
CHAPTER FIVE

PATH DEPENDENCY AND URBAN EXPANSION DURING THE POST WWII PERIOD

CASE STUDY: SYDNEY

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POTENTIAL LOCKED-IN OUTCOMES

An examination of the potential for path dependent outcomes involves taking on board the role history plays in influencing subsequent decision-making. For urban outcomes this would involve assessing how an existing urban environment influences decisions affecting location and investment. It may involve decisions made by individual households, by firms, or by public sector agencies. The examination would seek to find examples of urban outcomes that have become 'locked-in' as a result of earlier decision-making - whether these earlier decisions were intended to influence subsequent decisions or not.

As Aplin (1987) has noted, with particular reference to suburbanisation, "in many cases, a knowledge of the circumstances under which particular suburban areas grew will explain much of their present character. Indeed, many aspects of modern cities cannot be adequately explained by reference to modern conditions and processes alone. There is a certain resistance to change once capital has been invested in roads, buildings and public utilities. Some aspects of the present-day built environment are thus, in a sense, leftovers from past eras and need to be explained in terms of past conditions and processes".²⁴²

²⁴² Aplin, G., "The Rise of Suburban Sydney", in *Sydney: City of Suburbs*, Max Kelly (ed), UNSW Press, 1987, p 196

The examination of the case study city, Sydney, will involve working chronologically backwards from the existing urban pattern. It will involve examining how the existing urban form came to be by looking at the decisions and events that lead to the present urban outcomes. As city development is a multi-layered, dynamic environment that is always evolving and changing, analysis will involve peeling off one layer at a time to see 'what is underneath'.

HOUSING: PATH DEPENDENCY AND SUBURBAN RESIDENTIAL EXPANSION IN THE POST WWII PERIOD

The Australian city of today is saddled with a "massive suburban legacy".²⁴³ Sydney provides a ready example of this 'suburban legacy', perhaps not to the same degree as Melbourne or Adelaide during the 19th century, but certainly during the post WWII period.

The most noticeable elements of housing in the Sydney of the late 1990s is that it would appear to be a mixture of (1) relatively high density housing in suburbs built up from when Sydney was a walking city through to those suburbs formed at the time when mass public transport was inadequate²⁴⁴; and (2) low density suburbs, begun in force with the garden suburb movement of the early 1900s but

²⁴³ Frost, L., and Dingle, T., "Sustaining Suburbia: An Historical Perspective on Australia's Urban Growth" in *Australian Cities: Issues, Strategies and Policies for Urban Australia*, Troy, P., (ed), Cambridge University Press, 1995, p 38

²⁴⁴ Frost, L., *Australian City in Comparative View*, McPhee Gribble, Melbourne, 1990; Newman, Kenworthy and Vintila, *Housing, Transport and Urban Form, The National Housing Strategy*, Background Paper 15, Commonwealth Department of Health, Housing and Community Services, AGPS, 1992; Butlin, N. G. *Investment in Australian Economic Development: 1861-1900*, Cambridge University Press, 1971; and Frost and Dingle, 1995

which really took hold in the private motor vehicle dominated post WWII period.²⁴⁵

Despite concerns over the externalities created through urban sprawl (such as a heavy reliance on the motor car, congestion, pollution and habitat encroachment), and government policies aimed at promoting urban consolidation (for example, State Environmental Planning Policy 53, the present Metropolitan Strategy 'Cities for the 21st Century' and its immediate predecessor released in 1988), the sprawl of low density suburbs has continued. Sydney, as with other Australian cities, is not alone in facing this trend. Indeed, all comparable cities founded through the processes of settler capitalism are facing urban sprawl.

The existing housing stock is the result of previous decisions on housing types, desirability, forms and the impacts of housing affordability. This existing housing stock is effectively "locked-in". Changes from residential land uses are rare, although not unknown, for example the redevelopment of defunct industrial sites on the Pyrmont Peninsula and at Concord. Government policies seeking to promote urban consolidation have placed on them the limitations of this historical legacy.

The dimensions of the expansion of the urban sprawl within the Sydney Region, even in relatively recent times, are quite dramatic. For example, comparisons

²⁴⁵ Aplin, 1987; Freestone, R., "The Great Lever of Social Reform: The Garden Suburb 1900-30" in *Sydney: City of Suburbs*, Kelly, Max (ed), UNSW Press, Sydney, 1987; Frost and Dingle, 1995; Spearritt and De Marco, *Planning Sydney's Future*, Allen and Unwin, NSW Department of Planning, Sydney, 1988, p 14

between dwelling stock figures at the 1981 Census with the 1996 Census show the dominance of detached dwellings, particularly in the outer ring (see note (1) from Tables A and B) Local Government Areas (LGAs). The Tables below outline the growth in dwelling stock.

Table (A)

**Dwelling Stock 1981 and 1996
Sydney Statistical Division and Ring**

	Detached		Semi Attached & Flats		Other		Total	Total
LGAs (1)	1981	1996	1981	1996	1981	1996	1981	1996
Inner Ring	82957	80583	187534	213492	14430	15084	284921	309159
Middle Ring	258174	254480	94665	127577	10061	12613	362900	394670
Outer Ring	424318	570584	62518	126596	12993	25276	499829	722456
TOTAL	765449	905647	344717	467665	37484	52973	1147650	1426285

Source: ABS Census data

(1) Local Government Areas within the Sydney Statical Region by 'Ring' are as follows: INNER RING - Ashfield, Botany, Drummoyne, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randrick, South Sydney, Sydney, Waverley and Woollahra. MIDDLE RING - Auburn, Bankstown, Burwood, Canterbury, Concord, Hunters Hill, Hurstville, Kogarah, Ku-ring-gai, Manly, Parramatta, Rockdale, Ryde, Strathfield and Willoughby. OUTER RING - Baulkham Hills, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Gosford, Hawkesbury, Holroyd, Hornsby, Liverpool, Penrith, Pittwater, Sutherland, Warringah, Wollondilly and Wyong.

(2) 'Other' includes caravans and improvised dwellings, attached to shops and not stated

Table (B)

**Change in Dwelling Stock between 1981 and 1996
Sydney Statistical Division and Ring**

	Detached		Semi Attached & Flats		Other		Total	Total
LGAs (1)	No.	%	No.	%	No.	%	No.	%
Inner Ring	-2374	-2.9	25958	13.8	654	4.5	24238	8.5
Middle Ring	-3694	-1.4	32912	34.8	2552	25.4	31770	8.8
Outer Ring	146266	34.5	64078	102.5	12283	94.5	222627	44.5
TOTAL	140198	18.3	122948	35.7	15489	41.3	278635	24.3

Source: ABS Census Data

(1) Local Government Areas within the Sydney Statistical Region by 'Ring' are as follows: INNER RING - Ashfield, Botany, Drummoyne, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney, Waverley and Woollahra. MIDDLE RING - Auburn, Bankstown, Burwood, Canterbury, Concord, Hunters Hill, Hurstville, Kogarah, Ku-ring-gai, Manly, Parramatta, Rockdale, Ryde, Strathfield and Willoughby. OUTER RING - Baulkham Hills, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Gosford, Hawkesbury, Holroyd, Hornsby, Liverpool, Penrith, Pittwater, Sutherland, Warringah, Wollondilly and Wyong.

(2) 'Other' includes caravans and improvised dwellings, attached to shops and not stated

Over this 15 year period, an additional 278,635 dwellings were added to the total Sydney Statistical Division stock. Detached dwellings in outer ring LGAs accounted for around 52.5% of this total new dwelling stock. However, when other dwelling categories are added to this figure, the outer ring LGAs accounted for 79.9% of all dwelling stock additions. Another way to highlight the urban expansion of Sydney is to consider that in 1981, outer ring LGAs contained 499,829 of Sydney's 1,147,650 dwellings, or 43.6%. By 1996, 722,456 of Sydney's 1,426,285 dwellings were located in outer ring LGAs, or 50.6%. Just over half of Sydney's dwellings are now in the outer ring.

Sydney is a dispersed city, and recent trends have shown that this dispersal is not abating. However, it should also be noted that the number of semi-attached dwellings and flats being constructed in the outer ring would appear to indicate that this dispersal is not exclusively at a low density. Reasons for the existence of the continued suburbanisation might be summarised as: (1) population and demographic change creating a strong demand for new housing stock; (2) government policies that have encouraged suburban home ownership; (3) behavioural, social and environmental reasons that have lead people to desire to

live in a suburban residence²⁴⁶; (4) market forces, the cost of housing, given demand and supply factors, and the level of economic prosperity in the community²⁴⁷; (5) Issues such as location and accessibility have also influenced the potential for households to choose suburban housing alternatives. Without ready access to goods, services and employment options, the viability of suburban residential locations, or any residential locations, is significantly reduced.²⁴⁸

Each of the five factors highlighted above may have been influenced to varying degrees by path dependency, producing outcomes that have been constrained by the legacy left by past decisions.

Population Growth, Demographic Change and Housing

Population growth, one of the creators of housing demand, occurs as a result of fertility rates exceeding mortality rates and through migration²⁴⁹. The rate of household formation, age structure and trends in household size also influence demand for housing. With more migrants tending to be within the child rearing

²⁴⁶ Maher. C.A., *Australian Cities in Transition*, Shillington House, Melbourne, 1982; Frost and Dingle, 1995; Paterson, J., "Economics of Urban Policy", in *Australian Urban Economics*, McMaster, Webb (eds), ANZ Book Co., Sydney, 1976, pp 142-150; Sandercock, L *Cities for Sale*, Melbourne University Press, Melbourne, 1975; Spearritt, P. *Sydney Since the Twenties*, Hale and Iremonger, Sydney, 1978.

²⁴⁷ Aplin, 1987; Logan, Whitelaw and McKay, *Urbanisation: The Australian Experience*, Shillington House, Melbourne, 1981; Neutze, G. M., "The Cost of Housing", in *Australian Urban Economics*, in McMaster, J.C., and Webb, C.R. (eds.), ANZ Book Co., Sydney, 1978, pp 305-21

²⁴⁸ Wotherspoon, G., *Sydney's Transport*, Hale and Iremonger, 1983; Spearritt and De Marco, 1988; Aplin, 1987

²⁴⁹ Pollard, A.N., Farhat Yusuf, Pollard, G.N., *Demographic Techniques*, 3rd edition, Pergamon Press, Sydney, 1990

age groups, fertility levels were also higher than they might otherwise have been

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One of the principle failings of the County of Cumberland Plan (CCP), 1951, "Sydney's Great Experiment"²⁵¹ was its significant underestimation of population growth in the Sydney Region²⁵². Between 1947 and 1971, the CCP estimated that the Sydney Region's population would grow by 525,000 to 2,227,000, with the population reaching 2,297,000 by 1980. In actuality, the Region's population reached 2,297,000 by 1971 and 3,204,696 by 1981. The cause of the huge difference was a significant misreading of the post-war immigration level - a factor well outside any control by the State officials (Commonwealth population projections in 1944 forecast Australia's population to peak at 8,200,000 in 1980. By 1980, the population of Australia was 14,695,000).

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Some arguments might be able to be put forward to support the view that the post WWII migrant push showed signs of locked-in decision making. The 1980s and early 1990s saw some of the highest migration numbers in the history of Australia.²⁵⁴ This might be construed to mean that the historical legacy of earlier migration has been perpetuated, for example, by the family reunion program.

²⁵⁰ *ibid*

²⁵¹ Denis Winston, *Sydney's Great Experiment: The Progress of the County of Cumberland Plan*, Sydney, Angus and Robertson, 1957

²⁵² Spearritt and De Marco, 1988

²⁵³ *ibid*, p 21

²⁵⁴ House of Representatives Standing Committee on Long-Term Strategies, *Australia's Population Carrying Capacity: One Nation - Two Ecologies*, AGPS, Canberra, 1994

Sinclair (1976) notes that adding to the size of the population was an end in itself in 20th century Australia, and even in the second half of the 19th century, the self-perpetuating tendency of population growth in Australia was already apparent.²⁵⁵

However, given fluctuations in the levels associated with periods of economic downturn and the lack of any coherent national population policy²⁵⁶, the linking of path dependency theory to continued high migrations might be viewed from some quarters as having been purely fortuitous.

It could be assumed that the bureaucratic structure established to implement the initial post war immigration push had an interest in maintaining the program. Significant resources such as organisational capital had been sunk into establishing operational structures and information channels and codes. Conventions and processes had been developed, and had had time to achieve consistent ruling, rational actions and preferences. During the same period, effective lobby groups had grown up to clearly articulate the needs and expectations of the migrant groups.

Application of some of the principles of institutionalism to the continued population growth through migration would seem possible with the links to path

²⁵⁵ Sinclair, W.A., *The Process of Economic Development in Australia*, Longman Cheshire, Melbourne, 1976

²⁵⁶ House of Representatives Standing Committee on Long-Term Strategies, *Australia's Population 'Carrying Capacity: One Nation - Two Ecologies*, AGPS, Canberra, December 1994; Newton, P.W. and Bell, M. (eds), *Population Shift and Mobility in Australia*, Canberra, 1996

dependency seeming tenuous. However, if the causes of the population growth are put aside for the moment, the fact that by 1996 the Sydney Region's population had reached 3.9 million people in itself presents a historical legacy that will 'lock-in' many spatial decisions²⁵⁷, for example those relating to economic and social infrastructure servicing the new residential areas. In addition to this point, the decision that Australia needed a bigger population had in many ways locked-in public policy along the population growth path, and this presents an example for the illustration of path dependency theory.

Demographic structural changes have also influenced the demand for housing. For example, 520,000 new dwellings are projected to be required in the Sydney Region between 1991 and 2021. Of these dwellings, 75,000 are projected to be required due to demographic changes alone²⁵⁸. This demand for additional dwellings is the result of the aging population. As a consequence of this aging, more one and two person households will exist which "underlies the importance of the availability of small houses which will assist older people to live independently".²⁵⁹ The Department of Planning (now the Department of Urban Affairs and Planning) are also predicting a continuation of the trend in the lower dwelling occupancy rates that have occurred for much of this century,²⁶⁰ adding to the demand for more, and smaller, dwelling units. This structural change is

²⁵⁷ Arthur, W.B., "Urban Systems and Historical Path Dependence", in *Cities and their Vital Systems*, Ausubel, J.H. and Herman, R., (eds), National Academy Press, Washington, 1988, pp 85-97; Bradley, R., and Gans, J., *Growth in Cities*, UNSW School of Economics Discussion Paper, April 1996

²⁵⁸ NSW Department of Planning, *Cities for the 21st Century*, 1995

²⁵⁹ *ibid*, p 30

²⁶⁰ Frost and Dingle, 1995

based on the characteristics of the existing population, an outcome 'locked-in' unless a major event occurs.

Government Policies, Home Ownership and Urban Sprawl

Government policies have had a direct and indirect role in promoting urban expansion in general, and suburbanisation in particular. Government regulates lot sizes and minimum house standards, aimed to facilitate house ownership - especially aiming to assist low income earners purchase houses - and subsidise the provision of urban services. Government has also assisted the migration that sustained population growth (as outlined previously) and protected industry from external competition in an attempt to establish employment for the increased (and increasing) population.

The refining of industry protection, sometimes with 'made to measure tariffs', helped urban manufacturers at the expense of rural exporters. Prior to WWII, import controls had encouraged a number of large multi-nationals to set up in Australia to 'dodge' the tariff net; after WWII, foreign capital and overseas-based companies entered Australia to a far greater extent than had been seen previously.²⁶¹ The increase in manufacturing through protectionism, 'underpinned' immigration²⁶². Between 1947 and 1961, 73% of the increase in the labour force was provided by immigration, falling to just under 50

²⁶¹ Boehm, 1993, *Twentieth Century Economic Development in Australia*, 3rd edition, Longman Cheshire, Melbourne;

²⁶² Frost and Dingle, 1995, p33

per cent in the 1960s and early 1970s.²⁶³ If the massive immigration push was to be successful, jobs would be required. The tariff protection ensured that a significant proportion of these jobs would be urban jobs, thus creating a flow-on effect that stimulated urbanisation, increasing the demand for urban goods and services and suburban residential dwellings.

The New South Wales Local Government Act of 1919 empowered local government authorities to control the number of dwellings per acre, provided controls on new roads, subdivisions and buildings, and provided the opportunity to local authorities to stop further land use conflicts. J. D. Fitzgerald, speaking on the Bill in the Legislative Council said "if a Council declares a district a residential district, no one will be able to intrude into that district"²⁶⁴ - incidentally one northern Sydney Council, Ku-ring-gai, took these words to heart and declared their entire local government area a residential district in the 1920s.²⁶⁵

Sandercock (1975) notes these new town planning controls were readily taken on board by the middle class local government areas, protecting residential areas - and property values. Spearritt (1978) suggests that one of the main reasons why the Act passed the Legislative Council, was that "the upper house usually emasculated any legislation which threatened the rights of private property"²⁶⁶. Present local government local environmental plans (LEPs) are based on the

²⁶³ *ibid*,

²⁶⁴ Sandercock, 1975, p 82 noting NSW Parliamentary Debates, 1919, p 137

²⁶⁵ as reported by M. Beilby, General Manager, Willoughby City Council, 1997

²⁶⁶ Spearritt, 1978, p 20

Environmental and Planning Assessment Act of 1979, which develops further the principles outlined in the 1919 Act. Substantial amendments have been recently passed by the NSW Parliament²⁶⁷. These amendments aim, in part, to expedite the development process and promote performance-based controls over prescriptive controls.

Governments of all persuasions in Australia have accepted the 'ideal' of home ownership as one of the blanks of their political platforms²⁶⁸. In particular, governments have sought ways to promote access to home ownership for lower income earners. Various methods employed included lowering the deposit gap, extending the repayment period, subsidising interest rates through government guarantees, and the government's ability to borrow at lower interest rates²⁶⁹.

Frost and Dingle note that the new suburbs of the 1920s were overwhelmingly peopled by home owners or home purchasers - with home ownership rates in both middle and working class outer suburbs typically above 60 per cent²⁷⁰. They also note Butlin's calculation that over forty per cent of private capital formation in the 1920s went into residential construction - over half being for owner occupation²⁷¹. Owner/purchaser occupation in all of Sydney rose from 31% in 1911, to 40% in 1921, to 56% in 1954, and then to 70% by 1966²⁷².

²⁶⁷ EPA&A (Amendment) Act passed on 6 December 1997

²⁶⁸ Frost and Dingle, 1995, pp 29-30

²⁶⁹ *ibid*

²⁷⁰ *ibid*, sourced from 1921 Commonwealth Census

²⁷¹ *ibid*, noting Butlin, N.G., 1962, *Australian Domestic Product, Investment and Borrowings, 1861 - 1938/39*, Cambridge University Press, Cambridge

²⁷² Williams, 194, "The Politics of Property Ownership in Australia", in *Australian Urban Politics: Critical Perspectives*, Halligan and Paris (eds), Longman Cheshire, Melbourne

The level of government activity in promoting home ownership - in essence a reaction to the desires of the electorate - indicates the level of attention given to suburban dwelling ownership. Many studies have noted how the Australian psyche has been deeply influenced by a 'home ownership ideal'²⁷³. "Residential ownership is deeply seated in Australian society and is a direct measure of success and conformity"²⁷⁴. Before, and in immediately post WWII Sydney as well, those who could not afford to purchase housing and could not breach the deposit gap, were often forced back into the inner city areas to rent older, more rundown properties²⁷⁵. The depression of the 1930s dispossessed many and increased pressure on poor quality rental housing²⁷⁶. The inner areas of Sydney, including the once middle class suburb of Paddington, declined into slum-like status, where they remained until well into the post WWII period²⁷⁷.

Mounting pressure to address the deterioration of housing, particularly in the inner city areas, and the potential housing pressure expected to occur after the end of WWII, lead to the establishment of the Housing Commission in NSW in the early 1940s. Similar bodies also were established in a number of States around this time.²⁷⁸

²⁷³ Freestone, 1985; Kass, 1985; Allport, 1985; Neutze, 1977, *Urban Development in Australia*, George Allen and Unwin, Sydney; Stretton, H, *Ideas for Australian Cities*, Georgian House, Melbourne, 1970

²⁷⁴ Logan, Whitelaw and McKay, 1981, p 87

²⁷⁵ Frost and Dingle, 1995, p 32

²⁷⁶ *ibid*

²⁷⁷ Roseth, J., *Extent, Progress and Location of Rehabilitation Activity in Paddington*, Sydney, Planning Research Centre, University of Sydney, 1967

²⁷⁸ Frost and Dingle, 1995, p 32; Hayward, D., "The Reluctant Landlords? A History of Public Housing in Australia" in *Urban Policy and Research*, Vol 14, No. 1, 1996, pp 5-36

With the establishment of the Housing Commissions, Government now had the instrument by which to play a more direct role in the provision of 'decent' housing for low income earners. 'Decent' housing was to mean 'low-density housing' and not inner city higher density housing. Frost and Dingle note the Commonwealth Housing Commission's 1944 report as recommending "that any government-sponsored house should meet minimum standards for room size, floor area, and be built on an allotment of not less than 4,500 square feet with a frontage of at least 50 feet"²⁷⁹

The Menzies Government re-working of the Commonwealth-State Housing Agreement (CSHA) aimed to encourage home ownership rather than rental.²⁸⁰

The Housing Commissions actively campaigned to encourage its tenants to purchase the dwellings they were renting. Initially, credit for rent already paid was given (the tenants had to arrange finance and could not sell their home for seven years). Later, given the low purchase take-up rates, focus was directed towards addressing the deposit gap - the major impediment for home purchasers.

The 1956 Commonwealth State Housing Agreement aimed to ensure that not less than 80% of all houses built with CSHA funds were to be available for purchase by tenants²⁸¹

A Housing Board had actually been established in NSW in 1912. When the Board was dismissed in 1924 it controlled just over 400 homes, Allport, 1985, "Castles of Security: The New South Wales Housing Commission and Home Ownership, 1941-61", in *Sydney: City of Suburbs*, Max Kelly (ed), University of New South Wales Press, pp. 95-124

²⁷⁹ CHC Final Report, 1944, 10, 18

²⁸⁰ Allport, 1985, p 98

²⁸¹ *ibid*, pp107-114

Following the CSHA directives and rapid construction of dwelling stock, the Housing Commission of NSW played a significant role in the promotion of suburbanisation. It was the demand for the release of more land for residential subdivision by the Housing Commission, among others, that led to the collapse of one of the planks of the County of Cumberland Scheme, the Green Belt. In 1959, the Minister for Local Government and Highways, P. D. Hills, released 50 square miles (130 square kilometres) of green belt to willing developers in response to an extraordinary build up of demand for housing stocks²⁸². In an illustration of the lack of coordination and mutual support between government agencies, the Housing Commission was one of the main proponents of the release of green belt land²⁸³. Of course the Housing Commission did not act alone. The Councillors, property owners and businesses of the fringe areas were concerned about the future of their districts and the potentially limiting effect the green belt would have on future growth²⁸⁴.

Other State Government agencies did not help the CCC either. Stretton (1970) notes that "the railways took no notice at all of the new planners and refused to build their new railways. The Housing Commission defied the zoning - the plan didn't provide land of the kind the Commission wanted. When Water and Sewerage refused to dive under the green belt it was partly because the planners were doing nothing effective to get settlers to jump over it"²⁸⁵.

²⁸² Spearritt and De Macro, 1988, p 22

²⁸³ Sandercock, 1975

²⁸⁴ *ibid.*, pp 184-5

²⁸⁵ Stretton, H., *Ideas for Australian Cities*, Griffen Press, Adelaide, 1970, p 241

While government agencies were working against the attempts at metropolitan planning by the County of Cumberland Council, they were promoting future urbanisation through a series of subsidies, particularly through subsidies for urban services. The State Government invested considerable monies in public works such as water, sewerage and roads further up the hierarchy due to the increased traffic generated from the new estates. Investments in social infrastructure, such as schools, hospitals and recreational facilities were also required in the newly developed residential estates²⁸⁶.

In 1993, it was estimated that the cost of physical and social infrastructure per allotment was approximately \$50,000²⁸⁷. Therefore, for example, if all of the Department of Planning's estimate for dwelling stock requirements per annum were to be met by detached housing, this would equate to a cost of approximately \$750 million per annum in physical and social infrastructure costs²⁸⁸.

In New South Wales, it is only relatively recently that the Environmental Planning and Assessment Act (1979) was amended to incorporate contribution plans - levies on developers for a variety of infrastructure. Funds gathered by local government under this amendment (Section 94) provide some additional

²⁸⁶ Aplin, 1985. p 203

²⁸⁷ Alan Hunt, "Providing and Financing Urban Infrastructure" in *Urban Research and Policy*, Vol 12, No 2, 1994, pp 118-123; other estimates include between \$21,350 and \$44,350 per allotment (1989/90 dollars) by Travers Morgan P/L and Applied Economics P/L, 1991 "The Housing Cost Study", prepared under the Australian Building Research Grant Scheme

²⁸⁸ Neutze, M., "The Costs of Urban Physical Infrastructure Services", *Urban Research Program, Working Paper No. 42*, July 1994; Toon, J. Loges, D., Phibbs, P., Payne, M., *Review of Contribution Plans*, Planning Research Centres, 1994

scope for the provision of generally physical services by Local Government. However, these funds are not representative of complete cost recovery. Government in Australia has a long history of infrastructure provision, and in the post WWII period this expenditure increased significantly. Total government capital formation for roads in the post WWII period had increased between 1945 and 1975 by over 600% to 65.98 million pounds (calculated in constant 1938/39 pounds). Over the same period, public capital formation for housing rose from 1.7 million pounds to 22.55 million pounds (constant 1938/39 pounds). Between 1950 and 1975, public capital formation for water and sewerage rose from 5.5 million pounds to 38.99 million pounds (constant 1938/39 pounds), and for urban transit it rose from 1.65 million pounds to 2.25 million pounds in 1975, relatively less impressive when compared to the other infrastructure increases²⁸⁹.

As in the example of population growth where decision making could just as easily be the result of institutionalist traits as it could be the result of path dependency, the same conclusions might be drawn from the results of government policies that have encouraged urban expansion. Government agencies set in motion policies aimed at preserving their core activities given the amount of 'sunk' capital invested into organisational process, structures and objectives. This is in spite of their impact on wider government goals such as the County of Cumberland Plan and the Housing Commission of NSW desire to develop within the 'green belt'. However, inter-governmental agency power-plays aside, the activities of government agencies that have promoted urban

²⁸⁹ all sourced from Butlin, N.G., *Australian National Accounts, 1788-1983*, ANU Source Paper No. 6, November 1985

expansion may provide a useful example of decision making that has led to 'locked-in' outcomes.

Government support for private housing ownership in new detached dwellings has been sustained for most of the post WWII period. As illustrated previously, this support has included providing tariff protection leading to the creation of urban jobs; subsidising urban services such as water, sewerage and roads; regulating allotment size to ensure low density suburbs; and more directly through government agencies such as the Housing Commissions. The strong home ownership ethic had been embraced by governments of all persuasions. The public housing push in the post WWII period, incorporating the objective of encouraging tenants to purchase their homes, was an extension of the government policy -or decision - embracing home ownership. "In the early part of the Twentieth Century, Australian Governments embraced home ownership and ignored public housing. In the middle part of the century they added public housing to their bow, but during the post world war two era, with the partial exception of South Australia, turned public housing into a vehicle for enabling people to become home owners"²⁹⁰. Hayward (1996) sees the introduction of rigorous means-testing, the recent reforms that include a funder/ provider split, competition from other social housing providers, and direct payment to tenants from the Commonwealth, as a continuation of the long held decision to 'encourage' home ownership. The desirability of home ownership has been

²⁹⁰ Hayward, 1996, p 32

‘locked-in’ to government decision making. However, the level of resource allocation may have changed.

Paterson (1976) has noted that allocation differences between public and private resources reflect fundamental characteristics of the situation or time in which they are made. “It seems that major changes in the public/private allocation normally occur only in response to changes in technology over time or to major social and political changes”²⁹¹. Paterson also notes changes in allocations tend to occur in large discrete jumps that might also be reflecting social movements “within a country and which in turn very often reflect movements occurring in many countries at the same time”²⁹².

The major ‘social movement’ - or rather, in this example, an ‘ideological movement’ - could be the shift from the dominance of Keynesian economic theory, which recognised market failure and the need for remedial government action, towards a revival of the neo-classical approach which sees government failure as worse than market failure, creating inefficiencies in the economic system, hindering market signals and the frustrating of a competitive market place.²⁹³

²⁹¹ Paterson, J., “Economics of Urban Policy”, in *Australian Urban Economics*, McMaster, Webb (eds), ANZ Book Co., Sydney, 1976, pp 142-150

²⁹² *ibid*, p 146

²⁹³ Wolf, C., *Governments or Markets: Choosing Between Imperfect Alternatives*, The MIT Press, Cambridge Mass., 1988

Hayward (1996) notes the change in the political ideology by governments of all persuasions and the impact this change has had on the Commonwealth-State Housing Agreement. The CSHA has moved from direct funding of State Government for the provision of social housing, through to the establishment of a funder-provider system. Under this system the former Housing Commission is one of a number of social housing providers (albeit the largest) that competes with other providers such as community housing organisations. The 'clients' are funded directly and can choose between the competing suppliers of social housing.²⁹⁴ However, despite these changes as an example of locked-in outcomes the fundamental desirability of home ownership remains. The high profile given to home interest rates, government discounts on stamp duty charges for low income earners and the substantial government subsidies of housing infrastructure lead to the conclusion that despite any ideological shift the desirability of home ownership remained.

Behavioural Aspects for Housing Location Decisions

Utility maximising households will include the locational decision making process, social, environmental and behavioural characteristics - in addition to economic and access considerations. The households will seek to secure the best housing, given dwelling quality and location, that they can afford. In the post WWII period, for many this meant a detached dwelling in the suburbs, and quite often this dwelling was only recently constructed. Even well before this period a

²⁹⁴ NSW Department of Urban and Planning, *Housing Policy Directions in NSW*, State Conference on Housing Policy Green Paper, 12-12 August 1996.

“home” had come to mean a detached single level dwelling and not a ‘flat’ or ‘lodging house’²⁹⁵. Even in the nineteenth century, the concept of home ownership was raised as a worthy and achievable goal. Richard Twopeny (1883), regarding new arrivals to Australia in the 19th century, commented that “before long he acquires a small freehold, and with the aid of a building society becomes his own landlord”.²⁹⁶

The dispersed nature of the residential suburb sought by households reflects, in part, the household’s desire to secure the privatisation of living space - the ability to be able to ‘isolate oneself from one’s surroundings’²⁹⁷, a powerful incentive. While attitudinal information can be difficult to quantify, the spread of the suburbs indicates the societal acceptance and perceived desirability of this form of living. “Attitudes to urbanism generally have been extremely important in determining the type of physical environment to which some groups gravitate....Preferences for space, privacy and security can evolve over time as seen by the flight to the suburbs in many cities”.²⁹⁸

Maher (1982) and Frost (1990) suggest the overwhelming preference for suburban living is linked to the high number of immigrants of British origin.

While this suggestion is directed to 19th century immigration, it can be readily

²⁹⁵ Karskens, G., “A Half World Between City and Country: 1920s Concord”, in *Sydney, City of Suburbs*, Max Kelly (ed), NSW University Press, Sydney, 1987, p 128 noting W. R. Butler comments in a paper entitled *The Architecture of Healthy Homes* read to the Australia Healthy Society, Melbourne, 1902

²⁹⁶ R.E.N. Twopeny, *Town life in Australia*, Elliott Stock, London, 1883, p 37 - as noted by Kass, J., “Cheaper than Rent: Aspects of the Growth of Owner-Occupation in Sydney 1911-66 in *Sydney: City of Suburbs*, Max Kelly (ed) NSW University Press, Sydney, 1987, p 77

²⁹⁷ Maher. 1982, p 5

²⁹⁸ *ibid*, p 7

applied to migration in the post WWII period which also contained large numbers of British migrants²⁹⁹. These groups left high density living conditions and found that the space and climatic conditions of their new environment encouraged outdoor living³⁰⁰. In the Britain they left, suburban living was the domain of the upper-class groups, while in Australia it was more widely attainable³⁰¹.

Maher (1982) lists a number of factors that support the demand for suburban locations. These include (1) push factors, such as environmental conditions, where households wish to move to the suburbs for better environmental quality - the inner city with its pollution problems losing its appeal; (2) to avoid the congestion of the inner-city areas, and seeking quieter, more spacious living conditions; (3) pull factors, such as the perceived desirability of suburban living, more space and the ability to combine some 'rural qualities' while still being able to gain the economic benefits of the city; (4) social perceptions - when social status is less identifiable by accent and in most cases not conferred by birth, other ways are sought to emphasise social status. Maher suggests that one's 'address' has come to represent where one stands in society, acting as an 'external' status symbol³⁰². By simple design controls, status could be maintained in an area. For example, during the inter-war period brick was more expensive than timber. A Council, by declaring an area to be exclusively brick ensured that low income

²⁹⁹ Botsman, P. "Immigration in the 1990s: Some Personal and Socio-Economic Notes" in Easson, M. (ed). *Australia and Immigration: able to grow?*, Pluto Press, Sydney, 1990, pp 153-70

³⁰⁰ Maher, 1982, p 20

³⁰¹ Frost, 1990, p 28

³⁰² Maher. p 22

earners were excluded³⁰³. The same principle could be applied to fibro dwellings in the post WWII period. Given that Australian suburbia has been around for a number of generations, in many instances there will be people who have experienced no other form of living than the suburbs. Social contacts, recreation and employment can all be in suburban locations³⁰⁴. In these circumstances suburbia becomes self-perpetuating - the CBD and inner city just another suburb rarely visited.

There is also a degree of social cost applied to suburbia. Critics complained of the design, layout and the 'monotony' of the houses, row after row - fenced off with bare straggling gardens³⁰⁵. Karsken, noting Desbrowne Anner's³⁰⁶ comments that the typical suburban house involved "perverted ideas of economy", claimed that "the builder has but one rule and one method for the lot, and it is in the exact repetition that he scores whether they prove suitable or not". Robin Boyd (1960) in his book *The Australian Ugliness*, (Cheshire, Melbourne) slays into all suburbs with vitriolic contempt. The suburban 'dream' according to these ascetics, was not meant to be the suburban 'nightmare'³⁰⁷

'Cultural deserts', lacking adequate services and resources, car dependency, isolation - particularly for full time child-carers - could all be added to the social

³⁰³ Frost and Dingle, 1995, p 31

³⁰⁴ Maher

³⁰⁵ Karsken, 1987, 125

³⁰⁶ Desbrowne Anner, *For Every Man his Home: A Book of Australian Homes*, Melbourne, 1921, p 11

³⁰⁷ Duruz, J., "Romancing the Suburbs?", in *Metropolis Now*, Gibson, K., and Watson, S., (eds), Pluto Press, Sydney, November 1994, pp 17-32

costs of suburbia. However, despite these costs, the spread of residential suburbia continued at a rapid pace. Certainly from the behavioural and social aspects, this form of housing is well and truly 'locked-in'. As Frost (1990) has noted the old walking cities could not cope with the rapid expansion experienced as a result of the agricultural and industrial revolutions. With the deterioration of health and living conditions in the inner city areas the desirability of the suburbs rose.³⁰⁸

While the suburbanisation process is clearly more complex than this simplified behavioural approach - for example, gentrification, rising inner city property prices and recent trends of 'empty nesters' moving to inner city locations in search of lifestyle services, all work against the suburbanisation trend. However, there may be elements of path dependency and locked-in decision making in the behavioural outcomes that promote suburbanisation.

The similarities between path dependency and behavioural location theory was briefly discussed in a preceding chapter. Both approaches recognised that real world outcomes involved economic actors that lack perfect knowledge. When decision makers are faced with a deep-seated belief that detached dwellings in suburbia present an adequate, and possibly ideal, living environment the options to chose alternative outcomes become strictly limited and socially unacceptable. With the cultural norms of Australian society promoting the virtues of suburban living and restricting the choices available for alternative forms of housing, as an

³⁰⁸ Frost, 1990, pp 20-3

outcome it shares similarities with the institutional theoretical approach in addition to path dependency.

Behavioural approaches examine a wide variety of variable such as motives, values, preferences and opinions. When these variables, as we have seen, influence locational outcomes on a large scale - economies of scale and positive feedback mechanisms, as noted in path dependency theory, may lead to housing locational outcomes for many people being 'locked-in'.

Market Forces: The Demand and Supply of Housing

Market forces, the supply and demand for housing, and housing affordability impact on housing choice and in the example of Sydney, influenced the rate of urban expansion. As mentioned previously, suburban detached dwellings were seen as highly desirable for a large proportion of the populace. In the Australian setting, as compared to other cities developed through settler capitalism, the preference for living in a suburban setting was not only thought to be desirable, it was often an achievable goal³⁰⁹. Frost and Dingle attribute the number of Australians who could afford the high costs of suburbanisation to the favourable labour market conditions and the high average incomes which were generated from a prosperous economic base. They also note that while high incomes were necessary, additional conditions needed to be met if the extensive suburbanisation was to occur, including the need for an appropriate institutional

³⁰⁹ Frost and Dingle, 1995, p 22; Frost, 1991 and 1990

framework that allowed for the public provision of infrastructure, in particular transport infrastructure³¹⁰. These comments particularly relate to the 19th century. However, they could equally be applied to the second half of the twentieth century, if public provision of road infrastructure is included.

Maier (1982) notes that the suburbanisation processes that began at the start of the 19th century as a result of a number of far-reaching social and economic changes had, quantifiably, its most far reaching impacts in the period since the Second World War. "The increasing rate of accumulation and investment arising from the development of capitalism, the changing relationships of different social groups to the production process, and the emergence of strong class differences all combined to begin the movement of the population away from the centre toward the periphery; a process which has continued unabated to the present day"³¹¹.

While aspirations to own a detached dwelling on a separate block remain, as Aplin (1987) notes, to attain this goal - particularly for low income earners within Sydney - has resulted in the movement to areas further and further away from the old central core, continuing the urban sprawl onwards³¹². This is an example of the residential mobility which results from private households trading off their desires for location and space within the limitations of their domestic budgets³¹³. Households trade off environmental concerns, congestion costs, access to

³¹⁰ Frost and Dingle, 1995, pp 24-5

³¹¹ Maier. 1982, p 26

³¹² Aplin, p 205

³¹³ Paterson, 1976, p 143

services and access to employment, among other factors such as the behavioural and social considerations previously highlighted.

In built-up areas the residential land supply is usually fixed. Certainly more dwellings can be constructed through redevelopment to a higher density.

However, the historical legacy of previous development limits the potential for wholesale redevelopment. (Given Sydney's topography, a number of sites have significant natural advantage, such as water views and access. These sites are limited in number, supply is fixed and as a result a premium is paid for ownership). While Sydney over the last 5-10 years is said to have undergone an inner city apartment boom³¹⁴, the Dwelling Construction figures outlined in Tables A and B show that the contribution of new inner city apartments to total new dwellings stock, has been shown to be of limited significance - more than twice as many attached dwellings and flats were built in outer ring LGAs. Increases to residential land supply largely occurs only on the fringe of this existing built-up urban area.

The 'manufacture' of detached homes on mass and a competitive building industry has proved to be a particularly cost-effective method by which to construct dwellings³¹⁵. In the 1945-1973 period in particular³¹⁶, one of the key characteristics of urban development has been the easy availability of suburban housing. "It was quite simply cheaper to buy new housing in the suburbs than it

³¹⁴ NSW Department of Urban Affairs and Planning. *Building Trends*, 1997

³¹⁵ Brain Elton and Associates, *Four Affordable Housing Models* report to the (NSW) Ministerial Taskforce on Housing Affordability, May 1997

³¹⁶ USA example but equally applicable to Sydney

was to reinvest in central city properties or rent at the market price”³¹⁷. With governments heavily subsidising the economic and social infrastructure required to meet the demand generated by the new suburbs, the detached dwelling on the separate lot would have certainly been one of the cheapest housing options available.

Strong demand for housing was maintained through: (i) demographic change and population growth underpinned by immigration; (ii) the public’s belief of the desirability of suburban living; and (iii) the government’s willingness to support home ownership through subsidisation.

Maher (1982) has noted the changing nature of concerns in Australia over the 20th century. In the 1920-40 period, initial concern was over public health and slum clearance. In the immediate post-war period the concern was over whether supply could keep up with demand. From the 1960s concern shifted from quantitative to qualitative aspects of the distribution and allocation of housing resources³¹⁸. From the 1980s, with rapidly rising housing prices in Sydney, rising well beyond the other capital cities³¹⁹, housing affordability issues have received prominence. All of these phases have been addressed in some way through the supply of new housing allotments near the urban fringe of the metropolitan area.

³¹⁷ Jackson, K. T., 1985, *Crabgrass Frontier: The Suburbanisation of the United States*, New York, Oxford University Press

³¹⁸ Maher, p 87

³¹⁹ *ibid*

Demand for housing and the supply of housing, have both contained elements that allude to path dependency. By deduction therefore, the housing market is effected by path dependency. As mentioned previously, the population growth that reinforced housing demand has had a tendency to exhibit locked-in characteristics. The push for population growth, particularly in the post war period, has been seen as ‘an end in itself’³²⁰. The desire for suburban living has permeated society and reinforced the housing demand. The supply of new detached dwelling stock on the fringe of the urban area has been indirectly subsidised by government through economic and social infrastructure provision, and more directly through the activities of the Housing Commission. These government policies that direct resource allocation to the housing sector suggest a ‘locked-in’ outcome, that outcome being the home ownership ‘ideal’.

Accessibility and Locational Choice

No discussion on the post WWII spread of suburbanisation would be complete without mentioning one of the key aspects of locational choice - accessibility. Accessibility in this context refers to the ‘accessibility’ of households to services, to goods, and to employment. It has been noted that households balance within the constraints of their domestic budgets, their desire for space and environmental quality, as well as the quality of housing stock, with the costs of congestion and access to lifestyle and economic needs. The historical legacy of city development has lead to the majority of cultural facilities and economic

³²⁰ Sinclair, 1976

infrastructure being focussed on the inner core of the city. In the example of Sydney, a variety of lifestyle factors, such as access to the harbour, beachfront or 'premium' views have, through natural endowment, been located in the inner city and beach front areas.

Weighing up the advantages of location - and cost - households in the post war period have also experienced a dramatic increase in private mobility, essentially through the mass ownership of the motor car. This has enabled more dispersed residential locations to be considered by households than ever before. The weakening of the CBD's dominance of the employment market, in part, also reflects the greater ability of employees to select suburban employment locations as well as suburban residential locations³²¹.

Following the collapse of the County of Cumberland Plan, and following the establishment of the State Planning Authority (SPA) in 1964, which took over the role of metropolitan planning for the Greater Metropolitan Region, a new Metropolitan Strategy was developed. Released in 1968, the Sydney Region Outline Plan 1970-2000 AD (SROP). SROP has been variously criticised as allowing 'promiscuous suburbanisation'³²², and as being a 'speculators guide' for developers who had capital to buy urban fringe rural land for speculative purposes³²³. What it did do, however, was accept the low density suburbs as the

³²¹ Stanback, T. M., *The New Suburbanisation: Challenge to the Central City*, Westview Press, Oxford, 1991

³²² Spearritt and De Macro, 1988

³²³ Sandercock. 1975, p 89

norm³²⁴. It also looked for large-scale areas which would be suitable to accommodate the extremely large population numbers forecast for the Sydney Region. SROP aimed to accommodate an extra 2.75 million between 1970 - 2000. Actual growth between 1971 and 1996 was just over one million.

Sydney grew in every direction where topography allowed³²⁵. Accessibility to services and employment for all those households in new suburbs was overwhelmingly by motor car. With the 'accepted norm' of the detached dwellings in low density suburbs, accessibility to those suburbs in the post-war period was now dominated by the motor car

Perhaps the planners were overwhelmed by the impact of the private motor car (along with the concern over housing capacity). However, a quick review of the metropolitan strategy of that time shows that accessibility for all bar the CBD core was accepted as being by motor car. This view had become locked-in and urban form densities would become path dependent on motor car access to low density suburbia.

³²⁴ NSW Planning and Environment Commission, *Review: Sydney Region Outline Plan*, Sydney, 1980, p 22

³²⁵ Spearritt and De Macro, 1988, p 29

EMPLOYMENT: INDUSTRIAL, OFFICE EMPLOYMENT LOCATION AND PATH DEPENDENCY

The economic role performed by cities is critical to their very existence³²⁶. Clustering forces of agglomeration economies, scale economies and regional comparative advantage facilitating trade helps foster settlement activity and growth³²⁷. Within the settler capitalism context, through to the resurgent globalisation trends of the late 20th century³²⁸, the economic factors of Australian cities and the location of the factors of production (land, labour and capital) have been heavily influenced by external market forces³²⁹. The restructuring of employment, particularly in the post WWII period, can be viewed as an illustration of the impact of structural changes in the global economy. The flow-on effect of this global economic restructuring will also be felt spatially in the city³³⁰. However, given that the physical urban form is highly durable, and that neither households nor firms adjust instantaneously to change opportunities³³¹, a spatial lag results.

A path dependency theoretical description of this lag would suggest that present day decision making is locked-in to the historical spatial legacy of the decisions made by those who have gone before. In some cases the locked-in spatial outcomes may represent the most efficient outcome - referred to as First Degree

³²⁶ Mills, 1972

³²⁷ Mills, 1972; Mills and Hamilton, 1984; Kivell, 1993; Healey and Ilbery, 1990

³²⁸ Searle, 1996

³²⁹ Boehm, 1983

³³⁰ Searle, 1995; Australian Housing and Urban Research Institute, *Cities and the New Global Economy*, AGPS, Canberra, 1995

³³¹ Paterson, 1976, p 144

Path Dependency by Liebowitz and Margolis (1995). In other cases the decisions made have led to inefficient outcomes, however those original decisions were made with the best available information at that time - Second Degree Path Dependency. The third degree path dependency form, as described by Liebowitz and Margolis (1995), is where not only is there an error leading to inefficient outcomes, but these errors were known at the time the decisions were made and an alternative course of action could have been taken that would have led to a better outcome.

The Third Degree Path Dependency spatial outcomes delve into the world of urban political economy. Sandercock (1975), Sandercock and Berry (1983)³³², Daly (1982), Muir (1987)³³³, Sandercock (1990)³³⁴, Collins (1983), Riordan, (1983)³³⁵, and Ashton (1993)³³⁶ have each outlined extensively the political intrigue and the battle between personal interest and public benefit relating to major land use decisions. Indeed many of the examples they outlined would appear to represent individual cases of Third Degree Path Dependency - for example, the selection of a railway route that follows a less efficient route because of certain property interest, however, the outcome of the rail line option locks-in future land use decisions. It would appear to be of little value to repeat the individual cases of self-interest resulting in inefficient spatial outcomes in

³³² Sandercock and Berry, *Urban Political Economy: the Australian Case*, George Allen and Unwin, Sydney, 1983

³³³ Muir, "Public Spending and Private Property: The Illawarra Line Cabal, in *Sydney: City of Suburbs*, Max Kelly (ed) NSW University Press, 1987

³³⁴ Sandercock, *Property, Politics and Urban Planning*, second edition, Transaction Publishers, London, 1990

³³⁵ Riordan, "The Politics of Concrete: the Eastern Suburbs Railway" in Wotherspoon (ed), *Sydney's Transport*, Hale and Iremonger, Sydney, 1983

³³⁶ Ashton, P., *The Accidental City*, Hale and Iremonger, Sydney, 1993

this study. Instead the focus of attention will be directed to wider spatial trends rather than individual decisions. By this process it is hoped that a better understanding of the wider influence of locked-in outcomes and path dependency will result, rather than another explanation of the negative impacts of the pursuit of greed and self-interest.

A number of studies have highlighted the link between spatial form and the influence of global economic forces on production. O'Connor (1997), in his paper on continuing suburbanisation, said that the central core of his argument was "that the spatial form of a metropolitan area reflects the locational characteristic of the production systems that are in place in a metropolitan area, subject to the constraints and opportunities (due to the global and national role of that metropolitan area)"³³⁷. Paterson (1976) had noted that one of the constraints to the urban policy field was that "cities themselves are a set of intermediate goods, not a final good produced by the economic machine to satisfy ultimate wants"³³⁸. The city is always evolving and changing as a result of economic agents at work at any particular time³³⁹. Paterson argues that cities emerged as a by-product of other aspects of national activity, and as a result urban policies should be principally seen as an interaction area, or by-product, of other policies³⁴⁰.

³³⁷ O'Connor, K., "Continuing Suburbanisation", in *Urban Policy and Research*, Vol. 15, No. 2, 1997, p 139

³³⁸ Paterson, p148

³³⁹ Whitelaw, J. S., and Maher, C. A., "A tale of few cities: urbanisation in a constrained environment", in *Land, Water and People: Geographical Essays in Australian Resource Management*, Heathcote and Mabbutt (eds), Allen and Unwin, Sydney, 1988

³⁴⁰ Paterson, p 149

Industrial Restructuring and Employment in the Post WWII Period

The long boom, running from 1945 to the early 1970s, and subsequent periods of economic uncertainty and restructuring have had a profound effect on the national economic system, and as a consequence have also had a significant impact on spatial form. For example, the manufacturing sector, which had grown throughout the century with the help of tariff protection³⁴¹, had contained 25% of national employment and accounted for 28% of Gross Domestic Product by 1950, up from 21% and 18%, respectively in the 1930s³⁴². Manufacturers' share of national employment continued to increase up until the early 1970s whereupon it declined significantly. Maher noting Linge (1979)³⁴³) suggests that manufacturing (in the 1970s) has been perhaps, more than any other industry, subject to the forces of structural change brought about by a variety of pressures including inflation, tariff changes, increased external competition, exchange rate fluctuations, escalating labour costs and slowing population growth³⁴⁴.

In the Sydney Region in 1945, 182,000 people were estimated to be working in factories³⁴⁵. This had increased to 360,000 in 1971, or 27.9% of regional employment. Rich (1982) notes that there was a decline in regional manufacturing employment of 50,000 jobs between 1971 and 1976 and

³⁴¹ Boehm, 1993

³⁴² Logan, Whitelaw and McKay, 1981, p 36

³⁴³ Linge, "Australia's Manufacturing in Recession: A Review of Spatial Implications", in *Environment and Planning A*, Vol11, No. 12, 1979 pp 1405-1430

³⁴⁴ Maher, 1982, p 57

³⁴⁵ *County of Cumberland Plan*, 1951

comments that during this period the decline in manufacturing employment was “by far the largest contractionary element in the metropolitan economy”³⁴⁶. Australia-wide, the proportion of manufacturing sector employment fell from 30.6% in 1971, to 16.7% by 1986³⁴⁷. These changes to the proportion of manufacturing employment in the total labour force reveal, in part, the restructuring that has gone on in this sector. A restructuring that also has implications for spatial outcomes.

Rich and Cardew(1982), Maher (1982), Searle (1995), Spearritt (1978), and Spearritt and De Marco (1988), among others, have noted the impact industrial restructuring from the early 1970s has had on spatial outcomes, in particular the dispersal of manufacturing activity. The boom in the immediate post-war period had seen the old inner city employment areas becoming increasingly congested, especially through road traffic³⁴⁸. Within the principal industrial areas such as the Central Industrial Area immediately to the south of the CBD, industrial land was often in small parcels, fragmented and expensive. O’Connor and Stimson (1994) have noted that the spatial distribution of economic activity in Australia has been subject to complex change. The forces of concentration and dispersal are working simultaneously. At one level the forces of concentration have become stronger, with Sydney growing in its role in the national economy as an expression of the global economy. At the same time population dispersal has taken place, though

³⁴⁶ Rich, 1982, “Structural Change in Manufacturing”, in *Why Cities Change*, Cardew, Langdale and Rich (ed), George Allen and Unwin, Sydney, pp 95-134

³⁴⁷ as reported by Spearritt and De Marco, 1986, p 52

³⁴⁸ Frost and Dingle, 1995, p 34

O'Connor and Stimson note that much of this dispersal is contained within the daily networks of Australia's largest cities³⁴⁹.

Given the constraints faced by inner city locations, multi-national firms such as car manufacturers, attracted to Australia due to the benefits gained through tariff protection, sought large 'greenfield' sites to set up single storey buildings housing continual flows of production³⁵⁰. With locational mobility facilitated by motor vehicle transportation, these industries were not restricted to inner city locations near ports or railways, so cheaper, more remote, sites were exploited. Producer service firms would have also found it advantageous to follow the manufacturers to outer urban locations.

Regional Employment Locational Change

The shift in location of employment and the decreasing importance of traditional employment locations is illustrated by Sydney as well as a number of other cities. The Employment Report prepared for the Cumberland County Council (CCC) as input into their Metropolitan Strategy dated 15 January 1947 shows the degree of concentration of employment within Sydney's central core. As noted in a previous chapter, the Sydney Cove and CBD began as the employment centre for Sydney and continued to perform this role through the nineteenth century. The construction of radial mass transit systems reinforced the employment concentration. The CCC report showed that as at December 1945, about 70% of

³⁴⁹ O'Connor and Stimson, R. J., *Urban Futures*, September 1994, pp 1-12

³⁵⁰ Frost and Dingle, 1995

the Region's 630,000 workers were employed within 3 and a half miles of Redfern Station - the original terminus of the railway network.³⁵¹ Forty per cent of the regional employment was in the Municipality of Sydney alone, while over 200,000 people worked in the square mile of the city centre between Dawes Point, Central Railway Station, Darling Harbour and Hyde Park³⁵². The CCC also noted that 75% of the Region's factory employment, or 182,000 persons, were located within the three and a half miles from Redfern Station. This means that factory employment was just over 40% of all employment in the central core as at 1945.

By 1971, employment within the Sydney Region had increased by 400,000 jobs to 1,092,000, while at this time the central core's share of total employment had fallen to 42%³⁵³. While in 1945, 38.5% of the Sydney Region's employment was classified as being in the manufacturing sector, by 1971 the proportion had fallen to 26%, and by 1981 fallen further to 23%. While as at the 1991 Census, the proportion of Sydney Region employment in the manufacturing sector was 14.0%.

The industry sectors experiencing the most rapid proportional growth in the Sydney Region between 1971 and 1991 have been the Community Services

³⁵¹ A three and a half mile radius around Redfern station takes in the Eastern Suburbs, down to Botany Bay, the inner west, and depending on how precisely one wishes to measure the three and a half miles, it also takes in a small portion of North Sydney.

³⁵² CCC, *Cumberland County Council Scheme*, 1951, p 41

³⁵³ Source: State Transport Study Group, Analysis of ABS Census data; NSW Department of Industrial Development and Decentralisation, *Location of Employment within Sydney Metropolitan Area 1971 to 1981*, February 1984

sector and the Finance and Business Services Sector. The Community Services sector grew from 11% of total regional employment in 1971 to 16.8% by 1991. The Finance and Business Services sector grew from 10% of total regional employment in 1971 to 15.9% by 1991. The change in the share of regional employment in the other major industrial sectors generally remained within a 1 to 2 % range.

In keeping with the rapid population growth being experienced in the Sydney Region in the post war period, rapid employment growth was also experienced. Over the five year period between 1971 and 1976, regional employment grew by 4.4% to 1,140,000.

Over the next five years it grew a further 4.9% to reach 1,195, 656 - representing a total increase of just over 100,000, or 9.5% over the ten year period 1971-1981, despite rising inflation and unemployment³⁵⁴. Between 1981 and 1991, regional employment grew by 150,000 or 12.8%.

Table C shows that between 1971 and 1991 the proportion of employment located in outer ring LGAs increased dramatically. In 1971, outer ring LGAs accounted for 18.5% of total regional employment. By 1981, this share had increased to 25.5%, and in 1991, 31.6%. This proportional increase represents 223,676 more persons employed in outer ring LGAs in 1991, as compared to 1971. The proportion of employment located in middle ring LGAs has remained

³⁵⁴ Boehm, 1993

relatively constant between 1971, 1981 and 1991, representing 30.4%, 31.3% and 30.1% of regional employment respectively. However, this proportional consistency hides a percentage increase between 1971 and 1981 of 10.9%, and between 1981 and 1991, of 10.8%. This increase represents a total increase of 75,000 persons between 1971 and 1991.

Table C

**Sydney Metropolitan Region Employment (1)
1971 to 1991**

By Inner, Middle and Outer Local Government Areas

(2)	1971	1981	1991
Inner	548393	500111	511693
Middle	326964	362655	401799
Outer	199296	295883	422372
TOTAL	1074653	1158649	1335864

(2)	Change 1971-81	Change 1981-91
Inner	-48282	11582
Middle	35691	39144
Outer	96587	126489
TOTAL	83996	177215

(2)	% Chg 1971-81	% Chg 1981-91
Inner	-8.8	2.3
Middle	10.9	10.8
Outer	48.5	42.7
TOTAL	7.8	15.3

Proportion of Employment By Ring

(2)	1971	1981	1991
Inner	51.0	43.2	38.3
Middle	30.4	31.3	30.1
Outer	18.5	25.5	31.6
Total	100.0	100.0	100.0

Source: Census Data, Journey to Work publications

(1) All references in this section are to 'employment' rather than 'labour force'. The employment data quoted for 1971, 1981 and 1991 has been based on published material on the Journey-to-work analysis of Census data undertaken by the Transport Study Group (later the Transport Data Centre). This data has not been adjusted for underenumeration. While comparison is possible between the journey-to-work data for employment, comparison with other sources of employment data should not be made. The data mentioned previously as sourced from the CCC report was based on extrapolations of survey results adjusted for Census data, and should be used as a guide only when comparing it with the journey-to-work based data.

(2) Local Government Areas within the Sydney Statistical Region by 'Ring' are as follows: INNER RING - Ashfield, Botany, Drummoyne, Lane Cove, Leichhardt, Marrickville, Mosman, North Sydney, Randwick, South Sydney, Sydney, Waverley and Woollahra. MIDDLE RING - Auburn, Bankstown, Burwood, Canterbury, Concord, Hunters Hill, Hurstville, Kogarah, Ku-ring-gai, manly, Parramatta, Rockdale, Ryde, Strathfield and Willoughby. OUTER RING - Baulkham Hills, Blacktown, Blue Mountains, Camden, Campbelltown, Fairfield, Gosford, Hawkesbury, Holroyd, Hornsby, Liverpool, Penrith, Pittwater, Sutherland, Warringah, Wollondilly and Wyong.

Inner Ring LGAs employment has fluctuated, falling 8.8% between 1971 and 1981, then rising 2.3% between 1981 and 1991. The inner ring total share of employment has consistently fallen between 1971 and 1991, decreasing from 51% of regional employment in 1971 to 38.3% by 1991. Despite this decline, the inner ring still represents a significant employment area with over 500,000 persons employed there in 1991.

The figures show that there has been a significant employment increase in the outer ring Local Government Areas, and to a lesser extent in the middle ring Local Government Areas. However, during the post WWII period there has been a corresponding significant increase in regional employment. If the same proportion of the Region's employment was to be in the central core and inner ring LGAs in 1991 as there was in 1945, then over 750,000 people would need to be employed in that area. This level of employment would clearly require substantial investment in mass transit and other economic infrastructure, in addition to substantial investment in plant and office infrastructure.

An analysis of the employment levels in the "three and half miles" from Redfern Station shows that in 1991 a similar level of employment was located in that area as existed there in 1945. After almost 50 years - a period which saw the rise and

fall of tariff supported manufacturing, economic recession and boom, substantial economic restructuring, development and change, and the more than doubling of the Region's population, the employment level in the inner city areas remains about the same as it was in 1945. Certainly the type of work undertaken, and the skills required to do that work, has changed dramatically. Yet the overall numbers employed has not. It is suggested that this constant employment level provides an illustration of locked-in decision-making as it pertains to employment location.

The level of employment located in the central core has reached equilibrium based on the existing level of infrastructure support. The central core initially developed as a desirable employment location given its excellent sea and rail access³⁵⁵. The rise in road-based transport opening up many other highly accessible and cheaper sites, has not lead to the collapse of the central core as an employment centre. The central core has remained a desirable location for a number of firms given the high level of accessibility created through past infrastructure decisions. As a result the employment level is path dependent on now locked-in infrastructure decisions made in the past.³⁵⁶

³⁵⁵ Factors noted by Mills, 1972 and Evans, 1985

³⁵⁶ This assumes that the infrastructure support level is constant - i.e. sufficient political and economic pressure exists to ensure that the infrastructure required for the current level of employment is maintained and that obsolete infrastructure is replaced.

The Central Core and Office-Based Employment

The central core remains the most easily accessible to all parts of the region, and this makes it the preferred choice of location for activities requiring specialist skills and access to a diverse market. For example, American-Express' choice of Sydney for the site of their Asia-Pacific headquarters due to the diversity of language skills available. They chose the Sydney CBD because it was the best location for access to the variety of skilled labour they required³⁵⁷.

Constant employment levels would imply that an equilibrium in the density of inner core employment has been reached. While there are many advantages of an inner city location, there are a number of negative externalities, principally congestion costs and the cost effectiveness of a CBD location given the high the price of CBD land as compared to alternative locations. This implies that there are supply limits as well as accessibility constraints. Therefore, to overcome these constraints there would need to be (1) an increase in supply and (2) improved accessibility. Without these being addressed, additional economic activity that would enable increased employment levels in the inner CBD areas will not be able to occur.

³⁵⁷ NSW Department of State and Regional Development

Constraints to CBD Office Supply

As Daly (1982) notes, between 1971 and 1981 there was a huge level of office construction activity in Sydney. Floorspace figures from the Property Council of Australia³⁵⁸, indicate that additions to the CBD office floorspace stock, economic cycles aside, has continued to increase strongly since this period. Comparison between the 1981 and 1991 Census results by industry sector confirm that the nature of employment within the CBD has become significantly more office-based, even over this comparatively short period³⁵⁹. One type of employment is replacing another type, with a minimal net effect on the level of employment.

As offices are a more sought after use for the CBD in particular, significant increases in the supply of office space would be necessary if the total employment level is to reach a comparable proportion of Regional employment as experienced in the 1940s. The CBD had approximately 4,000,000 square metres of office floorspace in the early 1990s, an apparent over-supply at that time given vacancy rates were around 15 to 20 per cent. Working on an average floorspace per person of 20 square metres, a four-fold increase in total floorspace would be required.

Water and sewerage infrastructure constraints aside, long standing government regulation (plot ratio limits and heritage controls) have placed constraints on building heights, stopping the types of office block development that would be

³⁵⁸ formerly the Building Owners and Managers Association - BOMA

³⁵⁹ Sydney City Council reports show a small decrease in LGA employment

required to supply enough floorspace for a four-fold increase in employment.

One of the key outcomes of planning controls is creating certainty in the property market. The height regulation, by limiting the total building envelope permitted on a site, has assisted in maintaining a degree of certainty. Investors know that their office-building is not going to be completely overwhelmed by new supply - with better views. Height limits help maintain property values, keeping prices high in the CBD with the result of encouraging non-CBD office development³⁶⁰.

Government regulations have the impact of limiting supply. It is speculated that if government regulations encouraged massive office development in addition to investment in supportive infrastructure, from the time building technology enabled the development of very high office buildings, the Sydney Region's office stock would be more highly concentrated in the Sydney CBD than that which exists at present.

Long term supply constraints placed on CBD office stock may represent an example of path dependency and locked-in outcomes. From the fire regulations restricting the height of buildings to 150 feet³⁶¹, to plot ratios and even to Commonwealth aviation legislation that limits the height of buildings in aircraft flight paths, government regulations have restricted the height buildings in the CBD, locking-in the scale of development. Investors have a financial incentive to

³⁶⁰ Evans, A. W., *Urban Economics*, Blackwell, Oxford, 1995; Hall, P., *Urban and Regional Planning*, 3rd edition, Routledge, London, 1992; McLoughlin, J. B., *Control and Urban Planning*, Faber and Faber, London, 1973

³⁶¹ hence all the grand old sandstone buildings around Martins Place are approximately the same height, Fraser, R. D. L., *The Town Planning Problems of Tall Buildings*, Cumberland County Council, 22 May 1961

ensure that these restrictions remain. Given the long-term nature of height controls, the CBD has not had the opportunity to impose scale advantage on other centres of office stock, and cheaper alternatives have developed in competition. Competition from 'cheaper' centres and property speculators 'sitting on' sites for capital gains along with the lag in development³⁶² may go some way in explaining why the CBD has not been developed to its maximum capacity under the existing planning controls.

Accessibility to the Central Core

Supply constraints aside, the number of employees able to be located within the inner core will be limited by the level of support infrastructure. The infrastructure investment required to maintain the primacy of the CBD has not been forthcoming, and the rise in motor car transport has increased the competition from alternative sites. On the surface it would appear that infrastructure investment has largely gone into supporting non-inner core employment areas. For example, the M2 and M5 motorways do not go to the inner core, but rather notionally support employment areas outside the CBD - North Ryde and Chatswood, Bankstown industrial estates and Kingsford Smith Airport.

Travel to the central core by motor car is already discouraged by Government given the present level of congestion and pollution³⁶³. Indeed, even if the trip is

³⁶² Daly, 1982

³⁶³ NSW Department of Transport, *Integrated Transport Strategy*, 1995; NSW Department of Planning, *Cities for the 21st Century*, 1995

made, car parking spaces in the CBD are at a premium and the State Government charges a levy on each site³⁶⁴.

Congestion and the extent of urban sprawl in Sydney means that it would be difficult for employees from more outlying areas to commute to the CBD within a reasonable time period. Black (1987) suggests that 30 minutes is generally considered by commuters to be a reasonable journey-to-work trip. For this to be achievable for the bulk of CBD commuters, in the hypothetical CBD where the proportion of regional employment in the CBD remained constant from 1945, then significantly higher densities would be required in the inner and middle ring Local Government Areas, in conjunction with extensive investment in mass transit systems. As discussed previously, population growth in the post WWII era was primarily housed in lower density suburbs, while the infrastructure investment would have had to occur progressively over the entire post WWII period - and this has not occurred. In fact there has been a reduction of investment in mass transit, principally as a result in the scrapping of the tramway network and its replacement with buses.

It would appear that railway investment has not kept pace with employment growth. Railway construction in the post WWII period has included the Eastern Suburbs line with three non CBD stations, and the New Southern rail line (presently under construction) with five stations, although two are at airport terminals. These lines support the existing radial railway network, although it

³⁶⁴ NSW Treasury, *Budget Papers, 1997-98*

might be included that they are 'too little too late'. Most of the new railway lines proposed in the County of Cumberland Plan, and earlier proposed by Bradfield, have not been built³⁶⁵.

The main CBD loop railway stations of Town Hall and Wynyard are at present very busy, particularly during peak periods. Town Hall station patronage over 24 hours is recorded as 126,000 persons, Wynyard 91,000 persons and Central 112,000 persons. Town Hall station in particular operates near capacity at during peak periods³⁶⁶. The Rail Access Corporation, the new body in New South Wales which has responsibility over the rail lines, has begun preliminarily investigations of a 'Metro West' line, proposed to run adjacent to the existing line through Town Hall and Wynyard, and relieve congestion at those stations.

The decline in the proportion of the Regional employment located in the inner core was been effectively 'locked-in' by the decisions made that have restricted economic infrastructure to present levels and not permitting the development of further infrastructure that would support an increase in the amount of employment located in the central core.

³⁶⁵ Spearritt and De Marco, 1988

³⁶⁶ State Rail Authority, 1997

TRANSPORTATION AND PATH DEPENDENCY

Urban Form Lock-in and Transportation

The separation of activities necessitates travel. “The propensity to travel is a function of the desire for distant goals and the ease of movement to them”.³⁶⁷ The interaction of the facilitation of that movement with the city has a significant impact on the resultant urban form. While the influence of transport mode over urban form has been down played by some, for example Brindle³⁶⁸, others have highlighted that the shape of cities is heavily influenced by the dominant transport mode³⁶⁹. As the dominant transport mode has changed over time due to technological innovations, the shape of cities has also changed.

In the city developed in the settler capitalism context, such as Sydney, the changing urban morphology is readily apparent³⁷⁰. Sydney began as a walking city, grew into a public transport city, and is now dominated by the private motor vehicle³⁷¹. Overlaid on top of each other, these three urban patterns and the modes of transport and associated urban patterns, apparently co-exist. Parts of Sydney, principally the inner older and middle ring areas, are ‘locked-in’ to an

³⁶⁷ Aplin, 1983, p 249

³⁶⁸ “Transport technology and urban development” in *Technological Change and the City*, Troy (ed), The Federation Press, 1995, pp 32-55, was noted in a previous chapter as arguing that transport innovations had the effect of reinforcing urban expansion, but there was no inevitability about the urban expansion itself.

³⁶⁹ Frost, 1990; Frost and Dingle, 1995; Newman, Kenworthy and Vintila, 1992

³⁷⁰ see earlier chapter

³⁷¹ Frost, 1990 among others

urban form that was moulded by a transport system that while not quite obsolete is no longer dominant. Whether or not the dominance of the private motor car reflects its greater efficiency over other modes would be subject to debate.

The increase in vehicle kilometres travelled by private motor car, enhanced and enhanced by the decentralisation of residences and employment, imposes a number of negative externalities on the wider community. These include air pollution, congestion, noise pollution, safety concerns, and disruption to local communities - as can be seen by any freeway that cuts through an established residential district. Peter Spearitt (1978) concludes that “the public transport city may well have been a better place to live”³⁷². Noting the *Sydney Morning Herald's* mock obituary on the passing of the trams in Sydney³⁷³, Sydney streets were ‘strangled to death by private cars’. “So were some thousands of Sydney residents. And for what: to keep the oil and motor cartels in business, to keep employed those whose jobs depended on such industries or to provide what has since proved a partly illusionary expansion in the mobility of our ‘car owning democracy’ ”.³⁷⁴

The recent rise of ‘New Urbanism’ in urban design and development³⁷⁵ might be seen as harking back to the mix-use and interactive communities of the walking

³⁷² Spearitt, 1978, p 173

³⁷³ *Sydney Morning Herald*, , 25 February 1961

³⁷⁴ Spearitt, 1978, p 173

³⁷⁵ Katz, Peter, *The New Urbanism: Toward an Architectural Community*, 1994; ACT Department of Environment, Land and Planning, *Gungahlin Town Centre: Discussion Paper*, 1994

city age. The values of variety and 'liveability'³⁷⁶, promoted under the guise of 'new urbanism', had their genesis in the walking cities of old.

Neither the public transport nor walking city is forgotten. While the most recent layer of urban form is supported and facilitated by the private motor vehicle. This scenario would seem to suggest that the three types of urban form prevalent in Sydney are 'locked-in'. Changes are occurring but the path of further urban development is dependent on the urban form that has gone before. The dominant transport mode of the bygone age still has relevance. The values of public transport are promoted, light rail is making a come-back, the benefits once taken for granted in the walking city become the latest trend - and the private motor car continues its modern day dominance.

Path Dependency and Infrastructure

The dominant transportation mode of the day has left its legacy in the remnant urban form it has helped to mould. In doing so these modes provide an example of locked-in outcomes and path dependency, however, individual transport projects may also provide excellent examples of path dependent outcomes.

Once a decision has been taken to expend large sums on infrastructure - transport or any other type - opportunistic speculators will try to exploit the flow-on benefits of these investments for personal gain. Indeed, the speculators have a

³⁷⁶ see DUAP, *Cities for the 21st Century*, 1995

vested interest in influencing the decision-making process itself³⁷⁷. However, an urban political economy analysis is not the intent of this study. Supportive decisions, be they government policy or additional public or private investment, help lock-in the infrastructure investment path. Urban commercial nodes provide an excellent example of this type of lock-in. Substantial sunk costs have been invested by government in the form of rail connections and road infrastructure, and by private investors in shopping centres and office blocks. This exposure by the private sector has encouraged lobbying to restrict out-of-centre commercial development. Given government complementary exposure, this lobbying is often successful.

For the single urban transportation investment project, once the idea has germinated, it seems that unless a more effective alternative is suggested, the project will never truly fade away. If any investment is made, even if relatively small as compared to the overall cost of bringing the project to fruition, the outcome might be considered 'inevitable' or 'locked-in'. The only outstanding question to be answered is the timing of competition. Within Sydney, the eastern suburbs railway provides an excellent example of one such project.

Plans for the eastern suburbs railway were originally submitted as early as 1875,³⁷⁸ however, construction did not begin until 1916 as part of wider city rail projects,³⁷⁹ and was finally opened on 23 June 1979. Three new suburban

³⁷⁷ Sandercock, 1975; Muir, 1987

³⁷⁸ Collins, 1983, p 116

³⁷⁹ *ibid*

stations plus one central business district station had been added to the Sydney rail network - it only took 63 years to build - 104 years after the first plans were drawn up³⁸⁰. In that time the project was not scrapped, just delayed. This project provides an example of an outcome that became locked-in because too much had been spent, in time and money, to allow the project to fold.

Collins (1983) argues that the financing of the eastern suburbs railway, like all metropolitan public expenditure, was hindered by the distribution of political representation in favour of country seats, and the parochialism of the country members when it came to funding urban projects, particularly railway projects. “They claimed that this vast metropolis was little more than a parasite ‘living off the sheep’s back’”³⁸¹. It was to take forty years before the legislation³⁸² passed and commitment was made to start building an eastern suburbs railway as far as Bondi Junction.

A split in the government over the conscription issue during WWI and the return to power of the rural conservatives, as well as allegations of misappropriation of funds, saw construction stop in 1917. Changes in the political balance saw the building of part of the underground city loop in the 1920s. In December 1931, the Lang Labor Government disclosed that it was about to sign a contract for the building of the Circular Quay railway station³⁸³ and an underground eastern

³⁸⁰ Riordan, 1983

³⁸¹ Collins, 1983, p 115

³⁸² *City and Suburban Electric Railways Bill*, presented to parliament 1915 - Collins, 1983

³⁸³ finally completed in 1956, Spearritt, 1978, p 149

suburbs railway³⁸⁴. Lang's dismissal and an 'expert's' report questioning for the first time the viability of the proposal's utility³⁸⁵ delayed further construction until after WWII.

Construction was to begin again in 1949, after extensive lobbying from local government backbenchers. Given a 'horror' Federal budget in 1952, construction was again stopped, along with a number of other infrastructure projects. "What was left were, once again, several large holes in the ground which were to become landmarks in Sydney for many years"³⁸⁶.

Over the 1950s and 1960s a series of conflicting reports were produced on the line and lobbying continued. The costing and viability of the project had come increasingly under question. However, by the mid 1960s both the conservative opposition who had historically opposed metropolitan railway investment and the government were promising to complete the railway line as part of their election campaigns - a fact noted in cartoons of the day as highlighted by Riordan (1983). When Neville Wran was elected in 1976 he is reported as saying that the eastern suburbs railway "is the most monumental financial scandal in the State's history"³⁸⁷ and called for another report. The Board of Review recommended for completion of the railway line given the alternative of simply scrapping it, at an estimated cost of \$7.1 million and the likely standing down of 600 Public

³⁸⁴ Collins, 1983, p127

³⁸⁵ *Report of the Transport Advisory Committee*, 1932. Vol 3, p 3 - who preferred street based public transport as an alternative to rail

³⁸⁶ Riordan, 1983, p 132

³⁸⁷ *Sydney Morning Herald*, , 25 June 1979, p 7, highlighted during the opening of the new line.

Transport Commission employees³⁸⁸. Thus, the railway line was completed to Bondi Junction at the final estimated cost of \$168 million. The reasons for its completion might simply be concluded as being because it was already started.

The motorways of Sydney might provide a similar example to that of the eastern suburbs railway. A number of the major motorway proposals have been at the 'planning stage' for a number of years, or are partially completed. The M5-east, the completion of the M5 from Beverley Hills to Kingsford Smith Airport, was included in the County of Cumberland Plan in 1948, and even then it was adopted from an earlier Department of Main Roads plan. This section of the M5 is still to be constructed, and it is still a current proposal even after more than fifty years³⁸⁹. The metropolitan area has changed significantly over that time but this plan remains.

The M2 first appeared in the metropolitan strategic plan in the Sydney Region Outline Plan 1968. Just under 30 years later a section of the proposed route, from North Ryde to Seven Hills, was completed. As an illustration of how vilified this particular road project had become was that no government or opposition politician attended the opening³⁹⁰. The multi-million dollar project was instead opened by a long distance swimmer.

³⁸⁸ Board of review, Eastern Suburbs Railway, Report to the Government of New South Wales, October 1976

³⁸⁹ RTA, Draft State Road Strategy, 1995; DOT, Integrated Transport Strategy, 1995

³⁹⁰ *Sydney Morning Herald*

Despite the present unpopularity of major road projects, under the path dependency model it is suggested that the M5 east and the rest of the M4 will be completed, it is only a matter of time. The decision on the route has been locked-in and road corridors appear on Council Local Environment Plans. Residents should be aware of the proposals and of the RTA selectively acquiring land along the route. Sufficient investment has been made to commit the road builders of the future to complete the projects, projects that were proposed when motor cars accounted for only 13% of all trips in the metropolitan region³⁹¹.

CONCLUSION

The Sydney Region has developed into a metropolis containing 3.9 million people³⁹² and covering a built up area of approximately 1800 square kilometres³⁹³. This growth represents a more than doubling of population and urban area³⁹⁴ in the post WWII period. As a dynamic economic organism it contains a wide range of economic function. It also contains urban development at a variety of densities, and this reflects the phases of urbanisation experienced in Sydney. The legacy of the pattern of early urbanisation has resulted in path dependent outcomes for latter urbanisation.

³⁹¹ Spearritt, 1978

³⁹² Estimated Resident Population, 1996

³⁹³ calculated from regional maps.

³⁹⁴ assumed as post WWII development has been at a lower density.

The decline in the proportion of the Regional employment located in the inner core has been effectively 'locked-in' by the decisions made to regulate supply and not to provide the necessary level of support infrastructure. However, the absolute level of employment in Sydney's inner core has remained approximately constant over the last 50 years. This might be regarded as an example of locked-in outcomes.

Strong demand for housing was maintained through: (i) demographic change and population growth underpinned by immigration; (ii) the public's belief of the desirability of suburban living; and (iii) the government's willingness to support home ownership through subsidisation. Each of these has been influenced to varying degrees by path dependency, producing outcomes that have been constrained by the legacy left by past decisions.