

The Parliament of the Commonwealth of Australia

Patterns of Urban Settlement: Consolidating the Future?

**Report of the
House of Representatives
Standing Committee for Long Term Strategies**

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Members	*Mr K J Andrews, MP Mr R A Atkinson, MP Mr A R Bevis, MP Mr R E Broadbent, MP Dr R Catley, MP Mr L D T Ferguson, MP Hon. G T Johns, MP Mr G B Nehl, MP Mr A A Morris, MP Mr J H Snow, MP
Committee Secretary	Mr I A Dundas

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Sub-committee Secretary	Ms R L Flemming
Staff	Dr R J L Darby Ms A M Tymkiw Miss T Cumberland

* Mr K J Andrews replaced Mr J W Bradford, MP on 21 June 1991.



TERMS OF REFERENCE

The Committee is to inquire into and report on:

- . the economic and environmental impact of the pattern of human settlement in Australia with reference to both the structure of cities and the system of cities;
- . the major determinants of urban settlement patterns in Australian cities;
- . desirable patterns of development for the growth of Australian cities;
- . the ways and means of achieving ecologically sustainable patterns of settlement in Australia, with particular reference to energy efficiency, density of settlement and access to services;
- . equity in the provision of services;
- . the relationship between new infrastructure programs and urban consolidation programs;
- . mechanisms for the Commonwealth to achieve environmental and economic efficiency objectives; and
- . the urgency of urban development problems and the time frame for reform.

PREFACE

Since the Industrial Revolution urbanisation has been a ceaseless and seemingly relentless process. The environmental and social impact of the spread of cities has aroused community concern throughout the world and in Australia there have been demands for a vision of what an ecologically sustainable society might look like. The Committee wanted to respond to that demand; to analyse the long term implications of current settlement trends; and to consider whether there were more desirable directions for the growth of cities.

The Committee set broad terms of reference in an attempt to tie together the many threads of the debate and to develop a useful synthesis. A Committee report, by its nature, brings together the conclusions of other researchers, and tries to analyse the information collected by previous projects. Regrettably, the Committee often found that basic data needed for the analysis of topical problems was not available. The Committee had to commission a special map to depict expected growth rates over the next thirty years in Australia's largest cities. Finding reliable figures on the area covered by urban development proved an impossible quest in the time available.

It is estimated that by the year 2000, more than 2 billion people will be living in very large cities. The impact of urbanised humanity, however is not confined to city limits. The land surface of the globe is increasingly appropriated as the dwelling place of urbanised humanity. It incorporates areas reserved for recreation, agriculture, desert and wilderness, but it is essentially a web of interconnected settlements closely linked by common economic purpose, rapid transport and electronic communication. Australia's economic prosperity depends increasingly on its capacity to compete in the international marketplace. Our values will come to be as much a reflection of international norms as of national culture and tradition. Decisions to preserve land or species for the sake of saving wilderness or ensuring biodiversity arise as much from the trend of international opinion as from local concerns.

The effects of these processes are clearly visible in Australia. The growth or decline of cities is an indicator of the nation's capacity to adapt and respond positively to shifting economic, environmental and social goals, and to capture the benefits of innovation. The interactions among these processes are as important as the processes themselves.

The importance of urban and regional issues in meeting national objectives is now being recognised. However Australia's capacity to tackle these issues in a comprehensive and effective way is impeded by constitutional rigidities, by the difficulties in obtaining co-operation between the three levels of government and among the States and by a narrow view of the Commonwealth's interests. The Commonwealth must continue to assert a leading role for itself.

Programs aimed at enhancing the quality of urban life which rely on urban form - that is, the shape and placement of buildings and roads - are necessary but limited. Governments also need to investigate the systems and structures that make cities what they are and give them life (or otherwise). Attempting to alter the form of a city by making rules about the use of space while ignoring the factors which determine the

consumption of space (taxes, charges and the location of future economic activity, for example) will achieve limited results.

A desirable pattern of settlement cannot be prescribed in detail. Competing prescriptions or simple visions, will sway policy makers from time to time. In the long run a desirable pattern of settlement will evolve only from the creation of mechanisms which can both improve standards and balance competing objectives. A desirable pattern would be a matter of balance: between population impact and environmental quality, between lifestyle needs and productive efficiency, and between population distribution and employment opportunities. It would mean a settlement density compatible with pleasant living conditions and ready access to services. The cities should provide housing options suitable for different types of household, in a variety of areas and at a range of densities which correspond to public transport options, land availability, infrastructure capacity and the characteristics of the residential population. Urban populations should be served by adequate transport links across metropolitan areas, and between cities, that meet community needs and integrate employment and housing.

The collection of expert knowledge through objective research will assist the realisation of these objectives, but it is the political process which can achieve reform, not knowledge alone. The renewed interest in the pattern of urban settlement in Australia is a first step in that process.

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KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Key Findings

The character of Australian cities is being transformed by economic restructuring and rationalisation, technological change, the transition to an information economy and the ageing of the population. These trends are causing major shifts in migration patterns and economic activity that will continue until well into the 21st Century. The geographical effects of these trends will be:

- . the further enhancement of Sydney as Australia's premier city and the preferred headquarters of transnational corporations;
- . an increase in the population along the eastern seaboard, particularly north of Sydney, with the possibility that Brisbane will emerge as Australia's second largest city in the 21st Century;
- . isolated nodes of development in parts of Queensland and Western Australia with international rather than State or national links;
- . semi-rural but not remote regions attracting a higher proportion of the information-based and resource processing industries;
- . State boundaries becoming less important in two of the strongest growth areas notably south-east Queensland/northern New South Wales and the Australian Capital Territory/south-eastern New South Wales;
- . a need for better regional planning, particularly in those areas of strongest cross-border growth; and
- . a need to determine the environmental sensitivity of land which is likely to be required for urban development to establish those areas which are not appropriate for human habitation.

Within cities and metropolitan areas:

- . about 70 per cent of employment opportunities are now located in the suburbs; and
- . most daily commuter trips are now from suburb to suburb; they are increasingly complex as people make trips between a variety of destinations.

There will be:

- . a trend for cities to become multi-centred, with several activity centres;
- . a correspondingly reduced role for the old CBD as industries move to the suburbs; and
- . a concentration of service industries in Melbourne and Sydney to the south-east and eastern suburbs, with consequent reduction of employment opportunities for those in the western suburbs (these trends of spatial concentration of new industries are not as apparent in all State capitals).

The conventional stereotype of the Australian family as a wife, husband and two or three dependent children now bears little relation to reality. The number of one-person households has increased dramatically over recent decades.

City expansion is the result of population growth and new household formation. The rate of expansion has caused economic, environmental and social problems. These must be addressed, but it is unrealistic to expect urban consolidation alone to solve them. Urban consolidation is a useful but limited program which must operate along with several other policies and programs if governments are to reduce the undesirable effects of urbanisation while retaining the benefits. The capacity of urban consolidation to save space and thus enhance economic, environmental and social benefits is limited for a number of reasons:

- . Cities expand slowly even in booms, adding only 2 per cent to their dwelling stock each year, a rate of growth which restricts the opportunity to change urban form quickly through new construction.
- . It is difficult to restore the populations of inner suburbs to their original level because of the reduction in average household size, though raising dwelling density would help to hold population levels steady.
- . It is difficult to reduce the total area covered by cities by increasing residential housing densities: non-residential activities make a substantial demand for land that cannot be reduced at the same rate as demand for housing land.
- . Even under the most optimistic scenario, only one third of urban growth would be within the existing metropolitan area; the remaining two thirds of the growth would continue to occur on the suburban fringe.
- . High density development will save more space than medium density, but substantial savings will be made only if it is accompanied by a reduction in automobile use. This is likely to be an option only in a few select sites with high land values and good access to public transport and a broad range of services. Large cities cannot be designed to accommodate both cars and people at high residential densities.

Restrictive building codes limit more innovative and appropriate housing developments which will make urban consolidation more acceptable and effective.

It is often assumed that residents of the inner suburbs are subsidising those on the fringe, but the question of who is subsidising whom is uncertain because consumers have never paid equally for the same urban services, whether measured within or between cities. The economic savings from urban consolidation have been exaggerated because it is difficult to determine both the location and extent of spare capacity and the capacity of existing infrastructure to meet modern economic and social needs at least cost. This is because of:

- lack of detailed knowledge of where the current network of physical and social infrastructure has spare capacity;
- lack of data on the age and quality of existing infrastructure and how closely it meets modern standards;
- exaggeration of the savings to be made from greater utilisation of community infrastructure, such as schools and public transport, by over-estimation of the number of families that would relocate and the increased use of public transport; and
- uncertainty as to how far the economic life of existing infrastructure could be extended under new pricing and charging scenarios.

It is more difficult to achieve better environmental and economic outcomes with dual occupancy than with selective redevelopment because the latter can be targeted on suitable sites - for example, those close to public transport links.

Compact cities offer a different range of economic, environmental and social costs and benefits. They do not necessarily represent the optimal scenario.

The greatest potential for benefits from more compact cities would appear to be in the environmental field, but they will not eventuate with policies which fail to integrate land use planning with transport planning or which fail to take account of external factors such as personal safety, relocation of employment and the demand for multi-directional and cross-suburban travel.

Trams and trains cannot move people to destinations other than those along their routes. Buses and taxis offer greater flexibility and may therefore be a more appropriate mode of cross-suburban public transport for the next century.

Cars will continue to be the dominant form of personal transport. High levels of private mobility is one of the benefits of a modern affluent society and will not easily be given up. Governments must accordingly respond to reduce the negative elements associated with high levels of automobile dependency.

The priorities are to reduce:

- . the need for travel;
- . trip length; and
- . the pollution associated with high levels of automobile use.

Reductions in the number and length of trips can best be achieved by a combination of higher density development around key transport nodes and in highly accessible areas and continuing development on a limited number of outer suburban sub-centres. Reductions in pollution can best be achieved by reducing the harmful emissions from fuels and encouraging a faster change-over in the vehicle fleet.

Cities have no optimal size. The challenge is to find the means to ensure:

- . that capital and human resources are fully employed in cities of all sizes;
- . that the economic activities are both highly productive and appropriate to the environmental and social characteristics of each centre; and
- . that the quality of life is as high as possible in all centres.

These goals are as much the responsibility of the Commonwealth Government as of the States and local government.

Fiscal equalisation has a major impact on the pattern of urban settlement in Australia and is one of the major mechanisms available to the Commonwealth to effect a change in the pattern of settlement. The basis of fiscal equalisation is being questioned due to the impacts of economic and demographic change.

Innovative and more cost effective forms of urban management have been operating here and there for over ten years, but their wholesale adoption has been impeded, not by lack of data, but by political and organisational rigidities. The Committee's recommendations are therefore directed principally at encouraging the adoption of better practices in all public and private activities that affect urban management.

Conclusions and Recommendations - A Plan of Action

Need for a National Strategy and Co-ordination of Commonwealth Policy

It is important that the Commonwealth have a regional and urban perspective when developing national policy. Such a perspective must also take a long term view because the length of time required to change urban settlement patterns across regions and within cities is so great.

Although the Commonwealth has had little involvement in urban planning, it necessarily has a significant influence on urban form, through its funding of transport infrastructure, particularly roads; immigration policy; industry restructuring; and, most recently, sectoral

reform. General economic policies and taxation provisions also have a powerful impact on urban development, and it is likely that, in the future, national environmental policies will also exert more influence.

The market's response to Commonwealth policy initiatives over the past ten years has had more impact on urban form and use of infrastructure than state planning initiatives. It is therefore critical to understand the cumulative impact of Commonwealth policies across States and take account of this knowledge at the time of policy implementation. The Committee recommends that:

- (1) **The Commonwealth establish a unit within the Department of Health, Housing and Community Services to review urban and regional policy issues and to develop a national perspective on urban and regional development. This unit should also assume the local government responsibilities of the Department of Immigration, Local Government and Ethnic Affairs.** (Paragraph 8.36)

The collection of knowledge will play an important role in increasing governments understanding of the factors which affect settlement patterns. Research is only relevant, however, to the extent that policy and research are interrelated exercises each informing the other through on going forecasting and monitoring. It is essential that research effort be carefully prioritised and directed. The Committee recommends that:

- (2) **The Commonwealth establish an urban and regional research program, co-funded with industry and State government agencies, to examine the spatial impacts of changing economic, social and environmental trends and to consider socially and economically effective means by which cities can adapt to changing demands.** (Paragraph 8.37)

Urban planning in Australia is separated from economic policy making and fragmented both across and within state jurisdictions. There is no system for setting national priorities and no mechanisms for co-ordinating the various arms and levels of government to achieve them. Planning occurs by default, with national policy goals and priorities imperfectly reflected in the separate and unco-ordinated actions of the separate agencies of government such as roads, public housing and hydraulic services. The nation pays dearly for this lack of co-ordination.

Historically, the direction of internal migration has altered as people followed economic opportunities. In recent times the lure of mineral riches (which has so often been the motivation for migration) has been replaced by the hope for employment in tourist-related services in the northern east coast. This trend has been reinforced by other social and economic factors, including the tendency of retirees and others on fixed incomes to seek cheaper and more aesthetically pleasing locations with a better climate. The long term economic and technological trends, together with the increasing emphasis on trade with Asia suggest that the longer term northward trends will be sustained until well into the 21st Century.

The Committee believes the Commonwealth has a responsibility to ensure there is a nationally co-ordinated program for the development of key productive infrastructure such as the integration of urban transit networks for the movement of export freight. The most pressing imperative is to determine just what combination of infrastructure development is required. The Committee recommends that:

(3) The Commonwealth Government develop a national settlement strategy which takes account of the:

- . relocation of national activity;
- . increasing regional differences; and
- . environmental concerns associated with further coastal development and urban expansion.

This strategy should include the development of mechanisms (including constitutional change) which will facilitate:

- . better regional planning between levels of government; and
- . a more strategic approach to implementing long term key infrastructure projects. (Paragraph 4.87)

Balancing Regional Needs

The long term stability of regional populations and the capacity of regions to provide an adequate economic base are important issues which need to be addressed. Job opportunities follow structural change in the economy, so that regions benefit differentially from different types of structural change: the growth of service industries like tourism and the long term decline of manufacturing benefits some regions and ruins others.

The question of efficiency and equity in the delivery of services needs to be reconsidered in a national context. This requires a major review, by the Commonwealth Grants Commission, including each State and many local government authorities. The relevance of the formulae used by the Commonwealth Grants Commission in determining payments to the States should also be reviewed because there is evidence that they do not always accurately express the operations of cause and effect when assigning funds for the alleviation of social problems. The Committee recommends that:

(4) The Commonwealth Government, in consultation with other relevant authorities set new terms of reference for the Commonwealth Grants Commission to review the application of the principle of fiscal equalisation.
(Paragraph 3.45)

Integration of Commonwealth and State Policies

One of the major impediments to the reform of cities is the lack of co-operation and co-ordination between the various levels of government.

Issues arising from such developments need to be resolved up-front in an agreed policy approach between all parties. The Committee recommends that:

- (5) **The Commonwealth Government develop strict policies requiring its departments and agencies to better integrate their locational decisions and land release programs with the States' planning needs as identified in land use planning strategies.** (Paragraph 7.38)
- (6) **Where there is an opportunity to remove duplication or to improve efficiency of Commonwealth service delivery the Commonwealth, in conjunction with the States and local government, establish a jointly funded program (along the lines of the Country Centres Program) to facilitate better regional development and co-ordination.** (Paragraph 4.73)

Road transport is one example of where this co-ordination needs to be improved. The Commonwealth is now responsible for the maintenance of the national highway system, with the States and local government responsible for roads in their respective jurisdictions. There is just as much need for the Commonwealth to liaise with the States on the provision and maintenance of national highways, as there is for the States to ensure the various arms of their bureaucracies are working in harmony. The Committee recommends that:

- (7) **The Commonwealth, through the Department of Transport and Communications, establish mechanisms in conjunction with the State Strategic Planning bodies, to ensure the provision of national highways complements strategic land use planning objectives of the States.** (Paragraph 5.97)

Providing Land for the Needs of the Expanding Cities

The data presented to the Committee suggest that, with current trends, cities will continue to expand, principally along the existing urban corridors, engulfing the small country centres in their path and incorporating them into the fabric of the metropolis. What was a series of dots connecting the major centres of population along the east coast from Cairns to Melbourne is likely to become a nearly continuous line of urban development.

The increase in urban population levels has provoked concern over the quality of life within cities, while the ever-outward expansion of the urban fringe is reviving concern about the quality of the environments into which they spread. Society has only slightly

reduced the environmental impact of its urban lifestyle while continuing to devour bush, coastal and agricultural land. The Committee recommends that:

- (8) **The three levels of government work co-operatively together to identify the most environmentally sensitive sites in urban growth areas with a view to determining those that should be protected from development, those that may be developed with other technology at a later date and those that can be used to meet immediate development demands subject only to normal environmental and planning constraints.** (Paragraph 4.88)

Australian cities appear to make over generous provision of land for facilities such as schools and hospitals that could be constructed on sites smaller than those generally used - a situation that could be confirmed by some comparative research. The Committee recommends that:

- (9) **The Housing Ministers Conference initiate a research program to review the land allocated to community services and utilities such as schools and hospitals.** (Paragraph 5.37)

Urban Infrastructure - Improving Services and Reducing Environmental Impacts

When facilitating Australia's transition to the information age and fostering a productive culture, it is important to provide the sort of infrastructure that will meet the needs of the 21st Century. Governments' policy agenda, however, have been driven by the short term need to contain government debt and reduce expenditure, a priority which has enticed governments into seeking better utilisation rates on existing urban infrastructure. This quest is politically driven because it is difficult to take services away from residents, even if they are under-utilised; it is much easier to defer their provision. While maximising the utilisation of existing assets is a necessarily short term goal, in the long term the usefulness of the stock of buildings established in the 19th Century and 20th Century, is relevant only to the extent that it meets future economic and social needs. Infrastructure is a means to an end, not an end in itself.

Community services such as health, education and public transport are traditionally seen as social goods and part of the social wage. Along with cultural facilities, these services contribute significantly to the quality of life and should therefore be provided by government. Transport, communications and essential services such as water and electricity, on the other hand, are classified as productive infrastructure, because they contribute directly to the productive process. Community services like health, education and public transport can also be seen as contributing to the productive capacity of the economy: a society which suffers excessive productivity losses through illness, lack of workforce skills or absenteeism is not getting the most out of its human resources.

There is already evidence that organisations with operations in several centres will increasingly consider the characteristics of places when deciding where to locate production activities. There may be fewer places that are attractive to international producers in the medium to long term. The local infrastructure and institutional

arrangements which exist in Australia will thus be an important component of each city's potential. The Committee recommends that:

(10) **The Commonwealth and the States collaborate on the establishment of best practice management performance standards for state infrastructure authorities to encourage innovation in infrastructure provision and pricing.**
(Paragraph 6.20)

(11) **An infrastructure audit program be established in conjunction with the States and local government to develop a data base on the adequacy of physical and social infrastructure:**

· **the infrastructure audits be funded through the Better Cities Program;**

· **the infrastructure audit program concentrate initially on identifying the urban areas most suited for medium and high density development and the infrastructure replacement and development needs of those areas; and**

· **following the development of the infrastructure data base, strategies be formulated for infrastructure replacement or development in those areas identified as being most suitable for medium and high density development.**
(Paragraph 6.59)

(12) **The Industry Commission review the opportunities and potential for Australian industry to develop, market and export urban environmental products and services and the Departments of Health, Housing and Community Services, Industry, Technology and Commerce and Arts, Sport, the Environment and Territories, together with Austrade, the Environment Management Industry Association and State water board representatives form a steering committee to monitor the Industry Commission review and to develop supporting policy to encourage the development and marketing of such technology.**
(Paragraph 6.64)

(13) **The capacity to use new technology to provide health and education services to newly developed suburbs and regions be further investigated.**
(Paragraph 6.69)

Infrastructure - Land Development and Housing

At present there is no definite estimate of current returns to governments from charges analogous to betterment tax, the appropriateness of those returns, or their distribution to the three levels of government. Nor is it known whether specific purpose taxation would be more appropriate than nominal tax levies. The Committee can only conclude that further research should be undertaken to clarify these issues, and that costs and benefits of land wholesaling should also be further investigated. To understand how this option could be applied most to the maximum benefit of both developers and

consumers, the Committee recommends that:

- (14) **A national wide study be initiated through the Housing Ministers Conference to investigate the costs and benefits of land banking and betterment levies.** (Paragraph 6.50)

The Committee recommends that:

- (15) **The Industry Commission, in its review of the Taxation and Financial Policy Impacts on Urban Settlement, pay particular attention to the impact of transaction costs on housing mobility (both public and private).** (Paragraph 7.25)
- (16) **Policies and programs aimed at facilitating the private provision of low cost rental accommodation be placed on the agenda of the Australian Housing Council for discussion.** (Paragraph 7.26)

If cities of the future are going to contain a greater mix of housing types to better respond to changing demographic and lifestyle characteristics of urban populations it will be necessary to encourage the building industry to be more innovative and flexible. Governments need to ensure that the efficient cost structure which the industry provides in the standard residential market is not lost in the process of reform but rather is extended to the other sectors of the housing market. The Committee recommends that:

- (17) **The Department of Health, Housing and Community Services review the adequacy of information and research into costs associated with residential building site classification and awards and promote further research into this problem.** (Paragraph 7.32)

Infrastructure - Transport

The provision of infrastructure, in the form of fixed transport facilities such as roads and rail, has a significant impact on the location of population. As far as urban form and public transport is concerned the Committee concludes that a combination of urban form needs to be developed concurrently in a strategy devised to maximise access to employment and minimise trip times. In acknowledgment of the shift of industry to the urban periphery and the mobility needs of people the future form of public transit may not be rail but bus. The Committee recommends that:

- (18) **The Department of Transport and Communications review public transit options. This review should take into account all environmental, economic and social factors. It should address the optimal split between transport forms for all major cities, be based on an accurate and detailed assessment of the daily commuting patterns of Australian workers, and be cognisant of the future trends in the economy.** (Paragraph 5.96)

There is a concern in urban communities about the high level of lead emissions associated with the use of motor vehicles produced before 1986. The proportion of

unleaded fuel in the total sales of petrol is increasing, however, the take up of unleaded fuel has not been as rapid as anticipated due to the slow down in sales of new motor vehicles. The Committee recommends that:

- (19) A national standard for the lead content in super grade petrol of 0.3 grams per litre be adopted by all the State and Territory governments. (Paragraph 5.101)
- (20) The Commonwealth Government, in conjunction with the State Governments and the petroleum industry, review the feasibility of introducing a premium unleaded/super grade fuel mix. (Paragraph 5.102)
- (21) The Commonwealth Government review mechanisms to accelerate the relative consumption of unleaded and reduced lead grades and mixes of petrol compared to higher lead content petrol. (Paragraph 5.103)

Infrastructure - Water and Sewage

The Committee recommends that:

- (22) The Commonwealth and the States jointly establish long term national environmental standards for the delivery of urban services such as water and sewerage. (Paragraph 4.89)
- (23) The Minister for Health, Housing and Community Services send a reference to the Industry Commission to review the environmental, economic and social costs and benefits of differential charging for water services provision in regional centres such as (but not limited to) Newcastle, Wollongong, Geelong, Townsville, Albury-Wodonga and Ballarat. (Paragraph 6.16)

CHAPTER 1

INTRODUCTION

1.1 Shortly after its establishment in June 1990 the House of Representatives Standing Committee for Long Term Strategies agreed that the pattern of urban settlement, with particular reference to the quality of life within cities and the impact of urban living on the environment, would be the third of its inquiries. The Committee's first inquiry covered issues arising from Australia's development as an information society, and the second the long term economic and social implications of longevity. It is not surprising that the subject matter of these inquiries has overlapped to some extent, since such major social and economic processes will have a significant impact on both the future development, structure and form of Australian cities.

1.2 By the time the Committee adopted terms of reference for this inquiry in June 1991 the political environment had changed significantly, with the Commonwealth moving to implement elements of an urban policy. The National Housing Strategy (NHS - established in June 1990) was highlighting a mismatch between the housing stock and future demands for housing in its reports. State governments were experiencing fiscal difficulties in providing infrastructure for new outer suburban housing development. The need to review urban management and practices was becoming a central theme in many Commonwealth-initiated reviews, such as the Greenhouse strategy, the Ecologically Sustainable Development strategy and the setting of population growth and immigration levels. In the 1991-92 Budget the Commonwealth announced funding for its "Better Cities Program".

1.3 Far from reducing it, these developments increased the urgency and relevance of the Committee's inquiry: it was necessary for somebody to develop a comprehensive, long term perspective on urban issues and attempt to draw together the strands of the debate into a useful synthesis. The Committee's objective was thus to undertake a comprehensive review of how the management of urban areas affects the productive efficiency, social equity and environmental amenity of our cities, all within the framework provided by the three-tier (the Commonwealth, the States, and local government) administrative system. Such an approach also required a review of current urban programs and of both the validity and the relevance of the justifications behind policies, with a view to determining whether policies which arose from short term fiscal and political expediency could also be compatible with long term needs. The haste with which the elements of the new urban policy package had been put together made this review all the more urgent.

1.4 This report, as a synthesis of other analyses, offers only an overview of the issues and arguments, drawing on the many views put to it. The report outlines the patterns and processes which have shaped urban settlement in Australian and summarises the debates within the community on different aspects of urban development.

1.5 The community should understand the choices and challenges which it will face as the 21st Century approaches. Urban problems seem long standing, intractable and interwoven, but cities affect the character of our daily lives continuously and are perhaps the most important factor in our quality of life.

1.6 It is important to acknowledge that towns and cities are largely a spatial representation of social and economic processes, the result of long term historical trends, both local and international; and that the options for new spatial arrangements are limited by the fact that cities must express the priorities and values of the society they serve. From the 1950s with the explosive increase in car ownership, there was a political consensus for rapid expansion of road capacity, with an accompanying decline in public transport usage (and political support for it). A major debate about the relative merits of the "compact city" as against the "dispersed city" never occurred - the view that we would be an increasingly car dominated urban society was taken for granted. Failure to maintain comprehensive public transport links led to the creation of dispersed cities in which tram and train lines were too remote from users to be relevant.

1.7 Attempts by governments to provide better urban environments are influenced by competing values. It is up to the community to ensure that a comprehensive and realistic assessment of expenditure choices is made, especially at a time of economic constraint. Long term policy directions can be indicated:

- . The built environment will have to adapt more sensitively to the natural environment.
- . The built environment will have to adapt more rapidly and often to changes in economic and technological processes, and in social values, as will urban institutional management.
- . *In adapting to change, governments should strive to improve efficiency, but not at the cost of unacceptable social or environmental results. Subsidies, where appropriate, must be targeted at people or areas in need and not applied generally.*
- . In the process of reform, each level of government must be more rigorous in analysing its own contribution to the problem rather than enthusiastic in pointing the critical finger at the other levels. Federal, State and local government must each strive for internal consistency in its policies and programs, but each must also make efforts to ensure that its policies are co-ordinated with those of the other players. To ensure the latter outcome, it may be necessary to recognise that the administrative arrangements of the 19th Century are not immutable.

1.8 The Committee considers that a long term and balanced approach is crucial to the successful adoption of necessary reforms. This report acknowledges that reform of urban systems can be impeded by lack of information and therefore recommends that more research effort be put into analysing urban problems. But it also recognises that no accumulation of data or proliferation of experts will be of any use unless governments have the political will to act and the subtlety to accommodate the conflicting interests

involved. Governments should explain issues as clearly as possible by publicising as comprehensive a picture as possible of the future costs and benefits of change. The community - diverse and conflicting though its interests often be - will then have some basis on which to assess for itself the value of the trade-offs it may be willing to make among competing priorities. No quantity of expert knowledge will ever rule out the horse-trading that necessarily takes place when social priorities are assessed, but knowledge can make it more likely that decisions will benefit the majority, not merely those who deal in other forms of currency.

1.9 The Committee's perception of the issues changed in the course of its inquiry. For example, at the outset it was inclined towards a favourable view of the then fashionable policy of urban consolidation. Close examination of the evidence, however, revealed that too much was expected of urban consolidation and that it was no panacea. Urban consolidation might be a solution to certain people's problems, but not everybody's and not without undesirable consequences.

1.10 The Committee's most important discovery was that there is no ideal urban form that will solve urban problems. Urban problems are the result of social and economic pressures which are little understood and often external: no amount of tinkering with the balance between high, medium and low density housing will have much impact on the course of economic restructuring, foreign investment and internal migration. The point is to respond to these forces in sensitive and appropriate ways. Different types of housing may be suitable in different places and for different categories of people. Medium density near shops may be best for most old people, while families with children may be better off in a house with a grassy backyard and proximity to school and work. It is juggling these pieces of the jigsaw that will be the challenge for the 1990s and beyond.

CHAPTER 2

FACTORS WHICH HAVE INFLUENCED THE DEVELOPMENT OF URBAN AUSTRALIA

2.1 This chapter briefly outlines the current distribution of Australia's population and its demographic make up. It also makes reference to the significant historical factors which have influenced settlement patterns and determined city features. Serious attempts to improve or reshape Australian cities must be based on an understanding of the factors which drive the use of space and, in turn, determine the shape and extent of the built environment. The form of our cities is the outcome of the interaction of economic, social and political processes over two centuries.

2.2 It is a well-known truism that Australia is highly urbanised. This is perhaps surprising to some given Australia's extensive open space but as Dr Christabel Young of the Australian National University explains:

Australia is one of the most urbanised countries in the world. Although an outsider might regard a population of 17 million people in an area of 3 million square miles as representing a low density, in fact, 63% of the population is living in the major urban centres and in an area of less than 0.1% of the total of Australia.¹

2.3 The total area occupied by the cities may be greater than 0.1 per cent, depending on what is measured. The definition of capital city statistical divisions is not consistent: Sydney's is twice the area of Melbourne's, although the built up areas are comparable. However measured, the striking feature of Australia's urban development is of a heavy concentration of population in a few cities, all of them very large. Sydney's built up area is about the same as Paris, and Melbourne's is similar to London. Canberra is bigger than Amsterdam.

2.4 It might be easier to think of Australia as being like an archipelago - islands of closer settlement surrounded by an ocean of arid or marginalised land.

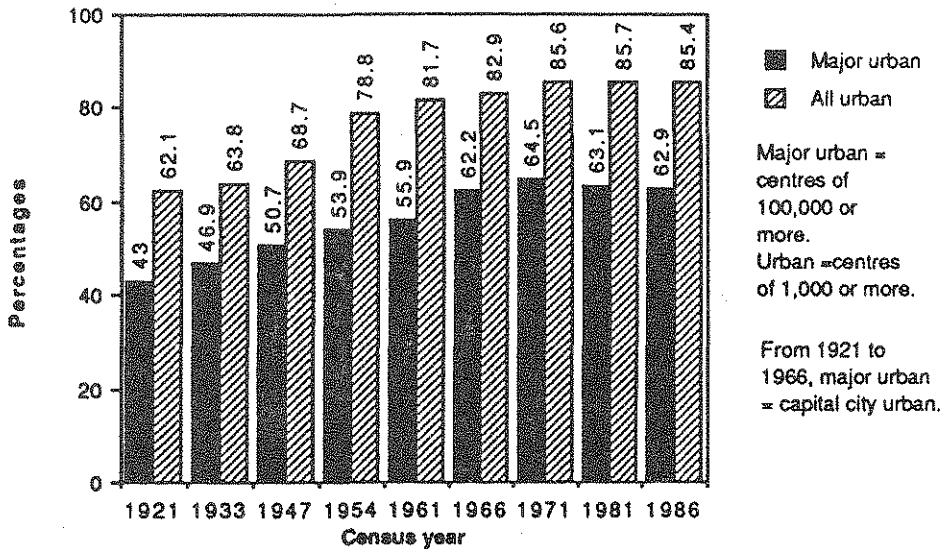
2.5 Since the arrival of Europeans the population has been concentrated in a few coastal sites. The settlements originally established by British colonisers have become the residential preference of most Australians and they have easily retained economic and political predominance while remaining the main population centres. That Australia has been highly urbanised for most of its history since European settlement is shown in Figures 2.1 and 2.2.

¹ Christabel Young, "Population Growth and Australian Cities", Seminar Paper, Australian National University, Canberra, 1991, p 13.

Historical Origins of the Pattern of Urban Settlement

2.6 Distinctive features of Australia's urban form include the high concentration of people in metropolitan cities and very low urban population density. In order to understand why Australian cities have developed this character, it is necessary to examine the conditions in which they developed.

Figure 2.1: Proportion of the Population in Major Urban and all Urban Areas, Australia, 1921 to 1986



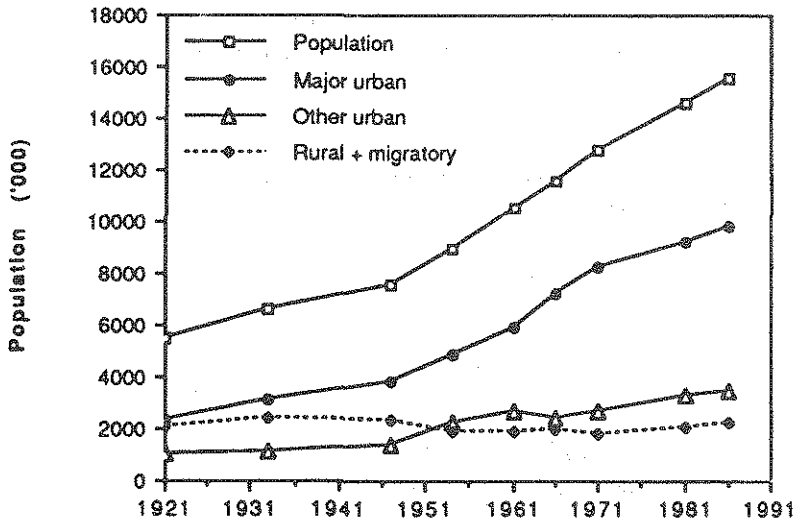
Source: Young, Figure 5.

2.7 Frank Stilwell, in his explanation of the pattern of Australian development, considers that there are relatively few factors responsible for the original settlement of capital city areas:

Desirable physical conditions such as fresh water and flat land were important in the selection of sites, but general situations are more explicable in terms of internal security, national defence, and centrality to potential agricultural areas. Nevertheless, despite the irrelevance of most of these factors in the current circumstances, the basic pattern of cities that now characterises the nation was established in these early years of white settlement.²

² Frank J B Stilwell, *Australian Urban and Regional Development*, Australian and New Zealand Book Company, Sydney, 1974, p 62.

Figure 2.2: Growth of the Total Population, Major Urban, Other Urban and Rural Components, Australia, 1921 to 1986



Source: Young, Figure 4.

2.8 The coastal location of Australia's major urban centres is related to the absolute necessity of a port at a time when the colonies were not self-sufficient in food and other essentials and relied on imports from Britain. Well into the 20th Century shipping was a major means of communication both internally and externally. When export trade became the colonies' economic base, the dominance of the port cities was doubly ensured.

2.9 Agriculture was also important in siting the major cities. Australia's most agriculturally productive land is situated in the crescent around the east and south coasts, a factor which, among other things, discouraged the growth of large cities inland. While "the outback" soon came to produce the wheat, meat and wool which sustained the pastoral economy, the main agricultural regions remained near the coast until the development of irrigation areas in the 20th Century.

Primacy of Cities

2.10 Australia was heavily urbanised from the beginning of European settlement. Instead of developing from rural communities, the colonies were set up as administrative centres for the detention of convicts and soon became the focus of commerce between the colonies and Britain. Since the cities were created first and rural populations developed later, capital city dominance was a feature from the very start.

2.11 British settlement in Australia coincided with the expansion of capitalism and, as a result, emphasis was given to commercial activity very early on. The commercial expansion of Europe often resulted in the domination of hinterlands for pastoral production and a strong focus on external, rather than inland contacts, as the development of wool as Australia's major export industry illustrates. The concentration on this industry reinforced capital city dominance through its relatively non-labour-intensive mode of production, so that little labour was drawn from the cities to the outback. The widely scattered distribution of graziers limited opportunities for the development of inland centres; and the wool always had to be transported to the capital cities for shipping, activities that required more labour than the actual production.³ Much the same is true of the mining industry, at least after the phase of the individual prospector. The paradoxical consequence was that the cities grew faster than the bush as pastoral production expanded.

2.12 The investment which arrived in response to awareness of Australia's rich resource base was also a major factor in the concentration of population in the cities. Between 1860 and 1890 much of the investment went into the establishment of urban services, particularly roads, drainage and railways.⁴ The rapid development of the latter contributed much to suburban sprawl, as housing followed the train lines.

2.13 That Australian settlement also coincided with the Industrial Revolution meant that the urban framework incorporated at the outset the technological innovations that had to be grafted onto existing urban forms elsewhere. Because much of Australia's development has taken place since the introduction of mechanised transport, the large volume of railway construction contributed to metropolitan primacy. The railways did encourage the growth of some small country towns; but, as the lines transported produce out and brought farmers' requirements from the ports, few major inland centres developed. Metropolitan primacy was not only unchallenged by inland centres but was reinforced by railway lines radiating from capital cities and drawing everything in towards a single port outlet.

³ I H Burnley, *The Australian Urban System: Growth, Change and Differentiation*, Longman and Cheshire, Melbourne, 1980, p 34.

⁴ C A Maher, *Australian Cities in Transition*, Shillington House, Melbourne, 1982, p 16.

2.14 The major cities also became the central location of political and administrative power. Government functions expanded employment opportunities, thus further enlarging metropolitan centres. Even after Federation, government continued on the basis of the structure established by the colonial administrations: the States were specifically recognised in the new constitution. The dominance of the capital city within each State was thus further reinforced.

2.15 Overseas immigrants have also played a large role in metropolitan growth. Migrants naturally gravitated towards the major urban centres where labour demand was highest. And later, as post World War II immigration policies aimed to recruit workers for urban industry, this trend was reinforced.

2.16 Australian population distribution is largely explained by the nation's colonial origins, the circumstances of which caused early prominence of coastal centres and the subsequent consolidation of this dominance.⁵

The Rise of Suburbia

2.17 The timing of Australian urbanisation was a crucial influence on the spatial form and city structure which developed. As mentioned, settlement occurred at the time the Industrial Revolution caused massive growth (and consequent upheaval) in the cities of Europe. As a result, most of the innovations and new urban arrangements that were forming there were directly incorporated into the colonial cities.

2.18 The changing transport technology which coincided with the early development of Australia is a common explanation for the low density of Australian cities. The cities of Europe were "foot-powered" before industrialisation. They were compact because mechanised travel was not available and workers had to live within walking distance of their work. Evidence of this phase from the earliest period of Australian urban development still survives in Sydney, Melbourne and Hobart, where the inner suburbs are compact with terraces and dense with their occupants.

2.19 With the advent of public transport, principally rail and tramways, the mobility of the population increased. Employees were able (and eventually were forced) to live further from their place of work, and the wealthier classes could indulge their desire for detached housing on large blocks of land while also maintaining close links with the city core.

2.20 Suburbanisation was speeded by the introduction of the automobile which released households from the need to live near a railway line; suburbs could now develop far away from fixed transport corridors. Private car ownership began to increase significantly from the 1950s, a major effect of which was to convert large tracts of rural land into suburbs. Freeways are an important feature of the automobile phase of development, and they have tended to promote further linear expansion along high speed corridors. The

⁵ Stilwell, p 65.

immense capital investment which has been poured into roads and freeways, together with a high rate of car ownership and, until recently, cheap fuel, have encouraged low density sprawl on the ever-spreading edges of major cities.

2.21 Transport was not the only factor behind Australian suburbanisation. Other important elements were the high average income necessary to meet the heavy costs of living in suburbia, particularly the desire for space and privacy. In a comparative study of Australian cities, Lionel Frost argues that the private, low density urban sprawl of major urban centres, especially Melbourne, Adelaide and Perth, was a ravenous consumer of capital. He suggests that the willingness to invest such large amounts into infrastructure and housing is shown by the expansive suburbs, which are both a tangible expression and convincing evidence of the relative affluence of the Australian worker.⁶

2.22 The formation of attitudes towards urban and suburban living was partly shaped by immigrants, who in the 19th Century were mainly of British origin. Many of these settlers came from conditions of Dickensian squalor, and they seem to have been averse to returning to high density living, particularly in a country with an apparent abundance of space and sunshine. Access to jobs and the facilities of the city core were given second place to the desire for privacy and space, both of which were offered by the emerging suburbs.⁷

2.23 Suburbanisation has thus both "negative" and "positive" causes. On the one hand, people are repelled from the old inner city by population pressure, pollution and traffic congestion; on the other, they are attracted by the suburbs' combination of semi-rural conditions with the opportunities offered by a large city. At first, only the most affluent could afford to move; but as public transport, and later the car, became readily available, a greater proportion could realistically aspire to a suburban lifestyle. Underwriting their capacity to buy a house lay the improvements in real wages which resulted from the operations of trade unions and, from World War II until recently, the post-war boom.

2.24 Professor Mike Berry has summarised the factors which have given rise to what is commonly termed "sprawl":

For more than one hundred years the dominant form of metropolitan growth in Australia has been 'the sprawl'. Complex, interacting forces - economic, political, cultural - are responsible for this outcome; they include:

centralisation of economic functions in the major port cities as Australia perfected its specialised role in a British, then American led, world economy;

the emergence of fragmented and competing metropolitan economies as colonial autonomy gave way to a national Federalism;

⁶ Lionel Frost, *Australian Cities in Comparative View*, McPhee Gribble, Melbourne, 1990, p 49.

⁷ Maher, p 20-21.

- . *plentiful supplies of land for continuing urban development, weak environmental constraints and even weaker planning controls;*
- . *long periods of sustained economic and population growth, fuelled by moderate to high overseas immigration (notably the 1950-75 period);*
- . *the strong speculative element in urban land and housing development;*
- . *the small-scale, traditional structure of the private house-building industry;*
- . *the conservative practices of financial institutions until the 1980s;*
- . *extremely strong cultural aspirations in favour of home ownership and low density living, reinforced rather than undercut by post-War immigration;*
- . *the changing spatial structure of metropolitan employment and industry location since the 1920s;*
- . *the emerging political geography of suburbia - ie. the location of marginal and swinging seats;*
- . *prevalent patterns of infrastructural provision which have always followed rather than led spatial developments;*
- . *existing taxation policies and incentives.*⁸

Population Distribution and Trends

2.25 In the long term, it is difficult to be certain about the shape of the cities or to predict the likely trends and thus ensure appropriate responses to change. Processes that are now at work will have ramifications for the economic and social make-up of Australian society and may alter the direction in which the cities are heading. The influences on settlement patterns outlined below are only a description of the outcome of processes that have already worked themselves out: the increased incidence of early retirement, for example. Trends which are only just starting to take shape can provide the impetus for entirely new directions in population distribution and mobility. Responses to the trends which are already having an effect on the pattern of settlement must be flexible and should recognise the likelihood of significant change in the future.

⁸ Mike Berry, Submission, p 2.

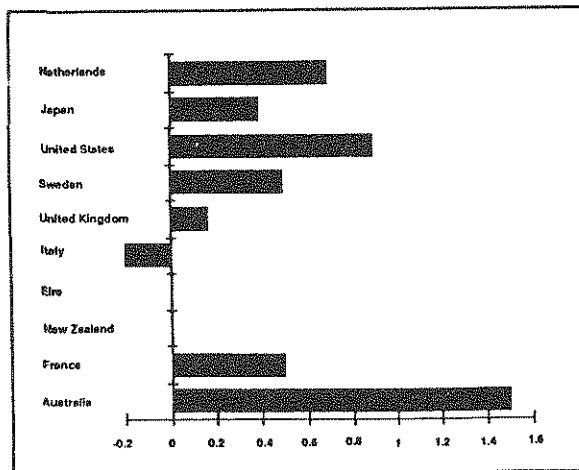
Components of Growth

2.26 As can be seen in Figure 2.3, Australia's population is growing faster than that of most other countries of the Organisation for Economic Co-operation and Development (OECD). The significance of this rate of growth is revealed only when the separate components of population growth are examined and projections made of population size and distribution.

2.27 There are two components of population growth: natural increase and net migration. The former is the extent to which births exceed deaths. The latter is the extent to which persons moving to Australia from overseas outnumber those departing.

2.28 The contribution of natural increase to Australian population growth is declining. Despite a below-replacement fertility rate, however, the relatively youthful age structure will guarantee significant population growth. The National Population Council (NPC) points out that natural increase will contribute two million people to the population between now and 2030.⁹

Figure 2.3: Population Growth Rates of Selected OECD Countries, 1986



Source: National Population Council, p 4.

⁹ National Population Council, *Population Issues and Australia's Future: Environment, Economy and Society*, Final Report, AGPS, Canberra, 1991, p 5.

2.29 The expected contribution of immigration to population growth greatly boosts predictions. As Table 2.1 indicates, overseas migration constituted almost half the total population growth in Australia in 1990-91. Australian Bureau of Statistics' (ABS) projections to the year 2031 estimate a population of between 23.3 and 26 million people, a figure which represents an increase of somewhere between 6 and 8.7 million people.¹⁰ Table 2.2 presents projected population levels for each of the States and Australia as a whole. Such projections depend on the level of immigration to Australia, which itself is very difficult to predict and, as Figure 2.4 indicates, has been subject to considerable fluctuations in the past. Recent reductions in the immigration quota may be a foretaste of further cuts.

Table 2.1: Population Increase by State and Territory, 1990-91

	Natural Increase		Net Estimated Overseas Migration		Combined Increase ⁽¹⁾	
	No.	% of Combined Increase	No.	% of Combined Increase	No.	% of Australian Total
NSW	47 240	50.8	45 791	49.2	93 031	37.1
VIC	34 445	54.0	29 294	46.0	63 739	25.4
QLD	25 081	66.4	12 703	33.6	37 784	15.1
SA	8 777	60.4	5 759	39.6	14 536	5.8
WA	16 190	54.7	13 394	45.3	29 584	11.8
TAS	3 424	85.6	574	14.4	3 998	1.6
NT	2 843	77.6	819	22.4	3 662	1.5
ACT	3 356	79.6	860	20.4	4 216	1.7
AUST	141 356	56.4	109 194	43.6	250 550	100

(1): Does not include interstate migration.

Source: ABS Cat. No. 3101.0.

¹⁰ Coopers & Lybrand Consultants, *National Report on Population Growth Ranking in Australia*, Summary, June 1991, p 33.

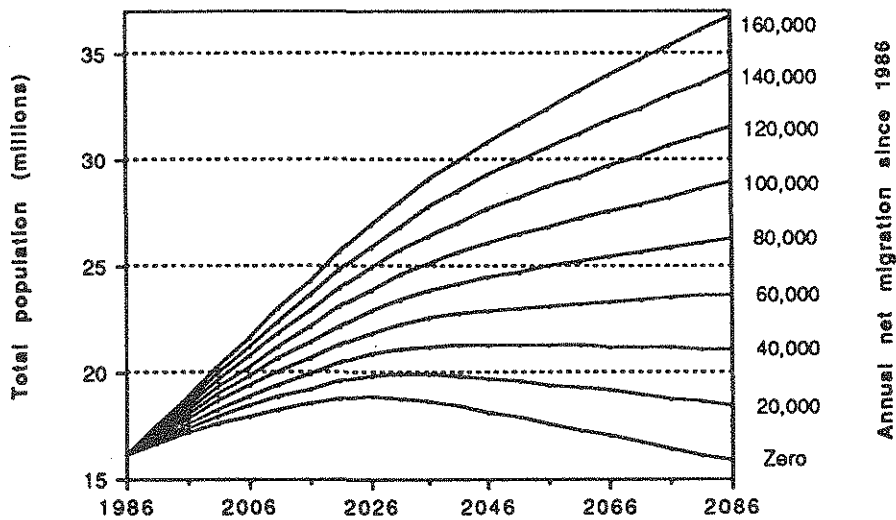
Table 2.2: Projected Population Levels by State and Territory

State/Territory	June 1991 ('000)	Forecast ('000)	
		2001	2031
NSW	5 902	6 536	8 966
VIC	4 416	4 922	5 984
QLD	2 966	3 577	5 036
WA	1 637	2 082	3 212
SA	1 447	1 572	1 763
TAS	467	485	491
NT	167	177	231
ACT	290	353	528
Australia	17 292	19 702	25 212

Note: Assumes overseas migration of 125 000pa between 1992 and 2031.

Source: *Coopers & Lybrand Consultants, 1992, p 43.*

Figure 2.4: Projections of the Total Population of Australia with Different Levels of Annual Net Migration Since 1986



Note: Assuming a continuation of a net reproduction rate of 0.9.

Source: *Young, Figure 2.*

Settlement Patterns and Locational Decisions

2.30 Population growth within Australia occurs at different rates in different regions. At the State level, the contribution of net migration to population growth can be examined as net international and net interstate migration. The contribution of each varies between the States, reflecting their differing economic, social and environmental circumstances. Considering both net migration and its spatial impact is essential when assessing the implications of future trends for settlement patterns.

2.31 To identify the different patterns of regional growth, population statistics and trends of each State and Territory are outlined below.

New South Wales - New South Wales is the most populous State, with a population of 5 731 926 or 34 per cent of the Australian total. While the New South Wales population is still expanding, Table 2.3 shows that since 1987/88 its rate of population growth has been in secular decline.¹¹

Table 2.3: Rates of Resident Population Growth by State and Territory, 1988-1991

% Total Population Growth								
Year ended 30 June	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
1988	1.60	1.20	2.43	0.86	2.55	0.43	0.55	2.49
1989	1.23	1.34	3.24	1.02	2.86	0.93	1.35	1.60
1990	0.94	1.28	2.52	0.88	2.10	1.56	1.60	2.01
1991	1.29	1.07	2.29	1.15	1.69	0.94	1.65	2.84

Source: ABS Cat no. 3101.0.

The main factor behind the downturn is the significant outflow of residents to other States, particularly Queensland. In 1990/91, 80 per cent of the net migration from New South Wales flowed directly to Queensland.¹² Reduced levels of overseas migration have also played a part in New South Wales' declining growth rate.¹³ Because Sydney has traditionally attracted a high level of new arrivals to Australia, the State's rate of population growth is linked to fluctuations in the immigration intake.

¹¹ A secular decline is a general downward trend despite minor fluctuations.

¹² Coopers & Lybrand Consultants, *National Report on Population Growth Ranking in Australia*, Summary, June 1992, p 42.

¹³ Coopers & Lybrand Consultants, 1991, p 34.

Victoria - Victoria is the second largest State in population terms, with a population of 4 243 719 or 25.2 per cent of the national total. As Table 2.4 shows, Melbourne, together with Sydney, is one of the fastest growing cities in Australia in absolute population numbers, but the rate of population growth is declining as is the rate of population growth for the State as a whole (refer also to Table 2.3).

The overall decline of Victoria's growth rate is due to a sharper decline in the fertility rate than is occurring in the nation as a whole.¹⁴ Net gains from international migration have also fallen because of the smaller numbers of immigrants arriving in Australia.¹⁵ Interstate migration contributes little to Victoria's population growth, and in most years the State has experienced significant net losses to elsewhere in Australia. These outflows have been especially marked since 1976 and have mostly been to Queensland, the Australian Capital Territory and New South Wales.¹⁶

Table 2.4: Population Growth Rates of Australia's Ten Fastest Growing Cities, 1990-91

Rank	City	Net Growth 1990/91	% Growth 1990/91	Population 1991
1	Sydney	41 950	1.1	3 698 450
2	Melbourne	31 600	1.0	3 153 500
3	Brisbane	25 348	1.9	1 327 006
4	Perth	21 980	1.9	1 197 295
5	Adelaide	13 001	1.2	1 062 874
6	Gold Coast-Tweed	8 717	3.3	274 210
7	Canberra-Queanbeyan	8 700	2.8	315 420
8	Sunshine Coast	5 851	5.3	115 235
9	Newcastle	3 880	0.9	432 640
10	Shoalhaven ⁽¹⁾	2 200	3.3	68 670
		163 227	1.4	11 645 300

⁽¹⁾ Nowra and Ulladulla.

Source: *Coopers & Lybrand Consultants, 1992, p 29.*

Queensland - Queensland's population of 2 978 617 represents 17.7 per cent of the national total. While the State currently ranks third (after New South Wales and Victoria) in absolute population numbers, it has had one of the fastest rates of population growth of all States and Territories for the last two decades. Most

¹⁴ Graeme Hugo and Bureau of Immigration Research, *Atlas of the Australian People - Victoria*, AGPS, Canberra, 1986, p 8.

¹⁵ Hugo, (Victoria), p 11.

¹⁶ Hugo, (Victoria), p 9.

of this growth is attributable to the substantial upturn in gains made from interstate migration. Over the last two decades, more than a third of Queensland's population growth has been due to net migration from other States.¹⁷ In 1990/91 Queensland was the most preferred destination for interstate moves and received a net migration inflow of 27 444. This inflow is well above that of other favoured destinations, such as Western Australia and the Australian Capital Territory, where the net combined gain in the same period totalled only 6 774.¹⁸ During the same period, New South Wales, Victoria, Tasmania and the Northern Territory all suffered net migration losses.

Western Australia - Western Australia's population totals 1 586 393, 9.4 per cent of the national figure. The State is one of the fastest growing in Australia but most of its population growth is attributable to net migration gains from international migration, not internal movements. In the last twenty years Western Australia has consistently received more than its proportionate (in relation to its share of the national population) share of the overseas migrant intake.¹⁹ Significant gains have also been made from the increasing northward and westward population drift, but net gains from other States have only made up around a fifth of the State's net migration component.²⁰ The effect of this pattern on the composition of the State's population is dramatic: more than half Western Australia's population are immigrants or the children of immigrants, a higher proportion than in any other State.²¹

South Australia - South Australia's population is 1 400 656, or 8.3 per cent of the national total. The State's population growth rate has been declining in the post-war years, and during the 1980s South Australia slipped from being the fourth to the fifth largest State, having been overtaken by Western Australia. The decline in the rate of population growth is the result of a fall in the rate of natural increase and reduced gains from net migration. In the 1950s and 1960s, net migration gains by South Australia were particularly pronounced because of the demand for labour resulting from industrialisation, but these have fallen dramatically, particularly since the collapse of the ship-building and related industries. Since the mid 1950s, the State's net gains from interstate migration have been declining, with population losses to the Northern Territory increasing

¹⁷ Graeme Hugo and Bureau of Immigration Research, *Atlas of the Australian People - Queensland*, AGPS, Canberra 1986, p 8.

¹⁸ Coopers & Lybrand Consultants, 1992, p 42.

¹⁹ Graeme Hugo and Bureau of Immigration Research, *Atlas of the Australian People - Western Australia*, AGPS, Canberra, 1986, p 8.

²⁰ Hugo, (Western Australia), p 7.

²¹ Hugo, (Western Australia), p 10.

from 1954 and to Western Australia from 1961.²² South Australia has recorded some gains from international migration, but these are less than its share relative to the national population break up.

Tasmania - Tasmania's present population totals 452 847, 2.7 per cent of the national population. Tasmania has had the lowest rates of population growth of all States for most of the post-war period, and in recent years they have been at their lowest level since the Great Depression of the 1930s.²³ The sustained decline in population growth can be attributed to the sharp drop in the rate of natural increase which occurred in the early 1960s, a history of net migration losses to other States and the comparatively low level of immigration from overseas, especially in the last two decades.²⁴ Since the mid 1970s, there has been a marked shift in the patterns of migration between the mainland States and Tasmania. While Victoria has remained the principal destination for migrants leaving Tasmania, increasing numbers have been attracted to New South Wales and Queensland.²⁵

Australian Capital Territory - The Australian Capital Territory, with 280 085 residents, accounts for 1.7 per cent of the national population. It is experiencing growth rates well above the national average and in 1990/91 recorded the highest rate of growth of all States and Territories and its population is likely to overtake Tasmania's early next century.²⁶ Net migration, rather than the rate of natural increase, makes the greatest contribution to population growth in the Australian Capital Territory, which has always shown a consistent pattern of net migration gains from other States.²⁷ The most rapid growth occurred in the late 1960s and early 1970s, reflecting the significant expansion of government employment in Canberra during this time. These settlers have enhanced the role of natural increase as a component of population growth because of the large numbers of young families and young adults who moved to the Australian Capital Territory. International immigration is also an important feature of the Australian Capital Territory's rate of population growth. While it has rarely received its full proportionate share of the overseas migrant intake, its proportion of

²² Martin Bell, *Internal Migration in Australia 1981-1986*, AGPS, Canberra, 1992, p 26.

²³ Graeme Hugo and Bureau of Immigration Research, *Atlas of the Australian People - Tasmania*, AGPS, Canberra, 1986, p 5.

²⁴ Hugo, (Tasmania), p 8.

²⁵ Bell, p 32-33.

²⁶ Graeme Hugo and Bureau of Immigration Research, *Atlas of the Australian People - Australian Capital Territory*, AGPS, Canberra, 1986, p 1.

²⁷ Hugo, (Australian Capital Territory), p 11.

overseas-born and recent arrivals is above the national mean.²⁸ It is thus likely that the Australian Capital Territory receives a high proportion of secondary migration, that is, migrant relocation to Canberra some time after first arriving in Australia.

Northern Territory- In terms of population the Northern Territory is the smallest of the States and Territories. Its population is 175 253, one per cent of the national total, and is currently experiencing a low level of growth. Natural increase has accounted for less than half of the Northern Territory's population growth, and, in most years, net migration has been the major contributor.²⁹ Net gains from other States have only made up about a twelfth of the net migration component, showing that the bulk of migration gain in the Northern Territory has been from international migration.³⁰ Since 1971 the Northern Territory has mostly recorded net losses of population to other States and Territories.

Interstate Migration

2.32 Patterns of internal population migration reflect changes in the balance of forces that shape the urban environment. To understand internal migration patterns and to guide planning, investment and the formulation of public policy it is necessary to appreciate these factors (which include economic, social and lifestyle aspects).

2.33 Four major trends of internal migration have been identified by the Bureau of Immigration Research (BIR) and are analysed in its report *Internal Migration in Australia 1981-1986*. The four trends are:

- Increasing "counter-urbanisation": the population of non-metropolitan areas is growing faster than that of major metropolitan areas. All mainland States are experiencing some outward migration from the capital cities to the coast and other attractive regions near metropolitan areas. Many of these people are retirees, and the trend reinforces the northwards movement of population which is speeding the growth of the Moreton region which includes the Gold and Sunshine Coasts in Queensland.

- The population drift from the south-eastern corner of Australia to the north and west has been maintained. This movement has increasingly favoured Queensland, particularly the Moreton region. Western Australia has been the second most favoured destination for interstate moves.

²⁸ Hugo, (Australian Capital Territory), p 13.

²⁹ Graeme Hugo and Bureau of Immigration Research, *Atlas of the Australian People - Northern Territory*, AGPS, Canberra, 1986, p 7.

³⁰ Hugo, (Northern Territory), p 7.

Long term outflows of population from the interior and the outback to state capitals is continuing. Further contraction of rural industries and the continuing economic decline of the older industrial towns will continue to fuel this type of migration to the major cities.

The radial movement of population from inner and middle suburbs to the periphery of urban centres has created a "doughnut effect". Urban expansion on the fringe is mostly driven by population growth, the availability of cheaper housing and the high rate of household formation resulting from the youthful age profile of the people involved. This pattern of population redistribution shows no signs of abating.³¹

Factors Affecting Internal Migration

2.34 The most important factors affecting the pattern of internal migration can be discussed under the following headings: age, State boundaries, economic activity, and the employment status, occupation and industry of the moving population. These are considered below on the basis of work by Dr Joe Flood from the Commonwealth Scientific and Industrial Research Organisation (CSIRO)³²:

Age - People aged between 15 and 24 are more likely to move than those aged over 40. They also move in a different direction, generally from the country to the inner cities. Other age groups tend to move outwards from the city.

State Boundaries - Movements within a State are about twice as frequent, given constant distance, as those from State to State. This appears to be because information on job opportunities, accessibility of services and company transfer of employees tend to operate within the same boundaries that define the States. Jobs are usually advertised statewide rather than nationally, and interstate moves will require re-applying for many State government services. At the same time, many movements (particularly within cities) are the result of people moving to improved accommodation ("trading up"), though the figures on this trend are not adequate for definite conclusions.

Economic Activity - Migration patterns are affected by the state of the economy. When the economy is expanding, more jobs and other opportunities become available, and the rate of household formation increases, thus encouraging greater migration. In a slump, the level of internal migration decreases.

Employment Status - Internal migration is strongly related to employment status. The migration patterns of the employed differs from those of the unemployed and those not in the labour force. Employed persons are moving to the cities, where

³¹ Bell, p 296-298.

³² Joe Flood, "Internal Migration in Australia: Who Gains, Who Loses", *Urban Futures*, Special Issue 5, February 1992, p 44-53.

more jobs and consumption opportunities are available, while the unemployed and those not in the labour force are leaving cities for coastal regions. Work has traditionally been the most important reason for interstate moves, but employment as a reason for change of residence has fallen from 43 per cent of moves in 1970 to 26 per cent in 1987.

Occupation and Industry - The ongoing changes in the structure of Australian industry have had a major impact on migration movements. As a result of the decline in manufacturing, New South Wales has registered a substantial loss of blue collar workers; Queensland has gained a large number of sales and service workers; and the Australian Capital Territory has recorded a large increase in the number of clerical and professional workers.

Impacts

2.35 The BIR's study, *Internal Migration in Australia*, concludes that "counter-urbanisation" notwithstanding the most significant effect of population redistribution is the extensive development on the fringe of existing urban centres. This expansion is generating much concern and debate on the appropriate policies to deal with economic, environmental and social consequences of urban sprawl.

2.36 The northward population drift also has important consequences for the future pattern of settlement. Despite short term fluctuations in the levels of interstate migration and the changes in net outflow experienced by some States, the trend of population redistribution to south-east Queensland is likely to be long term. Although predictions that Queensland will overtake Victoria as the nation's second most populous State by 2015 seem to be a little exaggerated, they arouse concern when the implications of this rate and extent of growth are pondered. Obviously Queensland's annual rate of population growth is substantially higher than the national rate and that of most other States. A journalist's description of this growth helps to focus the picture:

*In human terms, this means that Queensland's population is increasing by about 90,000 annually...Logan City will be home to another 85,000 people inside the next 15 years. The population of Albert Shire, catchment for the northward expansion of the Gold Coast, will balloon by 130,000 and Cairns will double in size, forming a second growth belt in the State's tropical north. What is happening in Queensland represents the greatest population shift in the nation's history.*³³

2.37 Also of concern is the growing financial cost of rapid migration to particular regions. On the basis of predictions for growth in south-east Queensland, the population of the Brisbane and Moreton regions is expected to reach about 2.8 million by 2011 - close to the current population of Melbourne. This rate of population and consequent urban growth have serious implications for planning and the provision of services. Related costs are substantial, and it is estimated that the provision of services to the

³³ Jamie Walker, "The New Gold Rush", *The Weekend Australian*, 13-14 June 1992.

region will require an investment of some \$20 billion in the 1990s.³⁴ Furthermore, because urban growth in this region spills across state boundaries, regional rather than State planning will become essential.

2.38 The rapid population growth of some areas and the continuing attractiveness of the coast are likely to exacerbate environmental problems. With the level of population already placing strains on resources, particular attention must be given to areas which are undergoing rapid growth and which are known to be environmentally sensitive.

2.39 As the migration from rural areas will affect the viability some industries, and, indeed, the life of some rural centres, policies to address the issue of regional decline are also needed.

Immigration

2.40 As highlighted previously, immigration has contributed significantly to Australia's post-war population growth. Since 1946 net migration gain has accounted for around 40 per cent of total population growth. Because the level of immigration is related to the cyclical nature of the economy, as well as to changes in immigration policy, there have been significant fluctuations in the contribution of immigration to the population and its rate of growth. The contribution of immigration to population growth in 1990-91 totalled 43.6 per cent (as shown in Table 2.1).

Settlement Patterns

2.41 The settlement of immigrants to Australia shows distinctive patterns which result from the range of social and economic elements which affect their well being and means of livelihood. According to the 1986 census, around two thirds of the 3 million-plus overseas-born persons in Australia lived in New South Wales and Victoria.³⁵ The proportion of overseas-born is also significant in South Australia, Western Australia and the Australian Capital Territory. Recent arrivals to Australia have tended to settle in New South Wales and Western Australia. Although, the former contained only 34.1 per cent of the total population, nearly 40 per cent of immigrants settled there between 1985 and 1990. Western Australia, with 9.6 per cent of the population, attracted 14 per cent of migrants in the same period.³⁶

2.42 The level of migration to a particular State is determined by a number of factors, including the spatial location of employment opportunities, the location of ethnic communities and the accessibility of services, especially those of relevance to migrants. The spatial distribution of the ethnic population, and particularly the tendency of some

³⁴ Bell, p 299.

³⁵ ABS Census of Population and Housing, *Summary Characteristics of Persons and Dwellings*, 1986.

³⁶ DILGEA, Submission, p 2.

groups to concentrate in particular areas, is important for identifying the areas in greatest need of specific services. In addition, since migrants show definite preferences for certain cities and States, the level of growth in these areas can be better projected.

2.43 Concentrations of recently arrived migrants in the major cities are most common in some of the older middle suburbs where housing is relatively cheap.³⁷ In recent years, however, new migrants have dispersed as is shown by the number now settling in places like Dandenong (Melbourne) and Liverpool or Cabramatta (Sydney). This trend mostly represents the movement of longer established migrants within the city and the increasing price of houses in the inner suburbs. To date, the overseas-born form only a small component of the internal migration flow out of major urban areas.³⁸

Impact of Immigration on Metropolitan Cities

2.44 Immigration trends show that migrants prefer the major cities. Sydney, Melbourne, Adelaide and Perth, as the principal ports of entry, have become major centres of the overseas-born population. Changes in the economic and social conditions of these States, however, have resulted in Brisbane and the Gold Coast increasing their share of new settlers.³⁹ It is clear that immigration has generally reinforced urbanisation. As the 1986 census showed, 91.9 per cent of the overseas-born population lives in urban areas.

2.45 The effect of immigration on urbanisation is made obvious by statistics which show that there is a high proportion of overseas-born in the major urban areas than in the total population.⁴⁰ In 1986, 21 per cent of the total population were born overseas, while 27 per cent of the population in the major urban areas were overseas-born. Moreover, between 1947 and 1986 the proportion of overseas-born persons increased faster in cities than in other areas from 12 to 27 per cent compared with an increase from 8 to 12 per cent in non-urban areas.⁴¹ This is demonstrated in Figure 2.5.

2.46 Migrants have swelled the cities, where resultant increased population density has undesirable effects in further congestion and other growth pressures. The outflow of the Australian-born from Sydney and Melbourne however, has made room for the continued inflow of new migrants.

³⁷ DILGEA, Submission, p 4.

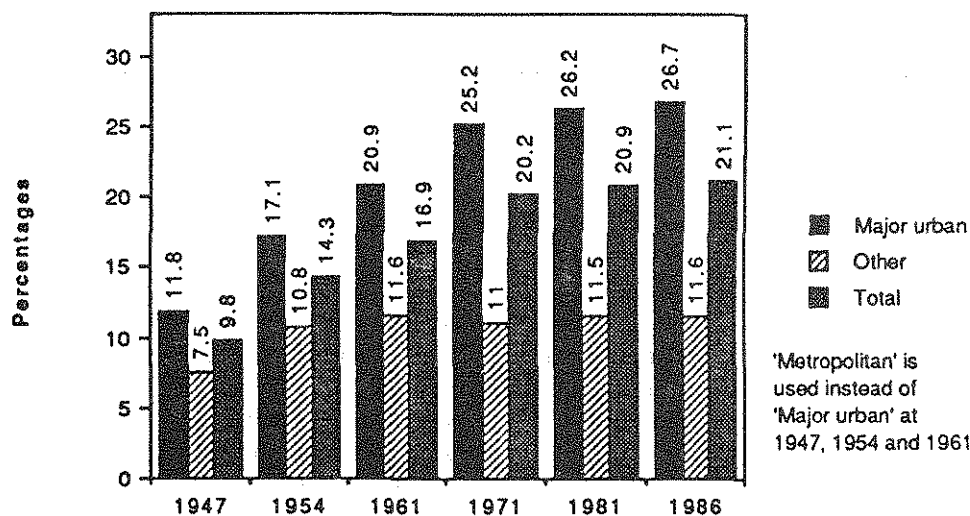
³⁸ DILGEA, Submission, p 4.

³⁹ R Goddard and L Sparkes, "The Demographic Effects of Immigration", *Journal of the Australian Population Association*, Vol 4, No 1, May 1987, p 31.

⁴⁰ Young, p 6.

⁴¹ Young, p 6.

Figure 2.5: Proportion of Overseas-born Persons in Major Urban, Other Areas and Total Australia, 1947 to 1986



Source: Young, Figure 6.

2.47 The overall impact of immigration within cities has been strongest in the more established suburbs. New arrivals traditionally settled in the inner and middle suburbs, a trend which has meant increased use of hitherto under-used physical infrastructure, but which has also placed considerable local demand on social services. In the long term, however, it appears that immigrants do not use community services at a higher rate than other residents.⁴²

2.48 Immigration can also contribute indirectly to suburbanisation by increasing the demand for housing in established and more costly areas, thus prompting price rises which force many to relocate on the periphery. Suburbanisation imposes a heavy demand for new infrastructure, and the continued concentration of growth in the larger cities is now making it difficult for the authorities to keep up with the demand for public services.

2.49 Through its impact on population growth, immigration will affect household formation and thus housing demand. In the short-run, house prices may increase, but there are other important variables which affect housing costs. In the long-run, it should be possible to bring the supply of housing into balance with demand.⁴³

⁴² Peter A Murphy, I H Burnley, H R Harding, Diane Wiesner, Vivien Young, *Impact of Immigration on Urban Infrastructure*, AGPS, Canberra, 1990, p xiii.

⁴³ Murphy et al, p 77.

2.50 Immigration, as a major contributor to population growth, has been blamed for the increasing environmental and resource problems faced by cities, but the rate of population growth is only one factor contributing to such problems. The level of immigration is, however, a central issue related to future urban development, especially in relation to the concerns that future population levels are beyond the carrying capacity of Australia's urban and natural environment. These issues are discussed in Chapter 4.

The Ageing of the Australian Population

2.51 As Table 2.5 shows, Australia's population as a whole is getting older, largely because of declines in fertility, but partly as a result of improvements in mortality. The proportion of aged people in the population (generally defined as those over 65 years old) is increasing and will continue to increase until around the middle of next century, at which point it should start to level off. In 1991, 11.4 per cent of the population was in the 65-plus age category representing almost 2 million Australians.

2.52 Important trends associated with the ageing of the population are:

- . Significant ageing within the aged population itself. While the population aged 80 years and above accounts for only 2 per cent of total population, it is the fastest growing group. The number of people aged 80-plus has increased by more than 100 per cent over the last twenty years and will double again by the year 2011.
- . The "baby boomers" (those born in the 1945-1965 period), which make up one of the largest cohorts in Australia's population are now approaching middle age, and will start to swell the ranks of the aged from the year 2010 onwards.
- . The decline in fertility has resulted in a decrease in the proportion of children in the population. In 1971, 28.7 per cent of the population was aged less than 15 years, but in 1989 this category represented only 22.1 per cent.

2.53 These trends have profound implications for future patterns of settlement. Spatial concentration of particular age groups produces specific demands for certain types of infrastructure and services. A study by D T Rowland of the age structure of metropolitan local government areas showed that there was a pattern of successive concentric rings of progressively younger populations with increasing distance from the city centre.⁴⁴ Despite pockets of gentrification in inner and middle areas, there is a tendency for people to cluster at particular stages of their life cycle. One implication is that planners will need to focus on transforming areas previously adapted to families with children, so as to equip them to meet the specific needs of the aged as residents advance through their life cycle.

⁴⁴ Cited in Graeme Hugo, *Australia's Changing Population: Trends and Implications*, Melbourne, Oxford University Press, 1986, p 160.

Table 2.5: Proportion of Persons Aged 65-plus Years

Year	%	Median Age of the Population ¹
1881	2.5	20.1
1891	2.9	21.6
1901	4.0	22.5
1911	4.3	24.0
1921	4.4	25.8
1933	6.5	27.7
1947	8.0	30.7
1954	8.3	30.2
1961	8.5	29.4
1966	8.5	28.2
1971	8.3	27.5
1976	8.9	28.4
1981	9.7	29.6
1986	10.5	31.0
1991	11.4	32.5
1996	12.0	34.1
2001	12.3	35.8
2006	12.8	37.4
2011	13.8	39.1
2016	15.8	40.5
2021	17.6	41.6
2026	19.7	42.7
2031	21.5	43.8

¹ Age at which half the population is younger and half older.

Source: House of Representatives Standing Committee for Long Term Strategies, Expectations of Life: Increasing the Options for the 21st Century, p 12.

2.54 "Ageing in place" also has implications for fringe areas which have absorbed much of the population growth in cities. The Committee's report *Expectations of Life: Increasing the Options for the 21st Century*, points out that the ageing of the population within the next ten years will be most intensely felt in what were previously outer fringe suburbs.⁴⁵

2.55 While many grow old within the suburbs where they spend their adult lives, counter to D T Rowland's theory suggesting mostly young people live on the fringe, there is some evidence that there is a significant level of older age groups on the fringe already. A recent study by the NHS is reported as showing that the majority of residents on the fringe are families who have bought second or more homes (change-over buyers).⁴⁶ According to the study, which focussed on Sydney and Melbourne, the proportion of established or change-over buyers rises progressively towards the outer suburbs. As a consequence:

*...in fringe zones, 40% of households did not have children present, and only 25% of respondents were under 35 years old.*⁴⁷

2.56 The NHS suggest that second and subsequent home buyers move for reasons associated with increasing the size and quality of their homes as well as concern for environmental and scenic attractiveness.⁴⁸

2.57 The combination of early retirement and improved financial circumstances has encouraged other retirees to relocate. A noted trend is the number of retirees who are moving from cities to coastal or other non-urban areas. Concentrations of aged are evident in several non-metropolitan coastal resort areas, particularly on the northern and southern coasts of New South Wales, as well as in south-east Queensland. The number of retirement communities in the hills outside larger cities, such as Katoomba and Moss Vale (near Sydney), is also increasing. Another trend is the slight over-representation of the aged in country towns; this occurs because older people who retire from their farms often move to a nearby town where they can maintain their social networks.

2.58 Where older people live affects their access to services and has implications for those who care for them. The basic needs of the aged are broadly the same as the rest of the community, but, because of their life stage, barriers emerge which are different from those faced by young people. Planning for transport, community and health services and housing will have to take account of the special needs of the elderly.

⁴⁵ House of Representatives Standing Committee for Long Term Strategies, *Expectations of Life: Increasing the Options for the 21st Century*, AGPS, Canberra, 1992, p 145.

⁴⁶ Paul Cleary, "People Happy in Nappy Valley, Study Shows", *Sydney Morning Herald*, 16 March 1992.

⁴⁷ Meredith Edwards, "Australian Cities Towards 2000: The National Housing Strategy", *Vital Issues Parliamentary Library Seminar Series*, 28 April 1992, p 8.

⁴⁸ Edwards, p 9.

2.59 Throughout their life cycle the baby boomers put pressure on different social services. They increased the demand for schools in the 1950s and 60s and for university places in the 1970s. As they left home they increased the demand for rented accommodation, and more flats were built in response. In the 1970s and 80s they increased the demand for new housing in the suburbs, roads, shopping centres and entertainment facilities. As this generation ages and retires, it will in turn increase the demand for aged peoples' requirements in the housing, health, welfare and general lifestyle fields. The importance of housing and the urban environment in the lives of the elderly is receiving increasing attention from state government planners responsible for the needs of the aged. Some of these issues are discussed in the *Expectations of Life Report*.

Household Formation

2.60 The ageing of the population will also have a significant effect on the rate of household formation and average household size. The increasing number of the aged will reduce the rapidity of household formation - a feature of current urban development. This will occur because the proportion of those under 30, the section of population which will be forming households over the next 10 to 20 years, will decrease.

2.61 Demographic factors in the rate of new household formation are the rate of population growth (through both natural increase and immigration) and the age structure of the population. Most new households are formed either by young people leaving the parental home or by arriving immigrants.⁴⁹

2.62 In the last three decades, household formation has occurred more rapidly than the rate of population growth. As shown in Table 2.6, the process reached a peak in 1971-76, when the baby boom generation was reaching the stage of separate household formation.⁵⁰

Table 2.6: Growth in Household Numbers Relative to Population, Australia, 1961-66 to 1981-86

Period	Household Growth		Population Growth	
	No ('000)	% pa	No ('000)	% pa
1961-66	373.3	2.6	1 091.3	2.0
1966-71	515.3	3.1	1 156.1	1.9
1971-76	469.9	2.4	792.8	1.2
1976-81	528.4	2.4	1 027.9	1.5
1981-86	518.5	2.1	1 025.9	1.4

Source: *The National Housing Strategy, Issues Paper 1, p 21.*

⁴⁹ The National Housing Strategy, *Australian Housing: The Demographic, Economic and Social Environment*, Issues Paper 1, AGPS, Canberra, 1991, p 7.

⁵⁰ National Housing Strategy, (Issues Paper 1), p 20.

2.63 The relatively high rates of post-war population growth, stimulated by immigration, have contributed to household formation, though their impact has been unevenly distributed across Australia because of population movement between regions and the tendency for migrants to settle disproportionately in a few cities.⁵¹ The impact of immigration has been very significant in Sydney and Melbourne: between 1981 and 1986, migrants accounted for 70 per cent of all household formation in the former and 50 per cent in the latter.⁵²

2.64 Both the rate of household formation and the size of households are decreasing. By the year 2006, household formation will still be proceeding at a faster rate than population growth, but it will decline as the proportion of young people falls and the "baby boomers" get old. Additionally, factors such as extended periods of full-time education, high youth unemployment rates, marriage at a late age and increasing housing costs have delayed or halted the movement toward independent households and will further reduce the rate of household formation. Nevertheless, over the next decade, 1.2 million dwellings, or the equivalent of four cities the size of Adelaide, will be added to the nation. That implies a national investment of about \$4.2 billion each year and compares with the \$3 to 5 billion per annum which has been invested in new manufacturing capacity over the past decade.⁵³

2.65 The composition of Australian households has undergone major changes since the post-war years, the most important being a decrease in average household size. As pointed out by the NHS, the average size of households has decreased from 3.55 persons in 1961 to 2.88 in 1986.⁵⁴ The main reasons for this are a decline in the proportion of children in the population and the rising proportion of older people.

2.66 The conventional stereotype of the typical Australian family as a wife, husband and two or three dependent children now bears little relation to reality. The number of one-person households has increased dramatically over recent decades: between 1965 and 1980 it more "than doubled, while the population increased by only 28.6 per cent".⁵⁵ There is also a trend towards non-family individuals, particularly young adults, living in group situations, and an increasing tendency for older people to live alone as a result of increased divorce rates and the greater numbers of elderly people who live independently.

⁵¹ National Housing Strategy, (Issues Paper 1), p 23.

⁵² National Housing Strategy, (Issues Paper 1), p 25.

⁵³ Lyndsay Neilson and Marcus Spiller, "Managing the Cities for National Economic Development: The Role of the Building Better Cities Program", Seminar Paper, Canberra, April 1992, p 2.

⁵⁴ National Housing Strategy, (Issues Paper 1), p 28.

⁵⁵ Hugo, Australia's Changing Population, p 195.

2.67 The growth in the number of sole-parent families is also significant. Divorce and separation are the major reasons for this type of family, but there are also many single-parent families in which the household head was widowed or never married.⁵⁶ The rapid growth of single parent families has major implications for government policy and planning, especially in the area of social security, while housing and access to services continue to be matters for concern.

2.68 The declining rates of household formation and household size have a significant influence on the pattern of settlement and planning for future development. The major implications are:

- Continuing rapid growth of many urban areas, combined with traditional housing preferences and non-residential land use, are contributing to suburban sprawl. The disadvantages of this type of development, which are discussed later in the report, include the enormous cost of providing infrastructure and problems of access; locational problems arising from the concentration of employment opportunities in the inner and middle-ring suburbs; and the adverse environmental effects of high use of private transport and insensitive land use practices.
- Despite decreasing average household size, there is a trend towards increased dwelling size, a tendency which increases the chance of a mismatch between housing stock and population characteristics. The specific housing needs of different family types and different stages of the life cycle are not adequately recognised by existing housing stock or current policies of planners.
- The economic and social changes in Australia's demographic make-up, and the effects these changes will have on household formation, size and type, have important policy implications. One example is that the increasing number of sole-parent families affects not only social security payments, but also housing and service needs.

Conclusion

2.69 The economic, environmental and social costs of Australia's relatively high level of immigration have been reviewed recently by the NPC which has raised the need for a national population strategy. The changes in the pattern of internal migration, which are the result of economic and demographic change, emphasise the need for a national settlement strategy.

2.70 The relevance of such a strategy must be considered in the light of both impeding economic and technological change and the environmental impact of the redistribution of the population along the coastal strip. Both these issues are discussed in the following two chapters.

⁵⁶ Hugo, Australia's Changing Population, p 211.

CHAPTER 3

THE URBAN IMPACTS OF ECONOMIC AND TECHNOLOGICAL CHANGE

3.1 Economic, technological and urban change are inseparable. Global and national economic change has a major impact on the extent of urbanisation, the size of cities and their quality of life. As Dr John Brothie of the CSIRO explains, this impact is the natural consequence of the high levels of economic activity already concentrated in Australian cities:

Nearly 90% of Australia's gross national product is created in its urban areas and more than half is created in its capital cities. It is relevant, therefore, to consider these cities as economic systems, and to examine their efficiency and effectiveness and their productivities in terms of their outputs and their resource inputs. It is even more important to examine ways of improving this productivity in a changing environment.¹

3.2 In developing urban policies it is important to understand the changing economic and technological trends and their implications for cities. The importance of economic change to cities in Australia is emphasised by the current adjustments necessitated by the consequences of the decline in the level of economic activity in traditional manufacturing centres, particularly in the southern states, and the failure of the cities to secure their historic proportion of new and growing industries. The growth of new service and tourist industries has resulted in a general shift of economic activity northwards, a process reinforced by the apparent preference of Asian investors for projects in the north.

3.3 Changes made to Australian industry to create an internationally competitive manufacturing and services sector have resulted in significant regional differences. The shifts in economic activity from one region to another are the result of the following processes:

- the restructuring of established industries through the removal of tariff protection and pursuit of micro-economic reform;
- the growth in the international trade of services and elaborately transformed manufactures and the associated shift in the direction of trade towards Asia;
- the technological changes in information processing, advanced materials and modes of transport and communications; and
- the subsequent organisational and structural changes within corporations.

¹ John Brothie, "The Changing Structure of Cities", *Urban Futures*, Special Issue 5, February 1992, p 13.

Restructuring Established Industries

3.4 The Australian government's program to restructure industry was expected to affect different regions in different ways, and the need to ensure regional adjustment was foreseen as early as the 1970s, particularly in the Jackson Report *Policies for Development of Manufacturing Industry* and the Crawford report, *Study Group on Structural Adjustment*. Reform of major industrial sectors, including steel, heavy industries, motor vehicles, textiles, clothing and footwear, was accompanied by sectoral plans. These were complemented by labour market policies aimed at reducing the inequality between regions and encouraging retraining; the Labour Adjustment Training Arrangements and the Relocation Assistance Scheme are examples.

3.5 As the restructuring process reached the stage of "across the board" reductions in the general level of tariffs for manufacturing industry, less emphasis was placed on sectoral plans and localised adjustment processes. With escalating private sector foreign debt and deteriorating terms of trade, the federal government focused on national issues and sought to facilitate further restructuring by means of macro-economic measures such as monetary, fiscal and wages policy.

3.6 The cumulative impact of that series of decisions about economic reform also had differing regional impacts. The development of some areas, particularly in Queensland, was favoured, while other regions experienced decline. Such disparities are partly explained by the clustering of industrial groups with their down stream suppliers, and the narrow, specific locational preferences of the new growth industries such as tourism and services.

3.7 Professor Michael Taylor and Steve Garlick define three types of region with different economic prospects in Australia:

- . growth regions stimulated by the current processes of internationalisation, deregulation and industry restructuring;
- . potential growth regions, held back by specific limitations such as shortages of capital, entrepreneurs or labour skills; local regulation; or infrastructure requirements; and
- . regions in secular decline.²

3.8 The decline in economic activity has been greatest in regions where manufacturing industries were highly concentrated - across most country centres in Victoria; in Adelaide and Whyalla/Port August in South Australia; and in Sydney, Wollongong and Newcastle in New South Wales.

² Michael Taylor and Steve Garlick, "Commonwealth Government involvement in regional development in the 1980s: a local approach" in Benjamin Higgins and Krzysztof Zagorski (eds), *Australian Regional Developments: Readings in Regional Experiences, Policies and Prospects*, AGPS, Canberra, 1989, p 86.

3.9 Decline in some regions has been particularly severe because the specific siting requirements of new growth industries in the services and elaborately transformed manufacturing sectors are significantly different from those favoured by traditional manufacturing industry. Greenfield sites on the outer suburban fringes are often preferred because they present opportunities to:

- . design and build to modern standards, at a lower cost than retrofitting an established site;
- . establish a new work "ethos" through new labour agreements; and
- . improve interstate and intra-metropolitan transport.

3.10 In recent research published by the CSIRO, Dr Joe Flood found that employment as a reason for change of address fell from 43 per cent of movements in 1970 to 26 per cent in 1987.³ This drop is indicative of an increasing population of retirees and relatively high levels of structural unemployment. General economic factors are significant too, because people on minimum fixed pensions or unemployment benefits are moving to cheaper centres. The relative importance of lifestyle *vis-a-vis* economic factors is as yet unclear but employment as a motive for relocation is still a significant factor. In the long term, if job opportunities fail to materialise on the north coast and in Western Australia for the children of families now moving to these areas, there could be a significant reversal of recent internal migration trends. In his analysis of internal migration patterns Dr Flood sees four distinct regions emerging:

- . growth - gaining employed and non-employed people;
- . displacement - gaining employed but losing non-employed;
- . marginalised - losing employed but gaining non-employed; and
- . depressed - losing all groups.⁴

3.11 The growth regions include the outskirts of Sydney, the mid-north coast of New South Wales, the far-east of Melbourne, the Gold Coast, most of Perth and southern and eastern Adelaide. Displacement regions include the older suburbs of Melbourne and Sydney where gentrification has occurred. The marginalised regions include the Hunter valley, south-western Victoria, Tasmania and the Sunshine Coast in Queensland. Depressed regions include inner-western Sydney, western New South Wales inner and southern Melbourne, most of Brisbane and central Perth. Dr Flood concluded that large cities could suffer a decline of population if current trends continue.

³ Joe Flood, "Internal Migration in Australia: Who Gains, Who Loses", *Urban Futures*, Special Issue No 5, February 1992, p 47.

⁴ Flood, p 47-48.

3.12 A recent report by the Economic and Policy Analysis Division of the Department of Employment, Education and Training, *Australia's Workforce in the Years 2001* suggests the key factors affecting future employment in industries are productivity growth, micro-economic reform and the pattern of investment. The volume of goods produced in mining, building and construction, transport and manufacturing is expected to grow, but growth of output in the manufacturing sector will be accompanied by a decline in workers employed. There will also be continued job losses in the public sector, particularly from the suppliers of urban services such as electricity, gas and water, which are currently striving to improve productivity. This is evident in the restructuring occurring in the telecommunications industry where there is a strong emphasis on centralising certain functions and winding back activities in country areas.

3.13 According to Professor Judith Sloan, Director of the National Institute of Labour Studies at Flinders University, the problem is that new industries are developing and job opportunities expanding in locations far away from where people are now losing their jobs. As a consequence, people in declining regional centres face the prospect of moving to the new job-growth areas and retraining for employment in the service sector.⁵ Over the long term the population may be able to adjust to the new economic order, but in the short term many people must experience dislocation and distress. How easily can a 45 year old sheet metal worker be expected to turn himself into drinks waiter at a tourist resort?

Emergence of the Information and Services Industries and New Technologies

3.14 Australia's shift to an information economy is beginning to be documented. The Committee's first report *Australia as an Information Society: Grasping New Paradigms*, discusses the implications of this shift, which involves a transition to a mode of production in which the fundamental production inputs are not material things, but knowledge, and in which production is assisted by rapid computer processing and communication networks. In the development of the information economy it can be seen that technological change has both facilitated and paralleled economic change.

3.15 The implications of the information economy for the cities are evident from a review of employment patterns, which shows that primary industries provide 6 per cent of jobs; manufacturing 15 per cent; and services 79 per cent. Different sections of the information economy have differing siting criteria. There may be a potential difficulty if the criteria set by the new industries differ from those of old-style manufacturing, which have traditionally provided the core of private sector urban employment.

⁵ Professor Judith Sloan cited in Tom Dusevic, "Where the Jobs Will Be", *The Weekend Australian*, 30-31 May 1992.

3.16 Peter Hall draws on new, rather than traditional, analyses of employment sectors when discussing the locational requirements of industry.⁶ He suggests that the development of the "informational mode of production" is the result of the convergence of new technologies and new organisational systems. This has underlain the economic changes of the 1980s - particularly the globalisation of the economy. These changes have profoundly affected three sectors: the informational-manufacturing sector, the information using producer services sector and the consumer services sector.⁷ These sectors are separate but interrelated and overlapping. Consumer services, which includes health, education, travel, public transport and tourism, has very close links with the producer services group, which includes distributive services like wholesaling, commercial freight, public utilities, corporate services and non-profit services such as government. The high technology, high value-added manufacturing sector can also be included in the producer services sector of the information economy. The general spatial requirements of the sectors of the information economy, as used in Peter Hall's analysis, are discussed below.⁸

a) High Technology Industries

3.17 These industries are concentrated in a few zones. All these locations offer an infrastructure which is physically well-developed (airports and roads), and organisationally well-developed (office buildings, business services and education facilities). Critical location factors for these firms are organised research and development establishments, proximity to universities and access to government research, especially government funded defence research. An area's amenity, its physical appearance and climate are also of increasing importance for attracting a skilled workforce. In contrast with old manufacturing, labour issues such as wages and the extent of workplace unionism, are less important. Some of these zones are relatively new, others are in established industrial zones with traditions of science-based industry. In both types of zone there has been a pronounced movement of firms to the urban periphery, a trend now evident in Melbourne and Sydney.⁹

b) Producer Services

3.18 Producer services include both high and low order services. High order services, such as banking and finance, tend to remain concentrated at the centre of the most highly developed metropolitan areas. Firms here tend to interact more with other

⁶ Peter Hall, "Cities in the Informational Economy", *Urban Futures*, Special Issue 5, February 1992, p 1.

⁷ Hall, p 2.

⁸ Hall, p 2-4.

⁹ In its submission to the Committee, the Melbourne City Council considered that this trend was disturbing for a number of reasons, not least of which was the concern for the direct impact on its rate base and the city's capacity to attract retailing and wholesaling business if general business continued to relocate to the outer suburbs.

international companies than with the host economy. Low order or routine services are more likely to be decentralised. These include the back-room functions of data processing, which (all over the world) are moving to lower cost centres in smaller towns or in the outer suburbs. In the insurance industry there is a world wide trend to decentralise operations in the outer suburbs. While the relocation of insurance offices has been made possible by the development of data processing and communications technology, Hall argues that the main reason is the search for lower rents and a supply of the right kind of non-union, docile, reasonably well-educated clerical labour.¹⁰ Mike Berry has outlined some of the spatial implications of the growth of producer services:

The 1980s witnessed the rapid growth of producer services - banking, accounting, property consultants, law firms, management consultants, etc. - in those locations aspiring to be 'world cities'. Unlike the earlier trend towards 'tertiarisation' of the labour force which was driven by locally oriented consumer services, producer services have developed on a global basis with a global reach in order to service the commercial and financial needs of transnational corporations in the manufacturing and natural resources sectors. This has meant that the pace and shape of CBD development in cities like Los Angeles, London, Frankfurt and, closer to home, Sydney has increasingly been determined by non-local factors. Developments in information technology, some 'wired into' modern commercial buildings, have been both a product and facilitator of the world city phenomenon. To an increasing extent world cities exist as semi-isolated cores of local metropolitan regions with limited intra-regional multiplier effects on output and employment and increasingly tight information and capital flows to each other. One consequence is the creation of new forms of social polarisation, a new, small skilled elite enjoying high material and status rewards, alongside a larger group of low-level white collar and blue collar workers servicing their corporate and personal needs - eg. wordprocessors and office cleaners, on the one hand, and child care workers, laundry workers and car washers, on the other. The latter jobs tend to be poorly unionised, with low job security and disproportionately peopled by women and those from ethnic minorities.

Another consequence, in the Australian context, is to intensify inter-state competition for precedence in the emerging hierarchy of world cities, reinforcing the speculative drive towards economically wasteful forms of urban development - eg. the construction of massive excess capacity in the central city office sector in most of our capital cities. Competition by each State government to attract the Asia-Pacific regional headquarters of global operators also undercuts the capacity of the Federal government to introduce a co-ordinated national urban and regional policy with an appropriate program of infrastructural development.¹¹

¹⁰ Hall, p 3.

¹¹ Mike Berry, Submission, p 6.

c) Consumer Services

3.19 Consumer services include activities which support other established industries or which constitute principal support services and industries in their own right. These include legal services, insurance, design and maintenance. These display differing location preferences, depending on whether they are in a principal or subsidiary role, and can be centrally placed in a more traditional urban hierarchy with the benefits of agglomeration. They can also be decentralised, as in some specialist towns in the United States of America which are based on the provision of education or health services and where these services operate as industries in their own right.

The Impact of Technology

3.20 The "technological cottage" offers the prospect of significant employment decentralisation, both within and beyond the metropolitan region, for information intensive industries like software production, certain consultant producer services and retail banking. The real potential for decentralisation of this kind, however, is the subject of continuing debate. Although extensive road and air transport networks coupled with communications technology makes employment location extremely mobile and is increasing the quasi urban population (mostly spread over the coastal landscape), more people are also likely to live in the major cities.

3.21 In Australia decentralised developments have so far been minimal, partly because of inadequate infrastructure and partly because, paradoxically, some information technology developments require a central city location. In the case of banking, different functions have different locational requirements: cheque clearing and related activities may either be concentrated centrally or decentralised to non-metropolitan locations, and customer banking may be decentralised to individual homes or workplaces through electronic funds transfer. International operations and strategic decision making, however, remain heavily concentrated in the Central Business District (CBD).¹² Central location is also necessary for executive or command functions which require face-to-face business and government contacts as well as accessibility to an international airport. It will also be important for international business, which manifestly prefers Sydney as its Australian base.

3.22 Sydney's development has also been favoured by shifts in the pattern of trade and investment. The growth of Australia's trade with Asia, particularly Japan, and the United States of America has moved the focus for economic relations to the north and east Pacific, thus placing Sydney in the ringside seat. Although much of Australia's trade with these regions is in pastoral, agricultural and mineral products, the increasing importance of the new information and services categories has further given Sydney an edge.

¹² The Central Business District is now also referred to by some as the CAD, that is, Central Activities District. This reflects both the greater range of diversity of higher order functions which take place in the city centre and the more visible segregation of those functions throughout the central city. Retailing, administration, banking, leisure, residential, cultural and entertainment activities are easily located together in all major capital cities.

3.23 Likewise with foreign investment. In the days when Australia was part of the Empire, British capital developed strong links with southern regions through investment in the pastoral industries, mining and public works. With the development of the post-war, and especially the information age economy, capital for new industries has flowed from the United States of America and, increasingly, Japan. This "new" capital has favoured Sydney, with the result that the regions favoured and developed by the "old" capital are increasingly left behind. The shift from sea to air travel in the 1960s also gave Sydney an advantage because its airport was the only one in Australia that could take jet aircraft until the mid 1970s. The changed composition of international trade has the potential to cause further change in the pattern of settlement. The growth areas of international trade are the elaborately transformed manufacturing (hi-tech) and services sectors. The implications of this change are made more complex and uncertain by the shift in the growth of trade to the Asian markets. In its submission to the inquiry, the Department of Industry, Technology and Commerce (DITAC) stated that economic growth arising from integration with Asia would require further rapid restructuring of Australian industry and the development of strategies to address infrastructure, economic, industrial and social issues.¹³

The Changing Structure of the Firm

3.24 The global restructuring of industry has caused changes in the organisation of corporations which have significant implications for Australian cities. Michael Taylor and Nigel Thrift argue that the growth of transnational corporations is one of the most important economic and social phenomena of the past decade and that it has had the following effects:

- an increase in the incidence of oligopoly;
- increased internationalisation of the operations of large corporations, with the consequence that control of their operations is frequently vested outside the host nation; and
- the forging of new relationships between the elements of large corporations which underpin the emergence of branch-plant economies, the setting up of regional offices and other units with an increasing differentiation of corporate functions. This trend includes the increasing incidence of sub-contracting specific tasks, supplier networks, specialised sub-branch offices and franchising rights.¹⁴

¹³ DITAC, Submission, p 1.

¹⁴ Michael Taylor and Nigel Thrift, "Introduction: New Theories of Multinational Corporations" in Michael Taylor and Nigel Thrift (eds), *Multinationals and the Restructuring of the World Economy: The Geography of Multinationals, Volume 2*, Groom Helm, London, 1986, p 1-5.

3.25 Increasingly, small firms are being locked into, or need to be locked into, relationships with large corporations through commercial licensing, subcontracting, franchising or agency agreements. These relationships provide opportunities, but they also limit the small firms' freedom of action. Michael Taylor and Nigel Thrift argue that social responsibility in corporations is now less likely than before; the divorce of investment decision-making from the site of production, for example, means that decision makers no longer have to live with the workers they retrench. It also means the development of separate core and peripheral markets, the latter subject to intensifying destabilisation. The sustainability of employment in particular regions and the capacity to co-locate employment in secondary settlement is increasingly more difficult across the board, and spatially more selective. These trends raise doubts as to whether many peripheral markets have any economic future. Michael Taylor and Nigel Thrift argue that these processes are creating more peripheral regions and promoting further under-development of regions that are already peripheral.

3.26 Siting factors influence industrial development policies because they can assist firms to reduce production and distribution costs, attract investment and facilitate exports. The productivity of Australian firms, and the efficiency of their distribution, may be improved by increased government investment in infrastructure and policies which help to make locations more attractive. As transport, communications, energy and labour market infrastructure improve, it is easier for the Government to attract industries to new locations.¹⁵

3.27 Investment choices are based on the availability of capital and appropriate labour. Governments have devised programs to improve both direct and indirect locational characteristics in order to increase the competitiveness of Australian industry. Tariff reduction should improve the availability and reduce the cost of direct inputs, while relaxing state and federal regulations should improve efficiency. DITAC responded to a question from the Committee about national factors in the following terms:

Locational factors play an important part in the "competitiveness" factors of industrial efficiency in three ways.

Industrial efficiency can be affected by the availability, cost and quality of industry's direct inputs including construction, energy supply, transport, materials, information technology equipment and services, environmental resources and support services. It can also be affected by indirect factors such as government regulatory requirements, or political, social and economic stability. Importantly, investment choices are based on the availability and cost of capital and appropriate labour, which can be affected by factors such as the language, culture and lifestyle offered in a particular location.

¹⁵ DITAC, Submission, p 1.

Government policies and programs are addressing both the direct and indirect locational factors in order to increase the competitiveness of Australian industries. For example, tariff reductions will help to improve the availability and cost of direct inputs to Australian industry; reducing some complexities and differences in government regulations, at the State and Federal level, will help to improve the business conditions; and the availability of capital is being addressed by mechanisms like the investment promotion program; while our labour skills are being enhanced by Government programs which, for example, improve education in foreign languages and culture and training in high technology fields.¹⁶

Implications of Economic Change - Increasing Regional Differences

3.28 There is justified concern that many people will be left behind as society adapts to these economic changes, that some will fail to learn new skills, that many will be unable to relocate and that many of the new jobs will offer poorly paid employment and thus create a new working poor. Recent research by Professor Bob Gregory of the Australian National University suggests that Australia now faces the same conditions that created the urban ghettos in the United States of America. Bob Gregory's research highlights the shrinking of the middle sector of the labour market, a situation caused by the loss of middle-income workers and middle-income occupation classifications. Many of the jobs being created in the new service industries are paid with salaries set at less than 80 per cent of average weekly earnings. Since 1975, the number of male middle income workers has fallen by 25 per cent relative to the size of the population, while the number of poorly paid workers has increased by 15 per cent. These observations are similar to trends in the United States of America and the United Kingdom, where the differentials between high and low paid jobs are also widening. These trends challenge the "trickle down" theory, which claims that wealth for all will automatically result from economic growth and job creation. Wealth creation and employment are separate things: even in countries like Australia, where there is a centralised wage fixing system which helps to promote adequate redistribution of wealth, there is a trend to wider disparities between high and low income earners.

3.29 If current economic and technological trends continue, a new pattern of intensified unevenness in Australian regional development is likely to emerge. It will be characterised by:

- The dominance of Sydney as the preferred headquarters of transnational corporations in commercial, mining, manufacturing and producer services industries and a magnet for international migrants. Melbourne will fall to middle-level status, partly held back by its existing concentration of traditional manufacturing industry.

¹⁶ DITAC, Submission, p 3.

- . Linear urban development along on a chain extending from south of Sydney to just north of Brisbane, and supporting small to medium-scale operations in manufacturing and services.
- . Isolated nodes of development with international rather than national linkages, notably Perth, Darwin and Cairns.
- . Complex new patterns of internal migration with important implications for small and medium urban development in coastal New South Wales. The age structure of capital city populations may narrow as impoverished older and unemployed young people are pushed out to non-metropolitan locations. Conversely, the age structure of rapidly growing coastal towns, like Ballina on the New South Wales north coast, will diversify.

3.30 To some extent this pattern has already emerged in other parts of the world. In Japan, for example, Tokyo grew at the expense of Nagoya and Osaka. The explosive development of the greater Tokyo region caused the migration of lower-paid and retired workers and the growth of smaller cities dominated by sub-contracting and re-export functions for the world market. If the trends evident in Australia continue, Mike Berry argues, "In this 'business as usual' outcome, Sydney may come to look more like Singapore, Taipei, Seoul and Bangkok, than Melbourne".¹⁷

3.31 Within the services section of the economy employment is expected to grow most rapidly in recreation and personal services, building and construction, wholesale and retail trade, community services and health, and public administration. As in the past, the States will not share equally in future employment growth; the location of most new jobs are expected to be in Queensland and Western Australia. During the 1980s New South Wales and Victoria experienced slower job growth than Western Australia and Queensland, trends that are expected to continue into the 21st Century. Western Australia and Queensland will increase their share of employment, while that of South Australia and Tasmania will decline. The long term future of the relative competitiveness of cities in attracting firms is not clear. Forces at work favour both centralisation and decentralisation. Certain locational factors are known, and these may be summarised as follows:

- . Semi-rural but not remote regions are attracting a higher proportion of the information-based industries.
- . There are very strong regional effects: in the United States of America growth has been fastest in the west and south, while in Australia it has been faster in the north.
- . The incidence of cities with more than one central business district is increasing.

¹⁷ Mike Berry, Submission, p 8.

The fringes of cities begin to sprawl and inner areas decline once the level of car ownership reaches 75 per cent. This rule is obvious in the United States of America and is now appearing in European and Australian cities.¹⁸

3.32 The wide dispersal of telecommunication and computing technology is reducing the significance of the geographical factors that have traditionally determined the location of facilities such as sea ports. Other siting factors, such as access to airports, communication hubs or high speed train stations, take their place. These facilities can be constructed wherever required. Some of these factors, such as high speed rail, may be less important in Australia, which relies on air and sea to send goods overseas. Urban image and quality have become more important considerations in the constant competition to attract replacements for declining activities. Central city councils are already expressing concern at the fading image of their CBDs. The CBD will always play an important role, but the employment which is attached to its key economic functions may be reduced as "back offices" are moved to cheaper locations. The loss of such employment in turn reduces investment in retailing and, to a lesser degree, wholesaling and secondary office activity in the CBD. Capital city councils affected by this trend are now seeking to replace office workers with residents as a means of maintaining purchasing power and thus improving the viability of their cities.

Managing the Regional Urban Impacts of Change

3.33 The Australian economy will be increasingly exposed to the international economy. The effects of this will be felt in the integration of Australian production with a world system, which will mean that firms in metropolitan areas with good international air and sea connections will probably be exposed to more change and competition, but also that they will be offered more opportunities. It is also likely that methods of production, both in manufacturing and services, will continue to favour groups of specialist sub-contractors which are tied together in project teams or which work as part of long term production networks.

3.34 In such an industrial and commercial future, the scope for face-to-face contact and the capacity to establish networks and linkages will be important influences on the capacity of each major city to play a role in the national economy. Scope and capacity will be influenced by the size and diversity of the metropolitan areas because these determine whether firms will be able to form internationally competitive groups in meeting market demand.

3.35 There is already evidence that organisations with operations in several centres will increasingly consider the characteristics of places when deciding where to locate production activities. There may be fewer places that are attractive to international producers in the medium to long term. This trend is confirmed by the selectivity displayed by United States of America multinational companies when seeking regional office locations in Europe. The local infrastructure and institutional arrangements which exist in Australia will thus be an important component of each city's potential.

¹⁸ Hall, p 6.

3.36 In a paper to a conference on "Planning for Sustainable Development - Solutions for the 90s" Lyndsay Neilson and Marcus Spiller noted evidence which suggests that international firms prefer to locate to cities offering a wide range of facilities. They suggested that, in terms of developing international competitiveness:

*...the role of planning and urban management, and by implication those of State and local government can be seen to be as vital in the processes of economic restructuring as macro-economic lever adjustments at the federal level, albeit that the influence is more incremental and long term in nature.*¹⁹

Facilitating Adjustment

3.37 If national efficiency is the primary objective of government, it may be necessary to devote more resources to the nationally co-ordinated provision of infrastructure, especially air transport and telecommunication systems. In order to make this possible, Australian policy makers may have to view cities more flexibly. They may need to place greater emphasis on finding alternative methods of providing social infrastructure in order to accommodate a more mobile economy. Solutions which are small, customised and less capital intensive may be more appropriate. The localisation of the impact of economic and technological change may necessitate a more national outlook, even where policies are administered at a local or regional level. As Australia moves further into the information age, policy makers need to facilitate patterns of development and change that will help us to be internationally competitive. To maintain and enhance our standard of living and generate resources which will pay for urban infrastructure, they need to be able to foster service and manufacturing activities that will be internationally competitive.

3.38 More productive cities are needed, but dealing with the social costs which result from this approach will be crucial to the successful execution of such policies. Australia developed a relatively egalitarian society, manifest in the equal cost structures across States, through the application of fiscal equalisation policies. The larger states (Victoria and New South Wales) have subsidised the provision of services in the smaller ones. This is evident in Dr Bob Birrell and Sue Tonkin's comparative study of Perth and Sydney.²⁰ They raise the issue of fiscal equalisation and question its application:

WA is also favourably treated in terms of Federal Financial Assistance Grants which are allocated on the basis of equalisation of tax revenue sources (the 'poorest' States receiving the most) and the costs of service provision. For 1991/92, the per capita allocation of WA is \$949 compared with \$611 for NSW. This, plus the rapidly increasing mineral royalties the

¹⁹ Lyndsay Neilson and Marcus Spiller, "Managing the Cities for National Economic Development: The Role of the Building Better Cities Program", Seminar Paper, Canberra, April 1992, p 11.

²⁰ Robert Birrell and Sue Tonkin, "Constraints and Opportunities for Urban Growth: Sydney and Perth Compared" in National Population Council, *Population Issues and Australia's Future: Environment, Economy and Society*, Consultants' Report, AGPS, Canberra, 1992, p 18.

State receives - \$374 million in 1990/91 compared with \$202 million in 1987/88 - has facilitated the financing of Perth's growth.

...It is not possible to adjudicate whether the penalties of WA's scale generate service costs which justify these allocations. The issue needs to be raised, however, in the context of the merits of locating large numbers of people in the West, particularly Perth, and whether the process should be subsidised by the Commonwealth.

3.39 The present system of fiscal equalisation is designed to allow each State and Territory government to provide the same level of public services. It was also considered appropriate to subsidise those smaller populated states whose economies were predominantly rural or resource based because the generally high level of tariff protection provided to manufacturing industry in the larger states reduced the operating efficiency of those rural and resourced based industries. The reduction in the level of tariff protection has brought the extent of the subsidy into question. The appropriateness or otherwise of this system, which the Premiers of New South Wales and Victoria have called into question, depends on how you define the fundamental objective of the process. As Dick Rye, Chairman of the Commonwealth Grants Commission, remarked recently:

...there is certainly a substantial implicit transfer from those two States [New South Wales and Victoria]... That transfer is of the order of \$2 billion. However, of course, if you were to remove equalisation, you would then have a massive transfer back from the smaller States to the two larger States. Now, whether that would be in the interests of national economic efficiency is a question that would need very serious consideration.²¹

3.40 It is difficult to say whether the current level of transfers among the States is appropriate. As Dick Rye remarks, "...I don't think anyone can say that at the moment until...we get an authoritative estimate of the costs of equalisation to national economic efficiency".²² What is clear from this data is that the Commonwealth, through fiscal equalisation, encourages redistribution of the population in an ad hoc and non-strategic manner. The benefits of this policy are assumed to outweigh the costs, but no one has measured these costs or benefits precisely.

3.41 The Committee is aware that Treasury officials are conducting an internal review of the application of the fiscal equalisation formulae, however, it is concerned that such a review may be too narrow in its focus to address the long term issues of increasing regional disparity. It may be that the Government needs to commission an all encompassing review of the best processes it could administer to deal with the impacts of changing trends and increasing regional disparity. This might include, but not be

²¹ Dick Rye, interviewed on "PM" Wednesday 10 June 1992.

²² Rye, 10 June 1992.

limited to, fiscal equalisation. A review of the national costs and benefits of fiscal equalisation that is acceptable to all levels of government is required. This review should analyse whether there is a need for equality in cost structures across Australia, and whether it is desirable. It should consider the environmental, equity and efficiency costs of both more and less regional diversity. The questions of greater regional diversity and the application of different charges in different centres have already arisen in the debate over enterprise bargaining; Michael Taylor and Steve Garlick argue that it is now opportune to re-examine these issues:

...there now exists considerable variation in the social and economic structure, performance, potential and needs of regions across Australia... There are also considerable differences in the nature and extent of the underlying forces contributing to these differences. A range of region-specific elements, such as corporate control, inter-regional trade links, types of sectoral activity, social and economic infrastructure, transport and communication links, physical characteristics, access to capital, labour market dynamics, entrepreneurship, social characteristics, and so on, has combined in various ways to produce distinctive regions capable of different levels of growth, different levels of resistance to recession and with different abilities to restructure in an international economic environment.²³

3.42 Making a complementary point, Benjamin Higgins points out that:

...regional policy response in Australia has not been well adapted to the actual regional structures and the actual regional disparities. Most interventions of the Federal Government fall under the heading of 'fiscal federalism', and have been concerned with standards of public services and redividing the revenue pie among the States. Most State government interventions in smaller regions within the States have been concerned with improving the quality of life in the capital cities, decentralisation to smaller centres (no matter where within the State) and with stealing industrial enterprises from other States.²⁴

3.43 Michael Taylor and Steve Garlick suggest that change should be made within a regional development framework, with government catalysing change, rather than directing or imposing it. Such a policy requires a degree of information exchange between governments and the community which does not currently exist and for careful monitoring to measure and anticipate local impacts. They note that:

the interplay of concern over States' rights and legitimate Commonwealth interests has accompanied the Commonwealth's periodic forays into the

²³ Taylor and Garlick, p 86.

²⁴ Benjamin Higgins, "Conclusions: implications for policy" in Benjamin Higgins and Krzysztof Zagorski (eds), *Australian Regional Developments: Readings in Regional Experiences, Policies and Prospects*, AGPS, Canberra, 1989, p 252.

*regional development area. These concerns have led to discontinuity in regional policy application since World War II, as political power has changed.*²⁵

3.44 The question of efficiency and equity in the delivery of services needs to be reconsidered in a national context. This requires a major review, by the Commonwealth Grants Commission, including each State and many local government authorities. The relevance of the formulae used by the Commonwealth Grants Commission in determining payments to the States should also be reviewed because there is evidence that they do not always accurately express the operations of cause and effect when assigning funds for the alleviation of social problems. It has been suggested that the alleged coming burden of the retired aged population appears a problem only in the context of the economic crisis and high level of unemployment.²⁶ The Commonwealth Grants Commission gives the States a subsidy based on the number of aged inhabitants, but it may be that the important factor in the cost calculations is not the aged but the number of unemployed. The latter may well become increasingly relevant as the unemployed move to cheaper locations where they will need catch-up service provision.

3.45 The Committee recommends that:

The Commonwealth Government, in consultation with other relevant authorities set new terms of reference for the Commonwealth Grants Commission to review the application of the principle of fiscal equalisation.

²⁵ Taylor and Garlick, p 80.

²⁶ House of Representatives Standing Committee for Long Term Strategies, *Expectations of Life: Increasing the Options for the 21st Century*, AGPS, Canberra, 1992, p 65-74, esp p 73.

CHAPTER 4

LAND AVAILABILITY AND ENVIRONMENTAL CONSTRAINTS

4.1 The unrestrained growth of cities described in Chapter 2 has been allowed to continue, partly because it seemed both desirable and unstoppable, and partly because of the popular misconception that there is unlimited land available for development. Such an unthinking view is now being challenged by questions arising from research into Australia's human carrying capacity and the impact of urbanisation on the environment.

Carrying Capacity

4.2 How much pressure can an environment sustain without being (substantially) degraded? Where the 12 million additional Australians we can expect by the middle of next century will live is a question which must be answered either by market forces or public policy or a mixture of both. Most of them will live in the already populated regions. There are obviously limits to the population that Australia can support, but they are difficult to define because we lack adequate knowledge of the environment. The human carrying capacity of a region has been defined as the maximum rates of resource consumption and waste discharge which can be sustained "indefinitely".¹ The maximum human population is therefore determined by dividing these rates by the mean per capita rates of resource consumption and waste production. In the long-run, maximum population carrying capacity can be raised only by reducing consumption and waste production per head or by importing resources from other areas. Because future technologies, resource management strategies and lifestyle choices may all help to reduce consumption and waste production, a region's natural resources do not set a strict upper limit on the standard of living or quality of life enjoyed by its inhabitants. Together with population, however, they do constrain lifestyle possibilities.

4.3 The population that any nation can support without exceeding environmental limits is determined by the interrelationship of several factors, of which population size is only one. Other factors are:

- . the level of affluence and related levels of consumption in the population;
- . the knowledge and information available to that society about the way its lifestyle choices affect the environment;
- . the technology used in production and consumption;
- . the geographic distribution of the population; and (perhaps)
- . changes in the definition of acceptable environmental impact.

¹ Doug Cocks, *Use with Care: Managing Australia's Natural Resources in the Twenty First Century*, New South Wales University Press, Sydney, 1992, p 213.

4.4 While the physical capacity of an environment is limited, carrying capacity, expressed in terms of population, will change as any of these variables changes. As the NPC points out, the Australian environment was subject to greater degradation at the hands of the smaller populations of earlier times which had less knowledge and concern about their impact.²

4.5 The complexity of these interrelationships, however, also makes it difficult to separately measure the impact of a given population on its environment. As the NPC states, giving empirical expression to the effects of a population on its environment is difficult because there are often no appropriate data or because the data are difficult to compile. It received few submissions which could provide any guidance on the relationship between population and environment or on the relative weight of the various contributing factors and their likely or possible future trends. Submissions received by the Committee were equally unhelpful in this area. This lack of information makes it impossible to present a considered response to the question of carrying capacity and makes debate on the question almost meaningless. Although there is little prospect of reliable answers, certain questions can be raised:

What, for example, is the long-term carrying capacity of this country, and of the world? And how efficiently are people using Nature's resources? A 1986 study of global human activities by Professor Paul Ehrlich and colleagues at Stanford University estimated that humans appropriate nearly 40% of the net primary production (NPP) of the Earth's land areas - that is, the total amount of energy fixed biologically, less the energy needed by the primary organisms (chiefly plants). The NPP is a measure of the planet's total food resource.

If the estimate is correct, the implications for biodiversity look rather stark. While one species is reserving 40% of the terrestrial food resource for its own purposes, the other millions of terrestrial species are being asked to survive on the remaining 60%. And if the human population continues to grow at current rates, we can reasonably expect our share of NPP to rise to 100% before the end of the 22nd century - an ecological impossibility...

*This suggests that the fate of the planet's biological diversity may depend at least as much on how efficiently we exploit the areas not protected in reserves as on what we protect in them.*³

4.6 The Committee's inquiry is into Australian settlement patterns, and is thus principally concerned with the relation of the distribution of domestic population to carrying capacity, but it notes the NPC's arguments about the reliance of the economy on the export of resources and the distortion that this places on the definition of an

² National Population Council, *Population Issues and Australia's Future: Environment, Economy and Society*, Discussion Paper, AGPS, Canberra, April 1991, p 47.

³ Brett Wright, "A Close Look at Biological Diversity", *Ecos* 71, Autumn 1992, p 31.

appropriate population ceiling. As a trading economy, Australia exports a large proportion of its production of food, fibres and minerals. Australia feeds a population of 50 to perhaps 100 million people at Australian standards, only 17 million of whom live here, and the same scale of production is evident in fibres and minerals. A strictly domestic focus on the carrying capacity of the environment is thus misleading.

4.7 The extent to which a population can deplete its resources, and the extent to which the stock of capital it builds up is adequate compensation for this process, is being reviewed by the current investigations into ecologically sustainable development. Opinion on these issues is often specific to an individual's values and prejudices, so that achieving a consensus will be a slow process - if, indeed, consensus can be achieved.

4.8 Economic development causes many environmental problems, which have been extensively documented elsewhere. They include loss of biodiversity and extensive soil degradation, the impact of which has been greatest in rural areas. There is, however, increasing concern about the quality of the urban environment and the impact of urban sprawl on adjacent non-urban areas. This is not so much a question of carrying capacity or overall population as of the location of settlement and the behaviour of residents. Concern is about the large number of people that live in the comparatively small area occupied by the cities, and the impact of those cities on their hinterland.

4.9 An article in *21C*, the magazine of the Australian Commission for the Future, suggests that it is "not the numbers that count...it's how they behave".⁴ The article quotes Phil Ruthven, Director of IBIS Research, who has suggested more intensive settlement of Australia's north: "150 million people doing the right thing by the environment will do less harm than 17 million doing the wrong thing".⁵

4.10 Given the lack of reliable data, the Committee cannot comment on the validity of Phil Ruthven's numbers, but it endorses the principle that what the population does is as important as its size and concludes that the concept of fixed carrying capacity provides only the broadest framework for the analysis of urban environmental issues. The impact of differing population levels are difficult to quantify, and it is more useful to concentrate on environmental management rather than simple numbers.

4.11 It is also difficult to define optimal city size or to define an upper size limit. There are various estimates of optimal size ranging from a population of 75 000 up to three million. What can be defined as an optimal size very much depends on a range of social, economic and environmental factors at work in the city in question. These factors will change over time to give a variety of optimal sizes.

A mathematical formulation of optimal city size was derived for various objectives and for given economies of scale of income and diseconomies of

⁴ This view is attributed to Lisa Evans, a former conservation officer with Community Aid Abroad, in Gib Wettenhall, "Sustaining the Madding Crowd", *21C*, Issue 5, Autumn 1992, p 29.

⁵ Wettenhall, p 29.

scale of costs of housing, transport and infrastructure. It shows that for current variations in these parameters with city size - including subsidies to public transport and to fringe development - optimal urban population for maximum net income per resident is now larger than the largest existing cities. For maximum national productivity, the optimal sized city for the channelling of further growth is now of the order of 3 million, e.g. Sydney and Melbourne.

However, it also shows that the region of the optimum is relatively flat and that the variation of net income per capita is not large over Australia's major cities...⁶

4.12 Benjamin Higgins argues that whether there is an optimal size for cities is a red herring. The real issue is to find the means of ensuring that capital and human resources are fully employed in cities of all sizes, that the economic activities of all cities are appropriate to the environmental and social characteristics of each centre, that such activities are efficient and highly productive and that quality of life is as high as possible in all centres. Policies to attain these objectives must be set co-operatively by all levels of government and should be founded on research and analysis of the region and community.⁷

Environmental Impacts of Urban Development

4.13 Most Australians live in urban areas, so it is in our cities that the direct stresses of population impact are most apparent. As the Department of the Arts, Sport, the Environment and Territories (DASET) highlighted in its submission:

Australian cities typically involve extensive decentralised development which requires extensive infrastructure per unit and is dependent on the motor car. Therefore, it is problems in the urban environment (eg waste or air, noise and water pollution, both fresh and marine) rather than problems in the rural and natural environment (such as biodiversity or land degradation) which directly affect the greatest number of Australians.⁸

4.14 The first impact of urbanisation is the loss of bush and prime agricultural land to urban development. The regions close to urban areas also suffer degradation through over-use for recreation and tourism. A prime example of this problem are the Blue Mountains, near Sydney.

⁶ John Brothie, "The Changing Structure of Cities", *Urban Futures*, Special Issue 5, February 1992, p 13.

⁷ Benjamin Higgins, "Conclusions: implications for policy" in Benjamin Higgins and Krzysztof Zagorski (eds), *Australian Regional Developments: Readings in Regional Experiences, Policies and Prospects*, AGPS, Canberra, 1989, p 258.

⁸ DASET, Submission, p 1.

4.15 The second impact is environmental degradation caused by the exploitation of resources and mismanagement of natural systems to provide for the necessities and luxuries of life in the cities. One example is the distance between the natural location of major rivers and the size and location of cities. Water must thus be collected, transported and disposed of over long distances, at considerable cost to both environment and society.

4.16 The past disregard for environmental factors permitted residential development in inappropriate locations, both on the fringe and in coastal zones. This has resulted in a significant loss of environmental quality, often at considerable cost to both householders (who pay high insurance premiums) and the public (which must pay for environmental reclamation). Examples of this may be seen in the development on the flood plains of western Sydney, and even more dramatically in the encroachments on dune systems along the south and east coasts of the continent.

4.17 There is also the impact of air, noise and water pollutants, the quantity of which eventually exceeds the absorption capacity of the natural environment, thus leading to further degradation. DASET is particularly concerned about the concentration of this mix of pollutants increasing with population growth:

Urban areas concentrate environmental problems to such an extent that they damage the natural ability of damaged eco-systems to regenerate themselves. As urban areas expand - whether outwards or upwards - this concentration will increase, as will the negative impacts of interactions between environmental problems.⁹

4.18 As DASET points out in its submission to the inquiry, examples of environmental loss are easily cited but difficult to measure. It is frequently the case that no-one has exclusive ownership of the causes of environmental problems and they are the outcome of the interaction of a number of elements which are difficult to identify.¹⁰

Noise - Noise is an easily perceived loss of amenity, but the disturbance caused by noise is difficult to measure because individual sensitivity to noise varies. Excessive noise is therefore difficult to define. Noise pollution is mostly associated with transport infrastructure, particularly roads, freeways and airports, which are now integral elements of major cities. Vibration from construction work, heavy vehicles and rail may also be a problem, though it affects relatively few people.

Water - Population expansion and industrial development in urban areas have had a significant impact on the quality of the rivers which flow through them and the marine waters along their coast. As towns cease to rely on rivers for drinking water, they become drains which carry an increasing volume and variety of effluent harmful to both water quality and wildlife. It is not clear, however, whether towns sought alternative water sources to allow discharge in to local

⁹ DASET, Submission, Appendix A, p 5.

¹⁰ DASET, Submission, Appendix C, p 1.

streams, or whether pollution made such a search imperative. One of the earliest reported instances of pollution in Australia involved the Tank Stream, the source of the first water supply for the settlement at Sydney Cove, the development of which soon made the stream unusable for drinking water.

Sewerage - The sewerage systems built in the late 19th Century have been required to carry both increased volumes of flow and different concentrations of substances, as populations increased and industry expanded and diversified. The long term capacity of this infrastructure to cope has not been considered but short term policies and temporary measures abound, particularly in relation to disposal sites and techniques. This neglect of long term problems has rendered systems even more costly to repair and, by causing the repeated postponement of increasingly urgent expenditure, has allowed the problem to build up to the point where it now seems insurmountable.

Run-off - Most of the rainfall which falls on urban areas is intercepted by the extensive impermeable surfaces. The water runs quickly off these surfaces and, during periods of deluge, can build up rapidly into large and fast-moving volumes. The high velocity of this flow increases the downstream flood risk and also means that the run-off picks up high concentrations of heavy metals, nitrates, organic pollutants and other materials from the land surfaces. All these pollutants are harmful to aquatic environments. The chemical and biological load of urban run-off is similar to that of sewerage, but is rarely treated before entering rivers, bays or oceans.

Soil Contamination - Indiscriminate dumping of toxic substances by industrial and domestic users is also a severe problem because the practice has caused serious long term soil contamination which severely restricts future use of these areas. While there is interest in reclamation of such land, the costs of rehabilitating these sites are so high as to limit the options for new use. This problem restricts the potential for replacing disused industrial sites with new housing and adds significantly, if not prohibitively, to the cost of such redevelopment.

Solid Wastes - Domestic waste is 40 per cent solid waste, most of which is disposed of in land-fills. A shortage of land-fill sites for the future needs and greater community awareness of environmental problem, however, is encouraging the adoption of more active recycling programs and better waste treatment methods.

Air Pollution - Air pollution is a complex problem both for cities and the Earth itself. Air pollution from several sources causes health and environmental problems for urban residents and is changing the composition of the planet's atmosphere. Some sources of air pollution contribute to "Greenhouse Effect" climate change, and to the depletion of the ozone layer. In Australia, where the pattern of transport use is associated with the structure of the cities, the high level of emissions from the widespread use of privately owned motor vehicles is a major source of urban air pollution.

Urban Environmental Priorities and Appropriate Strategies

4.19 DASET, in its submission to the Committee, argues that traditional approaches based on current institutional arrangements have conspicuously failed to address urban environmental issues.¹¹ DASET goes on to argue that an integrated approach is needed which will focus not only on the root cause of environmental issues, but on the capacity to initiate appropriate policy responses.

4.20 The Ecological Sustainable Development (ESD) process is one attempt to address environmental issues in an integrated manner. A central platform of that approach is the better integration of environmental costs into the pricing and charging systems levied on our natural and commercial resources. The environmental costs of our cities are however, difficult to measure.

4.21 The policy approach government needs to adopt is to ensure that future decisions about patterns of urban settlement and urban form do not exacerbate existing urban environmental problems or introduce new problems into urban and non-urban areas.

4.22 The environmental costs of our cities are difficult to estimate. Although accurate figures are thus not yet readily available, some progress is being made towards the formulation of costing for environmental externalities. Development of these will allow the impact of urban behaviour and development on the environment to be more easily taken into account by decision makers. The Economic Planning and Advisory Council (EPAC), in its report on urban and regional issues, has estimated total costs of pollution and congestion at around \$4 billion per year - or one per cent of Gross Domestic Product (GDP).¹²

4.23 The combined effect of the sources of pollution discussed above, if ignored or inadequately countered, will be that Australia should reach its environmental carrying capacity with only a comparatively small population. However, with better policies (those that take environmental costs into account) environmental damage may be greatly reduced. Government policy should focus, not on the negative constraints of carrying capacity, but on the removal of impediments to better environmental management. Not only will the environmental gain be significant, but there will also be economic benefits.

4.24 What is needed is a population policy that takes account of the environmental impact of the population, whatever its size, in the areas where most people live. Such a policy must therefore concentrate on the cities and on enhancing their capacity to accommodate more people. The adoption of more environmentally benign practices should occur across the whole spectrum of community life. Reform should begin with a metropolitan-wide settlement strategy which starts with the provision and development of land for future urban expansion and which also takes account of both the demand for new land and the impacts of expansion on the environmental issues discussed above.

¹¹ DASET, Submission, p 6-10.

¹² EPAC, *Urban and Regional Trends and Issues*, Council Paper No 46, January 1991, p 31.

Land Availability

4.25 The capacity of the land suitable for urban development around the major cities to meet future demands varies considerably. It depends on three key elements:

- . the area of land available for development;
- . the appropriateness of development on that land;
- . the impact of urban development on adjacent areas.

The Area of Land Available

4.26 Each State has prepared a forward strategy which identifies future land available for growth around the capital cities, at least in the short term. The Victorian Government, for instance, claims that there is an adequate supply of land for the next ten year phase in the development of Melbourne. The forward projections, however, assume certain levels of demand for land; if this picks up, the supply of land may be adequate for only six years.¹³

4.27 Data on land supply are sketchy. The only national compilation of data on land supply is that contained in three Residential Land Reports by the Indicative Planning Council for the Housing Industry (IPC), though the reports themselves highlight the paucity of information. Even at the State level, data on land supply, the rate of production and the net allotment supply from undeveloped land are meagre. Where data are available, the differences in the land systems between the States, as well as differences in the manner of collection and the accuracy of the information, are so great that meaningful national analysis of supply of and demand for residential land, or comparison among the States of potential land supply for residential development, is impossible.¹⁴

4.28 Despite these difficulties in obtaining data, the IPC has made general assessments of land availability in the capital cities on the basis of the information it could obtain. While the difficulty in forecasting allotment demand and assessing land supply and demand imbalances should be noted, the following account from the IPC's 1992 report gives some indication of the land/supply balance in each capital city:

Sydney - The outer metropolitan area (including the Central Coast) and Illawarra can be considered in aggregate as one market. In the medium term it is expected

¹³ Evidence, p 269.

¹⁴ Indicative Planning Council for the Housing Industry, *Residential Land Report 1992*, AGPS, Canberra, 1992, p 2. The IPC's latest report indicates that improvements have been made since the publication of the 1990 Residential Land Report, however, accurate and timely data is still difficult to obtain.

that demand can be met in release areas, notwithstanding the low stocks of completed allotments and allotments in the pipeline. Estimates of supply in the Illawarra indicate shortfalls due to servicing constraints. Stocks of broadhectare land are considered adequate to meet projected demand over the next five years.

Melbourne - Estimates of outer Melbourne show that land stocks are high with roughly three years supply. It is likely that production and consumption will be in balance over the next five years. Supplies of broadhectare land are more than adequate.

Brisbane - Land supply capacity from broadhectare to completed allotments is more than adequate to meet expected demand over the next five years. However, in the Gold Coast and Sunshine Coast areas there is likely to be a shortage of completed allotments unless production rates are substantially increased.

Perth - There is likely to be sufficient land to meet demand over the next five years. The stock of vacant completed residential allotments is expected to fluctuate in the short term as it is used as a buffer between demand and supply but it is unlikely that these deviations will cause excessive cost pressures on the price of land.

Adelaide - Completed allotment stocks have been declining. The central area of Adelaide will continue to experience shortages of vacant completed allotments and hence continued high prices because of broadhectare shortages. Demand should be satisfied in northern growth areas and shortages are considered to be likely in the southern growth area.

Hobart - The supply of completed allotments appears sufficient to satisfy demand in the short term, although there is likely to be a rundown in completed allotment stock. There could be a shortfall in the medium term, however, estimates of lots in the pipeline indicate that there is capacity to respond to any shortfall that could develop.

Darwin - A low level of dwelling construction activity has diverted priority from land development and allotment production. In 1991-92 a surge in dwelling construction resulted in a decline in allotment numbers and significant upward pressure on prices. In the medium term, production is expected to be able to cater for demand. There is sufficient broadhectare land for residential development.

Canberra (and surrounding environs) - The short to medium term supply of residential land is adequate to satisfy projected demand. Lower-priced land could suffer shortages without measures to increase its supply.¹⁵

¹⁵ Indicative Planning Council, 1992, AGPS, Canberra, 1991, p 7-8.

4.29 The lack of data on land supply has meant that the IPC has been forced to focus primarily on the land availability of capital cities. Some data have been presented for non-capital city areas but is severely limited. This is a significant deficiency as low land supplies in cities can effect that of nearby regional centres. The IPC advised in their 1991 report that the lack of resources and inadequate data collection procedures restrict any capacity to determine realistic land supply levels for areas of New South Wales outside the greater Sydney region and recommended that consideration should be given to implementing a data collection base for land availability for the whole of the State. Whilst the 1992 report acknowledges the establishment of a larger data base the IPC recommended further improvement in data collection.¹⁶

4.30 The scope for green fields development in some States is limited by physical and geographical factors, as well as by environmental factors like the requirement to retain open space. The amount of land available for development, however, has more often been constrained by institutional rather than environmental factors, particularly the amount of private land that is released onto the market.

The Selection of Land for Development

4.31 The environmental impact of developing individual parcels of land varies according to the characteristics of the land. This is best exemplified by the development proposals for Rouse Hill in New South Wales.¹⁷ In the debate the appropriateness of this development in the south west of Sydney, a major matter of concern, was not just about the adequacy of the development itself, but with its impact on the broader environs and especially the Hawkesbury-Nepean River System. Planning for the future urban development must take into account that the incidence of water and air pollution is a vital part of the potential "quality of life". As the Rouse Hill case in New South Wales shows, there should be continuous and high level appraisal of the development potential of an area before it is attached to the urban periphery.

4.32 The distribution of the population and its "lifestyle" effects are key elements of a population's impact on the environment. A settlement strategy should take account of population distribution and set the environmental standards for residential development in places where the population will be concentrated. Such a policy would limit the environmental impacts of the land development and servicing process but would have to be developed concurrently by the three levels of government. The first step in this process would be to agree on the identification of non-useable land.

¹⁶ Indicative Planning Council for the Housing Industry, *Residential Land Report 1991*, AGPS, Canberra, 1991, p 53.

¹⁷ A review of the debate about the Rouse Hill development is to be found in the report of the National Population Council, *Population Issues and Australia's Future: Environment, Economy and Society*.

4.33 Although the damage from a single development may sometimes be negligible, the cumulative damage from numerous similar or adjacent developments can often be great. Also, environmental impact of developments may not be confined to the local region but may affect adjoining regions. The planning process has been the mechanism for strategic land use planning in all States, but its capacity to shape settlement, except in the Australian Capital Territory, has been limited. Other economic factors have had a greater and more direct impact.

Planning

4.34 Many authorities including Professor John Minnery, Dr John Mant and Peter Self, have raised doubts as to whether the community derives good value from the existing planning process. They also conclude that planning is necessary and that if the process were reformed, it could deliver greater community benefit. In a paper for the NHS, John Minnery questions the effectiveness of government intervention in urban form by comparing the development of two cities, Melbourne and Brisbane. Melbourne has had strategic plans in place for over forty years, whereas Brisbane has never had an overall strategy at all, though there have been plans for parts of the metropolitan area. Despite the difference in public policy approach, John Minnery concludes that the outcome is a remarkably similar form of development in each case:

*both [cities] are seeing basically incremental growth along corridors focussing on major transport routes, with only partially successful district centres and congestion at the core.*¹⁸

The benefits of planning, he concludes, "...appear to include a more orderly expansion of the fringe, the ability to focus priorities more effectively and greater co-ordination of infrastructure provision".¹⁹

4.35 Peter Self also argues that planners have contributed to the stabilisation of urban systems but have often added to the inequalities of the market system.²⁰ Two examples are differing levels of provision of services to similar suburbs and the private appropriation of the rise in land values generated, not by improvement, but by the growth of population and emergence of land supply shortages.

4.36 John Minnery concludes that there are pressures on the public sector to reduce its financial role in urban development, but he insists that some form of public intervention, both to help achieve equity and environmental objectives, and also to facilitate economic change, is required.

¹⁸ John R Minnery, *Urban Form and Development Strategies: Equity, Environmental and Economic Implications*, The National Housing Strategy, Background Paper 7, AGPS, Canberra, 1992, p 110.

¹⁹ Minnery, p 110.

²⁰ Peter Self, *Metropolitan Planning: Economic Rationalism and Social Objectives*, Urban Research Program, Working Paper No 22, July 1990, p v.

4.37 The main problem with planning is that it is perceived as a separate social strategy, tacked on to rather than integrated with policies aimed at efficiency gains. As Professor Pat Troy argues, the tensions in the planning process occur because it grafts itself onto a system of private ownership and the development rights attached thereto.²¹ It is therefore necessary to incorporate goals and priorities in the decision making processes of agencies if they are to be successfully implemented.

4.38 John Mant, from the Australian Council of Social Service (ACOSS) Urban and Regional Development group, levelled this criticism at planners.

I have sometimes scathingly referred to the role of planning in State governments and local councils as colour consulting. Other forces - one-dimensional departments, taxation policies and so on - have made all the decisions and the planners tell you what colour it is going to be. That is really the role that they have been left with or have acquired unto themselves because the Housing Department or the Water Board is too powerful for them to really influence, or the pricing policies are too difficult to get your head around, and so you are facilitating sprawl and patting it into nice shapes but actually not influencing back down here where the real decisions are being made and the real forces are being generated. Very often, the planners tend to come in at the end of the process or, as I said, they facilitate it by publishing a plan saying that if it is going to happen it ought to happen here rather than there. But the question is why it is happening, and why it is happening in that way with that degree of under-investment, and so on.²²

4.39 The Committee's examination of the planning system leads it to conclude that there is no organisation taking a strong lead in the decision making process. The difficulty with the planning process is that it more often rubber stamps what is put forward than a force which directs development.

4.40 The market system of producing goods for sale at a profit and individual consumption is prone to short term perspectives. Planners, however, are concerned with community or collective goods and therefore need to put forward an explicit vision of what could be and how we might get there - that is, a strategy for realising goals and overcoming obstacles.

4.41 The current planning system, however, is neither adequate nor sufficient. To achieve its objectives, it must be both strengthened by reorientating its emphasis towards performance standards and be reinforced with general macro-economic and micro-economic policies implemented by all levels of government and which send right and consistent signals to the market.

²¹ Patrick N Troy, *Loves Labor Lost*, Seminar Paper, April 1992, p 17.

²² Evidence, p 109.

4.42 The emphasis in planning has always been on land supply because that is the area in which governments have had the most direct control. The emphasis should shift from simply servicing communities' demands for urban services to ensuring that the level of community demand for services is determined by awareness of the actual costs of provision.

Regional Growth and Planning

4.43 One advantage of large urban cities is their greater variety of employment opportunities (particularly higher income employment), but there comes a point where this is offset by diseconomies of scale: rising costs, environmental problems, social deprivation, traffic congestion and problems of access. The opportunities for redirecting urban growth to regional centres and the consequences of so doing can be considered as an alternative to continued urban sprawl. As Peter Self observes, the direction of urban development and the alternative of regional development need to be reconsidered:

It can be argued that the Whitlam new city initiatives came in some respects rather too soon, and that the time is now ripe for State development policies (supported by the Federal Government) which can gradually siphon off some of the continuing pressures of metropolitan growth to other areas.²³

4.44 The advance of telecommunications services and the application of knowledge, rather than materials, to the production process are now expanding the siting options open to both firms and employees. The locational advantage of areas which can offer lifestyle benefits is increasing.

4.45 The States believe that the scope to capture "footloose" industries and place them in country centres has improved and should be encouraged, without resort to subsidies. Both New South Wales and Victoria are fostering the growth of country centres. Rob Carter, the Director General of the Victorian Department of Planning and Housing, explains:

There is a consciousness of building on the competitive strengths of those centres, but in a way that acknowledges the importance of the international links as well. The prosperity of Bendigo and Ballarat and Geelong and places like that is inextricably linked to them being able to access a major market like Melbourne and its international contacts...I think that there has been extensive analysis of the decentralisation policies of the 1960s and 1970s. The conclusion of that is that subsidised decentralisation is not the way to go in terms of industry subsidies. Rather, the emphasis is now on the identification of competitive strengths and providing assistance to local communities in a bootstrap sense to help them build and develop those competitive strengths. That can include seeding grants, in terms of the

²³ Self, p 16.

*community helping to get its own act together; dealing with any problems that are caused by Commonwealth or State policies that might be holding them back; ensuring that infrastructure to those centres is targeted; and assisting them to develop their competitive strengths. But the old days of providing payroll tax rebates, cheap land, assistance with moving costs and so on, is gone.*²⁴

4.46 Lyndsay Neilson and Marcus Spiller sound a more cautious note and warn that:

*...it is imprudent to draw the conclusion that national resource savings could be made by channelling urban growth to country towns and other decentralised locations where "spare infrastructure capacity" exists or where infrastructure can be provided more cheaply. Firstly, there is little hard evidence to support the assertion that genuine infrastructure savings can be realised. Secondly, there is little point in diverting economic activity to decentralised locations (probably at considerable public expense) if the competitiveness of firms will be weakened in the process.*²⁵

4.47 As Martin Bell notes, in the trend to "counter-urbanisation", non-metropolitan increase has been spatially very concentrated, but not in the inland cities which the States are anxious to develop, but along the already pressured coasts.²⁶ The higher level of population growth expected along the coast and in selective semi-rural towns is highlighted in Figure 4.1. This map shows the expected rate of population growth (based on current trends) for Australia's largest 40 cities and towns over the next thirty years. Some centres such as Forster, Ballina, Maroochydore and Noosa are expected to treble their population in that period.

4.48 This relocation does have benefits for the community, particularly in reducing pressure on the capital cities and boosting the economies of other regions, but there are also associated costs. Although these have not been precisely measured, they have been identified in the NPC report:

- . the extent to which fringe communities commute and thus increase fossil fuel consumption;
- . the consumption of prime useable land;
- . disturbance of coastal zone ecosystems; and
- . greater costs arising from dispersed infrastructure and services.²⁷

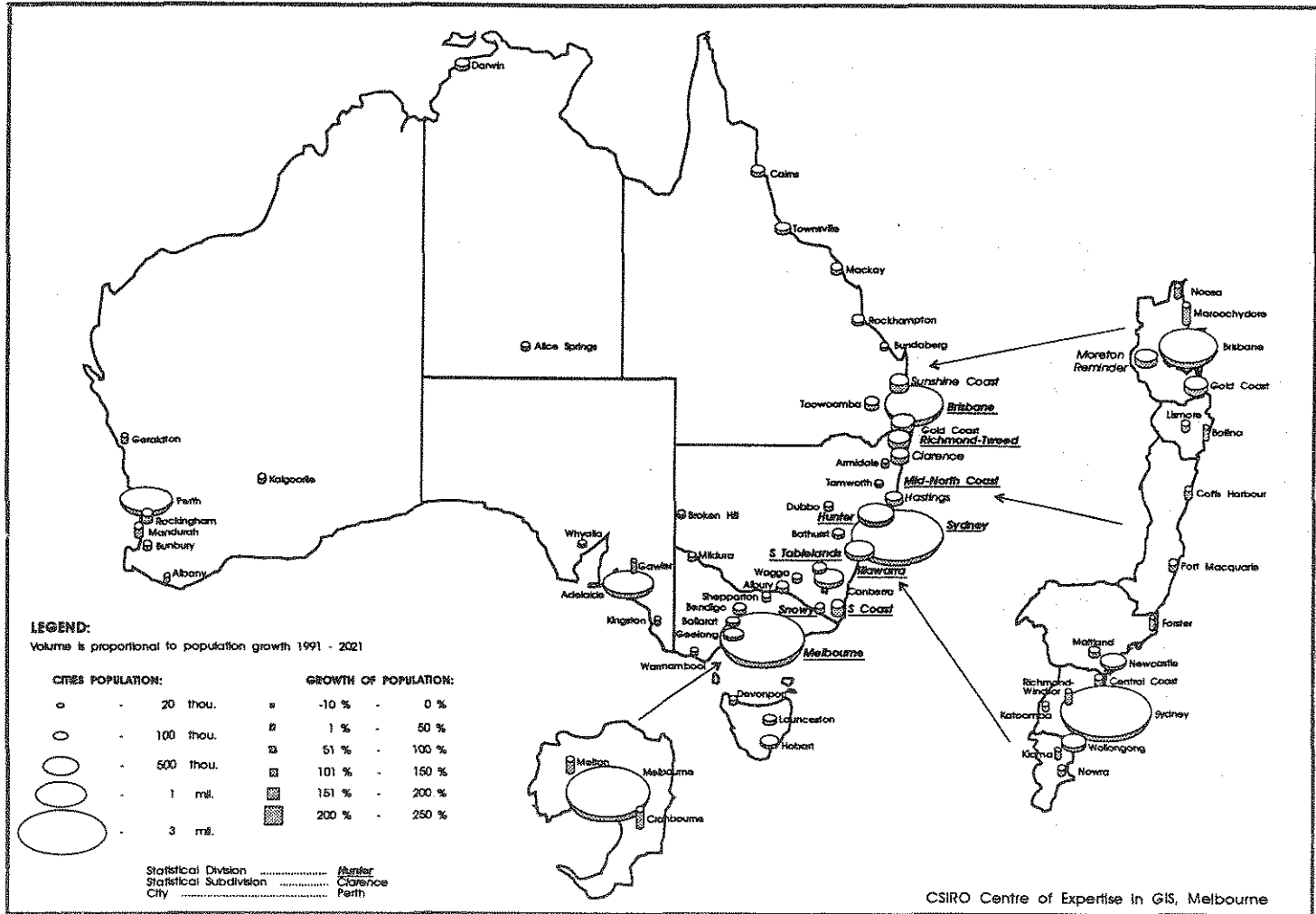
²⁴ Evidence, p 255, 259.

²⁵ Lyndsay Neilson and Marcus Spiller, "Managing the Cities for National Economic Development: The Role of the Building Better Cities Program", Seminar Paper, Canberra, April 1992, p 3.

²⁶ Martin Bell, *Internal Migration in Australia 1981-1986*, AGPS, Canberra, 1992, p 297.

²⁷ National Population Council, Final Report, p 62.

Figure 4.1: Projected Population Growth in Australia's Largest Cities



4.49 Greater knowledge of the environmental costs and benefits of planned land zoning sites is needed, and more account must be taken of regional perspectives. Should Sydney extend ever-further to the west, or would it be better if population were directed to established centres such as Newcastle and Wollongong?

4.50 The need for a broader perspective on regional and urban planning is exemplified in a recent article in the Independent by Henry Reynolds, Associate Professor of History and Politics at James Cook University, entitled "Sayonara Blue Singlet".²⁸ This article chronicles the changing face of Cairns:

In the past few years North Queensland has been thrown open to the world. Proximity to Asia is once again considered an asset. Gladstone, Townsville and Cairns seem destined to grow into major cities in the new century, given the ease of access to overseas markets and for international holiday-makers.

4.51 Cairns has experienced rapid growth and change as the number of incoming international flights has increased. According to Henry Reynolds the impacts of this growth include a further rise in the crime rate; unemployment with job growth only just keeping pace with the influx of job-seekers; and homelessness and poverty with high house prices and rents. He concludes that tourism will produce great strains and that people will increasingly feel that they have no control over the future, that their town no longer belongs to them, and that:

Pressure on the environment - on the Barrier Reef and rainforest in particular - will also be immense if numbers increase in the way expected, making enormous demands on the resources and imagination of the Great Barrier Reef Marine Park Authority and the Wet Tropics Management Committee. Even so, they may be better placed to cope than the three local authorities - the Cairns City Council and the Mulgrave and Douglas Shires - which are in danger of being overrun by the developmental juggernaut.²⁹

4.52 More national and state resources need to be committed to regional planning to ensure that both the local and the national community reap the maximum benefit at minimum cost to the environment and society.

4.53 Some of the fastest growing areas in Australia extend beyond state and local government boundaries, with the result that problems caused by the pressures of rapid growth are compounded by dislocated planning. Because there is little co-ordination and co-operation among the state planning authorities, especially in relation to trans-border regions, local councils have often been left to struggle with the increasing demands for infrastructure and service provision, without any hope of adequately meeting the needs of burgeoning population levels and the urgent requirements for economic growth.

²⁸ Henry Reynolds, "Sayonara Blue Singlet", *The Independent Monthly*, June 1992, p 12.

²⁹ Reynolds, p 14.

4.54 Many growth centres also cut across local government boundaries. In these circumstances, planning strategies based within local government areas cannot effectively meet the challenges of rapid and sustained population growth. Planning must occur on a broader scale, so that needs and future development can be assessed and provided for at a regional level. States have begun to incorporate this broader perspective into their planning initiatives, but these plans do not always give sufficient recognition to the strong links between some non-metropolitan centres and the capital city of a neighbouring State (eg. Canberra and Queanbeyan; Brisbane-Gold Coast and Tweed Heads). Furthermore, since regional plans are rarely specific about where to site significant infrastructure projects, local governments continue to compete for facilities, instead of co-operating to allow the best location for regional facilities to be assessed.

4.55 The limitations of local governments as providers of strategic and non-duplicated growth are often noted, but the lack of co-ordination among the three levels of government in planning issues cannot improve the matter. The adoption of a regional approach to planning for areas in which urban growth has made traditional administrative borders meaningless is now essential and urgent. Better integration of federal, state and local government or constitutional reforms would address the issues which will arise from future growth.

4.56 As Table 4.1 shows, in 1990-91 the Brisbane-Gold Coast and the Brisbane-Sunshine Coast corridors were the fastest growing regions in Australia. The effect of this growth on the provision of services and infrastructure has been a pressing issue for local governments, which have been forced to cope with only limited resources. The Queensland Government's attempts to deal with the enormous population growth rates of the Brisbane and Tweed-Richmond areas were, by its own admission, inadequate.³⁰ While attempts are now being made to address the problems of growth and to plan for better future development in this region, there are no plans for comprehensive discussion between Queensland and New South Wales to ensure the integration of planning and co-operation in the provision of services.

4.57 The area between Brisbane and the mid-north coast region of New South Wales is particularly affected by rapid growth rates. Because development there transcends administrative boundaries, co-operative action between governments is required. Development along the Gold Coast has fostered such integrated growth that the extent of urbanisation on both sides of the Queensland-New South Wales border makes it impossible to separate the two urban centres. The needs of the area should obviously be assessed as a region rather than according to state boundaries, but the autonomy and jealousies of the States and local governments have minimised co-operation in the development of planning strategies. Recently the Queensland Government added a planning unit to its administration and is finally recognising the strong links between the Brisbane and the Tweed-Richmond areas. This recognition has extended to involving relevant local councils in planning discussions, but it does not yet appear to have involved New South Wales planning authorities.

³⁰ Queensland Department of Housing and Local Government, Submission, p 5.

Table 4.1: Australia's Leading Growth Areas, 1991

Region	Municipalities Comprising Region	Net Growth (No)	Change 1990/91 (%)	Population 1991
Brisbane-Gold Coast	Logan, Albert, Gold Coast, Tweed	16 956	3.5	497 188
Brisbane-Sunshine Coast	Pine Rivers, Caboolture, Caloundra, Maroochy	16 213	5.8	294 332
Sydney's West	Blacktown, Penrith, Blue Mountains	10 600	2.4	454 300
South-eastern Melbourne	Dandenong, Berwick, Pakenham, Cranbourne	9 800	4.3	235 600
Southern Sydney	Fairfield, Liverpool, Campbelltown, Camden	9 800	2.2	455 800
Northern Perth	Stirling, Wanneroo	8 771	2.5	361 458
Southern Canberra	Woden Valley, Tuggeranong	7 418	7.3	109 131
Southern Perth	Melville, Cockburn, Kwinana, Rockingham, Mandurah	7 090	3.2	229 992
Southern Adelaide	Marion, Noarlunga, Happy Valley, Willunga	7 047	3.5	209 674
Central Coast NSW	Gosford, Wyong	6 450	2.8	239 850
Total Top Ten		100 145	3.4	3 087 325

Source: *Coopers & Lybrand Consultants, 1992, p 22.*

4.58 The substantial growth of the Brisbane and Tweed-Richmond areas is also expressed in a number of coastal towns situated south of the Queensland border. As the ranking of the 40 largest Australian cities in Table 4.2 shows, coastal cities in Queensland and on the north and central coasts of New South Wales have grown comparatively faster than other cities and moved up the rank order over the past few years. Most of these coastal centres are growing for the same reasons: retirement migration and the movement of people seeking rural lifestyles. Given the proximity of these centres, their demographic homogeneity and similar growth rates, a regional perspective on planning and provision of infrastructure is a logical response to their current and projected rates of growth. The New South Wales Department of Planning has devised a regional strategy for growth in this area, but it does not take account of the strong links between the region and both Sydney and Brisbane. Many non-metropolitan centres between Grafton and the Queensland-New South Wales border are administered from Sydney, yet economically tied to Brisbane.³¹ In the case of coastal towns situated very close to the border, such as Byron Bay, it can be argued that the historic administrative links with Sydney are becoming increasingly at odds with present-day economic and social realities.³²

³¹ Evidence, p 473.

³² D C Davis, B Stubbs and S Knox, *Regional Economic Development Strategy Plan for the Northern Rivers Region*, University of New England, Northern Rivers, 1991, p 14.

Table 4.2: Australia's Top Forty Cities, 1991

Largest 40 Cities/Urban Centres in 1991			
Rank 1991	Rank 1976	City	1991 Population
1	1	Sydney	3 698 450
2	2	Melbourne	3 153 500
3	3	Brisbane	1 327 006
4	5	Perth	1 197 295
5	4	Adelaide	1 062 874
6	6	Newcastle	432 640
7	7	Canberra-Queanbeyan	315 420
8	11	Gold Coast-Tweed	274 210
9	8	Wollongong	239 940
10	9	Hobart	185 040
11	10	Geelong	152 780
12	12	Townsville	115 561
13	25	Sunshine Coast	115 325
14	13	Launceston	94 870
15	17	Albury-Wodonga	90 850
16	22	Cairns	84 772
17	15	Toowoomba	83 776
18	14	Ballarat	82 330
19	16	Burnie-Devonport	77 970
20	23	Darwin	77 260
21	19	Bendigo	70 360
22	18	Bathurst-Orange	68 860
23	27	Shoalhaven (Nowra, Ulladulla)	68 670
24	20	Latrobe Valley	67 840
25	21	Rockhampton	63 453
26	24	Wagga Wagga	53 630
27	26	Mackay	52 234
28	38	Coffs Harbour	51 740
29	37	Hastings (Port Macquarie)	48 920
30	28	Bundaberg	47 214
31	32	Lismore	41 850
32	30	Shepparton-Mooroopna	41 450
33	36	Taree	40 810
34	31	Mildura	39 670
35	33	Tamworth	35 480
36	42	Wingecarribee (Bowral, Moss Vale)	34 120
37	39	Dubbo	33 750
38	48	Gladstone	31 844
39	56	Ballina	30 390
40	62	Hervey Bay	27 128

Source: Coopers & Lybrand Consultants, 1992, p 34.

4.59 Increasing recognition of the links between northern New South Wales towns and Queensland has lead local councils to form the Northern Rivers Regional Organisation of Councils (NRROC). This group has defined their region on the basis of physical geography and economic relations. The region extends south from Tweed Shire to

Grafton, the point where commercial links with the south are considered to predominate over those with Queensland.³³ NRROC has undertaken a number of planning projects and studies with a regional focus. It is also strongly keen to raise State government recognition of the Northern Rivers region, as they have defined it, as an economic planning unit.

4.60 The emergence of other organisations of councils like that of the Northern Rivers region both indicates the links among the local urban centres, as well as between the region and its capital cities, and demonstrates that local government is making efforts to plan strategically for growth, but is receiving adequate assistance from neither State Government nor the Commonwealth.

4.61 The expansion of the "dormitory zone" in parts of New South Wales adjacent to Canberra also highlights the need for the integration of Australian Capital Territory planning with that of New South Wales. The Australian Capital Territory is currently experiencing a rapid rate of population growth and significant overspill of population into New South Wales. The affected areas have been named Canberra's "dormitory zone" by Professor Terry Birtles who defines them as follows:

*"...the cities of Queanbeyan and Goulburn, and the shires of Yass, Gunning, Yarrowlunla, Mulwaree and Tallaganda. The NSW portion of Canberra's dormitory zone is now more than twice the area of the ACT and is steadily expanding into the surrounding zone of pastoralism and weekend hobby farming. Collector and Michelago have only recently been added as a result of bypass improvements and highway upgrading, but real estate sales to Canberra purchasers reveal rapid appreciation of localities now within daily commuting distance..."*³⁴

4.62 Terry Birtles considers that the expansion of the "dormitory zone" arises mainly from the movement of Canberra residents to nearby rural areas in search of a rural lifestyle or to take advantage of cheap land prices. The relocation is classified in two groups: hobby farmers who maintain urban employment or superannuation as their main source of income; and commuting city workers who have shifted to Queanbeyan, Yass, Murrumbateman, Sutton and other locations where land prices have been as much as 60 per cent lower than in Canberra.³⁵

4.63 It is clear that any functional definition of Canberra's boundaries must include the "dormitory zone" which houses many people who work there. In their use of Canberra's retail, educational, health and welfare services, it is evident that they are functionally residents of Canberra. These settlers are beginning to have an impact on the shire

³³ Davis et al, p 14-16.

³⁴ Terry G Birtles, "Canberra's Overspill into New South Wales", *Australian Geographer*, Vol 21, No 1, May 1990, p 69.

³⁵ Birtles, p 68.

councils within the Canberra sub-region which have experienced an escalation of urban responsibilities and, in some cases, resent the lack of Commonwealth grants to maintain local roads.³⁶ Terry Birtles predicts that differential rating to meet the costs of additional infrastructure appears likely if the dormitory population continues to increase.³⁷

4.64 Despite recognition of the need for and some action towards closer sub-regional co-ordination, there are several questions which require decisions outside the operational ambit of both the Australian Capital Territory and local government. Better consideration needs to be given to possible solutions to the problems caused by Canberra overspill. In addition, the economic, environmental and social impacts of highway upgrading or a tollway to the coast require sub-regional assessment and possibly legislation to resolve competing local interests.³⁸

4.65 Policies aimed at fostering regional devolution, however, should rely neither on the general decentralisation policies once in vogue, nor upon single new town ventures such as the ill-fated Bathurst-Orange. Instead, state policies should aim at the gradual but accelerating development of selected country and coastal towns which could benefit from some migration of people and jobs from the big cities. Dr Doug Cocks draws on work which established that there are a number of sites with sufficient potential to accommodate such a policy.³⁹

4.66 Such policies require metropolitan-wide strategies; they will not be implemented if responsibility is left to local authorities with only local priorities. Metropolitan wide strategies can be implemented only if there is co-operation among and support from local authorities with sound local knowledge. As John Minnery suggests, the Commonwealth has a role in supporting co-ordinated policies and providing guidance - acting as a facilitator to both state and local government as well as the private sector.⁴⁰

4.67 This is recognised by the State governments, which now admit a role for the Commonwealth; as the New South Wales Government recently told the Industry Commission:

It is also clear that whilst there may be divergencies between both policies and practices at the Federal and State levels, there will be some issues that should be assessed at the national level. It seems that there is a role for the Commonwealth Government in this area, where the impacts of policy decisions are ultimately felt across the States, rather than within the boundaries of individual cities.

³⁶ Birtles, p 73.

³⁷ Birtles, p 73.

³⁸ Birtles, p 76.

³⁹ Cocks, p 215-216.

⁴⁰ Minnery, p 110.

*States must also ensure that the focus of urban reform is not directed solely to the major metropolitan areas... Similarly, the benefits economic efficiency and environmental protection which may be brought about by pricing reform in the city may be undone if development is transferred to an alternative location about which there has been little economic and environmental assessment.*⁴¹

4.68 The application of such strategies, however, requires long term visions which in turn need bipartisan support from all levels of government in order that new directions may be set. Strategies for achieving a certain outcome across metropolitan areas will also depend on an agreed vision at the regional level. Some form of regional or State administration of the region is therefore essential. As John Minnery argues:

Application of the [urban] strategies almost invariably requires clear direction and agreement from all three levels of government.

*Given that the strategies are for achieving a physical shape for the whole metropolitan area they need an agreed vision at the regional level and the legislative authority to offer 'carrots and sticks' to local government. Thus some form of regional administration, or state administration applied to the region, is necessary.*⁴²

4.69 This proposition is supported by the evidence given to the Committee by the Department of Immigration, Local Government and Ethnic Affairs (DILGEA) and local councils in Newcastle and Coffs Harbour. Christopher Clare, the Secretary of NROCC put it to the Committee that:

*As regards the problem with the Queensland border, the developments there are very positive at this stage. They are only exploratory. We would recommend that the Commonwealth Government enhance those developments wherever possible. In whatever way it can, it encourages the New South Wales and Queensland governments to continue down this track of recognising that a border through a major conurbation is an unnatural barrier to proper development and that it encourages duplication of effort, duplication of services, and so forth, and that co-operation can overcome those problems.*⁴³

⁴¹ NSW Government, Submission to the Industry Commission, Inquiry into Taxation and Financial Policy Impacts on Urban Settlement, 1992, p 1.

⁴² Minnery, p 113.

⁴³ Evidence, p 561-562.

4.70 Paul Sefky, NROCC's research officer advised the Committee that the community is:

...looking to develop and facilitate situations where the three levels of government, local, Federal and State - and not just those direct government agencies but the government business enterprises associated with those levels of government - can come together to do that visionary planning and work that is necessary to identify the role of the region and hence maximise the regional competitive advantage.⁴⁴

4.71 National land use planning would vastly assist regional co-ordination, but it cannot be unilaterally pursued by the Commonwealth because the Constitution does not allow for it. There are costs, however, in not taking a national perspective, notably duplication of service and inefficiencies in managing cross-border problems. These problems are likely to be worst in regions where population growth and economic links cross state boundaries. There are, however, benefits arising from adopting diverse approaches to problems and localised decision making. The impact of population on Australia's natural resources and the growing concern that this arouses means that priority land uses should be identified for all regions. The emphasis needs to be on facilitating regions to focus on their comparative strengths in a more efficient and effective manner which takes account of the characteristics of each region, other regional activities and the national interest. In 1986 the Commonwealth initiated a Country Centres Project which ran to 1988. The Project entailed regional analyses involving considerable community consultation and avoided externally imposed solutions.⁴⁵ An evaluation of the program found:

A total of some \$680,000 was invested by the Commonwealth in reviewed centres over the two year life of the program. It is estimated that as a result of the opportunities identified in the reviewed centres during the CCP, or facilitated by the "derivative organisations" which resulted from it, some \$11 million in private sector investment has been undertaken, generating an annual turnover of \$27 million and creating an estimated 277 full-time equivalent jobs.⁴⁶

4.72 Whilst the Office of Local Government within DILGEA continues to analyse regional developments and produce reports on regional economic strength, resilience and vulnerability, there is little financial commitment by the Commonwealth (on a continual basis) to address the issues of economic and social development in regional economies.

⁴⁴ Evidence, p 564-565.

⁴⁵ Universal Pacific Business Services, *Review and Evaluation of the Country Centres Project*, Office of Local Government, January 1991, p 59.

⁴⁶ Universal Pacific Bureau Services, p 1.

4.73 The development of a national settlement strategy, developed in consultation with the States and linked to state planning processes which also reflect national economic, social and environmental interests has appeal. However, the Committee considered that such a program could become associated with a heavily interventionist approach whereby the Commonwealth directs settlement into new cities. Whilst the Committee believes that more strategic decisions should be made about settlement and associated infrastructure, it does not consider it appropriate that the Commonwealth direct settlement into particular areas. The Committee is more concerned with ensuring that settlements are achieving their optimal quality of life and therefore recommends that:

Where there is an opportunity to remove duplication or to improve efficiency of Commonwealth service delivery the Commonwealth, in conjunction with the States and local government, establish a jointly funded program (along the lines of the Country Centres Program) to facilitate better regional development and co-ordination.

The Development of a Long Term Strategic Plan

4.74 None of the State governments have seriously considered a settlement strategy that entails planning the distribution of population into settlements within or across states. With the exception of the Australian Capital Territory, which administers a more carefully planned city, the State and Territory governments are elected to facilitate, rather than limit, the growth of the capitals. As was noted in the *EPAC Background Papers on Urban and Regional Issues*, cities are a combination of mostly private choice and ad hoc public planning.⁴⁷ The Australian Capital Territory is the only government which has established satellite town centres linked to one another (and the original town centre) by major road networks. All of the other States have achieved urban growth by expansion of the fringe at the initiatives of private developers. This has occurred either outwards, through ever-expanding concentric zones around the city, or along growth corridors, usually following the highways which lead to the CBD.

4.75 In the absence of broad settlement strategies each of the States aim to formulate strategic plans for their capital and country regions which are intended to accommodate the expected increase in population and to facilitate economic and social development through the provision of adequate land. There will always be some land which should be reserved from development because of its environmental sensitivity. The identification of such areas could be facilitated by a national settlement policy and must be done co-operatively by the three levels of government. The protection of environmentally sensitive areas from urban or economic activities (usually extractive) is naturally a controversial step which causes community conflict, the cost of whose resolution (in direct government outlays and lost production) has often been considerable. A joint approach would identify areas of potential conflict in advance of development and seek to resolve,

⁴⁷ Ross Clare, "A Short History of Regional and Urban Policy" in EPAC, *Background Papers on Urban and Regional Issues*, Background Paper No 10, February 1991, p 3.

or establish resolution processes for, disputes before development proposals are put forward. Tripartite agreement on the areas to be reserved would also reduce the incidence of costly appeals through the hierarchy of local, state and federal processes. Joint assessment would also identify the different local, state and national interests involved in preserving key areas and resolve the inconsistencies between them.

4.76 It is in the national and, indeed, global interest to preserve forest and coastal scrubland, for example, but the costs of locking up potential economic resources in this way falls disproportionately on regions with areas of high environmental value. It is therefore necessary to develop compensation processes so that the twin goals of conservation and local development can be reconciled.

National Settlement Strategy

4.77 Dr Doug Cocks is a strong advocate of a national settlement strategy. He argues that:

*The challenge for natural resource management in Australia is to develop a co-ordinated set of programs around a range of key policy instruments, key land-use sectors and key regions, to actively experiment with these and to monitor the results against explicit, comprehensive goals and policies.*⁴⁸

4.78 Doug Cocks has also attempted to identify areas which could be the foci for a future growth-centre strategy. He identifies the promising areas as Mackay, Geraldton and some inland regions such as New England and southern Monaro. He suggests that a national settlement strategy could either follow trends or take an innovative "frontier" approach. If the strategy followed trends it would facilitate population growth in coastal Queensland, and concentrate population in other high-growth areas, such as Perth, western Victoria, Gippsland and the north coast - New England and south coast-Monaro regions of New South Wales. He has produced a map (Figure 4.2) which identifies both the most promising and least preferred areas for future settlement not including areas of natural hazard, high existing population density, high infrastructure costs and environmentally sensitive areas.⁴⁹

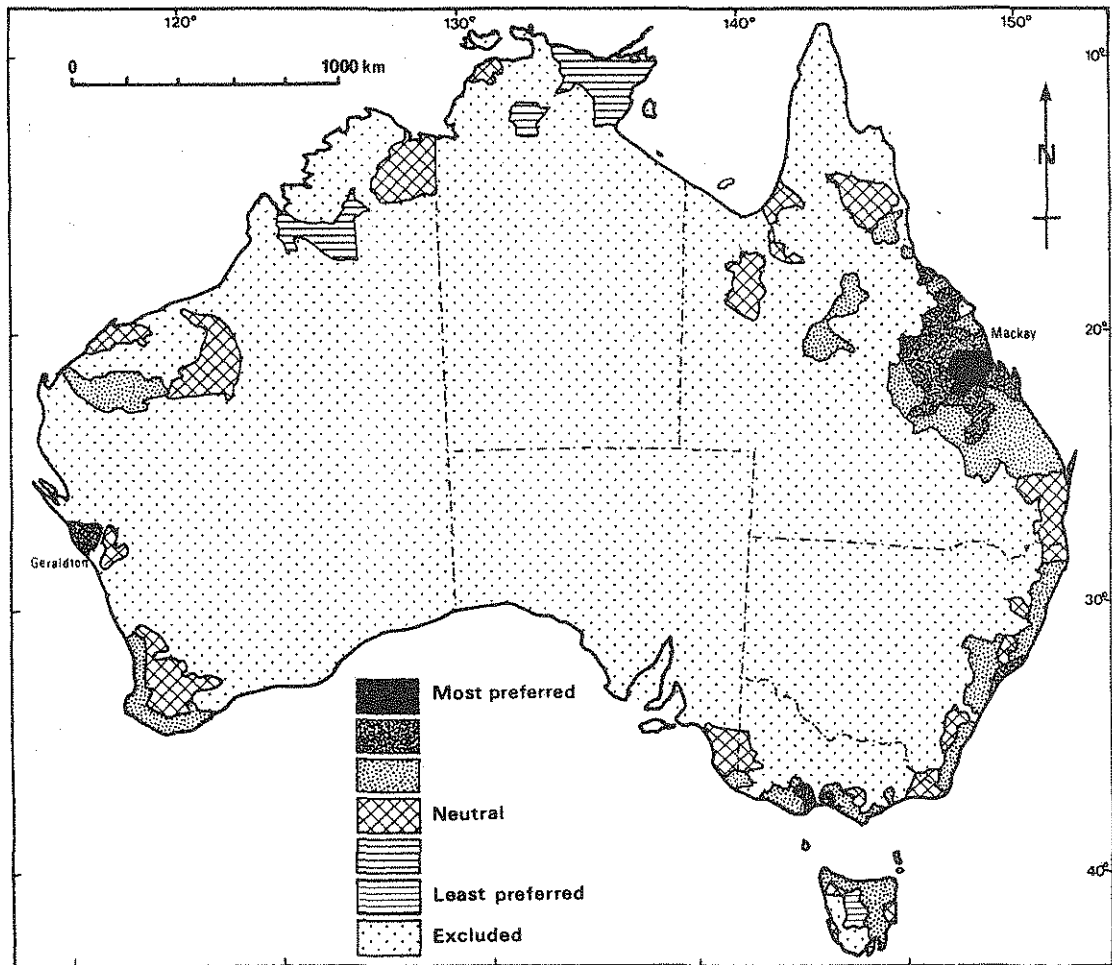
4.79 A "frontier" strategy would focus on encouraging significant population growth in alternative settlements:

- . Darwin - gateway for Asia and the North West;
- . Geraldton - tourism, mining, transport;
- . Alice Springs - de facto capital of central Australia; and
- . Mt Isa - mining, defence and transport hub.

⁴⁸ Cocks, p 289-290.

⁴⁹ Cocks, p 216.

Figure 4.2: Preferred Regions for Urban Development



Note: The map shows coastal areas south of Mackay as being particularly attractive for major future urbanisation. The map is based on a variety of considerations including: water resources; road building costs; existing services; pollution risks; economic development prospects; climate; likely energy costs; distance from coast; natural hazards; present population; environmental fragility.

Source: Doug Cocks, p 216.

4.80 The Committee received very few submissions which advocated a national settlement strategy, though there is already a body of research devoted to the issue and recognition in some quarters that key zones may need special attention. Evaluation of the options for a national settlement strategy is a complex business, but it should be recognised that this is a matter which warrants serious debate and analysis. In developing options for a national settlement strategy it is preferable to use terms other than "growth centre" or "decentralisation" for areas where population growth is to be encouraged, if only because of the unfortunate political memories evoked by these words.

4.81 In examining options for a national settlement strategy, the following elements should be central to further research:

The trade-off in land value between farming and urban or industrial development.

Ancient flood plains and river terraces now provide the gently sloping flood-free terrain optimal for urban and industrial development. The value of this land for urban development has to be weighed against its value for farming. Doug Cocks argues that settlement on hills has benefits and costs. One benefit is that sewage can flow down hill to treatment plants situated just above the floodline. One cost is having to pump urban water supplies up-hill, where topsoils are thinner and more prone to erosion.

The long term stability of regional populations, including an adequate economic base.

As Doug Cocks points out "only populations in relative stability with their environments can be expected to develop an image of their region which will promote an informed balanced perspective on how that regions resources can and should be used". The extent and diversity of employment opportunities are critical, but they are unfortunately limited in provincial cities. Job opportunities follow structural change in the economy, so that regions benefit differentially from different types of structural change: the growth of service industries like tourism and the long term decline of manufacturing benefits some regions and ruins others. Tackling this problem would also be part of a national settlement strategy.

The role of infrastructure

The provision of infrastructure, in the form of fixed transport facilities such as roads and rail, has a significant impact on the location of population. The question is whether infrastructure should be used to induce, rather than follow or anticipate, changes in land use. Inducing change through public investment without significantly subsidising private activity is difficult, and it is not hard, after the event to identify the successes and failures. Bathurst-Orange did not grow; Albury-Wodonga and, eventually, Canberra did. The role of transportation networks, road and rail, on the impact of the pattern of urban settlement was raised with the Committee many times. It was suggested by some, including John Brothie and Pat Troy that the Commonwealth government, in its consideration of the VFT proposal missed the opportunity to influence the future

settlement pattern in Australia. By focusing solely on the narrow economic costs and benefits of this proposal, the opportunity to review other aspects and wider costs and benefits were lost.

The Need for a National Perspective

4.82 Urban planning in Australia is separated from economic policy making and fragmented both across and within state jurisdictions. There is no system for setting national priorities and no mechanisms for co-ordinating the various arms and levels of government to achieve them. Planning occurs by default, with national policy goals and priorities imperfectly reflected in the separate and unco-ordinated actions of the separate agencies of government such as roads, public housing and hydraulic services. The nation pays dearly for this lack of co-ordination.

4.83 State governments have a free rein to compete for potential developments, a situation which often results in inefficiency and waste. In the 1980s the competition for "cranes on the skyline" at almost any cost resulted in an over-supply of commercial space and consequent huge vacancy rates in most capital cities. Indecision about whether to build a third runway at Sydney airport or new ones at Badgery's Creek, Canberra, Cairns and elsewhere, allowed congestion at Sydney to continue. While the United Kingdom is able to divert air traffic from Heathrow to Gatwick, the lack of a national policy, combined with state rivalry, rules out the option of similar sharing of capacity between Mascot and Tullamarine.

4.84 The Committee believes the Commonwealth has a responsibility to ensure there is a nationally co-ordinated program for the development of key productive infrastructure such as the integration of urban transit networks for the movement of export freight. The most pressing imperative is to determine just what combination of infrastructure development is required.

4.85 The Committee considers that there are dangers in adopting an exclusively problem centred approach to policy development. As Peter Ellyard observes:

Australians, all too often combine problem centredness and probable futures. They are problem centred towards probable futures, rather than mission directed toward preferred futures.⁵⁰

4.86 It is too often assumed that the future will be only a more or less efficient version of the past. This perspective is blind to the dramatic economic and technological changes outlined in Chapter 3. Good government needs both problem centred and mission directed policy, but the balance between the two approaches at present is weighted towards problem centredness, and this bias diminishes our capacity to take a long term perspective on restructuring the economy. There is a need for a clear vision of what an

⁵⁰ Peter Ellyard, *Ecomission 2020: Creating an Ecologically Sustainable Earth by the Year 2020*, Discussion Paper, p 5.

ecologically sustainable Australia might look like and the Committee is disappointed that the ESD process has, so far, failed to provide this.

4.87 The Committee recommends that:

The Commonwealth Government develop a national settlement strategy which takes account of the:

- . relocation of national activity;
- . increasing regional differences; and
- . environmental concerns associated with further coastal development and urban expansion.

This strategy should include the development of mechanisms (including constitutional change) which will facilitate:

- . better regional planning between levels of government; and
- . a more strategic approach to implementing long term key infrastructure projects.

4.88 The Committee further recommends that:

The three levels of government work co-operatively together to identify the most environmentally sensitive sites in urban growth areas with a view to determining those that should be protected from development, those that may be developed with other technology at a later date and those that can be used to meet immediate development demands subject only to normal environmental and planning constraints.

4.89 The Committee also recommends that:

The Commonwealth and the States jointly establish long term national environmental standards for the delivery of urban services such as water and sewerage.

