as a basis for analysis of the case study areas.

\[\text{In the following sections of this paper, a "new use" includes increased intensity of an existing use, e.g., multi-family relative to single-family housing.}\]
Greenfield sites

Two key principles should inform the policy and practice of capturing betterment associated with the release and development of greenfield sites: (1) prices should be determined competitively so that they equal market values and (2) the release of land should be controlled so that developers do not have the opportunity to hold land speculatively with the intent of earning windfall gains.

The need to determine prices competitively

A basic requirement for the capture of betterment is that the price should be established through some kind of competitive market process. If there is uncertainty on the part of the seller (i.e., the government) regarding the market value of greenfield sites, the optimal price may be determined by auction. On the other hand, if market values have been established recently for similar sites, and it is easy to assess the market value of the site, it may be possible to arrive at an optimal price through negotiation or even to set list prices.

Controlling the market to prevent speculation

It is also important to control the release of sites so that supply and demand are more or less in equilibrium. This can be accomplished by forecasting the demand for various uses, monitoring prices relative to costs, and releasing only enough land to satisfy new demands. Developers of new sites should be required to complete development within a fixed period of time, as they are in Canberra. Otherwise, leases will be acquired for speculative purposes, and some betterment will be pocketed by developers rather than the government.
Previously developed sites

Lessees have the right to use their sites only for the purpose(s) specified in the lease purpose clause. A change in use may be achieved either by the lessor buying the lease and leasing it to someone else at the higher rent or capital sum equal to its value for the new use. The alternative is to negotiate with the existing lessee for an additional capital sum or rent for the right to use the site for a more valuable purpose. The capital value of the enhanced development rights in a premium leasehold system such as Canberra’s is known as betterment.

Where land is privately owned, its market value will take account of both its value in its present use and the potential increase in its value for any other use that is permitted. As a result, a developer has to pay much or all of the increment in value expected to be realised through the change in use when purchasing a site for a change in use, though developers who purchase far enough in advance of the change are able to capture part of the increase in value for themselves.

Under a leasehold system, however, the lessor (landowner) owns the rights to any higher value use and the increased value that would result from a change in use. The way to collect such increased value is to collect betterment in full. If this is not done, the lessor is effectively subsidising changes in use by making a gift of part of the increase in value. If the lessor does collect full betterment, the market value of leases will be their value for the use permitted under the lease because any buyer would know that a change in use can occur only after betterment has been paid.

*How should betterment be defined?*

Betterment under public ownership is the increase in the value of the

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25 A more formal treatment of this section, together with tables illustrating the impacts of different definitions of betterment, may be found in the Appendix.
lease in its present condition as a result of permission being given for a new use. The “before” value is simply the market value for the lease assuming that no change in use will be permitted for the duration of the lease. With full charging for betterment, the “before” value is the market value of the lease. The “after” value is the value of the lease with permission for the new use, or its value in the new use less the cost of any alterations, demolition and construction needed for the new use.

**Definition of betterment in Canberra under 1993 regulations**

As noted above, from September 1993 (September 1994 in Fyshwick), the before value is to be calculated on the assumptions “(a) that there are no improvements to or on the land comprising the lease; . . . (c) . . . that no variation of the lease would be agreed to during the remaining term of the lease.” This value is lower than under the definition above because it does not include the value of improvements to the site. The “after” value is the value of the site with permission for the new use.

Consider first the situation where redevelopment is to occur so that the after value under the 1993 rules is quite close to the correct after value defined above (assuming that demolition costs are small). If valuations for betterment are accurate, the 1993 definition will produce an estimate of betterment that exceeds the increase in the value of the lease, and if the charge is set at 100 per cent of this value, no change of use will occur. This is because the before value does not

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26 The value of a “property” or the value of a “lease” refers to the value of both the site and any buildings or other improvements to the site. The value of a “site” means the value of the land without improvements, but with roads, water, sewerage and other services provided.

include the value of improvements for the existing use. This problem is less likely if the betterment charge is levied at less than 100 per cent.

Consider next a change in use where the existing buildings will be used for a new purpose, with or without alternations, rather than being demolished. An example would be where a house is to be used for a small business or where several floors are to be added to an existing office building. The 1993 rule will overstate betterment if the improvements to the site are worth more for the existing than for the new use, which seems unlikely. If the reverse is the case, it will understate betterment.

At what rate should the betterment charge be set?

A charge of 100 per cent of correctly defined betterment will not make any change in use, whether or not it involves redevelopment, unprofitable; i.e., if there is no betterment there is no charge. Anything less results in subsidisation of the change in use. A 100 per cent charge returns to the lessor the increase in the value of the lease which results from permission to use it for a more profitable purpose. This can be seen by comparing the cost of purchasing a greenfield site for a particular use at full market value, and the cost of buying a redevelopment site at a cost, including betterment, which is less than its market value by the amount that betterment is less than 100 per cent.

There is no logical argument for treating the two assets—development rights on undeveloped land and increase in development rights on developed land—differently by selling one at a discount. Selling a government-owned asset (the right to a more profitable use) at less than full market value goes against a widely accepted criterion of accountability in the public sector. A 100 per cent charge will yield the same revenue to the government as purchasing the lease before the change of use at its market value for the existing use, and auctioning it
with the new purpose clause. As noted above, a 100 per cent betterment charge will also ensure that the market value of a lease is its value for the use permitted in its purpose clause.

To assert that a 100 per cent charge will make all redevelopment unprofitable is like saying that auctioning leases will make greenfield development unprofitable because it prevents developers from capturing the increase in the value of raw land when permission is given to use it for urban purposes. Since the cost of the lease including betterment is defined as what a developer or a buyer who intended to use it for the new use would be prepared to pay for it, such a charge cannot make a change of use unprofitable.

The development of greenfield sites: Palmerston case study

Palmerston is the first of the suburbs of the new town of Gungahlin to be built (see Figures 2 and 3). As envisioned first in the 1970 Y-Plan, Gungahlin was to have had a population of 110,000. Since 1980, the target has been 85,000. The NCDC's Draft Policy Plan for Gungahlin (1984) was the first of several planning studies describing goals for the new town. In 1987, the NCDC prepared an initial plan for Palmerston and proposed minimum housing targets. Also in 1987, however, the government decided to turn development over to the private sector. This was a major departure from prior practice throughout Canberra's history. As noted in the earlier discussion of joint ventures, it is a decision now under reconsideration by the ACT Government.
Figure 2. Canberra urbanized area and location of study areas

- NEW SOUTH WALES
- GUNGAHLIN
- BELCONNEN
- NORTH CANBERRA
- CITY CENTRE
- BRADDON
- SOUTH CANBERRA
- WESTON CREEK
- WODEN
- TUGGERANONG
- AUSTRALIAN CAPITAL TERRITORY
- QUEANBEYAN

Legends:
- Open space
- Water bodies
- Urbanized area
- Major road
- Australian Capital Territory boundary

Scale: 0 - 5 kilometres
Figure 3. Palmerston land use

- Park, open space
- Standard and small-lot residential
- Future medium-density residential (G4)
- Cluster housing
- Community facility
- Commercial

LOCATION OF FUTURE GUNGAHLIN TOWN CENTRE
We have chosen Palmerston as one of our two case studies for several reasons: (1) it is a realisation of current ACT policies for broadacre, or greenfield, sites; (2) it is being built as private ventures so that it is possible to compare the actual development patterns of the private sector with the public planning concepts; and (3) it offers the possibility of comparing the revenue obtained by the ACT from sale of leases to developers to that which might have been obtained had the ACT proceeded as a joint venturer, as it is increasingly choosing to do, or had it chosen to be the developer itself, as was the case until 1988.

Palmerston is located adjacent to the future Gungahlin town centre and overlooking Gungahlin Pond, the run-off retardation basin that has already been built, and its adjacent golf course, under construction in early 1994.

Development policies

There are four estates, or subdivisions, at Palmerston. The areas for the three estates auctioned in 1991 are, respectively: G1, 45 hectares (111 acres); G2, 30 hectares (74 acres); and G3, 76 hectares (188 acres). The fourth estate, abutting the prospective town centre, is expected to be released in 1994, for medium density development, including apartments. Further planning objectives for this estate have yet to be published.

One planning “goal” and one planning “requirement” were set forth in the prospectus for the first three estates (DELP, 1991) and have shaped what has been developed to date. The principal planning goal was to achieve higher residential densities than had prevailed in earlier new towns. Higher densities were thought to be less costly to service, as well as a means of achieving lower house prices. The planning requirement that strongly influenced development was the specification that no developer could be the successful bidder for more
than one of the three estates. This might be seen as a political or an economic objective, avoiding possible monopolisation of development.

**The goal of higher residential density**

The initial auction announcement for Palmerston set minimum and maximum numbers of units for each of the four estates, with totals for all four of 1,285, minimum, and 1,885, maximum. The prospectus, however, subsequently was modified to state minima for G1 of 395 units, for G2 of 245 units, and for G3 of 735 units, totalling 1,375 units exclusive of G4, and to remove the maxima. Instead, an as-of-right authorisation to exceed the minima by 20 per cent was incorporated. The prospectus further stated that a developer might build even more units, with no maximum stated or implied, if he could establish that the infrastructure as built or as he might alter it would be adequate for the number of units proposed. Thus, it was DELP’s intention to encourage developers to increase densities. This policy was further promoted by leaving the mix and location of housing to the developers. In addition, collector streets and the verges—land between the street and the block sold to the home owner—are both much narrower than those in the older suburbs, and the verges have limited space for street trees. Since the site had very few existing trees and since there was no afforestation of the adjacent open spaces prior to development, the area is largely bare of trees and shrubs. There is little space available for them to be planted.

All three developers were required to provide small playgrounds, the developer of G1 was required to provide sites for the local shopping and community centres, and the developer of G3 was required to service 6.6 hectares (16.3 acres) and return it to the ACT for a primary school and playing field.

The site plan suggested by the NCDC for Palmerston showed streets, lot
design, floodways, and the routing of an electricity transmission line. The maps published by Delp in 1991, with the bidding prospectus, bound the winning developers to the locations and, in some instances, the widths or areas of:

- the floodways, incorporating cycle paths (2.5 metres/8.25 feet wide);
- the major distributor street and its five access points from outside Palmerston;
- the footpaths (1.2 metres/4 feet wide when adjacent to one side of the distributor street and its access points and 1.8 metres/6 feet wide as a separate walkway);
- the local shopping centre and adjacent community facility (0.9 hectares/2.2 acres minimum);
- the primary school and its adjacent playing field (2.8 and 3.8 hectares/6.9 and 9.4 acres, respectively); and
- other, smaller playgrounds.

Not specified were the locations of collector streets or houses; neither was there any directive on mix of housing types except that apartments were excluded.

There are critics of the free hand given to developers at Palmerston and other suburbs now developing in Gungahlin. The chief planner for Land and National Development, the developer of G2, criticises the lack of overall planning by Delp for Gungahlin, believing that this leaves too much open to the winning bidder for each site. Some may do a good job, some may not.

The requirement for three developers

The specification that a different developer be responsible for each of the

28 Interview with Tony Carey, Chief Planner, Land and National Development Corporation, 7 February 1994.
estates to be built was intended to encourage a variety of housing price and choice. It also prevented any one developer from having a monopoly on sites in Palmerston. There were multiple bidders for each of the estates, with the largest, G3, auctioned first and attracting the most interest. The winners did, indeed, represent different development preferences. MBA Land and its joint venture partner, Consolidated Builders, operating as Canberra Land, successful bidders for the G3 site, customarily develop small blocks primarily for first-time home buyers. The winners of sites G1 and G2, Landco Pty Ltd and Land and National Development Corporation, favour development of larger blocks targeted at second- or third-time buyers.

Developers’ choices

The winning developers jointly carried out a study to justify development at densities higher than the automatically approved 20 per cent above the minimum. Since the Commonwealth and ACT Governments are both pressing for higher densities, DELP approved the developers’ request. There was no specification of the maximum number of units that could be built.29

In February 1994, DELP anticipated that there would be at least 1,715 units when the first three estates of Palmerston were completed. Our field observations, in February 1994, and government records obtained later, suggested that the total would be much higher, close to 1,925, or about 40 per cent above the required minimum. Table 3 gives the housing types and block sizes as defined by DELP, as well as our counts and the average prices per block. Although our field observations are approximations, they are consistent with government records of property sales.

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Table 3. Block types and sizes, numbers of dwellings and prices, Palmerston

<table>
<thead>
<tr>
<th>Block type</th>
<th>Block size (square metres)</th>
<th>Number of dwellings</th>
<th>Average price per block of land ($A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard density</td>
<td>630 plus</td>
<td>812</td>
<td>66,475</td>
</tr>
<tr>
<td>Cottage</td>
<td>465 to 630</td>
<td>64</td>
<td>50,609</td>
</tr>
<tr>
<td>Courtyard</td>
<td>360 to 465</td>
<td>158</td>
<td>43,595</td>
</tr>
<tr>
<td>Medium density</td>
<td>360 to 465</td>
<td>196</td>
<td>44,278</td>
</tr>
<tr>
<td>Dual occupancy</td>
<td>325 plus (per dwelling)</td>
<td>42</td>
<td>33,474</td>
</tr>
<tr>
<td>Cluster</td>
<td>Strata-titled housing at higher densities</td>
<td>653</td>
<td>30,474</td>
</tr>
</tbody>
</table>

Note: At some point, DELP redefined the break point between standard and cottage; formerly it was at 730 square metres, now it is at 630, thus including within the standard definition lots up to 100 square metres smaller than was previously the case. The lot sizes exclude verges. "Strata-titled" is equivalent to "condominium".

Landco, on site G1, had a minimum requirement of 395 units. We estimate a total of 554 units, or 40 per cent higher than the minimum. Landco's development is 50 per cent standard density housing, 30 per cent separate housing on smaller blocks, and 20 per cent cluster housing. The denser housing is located adjacent to what will be the G4 medium-density estate and the Palmerston commercial centre.

Land and National Development chose to develop most of its estate as standard residential blocks. We estimate a total of 302 houses, or 23 per cent in excess of the minimum of 245 units. Of this total, 83 per cent are standard blocks and 17 per cent are cluster housing. Land and National Development was the first of the three developers to get its plans approved and sold many of its blocks off the plan. They assumed that 800 square metre blocks would attract buyers, particularly people living in the closest new town, Belconnen, who were looking for a larger home, and this proved to be so. Most of the purchasers were second-, third-, and even fourth-time home buyers of middle income. The 800
square metre blocks sold for up to $86,500.\(^{30}\) The townhouses in G2 are located adjacent to a floodway and cycle path.

Canberra Land, as anticipated, chose to develop predominantly smaller blocks. It has exceeded the minimum for its site by 45 per cent. The minimum was 735 units; we estimate a total of 1,069. The mix is 27 per cent standard blocks, 23 per cent separate houses on smaller blocks, and 50 per cent dual occupancy and cluster housing. The denser housing types have been located near the local shopping centre, school, and playing field, and near Gungahlin and Nudurr Drives, two of the exterior roads that bound Palmerston.

### An evaluation of Palmerston

It is indisputable that DELP achieved its goal and requirement of higher density and multiple developers at Palmerston. Does that mean that the planning was excellent and that Palmerston provided the ACT with a reasonable return for conversion of a broadacre site?

### Planning issues

As to the first question, there is considerable dissatisfaction with what has been built. We cite, first, as a critic, Bill Wood, ACT Minister for Environment, Land and Planning. Commenting on the ACT's prospective joint venture in Gungahlin at Ngunnawal, he said that he wished the Planning Authority to have enough time in the future to avoid the risk of the "poor design and siting experienced in Palmerston, where some developments were unsightly and badly planned."\(^{31}\) These sentiments are a response to the relatively crowded character

\(^{30}\) Based on data collected by DELP.

\(^{31}\) *Canberra Times*, 1 April 1993.
of development at Palmerston, with narrow streets and verges, little open space, and very closely spaced houses. Generally, the appearance of Palmerston suggests that little attention was given to public spaces, or to the relationships among individual buildings.

Barbara Norman, President of the Royal Australian Planning Institute (ACT Division), commented:

... under principles established by the first commissioner of the National Capital Development Commission, Sir John Overall, and former chief planner Peter Harrison, Canberra suburbs had no fences, wide streets, footpaths, and local shops with community facilities. I went to Gungahlin... and I was not entirely convinced that those standards have been maintained. ... Canberra is considered as a model of residential planning design and I'm convinced that some of those earlier planning principles are being eroded.32

One possible comparison is with the planning and development by Land and National Development at Jerrabomberra, a 600 hectare project in New South Wales, adjacent to Queanbeyan.33 Its 1993 population had reached 3,000, and its population at completion will be between 12,000 and 15,000, in the range of double that of Palmerston once the G4 site is completed. The land price and site development costs are comparable. The question that we posed is whether the development at Jerrabomberra is better than that at Palmerston—which we think that it is—and why this may be. This is a subjective judgment; however, we offer several objective observations in support of our conclusion.


33 This could eventually be part of the joint ACT–NSW new town of the same name, described earlier.
First, there was careful, cooperative planning. During the planning phase, the Land and National Development planning team met regularly with the Queanbeyan planners and Council. This provided a forum for continual exchange of views and modification of plans, and the process led to an outcome of which both Land and National Development and Queanbeyan are proud. There was no comparable process in the planning of Palmerston.

Second, two stages of the Jerrabomberra development have won the Housing Industry Association’s Housing Estate of the Year Award for the ACT region.

Third is the test of the market. Jerrabomberra is considerably further from Civic than Palmerston and is located in what has been less fashionable Queanbeyan. Brian Hill, who was a member of the planning team for Land and National Development at both locations, reported that the initial sales prices of standard blocks in Palmerston were 100 per cent higher than the same company’s sales of similar blocks in Jerrabomberra—$70,000 compared to $35,000. In early 1994, the few remaining comparable blocks in Palmerston were selling at $86,500, compared to $80,000 at Jerrabomberra, indicating a substantial relative jump in the perceived attractiveness of Jerrabomberra.

Financial returns

To assess the likely returns to the ACT Government from its desired resumption of a greater role in land development, we have estimated the financial return to the Government from participating in the development of Palmerston in joint ventures with private partners, and from carrying out the development itself, compared with the returns it received from private development. The following

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34 Interviews with Tony Carey, 7 February 1994, and Bob Ogilvy, Director of Planning for Queanbeyan, 7 February 1994.
assumptions relate to the joint venture alternative and are laid down in ACT Government policies for joint ventures:

- The ACT Government’s share of before-tax profit of a joint venture is 50 per cent, the minimum required in the Government’s other joint venture agreements.
- Under the joint venture arrangements, the Government receives both its profit share and its payment of the amount bid by the joint venturer at the time leases for individual serviced blocks are issued. For convenience, it is assumed that this date and the date the joint venture declares and distributes its profit share dividends are the sale dates listed below. This determines the timing of the flow of revenue to the government from both the joint venture and from government development.
- The premium bid by the private partner in the joint venture for land is escalated at an appropriate rate, assumed to be 5 per cent per year, until the date at which the government receives its payment. The total premium bid by a joint venturer is assumed to be a payment for land.

The following additional assumptions were decided after discussion with the Land Development Branch of DELP:35

- The ACT Government provides major infrastructure in all three kinds of development.
- The premium offered for the site for a joint venture would be $16 million compared with the $19.6 million paid for private development.
- That, in accord with the requirements of the Government, 10 per cent of the premium paid by the private developers was paid on the day of the

35 We acknowledge the provision of information, none of which was “commercial-in-confidence”, by the Land Development Branch.
auction and the remainder 36 days later. The value at the date of the auction was $19.43 million with a 10 per cent discount rate and $19.37 million with a 13 per cent rate.

- The suburb would be developed with three joint ventures with different developers, just as there were three different private developers for the three parts of the suburb.

- Each of the joint ventures develops its land in stages of 175 dwelling sites. As noted, the total number of 1,925 dwelling sites was obtained from ACT Government records confirmed by field visits. The timing allows nine months for all planning to be completed and permits obtained. After that, two alternative assumptions are made about the timing of releases of serviced blocks. If the market is buoyant, it is assumed that one stage will be released by each joint venture each 6 months; if it is less buoyant, each 9 months.\(^{36}\) It is assumed that, on average, the blocks will be sold one month after completion, which takes account of the fact that some blocks will be sold off the plan before individual titles are available. The returns from sales of blocks, on these assumptions, occur on average at the following times for 6-monthly stages; the times for 9-monthly stages are shown in brackets:

  525 sites 16 (19) months after the agreement was signed;
  525 sites 22 (28) months after the agreement was signed;
  525 sites 28 (37) months after the agreement was signed; and
  350 sites 34 (46) months after the agreement was signed.

- The cost to the developer of servicing and subdivision, including management and borrowing costs, is $25,000 per dwelling, averaged over

\(^{36}\) These assumptions are both conservative, as the Palmerston blocks sold more quickly.
different kinds of dwellings. It is quite possible that private developers were able to produce serviced lots 10 to 15 per cent more cheaply than the government because of greater efficiency and shorter holding periods before sale. This has been considered as one option in the calculations.

- Selling costs are 4.5 per cent of the prices at which allotments are sold.
- Gross revenue from the sale of allotments is assumed to be the same for joint venture and government development as it was with private development. This information was obtained from the ACT Government’s records of sales, with a few missing prices estimated from prices of adjacent leases.
- The rate at which future revenue is discounted takes two alternative values. The first is 10 per cent, which is approximately the Government’s borrowing rate, and the second is 13 per cent, which adds a 3 per cent risk factor. The results give an indication of their sensitivity to different discount rates.

For each of the two alternatives to private development being considered—joint ventures and government development—two sets of calculations were carried out. The first estimates the present value at the date of auction of the flow of funds that would have been received by the ACT Government from a joint venture arrangement and from carrying out the development itself. These can then be compared with the present value of the prices bid by the private developers: $19.43 and $19.37 million with 10 and 13 per cent discount rates, respectively. The second evaluates the internal rate of return from a decision to forgo the returns from private development—a loss of $1.96 million immediately and $17.64 million one month later—and a gain of the flow of returns from the joint venture on the timetable set out above, or the total estimated net returns on the same timetable.
The first step in the calculation was to total the gross revenue from block sales ($94.089 million, or an average of $48,877 per dwelling) from which is deducted selling costs of 4.5 per cent, development costs of $25,000 per dwelling, and land costs of $16 million, leaving net profit per dwelling of $13,366, of which the ACT Government gets half in a joint venture. The $16 million, appreciated at the rate of 5 per cent per annum, is added to the returns to the Government. Where it develops the land itself, it receives the total value of $21,678 per dwelling: $16 million bid for the land ($8,312 per dwelling) plus the profit of $13,366 per dwelling. All of these returns accrue to the Government in proportion to the number of blocks sold in each stage according to the above schedule. The results are shown in Table 4.

It is clear that, on the assumptions set out above, joint ventures would be a very good investment for the ACT Government, and carrying out alone the development of Palmerston would have been an even better investment. Compared with the (discounted) return of a little under $19.5 million that it received from the auction, the Government would have received $22.5 million from a joint venture arrangement on the conservative assumption of 9-monthly stages and a 13 per cent discount rate, and up to $25.1 million with 6-monthly stages and a 10 per cent discount rate. Because the period of investment is relatively short, the internal rate of return is over 20 per cent on either assumption. Returns from development by the Government alone on the same
Table 4. Returns to ACT Government from alternatives to private development

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>Joint venture*</th>
<th></th>
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<th>Private development</th>
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<tr>
<td></td>
<td>Common development costs</td>
<td>Lower private costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6-monthly stages</td>
<td>9-monthly stages</td>
<td>6-monthly stages</td>
<td>9-monthly stages</td>
<td>6-monthly stages</td>
<td>9-monthly stages</td>
</tr>
<tr>
<td>Net present value</td>
<td>10%</td>
<td>$25.1m</td>
<td>$24.2m</td>
<td>$27.1m</td>
<td>$26.0m</td>
<td>$34.5m</td>
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<tr>
<td></td>
<td>13%</td>
<td>$23.8m</td>
<td>$22.5m</td>
<td>$25.7m</td>
<td>$24.3m</td>
<td>$32.7m</td>
</tr>
<tr>
<td>Internal rate of return</td>
<td>27.4%</td>
<td>21.1%</td>
<td>38.3%</td>
<td>28.9%</td>
<td>52.2%</td>
<td>38.0%</td>
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*Common development costs assumes $25,000 per dwelling for all developments; lower private costs assumes that private development and joint venture costs are 10% cheaper.
assumptions are even higher. 37

Varying the assumptions so that private and joint venture costs are lower than government costs reduces the margin between returns from joint ventures and those from government development. It has no effect on the comparison between private and government development because the return from private development is solely the revenue from the premium bid for the site. It improves the return from joint venture relative to private development as joint ventures become somewhat more profitable.

These results must be qualified in several ways, not least of which is the fact that Palmerston was a very profitable development because of the pent-up demand for housing on the north side of Canberra. The development may also have been more profitable than was anticipated at the time of auction because developers were permitted to provide sites for a significantly larger number of dwellings than might have been expected.

No allowance has been made for the additional administrative costs to the ACT Government of participation in the joint ventures and of monitoring the operation to ensure that the profits of the joint ventures are not siphoned off through inflated development costs. These additional administrative costs are likely to be very small relative to the revenues.

Most obviously, joint ventures are financially more risky for the ACT

37 An alternative for a joint venture in which the Government was a partner would have been to reduce the prices at which it sold serviced blocks to the public. Were the Government as developer to sell land in the same way, at fixed prices through agents, it could have done the same. That would have resulted in faster sales, but even without any change in the 6-monthly stages assumption, prices could have been reduced by $3,000 under a joint venture or by $9,000 (to an average of just over $40,000) if the Government had carried out the development alone, and still would have been marginally better off than with private development. To sustain such lower prices while selling at auction would have required a somewhat faster rate of production.
Government than selling holding leases to private developers, and the additional returns are in some respect a (generous) return for the additional risk.

Change of use for previously developed sites: Braddon case study

The purpose of this section is to provide a critical review of change of use and betterment capture under self-government in one of Canberra’s suburbs. Braddon is a good case study because its proximity to the city centre means that it is particularly subject to redevelopment pressure and its diversity of land use means that many different types of reuse and redevelopment have occurred. Although the ACT Government was not established until 1989, we have identified all approved applications for variations from 1988 through 1993, in order to include projects that were in the pipeline as self-government was being implemented. These are listed by method of betterment calculation and then by section and block numbers in Table 5, which reports a number of details and summary statistics for the 30 variations.

Located adjacent to Civic (the city centre), Braddon is one of Canberra’s oldest suburbs. A map of streets and buildings drawn in 1933 shows that much of the residential area designated standard residential in Figure 4 was already developed and that there was also some development in the commercial areas just north of Civic. Today Braddon encompasses a wide range of uses, including: commercial and light industrial uses immediately north of the city centre; hotels, office buildings, and medium- and high-density residential uses along its western and south-eastern boundaries; parks and recreation facilities;

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38 A number of case studies of specific redevelopment projects prior to self-government are discussed in Neutze (1988a).
Table 5. Actual and correct betterment fees, Braddon, 1988-1993

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### Table 5 (continued). Actual and correct betterment fees, Braddon, 1988-1993

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**Sources:**
Australian Valuation Office and Department of Environment, Land and Planning records, and authors' calculations.

**Notes:**
(a) Calculation of the actual betterment fee included a $71,000 deduction for parking.
(b) This "correct fee" is based on the Australian Valuation Office's original valuation for betterment purposes (subsequently changed due to an appeal to the Administrative Appeals Tribunal).
(c) In cases involving no change in value (according to the AVO's calculation), we have defined the actual and method D fees to be 100% of the correct fee.
(d) The $20,000 "before" improvements value is the cost of demolition.
(e) The "correct fee" calculation assumes that the correct before value (excluding potential) was $200,000 ($120,000 assessed land value plus $80,000 improvements).

**Key:**
Method: See Table 2.
After use:
- C = commercial
- R = residential
Land use district:
- C = commercial/office
- RR = medium-density residential redevelopment
- SR = standard residential
low- and medium-density detached and semi-detached houses; and community facilities such as schools, churches, and a community arts centre. The residential streets are generally lined with wide verges, or “nature strips”, that accommodate mature trees. The older residential areas of Braddon generally have larger lots than the newer ones, averaging 1,119 and 850 square metres (about one-quarter and one-fifth acres), respectively.  

**Variations to lease purpose clauses**

The Territory Plan, approved in late 1993, places all of the newer residential sections and one of the older sections in a district where medium-density residential redevelopment is encouraged. The new development can have a maximum of three storeys, and will generally be in the form of flats or townhouses. Redevelopment proposals are subject to the ACT’s Design and Siting Code. Although a couple of applications had been made by early 1994, no variations had been granted pending resolution of negotiations regarding the design of the proposed buildings. Previously, three sites in the redevelopment and standard residential districts had been redeveloped under an NCDC regulation encouraging the development of “Aged Persons’ Units” (APUs). Three applications for APU projects were submitted and approved during our study period. Only one other variation for a residential use was approved; this was for a large apartment building, St James Court, at the south-western corner of Braddon, immediately adjacent to Civic and the main north-south arterial,  

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39 These lot sizes are exclusive of the verge.  

40 A “section” is usually a group of adjoining parcels of land enclosed by streets—what would be known as a “block” in the US.  

41 These were Section 15 Block 2, Section 24 Block 17, and Section 58 Block 7 (see Table 5 for further details).
Figure 4. Braddon land use
Northbourne Avenue.\textsuperscript{42}

All of the other variations have been for new commercial uses. Eleven of these have been along Torrens Street, which marks the eastern border of the commercial/office district at the south-western corner of Figure 4. This district, established by the recent Territory Plan, essentially formalises what was already occurring along Torrens Street: houses with residential lease purpose clauses were being used for commercial purposes. It allows small-scale office buildings, community facilities, and residential uses. Buildings may not exceed two stories, and the maximum plot ratios are 0.4:1 or 0.5:1.

Most of the remaining 15 variations involved relatively minor changes in use of existing commercial buildings in the commercial district immediately north of Civic, and incurred no betterment fees. The most notable exception to this was the expansion of a hotel, from 48 to 81 rooms, which incurred a betterment fee of $174,000.

\textit{The strange case of St James Court}

One of the variations was particularly anomalous. The variation for Section 19 Block 8 involved the replacement of a high-rise motel, the Travelodge, by a high-rise apartment building, known as St James Court, with a much larger plot ratio. The application for variation was submitted just prior to the February 1990 change in regulations, so that Method A was used for the calculation of before and after values. This meant that the before value was to include land and improvements assuming no variation in lease purpose, and the after value was to include land only because the existing improvements were to be demolished. Under Method A, betterment was charged at a rate of half the

\textsuperscript{42} Section 19 Block 8.
Leasehold Policies and Land Use Planning in Canberra

increase in value, less $1,500. In its initial calculation, the Australian Valuation Office determined that the before value was $5,100,000, including $1,600,000 for land and $3,500,000 for improvements (including demolition costs), and that the after value was $5,240,000 for the land only. Consequently, the applicant was charged a fee of $68,500. On appeal to the Administrative Appeals Tribunal, the developer challenged some technical details of the betterment calculations. Subsequently, the after value was reduced to $35,000 less than the before value, and no fee was charged.

The revised valuations were clearly in error, because no developer would undertake such a project. According to the revised valuation, the new lease would be worth less to the developer than the old one; this is patently ludicrous. Assuming that the original before and after valuations were correct, the betterment fee should have been $140,000.

Potential adverse effects of current betterment policy

In addition to showing the actual betterment fee charged, Table 5 also gives the correct fee and the fee that would have been charged had the current Method D been applied. In fact, with the valuations in the table, 13 of the projects might not have been carried out under Method D because the betterment fee would have exceeded the actual amount of betterment. Each of these 13 projects involved demolition and redevelopment with a more intensive use. Because such changes can be accompanied by relatively large increases in land value, Method D is particularly biased against them. The most dramatic instance of this is the St James Court redevelopment (Section 19 Block 8), which would have incurred a $1,731,000 betterment fee under the current regulations, over 12 times the assumed correct fee of $140,000. In total, the Method D fees would have been 1.7 times the correct fees.
The redevelopment district

The designation of a residential redevelopment district was foreshadowed in the Draft Territory Plan, released for public discussion in October 1991. The designation reflects the government's decision to direct 50 per cent of residential development to infill and redevelopment sites. It might be thought that anticipated redevelopment would have been reflected in greater land value increases in that district than in the standard residential district because the betterment fee has been less than 100 per cent of betterment and because valuations may understate betterment; however, increments in assessed land values have been uniform across these areas, rising 18 per cent in nominal terms in both districts between the January 1992 and January 1993 valuations, 65 per cent between January 1991 and January 1993, and 87 per cent between January 1988 and January 1993. As of January 1993, land values averaged $104,500 per lot in the redevelopment district, and $147,800 in the standard residential district (where lots are larger). These findings give no evidence for the hypothesis that some redevelopment potential might have been capitalised in the redevelopment district after release of the draft plan.

As noted previously, no variations for redevelopment had been approved by early 1994 under the redevelopment provisions of the new Territory Plan. Two proposals were under consideration, however. The first proposal involved Blocks 6 through 9 of Section 22. Two of the four blocks are owned by the ACT Housing Trust and two by Bobundra Pty Ltd, a developer; this project was to have been subsidised by the Australian government's Building Better Cities program, as an example of good medium-density redevelopment. The existing four houses would be demolished to make way for 34 flats; a conditional variation for this purpose was approved in early 1993. The project was then the subject of an inquiry (the "Todd Report") into whether improper approval and
subsequent review procedures were followed—particularly provisions denying third party appeals—and was also the subject of substantial local complaint about poor design, including poor solar orientation, above ground parking, and the decision to put all units in one structure. The Housing Trust and Bobundra subsequently sought to add two more blocks to the project, and went through a further lease variation process to consolidate the six blocks, with the aim of achieving better design and siting for the development.  

The Dicksons, owners of a block on the corner of Torrens and Girrahween, and adjacent to the above blocks, sought to appeal the ACT decision to approve the variation, but were prevented from doing so by the Land, Environment and Planning Act. They then sold their 1920s house to a developer, as did the two adjoining owners on Girrahween. According to the Dicksons, the developer insisted on "a joint contemporaneous settlement" and paid raw land prices.  Records maintained by the Australian Valuation Office indicate that the three lots sold for a total of $1,600,000. This project, too, has been stalled over negotiations about design and siting, but demolition occurred in March 1994.  

Developers have been approaching home owners in Braddon’s redevelopment district, urging them to sell. This activity was reflected in the attempted auction, in February 1994, of two parcels located in Section 13. The first of these parcels consisted of eight contiguous lots auctioned as one unit; the second parcel consisted of one separate lot auctioned by itself. Neither of the parcels reached its reserve price. In subsequent discussions with the real estate agent responsible for the auction, betterment fees—and in particular the recent

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43 Interview with Moiya Haynes, Assistant Secretary, Lease Administration Branch, DELP, 16 February 1994.

44 Canberra Times, 28 March 1993.
changes to the method for calculating fees—were blamed for the failure to reach an acceptable price.

Some details regarding the two Section 13 parcels are shown in Table 6. The most interesting conclusion to be drawn from this table is the fact that the actual betterment fee under Method D, had the properties sold at the highest bids, would have been substantially less than the correct betterment fee. Thus it is incorrect to say that the betterment fee is prohibiting redevelopment. Instead, the reserve price was simply set too high.

An evaluation of betterment policy

Although we are unable to comment on the costs and benefits of the ACT Government’s redevelopment policy as it applies to Braddon, this case study clearly suggests some conclusions regarding betterment.

First, the current definition of betterment is strongly biased against redevelopment for new commercial uses. Nearly half of all changes in use and almost all of the redevelopment projects that took place from 1988 through 1993 would likely not have occurred had the current Method D been applied throughout that period.

Second, although the definition of betterment was correct until February 1990, the valuations were often changed on appeal, resulting in no betterment being charged. One-third of all changes incurred no fee and, in one case, St James Court, the after value was determined to be less than the before value. Cases such as this violate the logic of land use succession, which is that property owners will seek to change the use of property only when the property is worth more in the new use than the old use.
Table 6. Alternative betterment fees for auctioned properties, Section 13, Braddon

<table>
<thead>
<tr>
<th></th>
<th>Eight lots combined (a)</th>
<th>Single lot (b)</th>
<th>All lots combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest bid (c)</td>
<td>2,900,000</td>
<td>325,000</td>
<td>3,225,000</td>
</tr>
<tr>
<td>Unimproved valuations</td>
<td>747,000</td>
<td>104,000</td>
<td>851,000</td>
</tr>
<tr>
<td>Estimated improvements (d)</td>
<td>640,000</td>
<td>80,000</td>
<td>720,000</td>
</tr>
<tr>
<td>Method D betterment</td>
<td>2,153,000</td>
<td>221,000</td>
<td>2,374,000</td>
</tr>
<tr>
<td>Method D fee</td>
<td>1,076,500</td>
<td>110,500</td>
<td>1,187,000</td>
</tr>
<tr>
<td>Correct betterment and fee (e)</td>
<td>1,513,000</td>
<td>141,000</td>
<td>1,654,000</td>
</tr>
</tbody>
</table>

Notes:
(a) Section 13 Blocks 2, 3, 4, 5, 6, 18, 19 and 20.
(b) Section 13 Block 10.
(c) The properties were passed in for negotiation because these bids did not meet the reserve prices.
(d) Assumes that improvements were worth $80,000 per lot.
(e) Assumes negligible demolition costs.

Policy recommendations

Two sets of policy recommendations follow directly from our analysis of the Canberra leasehold system. In regard to greenfield development, we endorse the ACT Government’s goal of playing a greater role in the site planning and land development process. This could achieve two objectives: higher quality living environments and a greater realisation of betterment from greenfield development. In regard to reuse and redevelopment of previously developed sites, we recommend that the definition of betterment be changed to capture appropriately the increase in property value due to changes in lease purpose. Also, betterment should be charged at a rate of 100 per cent; subsidies to encourage more efficient use of infrastructure in inner areas should be made in a
much more direct and open form than remission of betterment fees.

**Greenfield development**

The ACT Government's current commitment to joint venture development and announced intention in the 1994/95 budget to resume public development are founded on two objectives that we endorse: higher quality living environments and greater capture by the Government of betterment which occurs when non-urban land is converted to urban use.

The role of the ACT Government in influencing the quality of development in Palmerston, and in the newer suburbs of Tuggeranong, gives no great cause for confidence that its greater involvement *per se* will improve the quality of living environments. In Palmerston, small allotments, narrow streets and verges, limited local open space, and a high proportion of medium density housing, combined with inadequate attention to design, have produced a low quality of development. Much of this must be seen as an outcome of Government policy that did not set a maximum number of dwellings or exercise sufficient control over design and appeared to be concerned mainly to economise on the cost of its investment in infrastructure.

There is some room for optimism from the adoption of the ACT Code for Residential Development, for which the Department of Environment, Land and Planning received an award from the Royal Australian Planning Institute (ACT Division) in 1993. The new code incorporates a well-articulated statement of objectives, design alternatives, performance criteria, and measures for planning and subdivision, building design and siting, private and public open space, streetscapes and landscapes, transport and streets, and physical services. It can be expected to enhance the quality of future development. The code was developed to some extent as a reaction to the kind of development that has
occurred in Palmerston. Despite its adoption, it is not mandatory since it is not incorporated in legislation.

On the basis of our analysis, it is clear that it would be to the financial advantage of the ACT Government and the people of the ACT for the Government to resume the role that it took in land development prior to 1989. Since it already effectively owns all of the developable land, there seem to be no major barriers to it doing so.

Change of use

The current method of calculating betterment (what we have called Method D) equates it to the increase in the value of the site only. This results in the correct betterment fee where no redevelopment occurs only when the change in use does not affect the value that the existing improvements add to the site (an unlikely situation); otherwise, the fee charged will not be correct. Moreover, Method D will not result in the correct betterment fee where redevelopment does occur unless the value of the existing improvements for their current use and the cost of their demolition are both negligible. Basing the betterment fee on the increase in value of the entire property—i.e., the lease—is the correct alternative and, in this respect, involves a return to Method A. The before value should be the total value of the property in its current use and its current condition, assuming no change to the lease purpose clause. The after value should be the total value of the property in its current condition for its new use, i.e., ignoring the costs of demolition and new construction, if any. The correct method would gain for the Government the same revenue as it would receive if it purchased the leases of properties to be redeveloped at their market prices (given their current
lease purpose clauses) and auctioned them for redevelopment.  

The correct definitions of before and after values follow directly from an understanding of land use succession in a private market. Changes occur only when, in its current condition, a property’s value for its new use is greater than its value in its current use. This means that each change in use is associated with a change in value. In a private market, the increase in value may be divided between the previous property owner and the developer. With public leasehold, it all belongs to the government and hence it is incumbent on the government to set fees to equal the increment in property value that results from granting permission for a change of use.

Although the current method of assessing betterment is incorrect, it must be admitted that the increase in site value is a somewhat appealing base because the betterment that results from a change in use accrues mainly to the site. Nevertheless, a charge of 100 per cent of this definition of betterment will make unprofitable many changes of use that would have been profitable without the charge. Such a charge is inefficient, because it gives the wrong signals to property developers.

The changes that need to be made to the present regulations to provide a correct base are to delete subsection 12(2)(a), which refers to site value, and add some language clarifying the method for calculating the after value. The definition would then read:

“added value”, in relation to a lease to which a variation is proposed, means the amount by which the value of the lease immediately after the variation exceeds the value of the lease immediately before the variation, it

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45 This latter procedure would overcome the problems that seem to arise in setting appropriate values for betterment. Also, it would enable the Government to play a more active role in redevelopment. Its main disadvantage is that it would be politically unpopular.
being assumed: (a) that the rent payable throughout the term of the lease is a nominal rent; and (b) in relation to the value of the lease immediately before the variation—that no variations of the lease would be agreed to during the remaining term of the lease. The value of the lease after the change in permitted use should be calculated assuming that the same improvements are in place as in the before calculation. If these improvements are to be demolished, then their after value will be negative, due to the cost of demolition.

We recommend that, if the ACT Government wishes to subsidise redevelopment, it do so directly rather than through concessional betterment charges. The current policy of remission of 50 per cent of betterment fees for residential redevelopment bears at best only a crude relationship to any benefit that might be attributable to urban consolidation. This would be an equitable solution to the current disparate treatment of developers of new and established sites and different types of land use.

Lessons from Canberra

In the context of a society in which private ownership of urban land is the norm, it is perhaps not surprising that practices more consistent with that norm have tended to encroach on Canberra’s experiment with public land tenure. Examples of this include: the shift from land rents to premiums; the failure to charge 100 per cent of betterment for changes in use; the fact that residential land leases are effectively in perpetuity; and the fact that leases are very rarely terminated by the government. While the reason for the latter may well be in part because the government has always withheld sufficient land from development to satisfy future public needs, it also reflects the government’s unwillingness to play
an active role in the redevelopment process. The ironic result of this is that leasehold in Canberra is in fact a more secure form of tenure than freehold elsewhere in Australia.

The Canberra experience suggests that it is important to have a clear concept of the government's role as a landlord. Accepted principles of public asset management require the government to maximise the return from its land holdings. Thus we have argued that the ACT Government should charge 100 per cent of properly defined betterment and resume its earlier role in the development of new suburbs. It must also be kept in mind, however, that the return to be maximised is not only financial, nor always even precisely measurable. In a misguided effort to reduce costs, the ACT Government has sacrificed good planning principles in the development of its new suburb of Palmerston. The return to be maximised should be defined instead in terms of the benefit to the people of the ACT, in whatever form that might take. Canberra has realised many benefits from its system of public land tenure, but its government must regain its proper role as public landlord if it is to protect those benefits from further erosion.

The ACT Government has two roles in relation to land: first, it is the land owner and manager with a responsibility to its taxpayers to maximise returns from its land; and, second, it is the land use planner with a responsibility to protect the environment and amenity for all Canberra residents. Sometimes these roles are in conflict. The best way to deal with such conflicts is for the role that can be specified in business terms—in this case the land management role—to be performed by an authority at arms length from the Government. The Government should give a land management authority clear objectives: to maximise profits subject to providing sites for development at premiums comparable to prices elsewhere in Australia. It would report publicly to the Government on its
achievement of those objectives. Land use planning would remain a direct responsibility of the elected government. The relationships between the authority and the Government should be open and transparent. There should not be day-to-day political involvement in its operation. In those circumstances, it would be clear when land use decisions were being taken for financial reasons and when they were being taken for planning reasons. Two results of such an arrangement should be better decisions and greater accountability.
Appendix: Algebraic analysis of betterment for change of use

A change in land use will be profitable when the anticipated value of a property, including any buildings on the site, after a change in use ($V_a$) exceeds its value before the change ($V_b$) plus the costs of demolition ($C_d$), if any, and new construction or rehabilitation ($C_n$), if any. In other terms, a property can be profitably put to a new use or redeveloped when:

$$V_a > V_b + C_d + C_n,$$

where the $V$s refer to total property value, the $C$s to costs, and the subscripts $a$, $b$, $d$ and $n$ refer to “after”, “before”, “demolition” and “new”, respectively. Under a system of private land tenure, the potential land value associated with a permitted reuse or redevelopment is already reflected in the property’s current market value, $V_b$. This means that a developer wishing to acquire and develop a site must in effect pay much or all of the betterment to the current land owner before that owner will release the site. Of course, developers who acquire land speculatively in advance of reuse or redevelopment may be able to capture some of the betterment themselves.

Under any leasehold system, the lessee owns only the right to use the property for the purpose designated in the lease. The lessor owns both the right to use it for any higher-value use, and the increase in value that would result from a change in use. With public land ownership, good asset management requires that full betterment should be collected by the government; otherwise, the

46 The value of a “property” or the value of a “lease” refers to the value of both the site and buildings or other improvements. The value of a “site” means the value of the land without improvements, but with roads, water, sewerage and other services provided.

47 This discussion is based in part on Heilbrun (1987), pp. 340-344.
government is effectively subsidising developers or lessees by allowing them to keep increments in land value.

Betterment under public ownership is the increase in the value of the property as a result of permission being given for a new use. The analog to inequality [1] above is given as equation [2]:

$$ B = V_n - (V_p + C_d + C_n). \tag{2} $$

Here, the increase in value, $B$, is simply the total value of the property in its new use, $V_n$, less its value in its previous use, $V_p$, demolition costs, if any, and the costs of new construction or alterations. Rearranging [2] slightly, we can define $B$ in terms of “before” and “after” values:

$$ B = (V_n - C_d - C_n) - V_p, \tag{2'} $$

where the bracketed term on the right side of the equation is the after value and the second term is the before value. If the term in brackets is defined as $V_n'$, the value of the lease in its present condition for the new use—i.e., net of demolition and new construction costs but inclusive of any value the existing improvements may have in the new use—betterment becomes $V_n' - V_p$. The general rule is that betterment is the increase in the value of the lease in its present condition as a result of the permitted change in use. Where demolition is to occur, $V_n' = L_n - C_d$ (where $L_n$ is the value of the land in the new use) and betterment is $(L_n - C_d) - V_p$.

Where there is no demolition, $V_n' = V_n - C_n$ and betterment is $(V_n - C_n) - V_p$.

With public ownership of land, $V_p$ should be lower than $V_b$ because $V_p$ does not include a property’s potential for redevelopment. Because the owner of a lease does not own any rights to a change in use, and full betterment should be charged by the government when permission is granted for a change in use, $V_p$.

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48 Note that, in the case of public ownership of land, the subscripts $n$ and $p$ are used (referring to “new” and “previous”) in lieu of $a$ and $b$, to emphasise the fact that these values exclude any potential and refer only to the value of the property in its approved use.
should reflect only the value of the property for its current use. In other words, the current leaseholder will be unable to earn any betterment when the lease is transferred because the full value of betterment is collected by the government.

The implications of this are as follows: rather than \((L_n - C_d) - V_p\), the base for the charge, because of subclause (a) above, is the larger \(L_n - L_p\). Consider the situation that arises when redevelopment from residential to commercial use is being considered, where betterment is charged at the rate of 100 per cent of \(L_n - L_p\). Unless \(V_p - L_p (= I_p, or the value of improvements in the previous use)\) and the cost of demolition are negligible, which would be true, for example, where an existing dwelling had no value for residential purposes, the charge will exceed the increase in the value of the lease and no redevelopment will occur.

Under the current regulations in Canberra, that problem will occur less frequently for redevelopment from residential to higher-density residential or from commercial to residential, because the betterment charge is levied at less than 100 per cent of the base. The percentage falls with the duration of the existing lease, to 50 per cent for leases that have been in existence for 20 or more years (as is the case in most areas being considered for redevelopment).49

The problem can also be seen when a change in use is permitted and where the existing building will be used for the new purpose rather than demolished, though it may be renovated or altered and additions may be built. If a house is to be used for a small business, betterment is the increase in the value of the lease, including existing improvements, for the new use, but before meeting the cost of any necessary alterations. The same base is appropriate if the change is adding several floors to an office building, or increasing the density of

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49 The charge would still prevent redevelopment on a lease of 20 or more years duration that would be profitable without it, whenever \(L_p < 2(V_p + C_d) - L_n\).
building on an industrial site. Since the site is not cleared, it is even more obviously wrong to use site value to define the base for the charge. The current base for calculation of betterment is $L_n - L_p$ so that precisely the same problems arise as in cases involving redevelopment.

Tables A1 and A2 compare hypothetical betterment fees under alternative definitions of betterment. Table A1 assumes that the change of use involves complete demolition of existing improvements and redevelopment; Table A2 assumes that the new use will be accommodated in the existing building with no alterations. In both cases, the details are hypothetical and intended only to be illustrative. The most remarkable point to be drawn from Table A1 (redevelopment) is that the current regulations (Rule 3) can result in betterment charges that are substantially higher than the correct ones (Rule 1); this would make any redevelopment unprofitable when the charge is at the rate of 100 per cent of betterment. Rule 2, on the other hand, subsidises developers and lessees. In Table A2 (no redevelopment), Rules 2 and 3 are both shown to subsidise developers and lessees.
<table>
<thead>
<tr>
<th>Rule number</th>
<th>Betterment rules (Analogous ACT methods)(^{(a)})</th>
<th>Hypothetical before values</th>
<th>Hypothetical after values</th>
<th>Betterment</th>
<th>Per cent of true betterment(^{(b)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Before value: Land and improvements assuming no variation. After value: Land minus demolition costs.(^{(d)})</td>
<td>$L_p + I_p = V_p$</td>
<td>$L_n - C_d = V'_n$</td>
<td>$V'_n - V_p$</td>
<td>100 by definition</td>
</tr>
<tr>
<td></td>
<td>(Method A)</td>
<td>$100,000$</td>
<td>$150,000$</td>
<td>$250,000$</td>
<td>500,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$500,000$</td>
<td>$750,000$</td>
<td>$1,250,000$</td>
<td>$1,500,000$</td>
</tr>
<tr>
<td>2</td>
<td>Before value: Land only including risk-adjusted potential.(^{(d)}) After value: Land only.</td>
<td>$L_b + 0 = L_b$</td>
<td>$L_n - 0 = L_n$</td>
<td>$(L_n - L_b)(V'_n - V_p)$</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td>(Methods B and C)</td>
<td>$450,000$</td>
<td>n/a</td>
<td>$450,000$</td>
<td>$500,000$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$1,350,000$</td>
<td>n/a</td>
<td>$1,350,000$</td>
<td>$1,500,000$</td>
</tr>
<tr>
<td>3</td>
<td>Before value: Land only assuming no variation. After value: Land only.</td>
<td>$L_p + 0 = L_p$</td>
<td>$L_n - 0 = L_n$</td>
<td>$(L_n - L_p)(V'_n - V_p)$</td>
<td>400,000</td>
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<td></td>
<td>(Method D)</td>
<td>$100,000$</td>
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<td>$500,000$</td>
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<td></td>
<td></td>
<td>$500,000$</td>
<td>n/a</td>
<td>$500,000$</td>
<td>$1,500,000$</td>
</tr>
</tbody>
</table>

Notes:

(a) See Table 2. Note that the calculation of fees under the analogous methods usually involved partial remission of betterment.

(b) The calculations are based on the assumption that Rule 1 is the correct one.

(c) To simplify the calculation, it is assumed that existing improvements have no value for the new use. The cost of demolition, $C_d$, is assumed to be 5% of the before value of improvements.

(d) Land value including risk-adjusted potential, $L_b$, is assumed to be 90% of land value after the lease variation is granted, $L_n$. 

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Table A1. Hypothetical betterment calculated under alternative rules: change of use with demolition and redevelopment.
Table A2. Hypothetical betterment calculated under alternative rules: change of use with no demolition or redevelopment

<table>
<thead>
<tr>
<th>Rule number</th>
<th>Betterment rules (Analogous ACT methods)(^{(a)})</th>
<th>Hypothetical before values</th>
<th>Hypothetical after values</th>
<th>Betterment</th>
<th>Per cent of true betterment(^{(b)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Before value: Land and improvements assuming no variation. After value: Land and pre-existing improvements.(^{(c)})</td>
<td>(L_p + I_p = V_p)</td>
<td>(L_n + I_n = V_n')</td>
<td>(V_n' - V_p)</td>
<td>100 by definition</td>
</tr>
<tr>
<td></td>
<td>(Method A)</td>
<td>100,000 150,000 250,000</td>
<td>500,000 250,000 750,000</td>
<td>500,000</td>
<td>100</td>
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<tr>
<td></td>
<td></td>
<td>500,000 750,000 1,250,000</td>
<td>1,500,000 1,250,000 2,750,000</td>
<td>1,500,000</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Before value: Land only including risk-adjusted potential.(^{(d)}) After value: Land only.</td>
<td>(L_o + 0 = L_o)</td>
<td>(L_n + 0 = L_n)</td>
<td>((L_n - L_o)/(V_n' - V_p))</td>
<td>(L_n - L_o)</td>
</tr>
<tr>
<td></td>
<td>(Methods B and C)</td>
<td>450,000 n/a 450,000</td>
<td>500,000 n/a 500,000</td>
<td>50,000</td>
<td>10</td>
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<td>1,500,000 n/a 1,500,000</td>
<td>150,000</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Before value: Land only assuming no variation. After value: Land only.</td>
<td>(L_p + 0 = L_p)</td>
<td>(L_n + 0 = L_n)</td>
<td>((L_n - L_p)/(V_n' - V_p))</td>
<td>(L_n - L_p)</td>
</tr>
<tr>
<td></td>
<td>(Method D)</td>
<td>100,000 n/a 100,000</td>
<td>500,000 n/a 500,000</td>
<td>400,000</td>
<td>80</td>
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<tr>
<td></td>
<td></td>
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<td>1,500,000 n/a 1,500,000</td>
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<td>67</td>
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</tbody>
</table>

Notes:
(a) See Table 2. Note that the calculation of fees under the analogous methods usually involved partial remission of betterment.
(b) The calculations are based on the assumption that Rule 1 is the correct one.
(c) To simplify the calculations, it is assumed that the after value of improvements \(I_n\) includes only the value of pre-existing improvements for the new use.
(d) Land value including risk-adjusted potential, \(L_o\), is assumed to be 90% of land value after the lease variation is granted, \(L_n\).
References

Australian Bureau of Statistics (various years a), *Australian Year Book*, Canberra.

________ (various years b), *Census of Population and Housing*, Canberra.


________ (1988a), "The Canberra leasehold system," Appendix to *Report on the Canberra Leasehold System*, Senate Standing Committee on
Transport, Communications and Infrastructure, Parliament of the Commonwealth of Australia.


_______ (1993), Territory Plan, Canberra.


URP Working Papers
1987 - 1994


No 23. Greig, Alastair W., *Retailing is More Than Shopkeeping: Manufacturing Interlinkages and Technological Change in the Australian Clothing Industry*, August 1990 [out of print] [since published as ‘Technological change and innovation in the clothing industry: the role of retailing’, *Labour and Industry* 3 (2 & 3) June/October 1990].


No 41. Mowbray, Martin, *Transforming the Great Australian Dream: The Quarter vs The 30th of an Acre Block*, February 1994


No 43. Weaver, John, Scorned Hazards of Urban Land Markets: ‘The Carnival of Excess in Late-Nineteenth Century Melbourne’, November 1994


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