NO TRIM LOCATION

Office Floorspace Planning Budgets

City of Casey's Centres

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SGS
Economics & Planning

This report has been prepared on behalf of:

City of Casey

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Executive Summary

Purpose

This report provides office floorspace planning budgets for Casey's Principal and Major Activity Centres to the year 2021. Casey has two Principal Activity Centres (PACs) (Fountain Gate-Narre Warren and Cranbourne) and four Major Activity Centres (MACs) (Casey Central[1], Berwick Village, Hampton Park and Endeavour Hills).

Overview of Existing Conditions

Casey is one part of the South East Region of Melbourne. This region is expected to accommodate significant additional office floorspace in the next two decades.

However, the majority of Melbourne's outer suburbs (including Casey) do not currently have the attributes that would potentially make them strong candidates for attracting significant office development in high numbers, especially in the emerging small office market. In order to capture some of the small office market, outer suburbs will have to pro-actively develop their activity centres into 'lifestyle' locations that would attract the highly skilled workforce new economy firms demand.

Casey will be in the market to capture a share of the regional office floorspace demand. The extent of the capture will depend on the underlying supply conditions in each of the region's competing locations.

Office Floorspace Planning Budgets

The modelling suggests that the total target for Casey should be set at 180,000 sqm of additional office development to 2021 (net change from 2001 / existing conditions).

The supply-side review highlights that Fountain Gate-Narre Warren and Casey Central are the prime targets for substantial new office development in the future.

The Berwick university campus and technology precinct is also earmarked for significant new development, although this area will focus on specialised education, research and industrial based development, which is a niche segment and distinct from generic stand-alone offices.

[1] This is a proposed centre in Cranbourne North.

The other centres in the City have constraints and are expected to accommodate a relatively low level of office development in the future, mainly in the form of market-driven small office development.

On this basis, the following table provides three scenarios. In all three, Fountain Gate-Narre Warren and Casey Central are chosen as the focus for major office development. The remaining centres are placed on a lower level.

The 180,000 sqm of development (to 2021) is then allocated to the centres using three scenarios. Each scenario moves to a greater concentration of development in the two main office centres.

It is recommended the City of Casey select the scenario that best suits conditions on the ground. This will require more detailed consideration of planning and infrastructure conditions, and market demand conditions.

Centre	Possible Allocation Scenario 1	Budget Scenario 1	Possible Allocation Scenario 2	Budget Scenario 2	Possible Allocation Scenario 3	Budget Scenario 3
Fountain Gate-Narre Warren	25.0%	45,000	35.0%	63,000	40.0%	72,000
Cranbourne	12.5%	22,500	7.5%	13,500	5.0%	9,000
Casey Central	25.0%	45,000	35.0%	63,000	40.0%	72,000
Berwick	12.5%	22,500	7.5%	13,500	5.0%	9,000
Hampton Park	12.5%	22,500	7.5%	13,500	5.0%	9,000
Endeavour Hills	12.5%	22,500	7.5%	13,500	5.0%	9,000
Total (PACs and MACs)	100.0%	180,000	100.0%	180,000	100.0%	180,000

Implementation Challenges

It must be noted that achievement of this level of development will not be easy. The office budgets noted above provide a guide to possible outcomes, assuming that Casey's centres can capture a share of the office stock that is likely to be available to the South East Region of Melbourne. On this basis, the above numbers represent targets on a 'fair share' basis rather than forecasts.

Indeed, given that much of the demand will naturally tend to locate in the central part of the region, closer to the 'centre of gravity' of economic and population activity, the 180,000 sqm target can be interpreted as being optimistic for Casey.

An important point worth noting is that the City will need to be successful in growing and attracting so-called 'higher order' economic activities in order to reach the targets. This includes advanced business service firms, corporate headquarters, back offices and other activities that have a market orientation that is broader than the local population and business base.

This will require a shift in economic patterns because many existing activities in Casey are population serving, such as retailing, personal services and light industry. These sectors typically generate many clerical, sales, production, trade and transport jobs, but are less successful in generating a large number of (higher order office-based) professional, managerial and specialist technical jobs. This is not uncommon for suburban growth areas.

Possible Strategies

A list of possible strategies to bring about the target level of development, and degree of difficulty of each, is shown in the table below. This list highlights that there are many challenges in achieving the targets noted above.

Possible Strategy	Implementability
Strategic and Economic Plan - ▪ Develop an office development plan that identifies the type of office businesses being targeted, and the type of office facilities required. ▪ Prepare an accompanying land use, design, infrastructure and investment plan. ▪ Demonstrate how the office segment or segments are to be 'fitted' into the activity centre system, and how necessary infrastructure (hard and soft) will be provided to support the targeted office businesses.	**High** – ▪ Council has a direct role in strategic planning.
Zoning - ▪ Zone land to accommodate the targeted office development.	**High** – ▪ Council has a direct role in setting the planning framework.
Urban Lifestyle - ▪ Establish the lifestyle attributes that would potentially make Casey's centres strong candidates for attracting skilled workers and advanced business services in high numbers. ▪ Provide high quality housing estates that are attractive to skilled workers.	**Medium** – ▪ Urban environment development is a complex and long-term process. Council can set the objectives and control framework and implement some aspects.
Infrastructure Works – ▪ Implement infrastructure works associated with the strategic planning framework. ▪ Develop transport infrastructure networks that integrate Casey with the region better. ▪ Capitalise on the East Link investment with strategic infrastructure links into Casey.	**Medium / Low**– ▪ Council will be able to implement some works but rely on other agencies and the private sector to contribute. ▪ Major road and public transport investment is largely the domain of other agencies.

Small, Flexible Office Spaces (Some Low Rent) – ▪ Provide a stock of small and flexible spaces for new economy businesses in the future. ▪ Provide a stock or low rent spaces for businesses to grow into (from the home office) and evolve from, as they move through the business development cycle. This includes low-grade office space and residual shopfronts.	**Low –** ▪ Council is not a commercial property developer or investor. ▪ Many property developers and investors will generally avoid risks associated with multi-tenant properties, in lower order property markets.
Level of Skills - ▪ Boost the level of skills in the region in order to be able to offer a critical mass of highly skilled workers to promote business development and attraction, ultimately leading to establishment of a critical mass of businesses which will themselves generate agglomeration benefits and promote a positive cycle of skills capture and business growth. ▪ Invest in education, training and technology infrastructure.	**Low –** ▪ Education and training is the domain of other agencies and skills development has complex social dimensions.
'Anchor' firms and institutions – ▪ Attract large firms and education, health and government facilities to provide significant direct benefits and act as anchors for small business development.	**Low –** ▪ There are risks associated with chasing large and 'footloose' organisations.

1 Introduction

1.1 Report Purpose

The City of Casey commissioned SGS Economics & Planning in December 2004 to derive office floorspace planning budgets for Casey's Principal and Major Activity Centres.

As shown in Figure 1 below, the City of Casey has two Principal Activity Centres (PACs) (Fountain Gate-Narre Warren and Cranbourne) and four Major Activity Centres (MACs) (Casey Central[2], Berwick Village, Hampton Park and Endeavour Hills).

This report provides office floorspace planning budgets for these centres to the year 2021, which is considered a reasonable timeframe for planning purposes.

1.2 Report Structure

Section 2 of this report documents typologies and theories that explain office space locations and development drivers. This provides a context for understanding Casey's position in the future office space development market.

Section 3 provides statistical evidence of office space locations in Melbourne. This provides further insights into Casey's position in the future office space development market.

Section 4 forecasts future office space development in the wider south east region of Melbourne to 2021. This provides a quantitative guide to the maximum level of office space development that Casey may be able to capture to 2021.

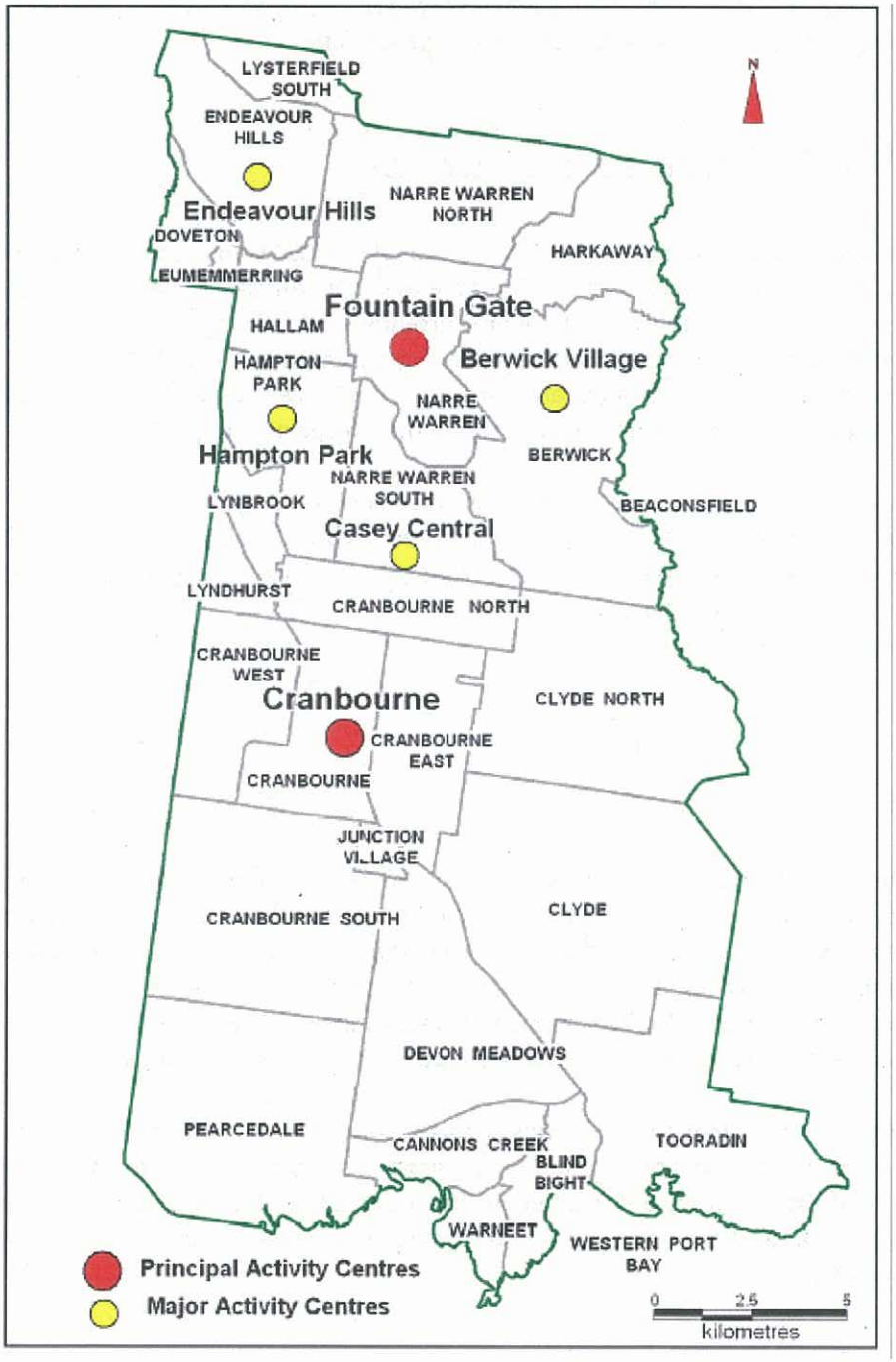
Section 5 begins the process of apportioning the aggregate level of regional office space demand (as established in Section 4) to locations within the region. Specifically, this Section estimates the extent to which office space is captured by 'activity centres' versus other locations. This is required because not all office space is located in conventional office buildings in activity centres. A significant level of office space development occurs in out-of-centre locations like industrial parks and institutional estates.

Section 6 introduces Casey's centres and briefly reviews their supply conditions. This provides further insights into the opportunities and challenges in capturing activity centre bound office space to 2021.

[2] This is a proposed centre in Cranbourne North.

Section 7 documents the recommended office floorspace planning budgets for Casey's centres to 2021. This is done by taking the aggregate regional level of activity centre bound office space to 2021, and apportioning this to Casey's centres having regard to competing centres in the region and other information compiled for the purposes of this report.

Figure 1 - City of Casey's Principal and Major Activity Centres



2 Office Space Characteristics and Drivers

This Section documents typologies and theories that explain office space locations and development drivers. This provides a context for understanding Casey's position in the future office space development market.

The Section begins with a review of traditional office space typologies and drivers, and then considers emerging drivers associated with economic restructuring.

2.1 Office Typologies and Drivers

In Australia, office markets tend to be focused around capital city CBDs and urban transport hubs. The largest office markets are located in the CBDs of the five main Australian cities (Sydney, Melbourne, Brisbane, Perth and Adelaide). There are currently 11.3 million sqm of office space located in these office markets with a further 6.6 million sqm located in 14 secondary office markets[3]. The five main office precincts generally have the best access to quality infrastructure, supporting businesses and a pool of skilled labour within their respective regions.

In this broad context however, there are a number of ways of classifying office space into typologies. Typologies are useful in gaining insights into the location preferences of office space users, and the drivers of office space development. Three office space typologies are as follows:

- Business segmentation method;
- Facility segmentation method; and
- Property grade method.

2.1.1 Business Segmentation Typology

A major determinant of a firm's office location is the location of the end market or customer. If the customer is located in a particular geographical area, and proximity is an important sales factor, the firm will be more likely to have a physical presence in that area. However, if a firm has a client base that is geographically dispersed, the locational preference may be more based on key inputs into the business process, which in many cases is a skilled workforce when dealing with office based business operations. With this in mind, office types can be classified as follows:

- Local offices / government services - This segment comprises local business services that primarily serve the regional population, for example, government services, tax agents, solicitors, real estate agents and related businesses that have a local orientation. The size of this sector is a function of the size of the regional population or catchment, much like the retail sector.

[3] Property Council of Australia, Australian Office Market Report, January 2001.

- Back offices of large firms - Call centres and data processing centres that serve a wide market favour locations that have a relatively skilled but stable workforce with few alternative employment opportunities. Low property costs are also desired by these operations because they generally occupy 'large' horizontal floorplates. This sector is more 'footloose' but is a candidate for a suburban location that offers the attributes demanded by these organisations.

- Advanced business services - This segment comprises 'new economy' businesses that offer highly specialised services potentially serving local, national and international clients. Key locational criteria for this segment are access to the highest quality skills and business networks (ie. being 'close' to partner firms and clients). 'Lifestyle' is important to this group, because of the need to attract and retain skilled workers.

- Corporate headquarters - This encompasses 'large' firms and institutions like leading companies, stock exchanges, core government offices and major health and education facilities. A location that provides access to quality infrastructure, skills, related business services and a prestigious address is typically desired. Quality access to a wider population base via road and public transport links is also important. Firms in this category tend to demand a CBD address or a high profile suburban site with good access to managerial and executive labour.

- Offices attaching to industry and institutions – A significant stock of office activity will attach to industry, research facilities and institutions such as universities and hospitals. These activities can be dispersed across the urban landscape, which may or may not include activity centres.

This information is summarised in the following table.

Figure 2 - Locational Attributes of Business Segments

Typology	*Location Drivers*	*Locational Attributes*
Local Offices / Government Services	• The size of the regional population or catchment (market)	• Local or regional centre
Back Offices	• Relatively skilled but stable workforce with few alternative employment opportunities (input) • Low property costs (input)	• Office park • Local or regional centre
Advanced Business Services	• Complex locational criteria • Access to the highest quality skills (input) • Access to business networks - partner firms and clients (input and market) • Lifestyle attributes (externality)	• CBD • Local or regional centre • Low rent offices • Home based business
Corporate Headquarters	• Quality infrastructure (input and market)	• CBD address • High profile suburban site

	• Access to managerial and executive labour (input) • Proximity to business services (input) • Prestigious address (externality) • Access to the wider population (market)	
Industry / Institution Specific	• Industry specific – on-site	• Dispersed - regional or local centre or out of centre

2.1.2 Facility Segmentation Typology

In addition to segmentation of business types, the office market can be segmented on a facility preference basis as follows.

- Home Office or Low Rent Offices / Shopfronts - Micro and small businesses, especially new start-ups, are establishing across the urban landscape in home offices and in low rent offices and shopfronts in the suburbs and in regional centres. People that establish companies in fields like design, marketing, software development, health and consultancy advice drive this activity. As businesses grow, and especially as new staff are added, many firms will seek to move from the home office to a conventional office in their local area. Small firms in such a growth trajectory will be wary of risks associated with long-term leases and high rents, many having paid no rent in the home office. The first move into the commercial office market will therefore be a cautious step to relatively cheap accommodation until the business model can sustain higher rents. The target is therefore low-grade office space and residual shopfronts, which are found in large number in many of Melbourne's inner and middle suburbs. In the outer suburbs however, such space is not as common which is a constraint to business evolution in those locations.

- Office Tower - Many firms will seek out a CBD style office tower setting for their office premises. Such locations offer benefits in terms of: co-location with other firms / organisations (providing agglomeration benefits) and activities that offer a wide range of services (including lifestyle services); the opportunity for face-to-face business contact; quality information and communications infrastructure; and good accessibility by multi-modal transport systems (including road and radial public transport services). Some firms will seek a suburban activity centre environment for their office premises. Such locations offer many of the benefits of a CBD location, but on a smaller scale.

- Campus Office - Some firms favour campus style accommodation. This refers to buildings on 'large' sites, high quality 'detached' buildings with large floorplates and superior landscaping (perhaps in conjunction with recreation facilities and cafes). High profile street frontages are desired for the corporate address. Note that this segment of the commercial office market tends to differ from the CBD / activity centre office market because sites and facilities of this nature are difficult to find in traditional activity centres. Organisations that

favour this type of accommodation will therefore tend to look for out-of-centre sites, much like the freestanding shopping centre. It is important to recognise that the State Government's metropolitan planning policy, Melbourne 2030, actively discourages out-of-centre development. Therefore, this style of facility is consistent with State Government policy if located in an activity centre, but not if located in an out-of-centre location.

2.1.3 Property Grade Typology

An additional way of segmenting the office market is by property quality. The main focus of this measure is the nature of the office building itself. However, the location of the building also helps to determine how it is graded. The Property Council of Australia divides buildings into five quality categories according to size, location, building finishes and technical services. Prime office space relates to Premium and A grade buildings, and secondary office space accounts for the remaining B, C, and D grade buildings. These categories are summarised in the following table.

Figure 3 - Property Grade Typology (Property Council of Australia)

Grade	***Size***	***Floorplate***	***Technical Services***	***Finish***	***Locational attributes***
Premium	Sydney / Melbourne CBDs Generally >30,000 sqm Other CBDs generally > 20,000 sqm	>1,000 sqm largely column-free	State of the art	Natural lighting Premium presentation and maintenance On site, undercover parking	Landmark office building Located in major CBD office markets Good views / outlook Quality access to / from an attractive street setting
A	Sydney / Melbourne CBDs Generally >10,000 sqm	>600 sqm largely column free	High quality	High quality presentation and maintenance On-site, undercover parking	Good views / outlook CBD location Quality access to / from an attractive street setting
B	Any size	Any size	Basic	Good quality Tenant carparking available	CBD fringe Suburban centre Out of centre campus
C	Any size	Any size	Older style	Lower quality	Suburban centre Out of centre
D	Any size	Any size	Minimum	Poor quality	Suburban centre Out of centre

Source: Property Council of Australia

2.2 Emerging Drivers of Office Location

While the traditional forces leading to currently observed hierarchies of office development will continue to be important, the pattern of office development in the future need not be a simple continuation of past trends. Other forces are emerging, relating to changes in the way business is conducted in a globalised, knowledge based economy. The implication of these shifts for the distribution of office floorspace across the metropolitan area is discussed below.

2.2.1 The New Economy

The last two decades have seen a number of changes in the way work is organised or conducted, mainly because of the emergence of the 'new economy'. This phrase is mostly used as shorthand for a new era of productivity and growth and the accompanying competitive opportunities and threats. It basically refers to the changes in the economy that have followed the developments in information and communication technologies (ICT) and increased globalisation.

The QR11 Project 'Phase 2' Paper[4] identified the following three aspects of globalisation to be the most significant in terms of regional economic development in metropolitan Melbourne.

- 'Unbundling of the Value Chain' - This is simply an acceleration of a centuries old process of specialisation in economic production. Instead of firms carrying out all aspects of the value chain in house (such as human resource management, technology development, procurement, inbound logistics, operations, outbound logistics, marketing and sales and after sales service) they are now more likely to outsource all but key functions. This is a way of improving technical efficiency in the value adding process and allows firms to manage a range of risks in staffing and stock inventories. This is why end users often get better value for money compared to past decades, despite the fact that there are more players than ever involved in assembling and delivering products and services to them.

  An upshot of this unbundling process is that more and more of the strongest companies are managing global value chains – sourcing inputs as required from a wide variety of suppliers in many countries. There is now far less inertia attached to the locational decisions of, say, major manufacturers. For example, eastern Melbourne has seen this in the loss of major automotive firms in the past 15 years. However, it has also managed to capture lucrative elements of other international value chains – for example, those emanating from food processing companies in Japan and major electronics corporations in the US.

- E-Commerce - The business-to-business aspects of e-commerce represent a more potent global force than business-to-consumer developments in electronic trading. Identifying and transacting supplier alternatives over the Internet means a further acceleration in the

[4] SGS Economics & Planning, 2002.

unbundling of value chains. Backward linkages (sourcing inputs) and forward linkages (distribution channels) are rendered more vulnerable to external competitors. The upside is that the same technology enables otherwise locally focussed companies to adopt an export orientation – for example, local professional services can reach out to markets well beyond the local region.

- Rise of Advanced Business Services - In the globalised and unbundled production environment, companies need access to the best advice on where to make cost savings and how to enhance customer value through improved product content, design, packaging and delivery. Consequently, advanced business services, for example, financial brokerage, patent attorneys and other specialised legal advisors, economists and business analysts, management consultants, IT and other engineers, advertising agents, public relations consultants and the like have emerged as a crucial corporate input. These 'thinking' services command a major premium in the job market. Meanwhile, those workers engaged in routine production functions are vulnerable to casualisation of their employment and slower wages growth, because employers can quickly redeploy these aspects of the value chain to other regions.

  Advanced business services are also important to regional prosperity because they are key exporters in their own right (legal service exports are already the equivalent of about 15% of Australia's wine exports and are growing much faster). Perhaps even more important is the fact that these services are the main conduits by which business innovation is disseminated – they are a major player in the third arm of the knowledge economy trilogy – 'know what' (formally learnt knowledge and R&D), 'know how' (techniques learnt on the job) and 'know who' (the networks which bring together enterprise ideas and venture capital).

  The changing nature of production, or 'value creation', is further evident in the shifts within the occupational structure of the manufacturing sector in Melbourne. The figure below shows that back in 1986, most workers in the manufacturing sector were 'on the factory floor', in process operator roles. These 'blue collar' employees made up 57% of the manufacturing industry work force. The situation has changed quite dramatically since then. Now only 40% of manufacturing workers are in the blue-collar category. Almost 36% of manufacturing employment is in 'office jobs' compared to 27% in the 1980s.

  The table also shows a significant boost in the number of transport occupations in this period. This can be explained by value chain unbundling as described above, resulting in the creation of greater inter-firm business networks for sourcing inputs and making sales, growing the logistics side of the equation.

  This underlines how the successful modern manufacturing enterprise is as much involved in administrative and commercial activities as it is in physical production and distribution.

Figure 4 – Compositional Change of Manufacturing in Victoria

Employment in the Manufacturing Sector	*1986*	*2001*
Factory occupations	57.0%	40.8%
Office occupations	27.2%	35.9%
Other occupations	3.9%	3.1%
Sales occupations	3.8%	4.7%
Transport occupations	8.1%	15.5%

Source ABS, SGS calculations

2.2.2 The New Economy and the Future of Work

The emergence of the new economy has had, and will continue to have, implications in terms of working practices, occupational structures and employment structures.

Key changes in workplace practices are outlined in the figure below. The shift from a centralised, hierarchical and multilayered workplace to a flexible workforce with high levels of outsourcing is changing the location and size of office space demand. These shifts are explored below.

Figure 5 - Changes in Office Working Practices

Date	*Office workforce characteristics*
1960s	Centralised workforce Hierarchical and multilayered Defined (fixed) working hours
1980s	Decentralised workforce Delayering Extended working hours
2000 and beyond	Task-orientated workforce Flexible working hours Core with outsourced / contracted employment

Source: Axiss Australia

- Working Practices - The changes in the 'new economy' have led to a decline in a 'typical' 40-hour workweek, while 'atypical' employment arrangements have become more prevalent. Traditional employees (ie. working for a single employer, in the employer's premises for a given wage or salary) are being replaced by free-lancers, 'portfolio' workers, or teleworkers. Improvements in technology have enabled some highly skilled professionals to engage in work through fluid networks, rather than the rigid hierarchies

that defined the conventional 'job'. Such changes in work patterns will have some effects on office space demand in the future.

- Occupational Structure - In general terms, work in the 'new economy' can be divided into three broad groups reflecting the relative intensity of knowledge content and the demand for creativity. Traditional distinctions between blue and white collar workers are becoming obsolete. The new segmentation of work force has been conceptualised by Reich (1991)[5] using the following typology:

  - Symbolic Analyst - High skilled information and knowledge work is being generated by the world economy. Jobs in finance, business services, design, information technology and research are included in this group. Also included would be certain classes of 'hi-touch' workers such as artists, musicians, writers and other content producers. Symbolic analysts have high economic wealth, relative job security, and good career prospects. These workers are increasingly 'footloose'; they have the ability to market themselves as independent enterprises working for several clients and pursue several careers simultaneously.

  - In-Person Service Workers - The symbolic analysts are driving demand for low skilled service work in hospitality, cleaning, security and entertainment. The in-person service workers support the lifestyles of the symbolic analysts. Relative to the symbolic analysts, workers in this group have low economic wealth, job insecurity, and uncertain career prospects. However, they do not have the control and choices open to the symbolic analysts.

  - Routine Production Workers - These include factory workers and clerks who require a reasonable level of education but who are nonetheless vulnerable to job loss through improvements in technology or job export to lower wage regions around the world. Routine production workers may have (so called) permanent jobs and tend to be in highly unionised sectors.

The strategic importance of advanced business services is evident in the rapid growth of the 'symbolic analyst' jobs and the shrinkage in 'routine production' jobs, as shown below.

[5] Reich, R. (1991) The Work of Nations. London, Vintage.

Figure 6 - Australia's Changing Workforce Structure in the New Economy

	1986	1986%	1996	1996%	Change
Symbolic analysts	1,502,893	23.7	2,019,039	27.2	516,146
In person service workers	2,459,778	38.8	3,090,530	41.5	630,752
Routine production workers	2,371,174	37.5	2,325,114	31.3	-46,060
Total	6,333,845	100	7,434,683	100	

Source: ABS[6].

2.2.3 Business Structures

Changes in the 'new economy' and the associated technological innovations and occupational shifts have led to relative decline in the number of big firms and relative increase in the number of small businesses.

The following figures show trends in the number of businesses and employment levels in Australia. Over the period 1989-1990 to 1999-2000 the average annual rate of growth in number of businesses varied significantly across the different size categories. While number of small businesses (those with less than 20 employees) grew at a significant rate, growth in the number of large businesses (those with more than 200 employees) was only 0.1 percent. Change in the number of persons employed across the different size categories generally reflected the change in businesses. It is interesting to note that almost half the number of employees in Australia work in a small firm (those with less than 20 employees).

Figure 7 - Number of Businesses in Australia

Employment Category	1999-2000 ('000)	Change from 1998-1999 %
Non-employing businesses	542.1	4.2
1-4 employees	365.7	-0.6
5-19 employees	167.1	4.6
20-99 employees	33.2	2.7
100-199 employees	3.7	-0.8
200 or more employees	2.7	-1.1
Total	**1114.5**	**2.5**

Source: ABS (2002), Year Book Australia 2002, Cat: 1301.0

[6] Quoted in O'Connor K, Stimson R.J. and Baum S. 'The Role of Economic Geography in Australia's Environment for Growth', in Niewenhuysen, J. et al (eds) Australia: Creating an Environment for Growth, Cambridge University Press, for the Committee for the Economic Development of Australia.

Figure 8 - Persons Employed in Australia

	1999-2000 ('000)	Change from 1998-1999 %
Persons working in their own businesses-		
- Own account workers	687.4	4.4
- Working proprietors and partners in employing businesses	289.2	-3.5
Employees -		
- Employees in businesses employing 1-4 persons	760.2	-1.0
- Employees in businesses employing 5-19 persons	1444.2	3.6
- Employees in businesses employing 20-99 persons	1287.3	0.7
- Employees in businesses employing 100-199 persons	512.6	-0.9
- Employees in businesses employing 200 or more persons	1753.9	0.6
Total employees	**5758.2**	**1.0**
Total persons working	**6734.8**	**1.1**

Source: ABS (2002), Year Book Australia 2002, Cat: 1301.0

The increase in number of small businesses over the last decade has occurred due to establishment of new small firms and the restructuring of some large organisations.

Restructuring has resulted in the laying-off of some workers, which in turn has created an incentive for some previously employed people to become self-employed. Examples in Victoria include the restructuring of the public service and financial sector in the early to mid 1990s, which spawned a myriad of smaller enterprises and consultants[7].

In addition, recent research has found that Australian professionals are increasingly concerned about the balance between work and life[8]. A significant number of professionals place high importance on life outside of work, such as time spent with their families. Hence, this may create an added incentive for them to be self-employed or to adopt flexible work arrangements (such as part-time jobs or jobs sharing).

[7] Daly Research Systems Pty Ltd (2002) Developing a Knowledge Centre at Ringwood Confidential report prepared for QIC.

[8] Fox, C. (2003) Leaders working for a balanced life. The Australian Financial Review, (11 February, 2003), p.58.

2.2.4 Spatial Implications of the New Economy

The new economy is accompanied by a new economic geography. By creating and enabling new market structures, business organisations and work practices, the new economy provides a 'looser and more dynamic relationship' between the place of business and the occupied space.

These economic shifts will play an increasingly important role in office locational decisions. The new economic geography is therefore changing the nature of demand for office location, size and type.

Conventional drivers of office space – such as proximity to prospective workers, proximity to customers and accessibility - are now accompanied by a growing set of other spatial forces. The physical manifestation of these forces will be an increasingly multifarious pattern of office development across the metropolitan region.

- Flexible Spaces - The spatial demand of new economy firms is for flexible, multi-purpose business premises. One key reason for this is the ability of 'symbolic analysts' to promote themselves as independent enterprises or to work in small networks. The current trend in Melbourne has been that these small enterprises tend to locate themselves in inner city markets. Among larger firms, organisational change, consolidations and mergers have shifted towards more versatile office solutions, including a trend towards increasingly flexible leasing arrangements.

- Locations that Can Capture High Skilled Workers - The emphasis on knowledge has amplified the importance of access to - and retention of - a highly skilled workforce. A number of firms are therefore placing high importance on the 'quality of life' that a location may offer their employees. Influential factors in office site selection increasingly include those that affect the quality of employees' daily lives, namely: quality housing; ease of commuting; access to an attractive 'lifestyle' including café culture and recreational facilities; and access to educational institutions (both those that train employees and those that serve the needs of current employee' families)[9].

- Spatial Clustering - In the fast changing, globalised business environment, organisations of a similar type are choosing to cluster in single locations. While the centralised and hierarchical employment market could thrive in 'economic monocultures' of industrial areas and office parks, the robustness of the more flexible new economy depends primarily on the dynamics of interdependent small businesses. A model of office location applied and tested in Toronto found that the agglomeration economies in the office sector are much larger than those in manufacturing, and the external effects of this agglomeration are considerable[10]. Small firms will increasingly seek spatial clustering in order to: concentrate

[9] O'Mara, M. A. (1999) 'Strategic Drivers of Location Decisions for Information-Age Companies' Journal of Real Estate Research, 17(3), p365-386.

[10] Se-il Mun, Bruce Hutchinson, 'Empirical analysis of office rent and agglomeration economies: A case study of Toronto', Journal or Regional Science, Aug 1995, Vol.35(3), p.437.

on core business activities by accessing supporting business services; access a network of specialised skilled labour; benefit from information spillovers; and gain efficiencies engendered by agglomeration and competition.

- Suburban Opportunities - The new economy is also changing the relationship between CBD and suburban office locations. Kevin O'Conner argues that in Melbourne, the shift to small scale flexible production systems is favouring the suburbs over the CBD in terms of jobs and investment[11]. He contends that Melbourne's suburbs 'now vie with the Central region as alternate providers of goods and services to the population, as well as being nodes of specialised industrial, research and new economy firms'[12].

- Middle Suburbs - Melbourne's middle suburbs to south east, west and north have in the recent past been very important locations for new warehouse, office, retail and community service development[13]. These are suburbs that were developed pre-1945, and are located immediately beyond the old inner suburbs. These suburbs have: an existing series of clusters of small offices; old industrial sites coming onto the market which can be subdivided for a range of small diversified business activities; access to sites of production that may be located in outer suburbs; and access to sites of decision making which in some sectors will continue to be located in the CBD.

- Infrastructure Impacts on Accessibility – Accessibility to employment nodes and jobs can be recast by provision of new infrastructure. In Melbourne, the City Link project has effectively cut travel times between many middle and inner suburbs to the CBD and Airport. This investment has shifted and entrenched patterns of accessibility and development in the City.

- Outer Suburbs - Suburban locations also have the potential to offer the lifestyle attributes desired by new economy firms seeking to attract a highly skilled workforce. It is therefore possible for suburban centres to capture some of the demand for small office clustering. However, it is important to note that these attributes apply at present to the middle suburbs, rather than outer suburbs. The majority of Melbourne's outer suburbs do not currently have the attributes that would potentially make them candidates for attracting advanced business services. In order to capture some of the small office market, these outer suburbs will have to pro-actively develop their activity centres into 'lifestyle' locations that would attract the highly skilled workforce new economy firms demand.

[11] Kevin O'Conner, 'Continuing Suburbanisation?' Urban Policy and Research, Vol.16, No.2, 1997, p.139.

[12] Kevin O'Conner and Virginia Rapson, 'Employment in City and Suburban Melbourne: The Changing Relationship', People and Place, vol.11, no.4, 2003, p.51.

[13] Ernest Healy and Kevin O'Conner, 'Jobs and Housing Location in Melbourne, 1986-1996', Australian Planner, Vol.38, No.1, 2001, p.10.

2.3 Implications for Casey's Centres

The implications of this review for Casey are as follows.

- Traditional forces in shaping office floorspace demand - proximity to prospective workers, proximity to customers and accessibility - will remain important over time. At the current time, Casey can be considered a lower order office location in a Melbourne context given its location relative to the centre of Melbourne and these drivers. Although a growing and maturing regional population and business base could boost the municipality's prospects of attracting new office development over time, the challenges are significant.

- Major growth in suburban office space development is likely to be driven by smaller and more flexible new economy businesses in the future. Suburban locations have the potential to offer the lifestyle attributes desired by new economy firms seeking to attract a highly skilled workforce. It is therefore possible for suburban centres to capture some of the demand for small office clustering.

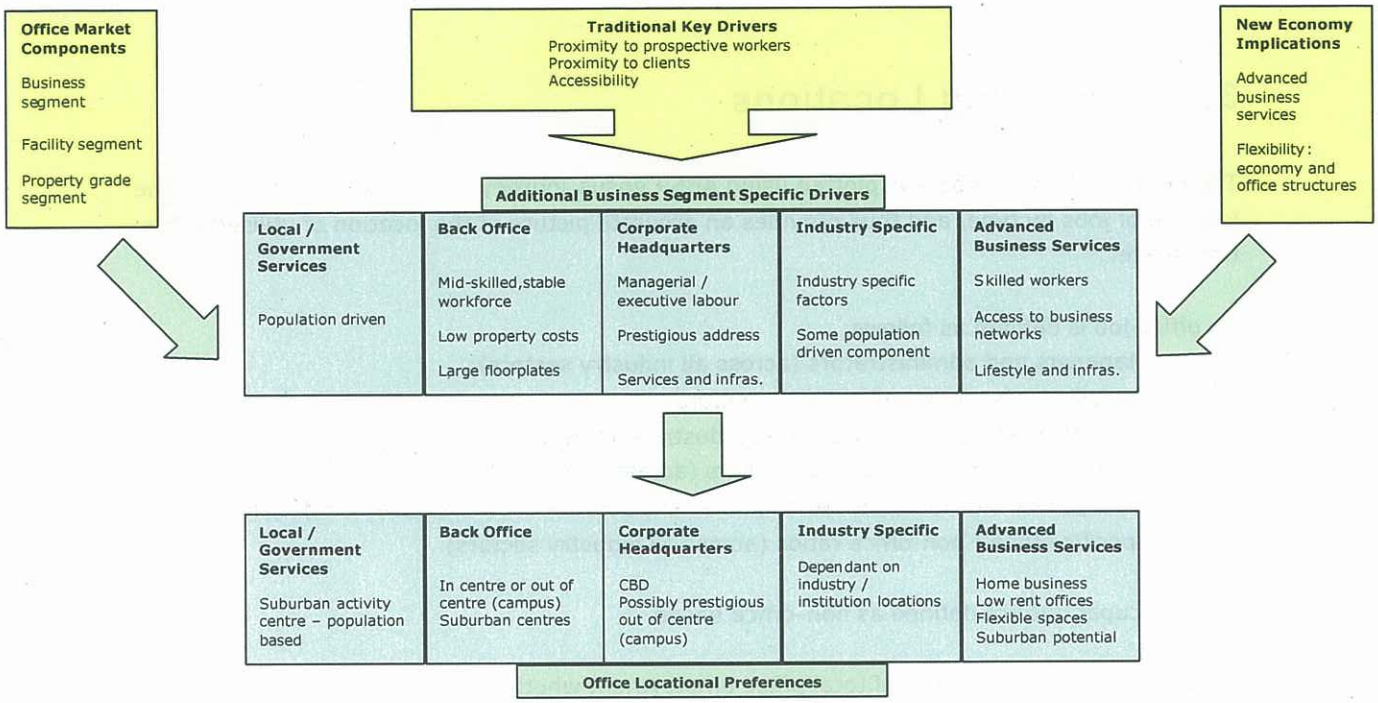
- The majority of Melbourne's outer suburbs (including Casey) do not currently have the attributes that would potentially make them strong candidates for attracting advanced business services in high numbers. In order to capture some of the small office market, outer suburbs will have to pro-actively develop their activity centres into 'lifestyle' locations that would attract the highly skilled workforce new economy firms demand.

- Casey will need to provide small and relatively cheap office premises for businesses to grow into (from the home office) and evolve from, as they move through the business development cycle. This includes low-grade office space and residual shopfronts, which are found in large number in many of Melbourne's inner and middle suburbs, but generally in short supply in outer suburban areas.

- The implications of traditional and new drivers for the location of office floorspace demand are depicted graphically in the figure below. This demonstrates the importance of business type as a key determinant of office locational preference. It also illustrates the continued influence of the traditional drivers of office location on the spatial decisions of all firms, including firms associated with new economy activity.

- A major conclusion for suburban activity centre planning is the clear need for pre-planning for specific office development types. It is not sufficient to simply say 'office' is desired in all activity centres and expect the development to occur. Strategies must identify the type of office business being targeted, and the type of office facilities required. In particular, suburban activity centres that want to attract advanced business service will need to actively develop the lifestyle attributes that these firms require. Furthermore, strategies must demonstrate how the office segment or segments are to be 'fitted' into the activity centre system, and how necessary infrastructure (hard and soft) will be provided to support the targeted office businesses.

Figure 9 - Thematic View of Office Space Segments and Drivers



3 Existing Office Space in Melbourne

This Section provides statistical evidence of office space locations in Melbourne. This provides further insights into Casey's position in the future office space development market.

3.1 Existing Locations

The location of office jobs was plotted using ABS Census Journey to Work data. This gives the location of jobs by type, and thus provides an accurate picture of the location of utilised office floorspace.

An office job is defined as follows:

- Managers and administrators (across all industry sectors);
- Professionals (across all industry sectors);
- Associate professionals (across all industry sectors);
- Advanced clerical and service workers (across all industry sectors); and
- A portion of intermediate clerical, sales and services workers based on detailed industry specific office / non-office ratios (across all industry sectors).

Other occupations are defined as non-office based.

Note that this gives a picture of total office employment whether this be in a conventional office building or in an ancillary office within another type building, such as shop, factory, hospital or other setting.

In total, there are 797,146 office jobs in Melbourne. Using an indicative job-to-floorspace ratio of 20 sqm, this suggests that Melbourne has approximately 15.9 million sqm of total utilised office space.

Figure 10 shows the location of all office jobs by Transport Travel Zone in Melbourne. This indicates that the inner and middle south eastern region is the 'centre of gravity' for office space in Melbourne.

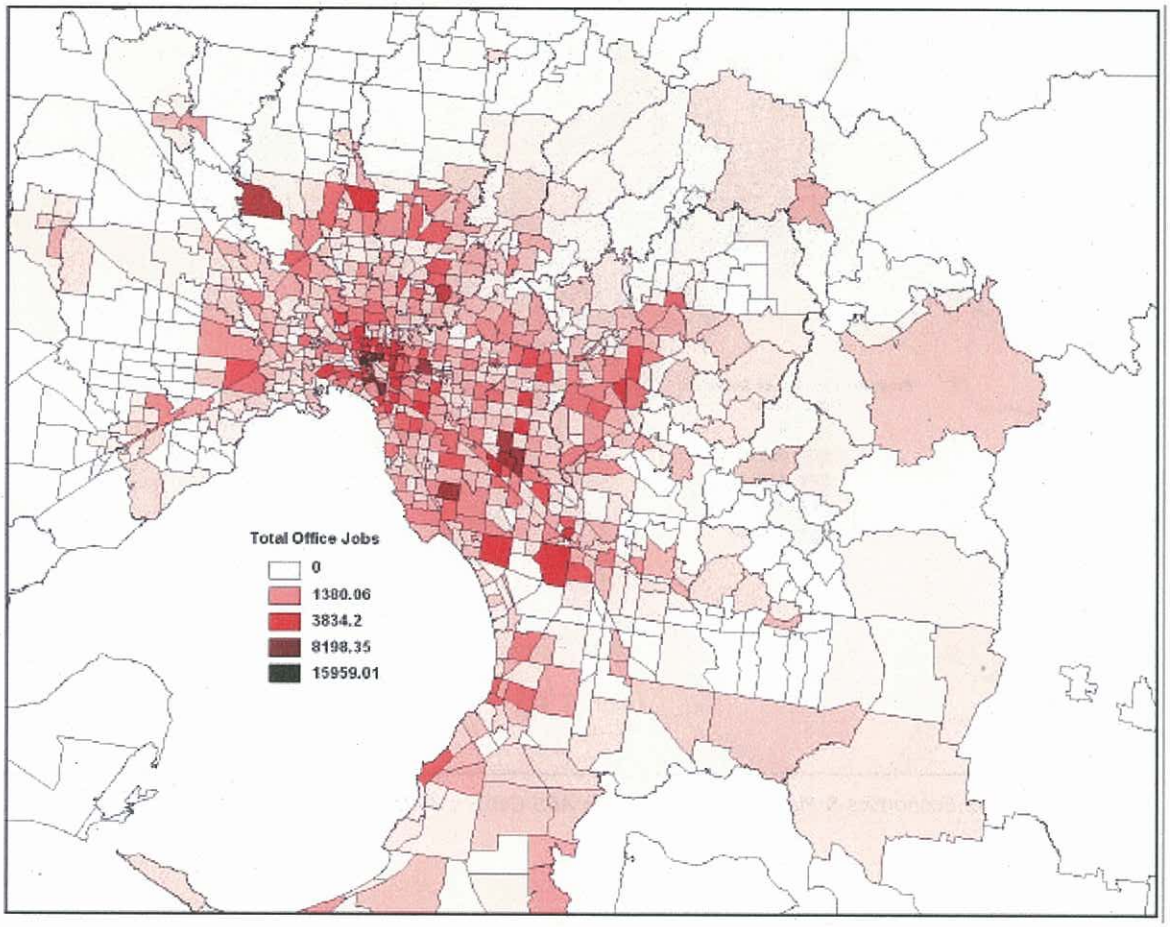
Figure 11 shows the location of office jobs in the Property and Business Services sector. This higher order sector is much more strongly concentrated in the inner and middle south eastern region.

Likewise, Figure 12 shows the location of office jobs in the Finance and Insurance sector. This sector is smaller in real terms but is also concentrated in a similar way.

Figure 13 by contrast shows the location of public sector office jobs. These jobs are more evenly dispersed in line with population catchments and activity centres across Melbourne.

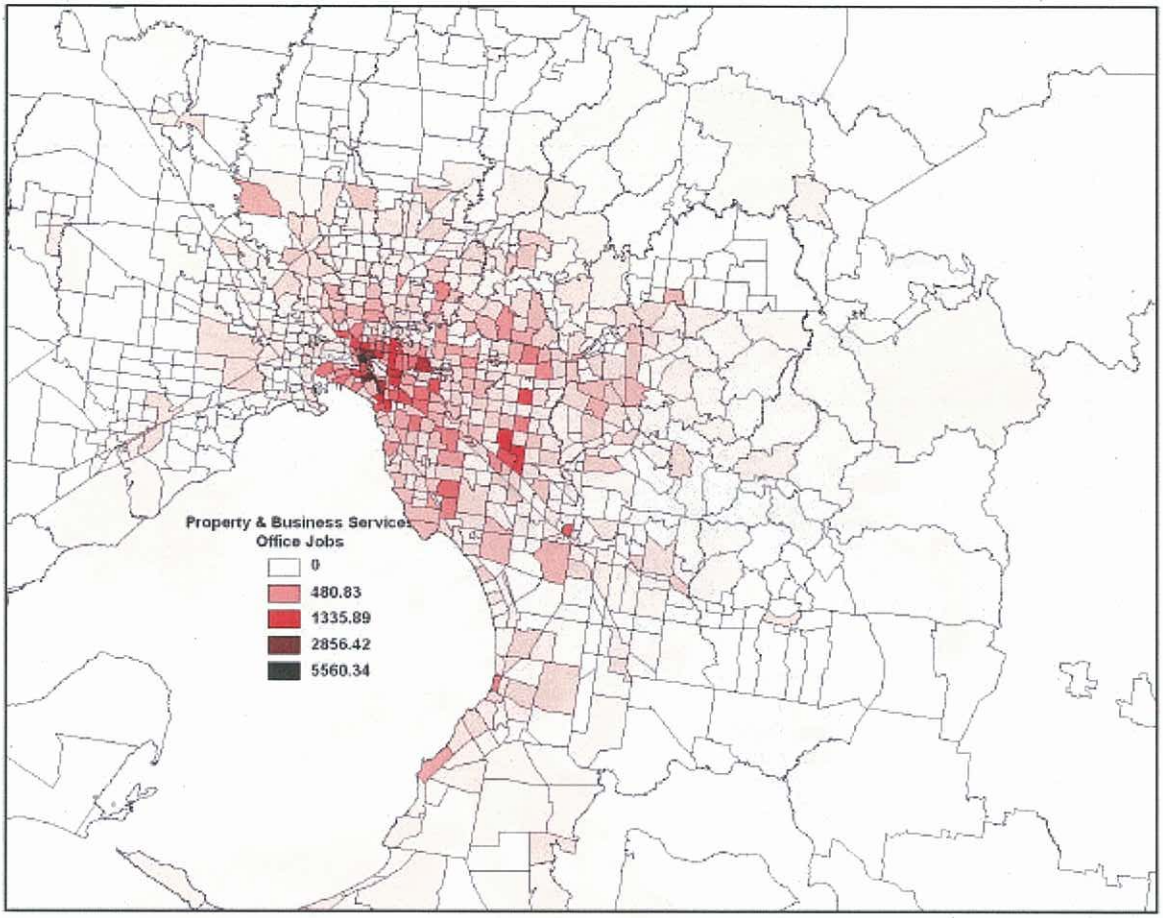
These graphics highlight that Casey is removed from the centre of office activity at the current time.

Figure 10 - Total Office Jobs



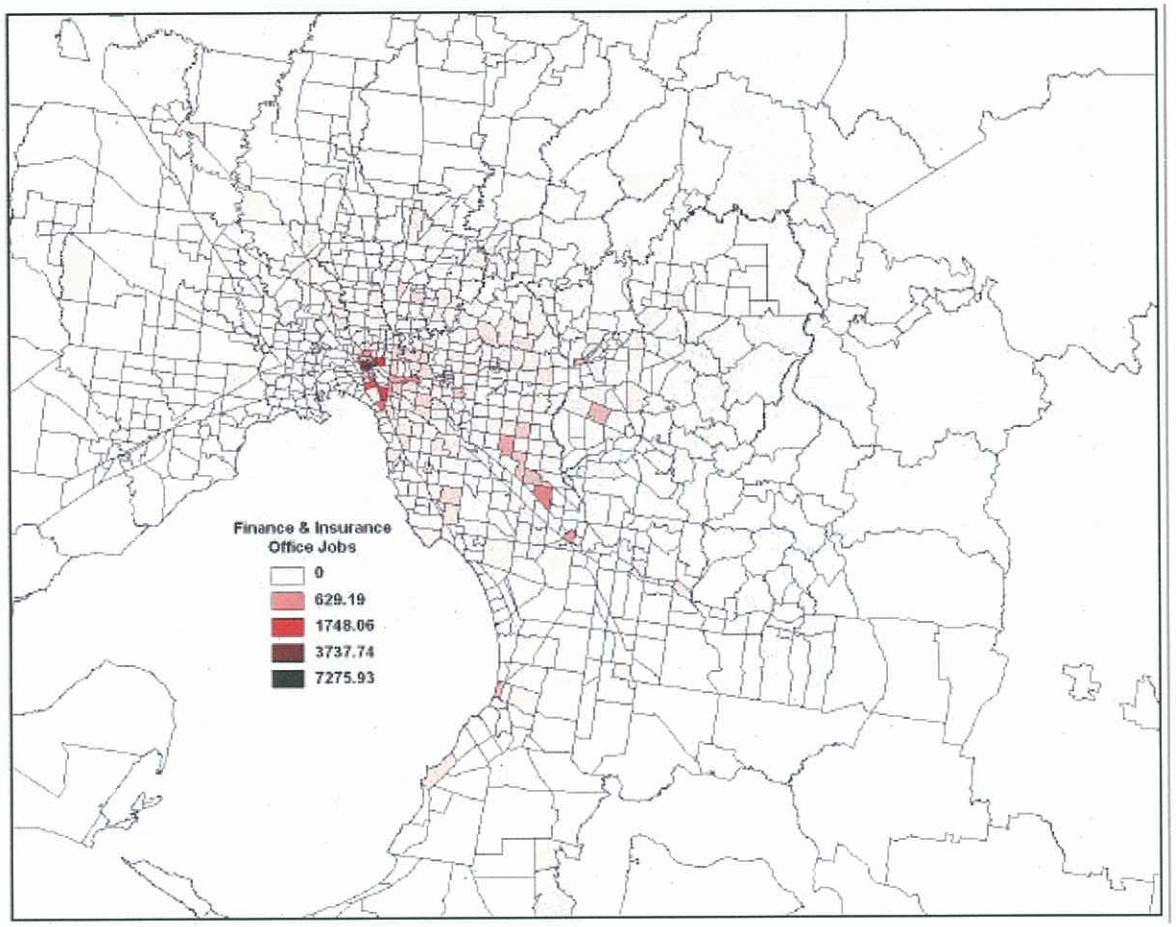
Source: SGS Economics & Planning, derived from ABS Census 2001.

Figure 11 - Office Jobs in Property and Business Services



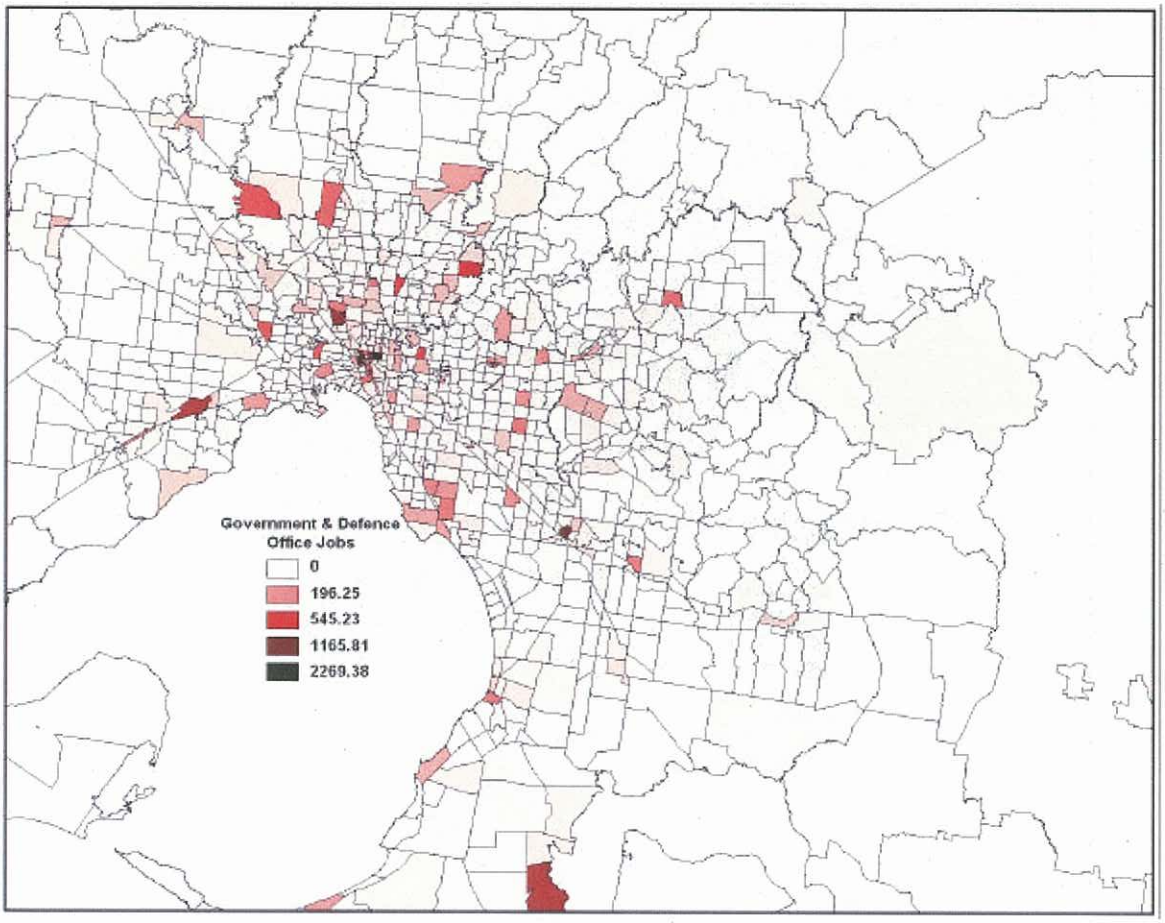
Source: SGS Economics & Planning, derived from ABS Census 2001.

Figure 12 - Office Jobs in Finance and Insurance



Source: SGS Economics & Planning, derived from ABS Census 2001.

Figure 13 - Office Jobs in Government and Defence



Source: SGS Economics & Planning, derived from ABS Census 2001.

3.2 Office Jobs in South East Melbourne: Related Factors

An analysis was undertaken to plot the weighted average geographic location of office jobs in southern and eastern Melbourne[14], and various factors that are related to, or drive, office development.

Within this region, the weighted average office location is to the east of Oakleigh.

[14] This is the 16 municipalities in the Melbourne Statistical Division located south of Yarra River bound by, and including, Boroondara, Stonnington, Glen Eira and Bayside to the west.

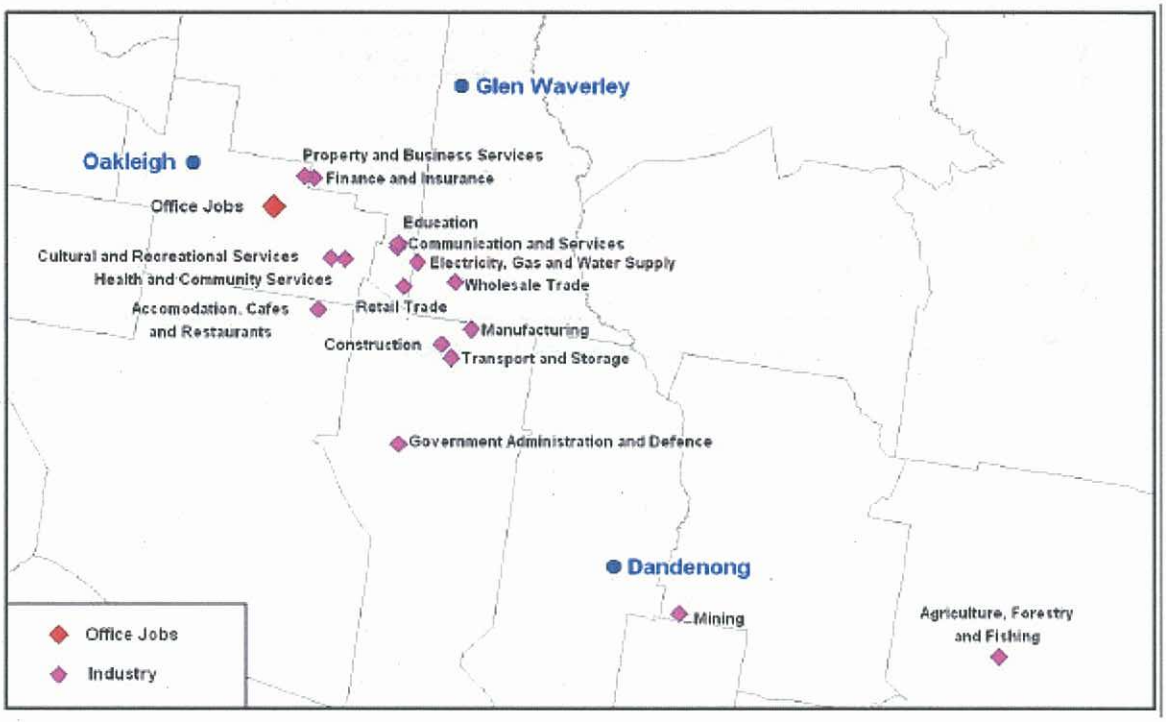
Figures 14, 15 and 16 plot the weighted average location of office jobs and the same measure for:

- Industry sectors;
- Occupational classifications; and
- Other factors.

Other factors refers to 'lifestyle' (which is a composition of cafes & restaurants, public transport use and 'higher' density housing), major firms (100+ employees), total population and total jobs.

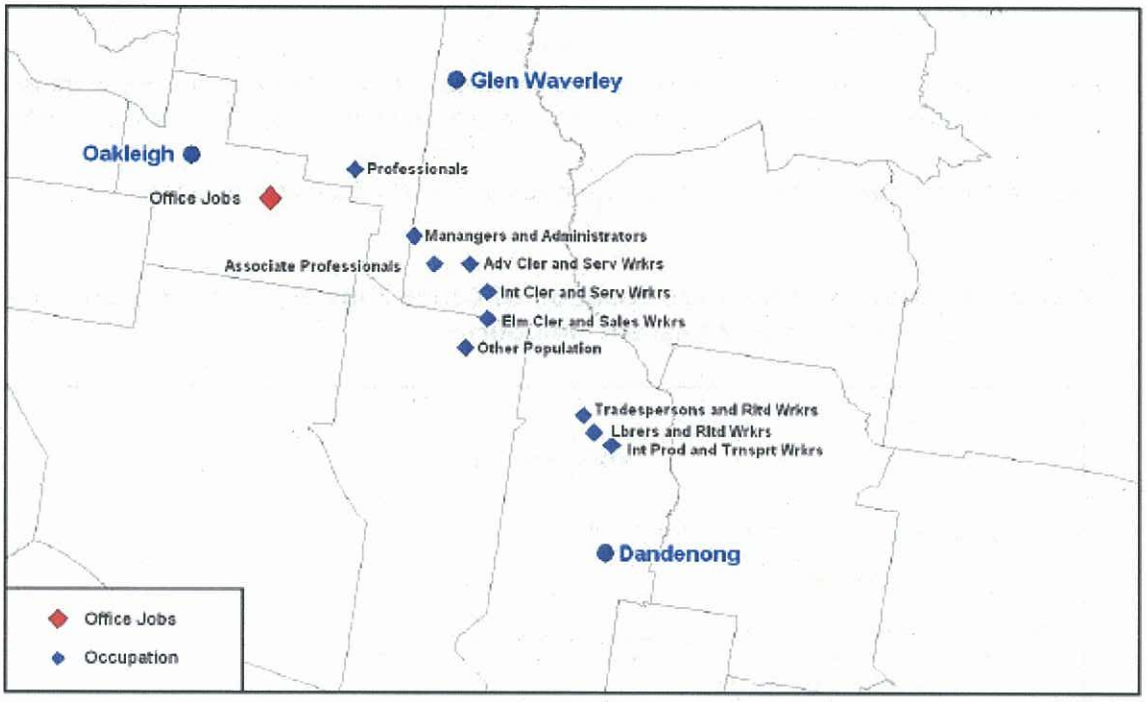
The results are shown in the three figures and summarised in the following table.

Figure 14 - Weighted Average Location of Office Jobs and Industry Sector Jobs, Southern and Eastern Melbourne



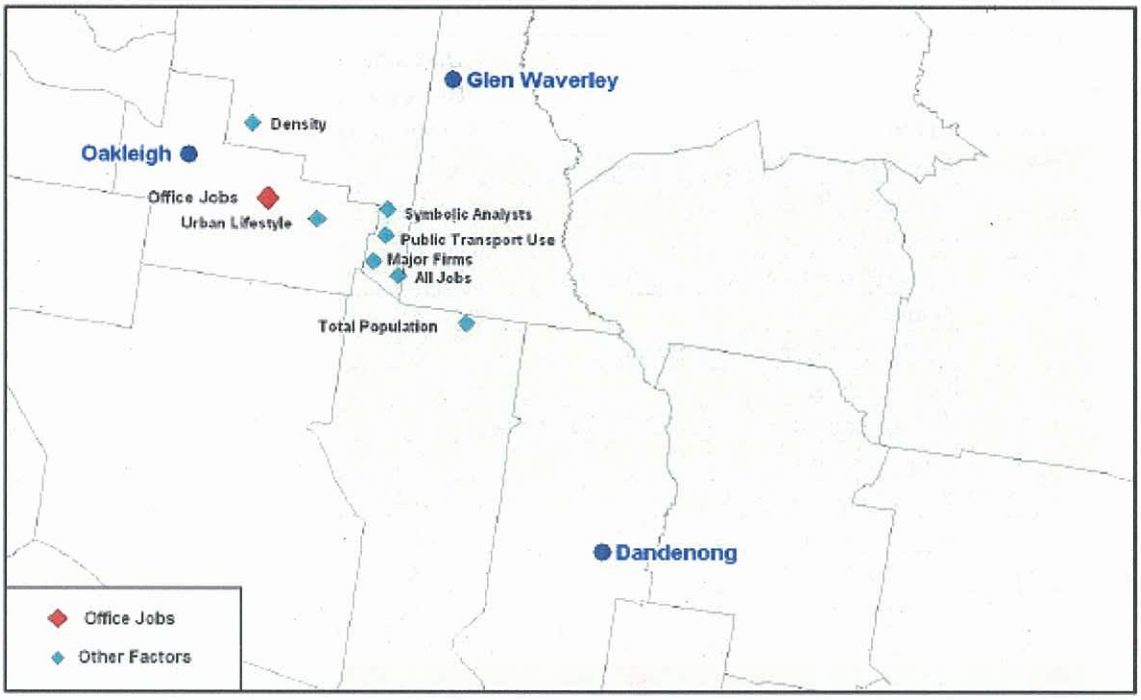
Source: SGS Economics & Planning, derived from ABS Census 2001.

Figure 15 - Weighted Average Location of Office Jobs and Occupations, Southern and Eastern Melbourne



Source: SGS Economics & Planning, derived from ABS Census 2001.

Figure 16 - Weighted Average Location of Office Jobs and Other Factors, Southern and Eastern Melbourne



Source: SGS Economics & Planning, derived from ABS Census 2001.

The following table summarises the information by measuring the distance between the data points. This highlights factors that have the closest spatial relationship to office jobs. It must be noted that some factors listed drive office jobs, some follow office jobs are some are office jobs. However, read together, the analysis provides an interesting way of looking at the spatial relationship between office jobs and factors.

The theme of the top ten factors, highlighted in green, is quality lifestyle that supports skilled workers. The first two in the list are sub-components of office jobs but factors 3, 4, 5, 6 and 8 can be interpreted as factors that contribute to a quality lifestyle for skilled workers, factors 7 and 9.

The other interesting aspect of this analysis are those factors that are more removed from the centre of office activity. Three are highlighted in red: retail trade, all jobs and total population. This analysis suggests that these factors are not critical in driving or supporting office jobs, which is relevant to Casey because that municipality has a large population and significant retail activity (existing and planned).

The upshot is that strategy should focus on the top 10 to 14 factors in developing a strong office sector.

Figure 17 - Ranking of Explanatory Variables

Rank	Factor	Distance Between Points (km)
1	Property and Business Services	1.1
2	Finance and Insurance	1.2
3	Urban Lifestyle	1.3
4	Cultural and Recreational Services	1.9
5	Density	2.0
6	Health and Community Services	2.2
7	Professionals	2.2
8	Accommodation, Cafes and Restaurants	2.8
9	Symbolic Analysts	3.0
10	Major Firms	3.1
11	*Public Transport Use*	*3.1*
12	*Education*	*3.2*
13	*Communication Services*	*3.2*
14	*Managers and Administrators*	*3.7*
15	*Retail Trade*	*3.8*
16	*Electricity, Gas and Water Supply*	*3.8*
17	*All Jobs*	*3.8*
18	*Associate Professionals*	*4.4*
19	*Wholesale Trade*	*4.9*
20	*Adv Cler and Serv Wrkrs*	*5.2*
21	*Construction*	*5.3*
22	*Manufacturing*	*5.7*
23	*Transport and Storage*	*5.8*
24	*Total Population*	*5.9*
25	*Int Cler and Serv Wrkrs*	*5.9*
26	*Other Population*	*6.1*
27	*Elm Cler and Sales Wrkrs*	*6.2*
28	*Government Administration and Defence*	*6.6*
29	*Tradespersons and Rltd Wrkrs*	*9.5*
30	*Lbrers and Rltd Wrkrs*	*10.0*
31	*Int Prod and Trnsprt Wkrs*	*10.6*
32	*Mining*	*14.2*
33	*Agriculture, Forestry and Fishing*	*21.1*

Source: SGS Economics & Planning, derived from ABS Census 2001.

3.3 Implications for Casey's Centres

The implications of this analysis for Casey are as follows.

- Casey has strengths in population size, retail space and certain industry sectors and occupational groups. However, Casey's current strengths do not have a close relationship to office jobs and development. Casey is removed from the centre of office activity at the current time.

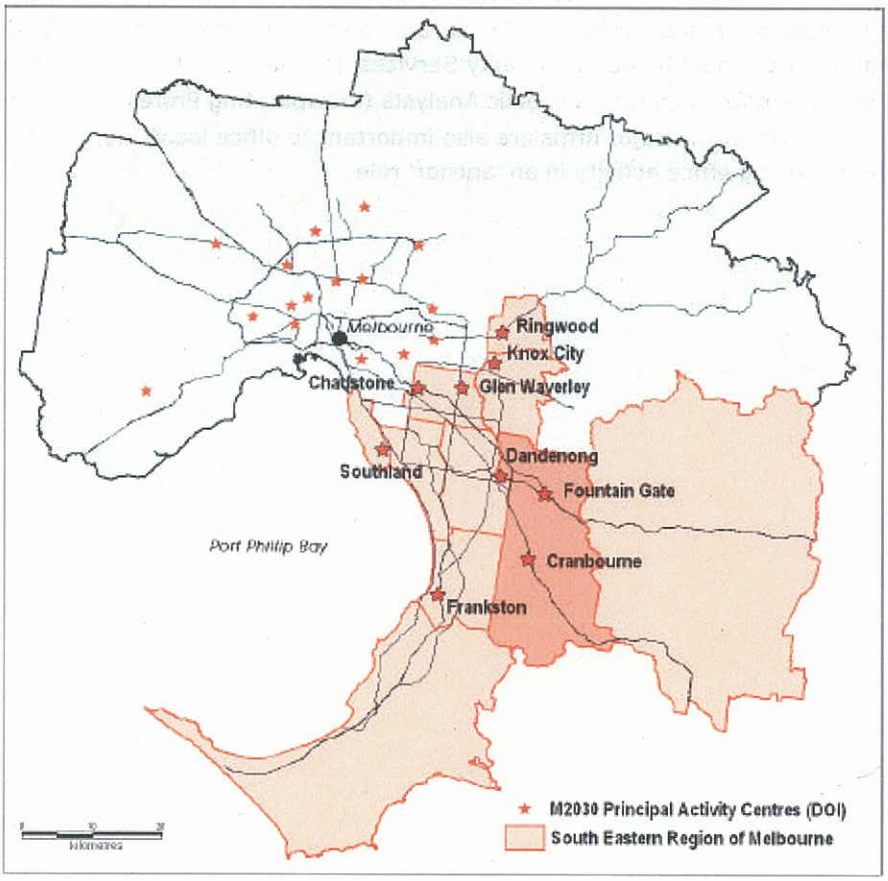
- Strategy to boost office development should focus on establishing a quality lifestyle that supports skilled workers. Important factors appear to be Urban Lifestyle (incorporating High Density Housing, Accommodation, Cafes and Restaurants and Public Transport Use), Cultural and Recreational Services, Health and Community Services, Education and Communication Services. This lifestyle 'offer' supports Symbolic Analysts (incorporating Professionals and Managers and Administrators). Major firms are also important to office locations, by holding many office jobs or driving office activity in an 'anchor' role.

4 Regional Office Space Demand Conditions

This Section forecasts future office space development in the south east region of Melbourne to 2021. This provides a quantitative guide to the maximum level of office space development that Casey may be able to capture to 2021.

The South Eastern Region of Melbourne[15] (SERM) adopted for this purpose is the 11 municipalities of QR11. This region is a functional economic unit, and is shown in the figure below.

Figure 18 - South East Region of Melbourne (SERM)



This section of the report first makes forecasts for total employment to 2021, from a 2001 base, and then examines office jobs and floorspace in more detail.

[15] This is defined as Bayside, Cardinia, Casey, Frankston, Greater Dandenong, Kingston, Knox, Maroondah, Monash, Mornington Peninsula and Whitehorse.

4.1 Overall Employment Forecasts

The results of employment forecasting are sensitive to the method and assumptions used. It is possible to obtain quite diverse results using different methods. For this reason, the forecasting in this report applies three separate methods to give a range of results. The range is treated as the most likely outcome in the study period.

Method 1: Employment Trend Projections

This method uses the data for changes in employment levels by industry over the last inter-censal period (ie. 1996 – 2001) and assumes that past trends continue into the future. This method is relatively simplistic and assumes that known relationships in the economy repeat themselves in the ensuing years. However, it is the lack of complexity in these assumed 'repetitions of history' that gives this method its greatest strength and weakness. What is lacking in accuracy is made up for in transparency.

Method 2: Trend Projections Using Gross State Product and Journey to Work Data

As a general rule, the employment level in each industry can be estimated as a ratio of total industry production. Therefore, if the growth in each industry sector is known then it should be possible to forecast the associated level of employment.

To forecast the growth of industry production, Victorian Gross State Product levels were examined over a twenty-four year period from 1977 to 2001. Gross State Product was then attributed to twelve industry sectors in proportion with Total Factor Income levels. Using the data, it was possible to forecast the growth rate of each industry. However, given the restructuring and the consequent shake out of non-competitive elements of manufacturing in the State during the late 1980s and early 1990s, the trend observed over the last 10 years is deemed to be more reflective of the current and future state of manufacturing. Hence, to forecast employment in manufacturing, the 1991 to 2001 trend was applied.

In order to estimate current production in SERM, industry production levels were taken from the 1996 national Input-Output tables and adjusted to 2001 dollars using CPI. Employment in each industry was then determined using Journey to Work 2001 Census data (JTW). This enabled an approximation of industry production per employee, and using JTW data for the SERM, total production levels were obtained. Production levels were then projected using industry growth forecasts yielded by the Victorian GSP analysis. Finally, this was multiplied by the known employee to production ratios (as given in the National Accounts) to convert output forecasts to employment levels.

Method 3: Input-Output Model - Trend Projections Using Export Growth

A common form of economic impact analysis is via the use of a regional Input-Output model. Such a model was developed for the SERM by SGS Economics & Planning using statistical adjustment of the national Input-Output coefficients based on location quotients, RAS method and Leontief inverse. The method used by SGS Economics and Planning is similar to that used by the Queensland Treasury and various other statistical agencies.

As part of the Input-Output model, the total value of inter-regional exports for each industry is generated. Assuming that exports grow in proportion to the Victorian GSP levels, and applying regional employment multipliers, it is possible to predict the amount of employment generated in SERM as industries increase their production to meet export demand.

The output of the employment forecasts for SERM made using the three methods is reported below.

Figure 19 - Employment Forecasts, SERM, 2001-2021

	Jobs in 2001	Jobs in 2021 using Method 1 (JTW)	Jobs in 2021 using Method 2 (GSP)	Jobs in 2021 using Method 3 (IO Model)
Agriculture, Forestry and Fishing	5,325	5,407	4,954	6,631
Mining	406	260	350	428
Manufacturing	111,087	122,928	174,962	161,866
Electricity, Gas & Water Supply	2,588	2,272	3,237	3,594
Construction	27,472	37,063	26,725	27,712
Wholesale Trade	42,751	52,513	49,946	52,681
Retail Trade	89,069	199,837	104,059	114,576
Accommodation, Cafes & Rest.	16,098	40,296	18,807	21,082
Transport & Storage	14,009	25,379	18,022	18,459
Communication Services	8,693	6,518	11,183	11,376
Finance & Insurance	10,678	9,795	16,667	14,992
Property & Business Services	44,617	104,364	69,642	61,348
Govt. Admin. & Defence	11,850	15,847	14,092	12,926
Education	37,419	59,039	44,498	44,396
Health & Community Services	48,836	102,471	58,074	58,082
Cultural & Recreational Services	9,684	24,693	13,125	12,710
Personal & Other Services	16,039	31,203	21,740	20,101
Total	496,621	839,884	650,083	642,958

Source: SGS Economics & Planning

The SERM is expected to grow its job stock by 146,000 jobs to 344,000 jobs, in the period 2001 and 2021. The extent of the growth will depend on wider economic factors.

It should be noted that Method 1 (JTW), which gives the highest result, assumes that the strong labour market recovery experienced in the South East over the last inter-censal period (1996 – 2001) will continue into the future. Hence, it provides an optimistic forecast while the other two methods provide a much more pragmatic scenario.

Furthermore, all of these estimates are trend based. That is, they do not explicitly allow for structural shifts that can be caused due to technological change or improved physical infrastructure. However, to the extent that these shifting drivers are embedded in production processes (especially since a long run trend was applied), the projections based on GSP may be the most reliable.

4.2 Forecasting Commercial Floorspace

To determine the proportion of jobs that are based in offices, a detailed review of land use and employment data was conducted. The Western Australia Department of Planning and Infrastructure (PlanningWA) conducts a detailed land use and employment survey of metropolitan Perth[16] at the Census Collection District (CCD) level (known as PLUC). The data was obtained from the Department and a regression analysis was conducted to determine the proportion of jobs in each industry and occupation that are based in different land use categories. CCD data was then aggregated to Statistical Local Areas (SLA) in order to compare this data set against the Journey to Work data set.

Using these two datasets, a set of ratios was derived that represent the most accurate conversion between JTW employment and PLUC employment. This was achieved using a technique known as Mean Least Squares[17].

Based on the concordance between the JTW employment data and PLUC data, it was possible to determine the proportion of jobs in each industry and occupation that are based in different land use categories.

[16] Perth data is used as no such survey is conducted for metropolitan Melbourne.

[17] Mean Least Squares is the same technique used in regression analysis. The difference being that instead of fitting a straight line to the data, in this circumstance a set of percentages were fitted.

Figure 20 - Office Quotients for Industries and Occupations

Industry	Professionals	Clerical and Sales	Other
Commercial Services	100.00%	100.00%	0.00%
Hospitality Services	30.32%	100.00%	0.00%
Manufacturing, Transport and Storage	0.00%	8.65%	0.00%
Construction	0.00%	0.00%	0.00%
Retail Trade	0.00%	0.00%	0.00%
Wholesale Trade	0.00%	0.00%	0.00%
Community Services and Government	62.41%	0.00%	0.00%
Education	0.00%	0.00%	0.00%
Other	100.00%	76.32%	0.00%

The second part of the Perth Census analysis was to develop the Perth employment and floorspace ratios for each occupation using regression analysis. The results are shown below.

Figure 21 - Occupation to Floorspace Ratios

R Square	0.97
Adjusted R Square	0.94

	Floorspace Ratio	Standard Error	t Stat	P-value
Professionals	19.08	6.12	3.12	0.004
Clerical and Sales and Other Workers	42.34	12.05	3.51	0.001

A custom made cross-tabulation of Journey to Work industry and occupational profile (ie. ANZSIC and ASCO cross-tabulation) for the SERM was obtained from the ABS to analyse the distribution of jobs in each industry according to various occupations.

By comparing 1996 and 2001 data it is possible to determine the shift in occupation structure in each sub-region. This change takes p lace for a number of reasons and some examples would include technological change reducing the amount of labour required, clustering of management and professional services in city sub-regions, and the extra demand for lower rent space for manufacturing in outer city regions. Therefore, it is important to examine the industrial structure and shift for each study region separately as the trend will vary substantially depending on the sub-region's role in the overall economy.

The employment forecasts according to industry and occupation were then used to predict the total office based employment using the land use quotients reported above. Office space per worker ratios (by occupation) were then applied to determine the total demand for office floorspace, as reported below.

Figure 22 - Method 1 (JTW) Based Floorspace Forecasts, SERM, 2001 - 2021

Column 1	*Column 2*	*Column 3*			*Column 4*			*Column 5*		
Industry Supergroup	Employment Growth	Occupation Desagregation			Occupations Requiring Office Floorspace			Office Floorpspace Demand		
		Professionals	*Clerical, Sales and Service Workers*	*Other*	*Professionals*	*Clerical, Sales and Service Workers*	*Other*	*Professionals*	*Clerical, Sales and Service Workers*	*Other*
Commercial Services	56,689	31,298	17,783	7,608	31,298	17,783	0	597,051	752,901	0
Hospitality Services	24,198	7,126	11,045	6,027	2,161	11,045	0	41,221	467,646	0
Manufacturing, Transport and Storage	23,211	6,762	3,694	12,754	0	320	0	0	13,534	0
Construction	9,591	2,453	1,643	5,494	0	0	0	0	0	0
Retail Trade	110,768	21,234	64,809	24,725	0	0	0	0	0	0
Wholesale Trade	9,762	3,944	3,144	2,673	0	0	0	0	0	0
Community Services and Government	57,633	32,107	22,775	2,751	20,039	0	0	382,277	0	0
Education	21,620	17,298	3,974	347	0	0	0	0	0	0
Other	29,793	12,074	8,362	9,356	12,074	6,382	0	230,329	270,219	0
Total	**343,263**	**134,298**	**137,229**	**71,736**	**65,573**	**35,530**	**0**	**1,250,878**	**1,504,301**	**0**
					Total Employment Requiring Office Floorspace					**101,103**
					Total Office Floorspace Demand (Sqm)					**2,755,179**

Figure 23 - Method 2 (GSP) Based Floorspace Forecasts, SERM, 2001 - 2021

Column 1	*Column 2*	*Column 3*			*Column 4*			*Column 5*		
Industry Supergroup	Employment Growth	Occupation Desagregation			Occupations Requiring Office Floorspace			Office Floorpspace Demand		
		Professionals	*Clerical, Sales and Service Workers*	*Other*	*Professionals*	*Clerical, Sales and Service Workers*	*Other*	*Professionals*	*Clerical, Sales and Service Workers*	*Other*
Commercial Services	33,504	18,498	10,510	4,496	18,498	10,510	0	352,867	444,978	0
Hospitality Services	2,709	798	1,237	675	242	1,237	0	4,615	52,357	0
Manufacturing, Transport and Storage	67,888	19,779	10,804	37,305	0	935	0	0	39,585	0
Construction	-747	-191	-128	-428	0	0	0	0	0	0
Retail Trade	14,990	2,874	8,770	3,346	0	0	0	0	0	0
Wholesale Trade	7,195	2,907	2,317	1,970	0	0	0	0	0	0
Community Services and Government	11,480	6,396	4,537	548	3,992	0	0	76,150	0	0
Education	7,079	5,664	1,301	114	0	0	0	0	0	0
Other	9,364	3,795	2,628	2,941	3,795	2,006	0	72,394	84,932	0
Total	**153,462**	**60,519**	**41,977**	**50,967**	**26,527**	**14,687**	**0**	**506,026**	**621,852**	**0**
					Total Employment Requiring Office Floorspace					**41,214**
					Total Office Floorspace Demand (Sqm)					**1,127,878**

Figure 24 - Method 3 (IO Model) Based Floorspace Forecasts, SERM, 2001 - 2021

Column 1	Column 2	Column 3			Column 4			Column 5		
Industry Supergroup	Employment Growth	Occupation Desagregation			Occupations Requiring Office Floorspace			Office Floorpspace Demand		
		Professionals	*Clerical, Sales and Service Workers*	*Other*	*Professionals*	*Clerical, Sales and Service Workers*	*Other*	*Professionals*	*Clerical, Sales and Service Workers*	*Other*
Commercial Services	23,727	13,100	7,443	3,184	13,100	7,443	0	249,892	315,122	0
Hospitality Services	4,984	1,468	2,275	1,241	445	2,275	0	8,490	96,322	0
Manufacturing, Transport and Storage	55,230	16,091	8,790	30,349	0	761	0	0	32,204	0
Construction	239	61	41	137	0	0	0	0	0	0
Retail Trade	25,507	4,890	14,924	5,694	0	0	0	0	0	0
Wholesale Trade	9,930	4,012	3,198	2,719	0	0	0	0	0	0
Community Services and Government	10,322	5,750	4,079	493	3,589	0	0	68,466	0	0
Education	6,977	5,582	1,283	112	0	0	0	0	0	0
Other	9,422	3,818	2,645	2,959	3,818	2,018	0	72,840	85,454	0
Total	**146,337**	**54,773**	**44,676**	**46,888**	**20,962**	**12,497**	**0**	**399,688**	**529,102**	**0**
					Total Employment Requiring Office Floorspace					**33,449**
					Total Office Floorspace Demand (Sqm)					**928,790**

The following table summarises the floorspace forecasts based on the three methods used.

Figure 25 - Synopsis of Floorspace Forecasts, SERM, 2001 – 2021

	2001 - 2011		2011 - 2021		2001 - 2021	
Method	Office Employment	Office Floorspace	Office Employment	Office Floorspace	Office Employment	Office Floorspace
JTW Trend Based	39,725	1,085,397	61,378	1,669,782	101,103	2,755,179
GSP Trend Based	15,812	437,873	25,402	690,005	41,214	1,127,878
IO Model Based	15,285	428,610	18,164	500,180	33,449	928,790
Average	23,607	650,626	34,981	953,322	58,589	1,603,949

On this basis, the SERM is expected to accommodate between 928,000 sqm and 2,800,000 sqm of additional office floorspace in the period 2001 and 2021.

It should be noted that not all of the floorspace indicated above will be delivered in the form of conventional in-centre office buildings. Some of the office space in question will be in ancillary spaces within retail and manufacturing buildings while some would be accommodated in home offices.

For reference purposes, the following examples provide a guide for visualising floorspace quantities:

- Typical strip shopping centre shopfront (eg. Narre Warren) – 100 sqm;
- Typical large supermarket – 4,000 sqm;
- Typical department store (eg. Myer) – 20,000 sqm; and
- Rialto Building, Melbourne – 140,000 sqm gross area, 84,000 sqm leasable area.

4.3 Implications for Casey's Centres

The implications of this analysis for Casey are as follows.

- Casey is one part of the South East Region of Melbourne, which is defined as the 11 most south-eastern municipalities in the Melbourne Statistical Division. This region is expected to accommodate between 928,000 sqm and 2,800,000 sqm of additional office floorspace in the period 2001 and 2021.

- Not all of the 'new' office floorspace will be delivered in the form of conventio nal in-centre office buildings. Some of the office space in question will be in ancillary spaces within retail and manufacturing buildings while some would be accommodated in home offices.

- Casey will be in the market to capture a share of the regional office floorspace demand. The extent of the capture will depend on the underlying supply conditions in each of the region's competing locations.

5 Activity Centre Capture of Office Development

This Section begins the process of apportioning the aggregate level of regional office space demand (as established in Section 4) to locations within the region. Specifically, this Section estimates the extent to which office space is captured by 'activity centres' versus other locations. This is required because, as noted earlier, not all office space is located in office buildings in activity centres.

5.1 Method and Qualifications

The percentage of office jobs that are located in activity centres in Melbourne was estimated by overlaying a data set of office jobs by Travel Zone in Melbourne with a map of activity centres. It was assumed that where a Travel Zone contains an activity centre, all office jobs located in the Travel Zone are 'in-centre' jobs. Conversely, if a Travel Zone does not contain an activity centre, all office jobs located in that Travel Zone are 'out-of-centre' jobs.

This analysis was undertaken for four activity centre types as defined in Melbourne 2030 as follows:

- Central Activities District (CAD) (1 Centre);
- Principal Activity Centre (PAC) (26 Centres);
- Major Activity Centre (MAC) (82 Centres); and
- Specialised Activity Centre (SAC) (10 Centres).

The results must be interpreted with three qualifying factors in mind.

Firstly, the calculations do not include Neighbourhood Activity Centres (NACs). These centres are small in comparison with the other activity centre types. However, as there are over 900 NACs in the Melbourne metropolitan area, it is possible that together they contain a significant number of office jobs. Therefore, the data for 'in-centre' office jobs relates to the activity centre categories noted above, and not necessarily all activity centres.

Secondly, because the calculations are accurate to the Travel Zone level, all jobs in a Travel Zone are deemed to be within an activity centre. However, it is possible that some of the office employment may be located outside a centre in technical reality.

Thirdly, it is important to note that these figures are based on existing patterns of office development in Melbourne. Future office development patterns will not necessarily follow past trends. In fact, it should be expected that the ratio of in-centre office jobs relative to out-of-centre jobs increases with the implementation of Melbourne 2030 and related policies such as the Transit Cities Program. Therefore, any projection of future office floorspace trends in Melbourne should acknowledge this by using a ratio that 'factors up' the proportion of in-centre jobs.

5.2 Existing In-Centre Versus Out-of-Centre Splits: Melbourne

The total number of office jobs in Melbourne is 797,146 (2001 data). Of this total pool of office jobs, 322,321 (or approximately 40%) are located in Travel Zones that contain one of the activity centre types listed above.

The 'in-centre' job figure is broken down by activity centre type as follows.

Figure 26 - Office Jobs by In-Centre / Out-of-Centre Location

Total Office Jobs	797,146	
CAD	133,053	16.7%
PAC	54,909	6.9%
MAC	105,060	13.2%
SAC	29,299	3.7%
Total Office Jobs In Centre	322,321	40.4%
Total Office Jobs Out of Centre	474,825	59.6%

The proportions by centre type using only in-centre office jobs, are shown in the table below.

Figure 27 - Office Job Locations: In-Centre Only

Total In-Centre Office Jobs	322,321	
CAD	133,053	41.3%
PAC	54,909	17.0%
MAC	105,060	32.6%
SAC	29,299	9.1%

5.3 Existing In-Centre Versus Out-of-Centre Splits: Suburbs

The figure below shows the existing distribution of office jobs in the suburbs (ie. excluding the CAD). This shows that, with the CAD excluded, most jobs in the suburbs are in fact out-of-centre based or in Neighbourhood Activity Centres, according to these indicators.

Of the suburban jobs that are in-centre, most are in MACs. This reflects the large number of MACs (82) relative to the number of other activity centre types (26 PACs and 10 SACs).

Figure 28 - Office Job Locations in the Suburbs

Total Office Jobs Excluding CAD	664,093	
PAC	54,909	8.3%
MAC	105,060	15.8%
SAC	29,299	4.4%
Total Office Jobs In Centre	189,268	28.5%
Total Office Jobs Out of Centre	474,825	71.5%

The proportions by centre type using only in-centre office jobs, are shown in the table below.

Figure 29 - Office Job Locations: In-Centre Excluding CAD

Total In-Centre Office Jobs Excluding CAD	189,268	
PAC	54,909	29.0%
MAC	105,060	55.5%
SAC	29,299	15.5%

5.4 Implications for Casey's Centres

The implications of this analysis for Casey are as follows.

- The base case suburban ratio of in-centre versus out-of-centre office jobs is 29%:71%, with the 29% broken into 29% PACs, 56% MACs and 16% SACs. This applies for 2001.
- The base case metropolitan ratio of in-centre versus out-of-centre office jobs is 40%:60%, with the 40% broken into 41% CAD, 17% PACs, 33% MACs and 9% SACs. This applies for 2001.
- For the purpose of future office space budgeting, a scenario that assumes Melbourne 2030 shifts the ratio in favour of activity centres should be applied. It is suggested that a 50% in-centre and 50% out-of-centre ratio be used for this purpose, for centres above NAC level. This is considered reasonable given the 2001 situation.

6 Introduction to Casey's Centres

This Section introduces Casey's centres and briefly reviews their supply conditions. This provides further insights into the opportunities and challenges in capturing the aggregate regional level of activity centre bound office space to 2021.

6.1 Overview of Centres and Profiling

Figure 1 at the beginning of this report plots Casey's activity centre network, which is defined by two Principal Activity Centres (PACs) (Fountain Gate-Narre Warren and Cranbourne) and four Major Activity Centres (MACs) (Casey Central, Berwick Village, Hampton Park and Endeavour Hills).

This section of the report provides a basic profile of the centres – in terms of existing conditions and land conditions - and reviews social indicators for areas surrounding the centres.

As noted in Section 3, access to skilled workers is a key ingredient in developing an office sector in an area, which is underpinned by lifestyle attributes. On this basis, the skills profile of each area can be used as an indicator of lifestyle -skills rating, and how this is changing. Reich's three level typology is used to profile the suburbs surrounding each of Casey's centres.

For comparison purposes, the same data for Casey, South East Region Melbourne (SERM) and metropolitan Melbourne is provided below.

Figure 30 - Occupational Structure in the New Economy, Casey LGA, 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	10,765	17.03%	13,663	17.21%	2,898	4.88%
In-person service workers	29,090	46.01%	35,483	44.70%	6,393	4.05%
Routine production workers	23,375	36.97%	30,236	38.09%	6,861	5.28%
Total	63,230	100.00%	79,382	100.00%	16,152	4.65%

Source: Derived from ABS Census, 1996 & 2001

Figure 31 - Occupational Structure in the New Economy, SERM, 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	133,861	24.88%	155,728	26.07%	21,867	3.07%
In-person service workers	230,524	42.85%	248,975	41.68%	18,451	1.55%
Routine production workers	173,593	32.27%	192,638	32.25%	19,045	2.10%
Total	537,978	100.00%	597,341	100.00%	59,363	2.12%

Source: Derived from ABS Census, 1996 & 2001

Figure 32 - Occupational Structure in the New Economy, Melbourne (SD), 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	374,454	27.64%	447,531	29.60%	73,077	3.63%
In-person service workers	572,494	42.25%	619,700	40.99%	47,206	1.60%
Routine production workers	407,943	30.11%	444,486	29.40%	36,543	1.73%
Total	1,354,891	100.00%	1,511,717	100.00%	156,826	2.21%

Source: Derived from ABS Census, 1996 & 2001

6.2 Fountain Gate–Narre Warren

Figure 33 - Fountain Gate–Narre Warren Zoning Map

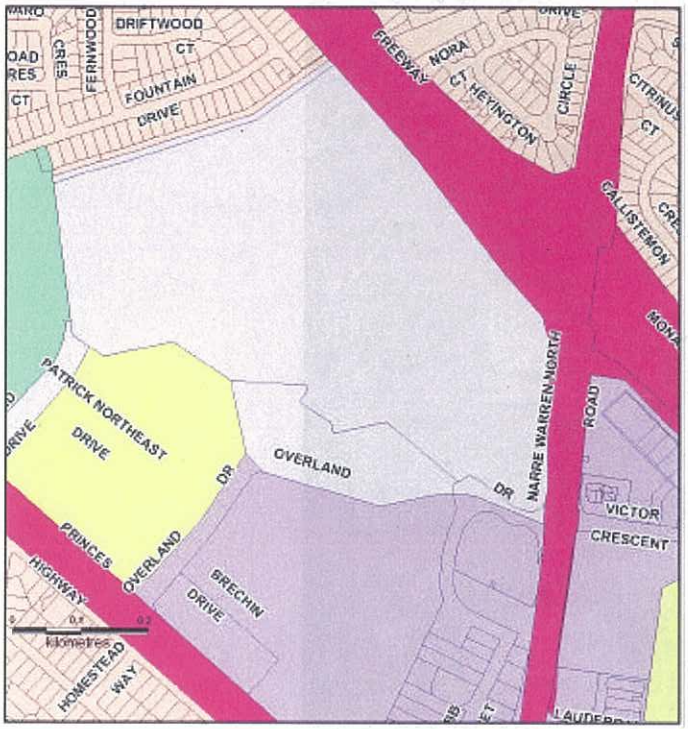


Figure 34 - Fountain Gate–Narre Warren Aerial Photograph

Location:	• Princes Highway, Narre Warren
Description:	• 120,000 sqm enclosed shopping mall • Satellite 'box' retail located around main centre • Civic and recreation services located around main centre • Strip retail / commercial hub and train station located south of Princes Highway
Classification:	• Principal Activity Centre
Zones and Overlays:	• The Centre is zoned Business 1 and 2, allowing for a range of activity centre uses • It includes Public Use zoning – incorporating the civic centre and library • It is surrounded by residential areas
Major Tenants:	• Big W, Kmart, Target, Safeway, Coles Supermarket, Bi-Lo
Other Tenants:	• Some office development within area • Many speciality shops
Transport Networks:	• Primary Car - Princes Highway and Monash Freeway

	• Narre Warren Railway Station 1 km to the south • Bus services on Princes Highway and surrounding roads • Pedestrian / bicycle
Total Business Zoned Land:	• 955,000 sqm approx.
Total Greenfield Sites in Business Zones:	• 180,000 sqm approx.

Figure 35 - Occupational Structure in the New Economy, Narre Warren, 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	1,517	16.05%	1,753	15.41%	236	2.93%
In-person service workers	4,448	47.06%	5,166	45.40%	718	3.04%
Routine production workers	3,486	36.88%	4,460	39.20%	974	5.05%
Total	9,451	100.00%	11,379	100.00%	1,928	3.78%

Source: Derived from ABS Census, 1996 & 2001

6.3 Cranbourne

Figure 36 - Cranbourne Zoning Map

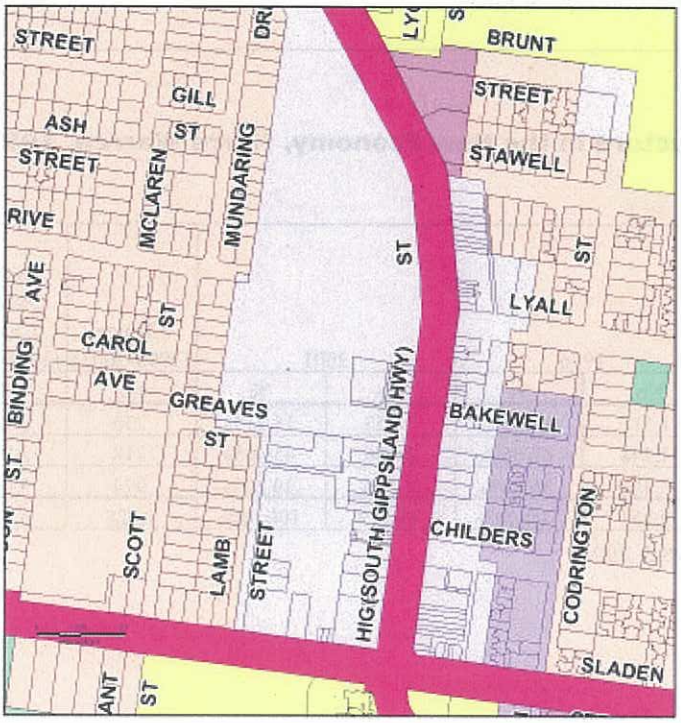
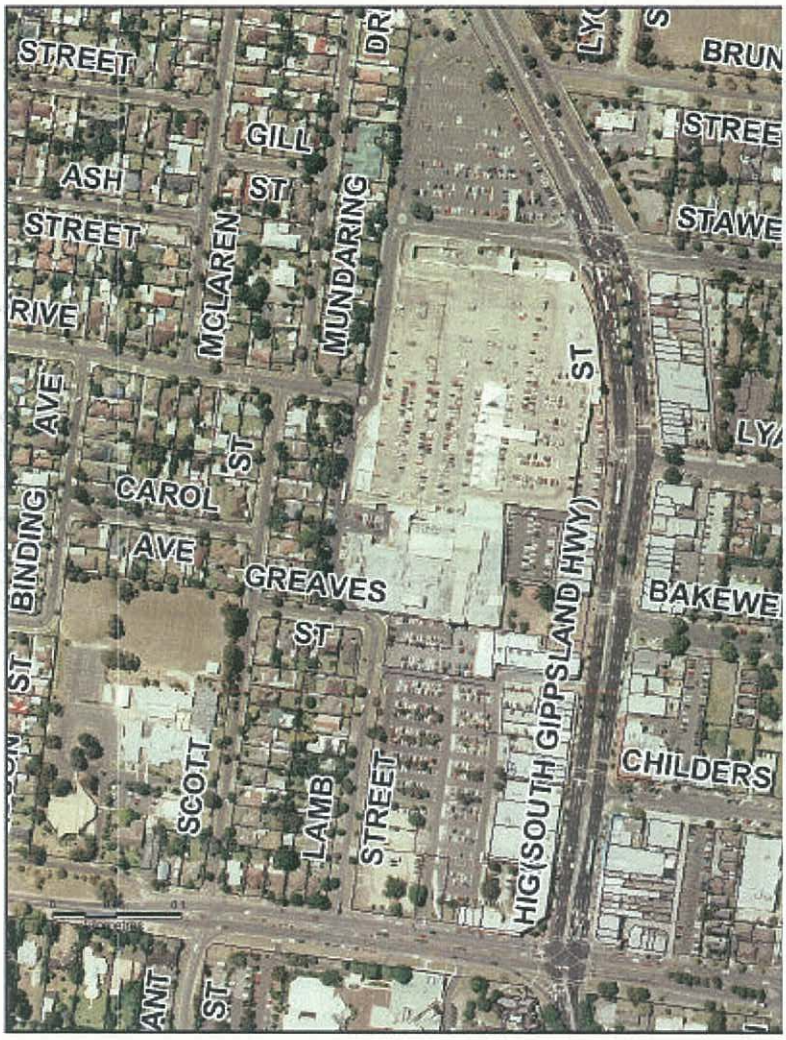


Figure 37 - Cranbourne Aerial Photograph



Location:	• High Street, Cranbourne
Description:	• 31,000 sqm enclosed shopping mall • Strip shopping street
Classification:	• Principal Activity Centre
Zones and Overlays:	• The Centre and strip shopping street is primarily zoned Business 1, allowing for a range of activity centre uses • Public Use zones are located at the extremities of the centre • It is surrounded by residential areas
Major Retail Tenants:	• Mall: Kmart, Coles Supermarket, Harris Scarfe, Safeway
Other Tenants:	• Small offices • Specialty shops • Village Cinema Complex
Transport Networks:	• Primary Car – South Gippsland Highway • Cranbourne Railway Station 1 km to the north • Bus services run through High Street

	• Pedestrian / bicycle
Total Business Zoned Land:	• 187,000 sqm approx.
Total Greenfield Sites in Business Zones:	• 58,000 sqm approx.

Figure 38 - Occupational Structure in the New Economy, Cranbourne and Cranbourne West, 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	743	11.17%	884	11.62%	141	3.54%
In-person service workers	2,979	44.78%	3,373	44.35%	394	2.52%
Routine production workers	2,930	44.05%	3,348	44.02%	418	2.70%
Total	6,652	100.00%	7,605	100.00%	953	2.71%

Source: Derived from ABS Census, 1996 & 2001

6.4 Berwick Village

Figure 39 - Berwick Village Zoning Map

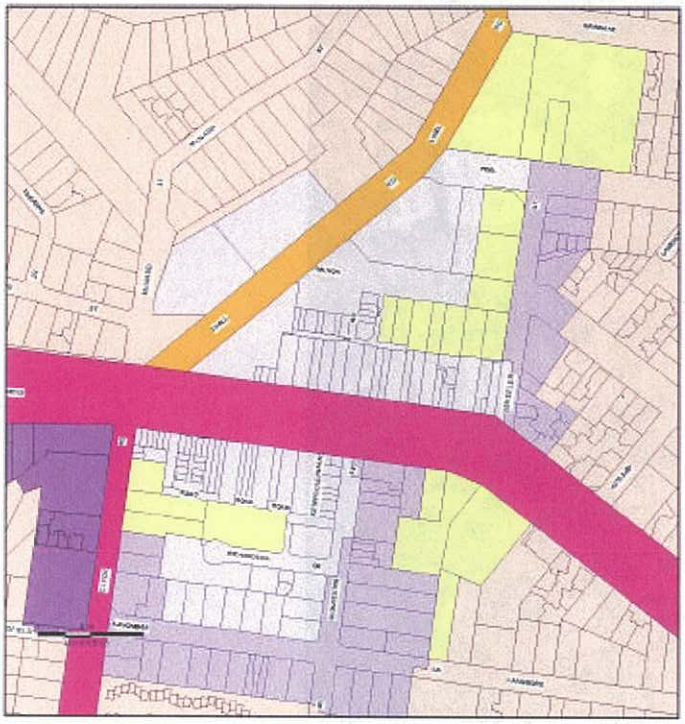


Figure 40 - Berwick Village Aerial Photograph

Location:	• Princes Highway, Berwick • Note: Berwick also has a campus of Monash University and a planned technology precinct; these facilities are planned to accommodate significant education, research and industrial based developments over time; these developments are considered separate from conventional office space development that is the subject of this report
Description:	• Strip shopping street • Small enclosed shopping mall
Classification:	• Major Activity Centre
Zones and Overlays:	• The strip shopping area and enclosed mall are zoned Business 1, with some areas of Business 2 and 4 zoning on the periphery of the centre, allowing for a range of activity centre uses • There are also Public Use zoned areas • It is surrounded by residential areas • Nearby activities include Monash University, Casey Hospital and

	schools
Major Retail Tenants:	• Supermarket
Other Tenants:	• Speciality shops
Transport Networks:	• Primary Car - Princes Highway • Berwick Railway Station 2km to the south • Bus routes run along Princes Highway • Pedestrian / bicycle
Total Business Zoned Land:	• na
Total Greenfield Sites in Business Zones:	• 6,000 sqm approx.

Figure 41 - Occupational Structure in the New Economy, Berwick, 1996 – 2001

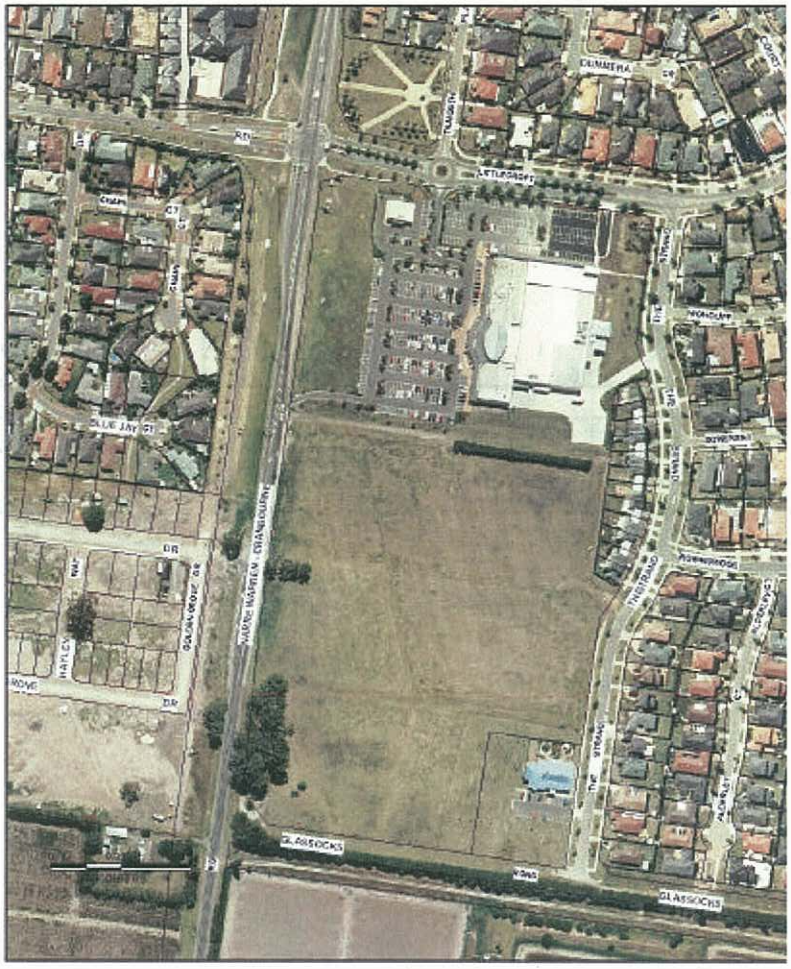
	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	2,100	25.10%	2,957	24.33%	857	7.08%
In-person service workers	3,751	44.83%	5,383	44.29%	1,632	7.49%
Routine production workers	2,516	30.07%	3,813	31.37%	1,297	8.67%
Total	8,367	100.00%	12,153	100.00%	3,786	7.75%

Source: Derived from ABS Census, 1996 & 2001

6.5 Casey Central

Figure 42 - Casey Central Zoning Map

Figure 43 - Casey Central Aerial Photograph



Location:	• Littlecroft Road, off Narre Warren – Cranbourne Road, Narre Warren South / Cranbourne North
Description:	• Small enclosed shopping mall • Large business zoned greenfield site earmarked for significant activity centre development
Classification:	• Major Activity Centre
Zones and Overlays:	• The centre is zoned Business 1, allowing for a range of activity centre uses • It is surrounded by residential uses
Major Retail Tenants:	• Development area
Other Tenants:	• Development area
Transport Networks:	• Primary Car - Narre Warren – Cranbourne Road • No railway station located nearby • Bus routes run along Littlecroft Road and Narre Warren – Cranbourne Road • Pedestrian / bicycle
Total Business Zoned	• 110,000 sqm

Land:	
Total Greenfield Sites in Business Zones:	• 71,000 sqm approx.

Figure 44 - Occupational Structure in the New Economy, Cranbourne North and Narre Warren South, 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	1,017	15.60%	1,827	16.43%	810	12.43%
In-person service workers	3,191	48.95%	5,246	47.19%	2,055	10.45%
Routine production workers	2,311	35.45%	4,044	36.38%	1,733	11.84%
Total	6,519	100.00%	11,117	100.00%	4,598	11.27%

Source: Derived from ABS Census, 1996 & 2001

6.6 Endeavour Hills

Figure 45 - Endeavour Hills Zoning Map

Figure 46 - Endeavour Hills Aerial Photograph

Location:	• Heatherton Road, Endeavour Hills
Description:	• 30,000 sqm enclosed shopping mall
Classification:	• Major Activity Centre
Zones and Overlays:	• The centre is zoned Business 1, allowing for a range of activity centre uses • There is Public Use zoned land to the south of the centre • It is surrounded by residential uses
Major Retail Tenants:	• Big W, Coles Supermarket, Safeway, Clint's Crazy Bargains, Best & Less
Other Tenants:	• 85 specialty shops on one level • No office tenancies
Transport Networks:	• Car • Bus routes on Heatherton Road • No railway station nearby • Pedestrian/bicycle
Total Business Zoned	• 101,000 sqm approx.

Land:	
Total Greenfield Sites in Business Zones:	• None known

Figure 47 - Occupational Structure in the New Economy, Endeavour Hills, 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	1,913	18.79%	2,192	18.83%	279	2.76%
In-person service workers	4,709	46.25%	5,070	43.55%	361	1.49%
Routine production workers	3,560	34.96%	4,379	37.62%	819	4.23%
Total	10,182	100.00%	11,641	100.00%	1,459	2.71%

Source: Derived from ABS Census, 1996 & 2001

6.7 Hampton Park

Figure 48 - Hampton Park Zoning Map

Figure 49 - Hampton Park Aerial Photograph

Location:	• Corner Hallam Road & Somerville Road, Hampton Park
Description:	• 6,000 sqm enclosed shopping mall • Civic buildings (community centre) • Medical centre • Satellite box retail
Classification:	• Major Activity Centre
Zones and Overlays:	• The centre is zoned Business 1, allowing for a range of activity centre uses • It is surrounded by residential uses
Major Retail Tenants:	• Not Quite Right, Safeway, Franklins
Other Tenants:	• 44 specialty shops on 1 level in mall • 3 office tenants in mall
Transport Networks:	• Primary Car – South Gippsland Highway nearby • Bus routes on Hallam Road • No railway station nearby • Pedestrian / bicycle

Total Business Zoned Land:	• 121,000 sqm approx.
Total Greenfield Sites in Business Zones:	• 5,000 sqm approx.

Figure 50 Occupational Structure in the New Economy, Hampton Park, 1996 – 2001

	1996		2001		Change (1996-2001)	Average Annual Change (1996-2001)
	No.	%	No.	%	No.	%
Symbolic analysts	1,018	12.70%	1,099	12.24%	81	1.54%
In-person service workers	3,827	47.73%	4,088	45.53%	261	1.33%
Routine production workers	3,173	39.57%	3,792	42.23%	619	3.63%
Total	8,018	100.00%	8,979	100.00%	961	2.29%

Source: Derived from ABS Census, 1996 & 2001

6.8 Implications for Casey's Centres

The implications of this review for Casey are as follows.

- The information in this section is presented to introduce basic supply-side information to identify opportunities and challenges in accommodating new office development. .Each centre in theory can be structured and restructured to accommodate new office development, but real challenges face Casey's centres.
- The office floorspace budgets of this report are separate from specialised education, research and industrial based developments that are planned for Berwick's university campus and technology precinct.
- See table o verleaf.

Figure 51 - Overview of Supply Conditions

Centre	Design Format	Greenfield Land Availability	Rail Based Public Transport	Symbolic Analysts in 2001 and Growth (pa)*	Major Opportunities	Major Challenges	Office Development Rating**
Fountain Gate – Narre Warren	Mixed, predominantly a big box centre, but has a transit node and office park	180,000 sqm	Yes	15.4% 2.9%	The primary centre of the City. Has significant new office development potential.	Creating an urban environment attractive to office based firms and workers.	**High**
Cranbourne	Predominantly a strip centre but has a big box component	58,000 sqm	Yes	11.6% 3.1%	Small scale development as market demand dictates. Most probable office uses are small offices.	Constrained area with limited new office development potential.	**Low**
Berwick Village	Strip centre	6,000 sqm	Yes	24.3% 7.1%	Possibly some new development opportunities on new road frontages as these are created.	Constrained area with limited new office development potential.	**Low**
Casey Central	Predominantly greenfield	71,000 sqm	No	16.4% 12.4%	The secondary centre of the City. Has significant new development potential.	Creating an urban environment attractive to office based firms and workers.	**High**
Endeavour Hills	Predominantly a big box, car based centre	None known	No	18.8% 2.8%	Small scale development as market demand dictates. Most probable office uses are small offices.	Constrained area with limited new office development potential.	**Low**
Hampton Park	Predominantly a big box, car based centre	5,000 sqm	No	12.2% 1.5%	Small scale development as market demand dictates. Most probable office uses are small offices.	Constrained area with limited new office development potential.	**Low**

*Casey 17.2%, 4.9%; SERM 26.1%, 3.1%; MSD 29.6%, 3.6%

**Qualitative rating of High / Low as a location for office development at the current time

7 Office Floorspace Planning Budgets

This Section documents the recommended office floorspace planning budgets for Casey's centres to 2021.

A 'fair share' approach is taken for this project. This approach apportions expected regional office space demand to each activity centre within the region on a even basis (but makes adjustments for each centre's position in the activity centre hierarchy).

7.1 Method

The method for apportioning the office space demand to centres is as follows.

1. The low to high range for office floorspace demand for SERM, 2001-2021, is used as the stating point. The basis for this is shown in Section 4 of this report.

2. This aggregate demand range is then apportioned to in-centre sites. Three scenarios are used for this purpose, 29% in-centre capture as Scenario 1, 40% in-centre capture as Scenario 2 and 50% in-centre capture as Scenario 3. The basis for this is shown in Section 5 of this report. This provides a low and high estimate for in-centre office demand for SERM to 2021.

3. This in-centre floorspace range is then apportioned to PACs, MACs and SACs based on observed capture rates across this network in Melbourne. Data shows that, on average, PACs in Melbourne have 2,112 office jobs per centre. The corresponding figures for MACs and SACs are 1,282 and 2,930. When applied to SERM's centres (9 PACs, 37 MACs and 3 SACs), a distribution of 25% to PACs, 63% to MACs and 12% to SACs is obtained. In other words, it is assumed that the in-centre floorspace range will be distributed to PACs, MACs and SACs within the SERM at these rates. This provides a low and high demand estimate separately for PACs, MACs and SACs in the SERM to 2021.

4. For each activity centre level (PAC, MAC and SAC), the office demand range is divided by the number of such centres in SERM. This provides a low and high estimate separately for each PAC, MAC and SAC.

The method and results are shown in the next part of the report.

As noted earlier, the SERM comprises the municipalities of Bayside, Cardinia, Casey, Frankston, Greater Dandenong, Kingston, Knox, Maroondah, Monash, Mornington Peninsula and Whitehorse. There are 49 activity centres in SERM (excluding NACs). Of these, 9 are PACs, 37 are MACs and 3 are SACs, as follows.

Figure 52 - List of Centres in SERM

PACs		
1	Casey	Cranbourne
2	Casey	Narre Warren - Fountain Gate
3	Frankston	Frankston
4	Greater Dandenong	Dandenong
5	Kingston	Cheltenham - Southland
6	Knox	Wantirna South - Knox City and Towerpoint
7	Maroondah	Ringwood
8	Monash	Glen Waverley
9	Whitehorse	Box Hill
MACs		
1	Bayside	Brighton - Bay St
2	Bayside	Brighton - Church St
3	Bayside	Hampton
4	Bayside	Sandringham
5	Cardinia	Pakenham
6	Casey	Berwick Village
7	Casey	Endeavour Hills
8	Casey	Hampton Park
9	Casey	Casey Central
10	Frankston	Karingal
11	Greater Dandenong	Chelsea
12	Greater Dandenong	Parkmore - Keysborough
13	Greater Dandenong	Springvale
14	Kingston	Cheltenham
15	Kingston	Mentone
16	Kingston	Moorabbin
17	Kingston	Mordialloc
18	Knox	Bayswater
19	Knox	Boronia
20	Knox	Mountain Gate
21	Knox	Rowville - Stud Park
22	Maroondah	Croydon
23	Monash	Clayton
24	Monash	Mount Waverly
25	Monash	Mount Waverly - Pinewood
26	Monash	Centreway
27	Monash	Mulgrave - Waverly Gardens
28	Monash	Oakleigh
29	Monash	Wheelers Hill Park
30	Mornington Peninsula	Hastings
31	Mornington Peninsula	Mornington
32	Mornington Peninsula	Rosebud

33	Whitehorse	Burwood East - Kmart Plaza
34	Whitehorse	Burwood East - Tally Ho
35	Whitehorse	Business Park
36	Whitehorse	Forest Hill Chase
37	Whitehorse	Nunawading
SACs		
1	Monash	Monash University/Health
2	Monash	Research Precinct - Clayton
3	Whitehorse	Deakin University

7.2 Results

As shown in the following figure, this method suggests that the SERM will, in a 20-year period to 2021, experience in-centre office demand in the range of 269,000 sqm to 1,378,000 sqm (from a 2001 base).

The nine PACs in the region should be able to capture approximately 67,000 sqm to 345,000 sqm of this office demand. For each centre, this represents an average capture rate of between 7,000 sqm to 39,000 sqm.

The 37 MACs in the region should be able to capture approximately 169,000 sqm to 868,000 sqm of the total office demand. For each centre, this represents an average capture rate of between 4,000 sqm to 24,000 sqm.

The 3 SACs in the region should be able to capture approximately 32,000 sqm to 166,000 sqm of the aggregate office demand. For each centre, this represents an average capture rate of between 10,000 sqm to 56,000 sqm.

Note that in the future, the Berwick precinct (University and technology precinct) could be formally classified as a Specialised Activity Centre. If this becomes the case, the aggregate space allocation should be spread across four SACs, meaning between 8,000 sqm to 41,500 sqm of office development each.

Figure 53 - Office Floorspace Planning Budgets Model, South East Region Melbourne, 2001-2021

Office Floorspace Demand 2001-2021, SERM		Low Estimate (sqm)	High Estimate (sqm)
		928,790	2,755,179
In-Centre Capture Ratio			
Scenario 1 @	29.0%	269,349	799,002
Scenario 2 @	40.0%	371,516	1,102,072
Scenario 3 @	50.0%	464,395	1,377,590
Distribution Across SERM's Activity Centre Network			
PAC	25.0%		
Scenario 1 @		67,337	199,750
Scenario 2 @		92,879	275,518
Scenario 3 @		116,099	344,397
Number of PACs	9.0		
Floorspace for Each			
Scenario 1 @		7,482	22,194
Scenario 2 @		10,320	30,613
Scenario 3 @		12,900	**38,266**
MAC	63.0%		
Scenario 1 @		169,690	503,371
Scenario 2 @		234,055	694,305
Scenario 3 @		292,569	867,881
Number of MACs	37.0		
Floorspace for Each			
Scenario 1 @		4,586	13,605
Scenario 2 @		6,326	18,765
Scenario 3 @		7,907	**23,456**
SAC	12.0%		
Scenario 1 @		32,322	95,880
Scenario 2 @		44,582	132,249
Scenario 3 @		55,727	165,311
Number of SACs	3.0		
Floorspace for Each			
Scenario 1 @		10,774	31,960
Scenario 2 @		14,861	44,083
Scenario 3 @		18,576	**55,104**

7.3 Recommended Starting Budgets

Casey has two PACs (Fountain Gate–Narre Warren and Cranbourne) and four MACs (Casey Central, Berwick Village, Hampton Park and Endeavour Hills). Based on this analysis, the two PACs could be allocated an office budget of between 7,000 sqm to 39,000 sqm, net change to 2021. The four MACs could be allocated an office budget of between 4,000 sqm to 24,000 sqm, net change to 2021.

In terms of application of the outputs, it is recommended that the highest figure be used for the purposes of planning. Forward planning should seek to accommodate in some way all forecast or target development, rather than one scenario that is below the most optimistic scenario.

On this basis, the recommended **starting budgets** (net change from 2001 / existing conditions to 2021) are:

- Say 40,000 sqm of net lettable floorspace in Fountain Gate–Narre Warren;
- Say 40,000 sqm of net lettable floorspace in Cranbourne;
- Say 25,000 sqm of net lettable floorspace in Casey Central;
- Say 25,000 sqm of net lettable floorspace in Berwick Village;
- Say 25,000 sqm of net lettable floorspace in Hampton Park; and
- Say 25,000 sqm of net lettable floorspace in Endeavour Hills.

The total target for Casey is 180,000 sqm of additional office development to 2021.

7.4 Adjusting the Starting Budgets

These budgets should be **modified up or down** having regard to supply conditions in the centres, as noted in Section 6 of this report. A higher figure than that shown above could be allocated to centres that have a 'high' office development rating, and a lower figure allocated to centres with a 'low' rating.

The supply-side review in Section 6 highlights that Fountain Gate-Narre Warren and Casey Central are the prime targets for substantial new office development in the future. The Berwick university campus and technology precinct is also earmarked for significant new development, although this area will focus on specialised education, research and industrial based development, which is a niche segment and distinct from generic stand-alone offices.

The other centres in the City have constraints and are expected to accommodate a relatively low level of office development in the future, mainly in the form of market-driven small office development.

On this basis, the following table provides three adjusted scenarios. In all three, Fountain Gate - Narre Warren and Casey Central are chosen as the focus for major office development. The remaining centres are placed on a lower level.

The 180,000 sqm of development (to 2021) is then allocated to the centres using three scenarios. Each scenario moves to a greater concentration of development in the two main office centres.

It is recommended the City of Casey select the scenario that best suits conditions on the ground. This will require more detailed consideration of planning and infrastructure conditions, and market demand conditions. This level of assessment is beyond the scope of this report.

Figure 54 overleaf presents the adjusted table.

Figure 54 – Adjusted Office Floorspace Planning Budgets for Casey's PACs and MACs, 2001-2021

Centre	Starting Budget		Office Development Rating	Possible Allocation Scenario 1	Adjusted Budget Scenario 1	Possible Allocation Scenario 2	Adjusted Budget Scenario 2	Possible Allocation Scenario 3	Adjusted Budget Scenario 3
Fountain Gate-Narre Warren	40,000	22.2%	High	25.0%	45,000	35.0%	63,000	40.0%	72,000
Cranbourne	40,000	22.2%	Low	12.5%	22,500	7.5%	13,500	5.0%	9,000
Casey Central	25,000	13.9%	High	25.0%	45,000	35.0%	63,000	40.0%	72,000
Berwick	25,000	13.9%	Low	12.5%	22,500	7.5%	13,500	5.0%	9,000
Hampton Park	25,000	13.9%	Low	12.5%	22,500	7.5%	13,500	5.0%	9,000
Endeavour Hills	25,000	13.9%	Low	12.5%	22,500	7.5%	13,500	5.0%	9,000
Total (PACs and MACs)	180,000	100.0%		100.0%	180,000	100.0%	180,000	100.0%	180,000

7.5 Employment Implications

The total target for Casey is 180,000 sqm of additional office development to 2021. This translates into approximately **9,000 jobs** in the City (permanent and direct jobs), not counting construction phase jobs and not counting multipliers throughout the economy.

Casey has about 32,835 jobs within its boundaries (2001 data). Hence the office budget, if achieved, would provide a major boost to the local economy, representing a 27% boost on the current job figure from in-centre office based development alone.

7.6 Implementation Challenges

It must be noted that achievement of this level of development will not be easy. The office budgets noted above provide a guide to possible outcomes, assuming that Casey's centres can capture a share of the office stock that is likely to be available to the South East Region of Melbourne. On this basis, the above numbers represent targets on a 'fair share' basis rather than forecasts.

Indeed, given that much of the demand will naturally tend to locate in the central part of the region, closer to the 'centre of gravity' of economic and population activity, the 180,000 sqm target can be interpreted as being optimistic for Casey.

An important point worth noting is that the City will need to be successful in growing and attracting so-called 'higher order' economic activities in order to reach the targets. This includes advanced business service firms, corporate headquarters, back offices and other activities that have a market orientation that is broader than the local population and business base.

This will require a shift in economic patterns because many existing activities in Casey are population serving, such as retailing, personal services and light industry. These sectors typically generate many clerical, sales, production, trade and transport jobs, but are less successful in generating a large number of (higher order office-based) professional, managerial and specialist technical jobs. This is not uncommon for suburban growth areas.

7.7 Possible Strategies

A list of possible strategies to bring about the target level of development, and degree of difficulty of each, is shown in the table below. Note that this is a preliminary list of actions and is presented as a guide for the development or more detailed strategies.

This list highlights that there are many challenges in achieving the targets noted above.

Possible Strategy	Implementability
Strategic and Economic Plan - ▪ Develop an office development plan that identifies the type of office businesses being targeted, and the type of office facilities required. ▪ Prepare an accompanying land use, design, infrastructure and investment plan. ▪ Demonstrate how the office segment or segments are to be 'fitted' into the activity centre system, and how necessary infrastructure (hard and soft) will be provided to support the targeted office businesses.	**High** – ▪ Council has a direct role in strategic planning.
Zoning - ▪ Zone land to accommodate the targeted office development.	**High** – ▪ Council has a direct role in setting the planning framework.
Urban Lifestyle - ▪ Establish the lifestyle attributes that would potentially make Casey's centres strong candidates for attracting skilled workers and advanced business services in high numbers. See Section 3 for factors. ▪ Provide high quality housing estates that are attractive to skilled workers.	**Medium** – ▪ Urban environment development is a complex and long-term process. Council can set the objectives and control framework and implement some aspects.
Infrastructure Works – ▪ Implement infrastructure works associated with the strategic planning framework. ▪ Develop transport infrastructure networks that integrate Casey with the region better. ▪ Capitalise on the East Link investment with strategic infrastructure links into Casey.	**Medium / Low**– ▪ Council will be able to implement some works but rely on other agencies and the private sector to contribute. ▪ Major road and public transport investment is largely the domain of other agencies.
Small, Flexible Office Spaces (Some Low Rent) – ▪ Provide a stock of small and flexible spaces for new economy businesses in the future. ▪ Provide a stock or low rent spaces for businesses to grow into (from the home office) and evolve from, as they move through the business development cycle. This includes low-grade office space and residual shopfronts.	**Low** – ▪ Council is not a commercial property developer or investor. ▪ Many property developers and investors will generally avoid risks associated with multi-tenant properties, in lower order property markets.
Level of Skills - ▪ Boost the level of skills in the region in order to be able to offer a critical mass of highly skilled workers to promote business development and attraction, ultimately leading to	**Low** – ▪ Education and training is the domain of other agencies and skills development has complex social

establishment of a critical mass of businesses which will themselves generate agglomeration benefits and promote a positive cycle of skills capture and business growth. ▪ Invest in education, training and technology infrastructure.	dimensions.
'Anchor' firms and institutions – ▪ Attract large firms and education, health and government facilities to provide significant direct benefits and act as anchors for small business development.	**Low –** ▪ There are risks associated with chasing large and 'footloose' organisations.

7.8 Qualifications

As noted above, the office budgets provide a guide to possible outcomes, based on a 'fair share' target rather than being an explicit forecast.

Note also that the underlying demand number is based on observed trends in the region. It does not explicitly allow for a shift in favour of the region with the construction of East Link and other regional projects. On this basis, the numbers in the report may be conservative.

The numbers represent net change from 2001 / existing conditions to 2021. Planning should use the numbers as a guide but give careful consideration to the longer term picture and ultimate development scenario.

The floorspace numbers quoted above refer to net lettable floorspace. These numbers should be converted into gross building areas and site areas in the planning process. The conversion rates will depend on built form objectives, in terms of site coverage, height and other parameters that are adopted to frame the design process.