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ARRESTING THE DECLINE IN THE NUMBER OF OFFICE USERS IN THE ADELAIDE CENTRAL BUSINESS DISTRICT

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Keywords: Back-Office Locations; Central Business District; Incentive Programs; Information Technology; Office Location; Sunrise Industries **Abstract:** This paper describes a research project carried out by the authors for the University of South Australia, the Adelaide City Council and the Property Council of Australia to identify, inter alia, the factors that have caused a relative and absolute decline in the attractiveness of the Adelaide CBD. It is established that there has been a decline in the number of office-based businesses in the Adelaide CBD and that the mix of industries represented has significantly changed. Some of the causes of the decline are well documented. For example, the technology-enabled centralisation of firms' operations at interstate head offices has had a large impact. The research surveys the perceptions of and attitudes to the Adelaide CBD of:

- decision-makers whose firms have relocated from the CBD,
- decision-makers whose firms have always been located within the CBD, and

• decision-makers whose firms have never been located within the CBD. The results of the surveys will provide some insight into what might be done to address the fairly common phenomenon of the declining CBD. Only the data related

to inner-suburban located respondents was available at the time of presentation.

Introduction

The primary purpose of the Adelaide CBD project, of which this research is a part, is to identify and to qualify the factors, including incentive programs, which attract office-based businesses to the Adelaide Central Business District. The research described in this paper is intended to canvass the attitudes of current CBD office users, current suburban office users, and office users whose firms had moved from the CBD. The only survey results available at the time of presentation were those relating to office users in the inner-suburban areas

Background

The Adelaide CBD is rather unusual in that it is clearly geographically defined as a square mile bounded by public parklands, and has its own local government body. The role of the Adelaide City Council sits somewhat uneasily between the parochialism of the suburban council and the responsibility for the business centre of a city of over one million people. The latter responsibility means that the State government exercises a considerable amount of implicit and explicit control over Adelaide City Council decisions.

The Council is very strong in promotion of CBD retailing against the competition of suburban shopping malls, the promotion of inner city living and, importantly for this project, the promotion of the CBD as the office centre of Adelaide. This means that, while the State government is active in trying to attract business to South Australia and the Adelaide metropolitan area, the Adelaide City Council is attempting to obtain as much of that new business as possible for the CBD, and also to attract existing businesses from the suburbs. In both cases of course, part of the effort involved is in retaining and growing what they already have.

Anyone who lives and works in a metropolitan area will be aware of the boosterism that occurs nearly everywhere at national, regional, city and local levels. The existence of a clearly geographically defined CBD with its own government provided an opportunity to isolate the factors that attract modern office businesses to, or repel them from an Australian CBD.

Although each city has its own unique pattern of users, space usage and growth or decline (Shilton 1995), the results may have relevance to the CBDs of smaller regional cities in most mature economies, while some of the findings may also be useful to larger urban agglomerations,

Modern Office Work and the CBD

There is much empirical evidence to indicate that the nature of office work has changed. As Shilton (1995) notes, old "rules" like finance, insurance and real estate employment driving the office market, office employment being on an endless upward trend, and 20 square metres per office worker being the standard, just do not apply any more.

At the heart of changes in modern office work and offices lie the increasing relative importance of knowledge work, deregulation of national and global financial markets, the consequent imperatives to corporate efficiency and, above all, the revolution in communications technology. Although it may be intuitively appealing to see these as positives in the demand for office space, they may equally prove to be a negative for a given city or region (Sullivan 1996). For example, the combination of drive for efficiency, globalisation and the enabling technology has seen most of Australia's insurance and banking organisations centralise their administrations at their traditional head offices in Sydney and Melbourne, which are perceived as "world cities". This has led to a marked decline in employment in these categories in Adelaide (City of Adelaide 1999) and other State capitals. On the other hand, technological innovations having made it possible to perform all but the "personal interface" functions such as selling from anywhere in the world (Ginsberg 1999).

Back Offices

It is also possible for the flow to go the other way. This is particularly the case in Australia with back-office functions (Bryant 1998). In Adelaide's case, that includes Westpac's national mortgage centre, Bankers Trust's investor and securities services centre, Ansett's ticketing call centre, Telstra's national pay-by-phone centre, Link and Hutchison Telecommunications and AAPT (Kennedy 1998).

Although the purpose of this research was to examine what attracts office business to the CBD, it is relevant to note some of the reasons given by BT Australia for locating their investor and securities services centre in Adelaide. These include lifestyle factors, which attracted many Sydney employees to move to Adelaide, a stable, skilled and enthusiastic workforce and, above all, economic advantages such as salary differentials, lower rentals and lower communications costs (Kennedy 1998). The Adelaide CBD actually shares all of these advantages, but it was suspected that this may not have been realised by decision-makers from large cities who are accustomed to a big cost differential in favour of suburban locations. Given that this type of business is continuing to be targeted by the State government, the decision making of call-centre type operations became one of the main foci of this research.

The Reinvented Workplace

While the technological revolution has enabled global and national corporate office functions to be more flexible in their global location, the same revolution has also had a considerable effect on the carrying out of office functions within a given city – the so-called "reinvented workplace (Becker & Joroff 1995).

One of the effects that has received the most attention has been the concept of telecommuting, whether from home or from a dedicated telework centre (Tepper 1998). The concept of remote working is reflected in office practices, such as hotelling and found workplaces (Sims, Joroff & Becker, 1996). One of the incidental observations during the research for this paper was the high incidence of professional businesses such as architects, engineers, computing software designers and the like which gave what appeared to be suburban residential addresses. These were eliminated from the sample of suburban businesses that were surveyed concerning their choice of location, because the research is not strictly about telecommuting or home officing. Nevertheless, it does confirm the phenomenon noted in by Lorrimer (1997), Kooymans (1998) and Kooymans et al (1999), of increasing numbers of Australians who work, or express a future intention to work, from home.

Telework Centres

Tepper (1998) conducted research in the United States on the telework centre, which is a remote-office alternative to working from home. Such centres have been established to answer concerns about distractions and lack of some requirements for a safe working environment, such as ergonomically designed furniture and good lighting, while retaining the advantages of telecommuting. These are relevant to the Adelaide CBD to the extent that they may provide a means for appropriate individuals to work for a firm in, say, Sydney while living in Adelaide. The authors have become aware over the years of instances of Adelaide-based professionals working for firms based in other capitals. Employers have reluctantly entered into such arrangements, as it was the only way to recruit or retain key individuals. Nevertheless, it may be a way for firms and individuals to gain the same advantages mentioned under the section on call centres, without relocating a whole operation. Such centres in the United States frequently operate in a similar way to the familiar concept of serviced offices, but are technology-focused, and often cater for 20 or 30 people in the same office. An example would be having a firm's entire legal department located in another city.

Communications Technology and the Format of Buildings

One of the major features of the modern office is the proliferation of technology, especially the Internet and e-mail, with their enabling computer technology and wiring. Buildings designed even ten years ago have not necessarily kept pace with the technology requirements of office users.

For example few of the existing stock of buildings had their air conditioning capacity designed around a personal computer on every desk. Technological requirements for buildings designed to accommodate the needs of the modern office tenant include:

- Broadband copper and fibre-optic connection to public communications carriers
- Extensive facilities for receipt of satellite and microwave information
- Generous riser space to allow tenants to install their own secure systems
- Provision, often under-floor for tenants to install integrated modular cabling systems for voice and data
- Wireless communication systems within tenancy spaces

Meeting such communication requirements, as well as the increasing comfort and security requirements of office building occupants is likely to become essential to viable long-term occupancy rates of office buildings (Loftness, Hartkopf & Mill 1990).

Lockwood (1999) notes that there was a discernible trend in the United States towards corporate headquarters' facilities of high-technology-using firms being in low-rise, multiple-building, outer-suburban campuses. This trend is noticeable in Metropolitan Adelaide with Technology Park in the northern suburbs and Science Park in the southern suburbs, for example. There is now a realisation that location does matter, especially in attracting qualified younger staff who may prefer access to city shopping, eating and entertainment over the facilities of a remote campus (Lockwood 1999). Once the decision is made for a more central location, then more efficient land use becomes the issue, meaning that attention is now being paid to making the midrise building work for the high-tech, work-team-oriented tenant. Part of this involves using large, open, internal communicating stairways between two or three floors, as well as the usual lifts and fire stairs, to facilitate internal communications. Small social centres are established on each floor, with a larger central social centre to promote casual gatherings and internal communication. Glass walled conference rooms and balconies take advantage of outlooks and views when available (Lockwood 1999).

Inner City Locations

As Winger (1997) notes, it is unlikely that we will see a withering away of the cities in the next 25 to 30 years. Although communications technologies make this theoretically possible, we continue to see firms and people doing similar things cluster together in geographical space.

Much of this has to do with our need for human interaction in face to face contact. For evidence of this, witness the prosperity of the shopping centre in the face of home shopping technology that has been viable for at least 10 years.

The advantages of the inner city identified by Porter (1995) and applying to Adelaide's CBD are:

- Strategic Location at the population, transport and communications centre. Urban consolidation, a boom in inner-city apartments and continuation of a radial transport system with a CBD hub mean that CBD businesses have easy access to virtually all of the white-collar workforce
- Local Market Demand the post-war decline in the Adelaide CBD population is now being reversed. When combined with the increasing inner suburban population for whom CBD Adelaide is the logical centre, demand for services is very likely to increase, especially given the relative affluence of the inner-city population
- Agglomeration of Competitive Clusters this is seen in legal and financial services, for example, and potential appears to exist for computer technology services
- Human Resources there is a recent tendency for managerial and professional people to prefer inner city living, as evidenced by demand for residential real estate. This could well tip the locational decision balance for some firms in favour of the Adelaide CBD

Hayes and Bunker (1995) concluded that Adelaide and Melbourne CBDs were gradually weakening in their metropolitan dominance as employment centres, in spite of a massive growth in floor space.

Since then, Melbourne CBD has enjoyed a considerable revival which, at least in the residential and entertainment areas, is starting to be seen in Adelaide. As yet, Adelaide has not seen that revival in the office sector. The study described in this paper was aimed at filling some gaps in Adelaide's knowledge of how to spark such a revival.

Methodology

The whole research project consists of collection of available secondary data to quantify the problem of CBD office decline and administration of telephone surveys and in-depth interviews to add qualitative depth. In particular, the surveys and interviews are designed to discover why firms are leaving the CBD, why firms locate in the suburbs instead of the CBD, and what it might take to attract firms to the CBD.

Although the public sector has always been the predominant influence in the Adelaide CBD, employing nearly 13,000 people in 1997 compared to the next largest sector, finance and investment, at just over 5,000, the public sector was not included in the study. The reason for this is that the location of State and Commonwealth government offices, and the question of whether they will be developed or leased, are political policy decisions. Adelaide City Council is well aware of this and of the lobbying that is necessary to ensure that the public sector maintains a substantial CBD presence.

Secondary data, the majority of which has been collected, included statistics collected by the Adelaide City Council, the Property Council of Australia, the Australian Bureau of Statistics and several major office-leasing agents.

Telephone surveys and in-depth interviews have been and are being conducted by the Marketing Science Centre, a semi-autonomous market research firm established under the auspices of the University of South Australia. The surveys and interviews are as follows:

- A telephone survey of 50 firms that had relocated from the CBD to the suburbs within the last four years was intended to be conducted, on the basis of a sample supplied by the major office-leasing agents. Although secondary research showed that employment in the city had declined between 1992 and 1997, the number of establishments had risen. When taking account of firms that just went out of business, a potential population of only 30 could be interviewed. It was decided to conduct in-depth interviews of the four largest firms that had moved from the CBD to the suburbs.
- A telephone survey has been conducted of 50 firms from growth sectors such as financial, legal, accounting, computing and IT, and business consulting, that were located in the suburbs, and results are reported on in this paper.
- These are to be supplemented by in-depth interviews of 4 locational decisionmakers (out of a population of 11) for major office employment centres, which located outside the CBD in recent years.
- A telephone survey is being conducted of 50 firms from growth sectors such as financial, legal, accounting, computing and IT, and business consulting, that are located in the CBD.
- These are to be supplemented by in-depth interviews of 4 locational decisionmakers for large information technology related office employers located within the CBD.

• In-depth interviews are being conducted with 4 senior leasing agents with wide experience of the Adelaide market.

The questionnaires sought to establish:

- Information about the firm and its locational decision-making processes
- Information about the premises occupied
- Satisfaction level with the present building and its amenities
- Satisfaction level with the location and its amenities
- Why the firm is located in the CBD in preference to the suburbs or the suburbs in preference to the CBD. Several of the questions on tenant demand factors were suggested by the survey on tenant demand conducted by Knight Frank Hooker (1995)
- Opinions on the attractiveness of a number of actual and potential Adelaide City Council initiatives, such as the Smart Buildings Program

The in-depth interviews were wide-ranging. While they covered some of the ground in the questionnaires, they were mainly seeking opinions on what needed to be done to attract more offices to the Adelaide CBD.

Findings From Secondary Data

It was established that, as at 1997 offices provided 47% of total employment and occupied 22% of floor area in the City of Adelaide. The sectoral statistics supported the findings of the literature on offices and office work, and followed the economic fortunes of the State:

- The number of Finance and Investment establishments decreased by 22.9% between 1987 and 1992, then increased by 11.8% from 1992 to 1997. CBD employment in the sector fell by 13.2%, then by a further 16.4% over the same period. The decline in employment reflects the centralisation of administration at head offices and increasing computerisation reducing labour requirements. The decline and then increase in the number of establishments reflects the effects of financial deregulation which resulted in rationalisation of the industry and then a proliferation of small providers
- The number of insurance establishments decreased by more than 30% between 1987 and 1997, as did employment in the sector. Again, centralisation of administrations played a large part, but there was a tendency for this industry to decentralise to suburban office strips.
- Legal services showed a 57.4% growth in CBD establishments between 1992 and 1997, while employment remained static.
- Property Services showed a 27% decline in the number of establishments and CBD employment between 1987 and 1997.
- Computing and IT services showed a 79% increase in the number of firms and a 62% increase in employment between 1992 and 1997.
- Business Consulting establishments increased by 63% and employment by 94% between 1992 and 1997.

The latter two categories represent significant growth areas, justifying the city's concentration on them.

In terms of Australian & New Zealand Standard Industry Classifications, the two categories of interest in Adelaide are Finance, Property and Business Services, and Government Administration and Defence. The latter shows a slight decrease between 1991 and 1996 in the proportion located in the City, when compared with the total of the City and Metropolitan Adelaide, down to 44%. Finance, Property and Business Services shows considerable increase, as indicated above, but the percentage increase has been greater in the Metropolitan Area than in the City.

Overall, between 1987 and 1997, there was an increase in the number of office establishments in the Adelaide CBD of 11.6%, but a decrease in office employment of 7.6% (City of Adelaide 1997). This indicates that, from the Adelaide City Council's viewpoint, there is a problem. The decline in CBD workers has a flow-on effect to CBD retailers, as well as a direct effect in terms of the under-utilisation of office building infrastructure. From 1987 to 1997, Adelaide CBD office building total stock increased from 852,600 square metres to 1,134,800 square metres (Australian Property Council Office Market Reports). Given the decrease in office employment over the same period, it is not surprising that the vacancy rate increased from 7% to 20%.

The problem appears to be with the lower classification of building. In Adelaide, there is nearly twice as much office space rated B, C and D grade as there is Premium and A grade. Yet while Premium and A grade had vacancies of 2.2% and 9.6% respectively at January 1999, B,C and D grade had rates of 18.3%, 28.5% and 16.4%. (Property Council of Australia 1999). D grade vacancies would have been higher, except that the Property Council "culled" that space whose leasing prospects were purely wishful thinking.

One of the challenges of attracting office users to the CBD therefore appears to lie in refurbishing and reutilising, or replacing, existing office building stock. Given that large-scale investment in new buildings is unlikely in the absence of a surge of demand, refurbishment becomes an issue. A study conducted in Adelaide in 1985 found that office tenants overwhelmingly preferred new buildings to refurbished buildings providing the same amenities and were willing to pay a 20% rental premium to be in a new building (Kooymans 1985). The suburban-located respondents in the recent survey did not appear to consider that refurbishment was an issue one way or another. This is not surprising, as these respondents also did not rate highly the prestige to be gained from being in a modern building. Perhaps there is perceived virtue in outwardly modest space!

Attitudes of 50 Respondents Located in Suburban Offices

Respondents were telephoned at random from a sample of 700 businesses located on the suburban fringe of Adelaide and in inner suburban office precincts. There were 32 tenants and 18 owners among the sample.

The firms concerned were predominantly in the business/consulting services sector (23), financial services (12) and information technology (11). They were small businesses in the main, which makes them fairly representative of Adelaide's suburban office population. Large businesses were excluded from the sample, as several of these are the subjects of in-depth interviews.

Space allocated per person was evenly split between 10 square metres or less, 11-20 square metres and over 20 square metres. Only five of the sample had moved into buildings that were less than 5 years old, with the majority (29) having moved into buildings that were more than 20 years old - although some of these had recently been refurbished.

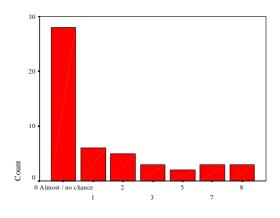
48 of the 50 respondents had made the location decision at local managerial or board level, as opposed to having it made at an interstate head office. This is in accord with the size of the business, and indicates that marketing for this class of space user must take place at a local level. 19 of the respondents had seriously considered a CBD location when making their decision to locate their offices. Incentives had played a minor role, with two respondents receiving local government incentives and six receiving landlord incentives.

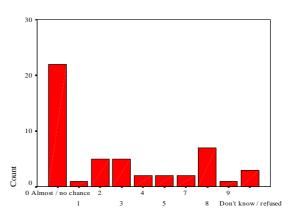
Reaction of Suburban Office Respondents to Council's High-Tech Initiative

The literature reviewed above provides some guidelines for possible refurbishment of office buildings to meet the needs of the reinvented workplace. The Adelaide City Council has already taken the initiative in a pilot program known as the "Smart Building Program". Broadly, the City of Adelaide provides subsidies to owners of office buildings being refurbished or upgraded, to encourage them to provide broadband internet connections to, and reticulate them within, their buildings. The aim is to encourage owners to provide cheap broadband connection as a tenant incentive, rather than the same old new carpet and subsidised partitions. The idea was suggested by an Adelaide City Councillor who had successfully leased a modestly refurbished early 20th Century building by making such a provision, when all else had failed.

While there is a notable tendency for every city of any size to promote itself as "the high-tech hub of the universe" (Weinstein 1999) such infrastructure initiatives are increasingly being seen as necessary but not sufficient to attracting business (Ley 1999).

Awareness of and attitudes to this initiative were canvassed in the research. Suburban located firms were initially asked the likelihood or otherwise that they would move to the Adelaide CBD if they were to expand within the next two years. They were then asked the likelihood of moving on expansion if they were offered Adelaide City Council's Smart Building Program. The results were as follows:





No Incentives

Smart Building Program

The mean of 2.6 on a scale of 0 meaning "no chance" to 10 meaning "certain" indicated that the suburban office occupiers were not attracted to the CBD. The offer of the Smart Building Program increased the mean to 4.1 - hardly an overwhelming endorsement. This is not surprising, given that the suburban respondents also perceived no difference between the suburbs and the CBD in terms of access to broadband internet cabling, and had some significant non-technology related reasons to remain in the suburbs. What was surprising was that the information technology firms showed exactly the same response as the whole respondent group to the Smart Building Program incentive.

Is the Building Itself the Issue?

As indicated above, respondents largely seemed happy enough to be in older buildings. More than 75% of respondents thought that the general condition, air conditioning (!!), ability to connect and use modern office technology, efficiency and flexibility of floor space, access hours and security provisions in their premises were good or very good.

Only nine of the respondents agreed with the proposition that there were no buildings in the Adelaide CBD that would suit their particular operation. So it is probably fair to say that, provided that they meet a reasonable standard, buildings are not the major issue.

As the suburban office phenomenon in Adelaide dates back only to the 1970's, with the majority being constructed in the 1980's, the building stock is likely to be far more modern than exists in the CBD. This emphasises the need for the CBD's older building stock to provide an appropriate standard of accommodation if it is to compete.

What about Locational Amenities?

Respondents were asked a series of questions relating to the amenity of the surrounding environment. A significant number of suburban office locations in Adelaide boast a parklands frontage and a quieter environment than is to be found in the Adelaide CBD. 35 respondents rated the appearance of their surrounding as good to very good, while only two rated it as poor.

Adelaide City Council has proposed an initiative to encourage the establishment of a café environment in the CBD, with a pleasant environment and amenities. This could be an effective initiative with suburban office users, as18 respondents considered that there was an even, or better than even chance of their organisations moving to the Adelaide CBD if it offered the ambience of a suburban location. Importantly, the networking opportunities provided by such an arrangement would appear to be an important consideration. Only 15 respondents agreed with the proposition that a suburban location provides better networking opportunities than a CBD location.

Only 7 suburban respondents rated the availability of facilities for buying meals as "poor". Although significant suburban office areas have a very limited choice of facilities, the gap tends to be filled by firms that deliver lunches.

However, only 16 respondents agreed with the proposition that a suburban location provides better staff amenities than a CBD location. Among the most important of amenities is the ability of staff to shop and to handle bill paying, banking and dry cleaning in their spare time. In most suburban locations, this is quite difficult. While this affects staff rather than decision-making principals, there is some anecdotal evidence from leasing agents that firms have had such difficulty in retaining key support staff in a suburban environment, that they have been forced to relocate in the CBD.

Personal safety and security is perceived to be an important environmental issue, although crime statistics in Adelaide tend not to support the perception. Only one respondent rated personal safety as being poor in their suburban location, while seven respondents disagreed with the proposition that that a suburban location is safer than a CBD location. While it will be interesting to compare the responses of CBD office users, there does appear to be a perception that there is less personal safety within the CBD. This is clearly a perception that needs to be dealt with by Adelaide City Council.

Economic Issues

It is generally the case that CBD rental rates are considerably higher than those in suburban locations, reflecting demand for locational advantages as well as greater building costs for high-rise buildings. The difference in Adelaide is not very great, with some overlap of rental rates having been observed at various times between inner-suburban, parklands-frontage buildings and those in the CBD. The perception of a large rental or land cost differential, assumed from circumstances in their own cities, can mean that interstate and overseas decision-makers sometimes do not even consider an Adelaide CBD location, according to a number of leasing agents. The perception is also held locally, with 40 of the suburban respondents believing that rental rates are significantly more expensive in the Adelaide CBD.

Business people tend to look at the whole operating cost of their business, not just the rental rates. 47 of the suburban respondents believed that it was cheaper to operate their businesses in the suburbs than it would be within the Adelaide CBD. Only three respondents perceived that council rates were cheaper within the CBD. Here is an issue that could be addressed by Adelaide City Council, to the extent that perception mirrors reality.

Transport and Access

40 of the suburban respondents considered that car-parking provision for management, employees and clients was good or very good in their present location, while only one respondent disagreed that car-parking is better in suburban locations than in the CBD. This is not surprising in that adequate car-parking provision is a requirement of suburban office development, whereas new car-parking provision in the Adelaide CBD Core area has been prohibited for many years. 48 respondents considered that car parking is too expensive in the CBD. 23 of the suburban respondents considered that there was an even chance or better of their next move being to the CBD, if car-parking cost and convenience were equal to that of a suburban location.

42 suburban respondents also considered public transport access to be good or very good in their locations. This is an unexpected response, given that Adelaide has a radial public transport system, meaning that many public transport users have to take one mode into the city, and another out to their place of work. Reasons for the response are probably two-fold:

- Respondents were business principals, who would be entitled to a car park and never use public transport. Public transport adequacy would not be an issue to them personally
- Public transport usage in Adelaide is very low and decreasing. This is partly because motor vehicle usage is still relatively cheap and convenient, and partly because public transport is perceived to be unsafe, especially in the evenings and especially by women

44 respondents agreed that a suburban location is more accessible for management and employees, while 48 thought that a suburban location provided more accessibility for clients and customers.

Taken together, car parking and accessibility appear to be the biggest issue for suburban office users in declining a CBD location. Over the last number of years Adelaide City Council has had a policy of discouraging the provision of private parking in buildings, and all-day on street and public parking station parking. A recent proposal in this regard has been to move long-term parking to the upper decks of Council-run parking stations, with lower decks to be used for short to medium term parking. This initiative is driven by the very rational objective of encouraging people to the City for shopping, but it may well be counter-productive in terms of discouraging CBD office users who need to use their cars during the day. Perhaps the rate structure could be modified to encourage all-day parkers to use the upper decks, while making some lower deck space available to those who need their cars during the day.

When the Adelaide City Council area is taken in total, there is more than adequate car parking provision, with fierce competition and some private operators not finding their operations to be very profitable. The problem appears to be a lack of effective demand in the face of competition from suburban office and retail locations.

Some years ago, a planning initiative was undertaken in response to the popularity of suburban offices. Low-rise building campuses were permitted in the Frame of the Adelaide CBD, provided that they had undercroft car parking. These buildings have proven popular with tenants, although they hardly solve the problem of vacant high-rise space in the Core.

As in most Australian cities, there is a move in Adelaide towards inner-city living, with most apartment development proving to be outstandingly successful over the last three or four years. The effect of this on the distribution of offices between suburban and CBD locations is problematic.

Taken as a proportion of the population of Adelaide's greater metropolitan area, inner city residents are not very significant in number, but they are more likely to be in decision-making positions. If they live in the city, the need to commute to work by car vanishes, and they may be more inclined to consider a CBD office location. Some inner-city development proposals on the drawing board are acknowledging the rise of home office working by providing ground floor office with residence above and parking on-site. This seems a worthwhile initiative, but again, it does not solve the problem of vacant CBD high-rise.

Conclusion

The secondary data shows that there is a definite problem in attracting and holding office-based businesses to the Adelaide CBD. A survey of suburban office users shows that car parking and access is the major issue, with economic and lifestyle considerations also being factored in.

Comparison of suburban office users' perceptions and attitudes with those of CBD users should provide further guidance to Adelaide City Council as to what can be done to attract and to retain smaller CBD office businesses. The other section of the project - ascertaining the attitudes of large office employers to the respective attractions of suburban and CBD locations will round out the picture.

References

- Becker, F. & Joroff, M. 1995 *Reinventing the Workplace*, Massachusetts Institute of Technology
- Bryant, G. 1998 'Talk is Getting Cheaper But it Can Still Give People Work', in *Business Review Weekly*, July 13, pp.78-79

City of Adelaide 1999 *City of Adelaide Economic Profile*, Strategic Planning Section, Planning Services Department, Adelaide City Council, Adelaide

Ginsberg, A. 1999 'Exiting the Interstate Highway for the Information Highway', in *Corporate Real Estate Executive*, June Issue, pp.50-51

Kennedy, A. 1998 'Finding the centre, Adelaide style', in *Business Review Weekly*, March 16, pp.95&97

- Knight Frank Hooker, 1995, *Tenant Demand*, Building Owners and Managers Association, Sydney.
- Kooymans, R.R. 1998 'Alternative Officing A study of Its Acceptance in a Branch Office Market', in *Proceedings of 4th Pacific Rim Real Estate Society Conference*, *Perth, Western Australia, 19-21 January 1998*
- Kooymans, R.R. 1985 Are Refurbished Buildings at a Market Disadvantage? unpublished research paper, South Australian Institute of Technology, Adelaide

Kooymans, R.R., Kupke, V.E., Pacharavanich, P., Aw Tuan Kee, D., Sallis, P., 1999 'The Take-up of Information Technology in Offices - a Comparative Study of Three Asia-Pacific Cities', in *Proceedings of the International Real Estate Society Conference*, January, Kuala Lumpur, Malaysia

- Ley, A. 1999 'Melbourne's Economic Advantage', in *Australian Property News*, Vol.27, May 14, pp.1-2
- Lockwood, C. 1999 'Mid-Rise may Change Face of Silicon Skyline", in *Corporate Real Estate Executive*, June Issue, pp.26-27, 46-47
- Loftness, V., Hartkopf, V. & Mill, P.A.D. 1990, 'The Evolving Office' in *Progressive Architecture*, 9/90
- Lorrimer L 1997 'Changing Work Practices', in *Australian Office Market Report*, Property Council of Australia, Sydney, pp 11-13
- Property Council of Australia 1999, *Adelaide Office Market Report*, Property Council of Australia S.A. Division, Adelaide
- Shilton, L. 1995 'The Changing Demand for Office Space', in *Real Estate Review*, Summer Issue, pp.89-94
- Sims W, Joroff M & Becker F (1996), *Managing the Reinvented Workplace*, International Development Research Foundation, Atlanta

Sullivan, K. 1996 'Changing technology and forecasting office space requirements', in *Property Management*, Vol.14, No.1, pp.24-29

- Tepper, S. 1998 *Telework Centers: An Analysis of the Physical and Economic Factors which Contribute to their Success*, Research Bulletin No. 20, The IDRC Foundation, Atlanta
- Weinstein, D. 1999 'Chicago Shoots for Global Info-Tech Status', in *Corporate Real Estate Executive*, June Issue, pp.17,19

Winger, A.R. 1997 'Finally: a withering away of cities?', in *Futures*, Vol.29, No. 3, pp.251-256