

4.3 Urban Dynamics in the Melbourne Metropolitan Area Affecting The Network of Centres

The following discussion outlines some key dynamics affecting the development of metropolitan activity patterns, and their implications for activity centres.

4.3.1 Demographic and Social Changes

Changes to the demographic profile of the city's population inevitably affects patterns of activities in and usage of centres. Localised changes occur in particular areas as a result of immigration, gentrification or generational change.

The single largest demographic trend projected to affect Melbourne in the decades to come will be the aging of the population. The average proportion of Melbourne's population over the age of 60 is expected to increase from 16% in 1996 to 23% by 2021. This will occur as a result of the effects of the baby boom in the post-war period, the general improvements in health causing people to live longer, and declining birth rates with couples having fewer children or choosing not to have children. Other important trends are real growth in household disposal incomes and increased workforce participation rates, particularly by women.

The rate of population growth in the metropolitan area is in decline as a result of low levels of natural increase. The average household size is projected to decline to 2.34 by 2021 (down from 2.68 in 1996) due to factors such as couples having less children, increased rates of marriage break-ups, increased longevity and spouse survival rate.

There is a trend towards people moving back into the inner areas of Melbourne. The City of Melbourne's population is projected to grow from 39,716 in 1996 to 63,447 in 2021 with an average annual growth rate of 1% more than the metropolitan average. The DOI's report, *Victoria in Future*, suggests that "many of the new residents are young, affluent and heavy consumers of urban services" (p.24).

While the detached house is still by far the most common form of housing constructed, the percentage of other types of housing, including medium density, dual occupancy and cluster housing, is on the increase from just 12% of new constructions in 1992 to 28% in 1999, (DOI, 2000). Multi-unit dwelling approvals constituted 35% of all new dwelling units approved in 1996-7, up from just 10% in 1992-93 (Buxton and Tieman, 1999: 2).

Construction of medium density housing increased steadily throughout the 1990s following the introduction of VicCode 2 in 1993 and then the Good Design Guide in 1995.

Medium density housing has been occurring unevenly across the metropolitan area, however, with much higher levels in the inner and middle ring of suburbs. Attached

housing is being constructed almost entirely in the inner and middle ring of suburbs. In the City of Melbourne 96% of new housing was some form of attached housing in 1999, in the City of Glen Eira the proportion was 36%, and by way of contrast, the City of Casey only had 5% of new constructions in this category, (DOI, 2000). In a recent study of medium density housing in Melbourne, Buxton and Tieman found that the four municipalities of Boroondara, Port Phillip, Stonnington and Yarra together accounted for 30 per cent, 23 per cent and 32 per cent of the total number of medium density housing approvals in Melbourne in 1995-6, 1996-7 and 1997-8 respectively (Buxton and Tieman, 1999:14).

4.3.2 Industry and Employment Forces

The most significant and obvious change in industrial employment which has occurred in metropolitan Melbourne and Geelong over the last few decades has been the decline of the manufacturing industry and the rise of white collar and service industries. There has been a widespread switch to off shore manufacturing in many industries such as textile, clothing and footwear which traditionally were large employers of labour. These firms now take advantage of cheaper labour, mostly in Asia, and the lowering of protective tariffs which occurred in the 1980s.

The effects of these changes in employment and industry are not evenly felt across the metropolitan area. The decline of manufacturing has left many redundant industrial sites in the inner, northern and western suburbs available for redevelopment. Increasingly it is only the warehouse and distribution functions which Melbourne retains, and whilst the growth of these functions has been steady, predominantly in the north-west and south-eastern suburbs, this growth has not matched the decline in manufacturing.

The areas of employment which are growing are those associated with the information age brought about by technological and telecommunications advances. These expanding areas of employment are in the services sector including both white and blue collar jobs.

Metropolitan Employment 1971-2011

	1971	1991	2011 Projected
Manufacturing	35%	19%	11%
Wholesale and retail trade	21%	21%	22%
Community, recreation and personal services	16%	25%	28%
Diversified commercial and professional services	9%	14%	18%
All other(incl.	20%	20%	18%

Utilities, transport and construction)			
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Source: Jeff Wolinski 1997 ‘ The Future Distribution of Jobs in Metropolitan Melbourne’, UPR Vol 15, No 2.

Along with a change in the strength of the different sectors of employment, has been a change in the nature of work itself. There has been a strong trend towards part-time, casual and temporary employment in a number of sectors, particularly in the retail and services sector. This has occurred concurrently with a steady increase in the number of women in the workforce and a growing number of self-employed and short term contract workers. The proportion of people who work from home also has increased.

Historically in Melbourne the CAD has been the main centre for office employment. However a recent study has found that suburban office stock is increasing at a rate of 75,000 m² per annum. Suburban areas increased their market share of metropolitan office stock from 11% to 20% between 1984 and 1999 (Ratio, Metropolitan Melbourne Employment Forecasting Study – Final Report, July 2000: 28). While office stock increased in the CAD by 50% during that time, its proportional share of the metropolitan market declined from 61% to 52%. Future office developments are predicted to be in the inner city areas such as Port Melbourne, Richmond, Abbotsford and Hawthorn, with some new suburban offices in industrial parks in the outer eastern and south eastern suburbs. The key sector driving these latter developments is the commercial services sector, particularly telecommunications and information technology. (Ratio, Metropolitan Melbourne Employment Forecasting Study – Final Report, July 2000)

4.3.3 Retailing Forces

Retailing is a growth industry that has an important impact on the majority of activity centres in Melbourne and Geelong.

Between 1980 and 1992, there was a significant expansion of retail floorspace across the metropolitan area. This growth in floorspace was not matched by growth in sales figures which increased much more slowly over the period, in line with population growth. The result in 1992 was a decline of 23% in real sales per square metre of retail floorspace (ABS, Retail Census 1991/92). Lack of comprehensive data since 1992 has not enabled us to indicate whether this trend has continued.

In recent years, there has been increased flexibility in retailing formats and trading patterns. Trading hours were deregulated in 1997 permitting shops to open 24 hours a day, seven days a week.

New forms of department stores, discount department stores and superstores have emerged, as well as “concept stores” geared to consumer lifestyle aspirations. There

continues to be a stronger emphasis among stores in developing a particular niche. There has been the diversification and expansion of major supermarkets in areas such as fresh food, pre-prepared food, and personal and household goods. Convenience remains a critical factor in supermarket and everyday shopping requirements.

With increased leisure time and higher standards of living, people are spending more on recreational goods including sporting goods and equipment, sportswear, music-related goods, compact discs, and books. There also is a continuing trend for people to dine out more frequently in cafes and restaurants and to obtain take-away food. The merging of retail and leisure/entertainment activities reflects broader lifestyle changes.

The major technological changes affecting consumers and retail suppliers have been the development of home shopping via television and telephone, and the development of on-line shopping via the Internet. These technological developments have increased the choices available to consumers to obtain a wide range of goods and services without actually having to visit a retail outlet.

4.3.4 Public and Private Health Changes

The aging of the population, changing government resourcing of the public health sector, and government policy to encourage private health insurance continue to be important drivers behind the provision of health services. The emphasis will be on more flexible health delivery systems with an increased emphasis on the prevention of illness, self-management and more individual responsibility for health and fitness, and greater focus on the use of technology.

Over the last decade or more, there have been a number of locational changes in the public hospital sector which have generally followed closure, amalgamation, and decentralisation trends moving away from the Melbourne CAD out into the suburbs. Prominent amongst these moves were the relocation of the Queen Victoria Medical Centre to become the Monash Medical Centre at Clayton; the closure of Prince Henry's Hospital in St Kilda Road; the relocation of the Preston and Northcote Community Hospital from Preston to the Northern Hospital at Epping; and the closure of the Fairfield Infectious Diseases Hospital. There are currently some 26 public hospitals in the metropolitan area of Melbourne.

Whilst there have been a number of closures of public hospitals in recent years, the number of private hospitals is increasing with 11 new private free-standing day hospital facilities opening in Victoria between 1997-98 and 1998-99 (ABS, 4390.0 Private Hospitals, Australia, 1998-99). There are presently about 70 private hospitals operating across metropolitan Melbourne and Geelong, many of which are quite small and generate less activity than the larger public hospitals.

4.3.5 Tertiary Education Changes

Since 1993, there has been an upward trend in spending on tertiary education. In 1996, Melbourne accounted for 20% of the nation's expenditure. It is suggested that the high levels of expenditure were part of a 'catch up' phase and therefore may not be sustainable in the long term.

The Melbourne CAD and inner suburbs have accounted for over 25% of the metropolitan area's expenditure on new educational facilities particularly in the tertiary sector. There has also been considerable growth during the 1990s in universities and TAFE institutions in the outer metropolitan regions and Geelong.

In addition, there has been an increasing trend to congregate related research and development activities near to some of the larger campuses.

4.3.6 Environment and Transport Pressures

A key environmental pressure is the continued emission of greenhouse gases at a high rate. In 1998 total greenhouse gas (GHG) emissions in Australia was 455.9 million tonnes compared with 433.2 million tonnes in 1997 and 389.8 million tonnes in 1990. This represents a 16.9% increase between 1990 and 1998. Victoria contributes 20% of Australia's total GHG emissions.

The transport sector is responsible for a total of 17% of GHG emissions which have grown steadily in recent years. Road transport accounts for 88% of emissions in the transport sector. Between 1990 and 1997, GHG emissions from road transport grew at an average annual rate of 2%. Approximately half of the emissions from the transport sector are attributable to the use of passenger vehicles in the urban area.

There has been a continuing increase in the use of the private car as a means of travel to work, study or shop in Melbourne over the last few decades, with an accompanying decline in public transport usage.

Public transport is more popular for journeys to work than for shopping trips, and walking is more commonly used for shopping rather than work trips. Although walking is most popular amongst those undertaking a journey to school or other educational institution, it has undergone a dramatic proportional decline in usage. For these types of trips, there has been an even larger proportional increase in car usage, perhaps reflecting parental concerns for safety.

The ABS data show that, in 1996, 12.3% of people in the Melbourne Statistical Division used public transport as their main method of travel to work - the lowest figure on record. For the first time ever, Melbourne has now fallen behind Brisbane in this area. Some 80% of the Melbourne workforce travel by car.

Mode Split: Journey to Work (%) – Melbourne

	1961	1971	1981	1991	1996
Public transport	36.8	30.9	20.6	15.9	12.3
Private transport	53.4	58.7	73.7	79.4	77.9
Walking, cycling	9.8	10.4	5.7	4.7	n/a*

Sources: Kenworthy et al (1999) p.224 and ABS (1995) *Travel to Work, School and Shops*, and ABS (1996) *Melbourne: A Social Atlas*. (*Note – no figure available)

The figures for people travelling to attend an educational institution in the Melbourne Statistical Division show a higher usage of public transport than for those travelling to work, as might be expected given that many are children. However, car usage has increased its mode share far more at the expense of walking than public transport.

Mode Split: Journey to Educational Institution (%) – Melbourne

	1984	1994
Train	4.8	7
Bus	11.1	9
Tram/light rail	4.6	2.6
<i>Total pub.trans</i>	<i>20.5</i>	<i>18.6</i>
Car	34.4	55.2
Walk	39.5	22.2
Other	5.6	4

Source: ABS (1995) *Travel to Work, School and Shops* and ABS (1985) *Travel to Work, School and Shops*.

The trends for people undertaking their main shopping trip show an increasing level of car usage. The proportion of people using public transport for shopping is considerably lower than journey to work, whilst those who walk to the shops is higher.

Mode Split: Journey to Shops (%) – Melbourne

	1984	1994
Public transport	6.2	3.3
Car	78.5	85.5
Walk	14.8	9.7
Other	0.5	1.6

Source: ABS (1995) *Travel to Work, School and Shops* and ABS (1985) *Travel to Work, School and Shops*.

These trends can be seen as both a cause and a consequence of transport policies that have reduced the relative attractiveness of non-automobile forms of travel.

There has been significant public investment in Melbourne's freeway and main road network over the last decade with the completion of the Western Ring Road, the extension of the Eastern freeway and the opening of City Link. The current State Government is continuing to invest in road construction in Melbourne with its recent announcement that it will support the building of the Scoresby Freeway in the outer eastern suburbs. Meanwhile, public transport remains of very low quality across most of Melbourne.

The public transport service delivery network was franchised to several private operators by the Kennett Government over the last decade. Co-ordination between the train and bus networks has not been made easier with each network being operated by different private companies.

4.3.7 Implications for Activity Centres

This section highlights some of the implications of these broader economic, social and environmental forces for the form and function of activity centres in Melbourne and Geelong. The concluding section emphasises particular areas of ongoing concern that need to be considered as part of the policy issues for activity centres developed in Chapter 5.

Commercial Land Use and Business Mix

The demographic, social and economic forces discussed above will create significant and ongoing changes in the form and mix of uses in centres. The aging of the population and the increasing sophistication of consumers will place increasing demands on retail and commercial centres to be safer and more attractive with a stronger sense of place. Accessibility to centres and movement within them will need to be geared more to the elderly with much better provision of secure walking routes and public transport services. There will need to be a shift in the goods and services provided to meet the needs particularly of older people.

The merging of retail and entertainment has caused the development of new or refurbished cinema complexes. Many larger shopping complexes have incorporated multi-screen cinemas and entertainment retailing into their centres. It is expected that this linkage between retailing and entertainment will develop further, with new forms of entertainment emerging as part of the shopping experience in many activity centres.

In contrast to these integrated developments, the experience in 1995-96 of the Reading proposal in East Burwood to establish a large cinema and retail complex outside of a significant activity centre indicates the possibility of an ongoing pressure for these type of facilities at stand-alone locations.

The restructuring of the economy and its effects on industry have resulted in fewer traditional manufacturing areas in Melbourne and Geelong. Older industrial estates have

been transformed into activity centres with a stronger emphasis on warehousing and distribution of goods rather than manufacturing. There also has been the emergence of new types of business parks with a blurring of distinction between the industry and office functions within individual operations, as greater emphasis is placed on head office and showroom functions rather than production.

The increased emphasis on research and development has resulted in the establishment of research facilities in precincts linked to large tertiary campuses. The ongoing expansion of the Monash Technology Precinct, the research and development park at LaTrobe University and the establishment of the Parkville Biotechnology Precinct adjacent to the University of Melbourne are key examples of the further evolution of these kinds of activity centres.

Increased Community Focus in Retail and Commercial Centres

Social changes have caused retail and commercial centres to become a much more important community focus. This is becoming more relevant for people working longer hours with limited opportunities for social contact in other ways, and for older people experiencing isolation.

From the broader economic, social and environmental changes we have examined, this sense of community has not developed in other forms of activity centres such as business parks, industrial estates, airports, or ports. This can be explained partly by the urban form of these centres which does not provide extensive opportunities for business-to-business or personal interaction. It also is explained by the more limited number of person-trips generated by different segments of the community to these kinds of centres.

Car-Oriented Transport Patterns and Lack of Modal Shift in Centres

The continuing increase in private car usage as a means of travel to work, study or shop in Melbourne centres over the last few decades, with an accompanying decline in walking and public transport trips, has had important effects on activity centres. There are increasing pressures for extensive car parking in centres, more traffic congestion, continuing conflicts between motorists and pedestrians, not to mention the environmental problems associated with greenhouse gas emissions.

The privatisation of public transport services into separate entities has made the co-ordinated delivery of services to and within centres more difficult. There are ongoing problems with the frequency and reliability of services in many centres. Operating hours also are an issue. There continues to be problem with accessing leisure and entertainment activities in many centres at night and over the weekend. Public transport services have not necessarily operated during those off-peak periods, making such activities less accessible to those without cars.

The most significant implication of the broader urban dynamics is that there has been an increasing shift to motorised forms of transport (and away from non-motorised forms) as the primary means of access to, and movement within, most types of activity centres.

Stand Alone Tertiary Education Campuses in Outlying Areas

The decentralisation of tertiary education facilities to outlying areas of Melbourne has created new single purpose activity centres on large stand-alone sites removed from established mixed use centres and the infrastructure supporting them.

For example, Monash University established its campus in the south-east on an isolated site at Berwick rather than on the edge of the Dandenong commercial centre. Swinburne University established its campus at Lilydale over one kilometre east of its town centre. Victoria University of Technology established its campus in Melton on Coburns Road south of the railway station, but over three kilometres from the Melton Shopping and Business District.

Large Retailing Activities Outside of Centres

The emergence of new retailing formats for the sale of large recreational goods, home wares and home improvements has resulted in the development of large stand-alone superstores or strings of ‘peripheral sales’ outlets along main roads and highways.

Similarly, new formats for convenience retailing have resulted in larger take-way food outlets with drive-in facilities, petrol stations with an expanded range of services, and larger video shops. These have developed as stand-alone outlets or small, often unrelated clusters, along main roads particularly in outlying areas of Melbourne and Geelong. Both of these types of activities are outside established activity centres and are generators of single purpose, car-oriented trips.

Between 1992 and 1999, these concentrations of activity generated a growing proportion of retail sales in metropolitan Melbourne. They are an increasing proportion of the sales generated in the ‘Other’ category in the following table:

Retail Turnover within Metropolitan Melbourne 1992 – 1999

Type of Centre of Activity	1992	1999
CAD	8.2%	7.1%
Shopping Malls with DS	11.2%	12.5%
Shopping Malls with DDS	14.0%	13.6%
Other	66.6%	66.8%

NB. DS- Department stores, DDS-Discount department stores, Other: predominantly strip centres but also includes supermarket based centres, freestanding stores, bulky good stores and other retail centres.

Source: Jebb Holland Dimasi , October 2000

The major implication of these trends is the further dispersal of a growing segment of the retail market away from established centres, and an increase in car-dominated travel that is necessary to sustain them. What is being created are more stand-alone operations or non-integrated strings of development along major roads. There is no sense of place or community in these developments.

Areas of Ongoing Concern and Issues for Further Consideration

The key issues for further consideration arising from this discussion are:

- the policies required to achieve a modal shift from motorised to non-motorised forms of transport to and within activity centres;
- the manner in which new superstore or highway retailing proposals are to be controlled and encouraged to locate in established centres;
- the policies required to ensure that major public institutions such as tertiary educational campuses or hospitals are located in mixed use centres;
- the measures required to improve the attractiveness, safety, liveability and mixture of uses in activity centres so that they provide a stronger sense of place and community, and encourage single destination multi-purpose trips.

4.4 Evaluation of Melbourne and Geelong Centres of Activity

4.4.1 Evaluation Approach

This section provides a more rigorous analysis of the relationship between centres of activity and ESD. The analysis was undertaken using an evaluation framework developed for testing by the Department of Infrastructure and the consultant team. The analysis covered a sample of 26 centres with varied characteristics in Melbourne and Geelong, and then an evaluation of the whole network of centres.

It was important to commence this evaluation at the individual centre level. In contrast to looking generally at the impact of activity centre policy on the sustainability of a broad network of centres, this approach provided a more in-depth appreciation of how different types of centres actually performed according to ESD criteria.

We were interested in carrying out this evaluation for a broad range of centres of activity, in keeping with our expanded definition of this concept. To do this, we looked at shopping and business centres of different sizes, ownership, location in different regions, and with different public transport and non-motorised transport infrastructure and services. We examined a major stand-alone superstore which was part of a string of homemaker shops near a major enclosed shopping centre. We looked at a stand-alone tertiary education campus, a business park, an industrial estate and an airport.

With this approach, we were able to explore the best and worst performance levels in particular centres to highlight improvements that could be made in terms of their particular economic, social and environmental characteristics. In this process, attributes of centres such as the type, role, size, location, mix of uses and activities, and public transport services were assessed for their importance in achieving ESD outcomes.

We then looked at the network as a whole. We were not convinced that the kind of improvements identified from our analysis of the individual centres would necessarily improve all aspects of the network as a whole. A set of additional factors needed to be considered - for example, the overall degree of clustering at centres versus dispersal elsewhere in the system, the pattern of and linkages amongst centres in different regional areas, accessibility arrangements particularly for non-motorised transport throughout the whole network. The questions required a different type of analysis from the one undertaken for the individual centres.

The evaluation approach was derived from the following core objectives in the National Strategy for Ecologically Sustainable Development:

- to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations
- to provide for equity within and between generations
- to protect biological diversity and maintain essential process and life-support systems.

In order to evaluate individual centres of activity, the Department developed a set of criteria and the consultant team worked up a set of indicators based on these core objectives. The criteria are outcome-oriented and relate to the extent to which a particular centre:

- has a high level of liveability (safety, convenience, comfort, aesthetics);
- increases opportunities for social interaction and provide a community focus;
- contributes to the community's natural, cultural and historical heritage;
- contributes to the economic competitiveness of the urban system;
- promotes urban forms which minimise overall transport requirements;
- improves the efficiency of land supply and infrastructure provision;
- improves freight and business logistics;
- improves accessibility to a wide range of services and facilities;
- improves the economic opportunities for people, business and industry;
- is compatible with adjacent land uses and landscape values;
- improves the diversity of choice available to users and businesses;
- encourages urban transport that limits the depletion of fossil fuels;
- meets the needs of all segments of the population;
- maintains or improve transport choice for all segments of the population;
- promotes energy efficient building design and layout;

- retains and improves natural ecosystems within urban areas and protects the integrity of the natural environment;
- maintains or improves public health;
- limits the waste generated for disposal off-site;
- reduces greenhouse gas emissions.

The criteria and indicators are not a definitive and exhaustive list. It was acknowledged that there would be debate about the way in which particular measures were expressed, the number of measures (and hence weighting) for each objective, and the inclusion of both quantitative and qualitative measures.

Despite these limitations, the criteria and indicators are considered to be useful examples of the type of things that could be used to measure the degree to which centres are moving towards achieving sustainability outcomes. They provided a concrete and understandable basis for our evaluation. They were a helpful tool, rather than a precise measuring stick, to advance the discussion about the key factors that influence optimal ESD performance in individual centres.

In addition to the list of criteria and indicators, the process of evaluating individual centres using these measures was difficult and challenging. There were concerns about the weighting to be given to the various indicators, and the overall aggregation of results for a particular objective.

Nevertheless, the evaluation of individual centres was undertaken in terms of each performance criteria and indicator, and given a very good, good, fair or poor rating for the three key aspects of ESD – environmental, social and economic sustainability. The assessment was based on the reports, surveys, discussions and focus group meetings undertaken for this project. It was recognised that the information available to draw conclusions for the individual indicators varied considerably, and that in a few cases, there was little information. In the end, we made judgments about the overall environmental, social and economic sustainability of the various centres of activity, based on the information at hand and in consultation with representatives from local government. Priority attention was paid to the issue of environmental sustainability – particularly in relation to reduction in car usage, given its significance within the concept of ESD.

4.4.2 The Evaluation of Individual Centres

The following section presents the evaluation for the 26 different centres of activity in Melbourne and Geelong. The centres selected for assessment are of different size, type (role and mixture of uses), form, location, and ownership with different levels of public and non-motorised transport infrastructure.

The centres fall within five categories:

- Central Activity Areas
- Large Retail and Commercial Centres
- Medium Size Retail and Commercial Centres
- Small Retail and Commercial Centres
- Stand Alone and/or Specialist Centres such as a superstore, tertiary education campus office park, industrial estate, and airport

Table 4.4.2 presents a summary of the key conclusions reached for each centre, with an overall rating provided in terms of its environmental, social and economic sustainability and recommended opportunities for improvement. The detailed evaluation charts for the 26 centres are presented in a separate Working Paper.

Table 4.4.2 Evaluation Results of Individual Centres of Activity

Type of Centre	Example	Key Conclusions	ESD Ratings	Opportunities for Improvement
Central Activity District	Melbourne Central Activities District	<ul style="list-style-type: none"> • Reasonably strong sustainable economic performance in terms of range and depth of activity mix (retail, commercial, administrative, civic, cultural, housing) and business turnover, although vulnerable to Sydney • liveable urban environment – a distinctive sense of place and extensive opportunities for social interaction, although some social problems such as drugs • good environmental performance in terms of high usage of public transport • weaknesses in energy efficiency and waste reduction practices, although desire by City of Melbourne to improve 	<p>Env: good Soc: good Eco: good</p>	<ul style="list-style-type: none"> • strengthen Capital City role • further prioritise pedestrian movement • redevelopment of the blighted areas (eg. Southern Cross Hotel site, Flinders St. overpass) • further coordinate business activities • included extended trading hours • continue program of increasing residential developments which cater for different socio-economic groups • concurrent provision of associated services for residents • pro-active programs to address city drug issues

	<p>Geelong Central Activity Area</p>	<ul style="list-style-type: none"> • fair economic performance due to reasonable range of goods and services, but of poor quality – its future economic performance is uncertain – 60% of business community in Roy Morgan surveys considered it to be prospering, but only 18% of residents felt that way • a limited economic and social focus - does not perform a major CAD role for Greater Geelong due to competition from suburban centres and lack of a resident population within the Central Activities Area • a very liveable urban environment – a distinctive sense of place, extensive opportunities for social interaction, and an urban character fits in with its surrounding natural and built environment • poor environmental performance particularly because the centre is car-dominated, does not have a coordinated public transport program, and pedestrian and cycling tracks through the centre are limited 	<p>Env: poor Soc: good Eco: fair</p>	<ul style="list-style-type: none"> • develop coordinated public transport program • improve walking and cycling tracks • stronger business mix and changed business attitudes to improve economic competitiveness • higher density housing within the CAA
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<p>Large retail, commercial, civic, and entertainment centre in the outer metro area</p>	<p>Dandenong</p>	<ul style="list-style-type: none"> mediocre economic performance in terms of range and depth of activity mix (retail, commercial, administrative, civic, cultural, housing) and business turnover an average urban environment in terms of liveability and a sense of place - dysfunctional urban character in some areas fair environmental performance in terms of public transport usage because of the location of the railway station interchange on the outer edge of the centre 	<p>Env: fair Soc: fair-poor Eco: fair-poor</p>	<ul style="list-style-type: none"> strengthening of business mix better integration of several parts of the centre, particularly the connections from the railway station to the heart of the centre further streetscape improvements to enhance sense of place improvements in train and bus services and connections.
<p>Large retail, commercial, civic, educational and entertainment centre in the inner metro area</p>	<p>Footscray</p>	<ul style="list-style-type: none"> reasonable range and depth of activity mix (retail, commercial, educational, administrative, civic, cultural, housing activities) poor economic performance in terms of business turnover - only 28% of business and consumer respondents to Roy Morgan Research indicated that the centre was prospering fair urban environment in terms of liveability and sense of place – only 45-50% of business and consumer respondents to Roy Morgan Research indicated that 	<p>Env: fair-good Soc: fair-poor Eco: poor</p>	<ul style="list-style-type: none"> strengthening of business mix and performance better integration of several parts of the centre, particularly the connections from the railway station to the heart of the centre further streetscape improvements to enhance sense of place

		<p>centre had a sense of community - social conditions mitigate against extensive interaction, a dysfunctional urban character, social problems such as drugs</p> <ul style="list-style-type: none"> • fair to good environmental performance in terms public transport usage, although the location of the railway station interchange on the outer edge of the centre and relatively high car usage (78%) mitigates against this 		
<p>Large retail, commercial, civic, educational and entertainment centre in the middle metro area</p>	<p>Box Hill</p>	<ul style="list-style-type: none"> • reasonable range and depth of activity mix (retail, commercial, educational, health, administrative, and cultural activities) • high level of office employment for a suburban centre resulting in greater public transport usage • fair to good business turnover • an average urban environment in terms of liveability and sense of place - dysfunctional urban character in some areas • very good performance in terms of equitable access for the community to public transport and range of services • good environmental performance 	<p>Env: good Soc: good Eco: fair-good</p>	<ul style="list-style-type: none"> • further streetscape improvements to enhance sense of place • better integration of several parts of the centre, particularly the connections from the railway station to both the retail and office precincts • strengthening of retail business mix and performance

<p>Large enclosed shopping and entertainment centre in the middle metro area</p>	<p>Chadstone</p>	<p>in terms of public transport usage and walking and cycling, although reasonably high car usage</p>	<ul style="list-style-type: none"> • strong sustainable economic performance in terms of high trading levels and low vacancy rate • a liveable urban environment – a distinctive sense of place, and extensive opportunities for social interaction – although it does not fit in with its surrounding natural and built environment • car dominance, but 7% of trips by public transport (compared with 16% at Box Hill and 9% at Dandenong) • reasonable environmental performance in terms of energy efficiency and waste disposal, • high level of car fume pollution because of the extent of car usage to the centre • poor pedestrian access into centre 	<p>Env: fair-poor Soc: good Eco: v.good</p>	<ul style="list-style-type: none"> • strengthening of bus services particularly outside main trading periods • higher density housing on edge of centre
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<p>Medium-size retail, commercial, civic, and entertainment centre in the inner metro area</p>	<p>Sydney Road Brunswick</p>	<ul style="list-style-type: none"> • very liveable urban environment – distinctive sense of place, good sense of community, pedestrian-friendly • good economic sustainability in terms of trading performance and mixture of businesses • good environmental sustainability - 33% of trips by walking or cycling, and 7% of trips by public transport 	<p>Env: v.good Soc: v.good Eco: good</p>	<ul style="list-style-type: none"> • strengthening of business mix and performance of some individual businesses, • further streetscape improvements to enhance sense of place, • improvements in train and tram services and connections.
<p>Medium-size retail, commercial, civic, and entertainment centre in the middle metro area</p>	<p>Glenferrie Hawthorn</p>	<ul style="list-style-type: none"> • good economic performance for size of centre • very liveable urban environment – distinctive sense of place, good sense of community, pedestrian-friendly • good pedestrian access to and within centre 	<p>Env: good Soc: v.good Eco: v.good</p>	<ul style="list-style-type: none"> • strengthening of business mix and performance of some individual businesses, • further streetscape improvements to enhance sense of place, • improvements in train and tram services and connections.
<p>Medium size retail and commercial centre close to public transport in the outer metro area</p>	<p>Bayswater</p>	<ul style="list-style-type: none"> • fair economic performance – average retail turnover; high vacancy rate • not a significant community focal point • offers a reasonable range of goods and services to all segments of the population • car-dominated centre despite 	<p>Env: poor Soc: poor Eco: fair</p>	<ul style="list-style-type: none"> • containment of the centre to stop the sprawl – more defined edge and new higher density housing developments on the edge, • more intense development within the centre - major redevelopment of underutilised sites including Bayswater Village, improvements to business mix and performance of individual

		<p>railway station being situated on eastern edge of centre</p> <ul style="list-style-type: none"> poor in terms of environmental sustainability 		<p>businesses,</p> <ul style="list-style-type: none"> major streetscape improvements to address issues of amenity, safety, pedestrian connections, and social interactions, designation of new open space areas and facilitation of more outdoor eating areas, improvements in train and bus services, and more information and marketing of these services to users of the centre.
<p>Medium size retail and commercial centre not close to public transport in the outer metro area</p>	<p>Melton Shopping and Business District</p>	<ul style="list-style-type: none"> reasonable mixture of goods and services, but with limited depth average retail turnover, but above average vacancy rate fits in with its surrounding natural and built environment, but does not have a real sense of place <p>Limited opportunities for social interaction – not an intensely liveable urban environment</p> <ul style="list-style-type: none"> very limited access to the centre except by car poor environmental performance in terms of energy efficiency, waste disposal, pollution minimisation 	<p>Env: poor Soc: fair Eco: fair</p>	<ul style="list-style-type: none"> containment of the centre to stop the sprawl – more defined edge and new higher density housing developments on the edge more intense development within the centre - redevelopment of underutilised sites, improvements to business mix and performance of individual businesses major streetscape improvements in High Street and cross streets to address issues of amenity, safety, pedestrian connections, and social interactions further enhancement of Courthouse Square to create stronger community focal point improvements to bus services including connections with railway station, and more information and marketing of these services to users of the centre.

<p>Medium size enclosed shopping centre in the middle/outer metro area</p>	<p>Parkmore Keysborough</p>	<ul style="list-style-type: none"> reasonable economic performance in terms of trading level and low vacancy rate comfortable urban environment – with a sense of community focus and safety, and opportunities for social interaction – although it does not fit in with its surrounding natural and built environment low environmental sustainability because of car dominance, with only 2% of trips by public transport (compared with 16% at Box Hill and 9% at Dandenong), but 14% of trips to the centre by walking 	<p>Env: poor Soc: fair-good Eco: fair-good</p>	<ul style="list-style-type: none"> improvements to business mix and performance of individual businesses, improvements to food courts and other meeting areas, major external landscaping to address issues of amenity, and pedestrian connections – stronger integration with surrounding community, improvements in bus services particularly connections with railway stations, and more information and marketing of these services to users of the centre.
<p>Medium size retail and commercial centre in Geelong</p>	<p>High Street Belmont</p>	<ul style="list-style-type: none"> reasonably good trading position with good number and range of jobs not an intensely liveable environment – no real sense of place, although some good community facilities poor environmental sustainability – car dominance 	<p>Env: poor Soc: fair Eco: fair-good</p>	<ul style="list-style-type: none"> containment of the centre to stop the sprawl – more defined edge and new higher density housing developments on the edge more intense development within the centre - development of underutilised sites, improvements to business mix and performance of individual businesses major streetscape improvements in High Street to connect the north and south ends of the centre, and address issues of amenity, safety, pedestrian connections,

				<p>and social interactions</p> <ul style="list-style-type: none"> • creation of a strong stronger community focal point in centre • improvements to public transport services, and more information and marketing of these services to users of the centre
<p>Small retail and commercial centre in the inner metro area</p>	<p>Union Road Ascot Vale</p>	<ul style="list-style-type: none"> • not a distinctive sense of place • not a strong sense of community, • not pedestrian-friendly • fair economic sustainability in terms of trading performance and mixture of businesses for size of centre • good environmental sustainability - 33% of trips by walking or cycling, and 7% of trips by public transport 	<p>Env: good Soc: poor Eco: fair</p>	<ul style="list-style-type: none"> • strengthening of business mix and performance of some individual businesses • further streetscape improvements to enhance sense of place and pedestrian-friendliness • more outdoor eating areas to create interest and activity in the street • improvements in tram services and connections with railway station, and more information and marketing of these services to users of the centre

	Hawksburn	<ul style="list-style-type: none"> • distinctive sense of place • strong sense of community • pedestrian-friendly • good economic sustainability in terms of trading performance and mixture of businesses for size of centre • uncertain environmental sustainability 	<p>Env: fair Soc: good Eco: good</p>	<ul style="list-style-type: none"> • strengthening of performance of some individual businesses • further streetscape improvements to enhance sense of place and pedestrian-friendliness • improvements in tram services and connections with railway station, and more information and marketing of these services to users of the centre
Small retail and commercial centre served by public transport in the middle metro area	Maling Road Canterbury	<ul style="list-style-type: none"> • distinctive sense of place • strong sense of community • pedestrian-friendly • good economic sustainability in terms of trading performance and mixture of businesses for size of centre • uncertain environmental sustainability 	<p>Env: fair-good Soc: good Eco: good</p>	<ul style="list-style-type: none"> • strengthening of performance of some individual businesses and improved marketing of whole centre • more information and marketing of public transport services to the centre
Small retail and commercial centre not well served by public transport in the middle	Bell Street Mall, West Heidelberg	<ul style="list-style-type: none"> • fair economic performance – average retail turnover; high vacancy rate • good community focal point • offers a reasonable range of goods and services to all segments of the population • poor in terms of environmental 	<p>Env: poor Soc: good Eco: fair</p>	<ul style="list-style-type: none"> • more intense development within the centre – filling of vacant premises, improvements to business mix and performance of individual businesses • improvements in bus services, and more information and marketing of these services

metro area		sustainability - car-dominated centre			
Small retail and commercial centre served by public transport in the outer metro area	Chelsea	<ul style="list-style-type: none"> • fair economic sustainability in terms of trading performance and business mix for size of centre • average sense of place and sense of community • fair environmental sustainability – high level of walking to centre; low level of public transport usage; below average car usage. 	Env: fair Soc: fair Eco: fair	<ul style="list-style-type: none"> • strengthening of business mix and performance of some individual businesses • further streetscape improvements to enhance sense of place and pedestrian-friendliness • more outdoor eating areas to create interest and activity in the street • improvements in train and bus services, and more information and marketing of these services 	
Small retail and commercial centre not well served by public transport in the outer metro area	Tunstall Square	<ul style="list-style-type: none"> • good economic sustainability in terms of trading performance and business mix for size of centre • good sense of place and sense of community • very poor environmental sustainability – car dominance 	Env: v. poor Soc: good Eco: good	<ul style="list-style-type: none"> • improved bus services and more information and marketing of those services 	
	Tooradin	<ul style="list-style-type: none"> • fair economic sustainability in terms of trading performance and business mix for size of centre • very limited sense of place and sense of community • poor environmental sustainability – high level of car usage 	Env: poor Soc: fair Eco: fair	<ul style="list-style-type: none"> • more intense development within the centre - development of underutilised sites, improvements to business mix and performance of individual businesses • streetscape improvements to address issues of amenity, safety, pedestrian connections, and social interactions 	

				<ul style="list-style-type: none"> designated new open space areas and facilitation of more outdoor eating area improvements in public transport services, and more information and marketing of these services to users of the centre
Small enclosed shopping centre in the middle/outer metro area or Geelong	Waurrn Ponds	<ul style="list-style-type: none"> high level of amenity and sense of place in this enclosed centre strong trading performance – no vacancies in the centre reasonable number and range of jobs poor environmental sustainability – high level of car usage 	<p>Env: poor Soc: good Eco: good</p>	<ul style="list-style-type: none"> improvements in public transport services, and more information and marketing of these services to users of the centre
	Ocean Grove	<ul style="list-style-type: none"> good economic sustainability in terms of trading performance and business mix for size of centre very limited level of amenity and attractiveness poor sense of place and sense of community poor environmental sustainability – high level of car usage 	<p>Env: poor Soc: poor Eco: good</p>	<ul style="list-style-type: none"> improvements to business mix and performance of individual businesses significant streetscape improvements to address issues of amenity, safety, pedestrian connections, and social interactions facilitation of more outdoor eating area major improvements in public transport services, and more information and marketing of these services to users of the centre
Stand alone large retailing outlet	Hardwarehouse Highpoint	<ul style="list-style-type: none"> good economic performance in terms of trading level very poor level of liveability – no 	<p>Env: v.poor Soc: v.poor Eco: good</p>	<ul style="list-style-type: none"> limited because of the type and form of use

		<p>sense of place or community focus – the outlet does not fit in with its surrounding natural and built environment</p> <ul style="list-style-type: none"> • very low environmental sustainability because of car dominance 		
<p>Stand alone educational institution</p>	<p>Monash University Clayton</p>	<ul style="list-style-type: none"> • a sense of place with a community focus, although limited to students and faculty • fair environmental sustainability – reasonably high public transport usage, but reasonably high car usage as well 	<p>Env: fair Soc: good Eco: good</p>	<ul style="list-style-type: none"> • more intense development on campus - redevelopment of underutilised sites, • improvements in bus services particularly connections with railway stations, and more information and marketing of these services.
<p>Office Park</p>	<p>Tally Ho, East Burwood</p>	<ul style="list-style-type: none"> • reasonable economic performance in terms of activity levels from the office facilities in the park • a limited sense of place with no community focus • poor environmental sustainability – high car usage, low energy efficiency 	<p>Env: poor Soc: poor Eco: fair</p>	<ul style="list-style-type: none"> • limited given format of business park • more intense development within the park- major redevelopment of underutilised sites, improvements to business mix and performance of individual businesses • major streetscape improvements to address issues of amenity, pedestrian connections, and social interactions • designation of new open space areas and facilitation of more active outdoor eating and meeting areas • improvements in bus services and connections with railway stations, and

<p>Industrial Estate</p>	<p>West Heidelberg Industrial Estate</p>	<ul style="list-style-type: none"> • fair economic performance in terms of activity levels from the factories and other industrial outlets, although above average vacancy rate • limited range of jobs and facilities • no sense of place • no community focus • very poor environmental sustainability – high truck and car usage, low energy efficiency 	<p>Env: v poor Soc: poor Eco: fair</p>	<p>more information and marketing of these services</p> <ul style="list-style-type: none"> • limited given format of industrial estate • more intense development within the park- major redevelopment of underutilised sites, improvement of business mix and performance of individual businesses • streetscape improvements to address issues of amenity, pedestrian connections, and business interactions • improvements in bus services, and more information and marketing of these services
<p>Airport</p>	<p>Melbourne Airport</p>	<ul style="list-style-type: none"> • high level of business activity at centre • limited range of jobs and facilities • reasonable sense of place that is attractive and safe for high number of visitors • very poor environmental sustainability – high car usage, limited public transport facilities 	<p>Env: v.poor Soc: fair Eco: good</p>	<ul style="list-style-type: none"> • limited given format of airport complex • more intense business development within the terminal • major improvements in public transport services, particularly a railway connection • more information about and marketing of these services

4.4.3 Comments on Different Types of Centres

Airports

Our examination of Melbourne Airport highlights that it exhibits good economic sustainability because of the movement of passengers, goods and services that it generates. However, its social sustainability, as measured in terms of providing a sense of place and its ability to interact physically with the community, is limited. It is a transient and somewhat alien centre of activity which does not provide an ongoing focus for most of the population on a regular basis. Its environmental sustainability, as measured by its encouragement of non-motorised forms of transport, is very poor because of its high dependence on car and truck usage.

The major opportunities for improvement within this approach are to establish a significant public transport connection in the form of a rail link. A further consideration is to continue to reduce any conflicts between Melbourne Airport and surrounding land uses. Its opportunities to develop as an important community focal point with a lasting sense of place are extremely limited.

From this analysis, it is virtually impossible for airports, compared with other centres of activity, to move towards achieving the full range of ESD outcomes, as envisaged by this framework. This suggests that, in an ESD-oriented centres strategy, airports – as single purpose but economically important activity centres - should be given support to adopt strategies that make them closer to achieving ESD outcomes but without compromising their essential economic purpose.

Industrial Estates

Our analysis of the West Heidelberg Industrial Estate raises similar issues. The Estate has characteristics which are typical of many older style industrial parks in Melbourne and Geelong. Its very high car and truck dependence and low energy efficiency contribute to its low rating in terms of environmental sustainability.

The Estate is a series of largely unintegrated private manufacturing or warehouse operations with no real public domain or community focus. It generates very few person-trips. Its economic sustainability is uncertain with some businesses looking to expand or relocate to other more modern or better situated estates.

The major opportunities for improvement of existing industrial estates in an ESD approach are to:

- encourage further clustering of appropriate new industries to enhance the business mix;
- achieve higher development standards;
- promote more energy-efficient building designs; and

- achieve greater use of modes of transport other than the car through better bus connections.

However, similar to airports, it is very difficult for industrial estates to move towards achieving the full range of sustainability outcomes, as envisaged by this framework. This suggests that industrial estates should be supported by strategies that move them closer to ESD outcomes (as listed above) without compromising their essential economic functions.

New industrial estates that mirror the traditional form exemplified by the West Heidelberg example should be severely discouraged, not only because of ESD considerations but also because of the shift among occupants of these estates to more office and showroom based uses that could locate in other mixed use centres. The location and design of all future estates should be approved only if they meet performance criteria leading to achievement of wider sustainability outcomes.

A possible approach to industrial estates, ports, and airports is the development of the Dutch 'C' location concept outlined in Chapter 2. 'C' locations were designated by the Dutch for warehousing, heavy industry and other freight-intensive activities because they were poorly served by public transport, but well served for freight transport. This concept could be taken further in this centres strategy by outlining development and infrastructure guidelines that result in greater clustering and more public focus within these industrial and transport hubs to enable better sustainability outcomes.

Office Parks

Our examination of the Tally Ho Office Park in East Burwood concludes that it provides only a fair level of economic sustainability because of the type of operations as well as the limited density of development and employment. Its social sustainability as measured in terms of providing a sense of place and public focus is limited. Its environmental sustainability, as measured by its encouragement of non-motorised forms of transport, is poor because of its high dependence on car usage.

The major opportunities for improvement at Tally Ho are to:

- facilitate much more intensive commercial development;
- encourage a greater mixture of uses within the park through major redevelopment of under-utilised sites;
- establish a strong public community focus;
- organise better bus services and pedestrian connections within the centre.

This will be a long term process which will be very resource-intensive. This raises the issue as to whether, from a sustainability point of view, it is better to allow this arrangement of commercial uses in a stand-alone centre of activity, or integrate these activities as part of an established or newly planned business/shopping centre

The overall poor sustainability of the business park in its current form suggests that this type of activity centre should not be allowed to expand unless strategies and actions to move the centre close to ESD outcomes can be demonstrated. Similarly, new business parks should be permitted only if they meet performance criteria leading to achievement of wider sustainability outcomes.

Stand Alone Tertiary Education Campuses

Our evaluation included Monash University, Clayton as an example of a stand alone tertiary facility. It concluded that it has a fair overall level of sustainability due to its critical mass of facilities and services and its research and development links with the adjoining Monash Technology Precinct. However, although there is better than average public transport usage to the Monash campus compared to other activity centres, when compared to the other major universities, such as the University of Melbourne, or Latrobe, it has the highest rate of car usage. Tertiary institutions will normally exhibit higher rates of public transport usage than shopping and business centres as many of the people who use them do not drive cars, (for reasons of youth or low income). Their location in relation to public transport services is therefore critical. Even though poorly placed in relation to existing train and tram services, Monash University could still improve its ESD rating in the short term by upgrading bus services, particularly those connecting to railway stations. In the longer term, a direct rail connection serving the campus and surrounding business area would be highly desirable.

Stand alone tertiary institutions are by definition poorly integrated with their surrounding areas. Whilst the larger ones, such as Monash in time generate their own concentration of related activities, smaller campuses such as the VUT campus at Melton, the RMIT campus at Bundoora, the Swinburne campus at Lilydale, and the Monash campus at Berwick remain isolated. Students (and staff) can have a positive economic impact on surrounding retail and commercial areas if they are easily accessible. However these stand alone campuses are poorly integrated and have low environmental sustainability because of their high dependence on cars. It is considered that future campuses of this type should be directed to locate within or adjacent to established or approved mixed use shopping and business centres.

Large Stand Alone Retailing Outlets

Our examination of the Hardwarehouse outlet next to the Highpoint Homemaker Centre. results in a very poor environmental and social sustainability rating. This superstore and its associated string of large homemaker shops does not have any sense of place or community focus. The outlet does not fit in with its surrounding natural and built environment. Access to the superstore is car dominated.

The opportunities for improvement of this situation within this sustainability approach are very limited. There would need to be a major redesign of the wider precinct to achieve a more intense clustering of uses and better integration of facilities to encourage more pedestrian movements and other non-car usage. The prospects for this are limited.

This form of development is similar to the string of often unrelated and unintegrated convenience retailing outlets on main roads and highways. These types of developments also receive a very poor sustainability rating for similar reasons.

The very poor rating and the very limited prospects for improvement indicate that these types of stand-alone facilities or strings of unintegrated developments are the antithesis of the kinds of “activity centres” to which a sustainable centres policy should be oriented. There should be rigorous controls on this form of development. Existing clusters or strings outlets should not be allowed to expand unless strategies and actions to move them closer to ESD outcomes can be demonstrated. Similarly, new development proposals for stand alone facilities or unintegrated strings of peripheral sales development should be not be permitted unless they are redesigned as part of an integrated framework so as to achieve ESD outcomes.

Central Activity Districts

The two different central activity districts in this review – the one for Melbourne and the other for Geelong – received very different ratings in terms of the evaluation framework. This challenges previous assumptions that all centres at the top of the hierarchy in their metropolitan or regional catchment should automatically perform very well in all aspects of sustainability.

The Melbourne CAD did receive a high sustainability rating in terms of the three main indicators. That assessment was based on a combination of factors - a strong sustainable economic performance in terms of the range and depth of activity mix; recognising the extent of competition with Sydney; a very liveable urban environment with a distinctive sense of place, and extensive opportunities for social interaction; and good environmental performance in terms of high usage of public transport. The strengthening ‘capital city’ role of the Melbourne CAD was built into the framework as an important factor in the evaluation of the centre’s economic sustainability.

In contrast, the Geelong CAA, although the most prominent centre in the Geelong region, received a fair rating on most indicators. It has not developed its CAD role to any degree approaching that of Melbourne. Its future economic performance was perceived to be uncertain, although the Geelong Central Activity Area was considered to have a sense of community and a sense of place. And most critically, the linkages between land use and public transport have been poorly developed (despite a new bus port facility) to the point that its environmental sustainability is at a very low level.

The major opportunities for improvement of the Geelong CAA are to:

- facilitate much more intensive retail and commercial development to strengthen its role with respect to suburban and outlying shopping centres;
- implement a comprehensive public transport strategy within the centre.

Other Retail and Commercial Centres

The 19 other retail and commercial centres analysed were of different size, type (role and mixture of uses), form, location, and ownership with different levels of public and non-motorised transport infrastructure. Examples included Dandenong, Parkmore Keysborough, Footscray, Melton, Box Hill, Chadstone, Bayswater, Union Road Ascot Vale, Bell Street Mall West Heidelberg, Maling Road, Waurin Ponds and High Street Belmont.

Most of these centres received only a fair rating on most indicators. Environmental sustainability factors were most critical in this judgment - car usage to the centre was usually high and public transport usage or walking/cycling was usually low. In addition, for several centres, there was not an attractive sense of place nor a buoyant sense of economic sustainability.

Sydney Road Brunswick in Melbourne's inner north received a very good rating. Glenferrie Hawthorn in the inner eastern suburbs followed behind, as did Box Hill.

Box Hill received a good environmental performance in terms of public transport usage and walking and cycling, although it exhibited relatively high car usage. The high proportion of public transport trips is caused in part by the high level of office employment and associated high level of office space in its business mix. However, the centre was considered to have only an average urban environment in terms of liveability and sense of place with somewhat of a dysfunctional urban character in some areas. And, although it had a very good range and depth of activity mix (retail, commercial, educational, health, administrative, and cultural, activities), it was not perceived to have a first class economic performance.

Chadstone performed well in terms of economic and social sustainability indicators, but was fair to poor in environmental sustainability because of its car dominance.

Dandenong was given a lower than expected rating on its environmental sustainability because it has generated lower levels of walking and public transport usage. This is most probably explained by the location of the railway station on the periphery of the centre, and conditions in the centre which do not make it pedestrian-friendly.

In contrast, the much smaller centre of Glenferrie Hawthorn received a good to very good rating on all counts because it not only has a good economic performance for its size of centre, but importantly a distinctive sense of place, a good sense of community, and pedestrian-friendly environment which has encouraged walking to and within centre, as well as relatively high public transport usage.

4.4.4 Summary Evaluation of Individual Centres

From our evaluation, the key variables emerging that influence sustainability performance at the individual centre level question some of the assumptions behind previous centres policies. They do not relate exclusively to the role (ie, regional, sub-regional or neighbourhood centre) or size of the centre, or its perceived position in a 'hierarchy' of centres.

The critical determinants have much more to do with whether the centre and its surrounding area had a particular urban form, mix of uses and transit arrangement that encouraged low car use, high levels of walking, cycling and public transport usage, and encouraged high levels of social interaction.

Centres with all forms of public transport, but particularly a centrally located railway station, and frequent services, performed better. Centres in higher density urban areas, which are well integrated with their surroundings, performed better. Centres with a strong mixture of uses and activities generating a high level of business activity, as well as multi-purpose trips, performed better. Centres with a compact form which are easy to walk around, and which provide safe, pleasant and inviting public spaces allowing opportunities for social interaction, performed better.

The desirable form arising from our evaluation is a mixed-use, pedestrian friendly, transit-oriented centre that has a distinctive sense of place and community and is integrated with surrounding areas.

Specialist centres we have examined such as airports, industrial estates, and, to a lesser extent, business parks, and stand alone tertiary education campuses have difficulty fitting entirely into this desirable form. Whilst they did not achieve a high sustainability rating, these centres are necessary and could achieve better sustainability outcomes with appropriate strategies in place. Measures should be developed to enhance the concentration of activity in these centres and to encourage urban forms that facilitate a reduction in motorised trips to and within them.

Other clusters of activity, such as stand alone superstores and strings of highway retailing, should be curtailed. Future such developments should be subject to a process, similar to the UK PPG6 approach outlined in Chapter 2, where they are directed in the first instance to locate within or on the edge of existing mixed use transit-oriented centres. Only if a suitable site cannot be found here to the satisfaction of the responsible authority, can the developer of such superstores, either individually or in clusters, be allowed to establish in an out-of-centre site. Even in this circumstance, though, the developer must demonstrate a commitment to enhance the sustainability of the development area and associated transit arrangements in this location before development approval is given.

4.5 Evaluation of the Overall Network of Centres

4.5.1 Network Evaluation

This section of the report evaluates the overall network of activity centres in Melbourne and Geelong, drawing on the core objectives of the National Strategy for Ecologically Sustainable Development.

Within this framework, the key underlying principle for the network is the increased clustering of uses at established or planned centres rather than dispersal of activity to new stand-alone locations. The desired metropolitan pattern is:

- a dense network of both major transit oriented centres and neighbourhood centres;
- a strong Melbourne CAD.

Desired characteristics of the network are:

- diversity in the type and scale of centres;
- a range of viable and vibrant retail and commercial centres that enhance the economic competitiveness of the network;
- a multitude of compact, attractive and pedestrian-friendly centres with a real sense of place;
- a range of centres capable of creating a better mode split in favour of public transport;
- a myriad of centres in the various regions generating local trips by walking or cycling rather than by car, and reduced car trips overall.

Our evaluation of the network required a level of analysis that was different from the analysis undertaken for the individual centres. The issues of the overall metropolitan urban form (settlement pattern and activity centres) and transport connections, as well as regional variations were more critical at this level.

4.5.2 Conclusions From The Evaluation – Desired Metropolitan Pattern

The results of the evaluation in terms of the desired metropolitan pattern are as follows:

Dense Network of Both Major Mixed Use Transit Oriented Centres and Neighbourhood Centres

The performance of the network of centres in Melbourne and Geelong in providing a dense configuration of both major mixed use transit oriented centres and neighbourhood centres is only fair.

With respect to major mixed use centres, an extensive pattern of existing or potential transit-oriented centres has been set across the metropolitan area. However, most of

these centres are predominantly shopping centres with a limited mixture of other uses. The transit orientation of many of these centres is weak. For example, major centres in middle and outer areas such as Bayswater, Dandenong, Greensborough and Sunshine have rail stations or bus facilities that are located on the periphery of the centre. Many other centres have extensive car parking areas within and around the main shopping centre. This has reduced the transit orientation of these centres as well as the performance of particular parts of the metropolitan transit network.

Many major non-retail centres such as stand alone office parks, tertiary education campuses and hospitals are neither mixed use, nor transit oriented.

In addition to their single use orientation, the density of major transit-oriented centres in the network varies considerably between different parts of Melbourne. The inner areas have a very dense network of mixed use transit-oriented centres. The compactness of urban form and the extent of fixed rail and tram facilities have created a mass of overlapping and diverse centres in these areas. The density of the network decreases as one moves out from the inner areas. This is most pronounced in the western suburbs, and the outer eastern and south-eastern regions of Melbourne.

In the western suburbs, the settlement pattern, lack of tram lines, limited number of rail lines, and extent of industrial areas have created a sparse configuration of major mixed use transit-oriented centres. The growth of Highpoint, the more recent development of enclosed shopping complexes in Brimbank, Melton and Wyndham, and the establishment of stand-alone tertiary educational institutions and hospitals have weakened the network here.

In the outer eastern and south-eastern suburbs, the low density subdivision patterns, the location of more centres along major roads rather than next to rail stations, and limited connecting bus services have created a scattered network of mixed use transit-oriented centres. The strength of the network in these areas has been further undermined by the proliferation of stand alone superstores, clusters of big box retailing along major highways, tertiary education campuses and major hospitals at locations removed from mixed use or transit-oriented centres.

What is needed to improve the density of major mixed use transit oriented centres is not only stronger controls over these private and public stand alone uses so that they are channelled into transit oriented centres, but also facilitation of a greater mixture of uses – particularly office development – in established retail centres to encourage multi-purpose, single destination trips and reduction of trips overall. There also is a need for limits on, and redesign of, car parking areas in shopping centres combined with improved public transport interchanges to enhance the transit orientation of major centres.

With respect to neighbourhood centres, there is dense network of these centres in Melbourne's inner areas and, in the northern, eastern and southern regions as far out as about 15 kilometres from the CAD. The density of the network decreases considerably beyond that point. In inner and middle areas, there is a strong correlation between the

density of the network and type and extent of public transport facilities. The network is more dense where there is a more intense configuration of railway lines and tram routes.

The network is weakest in the outer metropolitan areas of Casey, Wyndham and Melton as well as the outer suburbs of Geelong. The removal of, or low priority given to, neighbourhood centres in municipal plans, increased emphasis on larger retail centres, and changes in the business mix of some neighbourhood centres including the closure of ‘anchor’ businesses such as supermarkets and banks have contributed to a weakening of the network in these areas.

What is needed to improve the network of neighbourhood centres in middle and outer areas of Melbourne and Geelong is a stronger commitment by developers, property owners and local government to incorporate this scale of centre in the municipal structure plans and new subdivision designs.

Strong Melbourne CAD

The performance of the network in providing a strong Melbourne CAD is very good.

The CAD has continued to be the main focus for higher order business, entertainment, cultural and tourism facilities. It still has the largest retail area of all centres in the metropolitan area. Its office-based activities are increasingly focused on national and international markets rather than just the greater Melbourne region or Victoria. Employment growth in the ‘new economy’ has a particularly strong base in the CAD. Its capital city role has been strengthened, enhancing its competitiveness. No other centre in the metropolitan area has the size, or provides the range and depth of infrastructure and services, or is as accessible by public transport.

The CAD has maintained this predominant focus within the metropolitan network because of its quality physical environment; extensive public transport, sports and cultural infrastructure; critical mass of higher order shopping facilities; concentration of national companies and relatively inexpensive office rentals; and availability of land and associated infrastructure at the nearby Southbank and Docklands areas for major new development. The growing importance of the broader central city region also has strengthened the position of the CAD.

There continue to be strong synergies between the CAD and other parts of the metropolitan area. The radial tram networks in the inner areas and the train networks extending to outlying and growth areas have developed those linkages and enhanced the transit sustainability of the metropolitan system. Maintaining the unique and predominant role of the CAD has been critical to the overall network.

Despite its established strengths, there continue to be pressures on the CAD. The growth in suburban retail floorspace, particularly at major “regional” shopping centres, has challenged its retail role and reduced its share of metropolitan retail turnover. The suburbanisation of back-office functions; the establishment of new corporate head offices

in traditional centres, along major suburban roads or in suburban office parks; and the development of suburban technology-oriented precincts near suburban university campuses has had some impact on the strength of office activity in the CAD.

To a large extent, the CAD has met these challenges. The continuous development of new retail and entertainment niches has sustained a reasonably strong retailing role in the CAD. The enhancement of Melbourne's capital city role has had positive spin-off effects for the maintenance of the CAD as the major employment focus in the metropolitan area. Associated with that, the CAD has maintained its position as the predominant location for national and international companies.

The Melbourne CAD, therefore, plays a critical role in shaping the form and scale of activity centres in the metropolitan network. For these reasons, the Melbourne CAD needs to continue to be targeted for special attention, particularly to sustain its competitiveness within the national economy.

4.5.3 Conclusions From The Evaluation – Desired Characteristics of the Network

The results of the evaluation in terms of the desired characteristics of the network are as follows:

Diversity in the Type and Scale of Centres Throughout the Network

The performance of the network in providing diversity in the type and scale of activity centres throughout Melbourne and Geelong is good, although there are weaknesses.

In a general sense, there is a good spread of retail, commercial, and industrial centres as well as tertiary education institutions and hospitals across the metropolitan area.

Most centres in the network are retail-oriented, so it is important to assess the distribution of different forms and types of shopping centres across the network. The very large "regional" shopping centres (with floorspace greater than 50,000 square metres) in Melbourne and Geelong are spread throughout the network in a manner consistent with population levels in the different regional areas. There are 14 in Melbourne's eastern and south-eastern suburbs; four in the northern suburbs; and three in the western suburbs. Each part of Melbourne and Geelong has reasonably good access to "regional" centres with different types of shops (department stores, discount department stores, speciality shops, superstores, small convenience shops) as well as centres having different physical forms (eg, traditional strip or nodal centres, enclosed shopping complexes).

Similarly, there is a reasonably good spread of the 150 or so "sub regional" shopping centres (with floorspace greater than 10,000 square metres) across Melbourne and Geelong. There are variations in the form of these larger centres among the different regional areas. In the central and inner east and southern regions, they are largely

traditional open air centres organised in a strip or nodal format. By comparison, in the western region and outer suburban areas of Geelong, the balance favours enclosed shopping complexes. Melbourne's middle and outer eastern and southern areas have a balanced mixture of traditional centres, enclosed complexes, and hybrid arrangements of both. In parts of the network where there is not a good distribution of particular types of centres - particularly traditional centres, greater efforts need to be taken to enhance the retail business mix, business performance and centre management of the relatively few traditional centres that do exist.

With respect to neighbourhood shopping centres consisting generally of a supermarket and/or a small group of convenience-oriented shops, there is a dense configuration of these centres in the northern, eastern and southern areas of Melbourne within about 15 kilometres of the CAD. By comparison, the inner western area has a much sparser arrangement. Further out, there are major gaps in the availability of neighbourhood shopping centres particularly in newer residential suburbs in municipalities such as Casey, Wyndham and Melton, and in areas dominated by larger enclosed shopping complexes. To overcome this deficiency in the network, there is a need for a stronger pro-active approach by retail developers, property owners and local government to provide and strengthen neighbourhood retail centres as an integral part of the development pattern of middle and outer areas of Melbourne and Geelong.

In contrast to shopping centres, the overall metropolitan network has a limited number of office-oriented activity centres. This is primarily because of the very high concentration of office activity in the Melbourne Central City. Most suburban office development is in the form of small shopfront offices in traditional retail-oriented centres where the office component constitutes no more than 30% of the total floorspace of the centre. There are few medium sized or large corporate offices in traditional centres. There are very few offices uses within or adjacent to enclosed shopping complexes.

Box Hill, Prahran/South Yarra, Kew Junction, Camberwell Junction, Dandenong, Cheltenham, Frankston and Moonee Ponds are the only traditional centres outside the Melbourne's central region which provide a relatively high proportion of office floorspace. All of these centres except Moonee Ponds are in Melbourne's east and south east. Of all the centres, Box Hill is the only traditional suburban centre in the metropolitan area with a higher office to retail floorspace ratio.

In the last 15 years, the growth of office parks such as Tally Ho and the Monash Technology Precinct has been a new development in the metropolitan network. These parks are predominantly single purpose activity centres, although some have a few leisure amenities. Furthermore, they are concentrated in only a few parts of suburban Melbourne – particularly the middle and outer eastern and south-eastern suburbs.

There is a lack, therefore, of a significant level of office activity compared to retailing throughout most of the network of Melbourne's suburban centres. This has reduced the range of jobs and services provided in these centres. It also has diminished the sustainability benefits that would accrue from having more mixed use business-oriented

centres. To deal with this problem, there is a need for tighter controls on new stand-alone office parks as well as on the conversion of industrial estates into office parks. Many of the offices in these parks could be located effectively within traditional centres. A further action is take a more strategic and targeted approach, through centre structure plans and development facilitation, to attract new types and higher densities of office development in traditional centres.

There is a reasonably good distribution of industrial estates in the western, northern, outer eastern and south-eastern parts of Melbourne and in outer areas of Geelong. However, as discussed earlier, most estates do not achieve high sustainability outcomes. To improve the network requires improvements in the performance of individual estates. This involves encouraging further clustering of appropriate new industries to enhance the business mix; achieving higher development standards; promoting more energy-efficient building designs; and providing better bus connections to achieve greater use of modes of transport other than the car.

There is a reasonably good spread of tertiary education institutions and hospitals across Melbourne and Geelong. However, there are significant differences in the way these facilities are integrated with other activity centres.

In the central area of Melbourne and to a much lesser extent in Geelong, there is a dense concentration of tertiary education institutions and hospitals. Almost all of these facilities are integrated with larger retail and commercial activity centres and are close to public transport facilities.

In the inner and middle suburban areas of Melbourne, there is a more limited and dispersed arrangement, as well as an even split between those facilities that are integrated with or on the edge of other centres, and those that are quite removed. Box Hill Hospital, the Austin and Repatriation Hospital at Heidelberg, the VUT campus at Footscray, Swinburne University at Glenferrie/Hawthorn and Windsor, and Holmesglen TAFE are examples of facilities that are reasonably integrated with retail and commercial centres. Footscray Williamstown, Caulfield General, Sandringham, and Dandenong Hospitals, as well as LaTrobe University, Kangan Batman campus at Coburg, Monash University at Clayton, Deakin University campuses at Burwood and Clayton, and Chisholm Institute of TAFE's campuses at Moorabbin, Dandenong, and Bonbeach are examples of single purpose, stand-alone activity centres.

In the outer areas of Melbourne, there is not only a more limited provision of tertiary education and hospital facilities commensurate with the population base, but an increased dispersal of these facilities away from transit-oriented retail and commercial centres. All the major hospitals – Sunshine, Mercy (Werribee), Northern (Epping), Maroondah, Angliss, Knox, Frankston, Mornington Peninsula (Rosebud West) - are situated on stand-alone sites which are car-oriented. Eighty-five per cent of the tertiary education campuses in Melbourne's outer regions are isolated from major retail and commercial centres as well as public transport nodes. The only campuses that are integrated to any

extent with mixed use transit oriented centres are the Chisholm TAFE campus at Frankston, the Swinburne campus at Healesville, and the VUT campus at Sunshine.

Improvements in the network of tertiary education campuses, hospitals and other major community facilities require that this type of activity centre be directed to locate within or adjacent to established or approved mixed use transit oriented centres.

Range of Viable and Vibrant Retail and Commercial Centres Throughout the Network

The performance of the network in providing a range of viable and vibrant retail and commercial centres is good, although there are pressure points.

The extent of viable retail and commercial centres in metropolitan Melbourne and Geelong is affected by both characteristics within individual centres, as well as conditions within the overall network of centres.

With respect to the characteristics within individual centres, the viability of the network is determined to some extent by the business mix, vacancy rate, centre management, marketing, and overall business performance of centres. Individual centres throughout the network go through cycles of expansion and decline. Most centres in Melbourne and Geelong have re-positioned themselves over time in the face of changing socio-economic circumstances within their catchment areas. Some have undergone considerable extensions; others have developed a more specialist retailing niche; others have moved towards a lifestyle and entertainment focus; while others still have changed from a traditional retail focus to more of an office centre providing business services. The results of this evolution generally have been that individual centres have become more competitive and able to survive.

In the process, very few centres have died. Unlike in other parts of the world where individual centres are abandoned when they are in decline, this has not happened in Melbourne. Rather, there has been a determination among key players – owners, business operators and local government - to keep working on the business mix, management and marketing of centres so that they change and improve. The past track record of these players in facilitating a continuous evolution in the form and role of individual centres provides a strong indication that this will continue in future. These forces within individual centres have had, and will continue to have, a positive effect on the viability of the whole network.

There are considerable variations in the viability and vibrancy of different parts of the network in Melbourne and Geelong. We have not undertaken a thorough analysis of these differences, and how they affect the network as a whole. Rather, we offer some general observations about the overall network. Firstly, Melbourne has a very large number of established retail and commercial centres for its population base. Over the years, there has been considerable improvement in the range of goods and services provided in centres throughout the network. New forms of retailing – concept stores,

factory outlet stores, entertainment-based shopping - have been established at many centres throughout the network.

The viability and vibrancy of the network are affected by the degree of competitiveness and complementarity among retail centres in different areas. Where there is a stronger balance between, for example, enclosed shopping complexes and traditional strip centres, people are provided with a better range of shopping experiences. In the western suburbs, the growth of enclosed shopping centres within a sparse network of both large and small traditional strip centres has had a greater adverse effect on the viability of traditional centres in the network than in other regions of Melbourne where there is a more equal balance.

The main pressure point on the viability of the network of centres is the extent of retail and commercial development outside of centres – particularly in the form of large stand alone developments (eg, corporate offices), strings of superstores along main roads, and clusters of highway convenience retailing. These developments are continuing to occur particularly in the middle and outer areas of Melbourne and Geelong, and are affecting the performance of established centres in the network.

What is needed to improve the network is to discourage these forms of development completely. Corporate offices, superstores, and other forms of “big box” retailing encouraged to locate within or adjacent to major suburban centres.

Multitude of Compact, Attractive, Safe and Pedestrian-Friendly Centres with a Real Sense of Place

The performance of the network in providing a wide range of centres which have a high degree of attractiveness and liveability in terms of safety, convenience, comfort and aesthetics is fair.

Generally speaking, many of the larger centres do not have a distinctive sense of place. The built form is poorly presented. New development has occurred in an ad hoc manner and is not integrated fully with the rest of the centre. Rather than achieve a compact and legible urban form, these centres have grown in a haphazard and elongated manner with few community focal points and few pedestrian connections between different parts of the centre. The internal spaces of some of the larger shopping complexes have dealt more effectively with these issues, although there is a concern about the “sameness” of many of these centres. Most of the larger centres are car-dominated. A few of the larger centres having a high degree of liveability include Sydney Road Brunswick, Brunswick Street Fitzroy, Niddrie, Chapel Street, High Street Armadale, Church Street Brighton, Bentleigh, Camberwell Junction, Chadstone, Glen Waverley, Mornington, and Frankston.

Medium sized and neighbourhood centres in the network often perform better because their size enables them to create more of an attractive and workable “urban village”. A few examples of well performing centres on this scale include Acland Street Fitzroy,

Templestowe Village, Montmorency, Mt Waverley, Tunstall Square East Doncaster, and Maling Road Canterbury.

Improvements in the network depend on improvements in individual centres. In each centre, there is a need for an overall urban design framework. Attention must be paid to pedestrian connectivity and improvements in the pedestrian environment. Proper streetscape design is needed with emphasis on footpath treatments, lighting, pedestrian crossings, street tree planting, weather protection features, and special features such as public art and gateway treatments. Treatment of the public realm is a priority including integration of street systems, access to as well as availability, definition and safety of open space areas. Car parking needs to be attended to including reduced parking requirements, sharing of facilities, access arrangements, the design of parking structures, and relationships with transit operations. Compatibility between existing and new uses, transitions in scale between new development and the existing fabric, impacts on the existing physical character of the surrounding area also need to be considered.

Range of Centres Capable of Creating a Better Mode Split In Favour of Public Transport

The performance of the Melbourne and Geelong network in providing a range of activity centres capable of creating a better mode split in favour of public transport is poor.

Only a small handful of activity centres in Melbourne has a proportion of public transport trips made to them that is higher than the Melbourne average of 5%. These centres are generally large retail and commercial centres such as Footscray, Chapel Street Prahran, Brunswick Street Fitzroy, Fitzroy Street St Kilda, Camberwell Junction and Sydney Road Brunswick that are within about 10 kilometres of the Melbourne CAD. For Box Hill, which is outside this radius, the high proportion of public transport trips also can be explained by the high level of office activity in its business mix and the tertiary education facilities.

In addition to being large mixed use centres, the top three centres outside the CAD - Footscray, Box Hill and Sunshine - have significant modal interchanges. The remaining centres have not only a mixture of uses, but also dense settlement patterns and transit facilities which are at a focal point within the centre – either a tram line along the length of the centre or a rail with tram and/or bus interchange in the middle of the centre.

Many mixed use centres within the inner areas of the metropolitan network of centres are capable of creating a better mode split in favour of public transport. The situation is not as optimistic for middle and outer areas. What is needed to create a better modal split in favour of public transport in these areas is an increased mixture and density of uses – particularly a much higher proportion of office activity; significant modal interchanges or at least connection of major centres on a metropolitan public transport network with improved range and frequency of services; and increased housing densities within and around centres.

Myriad of Centres in the Various Regions Generating More Local Trips by Walking or Cycling Rather Than By Car and Reduced Car Trips Overall

The performance of the network in providing a range of activity centres in the various regions of Melbourne and Geelong generating more local trips by walking or cycling rather than by car, and reduced car trips overall is poor.

Only a small handful of activity centres in Melbourne has a proportion of walking trips made to them that is higher than the Melbourne average of 16%. Most of these centres are larger strip centres in the inner suburbs such as Fitzroy Street St Kilda, Acland Street St Kilda, Lygon Street Brunswick, and Sydney Road Brunswick where the density of urban form and degree of permeability contribute to this result.

Many within the dense network of large and small centres in Melbourne's inner areas have the potential of generating more local trips by walking or cycling and thereby reduce car trips overall. The situation is not as optimistic in middle and outer areas. What is needed to change this situation so as to create more walking and cycling trips is a redesign of subdivisions around retail and commercial centres, embracing the principles embodied in "new urbanism", to encourage less car usage to centres, more higher density housing within and adjacent to centres, and better pedestrian and cycling connections to and within centres.

4.5.4 Opportunities for Improvement

The performance of the overall network of activity centres can obviously be improved by improving its individual components. The achievements of the high performing centres can be used as a benchmark for the lower performing centres to work towards. Thus, if it is possible for Box Hill to achieve 16% public transport usage, then it should be possible for other centres in the metropolitan area to do likewise. The task is then to identify the key elements which contribute to a centre's higher level of sustainability and replicate them elsewhere.

The key factors are based around the concept of a mixed use transit-oriented centre and include:

- a mixture of jobs and services in order to enable and encourage multi-purpose trips and thus cut down on time and energy used in travel;
- availability of public transport services, and for largest centres with the highest trip generation, integrated transit services with intermodal interchange facilities;
- a compact and integrated urban form within a centre;
- higher density housing within walking distance of a centre;
- an attractive and functional physical design contributing to a sense of vitality and a sense of place;
- pleasant and safe walkways and public spaces encouraging pedestrian movement and social interaction;
- appropriate/not excessive car parking arrangements.

4.5.5 Improvements in Overall Metropolitan Pattern of Centres

However, it is equally important to make strategic improvements to the overall network. The key factors from our network analysis with respect to the desired overall urban form are:

- creating a dense network of both major transit oriented centres and neighbourhood centres;
- maintaining a strong Melbourne CAD.

Creation of A Dense Network of Major Transit Oriented Centres

With respect to developing a dense network of major transit oriented centres, a key opportunity for improvement would be stronger control of travel-intensive development throughout the metropolitan area so that it does not occur outside of these types of centres. This applies particularly to office complexes generating significant new employment, new retail developments such as clusters of superstores along major roads, and major stand-alone education, health and entertainment complexes.

Another opportunity consists of more stringent regulations to severely limit the number of new office parks or industrial estates. The larger number of smaller firms that are likely to emerge in the “new economy” could be accommodated just as well in established centres rather than in stand-alone office settings.

In addition to these controls, more positive programs or incentives could be provided to achieve greater concentration of activity in existing centres throughout the network. At regional levels, strategies could be developed by the public and private sectors to optimise the role and mix of centres in a particular region to enhance the competitive strengths of each centre while reducing overall trips by car. A series of sub centres in each region could be identified to which particular commercial development and community infrastructure would be encouraged or directed. An appropriate public transport system could be developed to focus on and connect these centres to one another.

A targeted focus also could be applied at a critical centre(s) along Melbourne’s radial fixed rail networks so as to enhance the sustainability of outlying and growth areas as well as the Melbourne CAD. This could be done through priority to a second CAD or a small number of major mixed use transit oriented centres in Melbourne’s middle or outer areas.

The first option is not preferred. Melbourne, unlike other cities with twin CBD’s, has evolved around a very large and dominant CAD with a plurality of middle-order centres at key points along its radial rail lines and at key points along major roads. This has been integral to the strength of the metropolitan network. In this context, it would be very difficult to establish one of the existing suburban centres, or create a new centre, as the second CAD.

The preferable alternative would be to target a small number of existing or potential transit oriented centres to act as suburban demonstration projects, creating the conditions for a major mode shift to non-motorised travel. This approach could have important spin-off benefits to other nearby centres in the network.

Supportive transport policies are essential to create this dense network of transit oriented centres. These policies must focus on provision of high-quality, integrated public transport services connecting the centres to their regions and the central areas of Melbourne and Geelong. There also is a need for limits on, and redesign of, car parking areas in throughout the whole network of shopping centres to enhance the transit orientation of major centres.

Creation of A Dense Network of Neighbourhood Centres

The network could be improved with an increased range of viable neighbourhood centres particularly in outer areas, so as to encourage shorter motorised trips or more trips on foot or bicycle.

The opportunities to achieve this relate partly to the redesign of existing and new subdivisions. They also could involve revitalisation of existing neighbourhood centres in decline through structure plans or business plans, so that they are able to effectively provide local goods and services in the face of competition from expanding major shopping centres that serve a wider catchment.

Maintenance of a Strong CAD

The Melbourne CAD needs to continue to be targeted for special attention, particularly to sustain its competitiveness within the national economy.

4.5.6 Improvements in Key Characteristics of the Network

From our network analysis, key characteristics of the network also need to be improved. These relate to:

- establishing greater diversity in the type and scale of centres throughout the network;
- creating a range of viable and vibrant retail and commercial centres that enhance the economic competitiveness of the network;
- developing a multitude of compact, attractive and pedestrian-friendly centres with a real sense of place;
- providing a range of centres capable of creating a better mode split in favour of public transport;
- establishing a myriad of centres in the various regions generating local trips by walking or cycling rather than by car, and reduced car trips overall.

The key opportunities for improvement to these characteristics are:

- tighter controls on new stand-alone office parks as well as on the conversion of industrial estates into office parks;
- a more strategic and targeted approach, through centre structure plans and development facilitation, to attract new types and higher densities of office development in traditional centres;
- location of tertiary education campuses, hospitals and other major community facilities within or adjacent to established or approved mixed use transit oriented centres;
- significant modal interchanges, or at least connection of, major centres on a metropolitan public transport network with improved range and frequency of services;
- a redesign of settlements or new subdivisions around retail and commercial centres, embracing the principles embodied in “new urbanism”, to encourage less car usage to centres, more higher density housing within and adjacent to centres, and better pedestrian and cycling connections to and within centres.

4.6 Conclusions

Our evaluation of the 26 different types of centres in Melbourne and Geelong, as well as the overall metropolitan network, has provided new insights into the key variables influencing sustainability. Our conclusions are that these variables do not relate as much as previously thought on maintaining a hierarchy based on the role or size of centres. The critical determinants have much more to do with whether the centre and its surrounding area have a particular urban form, mix of uses and transit arrangement that encourages low car use, high levels of walking, cycling and public transport usage, and encourages high levels of social interaction.

The optimum centre for achieving sustainability outcomes is a mixed-use transit-oriented centre whether it operates at a large or small scale. How to develop and sustain this type of centre in different parts of the metropolitan area is the key issue, especially given market and consumer trends.

Specialist centres such as airports, industrial estates, and, to a lesser extent, business parks, and stand alone tertiary education campuses have difficulty fitting entirely into this desirable form. However, these centres could achieve better sustainability outcomes with appropriate strategies in place. Measures should be developed to enhance the concentration of activity in these centres and to encourage urban forms that facilitate a reduction in motorised trips to and within them.

Other centres of activity, such as stand alone superstores and strings of highway retailing, should be curtailed. Future such developments should be subject to a process, similar to the UK PPG6 approach outlined in Chapter 2, where they are directed in the first instance

to locate within or on the edge of existing mixed use transit-oriented centres. Only if a suitable site cannot be found here to the satisfaction of the responsible authority, can the developer of such “centres of activity” be allowed to establish in an out-of-centre site. Even in this circumstance, though, the developer must demonstrate a commitment to enhance the sustainability of the development area and associated transit arrangements in this location before development approval is given

This evaluation of the overall network of centres highlights the direction for future policies. The overall aim of such policies should be to develop a vibrant network of mixed use transit-oriented centres with an integrated sense of place and community throughout the metropolitan area.

Strategies to achieve that objective arising from our network evaluation include:

- using a standardised ESD evaluation framework for all proposed changes in existing centres as well as new development proposals, to control the dispersal of major uses outside of centres throughout the metropolitan area as well as improve the condition of existing centres throughout the network so that they move towards achieving better ESD outcomes;
- developing a number of significant mixed use, transit-oriented centres at strategic points in the outer areas of metropolitan Melbourne (including Geelong) along the radial rail network to achieve a significant shift in transport mode, as has already occurred at Box Hill, towards non-motorised transport;
- developing a network of strong neighbourhood centres particularly in middle and outer areas to achieve a stronger sense of community for an aging society;
- maintaining the predominance of the Melbourne CAD within the network;
- facilitating an appropriate level and scale of higher density housing within or adjacent to all activity centres.

These issues are taken up in the next chapter.

Chapter 5 Activity Centre Policy Directions and Implementation Mechanisms

5.1 Introduction

The previous chapters have considered centres policies in Melbourne and other cities, and the current distribution of activity centres in Melbourne and Geelong, from the standpoint of Ecologically Sustainable Development. This chapter examines the policy issues arising from that evaluation, suggests a preferred policy approach and outlines possible implementation measures.

5.2 Policy Issues

The preceding analysis has raised the following key policy questions:

- Should the Government's Metropolitan Strategy focus on clusters of activity? What is special about clusters? What kind of clusters should be the subject of policy?
- Should encouragement be given to further clustering? Should clustering apply to all or specific activities? Should diversity and mixed use be a goal for all clusters?
- Should the clustering policy be expressed in terms of a classification or hierarchical framework of centres?
- If not, what are the key areas of a centres policy that are essential to achieve better sustainability outcomes?
- What kinds of clusters, if any, should receive special attention or targeted effort?
- In what way should Government policy contain activities outside of centres so as to curtail dispersal?
- Should policy facilitate the clustering of particular uses such as higher density housing within or adjacent to centres?
- In what way can policy help to sustain the robust and evolving pattern of centres throughout the metropolitan area?
- How should policy deal with critical performance gaps in the metropolitan network of centres?
- Does policy need to ensure that the Melbourne CAD continues to be the predominant focus in the network of centres?

This section provides a response to those issues.

5.2.1 Approach to Clustering – Centres Policy Versus No Centres Policy

Our analysis concludes that the clustering of activity at points throughout the metropolitan area is essential for the sustainability of Melbourne's urban structure. Clustering provides a stronger basis for economic growth. It creates opportunities for the more efficient distribution of goods and services. It increases the potential for the exchange of ideas and other synergies among businesses with spin-offs for business development. This increases the likelihood of new products and services being developed. It also increases the potential for new job creation. Clustering adds to the competitiveness of the metropolitan and Victorian economy.

Clustering also provides an important focus for communities. It creates increased opportunities for social interaction. It enhances the prospects for creating a 'sense of place' within communities. There is more potential within clusters to co-ordinate public and private development for the wider benefit of the whole public realm.

Clustering also provides greater opportunities for integrating land use and transport with important environmental benefits. The prospects for single destination, multi-purpose trips increase. The opportunities to reduce trips by motorised private transport increase if the clustering of activities occurs at key public transport nodes. This increases the prospects of improved air quality and reduction in greenhouse gas emissions.

With clustering, the potential for those without a car to access jobs and services increases. Access to goods and services becomes more equitable among all sections of the community.

Clustering results in a more efficient use of land for individual activities. There are greater prospects for the shared use of facilities and spaces. Not as much overall car parking is required and less energy is consumed with a clustered urban form.

From our analysis, further clustering should apply to most forms of activity. The key exception highlighted in this review is where there are little prospects of access other than by car. This applies to the increasing number of isolated locations with one or two large stand-alone retail or office developments, or with the strings of unintegrated superstores or highway retailing outlets. This promotes unsustainable travel patterns, marginalises people without cars and demands ongoing investment in road infrastructure and maintenance. Further clustering of activity in these types of dispersed and disconnected situations should be discouraged.

Our analysis suggests that clustering should be encouraged in an intensive way in areas well served by existing transit or with the potential for greatly improved transit. The increased concentration of uses and activities in these situations has been shown to result in enhanced social, economic and environmental benefits, not only in the individual clusters themselves but also for the metropolitan network as a whole.

Some clustering of activity occurs naturally around public transport nodes as a result of new private development, or extension to, or spin-offs from, existing development. However, more significant sustainability outcomes have been shown to occur when increased clustering of a mix of uses is actively encouraged and facilitated. Conversely, the clustering process can be undermined by policies and decision-making processes allowing further dispersal of activity throughout the metropolitan area. These circumstances highlight the need for a centres policy to achieve several ESD objectives relating to the more effective functioning of a metropolitan area.

5.2.2 A Hierarchical or Classification Framework for Centres

In past years, a central tenet of metropolitan policy has been a classification system of centres with a prescribed hierarchy of both activity centres and shopping centres. This has applied particularly to shopping centres where 'regional' shopping centres were the preferred locations for major comparison shopping facilities, including department stores and discount department stores, and sub-regional centres were the preferred locations for a more limited range of comparison shopping facilities. This hierarchical system has provided a sense of certainty and security for retail developers and investors in centres, and a framework on which they could monitor and build on their investments and assets.

From our analysis, this hierarchical system has given preference to the status quo by protecting existing private investment. It has required proponents of new developments to go through an extensive and prolonged review process. It has been argued that this has prevented much speculative development in Melbourne and Geelong, and resulted in a system of fairly robust centres.

However, in terms of the sustainability outcomes required from this review, this is a static policy approach. It implies maintaining a fairly rigid framework of centres in the face of changing economic, social and environmental forces. It does not indicate any aspirations for a better pattern of centres nor improved conditions in centres to meet economic, social and environmental sustainability objectives.

It also has become increasingly difficult to organise the different types of activity centres we have been examining in this review, within one overall classification system without causing a lot of confusion.

We recognise that a classification or hierarchical system can be a useful tool in describing some elements of the system, and maintaining a balance among the commercial interests within it. It also can be helpful in focusing major private development or Government programs to a select number of centres.

However, a classification or hierarchical system has its downfalls when it does not deliver the outcomes expected from the classifications. Our evaluation suggests that this has been the case. As a result, we need to move away from a static centres policy which

concentrates on the labelling of centres to an approach that facilitates performance outcomes in terms of sustainability.

5.2.3 Key Focus of Centres Policy

Working towards ecologically sustainable development (ESD) outcomes has been the driving force behind this review. For activity centres in a metropolitan context, our evaluation suggests that the key ESD concerns are: conserving land; encouraging use of travel modes other than the automobile; making it easier for all people to gain access to employment, goods and services; creating and maintaining attractive, safe and functional community focal points; and providing robust clusters of jobs and services throughout the metropolitan area.

Our analysis indicates that activity centres with a high level of sustainability are those with a critical mixture of uses and transit arrangements that generates a high level of business and other activity, but results in low car use as well as multi-purpose trips. Integration of uses within a compact and attractive urban form so as to facilitate high levels of social interaction, as well as more walking and cycling is also important.

Specialist centres such as airports, industrial estates, and, to a lesser extent, business parks, and stand alone tertiary education campuses have difficulty fitting entirely into this desirable form. However, these centres could achieve better sustainability outcomes with appropriate strategies in place. Measures should be developed to enhance the concentration of activity in these centres and to encourage urban forms that facilitate a reduction in motorised trips to and within them.

Other centres of activity, such as stand alone superstores and strings of highway retailing, should be curtailed.

From our review of international and national ‘best practice’ and our evaluation of Melbourne and Geelong centres, the primary focus of a centres policy should be on mixed-use transit-oriented centres with an integrated sense of place and community. Transit-oriented centres are considered to be those centres that are well connected to their catchment and to the CAD by public transport, or have the potential to be so connected. This is to permit access by local residents, and travel by centre workers to centre locations, without the need to use a car. This means those centres on a fixed rail line or on a tram line within the inner suburbs (about eight kilometres radius from the Melbourne CAD). The emphasis of the policy should be on making these centres better, and creating new transit-oriented centres in outlying and growth areas.

A complementary focus of centres policy should be on maintaining a robust network of neighbourhood centres throughout the metropolitan area. These centres provide important job opportunities, goods and services for local residents reducing the need to travel longer distances elsewhere. They also increase opportunities for non-motorised trips with the potential to enhance access arrangements to and within these centres on foot or by bicycle.

5.2.4 Facilitation of Particular Uses in Centres

Our analysis indicates that there is no set formula to determine the perfect mix of uses in a sustainable centre. Some centres have a broad range of retailing and entertainment facilities that is critical to their sustainability; others rely on a mix of retailing and educational facilities, while others still have a strong commercial and health orientation.

The key is not having a predominantly single purpose centre. Another critical factor is not the particular mix of retail, commercial and other industry sectors (health, education, community services), but having a combination of ingredients. From our analysis, these ingredients are jobs, commercial and community services, higher density housing, accessible transit infrastructure and good service levels, and well-designed public spaces.

The strategic emphasis, at State Government policy level, should not be on the size or make-up of the retailing or office component within centres. These matters should be dealt with within regional strategies or local structure plans. This suggests that the Government's centres policy should not be focused predominantly on directing the form of retailing or commercial development. A more important consideration is making centres better by strengthening the combination of jobs, services, housing, transit arrangements, and public spaces.

If centres with low levels of sustainability are looking to change or expand, a key consideration should be in what ways they are going to modify the mix of uses to achieve higher levels of economic, social and environmental sustainability. Performance standards should be considered to address this. Guidelines to assist centres achieve those standards should be developed.

5.2.5 Targeting Certain Centres for Special Attention

National and international best practice suggests that, for a metropolitan network of centres to move towards better ESD outcomes, it is necessary, but not sufficient by itself, to create and sustain a few significant suburban mixed use transit-oriented centres to work in conjunction with the Melbourne CAD.

In Melbourne's case, our analysis indicates these centres need to be targeted to service the outer areas. The inner and middle areas of metropolitan Melbourne are developing a range of robust transit-oriented activity centres. There still is a lot of work to be done in these centres, but many have a reasonable structural basis on which to build. The major weakness in the metropolitan system is in the outer areas. With the increasing population growth expected in many of these areas, the development of vibrant and efficient transit-oriented centres to service these outer areas and interact with other parts of Melbourne is vital to the achievement of a more sustainable metropolis.

It is necessary to specify these centres. The earlier sections of this report made it clear that a reactive policy based on assessing applications for development approval (as was

advocated in the *Report of the Retail Development Policy Review Panel* in 1996) is insufficient to bring about the desired pattern of transit-oriented centres. Successful centres in best practice cities have only evolved through strong, co-ordinated spatially specific policies.

However, designation need not mean the establishment of an elaborate and inflexible hierarchy of centres derived from central place theory or some other abstract ordering principle. It is necessary to move away from past preoccupations with formulating an orderly land use framework that recognises the status quo in activity centres, to a more active focus on achieving ESD outcomes in future.

Past policies in Melbourne have designated district centres in a fairly 'top-down' fashion, which involved the MMBW making an 'expert' assessment of appropriate locations for development. This approach is unsuited to 21st century Melbourne for a number of reasons. The Bracks Government is committed to planning as a partnership between State government, local government and the community, and the selection of major nodes of development needs to reflect this. There are practical reasons as well - centres policies are more likely to succeed if they have the support of local government and the community. For this reason, we do not propose to nominate preferred centres in this report. The UK PPG6 says the selection of centres should be carried out 'following consultation with business interests and the local community' (1.5), a principle that is equally important in Melbourne.

The process of selection of the designated centres should be driven by selection criteria established from ESD principles. Again, this would need to be finalised through a participatory process, but the broad principles should be clear enough. Appropriate locations are those that are, or have the potential to become, transit-oriented centres. They must not be too close together, lest they run the risk of 'splitting' the demand. Land availability within the centre for future development is very important, as is strong local support from the relevant municipal authority and local community. A strategic reason for designating the centre must be present. For example, each major growth corridor should have such a centre. A centre could be designated if it was the appropriate focus to build up tertiary employment in a region where there was a significant deficiency. Finally, there needs to be a measurable, long-term commitment from stakeholders to centre development and management.

It is considered that a small number of actual or potential transit-oriented centres in Melbourne's outer areas, including Geelong, would be designated through this process for special Government attention and support.

These centres do not need to be alternative or mini CADs. In Melbourne, suburban centres have always had a different range of functions to the CAD, and our analysis suggests that they should continue to do so. In this sense, Melbourne is similar to cities such as Copenhagen, Munich and most British cities. The subsidiary role of suburban centres in Melbourne can be attributed partly to the strength of the CAD, but also Melbourne's corridor-and-wedge growth approach.

Melbourne's major centres in outer areas are intended to serve residents of the radial corridor in which they are located, thus maximising the efficiency of the existing radial public transport system and minimising cross-corridor trips. If these centres grow too large and begin to attract significant amounts of cross-corridor travel, this would compromise environmental sustainability, firstly because most of these trips would likely be by car (unless a very expensive cross-suburban rail system was built) and secondly, because they would add to pressure for development of the green wedges between the corridors.

Unless the fundamental principles behind Melbourne's urban structure are to be abandoned, and sustainability with them, it appears that the 'multiple CADs' model of transit-oriented centres is unlikely to be a suitable choice for Melbourne.

The Melbourne CAD, therefore, plays a critical role in shaping the form and scale of activity centres in the metropolitan network. It has a unique role as an established centre of international significance and as the primary focus for culture, entertainment and tourism, for commercial and corporate activities, for specialised retailing and public administration. This role is important not only within Victoria but Australia as a whole.

The Melbourne CAD is the key transit hub for the metropolitan area. The CAD also has the highest concentration of other physical and social infrastructure in the State and provides the most diverse range of employment opportunities. The vast amounts of public and private wealth invested in the city and its relative accessibility from every part of Melbourne as well as other parts of Australia and the world are key competitive advantages. The capital city role of the Melbourne CAD is very important.

For these reasons, the Melbourne CAD needs to continue to be targeted for special attention, particularly to sustain its competitiveness within the national economy. However, in the case of the CAD, the basis for a sustainable future is well established. A similar basis does not exist in Melbourne's outer suburban areas. To achieve ESD outcomes for the wider metropolitan area, a greater effort needs to be put into centres that are transit-oriented, or have the potential to become much more transit-oriented, in these outer suburban locations.

5.2.6 Sustaining A Robust Network of Centres throughout the Metropolitan Area

The overseas and interstate experience outlined in Chapter 2 highlighted that a robust network of activity centres in a metropolitan area contained a vibrant range of major mixed use transit-oriented centres integrated with smaller neighbourhood centres for convenience shopping and other local activities, based around walking and cycling as important access modes.

A distinctive feature of Melbourne is its enormous number and variety of neighbourhood as well as larger scale centres. In the sample of activity centres examined in Chapter 4,

for example, over 65% were neighbourhood centres. There are, in addition, further such centres that were not included in the sample owing to their very small size.

Many of the neighbourhood activity centres are located in the inner and middle suburban areas. About 50% of these are in transit-oriented locations, but this is less important for small centres, because walking or cycling is anticipated to be the primary sustainable access mode. Proportionally, there are much fewer neighbourhood centres in outer areas, and, as indicated in Chapter 4, there has been much less of a tendency in recent years to establish centres of this scale in outlying growth areas.

Past activity centre policies in Melbourne have tended to ignore neighbourhood centres. They have concentrated on the largest centres - Central Melbourne, district centres, 'regional' and 'sub-regional' shopping centres, and large strip centres, as illustrated in Figure 7 in *Shaping Melbourne's Future* (p 19). However, from a sustainability point of view, active neighbourhood centres are very important in that they provide increased opportunities for journeys to be made to them on foot or bicycle, rather than by car, and for local community focal points to be established. To encourage as many local walking or cycling trips as possible, it is important for as many of these neighbourhood centres as possible to retain a local convenience retailing niche oriented to the sale of basic goods and services such as groceries, fresh meat, fruit and vegetables, newspapers, chemist supplies, banking and postal services.

Sustaining a robust network of centres throughout the metropolitan area clearly relies on strengthening the number and type of neighbourhood centres, particularly in outer areas. The role and relationship of these centres with the larger centres need to be addressed at municipal if not regional levels so that distinctive but complementary niches can be fostered within different centres. This requires a partnership approach among the government, business and community interests involved in centres in various areas.

The sustainability of the metropolitan network also depends on very good transit connections between the various centres, and particularly between the centres and their catchments. This requires a careful examination of bus services to ensure that the route and frequency of services are contributing in the most effective way to centre development.

5.2.7 Control of Activities Outside of Transit-Oriented Centres

Chapter 4 highlighted the pressures from different industry sectors over the last decade to locate various forms of travel-intensive development outside of transit-oriented centres. New office complexes generating significant new employment and new retail developments such as superstores have established in stand-alone sites, as part of strings of unintegrated development along major roads, or in business parks.

Melbourne has many uses that cannot be transformed into transit-oriented centres. Some of these are industry and warehousing that are inherently unsuited to location in these

types of centres ('C-location' uses in the Dutch parlance). There are policy measures to increase the possibility that people working in and visiting such places have increased choices of travel mode covering walking, cycling or using public transport. These primary measures are keeping industrial estates compact and designing pedestrian- and bus- friendly internal layouts (e.g. contiguous street networks; footpaths; lighting).

With respect to business parks, the object of centres policy should be to prevent, as far as possible, such patterns of development arising in future, and to prevent the existing problems being exacerbated.

The policy approach to control ad hoc retail and commercial developments (eg, superstores, strings of peripheral sales outlets, stand-alone office complexes) could build on the sequential approach outlined in the UK Government's Planning Policy Guidance 6 (PPG6).

These guidelines start with the policy position that all new development proposals are to be directed to centres. Local government must take a positive approach, in partnership with the private sector, in identifying suitable sites in centres for major new retail or office proposals in these centres. In the first instance, councils look for a site within a centre, and, then, as a second preference, on the edge of a centre. To achieve the desired outcome, local government takes a pro-active role in assisting with organising the new development site through measures such as land assembly.

Developers wishing to locate in out-of-centre sites must bear the onus of proving that a suitable site within an existing centre cannot be found, after the extensive efforts undertaken by the council. Only if the case is established to the satisfaction of the relevant authority can developments be permitted on freestanding sites.

This approach is a very fair and effective process to steer these particular types of retail and commercial development towards transit-oriented centres. We consider that it should form the basis of a new set of development guidelines for the Melbourne metropolitan area.

5.3 Preferred Policy Approach

At the beginning of this review, we indicated that we would focus more on the desired outcomes of activity centre policy in terms of achieving ESD. Our preferred policy approach therefore relates to sustainability outcomes derived from our evaluation of international and national centres policies, previous State policies, and the characteristics of a wide range of Melbourne and Geelong centres.

From the critical environmental sustainability point of view, the desired outcome is a network of centres which minimise overall transport requirements by achieving more multi-purpose trips to a single destination. They are centres that make maximum use of non-motorised transport so as to limit the depletion of fossil fuels and thereby reduce

greenhouse gas emissions. They are centres that are efficient in terms of land use and infrastructure provision. They are centres that achieve energy efficient building design and layout, and protect the integrity of the natural environment.

From a social sustainability point of view, the desired outcome is a network of centres which have a high degree of attractiveness and liveability in terms of safety, convenience, comfort and aesthetics. They provide a lively community focus with increased opportunities for social interaction. There are increased opportunities to work and obtain services nearer to where people live. There is equality of access for users of centres to a wide range of facilities and services. There is equitable access to meet the needs of those groups such as the young, elderly, disabled and low income earners normally disadvantaged by the lack of access to private transport.

From an economic sustainability point of view, the desired outcome is a network of centres which have an ongoing viability in terms of the goods and services provided. There are enhanced opportunities for business growth and increased employment, as well as business synergies. The centres contribute to the economic competitiveness of the urban system.

With these outcomes in mind, we put forward an action-oriented approach to a centres policy that is designed not just to control future private and public development (as has been a primary emphasis of past policies), but also to facilitate improvements in the entire network of metropolitan centres (rather than just in a few major centres). The following directions are designed to achieve this new policy approach:

- Outline an overall performance evaluation process to assess and recommend improvements to new development applications both within and outside activity centres, in line with desired ESD outcomes;
- Facilitate the further clustering of uses in mixed use transit-oriented as well as neighbourhood centres, so as to create a robust network of these centres having an integrated sense of place and community throughout the metropolitan area;
- Give special attention to a limited number of major transit-oriented centres at strategic points in the outer areas of Melbourne along the radial rail network, to achieve a significant shift in transport mode away from non-motorised transport;
- Develop a network of strong neighbourhood centres in middle and outer areas;
- Maintain the predominance of the Melbourne CAD within the network;
- Outline a development approvals process for all private and public development proposals (particularly major retail and commercial development proposals) so as to curtail the dispersal of uses outside of transit-oriented and neighbourhood centres;
- Develop upgraded transit arrangements geared to activity centres throughout the metropolitan area.

This policy approach provides a sound basis to answering the key questions posed by the Government for this review: what kind of clear framework is necessary to guide decision-making on future private development? What policies and programs are necessary for public and private organisations to improve individual centres, or the network of centres,

to make them more sustainable? What are the priorities for State Government action and investment?

The answers to these questions are outlined in the following discussion of implementation mechanisms necessary for an effective centres policy.

5.4 Implementation Mechanisms

We suggest a comprehensive package of measures to implement our preferred centres policy. This package consists of:

- A specific policy statement for activity centres within the Metropolitan Strategy highlighting the importance of this policy;
- Designation of a small number of mixed use transit-oriented centres in Melbourne's outer areas for special attention;
- Measures to strengthen neighbourhood centres particularly in middle and outer areas;
- Measures to maintain the predominant role of the Melbourne CAD within the metropolitan network;
- Revisions to the State Planning Policy Framework (SPPF);
- Revisions to the Retail and Office Development Guidelines;
- Guidelines for the revitalisation of activity centres;
- Supportive transport policies;
- A new Government Program geared to improving mixed use transit-oriented centres (TOC Program);
- Measures to enhance corporate government commitment and partnerships;
- Regular monitoring and evaluation.

Details are outlined in the following sections.

5.4.1 Specific Policy Statement for Activity Centres as Part of the Metropolitan Strategy

We recommend, in the Metropolitan Strategy, a specific section that summarises some of the key parts of this report dealing with the need for a centres policy, the desired form of centres to achieve sustainability outcomes, and the critical directions to be taken by Government.

It is recommended that this policy statement not be couched in rhetoric or be viewed primarily as a public relations exercise. This has been a problem with previous Government policy documents such as *Living Suburbs*.

Similarly, the emphasis should not be on trying to describe or categorise all the different types of activities centres, or to spell out retail, office, research and development precinct,

and community service development policies as was the case in the Government's *Metropolitan Activity Centres Policy Statement* of April 1989. This diffuses and confuses the focus. It tends to provide a very flexible policy position on which to justify various approaches to development both in centres and in out-of-centre locations. This flexibility reduces the intensity of effort to achieve sustainability outcomes in critical areas such as public transport delivery.

The centres policy statement should provide a clear indication of the outcomes the Government is aiming to achieve in its activity centres policy. There then should be an outline of the policy directions to be taken by the Government to achieve those outcomes. The expression of our preferred policy approach in 5.3 could form the basis of this kind of statement.

This should be accompanied by an outline of specific Government programs and processes to advance the policy further. These are discussed in subsequent sections of this report.

5.4.2 Designation of A Small Number of Mixed Use Transit-Oriented Centres in Melbourne's Outer Areas for Special Attention

Based on our analysis of measures to improve the metropolitan network of centres, we recommend the targeting and designation of a small number of actual or potential transit-oriented centres in Melbourne's outer areas for special Government attention and support. The aim of this approach is to achieve a significant shift in transport mode towards non-motorised modes of transport at key points in these areas that could have spin-off transit-oriented benefits for other nearby centres in the network.

Box Hill, as a key interchange point on the Ringwood and Belgrave rail lines, already is performing this role in the middle suburbs in Melbourne's east. The centres to be targeted in outer areas should similarly be at existing or future key interchange points on the radial rail network to provide the best change for a transport mode shift.

We do not propose to select these centres as part of this project. This is too difficult and important a task to be completed in the short time frame of this project and with the limited consultation that has been undertaken. It would be more appropriate for this to be done as part of a proper and serious process involving all key stakeholders.

We suggest the following ESD-oriented criteria (as they relate to a particular centre) could be used in determining which centres are selected:

- good provision and high usage of public transport services, and potential for further improvements;
- a significant mass of activities which generate high usage of the centre;

- an ability to meet the retail, commercial, and community needs of a catchment covering several local government areas including the growth corridor in which the centre is situated;
- provision of a significant amount of higher density housing within or immediately adjacent to the centre, and a commitment to provide more;
- a vibrant, attractive and pedestrian-friendly centre with a distinctive sense of place that serves as a wider community focal point;
- a demonstrated capacity to provide for additional and future needs, a measurable, long-term commitment to centre development and management.

The process of selecting the centres should be part of the discussion and consultation program leading up to the finalisation of the Metropolitan Strategy. The designation of the key centres in Melbourne's outer areas should occur at the time of the Government's adoption of the Strategy.

5.4.3 Strengthening of Neighbourhood Centres Particularly in Middle and Outer Areas

Our recommended policy approach has highlighted the importance of neighbourhood centres throughout the metropolitan area for convenience shopping and other local activities, and for encouraging trips on foot and by bicycle. Fewer of these types of centres exist or are planned in the middle and outer areas of Melbourne compared with the very dense network of such places in the inner suburbs. To enhance the sustainability of the whole network, we recommend that this situation be addressed by strengthening existing neighbourhood centres in outer areas, and planning new ones as part of the design or redesign of new communities.

The Government should indicate that this a priority. It should demonstrate its commitment to encouraging the improvement of the wide range and number of these important centres with a funded Neighbourhood Centres Improvement Program (requiring matching funding from local government or centre business associations), building on the Government's experience with Mainstreet and StreetLife programs. This type of implementation measure is developed further in 5.4.6.

As a basis for the implementation program, a structure plan or business plan should be prepared for each reasonably-sized existing or proposed neighbourhood centre in a municipality. Matters to be covered in the plan are addressed in 5.4.5 (Guidelines for the Revitalisation of Centres). Projects to enhance the sustainability of a particular centre would flow from the plan.

An important aspect of the implementation process should be the establishment, in each centre, of appropriate centre management arrangements involving businesses in the centre, the local Council and relevant community interests. This is critical to properly organise and execute the neighbourhood centre plan, direct the implementation of key priorities, and monitor and evaluate progress. An active centre management organisation

is the most effective way to ensure that a centre moves towards achieving the kind of ESD outcomes identified in this project for these types of centres. The importance of good organisational arrangements to the successful implementation of the centres policy is discussed further in 5.4.8.

5.4.4 Maintenance of the Predominant Role of the Melbourne CAD within the Metropolitan Network

A package of measures should be developed and implemented to facilitate the CAD maintaining its unique and predominant role in the network of activity centres in metropolitan Melbourne. As part of this, the measures also should aim to sustain the competitiveness of the CAD within the national and international economy.

The Capital City Policy should be developed further. Measures to continue to foster the CAD's role as a national and international hub for cultural, entertainment, recreational, tourism and business activities should be developed, in line with the policy direction in Clause 17.01-3 of the State Planning Policy Framework. The importance of the CAD in the 'new economy' should be strengthened.

In terms of the transit sustainability of the metropolitan area, the CAD's role at the centre of that network must continue to be improved so as to provide benefits to all parts of the radial train, tram and bus systems.

As indicated earlier in this report, the basis of a sustainable future for the CAD within the network of metropolitan activity centres is well established. A similar basis does not exist in Melbourne's outer suburban areas. The emphasis on the implementation measures suggested for the CAD, therefore, should not undermine the even more critical measures that need to be put into transit-oriented centres or centres that have the potential to become much more transit-oriented, in outer suburban areas.

5.4.5 Revisions to the State Planning Policy Framework (SPPF)

Revisions to provisions of the State Planning Policy Framework are necessary, as these provide an important statutory context for spatial planning and decision making by planning and responsible authorities. The current policy clauses place strong emphasis on business growth and the general planning of activity centres, rather than the achievement of ESD outcomes.

Clause 17.01-1 currently deals with the objectives of activity centres policy. The emphasis of that clause, which merely encourages concentration of various major uses into activity centres, should be substantially changed. The clause should outline the key objectives or directions of our preferred policy approach:

- further clustering of uses in mixed use transit-oriented as well as neighbourhood centres;

- creation of a robust network of these centres having an integrated sense of place and community throughout the metropolitan area;
- special attention to a limited number of major transit-oriented centres at strategic points in the outer areas of Melbourne along the radial rail network;
- strong neighbourhood centres in middle and outer areas;
- maintenance of the predominant role of the Melbourne CAD within the network;
- a development approvals process for private retail and commercial development proposals so as to curtail the dispersal of major uses outside of transit-oriented and neighbourhood centres;
- upgraded transit arrangements geared to activity centres throughout the metropolitan area.

Clause 17.01-2 currently outlines a scenario for individual centres which encourages a general mix of land uses, good accessibility by all modes of transport (particularly public transport), ease of pedestrian movement, co-location and sharing of facilities, appropriate child care facilities, minimisation of impacts on surrounding areas, and attractive environments.

This clause should be revised to focus more on the desired outcomes for individual centres we have highlighted in this report to achieve greater sustainability:

- an optimum mixture of uses to achieve maximum use of non-motorised transport and more multi-purpose trips to a single destination;
- greater efficiency in land use and infrastructure provision;
- energy efficient building design and layout;
- better access for walking and cycling, as well as to meet the needs of those groups such as the young, elderly, disabled and low income earners;
- a high degree of attractiveness and liveability in terms of safety, convenience, comfort and aesthetics;
- a lively community focus with increased opportunities for social interaction;
- increased opportunities to work and obtain services nearer to where people live;
- equality of access for users of centres to a wide range of facilities and services;
- ongoing viability in terms of the goods and services provided;
- enhanced opportunities for business growth and increased employment, as well as business synergies;
- more higher density housing within or adjacent to the centre.

Reference needs to be made to the value of structure plans and urban design frameworks for centres to guide development and redevelopment over time.

Clause 17.01-3, which provides “geographic strategies” for activity centres, currently focuses on building up the capital city role of the City of Melbourne, and requires that the location of new activity centres in the metropolitan area should be consistent with the objectives of *Transporting Melbourne* produced in 1996. This latter emphasis needs to be totally changed.

Transporting Melbourne encourages the concept of the “metropolitan orbital corridor”, where transport terminals, hotel and recreational developments, residential development, office park development, and high-technology industry were encouraged in American-style 'edge city' activity centres. This concept encourages car travel, and discourages walking, cycling and public transport use. This is the opposite of the kind of outcome we want to achieve from our preferred policy approach.

Section 17.02 of the SPPF deals with the encouragement of business development, but has some clauses relating to the location of commercial facilities within or on the periphery of existing or planned activity centres. There are clauses in 17.02-2 stating that certain uses (eg, outlets of trade-related goods or services; new convenience shopping facilities; new freestanding commercial developments in new residential areas) can be located outside of centres. These should be deleted and replaced by clauses that reflect our recommended new approach to evaluating all major development applications in terms of their ability to achieve ESD outcomes. That new approach is outlined in 5.4.6 (Revisions to the Retail and Office Development Guidelines).

New policy statements should be added to the sections in the State Planning Policy Framework dealing with housing, transport, education and other community services. These sections should have references to, and be integrated with, the policy directions recommended for activity centres.

5.4.6 A New Set of Development Guidelines in the State Planning Policy Framework

A new set of Development Guidelines should be inserted in the State Planning Policy Framework, as these provide an important statutory basis on which new development proposals are assessed.

The previous guidelines in Clause 17.02-2 related only to retail and office development and were based on a set of principles around the concept of ‘net community benefit’. This approach placed an emphasis on achieving a balance between new, innovative and competitive developments on the one hand, and certainty and consistency for industry, the wider community and activity centre patterns on the other. What the guidelines established was a conservative ‘checks and balances’ mechanism that necessitated rigorous and careful investigation of all new proposals.

It is argued that these guidelines, which basically involved trading environmental sustainability off against other objectives, were the antithesis of ecologically sustainable development.

A new set of guidelines needs to be prepared which deals with all private and public development proposals, both within and outside of centres. These guidelines should

revolve around a performance evaluation process linked to our ESD outcome-oriented policy approach.

The sequential approach to site selection for new development proposals, outlined in the UK Government's Planning Policy Guidance 6 (PPG6), provides a very useful decision-making model. The policy document is outlined in Working Paper 7.

The guideline combines a pro-active approach by local government with a regulatory framework. This PPG6 approach should be modified to ensure that not only more development is directed to transit-oriented centres, but also that the form of development and associated transport arrangements within the centres work towards achieving better ESD outcomes.

The guidelines should apply to all private and public development, not just retail and commercial development. The basis of the guidelines could be expressed as follows:

8. All new development proposals are to be directed to existing or planned mixed use transit-oriented and neighbourhood centres, and the form of development and associated transport arrangements within the centres must be designed towards achieving better ESD outcomes. The emphasis that should be taken in different types of centres is outlined in further detail in Section 5.5.
9. Local government is encouraged to take a positive approach, in partnership with the private sector, in identifying and organising suitable sites for major new development in these centres.
10. In the first instance, the preferred site for the new development is within the centre. If a suitable site is not available here, then a second preference on the edge of the centre can be exercised.
11. When a suitable site is located within or on the edge of the centre, the developer must put forward a development application demonstrating how the proposal will enhance the sustainability of the whole centre, in line with ESD-oriented criteria incorporated into the State Planning Policy Framework.
12. Developers wishing to locate in sites outside of mixed use transit oriented and neighbourhood centres must bear the onus of proving that a suitable site within an existing centre cannot be found.
13. Only if the case is established to the satisfaction of the responsible authority can developments be permitted on these sites.
14. Developers of an out-of-centre site must bear the costs of enhancing the sustainability of the development area and associated transit arrangements in this location.

The practical outcomes of these guidelines could be:

- most peripheral sales (big box retailing) and factory outlets would be located in or on the periphery of transit-oriented centres;
- strings of unintegrated retail or office development along major roads and highways removed from centres would be curtailed;

- no retailing proposals would be permitted outside of centres, simply because they were ‘innovative uses’;
- office development would be located in transit-oriented centres.

This would substantially improve the sustainability of the pattern of metropolitan development.

5.4.7 Preparation of Guidelines for the Revitalisation of Activity Centres

We recommend that the Government produce a comprehensive set of guidelines to assist local government, the development industry and community interests with the revitalisation of different types of centres towards more mixed use transit-oriented centres with a better sense of place and community. The guidelines would be structured so that they could be applied to existing and planned mixed use centres, shopping complexes, business parks, and neighbourhood centres. All local governments should be required to use the guidelines.

The guidelines could be considered as a checklist of issues that need to be worked through to make particular centres more livable, accessible, energy-efficient, vibrant, pedestrian-friendly, and transit-oriented. The emphasis would not be on bureaucratic regulations, but more on advisory notes to assist the redevelopment of centres. They could be similar to the matters covered in a structure plan or urban village plan, but with a stronger emphasis on sustainability.

From the analysis undertaken for this review, the critical issues that should be addressed in the guidelines for individual centres are:

- the desired mix and location of activities;
- the density and form of development;
- the balance between employment-related uses and residential uses;
- the mix of housing types;
- existing and future transit arrangements;
- the overall urban design framework including the pedestrian and vehicular circulation system, open space system, distribution of uses over the centre, overall height and massing of buildings, the relationship between buildings and streets, relationships between existing and proposed buildings, integration of existing and proposed development with transit service, standards for micro-climate;
- pedestrian connectivity and improvements in the pedestrian environment
- streetscape design including footpath treatments, lighting, pedestrian crossings, street tree planting, weather protection features, and special features such as public art and gateway treatments;
- treatment of the public realm including integration of street systems, access to as well as availability, definition and safety of open space areas;

- car parking including reduced parking requirements for centres, sharing of facilities, access arrangements, the design of parking structures, and relationships with transit operations;
- compatibility between existing and new uses, transitions in scale between new development and the existing fabric, impacts on the existing physical character of the surrounding area.

Performance standards should be spelled out in the guidelines.

Practical examples also should be provided of how the guidelines could be applied to different types of centres. Examples of centres that are well advanced in achieving the desired outcomes should be highlighted.

A key area in the guidelines would relate to the recommended approach towards higher density housing within or on the edge of centres. This would build on the Government's revised approach to ResCode. Matters that could be addressed include:

- the selection and designation of particular areas within/near centres for higher density housing (particularly next to railway stations), recognising neighbourhood character and heritage constraints in some areas;
- target housing densities in the designated higher density precincts (encouraging densities many times greater than the densities prevailing in other parts of the municipality);
- target housing/employment ratios in the activity centre and immediately adjacent residential area;
- housing form in the higher density precincts– encouragement of a range of types and prices; prohibition of certain housing types – single detached dwellings; dual occupancy;
- minimum site areas;
- improvements to the physical environment of the designated areas;
- waiving of normal open space requirements;
- development incentives.

5.4.8 Supportive Transport Policies

A package of supportive transport policies and actions should be implemented to achieve the desired ESD outcomes for the network of activity centres across the metropolitan area.

Provision of integrated, frequent public transport connections between centres and their regions is a key priority. The outcomes of the Bus Improvement Strategy currently underway in the Department of Infrastructure will be critical in this area. Ensuring that these connections occur over the full range of hours that centres are open – particularly at night to serve users of leisure and entertainment facilities such as cafes, restaurants,

cinemas, and sporting activities – is very important. Immediate improvements could be achieved by adjusting timetables to the real needs of centre users with special emphasis on children, people with disabilities and older people.

Transit access to centres should not only be efficient, but legible and pleasant. Users should have adequate information on a centre's transit facilities.

Centres should be designed to provide easy access and attractive approaches to transit interchanges to promote the use of public transport by all groups in the community. Major benefits would accrue from improving connections between the existing transit services provided to a particular centre.

Demand management policies for car parking in activity centres should be required across the board in metropolitan centres, with car parking requirement ceilings lowered over time as the activity level in the centre increases

Major new transport infrastructure proposals need to be assessed for their capacity to enhance transit-oriented centres along the main radial rail corridors. Facilities that generate long distance, cross-corridor travel should be avoided.

Transport programs geared to centres should be integrated with measures to encourage high-intensity land use, a concentration of different activities, and additional employment around transit nodes.

5.4.9 New Government Program Geared to Improving Mixed Use Transit Oriented Centres (TOC Program)

A major transit-oriented centre development and improvement program (TOC Program) should be organised by the Department of Infrastructure to pull together various existing Government programs and projects in activity centres, and to establish some new initiatives within a co-ordinated effort to create greater impact. The program would provide practical examples of the kind of outcomes the Government wants to achieve in different types of centres through an ESD-oriented centres approach. A dedicated TOC Program would highlight the importance of the Government's approach to activity centres within the Metropolitan Strategy.

A key focus of this Program would be to enhance the attractiveness and liveability of centres in terms of their safety, convenience, comfort and aesthetics. It would foster projects that provide a stronger sense of place in centres which would lead to a more lively community focus with increased opportunities for social interaction.

Another focus would be to improve transit interchanges and the access arrangements to them in key centres. Organisation of demonstration projects for higher density housing in selected parts of centres would be a further emphasis.

The TOC Program should pull together elements of existing Government programs in centres. For example, it should capitalise on the Pride of Place Program to develop urban design frameworks and exciting capital works projects in transit-oriented centres. It should draw from elements of the earlier Urban Villages concept to develop successful examples of centres with more intense concentrations of both commercial development and higher density housing. It should target aspects of the Principal Stations and Transport Interchange Capital Programs, currently under the Minister for Transport.

The TOC Program should be designed to enable the Government to take a more proactive approach to centre development. By clearly indicating the outcomes expected from the program, monitoring results, and encouraging high levels of performance, the Government could provide a direct catalyst for private sector action in key activity centres.

A key element of the Program, therefore, would be to facilitate projects. Part of the Program funds could be considered for land assembly, particularly consolidation to create larger sites, as a catalyst for major new development or redevelopment. The Government through the Program could work in partnership with the private sector and local government to more effectively develop its land holdings in centres. Some Government land could be used as equity in joint venture arrangements.

The TOC Program also should provide a seeding fund for local government initiatives that support the overall thrust of the Government's centres approach. This seeding fund could be used for preparation of structure plans and urban design frameworks for individual centres, new or rejuvenated infrastructure (eg, cultural and entertainment facilities), streetscape improvements, demonstration projects (eg, higher density housing in selected areas), and facilitation of centre management and marketing programs.

This emphasis of the Program would likely encourage local government to develop and implement its own incentives (density bonuses, reduction of fees and charges, rate holidays, special rate schemes) to create wider sustainability outcomes in centres.

5.4.10 Corporate Government Commitment and Partnerships

Successful implementation of our preferred centres policy approach requires active and ongoing support from all arms of Government. Major changes to urban form cannot be expected unless there is consistent application of policy over a lengthy period of time from all the players. Commitment from different Government agencies embraces everything from the provision of transport infrastructure and services, the location of Government offices and services, environmental and social programs, procurement of Commonwealth Government funds, direction and advice to local government, assessment of major development applications to ongoing monitoring and evaluation of changes in activity centres.

For example, the location of Government offices and major community facilities such as the campuses of tertiary education and hospitals is critical to the success of a centres policy. The State Government needs to take a corporate approach to decision-making in this area, and ensure that all new facilities of this kind are established only in transit-oriented centres. The scale and form of each office or education/health facility should complement the role and scale of the centre in which it is to be located.

A major focus on activity centres should be established in the Department of Infrastructure. Interdepartmental committees and working groups also need to be in place to ensure co-ordination in the planning and delivery of programs affecting centre development.

Partnerships and alliances also should be established between the State Government, local government and the private sector. Close co-operation between these players is essential if the challenges associated with creating more sustainable activity centres are to be realised. A recent example at the Ringwood Activity Centre of an alliance between the development industry, local Council, State Government bodies, and community interests gives an indication of the wider range of outcomes possible through these kind of partnerships.

A partnership approach also is critical at the individual activity centre level. Centre managements arrangements have been shown to be a key factor in the success of many centres. An active centre management group with representatives of all interests relating to a centre – businesses, landlords, Council, and the adjacent community - is essential.

5.4.11 Regular Monitoring and Evaluation

Much of the uncertainty and controversy surrounding centres policy could be eliminated with better monitoring and data collection. Information and monitoring also are very important tools for co-ordinating and facilitating public and private development in these centres.

We recommend that the Department of Infrastructure develop a monitoring system for activity centres building on the extensive data collected for this project on a very wide range of centres, and the evaluation framework used to assess the performance of centres in achieving ESD outcomes.

At the individual centre level, a standard format of the key criteria and indicators for more sustainable centres should be refined further and provided to local government for updating every year. With this information, the Department should produce an annual audit of the state of metropolitan activity centres in moving towards achieving better ESD outcomes.

A similar monitoring and evaluation process should occur with respect to the overall network of centres in the metropolitan area, building on the assessment criteria used for this project.

5.5 Focus for Different Types of Activity Centres and Other Uses

The emphasis in our recommended policy directions and implementation measures is to achieve all key sustainability outcomes, as indicated in previous sections of this report. However, the reality of the situation is that there will be greater capacity to achieve certain outcomes rather than others in different types of centres because of their particular urban form and transport arrangements. In neighbourhood centres, for example, there may be limited opportunities to alter the transit arrangements. The focus, therefore, should be more on the land use configuration (including housing), business mix, marketing and centre management, or physical form and pedestrian interactions.

This section of the report highlights the focus or priority that should be placed on the following types of centres or other uses:

- major suburban centres (retail or commercial centres with at least 10,000 square metres of retail floorspace);
- neighbourhood retail and commercial centres;
- office parks;
- industrial estates;
- strings of peripheral sales retailing outlets and office complexes on major roads;
- stand alone superstores;
- major institutions and public facilities.

5.5.1 Major Suburban Centres

While striving to achieve all key sustainability outcomes, the emphasis for major suburban centres should be towards becoming more mixed use public transport oriented centres. The focus for improvement should be on:

- high quality public transport access from throughout the main geographic ‘catchment’ of the centre;
- high quality access by non-motorised forms of transport including pedestrian connectivity and improvements in the pedestrian environment;
- suitable public facilities and amenities for the general community served by the centre;
- reduced car parking requirements and/or restricting the provision of “free” parking, safe and convenient access arrangements, the design of parking structures, and relationships with public transport operations;

- compatibility between existing and new uses, transitions in scale between new development and the existing fabric, impacts on the existing physical character of the surrounding area;
- a scale of economic activity that contributes to and does not prejudice the viability and vitality of the network of centres in the catchment served by the centre;
- maintaining or increasing diversity in the range and mix of uses in the centre and its associated network of centres;
- maintaining or increasing diversity in the type and scale of centres in the network of centres.

Existing major suburban centres that are not on significant interchanges on the regional transport network will be required to improve their performance against the required sustainability outcomes as part of any major changes that may be proposed. Particular emphasis should be given to improving public transport access to and from the centre

New major suburban centres, proposed as new centres or as a result of the planned expansion of a smaller centre) will need to be or be able to be located at nodes on the regional transport network and have suitable transport interchange facilities integrated into the overall development.

5.5.2 Neighbourhood Retail and Commercial Centres

While striving to achieve all key sustainability outcomes, the focus for Neighbourhood Retail and Commercial Centres should be on:

- providing suitable public facilities and amenities for the general community served by the centre;
- compatibility between existing and new uses, transitions in scale between new development and the existing fabric, reducing the impacts on the existing physical character of the surrounding area (including housing);
- a diverse business mix;
- active marketing and centre management;
- high quality access by non-motorised forms of transport including pedestrian; connectivity and improvements in the pedestrian environment;
- increasing housing densities within or on the edge of these centres.

5.5.3 Office Parks

Office Parks traditionally have been designed as single use type developments (predominantly corporate offices with some amenities) with little or no retailing. The emphasis here should be on improving the public transport connections (depending on the scale of the park), diversifying the business mix and creating meaningful public spaces.

Emphasis should be on restricting the approval of future business parks that would perform poorly against the key sustainability outcomes. Many of the uses in these types of parks are suitable for and should be encouraged in existing or future mixed use public transport-oriented centres.

5.5.4 Industrial Estates

Industry and warehousing are uses that are inherently unsuited to location in mixed use activity centres. Sustainability outcomes here must be focused on increasing the possibility that people working in and visiting such places have increased choices of travel mode covering walking, cycling or using public transport. Keeping industrial estates compact and designing pedestrian- and bus- friendly internal layouts (e.g. contiguous street networks; footpaths; lighting) will also be important outcomes.

5.5.5 Strings of Peripheral Sales Outlets and Stand Alone Office Complexes

The policy focus is to discourage this form of development completely. The activities should be encouraged to locate within or adjacent to major suburban centres.

5.5.6 Stand Alone Superstores

The policy focus is to discourage this form of development completely. The activities should be encouraged to locate within or adjacent to major suburban centres.

5.5.7 Major Institutions and Public Facilities

Large scale new hospitals, universities, cultural centres, major sporting facilities and other similar uses will all be required to locate in or adjacent to existing major suburban centres. These uses generate substantial trips and the number undertaken by public transport or walking can be maximised by locating at these types of suburban centres. This location will then serve to strengthen that centre and create possible business synergies.

Smaller scale facilities should be encouraged to locate in or adjacent to neighbourhood centres.

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