CANBERRA
Site and City

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This book, written at the invitation of the Australian National University Press, tries to paint a picture of Canberra for the reader who wants something more than a glossy tourist leaflet and yet does not have access to the voluminous reports of the National Capital Development Commission or the many other studies dealing with various aspects of the city’s development. It is, necessarily, a personal statement written by someone who has lived in the national capital since 1959 and witnessed its growth from little more than a country town of 40,000 inhabitants (admittedly large even then by Australian standards!) to a flourishing city of 175,000.

Canberra is unique in several respects. It is free of many of the restrictions facing older and larger urban areas. Apart from limitations imposed by topography, economics, and the administrative and political structure, it has provided an unusual chance for planners and administrators to carve out a city on rural land owned by the Commonwealth of Australia, unimpeded by any local government with executive powers. It is a vigorous, new, clean, garden city populated in the main by young, middle class, white collar, car-conscious residents whose levels of expectation and aspiration are high. It is now the largest inland city in Australia and the most successful example of planned development away from the State capitals. All these factors have provided opportunities and challenges that on the whole have been met with credit and, occasionally, with real distinction. There is much, then, that is good about Canberra, but any proper assessment must temper praise with criticism for there are still lessons to be learned and solutions to be found in this and other planned cities. Having said that, it is also true that there are few places in Australia, and possibly even in the world, where the standard of amenities is so high and where there is such a wide variety of opportunities available for the people who want to take them.

G.J.R.L.
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Figure 3 is based on a map published in 1933 by the Property and Survey Branch of the Department of the Interior; Figures 4, 5 and 9 are based on maps in Tomorrow's Canberra, pp. 16, 93 and 213; and Figures 6, 7 and 8 are redrawn from the NCDC, Annual Report, 1973/74, pp. 19, 22 and 25.

Many of the photographs in this book were taken by the author in October-November 1974. Acknowledgment is made to the National Library of Australia for permission to reproduce Plates 1, 2, 4, 6 (photographer, Dr Jorma Pohjanpalo of Finland), 7, 8, 10 (Weston album), 12, 14, 15 (Mildenhall collection), 16, 18, 19 (Percy Deans collection), 21 and 46. The Australian Information Service provided Plates 5, 11 and 25.
Canberra and environs, 1974.
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This northeasterly view across Capital Hill to Mount Ainslie along Griffin's 'land axis' illustrates the alternative sites for the permanent Parliament House in relation to the existing building in the centre of the picture. Camp Hill is the slight knoll between the ring road and the present Parliament House. See p. 83.
The concept of a national capital in a separate Commonwealth territory emerged during the extended and often acrimonious negotiations that led to the six colonies uniting as the Commonwealth of Australia on 1 January 1901. The Secretary of State for the Colonies had suggested as early as 1847 that some method would have to be devised to enable ‘the various legislatures to co-operate with each other in the enactment of such laws as may be necessary for regulating the interests common to these possessions collectively’. Soon afterwards the Privy Council endorsed a proposal that one of the colonial Governors should hold a commission constituting him Governor-General of Australia with power to convene a General Assembly ‘at any time and at any place within your Majesty’s Australian dominions which he might see fit to appoint for the purpose’.

The Bill for the Better Government of the Australian Colonies, first introduced in the House of Commons in 1849 and reintroduced the following year, took account of these suggestions but the federal clauses were opposed and eventually deleted. Thereafter discussions took place from time to time between the colonies (each of which, apart from Western Australia, gained responsible government during the 1850s). In March 1862, for instance, South Australia suggested that representatives should meet to try to reach some agreement on matters of common interest since ‘the systematic treatment of each colony by its neighbour as though it were a foreign state, is gradually creating, and must continue to excite, feelings between the inhabitants of the several Colonies scarcely in accordance with the unity of their origin’. But little came of such negotiations, and each of the colonies — whatever their nominal attitude to ‘free trade’ and ‘protection’ — erected tariff barriers and invested in railways, roads, harbours, and other public works in a spirit of competition rather than of cooperation.

At the root lay the struggle for commercial and industrial supremacy between Sydney, Melbourne and, to a lesser extent, Adelaide, partly for reasons of aggrandisement and prestige but mainly because of the practical benefits and multiplier effects to be obtained from securing a significant share of Australia’s overseas trade. Railways (almost all government owned) were built without any co-ordination of construction schedules or inter-connecting of lines and without consultations over the choice of gauge, and freight rates were structured so as to distort space and thus win business from, and capture
markets in, areas across neighbouring borders. In the 1880s, for example, the rail distance between Melbourne and Echuca on the Victoria-New South Wales border was ‘reduced’ to one-third in cost terms for products like clothing and footwear. Developments elsewhere, such as the Zollverein in Germany, did not pass unnoticed in the metropolitan press whenever wrangles over customs duties in southeastern Australia came to the fore. The *Sydney Morning Herald* reached the heart of the matter in 1876 by declaring:

Nothing can be more senseless than that these colonies, members of the same empire, should have sentinels from the Customs-house pacing their borders, and repressing the free interchange of produce as much as if they were foreign States, and owed allegiance to different Sovereigns. Such a condition of things, side by side with our aspirations for federation, may well excite the ridicule of English statesmen and the English Press.

Intercolonial meetings of bodies like the trade union congresses and chambers of manufactures in the late 1870s and 1880s discussed pulling down the colonial fences but remained divided as to how this could be done. Nonetheless, in this and other ways the growing recognition that some of the problems faced by each colony were common to them all gradually set the stage for an Australian Federation Conference at Melbourne in 1890 and a National Australasian Convention (which included delegates from New Zealand) ‘to consider and report upon an adequate scheme for a Federal Constitution’ at Sydney in 1891. There was, naturally, some discussion about the possible location of the seat of government, but a proposal that it should be sited at Sydney was quickly rejected. Instead the resulting draft constitution simply left the decision to the Federal Parliament.

Debate about federation continued in the press, at public meetings, and at further conventions at Adelaide, Sydney and Melbourne in 1897 and 1898. Referenda held in each colony except Western Australia approved the new constitution, but as the majority in New South Wales was below the prescribed minimum the Parliament there drafted changes to make the proposals more acceptable. On the one hand, the ‘Mother Colony’, suspicious of the upstart Commonwealth, demanded that the capital should be in New South Wales; on the other, Victoria was far from happy at the prospect of its archrival becoming the home of the new Parliament. A Premiers’ Conference early the following year reached a compromise: the capital would be within New South Wales but at a ‘reasonable distance from Sydney’ and in territory vested in the Commonwealth (following the American rather than the Canadian precedent). As a further *quid pro quo* the Victorians successfully proposed that until the Federal Parliament met at the seat of government it should convene at Melbourne, where in the event it and the Commonwealth public service remained for twenty-six years.

By the time the *Commonwealth of Australia Constitution Act* had been passed by the Imperial Parliament, assented to by the Queen, and proclaimed on 17 September 1900, the wording of the relevant section had become more precise:
The seat of Government of the Commonwealth shall be determined by the Parliament and shall be within territory which shall have been granted to or acquired by the Commonwealth, and shall be vested in and belong to the Commonwealth, and shall be in the State of New South Wales, and be distant not less than one hundred miles from Sydney. Such territory shall contain an area of not less than one hundred square miles, and such portion thereof as shall consist of Crown lands shall be granted to the Commonwealth without any payment therefor.

In this way, then, the idea of a national capital separate from any of the existing capital cities was born. As Sir Keith Hancock has pointed out, it was part of the romantic makebelieve of the time to pretend that it was the spontaneous conception of aspiring national idealism. But the legend was a plaything of a tiny minority. The great majority of Australians knew well enough that the national capital had been conceived, not in generous national enthusiasm, but in the haggling of provincialisms.

If the intercolonial war had been decided, the battle of the sites had yet to come. In November 1899, even before the Constitution Bill had been introduced into the House of Commons, the Premier of New South Wales appointed Alexander Oliver Q.C. as a Royal Commissioner to examine and report upon the suitability of the forty places (including Canberra-Queanbeyan) that had been nominated. Oliver recommended the southern Monaro area centering on Bombala-Eden as his first choice with Orange and Yass as equal second (see Figure 1), and the New South Wales Government thereupon offered to transfer any of these three sites to the newly fledged Commonwealth. The latter felt, however, that other possibilities should be examined and parliamentarians toured the areas concerned (see Plate 1). The results were inconclusive for, as L. F. Fitzhardinge has suggested, neither the weather nor the hospitality of the local committees was perhaps conducive to balanced judgment. A Royal Commission then recommended Dalgety, but during the subsequent debates the House of Representatives voted for Tumut and the Senate for Bombala, and the first Commonwealth Parliament dissolved in November 1903 without reconciling the deadlock. Nevertheless, one important suggestion to emerge at this stage was that the area of the territory should not be less than 2590 square kilometres (1000 square miles) so as to give the Commonwealth control of a water catchment and the benefit of the expected rise in land values when development began.

The next year, however, the two Chambers managed to resolve their differences and by the Seat of Government Act 1904, assented to on 15 August, determined that the capital should be within twenty-seven kilometres of Dalgety, contain an area of not less than 2332 square kilometres, and have access to the sea. New South Wales immediately opposed this choice, one of the grounds being that as the territory was adjacent to the Victorian border it was not strictly speaking ‘within’ the State. But the objection also stemmed from a concern that Twofold Bay nearby might be developed as a major port in competition with Sydney, and fears were even expressed that if the capital were built too near the coast it
could be bombarded by warships. Criticisms of Dalgety’s remoteness and harsh winter climate were countered by Prime Minister Deakin with the argument that Federal Parliament would meet for only three or four months during the summer and that a mere 300 or so public servants would be permanently located there — a view that indicates the scale of development then being contemplated. Despite lengthy correspondence, the stalemate still had not been resolved when the second Commonwealth Parliament was dissolved in November 1906. Some members then turned their attention to the Yass-Canberra area and, after a further series of exhaustive ballots in the House of Representatives and the Senate, managed to have this district named instead of Dalgety in the Seat of Government Act 1908.

Soon afterwards Charles Robert Scrivener, a New South Wales district surveyor, was directed to report upon the most suitable site in the nominated area. In a matter of weeks his report had been submitted, endorsed by an Advisory Board in March 1909, and become the subject of a new round of negotiations. Eventually in October, New South Wales agreed to transfer approximately 2332 square kilometres near Canberra and a further nine square kilometres at Jervis Bay for port and defence purposes. It also conceded to the Commonwealth the right to construct, maintain, and work a railway from the territory to Jervis Bay (which, in fact, has never been built); the right to use the waters of the Snowy River or such other rivers as might be agreed upon to generate electricity for the territory; and paramount water rights over the catchment areas of the Molonglo and Queanbeyan Rivers and their tributaries. In December 1909 both Parliaments passed Acts endorsing these arrangements, and a year later a proclamation was issued vesting the Australian Capital Territory of 2360 square kilometres in the Commonwealth as from 1 January 1911. By a further Act in 1915 an area of seventy-three square kilometres at Jervis Bay was also surrendered to the Commonwealth as from 4 September 1915.

After more than a decade the search for a national capital site had been completed: the search for a plan had now to begin.

Plate 1 Early in 1902 parliamentarians made a careful inspection of the prospective sites for the national capital.
Figure 1 This map indicates the places in southeastern Australia which were nominated as possible sites for the national capital, and the relationship of the ACT to Sydney and Melbourne and the State border.
The site chosen for the proposed city lay in the northeast of the Australian Capital Territory astride the floodplain of the Molonglo River, at this point about 550 metres above sea level, flowing northwesterly across the Territory and into the Murrumbidgee River. North of the Molonglo two ranges of hills rose nearly 300 metres with a strip of treeless lowland three kilometres wide between them; south of the river and its floodplain the topography was generally more undulating, being dominated in the west by a steep-sided ridge running northwest to southeast (see Plates 2 and 3). About 1000 people were living in this general area which had long been divided into grazing properties and small farms, including Lambrigg, the scene of William Farrer's famous wheat-
Early planning and development

breeding experiments towards the end of the century. A small village, with a school and store, had grown up around St John’s Church, built of locally quarried stone and consecrated in 1845, but the main administrative and service centre was sixteen kilometres away at Queanbeyan, which had been left just outside the territory border. Apart from parties of surveyors and the labourers who had started work on the Royal Military College at Duntroon in 1910, life remained much the same as it had done since the arrival of the pioneer settlers.

The Commonwealth launched an international competition for the city plan in April 1911, with plans, scale models,
and photographs of the area being displayed in the principal cities overseas. Throughout the world at this time there was a great revival of interest in town planning. The World’s Columbian Exposition, or Chicago Fair, of 1893 had focused attention on the ‘city beautiful’: in Washington there were moves to rescue and revive L’Enfant’s original plans for the city which had adopted many ideas from Versailles; in England the publication of Ebenezer Howard’s book *Tomorrow, A Peaceful Pathway to Real Reform* in 1898 had promoted the ‘garden city’ movement; in India there was talk of moving the administration from Calcutta to New Delhi; and in Brazil the notion of an inland capital was gaining support. Thinking about the new Australian capital was thus greatly influenced by these visions of grace and space in a garden setting. Something of the ideals had been imparted to Scrivener in January 1909 when he was enjoined to bear in mind during his search for a site that

Plate 5 The birth of the city was officially celebrated on 12 March 1913 when stones in the base of a commencement column — which has never been completed — were laid by the Governor-General, Lord Denman; the Prime Minister, the Rt Hon. Andrew Fisher; and the Minister for Home Affairs, the Hon. King O’Malley. Lady Denman announced that the name of the National capital would be Canberra.

Plate 4 Canberra as envisaged by Eliel Saarinen whose design was awarded second prize in 1912.
the federal capital should be a beautiful city, occupying a commanding position with extensive views, and embracing distinctive features, which will lend themselves to the evolution of a design worthy of the object, not only for the present, but for all time; consequently the potentialities of the site will demand most careful consideration from a hygienic standpoint, with a view to securing picturesqueness and also with the object of beautification and expansion.

Indeed one of the factors that influenced Scrivener was the possibility of damming the Molonglo River to provide an ornamental feature, and it is a tribute to his perception that the water in Lake Burley Griffin is held at 556.4 metres (1825 feet) — the level that he himself recommended.

Almost immediately difficulties arose. The Royal Institute of British Architects and the Institution of Civil Engineers objected to the Minister for Home Affairs, King O'Malley, having the final decision rather than a board of professional assessors and advised members to boycott the competition. Then the engineer, architect and surveyor who examined the 137 entries failed to come to a unanimous decision. O'Malley, however, accepted the majority view and awarded first prize of £1750 to Walter Burley Griffin of Chicago, second prize of £750 to Eliel Saarinen of Helsingfors (whose grandiose plan included no fewer than seventeen monumental bridges over the Molonglo), and third prize of £500 to D. Alf. Agache of Paris (see Plate 4).

Architectural bodies that had poured scorn on the competition now dismissed the decision as a travesty. O'Malley countered by referring the designs to a Departmental Board which considered none of them suitable. Griffin's design, allowing for an initial population of 25,000 and expansion to 75,000, was thought to be too elaborate because it seemed inconceivable at the time that the population could ever reach even 10,000. In C. S. Daley's view, the officials were honestly fearful that the Griffin plan for development on both sides of the Molonglo might become a financial fiasco. The Board thereupon incorporated bits and pieces from the various entries in its own plan, which concentrated development south of the Molonglo, and submitted it to O'Malley in November 1912. This added more fuel to the fire and was lampooned in professionals journals but, nonetheless, it was presented to Parliament and approved by O'Malley in January 1913. The Board's plan was thus the official one when the foundation stones for a commencement column were laid on Capital Hill on 12 March 1913 and the city formally named (see Plate 5).

Even the selection of the name attracted its share of controversy. The public had had a field day when invited to submit suggestions, with the 750 entries running the gamut from the sublime to the ridiculous. Apart from those using or incorporating the names of prominent Australians or nearby areas, suggestions included 'Blue Ducks', 'Emu', 'Kangaroo', and even 'Kangaremu'; 'Acacia', 'Wattle', 'Banksia', and 'Olive'; 'Austral', 'Australisc', and 'Australamooloo'; and 'Eureka', 'Climax', 'Commonweal', and 'Perfection'. Some, like 'Admelsalra', 'Meladneyperbane', 'Sydbourne', and 'Symeladperbrisho', tried to combine...
the names of the State capitals. A few, such as ‘Gone Broke’, ‘Swindleville’, ‘Malleymaine’, and ‘Thirstyville’, were downright cynical. Present day residents can perhaps take some comfort from the fact that, amidst all the confusion surrounding the national capital at this time, the Cabinet simply decided to perpetuate the name Canberra, said to be derived from an Aboriginal word meaning ‘meeting place’, by which the area had generally become known since the 1860s.

A change of government after the naming ceremony was seen as a fortunate turn of the political wheel by architects and surveyors practising in Australia. No fewer than 260 signed a petition seeking a Royal Commission to ‘investigate the general administration relative to the building of Canberra’, to ‘review the present built up design to which so much expert objection has been taken’, and thus to ‘save Australia’s Capital City from the grave constructional disaster that threatens it’. Instead, the Government invited Griffin to Canberra in mid-1913 for discussions with the Departmental Board, the very people who had set his plan aside. It was an impossible situation: the Board genuinely believed that Griffin’s scheme was too elaborate and he was not given to compromise. But W. H. Kelly, the new Minister for Home Affairs, impressed by this ‘shy, smiling little man’, decided to disband the Board, cancel the approval given to its plan, and appoint Griffin as Federal Capital Director of Design and Construction (see Plate 6).

In October Griffin submitted a revised version of his plan, the essential

Plate 6 Walter Burley Griffin (1876-1937) photographed at Castlecrag, Sydney, on 27 July 1930, ten years after he had left Canberra.
Figure 2 Griffin’s revised plan of October 1913, which was produced in 1918 and became the Gazetted Plan of 1925.

This was the first of many versions, the last of Plan of 1925.
characteristics of which are illustrated in Figure 2. A *land axis* was projected following a line from Mount Bimberi (1912 metres) on the Territory border through Red Hill and Capital Hill to Mount Ainslie. At right angles to this he projected two subsidiary axes: a *water axis* from Black Mountain in the general direction of the waterway, and a parallel *municipal axis* running from Mount Pleasant through City Hill. He envisaged Capital Hill, the focus of nine avenues, as the location of the Capitol, a general administrative building for popular reception and ceremonial, which would be flanked by the residences of the Governor-General and the Prime Minister. Below it on the main land axis would be the Parliament House. Other departmental buildings, bounding a water court on the next lower terrace, were to extend to a solid terrace front of buildings and to still lower boulevarded embankments. There is a nice irony from the viewpoint of the 1970s in Griffin’s proposed juxtaposition of the courts of justice above a ‘water gate’ projecting into the lake basin. Around City Hill he focused an ‘urban administrative centre’ and around Mount Pleasant he placed an ‘urban mercantile centre’ which was to include the main railway station, a produce market, warehouses, and light manufacturing facilities. A dam across the Molonglo River would impound two irregularly shaped outlying lakes and three internal, formal lagoons bounding the government group on three sides ‘reflecting the buildings, augmenting humidity and aiding equability of atmosphere in the heart of the city’. Griffin saw local topographical features as points of reference over a city arranged in an orderly way with reference to them:

Taken altogether, the site may be considered as an irregular amphitheatre — with Ainslie at the north-east in the rear, flanked on either side by Black Mountain and Pleasant Hill, all forming the top galleries; with the slopes to the water, the auditorium; with the waterway and flood basin, the arena; with the southern slopes reflected in the basin, the terraced stage and setting of monumental Government structures sharply defined rising tier on tier to the culminating highest internal forested hill of the Capitol [sic]; and with Mugga Mugga, Red Hill, and the blue distant mountain ranges, sun reflecting, forming the back scene of the theatrical whole.

Everything was organised in a symbolic relationship with everything else. The University at the base of Black Mountain, for instance, was planned in concentric circles illustrating the expansion of knowledge:

Fundamental sciences, descriptive of nature, lead directly to the theoretical sciences dependent upon them along lines of derivation and through these, in appropriate combination, into the lines along which they are applied to the work of civilization. Some such arrangement is necessary to permit proper expansion in ever-changing fields, with convenience to students.

In keeping with this arrangement, physiology was near the athletic grounds; the medical, surgical, and pharmaceutical schools faced the hospital; agriculture was adjacent to the botanical gardens and forest reserve; and law and commerce lay near the Civic Centre of people, courts, and offices.

Although this revised plan was not immediately adopted officially, it formed a working basis for development. Changes of government, departmental antagonism, and World War I all
delayed progress, but Griffin used the limited funds and unskilled labour available to carry out earthworks for the main roads and the lake margins. His ideas, of course, were still evolving. The design had provided for an ‘initial city’ (located approximately where Manuka is today) to meet the immediate residential requirements before the construction of bridges over the Molonglo and the extension of the railway through the northern suburbs and on to Yass. By 1918 Griffin had abandoned this proposal, recognising that vested interests in this initial settlement might try to prevent the completion of the overall design. As part of this strategy he also eliminated the loop railway which was to pass through this initial city and along the northeastern side of the government group.

Other preparations went ahead without reference to Griffin. An eight kilometre construction line from Queanbeyan was opened to goods traffic in 1914 (and passenger traffic in 1923), a coal-fired power station was erected at Kingston and a brickworks at Yarralumla, and the Cotter Dam — nineteen kilometres to the west — was commissioned in 1915 with a storage capacity of 1.8 million cubic metres. But meanwhile time and effort had also been diverted into a Parliamentary inquiry into the lake scheme and a muckraking Royal Commission on Canberra’s development, which resulted in Griffin’s plan being approved on 3 November 1916 by O’Malley, back in the Home Affairs portfolio and now one of Griffin’s staunchest supporters.

After the war the Government, tired of the constant bickering and indecision about Canberra, made preparations for a Federal Capital Advisory Committee on which Griffin declined to sit as an adviser, reportedly saying that ‘a Board has length and width, but no depth’. Griffin’s contract as Federal Capital Director expired at the end of 1920 and his association with the city came to an end. His achievements, however, had not been inconsiderable: in less than eight years he had turned some of his opponents into allies and cynics into supporters, and had managed to convince people that the main outline of his grand design should not be easily set aside. By this time $2,114,000 had been spent on works and services and $1,480,000 on land acquisition.

The Federal Capital Advisory Committee was formally appointed in January 1921 ‘with a view to enabling the Federal Parliament to meet and the Central Administration of the Commonwealth Government to be carried on as early as practicable at Canberra’ on the basis of the Griffin plan. The Commission proposed to give priority to the temporary works needed to establish Parliament and related administrative departments in the city and to leave embellishments until later. A three year crash program of ‘utilitarian development and economy’ was approved but barely half the funds sought were made available and then only on a year to year basis. Uncertainties, shortages, and ‘influences of a political character exerted by opponents of the Federal Capital scheme’ delayed the work and prevented it from being carried through in a logical sequence.
Much of the construction undertaken at this stage was provisional in character. Roads, for instance, were laid down to facilitate the movement of supplies and equipment rather than in accordance with the planned width of 30.5 metres (61 metres — 200 feet — for main avenues). Or again it was considered inappropriate to replace the existing low-level crossing with a permanent high-level ornamental bridge to carry Kings Avenue over the Molonglo and, in any case, priority had to be given to the reconstruction of the light, timber bridge on Commonwealth Avenue which was weakened by floodwater in July 1922. This same flood also washed away the trestle bridge carrying a temporary extension of the Queanbeyan-Canberra railway from the power house to a point near Civic Centre (see Plate 7). Yet at the same time an extensive landscaping program — alongside future avenues, near planned residential subdivisions, and around 'unsightly buildings' — was beginning to etch in some of the outline of the future city.

With nice bureaucratic precision the Advisory Committee reported that by the end of 1924 its workmen had planted no fewer than 1,162,942 trees including those in the windbreak (Haig Park) across the Canberra valley, which for many years marked the northern edge of development (see Plate 8).

A competition for the Parliament House design had been launched in July 1914 but abandoned shortly after the outbreak of the First World War. In May 1921 the Advisory Committee was asked to submit plans for a galvanised iron Conference Hall to accommodate first a proposed convention and then, temporarily, the Federal Parliament. Two years later it was decided instead to erect a provisional Parliament House (at one-tenth the estimated cost of a monumental permanent structure) to be ready in time for Parliament to assemble there in 1926, the first sod for the brick structure — still the one in use today — being turned (with a steam shovel!) in August 1923. However, the complementary scheme to move the whole of the public service to Canberra ran into difficulties because Parliament resolved in July 1923 that a permanent Administrative Building should be constructed after Australian architects had been given the opportunity to submit competitive designs. The Advisory Committee, realising that this would delay the completion of office accommodation, recommended that the transfer of the public service should be organised in stages with a first group, consisting of about 160 key personnel drawn from all departments, being housed...
Plate 9 Part of the Causeway area, a legacy from the early construction days, which is still used for low-rental housing. It was not until late in 1974 that moves were made to include these streets as part of the Canberra gazetted plan.

Plate 8 View from the lower slopes of Mount Majura looking across towards Black Mountain (c. 1930). Part of the Ainslie residential area can be seen on the left in the mid-distance, and beyond that the line of trees forming Haig Park. Forty years later the area shown in this photograph accommodated about 35,000 people.
ed in a hastily designed, modest Secretariat Building (East Block) that could later be used as offices for parliamentarians.

This 'Secretariat' scheme was accepted and also became the basis for planning residential development for an estimated 5655 people, roughly evenly divided north and south of the Molonglo. Parts of Braddon (between Elder and Donaldson Streets), Forrest (east of Melbourne Avenue), and Kingston (then known as Eastlake) were laid out as 'garden suburbs' with streets lined by grass and trees, and fences (though not hedges) being prohibited in front of the building line. On 12 December 1924, 147 of the 393 residential and commercial leases offered at the initial auction were taken up (the first block being bought by the Queanbeyan retailing firm of J. B. Young & Co.). The minimum value of the dwellings to be erected ranged from $1000 in Braddon to $4000 for those fronting Northbourne Avenue, and building had to begin within two years. Parliamentarians, other public servants and construction workers were to be housed in the Canberra, Ainslie, and Kurrajong Hotels, guest houses, workmen's camps, and cottages. One of the legacies from this period is the group of temporary cottages at Causeway, still inhabited,

Plate 10 View across Commonwealth Avenue from West Block towards the Hotel Canberra (left) and the Albert Hall (right) with Black Mountain in the background. In 1928, when this photograph was taken, there were only 828 motor vehicles registered in the ACT.
producing the odd effect of a semi-slum tidily planned as such (see Plate 9). Provision had been made in the first instance for thirty-six shops at Civic Centre, thirty-eight at Manuka, and twelve at Kingston, but whereas construction started almost immediately after the auction in the latter areas, work at Civic Centre was delayed until an overall scheme could be finalised.

Some idea of the appearance of Canberra at the time of the first auction has been given by C. S. Daley who recalled that

There were no shops, no street lighting and very few roads in the city area, and the community was scattered, a small number of houses having been provided at Braddon, Kingston, Acton, the Causeway, Westlake, Westridge near Yarralumla, and at Molonglo where a large [internment] camp had been erected during the War and was used for accommodating workmen. There was, of course, the Royal Military College, an early established area [at Duntroon] with its own organised official routine.

The Advisory Committee was replaced at the beginning of 1925 by a Federal Capital Commission appointed under the Seat of Government (Administration) Act 1924, in the face of opposition from those who thought that the Minister should remain in full control. The Act also contained the very significant provision that the approved design — covering an area of about thirty-one square kilometres — should be published in the Government Gazette (where it appeared on 19 November 1925) and could subsequently be altered by the Minister only after giving notice of his intention to do so and receiving specific Parliamentary approval. At one and the same time this safeguarded the integrity of the plan and gave Parliament control over it.

The Commission was a statutory corporation in which were vested the whole of the land and other public assets (and liabilities) in the Territory. Since it took all the revenue from the Territory and was empowered to raise loans, the Commission escaped annual confrontations with the Treasury and with those opponents of Canberra who in previous years had succeeded in having the appropriations reduced. Moreover, for the first time, it brought together under a single authority the administration, design, and construction of Canberra as well as the development of municipal activities and the control of private enterprise: previously these responsibilities had been divided among three departments. On taking office, the Commission found that

about three-quarters of the brick work of Parliament House had been constructed; the central portion and one-half of the pavilions of Hotel Canberra were completed and the other portion still under construction; Gorman House had been commenced; the first portion of the Bachelors' Quarters [at Acton] was occupied; the Power Station with the original machinery was in existence; the main water supply system was constructed; the main sewers were well under way, and a few arterial roads had been formed. Accommodation was available for a certain number of the Commission's employees in cottages at Kingston, Griffith, Braddon and Acton, but nothing had been done towards the reticulation of services or the provision of homes or hotel accommodation for the Public Service. Its instructions were to complete Parliament House at the earliest possible date — January 1927 was now suggested as the deadline — by which time office and housing accommodation was also to be ready for the Parliamentary staff and
the small Secretariat which it was then intended should move to Canberra during Parliamentary sessions and back to Melbourne when they ended.

The Commission had no sooner started to tackle this hectic program than the Government decided in November 1925 that the Secretariat scheme would be unworkable and that the entire central office staff of the public service should be transferred to Canberra by June 1927. Overnight the whole basis of planning had to be scaled up to provide housing and offices for 1100 officers and their families. Additional hotels and guest houses were designed (sometimes existing plans were used for more than one building as in the case of the Hotel Acton which duplicated the Hotel Kurrajong) and accommodation at the Hotel Canberra doubled (see Plate 10). Office space was enlarged by building West Block, utilising part of the Hotel Kurrajong, and shifting a large wooden building from Melbourne. In addition, Parliament House had to be completed, Yarralumla homestead remodelled for use by the Governor-General, the Prime Minister's Lodge constructed, and a Government Printing Office (with a three kilometre underground pneumatic tube link to East Block and Parliament House) erected. Work also went ahead on schools and institutions like the Albert Hall, the Institute of Anatomy, the Australian School of Forestry, and the Observatory at Mount Stromlo. The Commission was faced, too, with the task of providing services to the scattered residential areas, noting wryly that 'a much more economical development could have been made without jeopardising the city plan'. Some idea of the flurry of activity can be gained from the fact that the Commission spent $9,360,000 in the thirty months before the ceremonial opening of Parliament twenty-six years after King George V had opened the first Federal Parliament in Melbourne.

Plate 11 Parliament met for the first time in Canberra on 9 May 1927. The opening ceremony was performed by the Duke of York,
on 9 May 1927 (see Plate 11), and at its peak employed 4000 tradesmen and labourers.

In parallel went the private investment in houses, commercial offices, shops, churches, and schools. By 1927 Kingston had become a ‘busy commercial centre’ (see Plates 12 and 13) and the Manuka business area (Plate 14) was ‘taking shape’. Civic Centre was planned under a far-sighted scheme whereby the separate owners of the blocks were required to adhere to a given overall design, and the first of the two arcaded structures erected in a sort of Spanish-Mediterranean style, the Sydney and Melbourne Buildings on either side of Northbourne Avenue, was officially opened in December 1927 (see Plate 15).

The minor industrial area north of Civic Centre could already boast a steam laundry, two bakeries, and a newspaper office, while Manuka gained an additional attraction when the city’s first cinema, the Capitol Theatre, opened in February 1928 (Figure 3).

When the transfer of public service personnel began in April 1927 the ten departments employed 37,300 people of whom 1700 were on the head office or central staffs. Understandably, few were keen to be uprooted to start life again in the ‘bush capital’. Asked whether there was much competition to be the first to be moved, one public servant told a newspaper reporter that he didn’t know ‘but there will be a lot of competition to be the last’. Nonetheless, by November
Figure 3 By 1933 the outline of inner Canberra was beginning to take shape. The wide, empty floodplain of the Molonglo River caused visitors to wonder which of the developing areas was Canberra.
646 officers and their families had been shifted to the city despite last minute panics caused when more females arrived than expected and additional hostel accommodation was sought by those who adopted a wait and see policy before moving their household to the new city.

In April 1928 the Government decided that another 142 public servants should be moved immediately and the remaining 700 as soon as possible after that. But the following year, because of deteriorating economic conditions, the Commission was allowed to raise loans totalling only $810,000, or about one-third the amount needed, and the whole program again had to be modified. Plans to move the third batch of 700 officers were deferred and many of the projected works postponed, including the permanent Administrative Building (the foundations of which had been poured in 1927), the Australian War Memorial, the railway extension to the City Centre and thence to Yass, the in-

Plate 15 In the early 1930s when this photograph was taken of Civic Centre (looking up Northbourne Avenue from above City Hill) it is unlikely that much concern was shown about either traffic or parking.
itial lake scheme, and municipal services like a milk handling depot, a new abattoir, and a fire station.

By 1930 the population of Canberra numbered about 7000 (of whom 780 were public servants transferred from Melbourne), largely accommodated in Government-owned hostels, hotels, and 730 permanent and 400 temporary cottages (see Plates 16 and 17). Although 360 residential leases had been sold at the three auctions held by 1927, the reduction in the scale of the development program and the shortage of finance led to some being surrendered before building had commenced. Privately owned housing thus formed a much smaller proportion of the total than had been anticipated. Some of the longer term needs of the community were also being met (see Plate 18). For example, a Committee reported in April 1926 that university facilities should be provided (at an anticipated capital cost of $24,000 and annual running costs of $30,000) and this led to the establishment of Canberra University College in 1929 under an arrangement with the University of Melbourne: by the time the first lectures were given on 31 March 1930, thirty-two students had enrolled.

A good deal of thought had been given, too, to nomenclature. Avenues, streets, and parks in each of twenty-three areas were named after different groups of people associated with Australia, including Governors, explorers, navigators, scientists, foresters and botanists, pioneers, and founders of the Constitution. Nothing was left to chance: 'every State was taken into account in the selection of names and Australian national sentiments were carefully studied'. As examples of the symbolism involved, the avenues forming the central triangle were named Kings, Constitution and Commonwealth to embody the idea in Canberra's motto 'Pro rege lege et grege' (For the Queen, the law and the

Plate 16 View westwards from the Hotel Ainslie in the foreground towards Black Mountain c. 1930 (compare Plate 17).
people); and the avenues radiating out from Capital Hill were named after the Australian capital cities and were to lead to parks called after the first Governor of each colony which, in turn, were to be surrounded by a street named after the colony concerned. Nor were Aboriginal names forgotten. Each of the streets intersecting Northbourne and Ainslie Avenues was called by a 'euphonious' word, the words being taken from the principal Australian dialects, and the streets being carefully arranged in alphabetical order from London Circuit outwards: among those chosen were Alinga (sun), Bunda (kangaroo), Door-
ing (bark of a tree), and Elouera (pleasant place); Allara (day), Ballumbir (butterfly), Currong (silver wattle), Doonkuna (rising ground), and Elimatta (my home); Allambee (recline), Boolee (star), Coranderrk (Christmas bush), and Dirrawan (emu); and Akuna (flowing water), Booroondara (shady place), and Cooyong (bandicoot).

The Federal Capital Commission was abolished by J. H. Scullin's Ministry in 1930 and the planning and administration of Canberra again became the responsibility of the Department of Home Affairs (reconstituted as the Department of the Interior in 1932).
Plate 19 The ‘land axis’ from Mount Ainslie to Capital Hill in 1935, showing the War Memorial under construction in the foreground, Scott’s Crossing over the Molonglo River, and the temporary Parliament House in the middle distance (compare Plate 20).
Plate 20 By 1974 the 'land axis' from Mount Ainslie to Capital Hill had become formalised with the construction of Anzac Parade, the 'portal buildings', and Lake Burley Griffin. On the far side of the lake, the National Library Building (on the right) will be balanced by the High Court and the National Gallery on which preliminary work has been started in front of the Administrative Building.
assisted by Works, Health, and the Attorney-General's Department. At first most of the limited funds available were spent on tree planting and road schemes (including the construction of the Federal Highway), largely as a means of relieving unemployment, but as the financial situation eased more effort could be devoted to residential building and the erection of the Australian War Memorial (completed in 1941) and a building for the National Library (see Plates 19 and 20). On the eve of World War II the central office staff of most Commonwealth Departments (except Defence and the Postmaster-General's Department) had been transferred to the city, which by then had a population of 10,400 living in 1270 government and 350 private cottages, 280 tenements, and a dozen hotels and guest houses. The construction by private enterprise of 130 shops as well as banks, churches, schools, and even a commercial broadcasting station in 1931, did little to reduce the 'company town' atmosphere or the artificiality of life in this small, isolated inland city, 320 road kilometres from Sydney and 690 from Melbourne.

In the eyes of many, Canberra remained nothing more than an expensive white elephant, which by the middle of 1939 had cost the Australian Treasury over $36 million to construct, maintain, and administer (including the amounts spent on Parliament House, the Queanbeyan-Canberra railway, and the Federal Highway). The Department of the Interior went to some pains in 1940 to point out that the city's 'soundness from an economic point of view need cause no anxiety, and it will soon justify any expenditure upon its provision and actually become a payable investment to the Commonwealth from every point of view'. Official publications of the time attempted to justify Canberra by stressing the advantages to be gained by running the nation's affairs from a place free from State influence:

Leading citizens of the various States cannot but be affected by their local politics and circumstances, and contact with them when in Canberra already serves to indicate, by contrast, the development in the Capital of an Australian point of view, which, in course of time, should be of the greatest advantage, not only in the sphere of public administration, but in other directions, as a corrective to the tendency in many States to keep within their own borders in considering their social, economic, and industrial problems.

The average Australian taxpayer still wondered how bewildered bureaucrats bundled into such a remote oasis of prettiness could make decisions relevant to his daily needs: to him Canberra was merely a good sheep station being spoiled.
The appearance of Canberra changed little during World War II save for the extension of East and West Blocks, the completion of the Melbourne Building in Civic Centre, the erection of a Patent Office on Kings Avenue and a new hospital at Acton, and the construction of the American Embassy on a prominent site at Yarralumla in 1943. The British and Canadian High Commissioners had taken up residence in the city during the 1930s (the former in a building now used as the University Staff Centre), but the U.S. Chancellery and Residence — designed in the semblance of an early eighteenth century Williamsburg, Virginia, mansion — were the first formal embassy buildings. Though regarded as an ‘offensive fake’ by some architects, they seemed pretty to residents and were popular among tourists, setting an example to other nations who later also tried to appear, as Robin Boyd has suggested, ‘in full-dress architectural diplomatic costume’.

Between 1940 and 1947 the population of Canberra grew from 12,000 to over 15,000 and the housing shortage became acute. The Government was anxious to resume public service transfers but this was clearly impossible until a co-ordinated program could be developed to catch up with the backlog in demand and provide housing and office accommodation for the new arrivals. Meanwhile, owing to the growth of existing departments and the creation of new ones during and after the war, the number of public servants in Melbourne had been increasing: early in 1954, in fact, there were only 4600 officers in Canberra compared with 6030 members of head office staffs in Melbourne and 130 in Sydney. Dissatisfaction with the slow progress being made led to the appointment in 1954 of a Senate Select Committee, which noted with dismay that work had started on the permanent Administrative Building in 1927 and yet it was still not ready for occupation, that the only other permanent government building was the Patent Office, and that other departments were housed in inconspicuous, temporary, or ugly buildings, some of which had to be hidden from public view by screens of trees. The hand to mouth existence that had characterised the city’s development since 1929 must cease, the Committee decided, and a clear program to transfer all central departments to Canberra should be drawn up, affirmed, and carried out within a measurable period:

‘The time has come to take the responsibility of building the National Capital from the unborn backs of future
generations and place it firmly and squarely on the shoulders of people alive today.’ To do this the Committee recommended the establishment of a commission to plan and develop Canberra with adequate finance to enable it to carry out a long-term, co-ordinated program.

Soon afterwards the Government invited Sir William (now Lord) Holford, an eminent British architect and town planner, to cast a critical eye over the city. The theory of Griffin’s triangle, Holford noted in his ‘Observations’ in December 1957, was that the focus of each angle would generate activity and that development would spread outwards from each centre along the connecting avenues in which were to run the lines of a fast tramway. Holford doubted whether this system would ever have worked because the distances between the centres were too great but, in any case, circumstances had changed: the railway station (which was to have been the magnet of the merchandising centre) had been removed to the south side of the Molonglo and the municipal and merchandising centres had coalesced at Civic Centre. Moreover, the unity that Griffin had hoped to achieve across the Molonglo Valley by his land axis and by the Commonwealth and Kings Avenues and their bridges over the lake had so far failed to materialise. Visitors looking down on the separate developments on either side of the river were left wondering which was Canberra.

Holford suggested four main amendments to Griffin’s plan, which had not been revised since 1918. First, the street pattern should be modified to cope with increased vehicular movement and parking. Second, the land axis, the centrepiece of the whole city composition, should be made more visually effective since, although the sense of openness was exhilarating, the vista itself did not strike the eye as lesser distances did in places like Rome, Paris, Washington, or Versailles. He suggested that the permanent Parliament House should be located near the mid-point of the axis on the lakeside. Third, a better relationship could be created between the central area and the nearby residential districts if buildings of greater height or bulk were constructed. And, finally, the formal symmetry of the Griffin plan should be retained only for those features where it could be really effective. In Holford’s view there was a fundamental choice to be made: Canberra could either remain a divided city with the flood plain of the Molonglo as an open wedge between a federal town on the south bank and a municipality on the north, or it could become a unified city, metropolitan in character if not in size, a cultural and administrative centre and a national capital. The latter choice he realised would require immense effort and considerable administrative courage:

There will be plenty of critics asking for half measures, or no measures at all . . . But the lesson appears to be that as soon as interesting results begin to arrive, the criticism is no longer that too much has been done, but not enough. Real quality and imagination in the design of three features of the new city — the Commonwealth-avenue Bridge, the permanent Parliament House, and the Lakes, would lift Canberra at once into the ranks of the significant capital cities of the world.
The Senate Committee's report, the approval in principle by Parliament of a five year development program, the decision to start transferring the Defence Departments to the city in 1959, and the Holford Report together pushed Canberra into a new phase of accelerated development. The Government, appreciating that the division of responsibility between the Departments of the Interior and Works for planning and construction was unsatisfactory, established the National Capital Development Commission (NCDC), which formally came into existence on 1 March 1958 and was charged with responsibility for carrying out the planning, development, and construction of the national capital. Unlike the earlier Federal Capital Commission, however, the NCDC had no administrative functions; it planned and built, and then returned the land and buildings to the department concerned to administer and maintain.

The NCDC was immediately faced with the formidable task of taking over and co-ordinating projects already in hand and in the pipeline, programming immediate and short-term works, planning additional permanent office accommodation, fostering private enterprise, undertaking basic investigatory work for the lakes scheme, and making surveys of population, housing, and traffic. Overnight the problems that had been accumulating during the years of 'leisurely development' were dumped on its shoulders: as it starkly pointed out in its first report in June 1958, the population of Canberra had doubled during the previous seven years (to 39,000), the number of vehicles had trebled, and the number of accidents had quadrupled.

The Commission recognised a four-fold task: to complete the establishment of Canberra as the seat of government; to further the development of Canberra as the administrative centre; to give the city an atmosphere and individuality worthy of the national capital by providing monumental buildings and suitable special features; and to further its growth as a place in which to live in dignity and comfort. The emphasis was to be on the proper programming of development and of works.

At first most of the Commission's attention was devoted to projects in North and South Canberra (see Plate 21). A further seven suburbs were added to the eleven already in existence in 1958 so that by mid-1974 the population of inner Canberra had grown to about 77,000 compared with a possible ultimate total (depending on the amount of redevelopment considered desirable) of perhaps 110,000. Work went ahead immediately on the first units of a new office area near the Australian-American Memorial, a sixty-seven metre column sheeted in sandblasted aluminium erected in 1954 as a tribute to the contribution made by the United States to the defence of Australia during World War II (see Plate 22). The 182 hectare Parliamentary Triangle was clearly too small to meet the long-term demand for office space and related car parks, and in any case this new site at the end of Kings Avenue provided a visual 'mass' to balance Civic Centre at the end of Commonwealth Avenue.

It is a tribute to the energy of the
NCDC that, despite all the immediate demands imposed by a population increase in the early 1960s of about 6700 each year — nearly twelve per cent — Kings Avenue Bridge (1962) and Commonwealth Avenue Bridge (1963) were designed and constructed (see Plate 23), enabling the valves of the newly completed Scrivener Dam to be closed on 20 September 1963 (see Plate 24). But the planners had forgotten to program the weather: during the exceptionally dry period that followed, the level of the impounded water, then named Lake Burley Griffin (the only, if nonetheless fitting, memorial to the city’s designer in Canberra), rose with agonising slowness. Meanwhile the main land axis was being more clearly defined on the north side of the lake by the construction of Anzac Parade, a red-gravelled processional way completed at a cost of $400,000 in 1965 to mark the fiftieth anniversary of the landing at Gallipoli, and by the erection of two government offices, known as the ‘portal buildings’ at its southern end. In the Parliamentary Triangle itself work proceeded on the National Library (completed at a cost of $8.6 million in 1968) and, in symmetry with the Administrative Building, on the first section of the Treasury Building (1967). Civic Centre, too, was beginning to take on something of its present

Plate 22 The Australian-American Memorial flanked by some of the Russell Hill office buildings dominates this view, taken in 1974, along Kings Avenue from Capital Hill.

Plate 21 In 1959 the suburb of Campbell, near the Australian War Memorial, was under construction. Note the lack of trees in the residential area, the informal development of the reserve that a few years later became Anzac Parade, and the popularity of the Memorial as one of the leading attractions for visitors to Canberra.
Plate 23 In mid-1963 Commonwealth Bridge, nearing completion, dwarfed the old timber bridge on the far side. The low level crossing in the foreground was frequently closed to traffic after heavy rain caused the Molonglo River to flood its banks.

Plate 24 Scrivener Dam, 319 metres long, impounds Lake Burley Griffin. For most of the time three sluice valves are used to maintain the lake level at 556.4 metres, but five large flap gates are designed to come into operation during floods.

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appearance with the completion of Civic Square and the Civic Offices (1961), the Monaro Mall and Garema Place, which added 26,000 square metres of retail space (1962-4), the Reserve Bank and Law Courts (1963), the MLC Building (1964), the 1200 seat Canberra Theatre and 312 seat Playhouse (1965), and the thirteen storey AMP Building (1965), which added a further dimension to the office group taking shape in Hobart Place (see Plates 25 and 26).

During the seven years to mid-1965 the population of Canberra more than doubled and both the face of, and the faith in, the national capital was changing. The more positive attitude towards the seat of government had resulted in a rise in private investment of all kinds. As one example, only 269 houses (22 per cent of the total completions) were built privately in 1958/59 whereas 1086 (60 per cent) were thus constructed in 1964/65. As another, commercial office space increased from 25,800 square metres in 1960 to 40,400 square metres in 1965 (much of it being leased to the Commonwealth) and private investment in non-residential building was running at about $8 million a year. The late Grenfell Rudduck, an Associate Commissioner of the NCDC, used to tell how, after taking a party of children around Canberra, he asked if anyone could tell him the city’s motto: the boy who piped up ‘Civil and Civic’ can be forgiven since the name of this and other leading construction firms were plastered everywhere. In truth, the stage had been reached when Canberra was beginning to generate its own momentum and the planners were now begin-
ning to face the problem of how to cope with growth rather than how to encourage it.

But by this time the Commission was developing its own longer term ideas, and in 1964 received broad approval from Parliament for the philosophy contained in an outline plan (published commercially in 1965 as *The Future Canberra*) for a population of 250,000. The alternatives were plain. The city could be allowed to grow either by increasing densities at the existing centres and allowing suburban expansion to occur in the traditional Australian pattern, or by preserving the open character of the existing areas and providing for future developments in new towns located in the adjoining valleys. These, as the NCDC proposed, should have populations of 50,000 to 100,000, be separated by bush-clad hilltops and ridges, and be linked by a clearly defined road system running through adjoining parkland (Figure 4). Each town would provide some job opportunities in a main retailing, commercial, office, and service centre, but a proportion of the workforce would still need to travel to inner Canberra, to the other towns, and to research and similar institutions located in the spaces between them.
Plate 25 In November 1962 Civic Centre was beginning to take on something of its present appearance. The Monaro Mall (in the foreground), the MLC Building (left of centre), the Law Courts, and the Hobart Place office group were all under construction (compare Plate 26).

Plate 26 By 1974 development had spread further round City Hill as can be seen by comparing this view with Plate 25.

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These towns would be divided into neighbourhoods containing about 4000 people, a small shopping centre and a primary school. The principle of neighbourhoods was adopted not with the intention of fulfilling any social ideal, such as the promotion of community interchange, but rather to take into account factors like residential density, walking distance, traffic generation, and the required size of an infants and primary school. In turn, three to five neighbourhoods would be served by a strategically located group centre providing higher order shopping oppor-
tunities as well as secondary school, religious, and recreational facilities.

The NCDC also stressed the importance of paying special attention to the national aspects of city investment and the desirability of identifying areas in which particular attention should be given to design, planning, and construction standards. Among such areas of ‘special national concern’ were the parliamentary and other central localities, the main avenues and approach roads, important ridges and hilltops, and of course, the lake and its foreshores. The Parliamentary Triangle was to be divided, conceptually, into a parliamentary zone, a conference zone (embracing the present Parliament House and the Camp Hill area behind it), and a cultural zone centred on Capital Hill. The northeastern corner of the triangle would continue to be developed as a complex of office and various other ancillary buildings for defence personnel, while Civic Centre would occupy 121 hectares at the northern corner. The latter, which was to remain the main business and employment centre of the metropolis, would be surrounded by a sunken ring road, an intermediate traffic ring to give access to parking stations, and an inner ring for pedestrian movement.

Apart from the principle of a series of new towns, each with the characteristics and advantages of individual cities but linked to Canberra to form a single metropolis of 250,000 people by the early 1980s, this statement reflected another significant shift in the Commission’s ideas. At first its thinking about the urban structure had been bas-
into the hierarchy. In effect, the long-established Kingston and Manuka shopping areas were already fulfilling this role in South Canberra, and in 1965 the Dickson Group Centre was established near four new residential suburbs (Dickson, Downer, Watson, and Hackett) in North Canberra.

There was at this stage some disquiet in Canberra itself about the way things were heading. There appeared to be undue emphasis being given to the plan, to vistas, to superficial appearances, and to somewhat nebulous aesthetic judgments, and not enough attention to the realities of how people actually wanted to live, work, and play. In part this was the result of increasing resentment against an apparently authoritarian indifference to complaints and suggestions and the poor public relations (discussed in a later chapter) which then existed between the planners and administrators and the planned. But there was also a deeper concern that the headlong flight into metropolitan size might stampede people into accepting some of the status symbols associated with American cities (such as an over-elaborate intra-city freeway system with its spaghetti of overpasses, underpasses, elevated road decks, and miscellaneous concrete impedimenta) without thinking through the alternatives ranging from a reshaping of the form and function of the future urban layout to the upgrading of existing routeways. Motorists and, even more vociferously, pedestrians wondered whether apparently simpler solutions like the installation of traffic lights — against which the authorities resolutely set their face until late in 1965 — could not be tried, and were bemused when no effort was made to restrict parking on Northbourne Avenue after it had been upgraded with three traffic lanes in each direction. The cognoscenti showed visitors a model of Civic Centre and asked them to pick their way through the ramps leading to and from the sunken ring road: the trick was that from one direction it was impossible to penetrate the moat. The model of course simply tried to illustrate one possible solution but it was seen by some as a taste of what life might be like if the engineers and traffic consultants were allowed to run amok.

The debate continued when a further report by Lord Holford, submitted to the NCDC in December 1965, was made public ten months later (this delay itself adding more fuel to the view that the citizens were in the hands of the planners). Holford pointed out that the population of Canberra might reach 355,000 by 1980 if growth continued at 10 per cent a year rather than the 185,000-215,000 estimate adopted by the Commission. His intention, it seems, was to provoke the planners, administrators, public and, perhaps more importantly, Government into thinking further ahead and in more grandiose terms:

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a metropolitan Canberra, with a population perhaps as large as that of Perth [then 550,000] or even Adelaide [then 750,000], would be a more effective capital. Both politicians and civil servants would be much less isolated from those they govern; and more important still the city would finally cease to be thought of as remote and resistant to change, but rather as a place where growth and development are being initiated, not only in local projects but in national policies.
Holford wanted consideration given to the adequacy of the boundaries of the Australian Capital Territory, the reservation of space for co-ordinated traffic ways, the achievement of greater architectural merit, further development of the Parliamentary Triangle (and, in particular, Parkes Place), landscaping and the formation of a metropolitan park system. Although some were appalled at the thought of Canberra being pushed ahead more quickly, others saw Holford's comments as valid criticism of the NCDC for being 'petty-minded' and

Plate 27 By 1974 the second stage of the Woden Town Centre had been completed. To the left of the twenty-three storey office block is the town square (compare Plate 28) and to the right is the main retail complex (compare Plate 29). The residential area in the foreground is linked to the town centre by a pedestrian subway under Melrose Drive which runs left to right across the photograph. The future office extensions shown in Figure 6 will lie between the town square and the Canberra cemetery. Note the very large area taken up by car parks.
Plate 28 Woden Town Square is almost deserted on Sundays. Unlike the proposals for Belconnen Town Centre, no residential accommodation (apart from hotels) has been incorporated into the design for the area and few shops or cafes remain open after normal business hours.

Plate 29 Friday shoppers pause to watch entertainers in the main, air-conditioned, concourse of the Woden shopping mall.

Figure 5 The design synthesis for Woden-Weston Creek which will eventually accommodate 90,000 people. Note the arrangement of the suburban, group and town centres.

Figure 6 This plan of the Woden Town Centre complements the view in Plate 27. The proposed pedestrian system will enable shoppers and office workers to move about the centre unimpeded by traffic.
for 'lacking far-sightedness and confidence'.

In fact the NCDC had realised in the early 1960s that to cope with the population increase two or three suburbs would have to be designed, serviced, and released for building purposes each year, more or less on an assembly line basis. But space in inner Canberra was running out and the Commission had already turned to the tracts of land in adjoining valleys like Woden, Belconnen, and Majura. The full use of this last-named district depended on the future of the civil airport and RAAF base at Fairbairn which, it was thought at this stage, might be shifted to another location where aircraft movements would be less affected by surrounding hills. The shape of the new districts was determined by the topography, the economics of engineering services, and the higher slopes of the hills and ridges that could be retained in a more or less natural state to form a web of open space surrounding and defining the urban space.

Thus construction of the first new town in the Woden Valley southwest of Canberra began in 1962 and was already well under way by 1965. Woden was originally planned as a single unit of 55,000 people divided into twelve neighbourhoods round a town centre (Figure 5). But it was later decided to develop another group of eight neighbourhoods further west at Weston Creek so that the combined design population of 89,000 could support a single large town centre and better urban facilities. The first residents began moving into Woden during 1963; the population rose to 11,500 by mid-1966, 42,500 in mid-1971 and 58,000 in mid-1974.

Figure 7 The design synthesis for Belconnen which, when fully built up, will house 120,000 people. Neighbourhood centres are to some extent being replaced in the northern part by more frequently spaced corner shops on distributor roads.

Plate 30 Neighbourhood centres, like this one at Melba in Belconnen, provide day-to-day necessities. Until recently these formed the lowest rung of the retail hierarchy, but in the newer parts of Belconnen and in Tuggeranong sites are being set aside for a modernised version of the traditional 'corner' shop.
Only one suburb, Isaacs, has yet to be committed for development. As explained earlier, the concept had evolved of group business centres: one was located at Curtin (where it incorporates the neighbourhood centre), another, Southlands, was established off Melrose Drive in 1971-2, and a third in the middle of Weston Creek in 1975. The Woden Town Centre was planned to provide, in a series of single-use precincts, the main shopping, social, recreational, and cultural facilities employing 4000 people as well as offices to accommodate 6000 public servants (Figure 6).

Several of the office buildings, occupied by the Departments of Works, Health, Repatriation, and Education and Science, were constructed in 1968-70, well before the completion of the first stage of the shopping complex opened for business in September 1972. Initially this contained a David Jones' Ltd department store of 9800 square metres, a Woolworths supermarket of 2800 square metres, a smaller department store of 937 square metres, fifty-three speciality shops comprising 5000 square metres, and offices and professional suites amounting to 1165 square metres. An additional floor was added to the major department store in September 1973 and fifty additional shops were opened a year later, marking the completion of the second stage of the complex (see Plate 27). The final stage of development should take place in about 1980 by which time the fifty-seven hectare site will have up to 50,000 square metres of retail space, two hotels, restaurants, cafes, private offices, banks, a post office, theatre, library, police station, a church centre, a bus station, and many smaller buildings centred on a town square complete with pool and fountains. Dominating the complex is a twenty-three storey private enterprise office block in which 1300 are employed (see Plates 28 and 29). The NCDC has also adopted in principle a master plan for the development, in three stages, of a major office group on a sixteen hectare site east of the main town centre. This will involve the construction of two honeycomb clusters of low-rise buildings beside and partly over the Yarralumla stormwater channel which will be realigned to avoid the danger of flooding. When completed these offices will accommodate 4800 public servants as well as 1200 employees in two twelve storey private office towers. An integrated pedestrian system will enable shoppers and office workers to walk east-west or north-south through the town centre. Underpasses and footbridges will cross the busiest streets in the town centre; flats on the western side of Melrose Drive are already linked to the town centre by an underpass; and the planned eastern office area will be connected to the town centre by a covered footbridge over Launceston Street. At the northern end is a recreation centre, while to the south a service and light industrial area covering twenty-nine hectares is emerging.

Meanwhile, Canberra's second new town, Belconnen, was being planned and developed on the basis of twenty-seven neighbourhoods divided into seven groups and a major town centre (Figure 7). The ultimate design population is
120,000. Contracts were let in September 1966 for servicing the first residential blocks and people started to move into their houses fourteen months later. From the start, unlike Woden, the urban structure of Belconnen incorporated three levels of business centres. Each of the neighbourhoods has a small shopping centre with 450 to 900 square metres of retail space (containing, typically, a chemist, a milk bar, a chain grocery shop, a newsagent, and other non-retail services such as doctors' surgeries, post office and bank agencies, dry-cleaners, and hairdressers (see Plate 30). These are scheduled to be in operation by the time about half the population of the suburb has arrived. The northern part of Belconnen is being planned along slightly different lines because there is a greater overlap between shopping and school catchments. Although some neighbourhood shopping centres are being retained, they will be augmented by more frequently spaced corner shops, on distributor roads, because almost 80 per cent of shopping trips are done by car. Belconnen will have six group centres, varying in size from 1000 to 5000 square metres of retail space, and these will each contain a supermarket as well as perhaps a couple of banks, a shoe shop, an electrical appliance and record shop, a soft goods shop, a garden centre, and some professional suites. The first of these, the Jamison Centre, was opened in 1971, and will be followed in 1975 by the Hawker Group Centre serving the suburbs of Hawker, Weetangera, Scullin, and Page, and the Kippax Group Centre located between the catchment neighbourhoods of Higgins, Holt, Macgregor, and Latham. The remaining three should all be in operation by about 1980. When Belconnen is completed, it is estimated that the neighbourhood and group centres will each take about 20 per cent of retail expenditure and the town centre about 45 per cent, leaving 15 per cent to go to Civic.

The Belconnen Town Centre is being
constructed in a basin-shaped area of 433 hectares; when fully developed by the end of the century it will provide employment for 20,000 to 25,000 people (Figure 8). Three main features distinguish the design concept from that used at Woden. First, it is being built around a V-shaped water feature, Lake Ginninderra, which has a surface area of 105 hectares (about one-seventh the size of Lake Burley Griffin) (see Plate 31).

Figure 8 Belconnen Town Centre is within eight kilometres of the most distant residential area. The retail heart will be built on a small ridge overlooking Lake Ginninderra.

Plate 31 By mid-1974 the V-shaped Lake Ginninderra, the water feature of Belconnen Town Centre, had taken shape. In the middle distance to the right of the photograph are the Cameron Offices (see Plate 32) and to the left are the buildings of the Canberra College of Advanced Education.

This not only provides an important recreational facility but also serves as a cooling pond for the heating system in the first group of government offices. Second, provision is being made for a residential population of 10,500, some of whom will be accommodated in tower type flats in the heart of the town thus helping to avoid a sense of emptiness after business hours. Finally, instead of being planned as a group of discrete areas associated with a particular use (government offices, entertainment, commerce, and so on), activities in the core will be mixed together and closely related. This core, located on a prominent ridge beside the lake, will consist of a two level shopping mall (linking two main department stores 180 metres apart) integrated with a wide range of civic, commercial, cultural, and entertainment facilities providing jobs for 5000 people, Commonwealth offices for 10,000 public servants and, as noted already, some residential tower blocks. It is envisaged by the NCDC as a ‘dense, active centre related to a system of pedestrian ways, plazas and squares, segregated from vehicular traffic’. Around the core are sites for the College of Advanced Education (which began to accept students in 1970), a public and a private hospital, a technical college, and service and industrial trades. Near the College hostel accommodation is being built for 650 staff and students, and three other areas have been set aside for apartments and town houses. For the most part, buildings will be sited on ridges and the whole will be integrated by a system of parkways with mass plantings of eucalypts. Direct access from
the peripheral roads is being provided to the various parts of the town centre and to the major car parks near the commercial area; two stopping points will also be provided in the town centre for a proposed rapid transit service operating along a right of way, separated from other roads, through Belconnen.

As in the case of Woden, the first buildings in the Belconnen Town Centre were government offices. These, the Cameron Offices, won an architectural award for the designer and consist of seven three storey wings linked to the retail-commercial area of the core by a pedestrian mall at first-floor level. The units form a series of stepped courtyards, enclosed on three sides, with an open side leading to landscaped car parks. Courtyards and roofs combine to provide 'garden offices' for 3600 public servants who began to move in late in 1973: the whole complex should be completed in 1975 (see Plate 32). A second group, the Belconnen West Offices, will be ready in 1976-7 when the retail mall (managed by a statutory authority) will also be nearing completion. The first residential sites in the Belconnen Town Centre, northeast of the retail core, are expected to be released in 1975-6. These will be 200 medium-density residential units, including a range of town houses and flats.

By the early 1970s the NCDC had substantially completed the planning of Woden-Weston Creek and Belconnen, and was turning its attention to the development of Canberra's third and fourth new towns, Tuggeranong and Gungahlin. With potential population capacities of 170,000 and 100,000 respectively, these form part of the metropolitan system, conceived to accommodate a population of one million; this is discussed in the concluding chapter.

The first land servicing contract in Tuggeranong was let in January 1973 and residents began to move into the most northerly residential area, Kambah, the following year. In this town the familiar 'neighbourhood' is being replaced by a new concept, a more flexible basic planning unit known as the 'territorial unit'. These are defined by natural boundaries such as ridges and water courses rather than by specific population sizes based on school or retail catchments, and will vary in size from 10,000 to 30,000 people. Kambah, for instance, will ultimately have a population of 20,000. Some of the schools in Tuggeranong are being grouped together along landscaped 'activity spines', containing playing fields, public recreation areas, shops, services, and

Plate 32 The Cameron Offices are the first major buildings to be constructed at the Belconnen Town Centre. When completed in 1975 they will house 3600 public servants.
other community activities, linked by pedestrian ways and roads. The association of schools and community activities in this way provides the opportunity for educational facilities to be used for other purposes after normal school hours. Moreover, faster public transport services can operate along the main roads running through these 'activity spines' to the town centres and easy feeder connections can be established into residential areas set back from the corridor and planned in such a way that no dwelling will be more than 600 metres from a bus service. Another change in concept relates to retail facilities: instead of suburban and group centres alone, the territorial units will have local activity centres, intermediate centres, and group centres. The first are intended as a new version of the traditional corner store and under one roof will provide about 250 square metres of retail space for a licensed mini-market (to which will be attached a storekeeper's residence) as well as a coffee bar that can be used as a community hall at night. These are intended to serve the needs of people within walking distance, such as mothers with young children, and will be located on the main pedestrian routes close to bus stops, pre-schools, and recreation areas. The next level in the hierarchy, the intermediate centres, will have 3400-5100 square metres of retail space and contain an entertainment sector and medium density housing such as flats and town houses. In Kambah, for example, there may be six local activity centres, an intermediate centre known as 'The Village' (programmed to start operating in stages from 1975) towards the northern end of the activity spine, and a group centre (scheduled for development in stages from 1976) towards the southern end. Five of the other territorial units will be progressively developed during the 1970s and work will also begin on the town centre. This will form an integral part of a central mixed-use spine, about five kilometres long and 1200 metres wide, which may include retail and office employment, commercial, cultural and recreational activities and higher density residential accommodation. The first office development in this spine will be located northwest of the town centre and will provide accommodation, possibly by 1976-7, for 6000 workers. Retail facilities in the town centre itself may be opened in 1978-9 and will form the first stage of a complex which may include a district heating and cooling station. Consideration is also being given to an automated garbage collection system and a document handling system for the buildings in the town centre. Design studies have begun on the creation of a lake in 1976 by damming Tuggeranong Creek below its confluence with Village Creek. The lake would cover 100 hectares, making it slightly smaller than Lake Ginninderra.

Gungahlin, to the north of inner Canberra, will be the last new town within the boundaries of the Australian Capital Territory. The first turn-off of blocks may begin in 1976 in a largely self-contained basin close to the present village of Hall. This initial development, which will eventually accommodate 10,000 people, is separate from, but will be closely related to, the main part of
the Gungahlin new town where settlement will begin towards the end of the decade.

The Commission is also carrying out further work in Civic (as the City Centre is popularly called) which has always been seen as the main administrative, commercial, and retailing focus of the metropolitan city, and an area important for tourists, conventions, and national headquarters. The scheme for Civic is based on the principle of a ‘core’ and a surrounding ‘frame’. The core has the main pedestrian flows, the main shops and other intensively used buildings and the highest land values (see Plates 33 and 34). The plan envisages the development by 1980 of a compact urban centre, extending from University Avenue eastward to Constitution Avenue, which will contain the main retail shops, major office concentrations, and a diversity of other civic, cultural, entertainment and hotel activities along with some high density residential accommodation. These will be framed in the southwest by a hotel and convention area, in the west by a cultural and entertainment centre, and in the southeast by a sports and recreation area extending into passive recreation in Commonwealth Gardens, which
Post-war planning and development are already well developed. The outer frame consists of a service trades, minor office, and hotel-motel area north of Civic and east of Northbourne Avenue in Braddon; high density residential areas to the north along the western side of Northbourne Avenue and to the east centred on Ainslie Avenue; the Australian National University campus in the west; and the Technical College site along Constitution Avenue to the southeast.

The aim is to separate in stages through to 1980 the main vehicular and pedestrian movements: late in 1971, for instance, parts of Alinga and Petrie Streets were converted into pedestrian precincts. More streets were closed during 1974 and plans are in hand for pedestrian underpasses or bridges link-
ing buildings at first-floor level. Since no charge was made for parking in Civic (or, indeed, anywhere else in Canberra) people had become accustomed to using cars for shopping trips or leaving them all day exposed to the elements in large surface parks or, if lucky, beneath the shade of ornamental trees. By the early 1970s, however, some of the open spaces had been replaced by offices or shops and the remaining areas were becoming organised more formally with sections set aside for short-term use. Old habits died hard and Minis and Mercedes wandered in ever increasing circles searching for the elusive vacant spot: in desperation citizens abandoned their tin boxes on newly planted nature strips while the chauffeurs of diplomatic vehicles, with more respect for their status and suspensions, sought immunity in restricted zones. Then in 1973 parking meters were introduced as a first move towards regulating and reducing all-day parking and encouraging people to use the heavily subsidised bus services. The next step will be parking structures linked by pedestrian ways to offices and shops. Canberra residents are just beginning to appreciate some of the costs and penalties of living in a city moving towards metropolitan status.

Since the NCDC took over responsibility for the city the population has increased by 136,000 to its present total of 175,000. The national capital is now the eighth largest urban place in Australia and by far the largest inland centre. During the fourteen years to 1971/72 about $1400 million (1971/72 values) were invested in Canberra: about $620 million were spent by the Commis-

sion, $250 million by other government agencies, and $530 million by the private sector. Preliminary figures, covering the 100,000 increment to mid-1972 but excluding national projects like the Australian War Memorial and the National Library, suggest that the urban fixed-capital investment by the private and public sectors combined amounted to no less than $11,000 per person. Land (including surveying) accounted for $100; engineering works (land subdivision, roads, bridges, water, sewerage, electricity, parks, landscaping, and airport and railway development) for $2400; dwellings and hotels for $4000; shops and offices for $1900; education, entertainment, health, and religious facilities for $1700; and town planning, architectural and engineering fees and charges for $900. This survey draws attention to the extremely low figure for land (much of which was acquired more than fifty years ago for an average price of less than $8 an acre), which has here been included at its rural value. Since the Australian Government owns most of the land in the Territory, Canberra’s development has been free of many of the difficulties experienced elsewhere: this, however, has provided its planners with both opportunity and challenge.
During its first twenty years Canberra was little more than a large construction camp where officialdom reigned supreme in a kind of petty dictatorship. The very first Territory ordinance in 1911, banning the sale of alcoholic liquor (or ‘stagger-juice’ as O’Malley called it), set the scene:

Canberra’s a truly awfu’ place,
A ‘Canna-get-a-Spotland.’
It wouldna’ long hae this disgrace,
Were it a bit o’ Scotland.
If Scots had but a moment’s power
O’er this fine flat and highland,
It shouldna’ be anither hour,
A droughty an’ a dry land.

The result was a daily exodus across the border to the Queanbeyan hotels and an even more spirited return when they closed at six o’clock. But this was nothing to the resentment generated by the Federal Capital Commission which ruled between 1925 and 1930 with an iron fist, arguing that the municipal side ‘formed a small part of its everyday work, and obviously its general activities could not be made subsidiary to the smaller, but troublesome, points associated with local government’. In O.H.K. Spate’s words,

O’H.K. Spate’s words,

The commission was law in Canberra; and it paid no attention to the old maxim that law does not care for trifles. The expenditure of half a million pounds and a prosecution for failure to cut a hedge might be on the same agenda; and the morals of the community were looked after with fatherly care.

In 1928 some heed had to be taken of the growing demand from the residents to have a say in the affairs of the town. On 1 September that year, for instance, a poll favoured the sale of liquor in licensed premises, but at first the Commission alone was granted licences and thus added the operation of four hotel bars and three cafes to its multifarious activities. More importantly, however, the Seat of Government (Administration) Act was amended to provide that the third Commissioner should be popularly elected despite a warning by the Chairman that the people’s representative would be ‘unlikely to co-operate in a friendly spirit’. Continuous clashes were inevitable even if only because (according to the Chairman) the new Commissioner ‘invariably proceeded on the assumption that his colleagues were necessarily antagonistic to the local interests’. But by then the Commission’s days were numbered and the control of Canberra soon reverted to a departmental administration assisted by an Australian Capital Territory Advisory Council, constituted on 1 May 1930 and consisting of five nominated members (one of whom was Chairman) and three residents elected for twelve month terms. The Advisory Council was simply a sounding board — a sop to democracy: the Minister was not bound to
refer matters to it or to accept its views if he did.

Canberra people, moreover, had no representation in Federal Parliament until 1948 and even then the Member could vote only on a motion for the disallowance of a Territory ordinance. Grudgingly, he was given full voting rights in 1966, but by then the ACT electorate was becoming one of the largest in the Commonwealth and there was a good case to be made for splitting it in two. Canberra, however, had always inclined to the left and the ruling Liberal-Country Party coalition was not keen to see its slim majority whittled away; equally, the Labor Government saw the creation of the second ACT seat as a way of retaining power when it was manoeuvred into holding a snap election early in 1974. Soon afterwards the Senate and House of Representatives, sitting jointly, passed legislation under which the ACT will be represented in the Senate by two members directly chosen by the people of the Territory voting as one electorate.

Although over the years the membership of the Advisory Council has been enlarged so that, until recently, there were eight elected members (one of whom is Chairman) as against four nominated members (appointed from the Departments of the Capital Territory, Works, Health, and the NCDC) and an observer from the Department of Education and Science, it has been something of a paper tiger. The Minister's decisions might, and frequently did, run counter to its advice. In April 1969 in fact the elected members dug their heels in and resigned en masse after a stream of recommendations — nearly fifty in all — had been rejected, the final straw being a Cabinet decision to close the local abattoir. Three months later a solution was found and the abattoir retained, but eight months elapsed before tempers had cooled sufficiently for new Council elections to be held. In the meantime the ACT Member of the House of Representatives, temporarily the sole elected representative of the people, earned the admiration and respect of the community by his single-handed efforts to cope with the increased volume of work. The Canberra Times helped out by instituting a 'Voters' Voice' column through which people may obtain justice against bungling and arrogance, through which they may have wrongs righted, and through which they may air their just complaints about aspects of life in the ACT'. This provided a much needed channel for people to let off steam (no fewer than 2120 complaints being handled in the first three years) and for bureaucrats and businessmen to explain or excuse themselves and, just occasionally, to eat humble pie. The important point was that the Canberra Times could (usually!) find a way through the tangles of red tape, and the departments concerned began to respect the power of the press and to give sympathetic rather than cynical replies.

Often the difficulty has been to know where to make an inquiry or lodge a complaint. To some extent the NCDC has been the whipping boy for bungles in other departments because the layman was uncertain where its responsibilities ended and those of others began. The
Plate 35 By 1974 the multi-purpose telecommunications tower on Black Mountain was already becoming a landmark or an eyesore depending on the point of view. It will be a self-supporting concrete tower with a steel superstructure rising to a height of 195 metres. The junction between the concrete and steel will be at 132 metres; below this level there will be three protruding drums, the middle one containing a restaurant. The existing masts (which will be replaced) are 157 and 133 metres high.

confusion was worse confounded since it was not clear whether the NCDC itself was the sole authority entrusted with the planning of Canberra. This point was tested in a somewhat curious way in 1973 when a group of local residents sought a permanent injunction from the ACT Supreme Court against the erection of a multi-purpose 195 metre telecommunications tower on the top of Black Mountain. This group saw the tower as a menace to 518 hectares of bushland gazetted as a public park in July 1970, a gross distortion of the skyline of the city, and incompatible visually and in other ways with the plan and conception of the national capital. The NCDC and the National Capital Planning Committee (an advisory group of ‘widely based eminent professional men’ set up under the same legislation as the NCDC) had made it clear that they, too, regarded the Post Office design proposal as unacceptable. The defendants — the Minister for Works, the Postmaster-General, and the Commonwealth — argued that this was a necessary public work, that the $6 million expenditure involved could be recouped in two or three decades by the provision of tourist facilities including a public restaurant, and that the powers of the NCDC under its Act in 1957 were limited to such matters as laying out streets, providing amenities like sewerage and drainage on Commonwealth land, erecting buildings, and doing other incidental works and that otherwise the NCDC had a purely advisory function. Hence, they contended, the Act ‘does not purport to restrict the Commonwealth itself or any of its
Ministers or agencies for exercising, in any manner seen fit by them, statutory powers to erect buildings and do other works in Canberra'. But Mr Justice Smithers ruled that the erection of the tower against the wishes of the NCDC would be unlawful:

If all who have statutory authority to execute works on Commonwealth land are free to execute such works as are in the nature of developing and constructing Canberra as the National Capital not only must chaos result so far as the planning development and construction of the city as the National Capital is concerned, but the functions which Parliament conferred exclusively upon the N.C.D.C. are incapable of performance by that body. That would be contrary to Parliament's intention. Not only would Canberra be unplanned as a city, but as a National Capital it would be without form and void.

Government spokesmen immediately attacked and derided the judgment, maintaining that it was against the weight of evidence and wrong in law, and the Commonwealth appealed to the High Court. Yet when the hearing took place on 1 May 1974 the Government quietly retreated and did not proceed on any aspect of its case, leaving the opponents to press their cross appeal, which maintained that the Commonwealth had no legal power to build the tower with its revenue-producing facilities. The High Court reserved its judgment. But while all this was going on, and apparently in scant regard to the legal position, work on the tower continued (see Plate 35). It is sagas of this kind that make people in Canberra feel, and to some extent behave, like denizens rather than citizens.

The whole question of municipal and territorial self-government in Canberra and the ACT has been aired in an ever lengthening list of reports. On the one hand, the argument goes, good government is no substitute for self-government since no bureaucracy, however efficient initially, can remain sufficiently flexible and responsive to social pressure in a changing society. As one study noted in 1955,

The existing Departmental administration may not be wholly insensitive to the needs and reactions of the citizens whose affairs it administers, but the inevitable tendency is for it to be impersonal and authoritarian and, above all, to shroud its plans and intentions in unwarranted secrecy.

On the other, Canberra is being developed as an expression of the political, social and cultural ideals of the Australian people as a whole and it appears to some that, however altruistic the motives of the local residents, it would be difficult to reconcile local independence with the overwhelming financial responsibility of the Commonwealth for the maintenance and initial construction of a capital city worthy of the nation.

In mid-1973 the Minister for the Capital Territory extended the existing Advisory Council's term of office for a further twelve months so that arrangements could be made for the election of a new self-government body in October 1974, and the question of self-government was placed before the Joint Parliamentary Committee on the ACT. When the Federal election interrupted the deliberations of this Committee it became clear that no report could be expected before the end of 1974. Meanwhile one of the elected Advisory Council members had retired
(and been replaced by a Ministerial appointment); another had been elected to the House of Representatives; and every one of the nominated departmental members and observers had changed at least once since the previous election in 1970. The Minister therefore proposed that new elections should be held since the membership had outlived the terms and many of the issues on which it had been elected, and the number of elected members had become inadequate for the growing workload (which includes representation on no fewer than twenty-five statutory bodies). The Council resolved, however, that it supported ‘the earliest possible elections for an ACT Territory Assembly with a very real measure of power, control and responsibility over ACT affairs’ but it ‘would not be acting in the best interest of the community if it were to accept the Minister’s proposals for what would be virtually another election for an elected body with entirely advisory powers’. This advice was rejected by the Minister and elections for an ACT Legislative Assembly, with a membership increased to eighteen, were held in September 1974.

Undoubtedly there are some people in Canberra who are content to leave things as they are on the grounds that self-government is unlikely to be any better and would almost certainly be more expensive. Part of the antagonism that existed in the mid-1960s between the populace on the one hand and the planners and administrators on the other has probably disappeared because the NCDC and the Department of the Capital Territory (which took over some of the functions of the Department of the Interior in 1972) have made decidedly more effort to expose their ideas, justify their decisions, and seek ‘grass root’ views. For instance, the NCDC in 1969 held seminars with specialists and laymen while it was planning Tuggeranong and four years later organised a five day meeting with a group of young people who might represent the social values and community expectations of the inhabitants of the future town of Gungahlin. A decade ago, however, the planners and administrators seemed to be unduly occupied with the larger issues — the areas of Special National Concern for example — and to be neglecting people except insofar as they could be fitted into neat and tidy plans or streamlined administrative arrangements. The list of complaints was endless: the erection of low-income, medium-density housing with front doors leading directly on to main roads; unprotected, smooth-walled stormwater drains, in which several children were drowned, near houses and schools; overhanging coping stones round sections of Lake Burley Griffin; lack of traffic lights, pedestrian crossings, and pedestrian underpasses in places like Civic Centre; inadequate toilet facilities in shopping centres (and the removal of those erected by protesting shopkeepers!); the weakness of the railings on Commonwealth and Kings Avenue bridges; the erection of two separate television aerials and commercial station studios on the top of Black Mountain; and so on (see Plate 36).

Many of these situations have now
been remedied (the addition of roadside crash barriers across the lake bridges being a case in point), but at the time the authorities seemed indifferent to suggestions and showed a marked propensity to shuffle off responsibility on to someone else. Public relations thus became strained except with tourists, who were given wallets of brochures and invited to follow a specially marked (and carefully selected) route round the city sights. In retrospect, it is a pity that some of the energy and tact displayed towards selling the national capital to tourists could not have been devoted to building up a more favourable local image. Instead, opportunities that might have been taken to explain policy or express a point of view were greeted with a stony silence or by barely disguised press releases saying, in effect, ‘mind your own business, big brother knows what it is doing’. Perhaps people expected too much or resented being the guinea pigs in what the academics had labelled a social science laboratory.

The situation now, to be fair, is rather different. One example is the consultation with potential future residents that has already been mentioned; another is the erection of signs throughout the city indicating the likely future use of vacant sites (see Plate 37). The publication of the 240 page Tomorrow's Canberra in 1970 has given people some insight into the practicalities, pre-occupations, and problems of planners. This is not to say, of course, that the NCDC and the Department of the Capital Territory please all the people all the time, or that the gap between ‘Them’ of the bureaucracy and ‘Us’ of the suburbs has been completely overcome. Important information about major decisions still leaks out late in the day as, for instance, when a spokesman for the NCDC ‘disclosed’ in April 1974 that every two years on average the paths and open spaces around Lake Ginninderra in Belconnen are expected to be flooded and that every six to eight years, on average, the level of the lake is expected to drop so low that it may have to be topped up from the city water supply. As another example, the Department of the Capital Territory made no announcement late in 1973 when it began limiting Commissioner for Housing loans to people buying houses valued at $30,000 or less, a major policy change that dis-
qualified overnight at least two-fifths of the applicants previously eligible. The department merely confirmed the change after the *Canberra Times* had reported it, apparently two weeks after the event. Moreover, there sometimes seems to be a gulf between the way that people actually behave and the way that the authorities think they ought to behave, a recent example being a proposal to barricade certain busy suburban streets in order to force motorists to use main arterial roads. The residents of such areas no doubt have a legitimate grievance but it seems extraordinary that such cumbersome measures are thought necessary in Australia's most planned city where there is complete control over the design, scheduling and construction of roads and the use of regulatory devices like 'Stop' signs, traffic lights, and speed limits. The cynicism thus engendered was well captured in an editorial in the *Canberra Times*:

If the Department of the Capital Territory were to patent its suggestions for rerouting traffic flow in the Woden Valley and Deakin it is possible that it would have a better seller on its hands than the game of snakes and ladders... Certainly a lesson to be learnt from this unsatisfactory maze is that planners must take note that motorists find the quickest and most direct route between two given points. Barriers and obstructions are no substitute for good planning.

Perhaps some sort of gap must always exist between the planners and the planned. As the NCDC pointed out in *Tomorrow's Canberra*, it takes four years from the initial planning of a neighbourhood to the completion of the first house, and then another six years elapse before the residential landscape has matured and all the sites have been occupied. By then the population composition and social attitudes of the initial residents, on which planning was based, have changed almost as much as their environment. On the one hand, it may be that the planners (and their critics) expect too much: it is all very splendid lining up the masses behind some idealistic planning concept but few people will appreciate what an abstract dialogue is all about until they discover its meaning in concrete terms. A great many folk may not have understood the implications of the original plan; a great many more may not have cared one whit about participation and involve themselves only later when there is a very real chance that their daily lives and established routines will be affected. On the other, it could be argued that the mass of the residents are all too ready to let government take on an ever increasing range of services that could be performed by the community. As the Secretary of the Department of the Capital Territory has pointed out,

Ultimately if the attempt at service becomes too embracing, there is a diffusion of talent and time so that nothing the bureaucracy does is done well. There are thousands of un-
born ideas clamouring to be brought to life. It would be a great pity if all these initiatives were taken over by the bureaucracy.

Despite these continuing problems, the NCDC in recent years has displayed an increasing concern about people, as the following extract from the *Fifteenth Annual Report, 1971/72*, indicates:

The local urban environment is perhaps the most critical of all. It is here that people spend most of their lives whether they be infants, adolescents, adults or aged. Pedestrian walkways and underpasses, a park-like street setting uncluttered by powerlines and urban services, a road system which distinguishes roads for traffic and roads for access, attractive street signs and street lights, the preservation of trees, the provision of carefully designed local centres and sites for community projects, the development of houses for privacy, the introduction of new forms of housing and housing environments — all these help to create a good urban environment . . . The play of water, the introduction of sculpture, night lighting, places for casual encounter, pavements, graphics, street furniture, and landscaping are all part of the ‘fine print’ of an environment which enriches human experience.

This may seem rather idealistic but it does in fact represent a fair statement of what is now being attempted and even achieved. The ‘nature strips’ along the roadsides planted with trees or flowering shrubs (a particular species for each street), the absence of front fences, and the reticulation of electricity on poles

Plate 38 This view of the area round Campbell Primary School gives an impression of the garden appearance of a mature post-war suburb.
behind the houses all help to give the
suburbs a garden appearance (see Plate
38). Since the dwellings are mainly one
storied, have single colour roofs, and are
uncluttered by external television
aerials, the visual impact of the screens
of foliage is further enhanced. Even the
new areas quickly lose their raw
appearance as householders are en-
couraged to plant an assortment of trees
and shrubs that are provided free from a
government nursery (see Plate 39).
Moreover, unlike most cities, few

Plate 39 Melba in north Belconnen typifies the
raw appearance of a new suburb. Note the few
vacant blocks, the absence of fences in front of
the building line, the reticulation of electricity on
wooden poles behind the houses, the lack of
footpaths, the concrete drive strips, and the
ubiquitous rotary clothes lines.

residential blocks are left vacant for very
long because the lease conditions for
detached houses require that construc-
tion must begin within six and be com-
pleted within twelve months of the lease
being granted. If these conditions are
not met, the Department of the Capital
Territory has the power to determine the
lease, reportedly without compensation,
although in practice this power is rarely
used and compensation is then usually
paid. The whole of a suburb therefore is
developed and matures at about the
same time: subsequent building is con-
fined to the extension of existing houses
and the erection of medium-density
dwellings and commercial, professional,
and community facilities towards the
centre near the primary school and play-
ing fields. Some criticisms have been
made of Canberra's suburbs and, in particular, of the monotony of acres of low-density housing spread along streets that vary little in design or appearance. More important, perhaps, is the lack of any great mixture of age, income, or social groups and the resulting pressure to conform.

Nearly 87 per cent of Canberra’s population live in 43,500 detached, single-family homes; the remainder are almost equally divided between group housing (flats, patio houses, town houses, and row and terraced houses) on the one hand, and hostels, colleges, and similar institutions on the other. The number of government houses reached a peak of almost 9000 in 1971 but has subsequently declined and now forms less than one-fifth of the total. It has to be borne in mind, however, that over the years 11,000 government-built houses have been bought by tenants.

All land is owned by the Commonwealth. Before being released for auction, residential blocks, ranging from 650 to 1850 square metres and averaging 880, are serviced with water, sewerage, drainage, electricity, kerbs, gutters, and street lighting. The Seat of Government (Administration) Act 1910, provided that 'no Crown land in the Territory shall be sold or disposed of for any estate of freehold' in order to avoid speculation in undeveloped land, retain unearned increments for the people, and defray the costs of developing the national capital. Under the system adopted in 1924 land was auctioned for a ninety-nine year lease. Subject to reserve prices, the bids represented the unimproved values on which land rent was payable. Land rent was set at 5 per cent of this unimproved value or the reserve price, whichever was the higher; the unimproved values were to be reappraised after the first twenty years and thence at ten-yearly intervals. Following legislation in 1935 any excess of amount bid for unimproved value over the reserve price had to be paid as a capital premium, and the second and subsequent reappraisals were to be made at twenty-year intervals. When Canberra entered its phase of rapid growth in the late 1950s, planning, development and leasehold management became more difficult. Thus, 'group' auctions of residential leases were introduced in 1959 to enable builders to achieve economies of scale, and 'restricted' auctions were instituted three years later for people who had not held leases during the previous five years (or since 1962 following a change of conditions in 1967).

During the 1960s the rapid increase in Canberra's population and continuing shortages in the supply of land led to substantial increases in the amounts paid at group, restricted, and unrestricted auctions. By the end of the decade the Canberra leasehold system was being attacked for several reasons. Some criticisms related to the supply of serviced land and methods of disposal; others were concerned with pricing policies in respect of both rates and rents (which in 1965 had been pegged at 1962 values). Despite the high premiums being bid, rental revenues were not providing a reasonable return on development outlays, and rate revenues were falling behind the cost of municipal services. In the absence of any system of
land development or municipal accounting it was impossible to judge what rent or rate levels would be appropriate. The long periods between rental reappraisals and the low rate of 5 per cent applied to unimproved value meant that the cost of acquiring and servicing land could probably never be recovered. Moreover, problems of equity were beginning to arise: a residential block reappraised in 1969 attracted an annual land rent of $228 while a similar block valued in 1954 had a land rent of only $40, and a business lease valued in 1955 had an annual rent of $324 but an adjacent similar site reappraised in 1969 attracted an annual rent of $10,000.

The Government decided in 1970 to reduce land rent to a peppercorn value of five cents a year ‘if and when demanded’ and increase rates to a level which, initially, would be equal to the combined rent and rate revenue previously obtained. New leases continued to be disposed of by auction but reserve prices were calculated to return overall the costs of land acquisition and development. The main effect of this change was to substitute a premium leasehold system for a rental system. It also introduced inequalities: the abolition of all future rental obligations had the effect of giving substantial capital gains to existing leaseholders while the substitution of tax-deductible rates benefited high-income leaseholders more than those on low incomes. Lease prices continued to rise steeply in 1971-3, partly because of the shortage of serviced land (despite an increase in the number of serviced blocks) and partly because of the general availability of mortgage finance and various detailed changes such as a revised policy towards the sale of government houses and the acceptance of the incomes of working wives as part of a household’s capacity to repay loans. The number of auctions held each year was increased and became monthly in April 1973. Then in August that year the auction system was suspended and in October a new system of allocating land introduced. A waiting list was established for people who had never before had an interest in land anywhere in the world or who transferred from the government housing list (where the waiting time was about forty months for a three-bedroom house and twenty-seven months for a two-bedroom flat). The leases are sold at prices ranging from $2500 to $10,000 ‘depending on residential desirability’, or for an average of about $5500. Until the needs of first-home buyers have been met, all other land (apart from that required for government housing) was allocated to builders who were free to sell to any purchasers on the basis of indicated prices for houses and land prices fixed by the Government. Subsequently these measures were revised so as to allow people to join the waiting list provided that neither they nor, if they were married, their spouses had held a Crown lease or owned freehold land in the ACT within the previous five years, that they normally live in the ACT, and that they are not employed outside the ACT. In due course (sixteen to twenty weeks), applicants are offered a choice of up to twenty blocks from those on hand but, if they refuse them all, they go to the bottom of the list. Other changes included the encouragement of co-
operative house construction and a scheme whereby builders are told twelve months ahead (instead of monthly) how many leases they can expect to be allocated. Any builder who fails to begin or complete the construction of a house within the specified periods is penalised but this penalty cannot be added to the selling price.

Changes were also made to the method of disposing of commercial land. Instead of the previous auction system, prospective lessees for flats, town houses and other commercial developments were invited to take part in a tender system. For residential sites they were asked to tender a price above a nominated reserve price. Developers interested in commercial or industrial sites were invited to indicate the annual rents they would be prepared to offer for the leases. Originally, a reserve rental — based on a simple formula which provided for a rent representing the current site value multiplied by the long-term bond rate — was nominated but, after a trial period, it was decided not to disclose the reserve rental. This new tender system proved unattractive to investors: indeed in its 1973/74 annual report the NCDC noted that ‘because of the suspension of the auction system in August 1973, there was little movement in the commercial land market’. And it warned that ‘delays in release of commercial land will aggravate shortages of certain kinds of space and will create inconvenience to residents in those areas where shopping facilities will not now be available at the times planned’. Then in October 1974 the Department of the Capital Territory announced that the system had been amended. Sites for flats and town houses which fail to attract tenders will be offered ‘over the counter’ at reserve prices and sold to the first person who offers the price asked or pays 10 per cent of the reserve price and the balance within thirty days. Commercial and industrial sites will be offered under a profit sharing scheme. Although the details have not yet been announced, it is believed that the department would provide the land, the developer would supply the building, and the department would share the potential profit from the development.

The cost of houses in Canberra is somewhat higher than in other large cities in Australia. In part this is because of its remoteness from major suppliers, the scarcity of labour, lack of economies of scale, and limited competition between building firms, but it also reflects the need for additional heating and insulation to cope with the frosty winter nights and screens on doors and windows to keep out the flies (one of the more irritating drawbacks to life in Canberra). But there is no doubt, too, that people in the national capital set their sights rather higher with a greater proportion of the completed dwellings being at the upper end of the price range. The long Australian traditions of home ownership and detached houses, the higher average income of Canberra residents (about $400 more than elsewhere in Australia), and the security of employment offered by the public service and research institutions (and the increased borrowing capacity associated with it) have all reinforced the demand for additional dwellings. Some critics
have also suggested, however, that another reason for the low-density sprawl is the lack of first class, contemporary, well planned high-rise development around the main city centres. The NCDC has noted the trend towards higher density accommodation in other major cities in Australia and believes that some of the advantages — the lack of a large garden and proximity to shops and buses — may encourage a greater proportion of Canberra’s population, perhaps a quarter, to seek housing of this kind during the next two or three decades. Hence, sites for medium-density development (which the NCDC broadly labels ‘group housing’) are being set aside near suburban, group, and town centres for release as demand arises (see Plate 40). To some extent the NCDC itself has become a trend-setter in an attempt to widen the choice of accommodation types available. As a pilot project, for instance, it built thirty-nine medium-density houses of various designs at Swinger Hill near the Woden Town Centre. When opened for public inspection during two weekends in April 1972 they were visited by 20,000 people, suggesting that the Commission’s views about the future demand for a greater diversity of accommodation has some validity.

Most dwellings are within walking distance of a group of shops (there are no corner shops except in a few high-density developments and in the new suburbs at Belconnen) but life in Canberra is difficult for households without a car. The undulating topography and the organisation of the suburban street pattern, reminiscent of the whorls of a thumb-print, to separate through and access traffic, means that movement to higher-order service centres is time consuming and often inconvenient. Nor is walking particularly pleasant during the summer months of November through March when the mean maximum temperature is over 21°C, extreme shade temperatures can reach over 37°C, and the bush flies are at their most persistent.

Canberra is a car conscious, not to say car orientated, community with one private passenger vehicle registered for every 2.3 people and with nine out of ten adults holding a driving licence. This reflects the relative wealth of the society, the low density of development, the lack until recently of paid parking and, by no means least, the inadequacies of the bus services. Until the late 1960s the bus routes were circuitous (a good way of sightseeing but not of getting to work on

Plate 40 Sites for group housing, such as this beside Bangalay Crescent opposite the Rivett shopping centre in Weston Creek, are held in reserve for release as the demand for medium-density residential development arises. On the left are units for the aged and on the right are three bedroom family units.
time) and the services infrequent: as a result Canberra residents became accustomed to the idea that it was better to travel hopefully than to arrive or to use their own cars. Efforts have since been made to rationalise routes, increase frequencies and introduce limited-stop buses but the fleet is inadequate to cope with peak-hour demand and to provide more than skeleton services in the newer suburbs. Various plans have been announced for further improvements, including the purchase of over 100 buses, an increase in off-peak frequencies on major routes from thirty to fifteen minutes, the reservation of lanes for buses, the installation of bus-actuated traffic signals to reduce waiting time at traffic lights, and an experimental ‘dial-a-bus’ service in Woden. When announcing the approval in principle of this last idea, the Minister — perhaps with more hope than conviction — thought it might obviate the need for a second car in a family and ‘could eventually provide a real alternative to the family car’. For some time transport planning has been directed towards a rapid-transit system, the rights of way for which have already been reserved along all major traffic spines. What form it will take and when it will be introduced remain matters for conjecture: the Department of the Capital Territory may see a capital-intensive system as a way of reducing the high operating costs of the present one-man buses but the NCDC may be less enthusiastic since it would have to find the construction outlays involved. Nonetheless, the NCDC noted in its 1973/74 annual report that a major study is in progress to assess the most suitable form of express intertown transport designed to connect the major employment centres and residential areas in Canberra’s new towns:

It is clear that major system improvements are technically feasible but it is also evident that the costs will be considerable. Much will depend on the level of usage and on public attitudes generally towards preferred modes of transport and the notion of public transport as a community service or otherwise. The information available suggests that major changes in life style are probably necessary to effect a significant shift towards public transport.

To help encourage such a shift in attitude, new policies were announced in August 1974. Less emphasis will in future be placed on wide, high quality roads built to handle peak-hour flows: the Molonglo Parkway (which will link Civic with the Tuggeranong Parkway west of Black Mountain) will, for example, be built with four lanes instead of six. At the same time, long-term commuter parking facilities around town centres will be minimised. Thus, on the one hand, an attempt is to be made to persuade commuters to leave their cars at home while, on the other, people will be encouraged to use upgraded public transport facilities.

About half the city’s workforce drive to their jobs each day, 25 per cent travel as car passengers, 15 per cent use public transport, and 5-10 per cent walk. Apart from schoolchildren, who tend to keep to minor roads within suburbs, cyclists are a rare but brave breed since motorists show them little consideration. Late in 1973 a four kilometre bicycle pathway was constructed from Dickson to University Avenue near Civic at a cost of $70,000. The route links schools and shopping centres with existing parkland, and has crossings at
the busier streets controlled by traffic lights that can be activated by cyclists. The NCDC is planning to extend the pathway to other areas and to provide similar facilities in the new towns and in the parkway corridors. The relatively short journey to work (averaging about seven kilometres) also encourages people to use cars so that they can travel home for lunch, a habit, however, that seems to be on the wane. The morning, afternoon, and evening peak flows are short but intense since they are aggravated by the large numbers of public servants who start work at 8.30 a.m. and finish at 4.51 p.m. Some departments have introduced ‘flexible’ working hours so that their staff can, if they wish, avoid the peak periods.

Driving is a hazardous business with numerous minor collisions, 800 accidents involving casualties, and thirty fatalities each year. Alcohol, excessive speed, and plain stupidity all take their toll, but the authorities sometimes seem ponderously slow to take action when black spots emerge. Again and again the same pattern is repeated: major intersections come into being, a number of serious accidents occur, public pressure mounts, and finally traffic lights are installed. The NCDC claims that the patterns have to be studied before the best form of control can be devised but this seems a somewhat curious argument since traffic circulation is largely of its own making anyway. The whirligig design of the older areas, where commonly five or six roads converge at odd angles, and the ever changing pattern in the newer suburbs make each trip something of a fresh adventure (see Plate 41). Confusion also arises because of the difficulty of interpreting (or remembering) the road rules, and it is worth heeding official advice to ‘adopt the defensive driving principle that all intersections are made hazardous by the other driver’. Life has been made a little easier since the mid-1960s by the installation of traffic lights at about fifty of the main intersections — even if somewhat late in the day — and by the erection of ‘Give Way’ signs (which transcend the ‘give way to the right’ rule applying at unmarked crossings) and ‘Stop’ signs (which, until recently, simply meant halt and then proceed prayerfully in the hope that motorists coming from the left would give way). Yet even this distinction proved too subtle for some drivers and the ‘Stop’ sign has now been ‘strengthened’ to mean halt and give way to traffic coming from both right and left. Another, rather different but no less traumatic, hazard faced by car owners in Canberra is the annual compulsory vehicle safety check in government-operated testing stations. Perhaps in deference to the 1500 strong diplomatic community, the ACT is the only part of Australia apart from the Northern Territory where left-hand-drive cars can be registered.

A not unimportant addition to the traffic on Canberra roads stems from the growing number of tourists, estimated to be about 750,000 a year, who visit the city. The majority travel by family car and spend two or three days touring the sights, including the Australian War Memorial, Parliament House, the National Library, the lookout on top of Black Mountain, Mount
Ainslie, Mount Pleasant, and Red Hill, and the diplomatic buildings largely concentrated in Yarralumla. These structures have attempted to capture something of the traditional architectural styles of the respective countries, and it is seldom difficult to guess in which part of the world each design originated even if, as one architect has rather unkindly suggested, 'most of them look like stage sets for musical comedies about their own countries'. Canberra is also becoming, and being actively promoted by the NCDC as, a convention and conference centre: since it can be reached by air in forty minutes from Sydney and fifty-five minutes from Melbourne this is a convenient meeting point for delegates from all parts of southeastern Australia.

It has been indicated already that at the beginning of 1959 the population of Canberra was about 37,000. During the first half of the 1960s, when the program to transfer public servants from Melbourne had been resumed with some vigour, the annual rate of growth averaged about 10.6 per cent. In the five years from 1966 to 1971 it fell to about 8.5 per cent. Nearly one-third of the

Plate 41 Kingsford-Smith Drive, running south between the suburbs of Melba on the left and Flynn and Latham on the right, forms one of the main links between north and south Belconnen.

Traffic to the houses backing on to this road must use the internal suburban collector and distributor street system to gain access to it.
56,600 increment during this latter period stemmed from natural increase and the remainder from net migration. The NCDC has estimated that public service transfers were responsible for only one-twelfth of the annual growth, even after allowing for the consequential increase in the private service sector. Persons employed under the Public Service Act (embracing more than simply office workers) form 38 per cent of the workforce, and those in organisations supported by government funds, such as the Australian National University and the Commonwealth Scientific and Industrial Research Organisation, another 25 per cent. The remainder are in private employment which is mainly geared to providing services for the Canberra community: apart from building and construction, only 12 per cent of the private sector is supported by funds coming from outside the city, chiefly in the form of tourist revenue.

Of the new arrivals each year, 44 per cent come from New South Wales (about half from Sydney), 25 per cent from overseas (one-third being returning Australian citizens and two-thirds new permanent settlers), 15 per cent from Victoria, and the remainder from other parts of Australia. Two significant points emerge. On the one hand, it seems clear that Canberra is becoming an important alternative destination to Sydney for people moving away from country areas in New South Wales; on the other, the relatively small proportion from Victoria appears to support the view that the public service transfer program is a comparatively unimportant factor in Canberra’s growth, and that much of the expansion of the public service sector arises from the burgeoning of departments already based in the city.

The population and workforce structure of Canberra differs from the national ‘norm’ in a number of ways that bear directly and indirectly on planning. Thirty-two per cent of the inhabitants here are under the age of fifteen (compared with 29 per cent in Australia as a whole) and only 3 per cent (as against 8 per cent) are aged sixty-five or more. The youthfulness of the population causes a greater than usual demand for pre-school and school facilities and for accommodation suitable for young single people. As against this, however, the low proportion of aged people means that there is less need for special housing and geriatric facilities. Between 1966 and 1971 the number of married residents increased by 9.4 per cent a year, and this has contributed to the demand for land and family dwellings, to say nothing of the pressure on maternity beds. (Demographers have exploded the long-standing myth that Canberra women are more than usually fertile by pointing out that the birthrate here is less than that in some of the newer suburbs of the State capital cities.) The significance of the building and construction industry (which absorbs 11 per cent of the workforce as against 9 per cent in Australia) has the further consequence that fewer permanent employment facilities (such as offices and car parks) are required in Canberra than is usual in similar sized towns. Since much of the work in the national capital consists of pushing pens
(the gibe that the city is nothing but a large factory producing hot air and waste paper is not without its point), the pattern of transport movements and freight storage is rather different from that elsewhere. One of the biggest vehicle fleets, for instance, is the Commonwealth car pool, much of which seems to spend an inordinate amount of time waiting at Canberra airport. Manufacturing is largely confined to servicing activities, the production of day-to-day needs like bread and soft drinks, and the supply of building materials: even so, in terms of employment and value added (inflated by the operations of the Government Printing Office and the Royal Australian Mint), the national capital ranks as Australia's fourteenth most important industrial centre.

Canberra also has a highly mobile population and has for this reason been labelled a 'city of nomads' with little sense of 'belonging'. This arises because of the relatively short tours of duty by some members of the diplomatic corps, defence personnel, public servants on head office training courses, and the staff and postgraduate students in the research institutions. The NCDC has estimated that 4 per cent of the population move away each year, reinforcing the demand for rented accommodation such as apartments and houses with established gardens. The feeling of mobility is strengthened by the movement into Canberra each week while Parliament is in session of politicians, lobbyists, demonstrators, and commentators who melt away again on Friday. This constant movement into and out of Canberra also helps to explain why it has the fifth busiest airport in Australia.

About one in four married women in Canberra goes out to work (as against one in six elsewhere in Australia). One explanation is the availability of congenial jobs, such as in research institutions, for the wives of white collar workers, but another is the higher cost of living than in the State capital cities. Freight charges, for instance, are added to most items and this and the cooler winter nights inflate heating costs. Not so long ago neighbourly discussion centred on the rival incendiary merits of different local timbers and the 'blockbusters' needed to split them, but now wood-burning stoves and open fireplaces have given way to increasingly elaborate oil and liquefied petroleum gas heating systems. There is no doubt, too, that retailers take advantage of this semi-captive market: as a case in point, goods advertised in Canberra newspapers are about 3 per cent more expensive than the identical items promoted by the same chains in Sydney journals. But another factor that cannot be lightly dismissed is the race to keep up with the people next door.

When Canberra was a small country town where everyone knew everyone else, social prestige depended upon known status. As the city grows towards metropolitan size, however, conspicuous expenditure and apparent wealth — symbolised by private swimming pools, sailing craft, and second homes on the coast (discussed later) — are appearing as the measuring rod of success and position. As part and parcel of this,
some suburbs have become more ‘desirable’ than others, a tendency being encouraged (or provided for) by the NCDC. At Garran, for instance, 121 residential blocks on a hill slope overlooking the Federal Golf Course are expected to be sold for far more than the $10,000 maximum intended under Canberra’s waiting list system of land allocation. Two of the blocks are each about 8000 square metres (five times the size of the normal residential block) and the others range from 780 to 2700 square metres. Similarly, the NCDC announced an intention to subdivide part of the Woden suburb of O’Malley into ‘larger than normal blocks of special quality development for diplomatic and high convenant uses’ but, after the Labor Government took office in December 1972, the new Minister in charge of the NCDC indicated that he was opposed to elitist development of this kind and ordered the Commission to redesign the area into blocks of conventional size.

From time to time Canberra has been used as a convenient laboratory in which to try out social innovations. During the early 1970s, for example, there was considerable debate in Australia, and more especially in Canberra, about the need for better co-ordination and more effective delivery of health care within urban groups of 20,000-50,000 people. One possible solution was the establishment of health centres providing accommodation under one roof for general medical practitioners, dentists, district nurses, health and welfare social workers, and others so that they could work together effectively as a team to provide comprehensive medical care twenty-four hours a day and seven days a week. Much of the controversy stemmed from a fear that this would be the first step towards putting general practitioners out of business and restricting patients’ freedom of choice. Soon after its election in December 1972 the Labor Government decided that both the public and the medical profession were becoming confused about the issues involved and that two community health centres should be set up in Canberra as quickly as possible to demonstrate how they would work and to explore the organisational and operational problems involved. The first of these interim centres was opened in July 1973 at Melba in north Belconnen — a developing area with no general medical practitioners. This has four doctors, two dentists, clinic and domiciliary nurses, a mothercraft sister, social workers, a physiotherapist, and clerical and reception staff as well as a pharmacy. All staff are salaried and, apart from the dental and pharmacy facilities, all services are free. The second centre was opened a few weeks later at Scullin in south Belconnen (see Plate 42). Here services are provided by a combination of private fee-for-service medical and dental practitioners and by government employed nurses and counselling staff. Centres have also begun operating at Narrabundah (following the closure of the only local medical practice in the area), Kambah, and Civic. The latter centre, opened in February 1974, is similar to the Melba and Scullin centres; it is housed in a temporary, demountable building and will serve the
residents of the city area and inner suburbs until the permanent building for the ACT Health Services is completed in 1977. The first two permanent health centres, at Phillip and at Kippax in Belconnen, are expected to begin operations in 1975, and these will be followed by another at Kambah Group Centre (to replace the temporary one functioning at The Village) in 1976.

The need for health care facilities of this kind draws attention to the danger when discussing Canberra of emphasizing the high standard of living enjoyed by the middle class, white collar majority, and of forgetting that one in ten of the households do not even possess a car and that significant groups, such as widowed or divorced mothers with young children, the aged, and non-English-speaking migrants, are in various ways underprivileged and are hard-pressed to make ends meet. Although these people are assisted with housing and, in cases of proven hardship, reduced rentals, they can find themselves allocated a government house in a new, remote suburb where the bus, retail, community and entertainment facilities may for several years be minimal. This problem is exacerbated because, in the absence of older and larger houses suitable for multiple family sharing, cheap accommodation in the inner areas is almost unobtainable. Moreover, the rent structure is inflated because of the demand from short-term residents and because subsidies are available to some categories of public servants. A survey of private flats and town houses in 1972, for instance, showed that 60 per cent were occupied by government employees, one in five of whom was receiving a rent subsidy. Another, not unimportant, facet of all this is that Canberra planning makes few concessions and provides few opportunities for the man who wants to start a little business of his own — perhaps as a watchmaker, a shoe repairer, or an upholsterer — within easy reach of his home and his potential customers. In short, individual initiative of this kind tends to be suppressed in such a highly formalised, zoned city where, according to some practitioners of the town planning art elsewhere, three essential ingredients of any organic town — hugger mugger, hullabaloo and higgledy piggledyness — are almost entirely missing.

It was perhaps this point that the Duke of Edinburgh was driving at during a visit to Australia in 1965. When asked whether he thought it a good or bad thing for capital cities to be specially built, Prince Phillip responded:

I think it has tremendous advantages from an administrative point of view. I think its practical advantages are greater than its advantages to the citizen . . . any completely planned structure of that kind is always going to miss a little something of the human cussedness, which makes a town worth living in. And I think one of the difficulties with all these like Washington — another one, Ottawa to some extent: they lack . . . I don't know how one would describe it; they lack a soul.

But the interesting thing is . . . that all these new towns depend enormously on the planning that goes into them. And the difficulty is that any planner has got some theory and if you superimpose this theory on to a completely organic structure, which is a city, you tend to force people to live in the way the planner either wanted them to live or they have to adjust themselves to the way the town is formed.
The Duke was talking about new towns in general rather than about Canberra in particular but his remarks seemed apposite at the time and were widely publicised. True to form, the NCDC rebutted the implied criticism in its next annual report: 'The old references about a city in search of a soul are still heard but have little significance'. In a personal communication in March 1966, Prince Phillip further explained the point he was making:

any town which is planned from scratch by one man or by one organisation will get about 80 per cent of the conditions right but inevitably about 20 per cent will be mistakes or omissions. Many things are wrong with organic towns but these have either grown up with the consent of the citizens or the citizens are prepared to accept them. In new planned towns the citizen has a very limited influence.

At that time it was possible to argue that Canberra, in a physical sense, lacked both a heart and a soul. The vistas, the tree-lined avenues, and the parkland settings of the public buildings — all appropriate in a national capital — formed a monumental landscape on such a grand scale that it was impossible to feel much identity with it. Moreover, Civic Centre scarcely lived up to its name for it had no focus, no place where someone could stand and feel at the centre. Instead there were short streets in which pedestrians and traffic fought for supremacy while Civic Square failed to act as any sort of magnet both because it was peripheral to the development and because it could only be reached by running the gauntlet of five or six streams of vehicles. Furthermore, one of the features that adds subtlety and excitement to older towns — the unexpectedness of what lies around the next corner with new buildings and monuments appearing in a series of revelations — was almost completely lacking in any part of Canberra. These criticisms are no longer entirely fair. The erection of buildings on vacant sites that were arid in summer and muddy in winter, the appearance of fountains, statuary, and courtyards, the transformation of some streets in Civic Centre into pedestrian areas, have all helped to reduce the coldness and sterility and replace it with the makings of a townscape in which there is some warmth, interest and humanity (see Plates 43 and 44). From a visual point of view some critics may disagree with this assessment on the grounds that, within the limitations imposed by strict controls on height and colouring, each architect has tried to make his particular building as beautiful as he could rather than as subordinate to the intended appearance of various groupings as a

Plate 42 Scullin Health Centre, opened in August 1973, provides health care by a combination of private fee-for-service medical and dental practitioners and government employed nurses and counselling staff.
whole. The result has been to produce in some cases, like the office development in Hobart Place, a harmony of good taste but not a unified overall composition.

The really dramatic change came with the filling of Lake Burley Griffin. In Robin Boyd's words.

Canberra suddenly came into focus and all the vistas and cross axes that we had read about and seen on the diagrams, and seen for a long time in the NCDC's aerial perspective, all this came to life and was brilliantly clear and the good scale of the whole thing was confirmed — the Griffin vision, the vistas that he had planned were shown to be right.

The lake, the completion of the massive National Library building on the south side, and the construction of the Carillon (a gift from the British Government to mark the fiftieth anniversary of the founding of the city) and the Captain Cook Memorial Jet (com-

Plate 43 Shoppers and shopkeepers in some parts of Civic Centre suffered no little discomfort during 1974 while streets were being converted into pedestrian precincts.
It is difficult to say whether Canberra yet has a soul, if by that is meant a community spirit. In many ways it remains a company town where there is a feeling of inevitability that someone somewhere has a blueprint and budget for everything. Traditions have not yet had time to emerge although this is hardly surprising when barely half the population has been in the place for more than five years and there is a constant turnover of short-term residents. The lack of self-government, the inhibitions and prohibitions on public comment faced until recently by government employees, and the large number of people who are immersed in jobs that neither begin at nine nor end at five, all contribute to a lack of involvement in public affairs. At best, for instance, service on the Advisory Council was a thankless chore. Canberra is also a middle class society and, on the whole, not gregarious. People tend to live and entertain in their own little boxes and to cultivate a fairly small and select group of friends very often drawn from among those with whom they do business each day. Yet a striking feature of life in Canberra, and one that is helping to break down the isolation and insolation of these various groups — the politicians, the public servants, the diplomats, the academics, and

Plate 44 Petrie Street, Civic Centre, after conversion to a pedestrian mall. The merry-go-round that can be seen in the background came into operation early in 1974 on what had formerly been a busy intersection. It was bought by the Department of the Capital Territory and restored with the aid of funds donated by a leading Canberra retail firm and considerable voluntary labour.
the businessmen — is the very large number of clubs, associations, and societies (over 600 at the last count) catering for every conceivable taste and enabling a novice to take up almost any pastime, hobby, or intellectual or cultural pursuit. The rich variety of talent is displayed, for instance, at the frequent concerts, musicals, and dramatic productions that compete for stage space with the increasing number of overseas companies, orchestras, and entertainers who, since the completion of the Canberra Theatre and the Playhouse, now include this city in their Australian tours. But Canberra people seldom come together as a community: even the annual Canberra Day procession is hardly a well supported or spontaneous occasion and it would difficult to tell sometimes whether the knots of spectators were watching a carnival or a cortege. Most of the most important and vigorous demonstrations are related to national or international issues — pensions, Aboriginal land rights, Vietnam, and apartheid, and draw much of their support from people travelling in from other parts of Australia. Since they are normally held outside Parliament House, these affairs are noticed more by tourists, reporters, and local activists than the general run of Canberra residents. Above all, however, Canberra lacks places like coffee bars and discotheques where youngsters can meet casually and cheaply: Civic Centre, for instance, comes to life only on Friday evenings when the shops stay open until nine o’clock. It is surprising in these circumstances that juvenile delinquency and vandalism are not an even greater problem for parents and police alike. Visitors, too, complain about how sombre Canberra seems to be after dark apart from the floodlit buildings (see Plate 46); insofar as this refers to the lack of ‘night life’ they have a point. But often it is to confuse dullness with dignity: one of the great virtues of the city is the firm stand taken by the authorities over the years against the false facade of gaiety produced elsewhere by extravagant, multi-coloured, flashing neon signs.

With all its faults, Canberra is a pleasant place to live for the white collar, middle class, conformist, car-owning majority, to whose needs and aspirations most of the planning and administration of the city is geared. Many of the grumbles relate to questions of detail rather than the concept of a clean city where the fundamental aim is carefully separated land uses linked by a hierarchy of local, arterial and freeway-style traffic routes. The majority of these arise only because of the continuing, although diminishing, gap between the ideals of the planners and the idiosyncracies of the planned. Time alone will transform Canberra from an ideal city into an integrated community.
On fine Sundays in summer 250 or more boats can be seen on Lake Burley Griffin, ranging from Flying Fifteens and Trailer Sailers to Manly Juniors and P Class Trainers.
Plate 46 An evening view of the National Library, the Captain Cook jet and Commonwealth Avenue Bridge. Note the use of strip lighting in the hand rails of the bridge which avoids the need for overhead light poles.
The national capital is located in the northeastern corner of the ACT, which covers an area of 2332 square kilometres within the upland, pastoral country of the New South Wales Southern Tablelands. Canberra is both the leading urban centre within the Territory (only 1250 ACT people in fact live outside the city district) and in the surrounding region. It stands head and shoulders above the New South Wales towns of Goulburn (21,600 inhabitants in 1971) and Queanbeyan (16,000) as well as a series of even smaller settlements, many of which are either growing very slowly or declining absolutely. In these circumstances it is hardly surprising that Canberra has emerged as an increasingly attractive location for the regional headquarters of insurance, finance, and other companies, a trend further encouraged before 1969 by the absence until then of stamp and other duties on business transactions in the ACT. Fifteen years ago Canberra residents travelled to Goulburn and Queanbeyan to buy goods like furniture and floor coverings whereas the flow now is in the opposite direction. Nonetheless, some of the remnants of the former urban hierarchy still remain. Goulburn, for instance, is the wool selling centre for the Southern Tablelands and its gaol and mental institution include Canberra people among their residents.

Special ties exist with Queanbeyan, separated by the width of a railway from the ACT border. This old-established town, with its developed commercial facilities and more liberal trading and licensing laws, boomed throughout Canberra's early construction period, but when work on the national capital almost came to a standstill in the early 1930s Queanbeyan became 'stranded as it were with the tide of money and occupation gone'. During the postwar Canberra housing shortage, the availability of relatively cheap freehold land and the lack of restrictions on house construction time encouraged some people, particularly European migrants, to settle in Queanbeyan even if working across the border. More recently, numerous blocks of flats have been constructed and, because of the lower rentals, have proved attractive for young couples saving up to buy or rent a house in Canberra: a survey in 1972 showed that three-fifths of the flat dwellers questioned (representing 2200 people) intended to act in this way. Queanbeyan has thus become little more than a residential, commercial, and industrial suburb, a point recognised by its inclusion for official statistical purposes as part of 'urban Canberra'. But visual-
ly the two places have little in common. The patchwork of nineteenth and twentieth century building styles, the corrugated iron roofs on decaying buildings, and the potholed roads all help to give Queanbeyan the appearance of a refuge for the bits and pieces that the bureaucrats across the border omitted from their utopian dreams: noxious or less desirable industries, small businesses operating in converted houses, and even clubs where Canberra people can feed poker machines.

Events in 1974 further demonstrated the delicate nature of the relationship between Canberra and Queanbeyan. On 3 January a mechanical failure caused raw sewage to bypass the treatment works there and flow into the Queanbeyan River and thence into Lake Burley Griffin. The ACT authorities were not advised of this for several hours and then declared the lake and the Molonglo River to be prohibited areas; water police and police motor cyclists were sent out on patrol to ensure that no swimmers or sailing craft ventured into the polluted waters. At the time this was dismissed in New South Wales as a ‘once in a lifetime problem’, but it drew attention to a singular lack of liaison across the border. A week later there was a further spillage of raw sewage and again there was considerable delay before the ACT authorities were informed. When further leakages occurred later in the year, the New South Wales authorities were none too gently reminded that these events not only appeared to be in breach of the State’s own clean water legislation but also of the first schedule of the *Seat of Government Acceptance Act* 1909 wherein it was agreed that ‘The State shall not pollute and shall protect from pollution the waters of the Queanbeyan and Molonglo Rivers throughout their whole course above the Territory’. This saga has, at the time of writing, yet to be played out but it seems that Queanbeyan and New South Wales are prepared only to fiddle with their pumps, thus negating in part the effort being put into the Lower Molonglo Water Quality Control Centre which in 1976 will begin turning all wastes from Canberra, Woden-Weston Creek and Tuggeranong into ‘high quality effluent which will be suitable for recreational purposes, including swimming’. The border and the politics associated with it will, it seems, remain realities in more ways than one.

In other ways, however, the national capital has had a marked effect on the surrounding region. Canberra firms supply building materials and manufactured goods and provide job opportunities for about 4000 people who commute from places like Queanbeyan, Braidwood, and Captains Flat. The increased demand for milk, fruit, vegetables, eggs, and meat has had an impact on rural land use: for example, approximately 275 beef cattle, 1200 sheep and 1100 lambs have to be slaughtered annually to provide the meat needed by each increment of 1000 people. Some of this produce is obtained from within the Territory but much of it, about three-quarters of the milk for instance, is brought in by road (some of which has been upgraded for the purpose) from more distant areas.

Over the years the Commonwealth
has progressively bought the lands of the Territory; in 1971 only 380 square kilometres remained in freehold ownership. This, too, is being acquired, a recent example being the purchase of forty square kilometres from Lanyon Pty Ltd, owners of Lanyon Station, started in 1835, for $3.75 million. This particular area was required for the development of Tuggeranong, but other land not immediately needed for urban purposes has generally been leased to the former freeholders for terms, consistent in each case with the anticipated growth of the city, of up to fifty years. Although a few rural leases in the Territory have been acquired by city dwellers (the so-called Pitt Street farmers), Canberra residents have increasingly turned their attention in recent years to rural properties over the ACT border. In 1960, less than 2 per cent of the transfers of properties of more than two hectares in the eighteen shires surrounding the Territory were to people living in Canberra: in 1970 the comparative figure was 18 per cent. Of the 7800 properties that changed hands during the whole of this period, 600 were acquired by Canberra residents and most of these holdings were within fifty or eighty kilometres of the city. In Yarralumla Shire, Canberra-owned land consists of relatively small subdivisions north and south of the city, whereas in the other neighbouring shires the holdings are rather larger. With few exceptions, the land being acquired is along the Federal and Barton Highways and the main road to the South Coast, and there is thus concern about the development of a disguised form of semi-urban sprawl on Canberra’s doorstep. All this has emphasised the need for a co-ordinated, regional approach to planning round the ACT especially as the long-term growth strategy for Canberra (discussed later) implies an extension of the urban area beyond the present border.

One of the main impacts of Canberra on the region has been the demand for recreational facilities. The ACT itself provides opportunities for a wide variety of day excursions, including swimming, bush walking, and fishing. The Murrumbidgee River, because of the reliability of the river flow, the water temperature, and the sand beaches, has always been a popular place for paddling and picnicking. But some of the easily accessible recreation spots along its shore — at the junction with the Cotter River, Casuarina Sands, Kambah Pool, Pine Island, Uriarra, and Point Hut — have become overcrowded during summer weekends, and other areas further afield are being opened up (see Plate 47). However, many of the remaining stretches along the Murrumbidgee and Molonglo Rivers are in steep gorge country which limits access by car, and in any case the number of places with beaches and safe swimming conditions is limited. The growing dilemma, therefore, is how to reduce the pressure on existing areas without destroying the essential landscape and recreational qualities of these newer ones.

One solution has been to develop alternative picnic sites along Paddy’s River beside the road leading to the Tidbinbilla deep space tracking station and the nearby nature reserve. This Tidbin-
billa Nature Reserve, established in 1964, occupies about forty-seven square kilometres in a valley, the sides of which rise up 840 metres thus providing a diversity of flora and bird life that can be seen from walking trails. It has been zoned to restrict maximum visitor pressure to the front and central valley area where the greatest changes had already occurred during the early days as rather poor farm land. It is here, for instance, that native animals are held in large enclosures providing a setting similar to their native habitat through which visitors can walk unimpeded by cages or netting. Another solution has been to provide public access into some of the 121 square kilometres of forest plantations (mainly *Pinus radiata*) which form the basis of a viable logging and processing industry. These have been scattered from the low hills near the city well up into the mountains. They stand out from their surroundings as their colouring is stronger and darker than that of the eucalypts and their edges mark a strong transition from one land use to another. Elsewhere in the ACT the original appearance of the vegetation has been altered by many factors but particularly by farming and grazing. Clearing the hills to improve grazing has broken up their scale and left large areas bare of trees or with only scattered cover. The imprint of rural development also appears in the form of trees along roads and stock routes, the sharp divisions in the flow of the landscape where clearing stopped, and the stands of brightly coloured exotic species around homesteads, shearing sheds and stock yards and along water courses.

For longer trips Canberra people travel to the South Coast and to the Snowy Mountains. The coast, which can be reached now in less than two hours by car, has long had an attraction for the residents of this inland town. Many Canberra people have built vacation cottages along the 400 kilometre stretch between Nowra and Narooma: in 1965/66, for instance, a quarter of the land sales there were to ACT people. In some respects this is a curious phenomenon for in some parts of the coast the chances are that the street will be named after a Canberra suburb or that the neighbours will be employees of the same department or organisation. During winter attention turns to the skiing facilities in the snow country south of the ACT near the summit of Mount Kosciusko where hundreds of kilometres of new roads have been opened up in association with the Snowy Mountains hydro-electric and irrigation scheme.

In all these ways, the development of Canberra has had a considerable effect over a wide area of southeastern New South Wales. So far, on the whole, the benefits have outweighed the disadvantages but, as the numbers of people seeking nearby recreational outlets grow, there will be mounting pressure to 'upgrade' and formalise existing and planned new facilities, and the ease with which one can escape from a man-made urban environment into relatively untouched natural surroundings will diminish.
The growth of Canberra's population has intensified the pressure on nearby recreational areas like this one beside the Cotter River. Barbecues (and the wood to burn on them), tables and seats, toilets, parking areas, kiosks and other amenities are provided to try to cope with the demand and yet preserve the natural surroundings.
In 1964, as has been mentioned already, the NCDC received parliamentary approval in principle for the philosophy of developing Canberra in the form of a series of new towns which would neither become too unwieldy in size nor be choked by traffic concentrated in only one or two employment centres. The first two of these, Woden-Weston Creek and Belconnen, were developed on the basis of this outline plan for a city of 250,000, the size of population that seemed likely by the early 1980s. Since there was no suggestion or probability that Canberra would then stop growing, the Commission began considering how best to accommodate a population of half a million (which it is thought may be reached sometime between 1992 and 1996) or even a million while still preserving the central area as an uncongested, quiet precinct for deliberative activities and ceremonial occasions; maintaining the dominance of the city centre over the town centres; combining concentrated activity and accessibility by car; establishing an effective public transport system in a car-reliant community; determining the extent of redevelopment and the location of high intensity areas; and maintaining and conserving readily accessible open space.

To achieve these goals, the traditional comprehensive ‘master plan’ seemed too rigid. What was needed instead was a strategy for growth that would be sufficiently flexible and open-ended to allow for changes in the complex web of urban life and to enable future generations to make their own decisions in their own time and social context. The Commission recognised the enormous changes that had taken place, even since Canberra was founded, in the way that people want to live and behave, and recognised that further changes — in affluence, the nature of work, leisure, the role of education, and attitude to health, for example — would continue in the future. Moreover, it cannot be assumed at any time that people’s wishes are being fully met; the needs of minorities or less vocal groups may be drowned out by the clamour of the majority who themselves do not appreciate the full range of potential choices. A balance had to be struck, therefore, between remaining flexible while meeting contemporary demands and between making innovations while satisfying current needs. The urban system also had to be viable as public enterprise and yet provide profitable opportunities for private investment.

The Commission sought a strategy for growth that satisfied six main objectives:
1. the quality of the city as the national capital should remain paramount;
2. the stability of land use and land tenure should not be impaired;
3. future needs should be satisfied func-
Fig. 9 The Y plan for Canberra to accommodate growth to one million people. The transport system consists of a peripheral freeway network and an arterial road and public transport spine. Note the two proposed inter-town regional employment centres.

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 tionally, economically, socially, and aesthetically;
4 the range of opportunity for choice should be widened;
5 growth and change should be facilitated without loss in environmental qualities and cost effectiveness;
6 the structure of the city should be capable of accommodating growth and change without losing its enduring qualities.

Having accepted the principle of new towns as being the most appropriate way of structuring the future metropolitan region, the essence of the problem facing the Commission was how to organise and relate them to each other and to inner Canberra. Possible arrangements included centralised development around inner Canberra, linear development along main roads stretching northwest or northeast, and dispersed development in the form of a polynucleated system of towns separated by wide green wedges. The arguments for and against these alternatives were set out by the NCDC in Tomorrow's Canberra published in 1970. To help reach a decision the Commission and its consultants developed a series of mathematical relationships expressing the patterns of movement generated by the various structures. The significant variables were the distribution of the residential population and of employment, the size and location of the major retail centres, the road network, and the public transport system. Six alternative growth plans were tested with the aid of a computer and then evaluated.

The preferred option to emerge from this analysis consisted of three corridor
groupings of towns radiating from the central area, plus the satellite town of Queanbeyan to the southeast. The arrangement, shown in Figure 9, is Y-shaped with three towns (inner Canberra, Woden-Weston Creek, and Tuggeranong) in the southern corridor, two (Belconnen and an unnamed town) in the northwestern corridor, and another two (Gungahlin-Mulligans Flat and an unnamed town) in the northeastern corridor. The towns are connected by a major public transport route, running on a separate right of way through them, and by two north-south and two northwest-southeast freeways. In addition, provision is being made for two large regional employment centres located on the public transport spine between the towns in the northern corridors which, if necessary, could accommodate up to 40,000 workplaces. There are also a number of smaller intertown centres where land has been set aside for hospitals, research institutions, and industry. Between inner Canberra and Gungahlin-Mulligans Flat, for example, 80 hectares are being developed as the Crace industrial zone, providing an alternative to the existing industrial area at Fyshwick. In short, the Y plan envisages a metropolitan region with towns and major and minor intertown employment centres linked by clearly defined transportation corridors but separated sufficiently to give each its own identity.

This Y plan emerged as the result of eliminating a wide range of possibilities. A basic consideration was that the 1550 square kilometres of the ACT lying west of the Murrumbidgee River are moun-
square kilometre within and beyond it. Over and above this, the NCDC notionally set aside 100 square kilometres for broad-acre miscellaneous institutions not directly related to population growth, including defence and research establishments and airport facilities.

The table summarises the main population and employment data available at the present time: it should be noted that ‘Canberra’ includes the Majura, West Deakin, and Crace intertown centres, and ‘Belconnen’ includes the eastern and western intertown centres. What becomes clear from this is that Canberra can grow to a population of about 600,000 (to be reached perhaps in the year 2000) on the basis of the Y concept on land which is either owned or can be compulsorily acquired by the Commonwealth within the ACT. Beyond that development must take place in New South Wales — to the southeast around Queanbeyan and to the northwest and northeast of the Territory border as indicated in Figure 9. To some extent, therefore, there is a constitutional, legal, political, and practical uncertainty about the viability of the complete concept unless arrangements can be made to extend the A.C.T. border. There were suggestions in November 1974 that the New South Wales Government was willing to negotiate some sort of ‘deal’ with the Commonwealth but no decision has yet been announced.

In the meantime an intermediate plan was developed within the general Y concept to accommodate half a million people. Inner Canberra and the four new towns within the Territory would together contain over 80 per cent of their potential population at this point. To prevent any imbalance between the employment centres (which might be difficult to redress later) and excessive traffic demands on some roads, it is intended to keep the number of workplaces in the central area to about 59,000 at the half million mark, or roughly the same proportion, 25 per cent, that will be accommodated there when the population reaches a million. By then employment in the central area will have risen to 90,000 of whom two-thirds will be people commuting from the new towns.

A decision had to be reached in 1969 about the next new town to be built, since it seemed likely that the servicing of residential blocks for low-density housing would be completed in Woden in 1968/69, in Weston Creek by 1972/73, and in Belconnen by 1974/75. There were two main options: Tuggeranong and Gungahlin-Mulligans Flat. As the NCDC explained,

To program [Gungahlin-] Mulligans Flat before Tuggeranong would delay the introduction of a rapid transit system. To develop Tuggeranong first would increase pressures to fill in Woden and redevelop South Canberra. If [Gungahlin-] Mulligans Flat were first, similar pressures would be exerted on Belconnen and North Canberra. [Gungahlin-] Mulligans Flat development would increase the speculation on lands to the north of the A.C.T. border whereas Tuggeranong development would relieve them. In balancing the development of town centres, Tuggeranong had the advantage. The development of the third stage of the Woden Town Centre would be related to the early growth of Tuggeranong. It would use the facilities Woden provided until it got its own centre.
The choice was a marginal one in planning terms but was ultimately decided in favour of Tuggeranong because at that stage Mulligans Flat was under consideration as the site for a future airport (a proposal subsequently abandoned). Thus the development of a second town, consolidating the growth of the southern corridor and supporting the existing facilities in Woden-Weston Creek, went ahead: by May 1974, when the first residents moved into the new suburb of Kambah, 5000 blocks had been committed for servicing (see Plate 48).

The Y concept is not without its critics: they point, for instance, to the problems that may be created by the proposed future expansion across the Territory border into New South Wales and the difficulties of implementing an effective rapid transit system in this rather than a linear form of development. Yet the structural concept of a system of new towns has the merit of providing flexibility and a range of choice for social groupings; moreover, as they are clearly defined the possibility of implementing new forms of local government is enhanced.

The NCDC can maintain close control over the scheduling of development by advancing or retarding the release of serviced land for particular purposes. In recent years the planning of town centres has been stepped up to divert development pressure away from the central areas. Within the towns themselves the provision of shopping facilities is monitored to try to maintain a balance between the levels in the retail hierarchy. Thus the Southlands Group

Plate 48 In May 1974 the first residents moved into Kambah, the most northerly suburb of Tuggeranong. This photograph illustrates the very real problems of isolation faced by the 'pioneer' families in such areas, and helps to explain why nine out of ten households in Canberra have access to a car.

Plate 49 Fraser Court near the Kingston shopping centre was built in the early 1970s to replace a series of prewar single family dwellings. Redevelopment of this kind is likely to become an important feature in the older Canberra suburbs during the next couple of decades.
Centre in Woden was originally planned to provide 5100 square metres of retail space but, on the eve of the auction in 1970, the Commission withdrew the site for a 1850 square metre supermarket on the grounds that the build up of population in the southern part of Woden had been slower than expected and that 'a proper balance' had to be maintained between the interests of the consumer and those of the shopkeeper. There was speculation, however, that the Commission’s main concern was to avoid a possible diminution of interest in Woden Town Centre sites by prospective developers and major retailers.

The NCDC itself is in the hands of circumstances outside its control (the construction of the Black Mountain tower being a case in point) and is directly or indirectly affected by restraints imposed in times of general economic difficulties. In February 1971, for instance, the Government announced a package of economy measures which included the restriction of public service transfers to Canberra, and at that stage the Public Service Board projected an annual growth rate of 8 per cent during the 1970s rather than the 10 per cent previously expected. Changes in government can also mean changes in philosophy such as the elimination of elitist residential areas which has already been discussed. Policies can be reversed and reversed again. Thus, in September 1969 part of Kingston was declared to be an area in which redevelopment schemes would be allowed and several were implemented; in October 1973 all redevelopment proposals were frozen although permission was subsequently given for four previously announced schemes to continue; and in May 1974 it was indicated that suitable redevelopment schemes would be approved provided that only privately owned leases and not those used for government houses were involved (see Plate 49).

But all these pale into insignificance compared with the government’s indecision about the siting of the new Parliament House — the centrepiece of the Parliamentary Triangle. Griffin envisaged Parliament House as being on Camp Hill, a fairly inconspicuous knoll between the present temporary building and Capital Hill, and there it remained in theory until 1957. Then, following a recommendation from Lord Holford, it was shifted to a site nearer the lake frontage and the centre of Griffin’s land axis. The report of a Parliamentary Select Committee, set up to consider the planning requirements for the new building, reopened the question of its siting with the result that in 1968 the Senate voted for Capital Hill and the House of Representatives for Camp Hill (plate facing p. 1). When in mid 1969 the Government decided on the latter site, the NCDC not only prepared new plans for the Parliamentary Triangle but also immediately began work on a major ring road system round Capital Hill. Four years later the question of the site was again thrown into the melting pot. The Canberra Times on 26 October 1973 captured the mood of the renewed debate, much of which centred on symbolism not to say symbolatry:

The intellectual heirs of the age of armorial bearings and escutcheons find it intolerable
that the national Parliament should be built on any but the most physically dominant site within the hallowed Parliamentary Triangle conceived by Burley Griffin. Hence the almost pathological fear that a Parliament House built on the lesser Camp Hill could one day find itself looking up to a mere administrative building erected on the more prominent Capital Hill, and the imperative necessity to 'grab' the site now and 'stick our building on it while we can'. Apart from anything else, there is in this conception of what is hinging an element of pettifoggery as narrow as the proposal to limit to Australians only the competition for a design for the House.

Pursuing the rich intellectual lode opened up by man's universal addiction to the use of symbols, some supporters of the Camp Hill site can be just as persuasive. Instead of isolating the Parliament in lonely splendour on Capital Hill, they advocate, with all the power this word conjures, the integration of the supreme law-making authority of the nation with the daily and multifarious concerns of the citizens. Parliament is concerned with people, not with separate pressure groups or abstractions.

At that time both the Senate and the House of Representatives indicated a preference for the Capital Hill site. Aside from symbolical arguments, both sites would give rise to practical problems. The Capital Hill location would present difficulties during the period of construction, including access, the relatively steep slopes on part of the site, and the heavy traffic flow on the surrounding ring road. The Camp Hill site would, however, facilitate the transfer of business from the existing building, a process which may extend over five years, but would be partly obscured by the present structure if it were allowed to remain because of its historical importance. When the debate was renewed in 1974 the NCDC claimed to have no preference for either site but is believed in fact to have favoured Capital Hill, if only to help put an end to the argument and obtain a firm decision. As the NCDC Commissioner pointed out in his 1973/74 annual report:

The existing accommodation in Parliament House is wholly inadequate for the functions that Members are required to carry out. In spite of the extensions recently completed the situation continues to deteriorate. Already there are several proposals for further alterations and extensions. As it will take some 12-15 years to plan, design and construct a new Parliament House, a decision on the site and a firm commitment to commence with design should no longer be deferred. Absence of these decisions is not only detrimental to the conduct of Parliamentary business but also prevents any logical and comprehensive planning in the Parliamentary Triangle and contiguous areas. Continuing uncertainty is frustrating the Commission's task in this vital part of the National Capital and a resolution is urgently required.

Eventually in October 1974 both Houses of Parliament voted for the Capital Hill site. Nonetheless, it is more than a little ironic that the permanent Parliament House, symbolic of the whole purpose for which Canberra has been created, should be the one remaining major building in the Parliamentary Triangle yet to be designed. Work has already started on the National Gallery, a four level building to cost $13 million, which is scheduled for completion in 1977, and a two stage competition has been held to produce a design for the High Court. But in the opinion of many it is Parliament House that 'could still make or break Canberra artistically'.

The question has sometimes been posed as to whether it is feasible or desirable to contemplate an ultimate or optimum size for Canberra. The NCDC believes that the imposition of arbitrary
restrictions on city size are not required although this does not imply that it fosters a policy of unlimited growth or that it would 'resist proposals to reduce the rate of growth':

It simply means that there is no physical or planning impediment to the absorption of growth within the development strategy being pursued; that a strategy to provide growth is feasible; and that environmental quality, while accommodating growth, can be maintained.

But the question yet to be canvassed adequately is not how big the city can become but how big it should be. As the Canberra Times pointed out in an editorial on 30 May 1974.

There are undoubted advantages in size. Canberra cannot, at present, support a professional theatre company or similar artistic facilities. The provision of extensive sporting facilities such as large stadiums or racecourses can only be justified in terms of prestige and the occasional international event, not in terms of every-day need. It is argued that if one wants to see professional theatre or top sporting events it is possible to travel to Sydney or Melbourne but there are also those who would wish to have such events available in their own city. There is the question of Canberra's supposed lack of 'soul'. There is no guarantee that increased size will bring increased soul but certainly an increased size would support and justify the expansion of such things as youth centres, sporting complexes, and 'night life' which can be found in other major cities.

As against this, the virtues of Canberra in the eyes of some residents are the relative lack of traffic congestion at other than limited peak periods, freedom from pollution, proximity to natural bushland, and the high standards of amenities in residential, working, and recreational areas. Perhaps these will still be there when the population reaches half a million. But others already see Canberra as an increasingly impersonal place and are concerned that as it grows still further the individual will 'lose the sense of direct contact and spontaneous integration in the life around him'. An assessment of these less tangible costs and benefits of size is more than a mere academic matter for they bear on policy decisions yet to be made (such as whether some of the public servants due to be transferred to Canberra should be diverted to other inland growth centres like Albury-Wodonga). Canberra has now become such an attractive place to live that the real problem is no longer how to persuade people to come but how to cope with or even perhaps to discourage them.
Further reading

Population and employment data for future Canberra (see p. 81)

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(a) NCDC, Tomorrow’s Canberra, Canberra, 1970, p. 217.
(b) As at 31 March 1974 (supplied by Australian Bureau of Statistics).
(c) Assumes some redevelopment in Canberra.
(d) As at 30 June 1973 (supplied by Australian Bureau of Statistics).
(e) Plus an estimated 41,000 building and other mobile workers thus giving a total of 238,000 in the workforce (45 per cent of the population).
Canberra has grown in sixty years from a collection of surveyors' tents into a thriving city. It is a planned city — some say over-planned — controlled directly by the Australian government. But people are not always amenable to planning, and the city’s growth has not always been in accordance with the planners’ grand design.

*Canberra Site and City* is a lively personal account of how Canberra developed and of the things that have gone into making it a living, changing city. Extensively illustrated, this book is an absorbing picture of life as it has been and is in the national capital.

Godfrey Linge has long taken a lively interest in the development of Australia’s national capital and has written articles about it for both popular and academic publications. He is Professorial Fellow in the Department of Human Geography at the Australian National University.

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