



Royal Institution of Chartered Surveyors - Queensland  
Branch  
GPO Box 1634  
Brisbane Qld 4001  
Tel: 07 3224 9287  
Fax 07 3224 9259  
email:  
Info@ricsqld.org.au

### **Productivity Commission – Improving the Future Performance of Buildings**

The Royal Institution of Chartered Surveyors represents some 100,000 members globally with 1000 members located within its Australasian Region. Our members belong to a range of professional divisions covering all aspects of land and construction. The divisions with particular relevance to this research are our General Practice members comprising valuers and property and facility managers. The second relevant division comprises the Quantity Surveying division, including project managers, who have a particular interest in new construction and refurbishment issues. Members in the Queensland Branch wish to contribute to this timely and thought provoking research which could have very significant bearing on our profession as we enter the new millennium.

In responding to this issues paper our comments will be presented as a series of points referenced to the issues paper and supported wherever possible.

#### **Section 2 Performance Measures**

The subject of building performance measures and benchmarking is a wide one with a great deal having been published on its merits and techniques both in the wider business context and in relation to property asset performance. Benchmarking is particularly useful when applied to property operations and has resulted in the establishment of a number of indexes which are applicable to the property industry. This has become more important in recent times with the rapid move towards contracting out with its need to measure contract performance.

What has emerged from both corporate real estate studies and outsourcing research is that the key to success is measurement. The ability to measure results is essential to success. *'You cannot manage what you cannot measure'* Daniel Goldin Head of NASA. Thus benchmarking fulfils this essential gap in the decision making process providing a crutch on which to rest the decision. There is however one fundamental problem with the way in which benchmarking is often applied. Benchmarks are not lines in the sand they are indicators of best practice. No two properties are identical, each is at least individual in its location even if, all other factors are identical and as such each property has a unique set of good and bad performance criteria. The oft quoted saying *'you must compare Apples with Apples'* could not be truer when it comes to property. However there are no

less than 1800 varieties of apple world wide. Borsinger, L Facilities Management Benchmarking On-Line Conference (1998). It is also true that of those benchmarks that are available the majority are cost centred, reporting metrics on a cost per unit area basis or the more practical measure of cost per full time equivalent employee. The former and generally more widely reported industry standards of costs per unit area must always be used with caution as the best performing building in maintenance and other general operating cost is a 'vacant building'. Thus in extracting meaning from these measures care must be taken that the measures have meaning and are interpreted on a like for like basis.

Perhaps the most elusive of benchmark measures is one of quality. In their comprehensive survey of major USA corporations Deloitte Touche LLP 1996, reported that 38% of respondents indicated they had a formal program to measure quality of service from corporate real estate. *'Thus almost two-thirds of companies senior management is making decisions about real estate department services without the benefit of complete and accurate performance information'*. While there are no similar surveys available for Australian corporate asset management, the occurrence of quality evaluation techniques is few and far between and likely to be substantially below that experienced in the US research. Indeed in our experience the majority of commercial building managers rely almost solely on the operating cost and index publications of the Property Council. While these are useful publications they are very limited in their scope and purely centred on dollars per meter squared performance. The need for more comprehensive performance measurement clearly exists. Downey K (1998).

The further development of benchmarking performance metrics particularly in relation to the evaluation of quality of service provision is essential to the continual improvement process in the delivery of real estate asset management.

Without improved performance measures or in many cases, any benchmarking data it is impossible to determine the optimum service delivery methodology and its added value to the corporation as a whole. This conundrum is succinctly demonstrated in Varcoe, B.J. (1996:45) when he says:

*'The inward looking and conservative facilities management team, that prides itself on a "quality job well done" is often the one most in need of the stem-change improvement in performance brought about by the fundamental change wrought by real process innovation'*

Thus the development of meaningful property benchmarking metrics is essential if the science of property management is to progress.

It is important in considering the performance of buildings to understand the two distinct streams of investors and owner occupiers, that exist in the market and how these are driven. The performance indicators differ between the two streams, investment properties are principally constructed and operated on a strict return on investment bases. These investment properties can themselves be divided into two categories, the short term speculative construction and the longer term owner builder such as the larger insurance companies. The former tending to look toward lower cost construction to maximise the

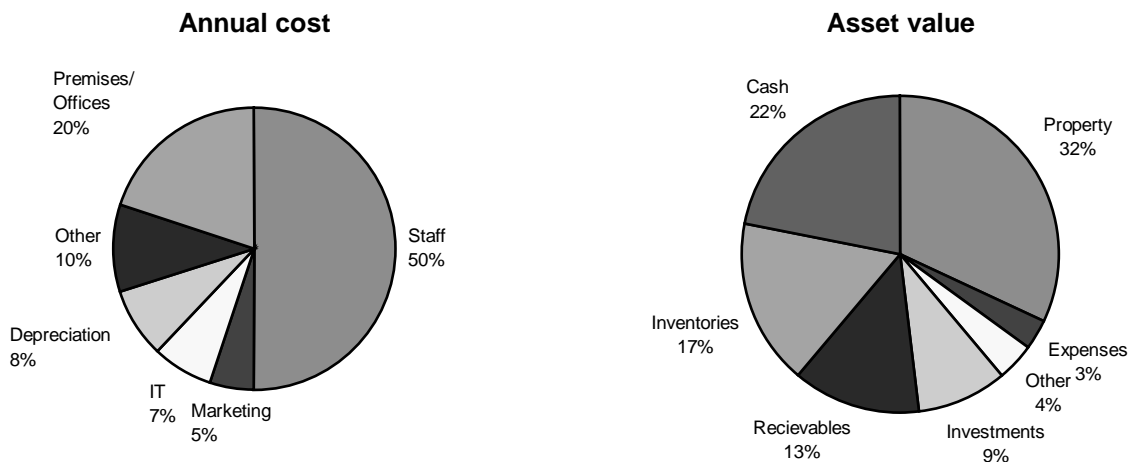
profit on sale while the latter can be more inclined to look at the longer term costs in use and may be prepared to spend more on up-front construction.

The second class of property owner is represented by the owner occupier where the ownership of property is not part of the core business, the term Corporate Real Estate or CRE having been applied to this grouping in recent times.

Corporations purchase real property assets for many different reasons. It is, however, only recently that the important part they can play in the financial stability of the corporation has been recognised. The extent of assets employed by corporations is very significant and is generally the corporation's second largest cost-centre after salaries. Douglas, J. (1996:25).

The value of capital tied up in corporate property has been estimated to be as high as 30% to 40% of total assets, and annual expenditure on property representing 10% to 20% of funds. Figure 1, illustrates the annual cost of retaining property and the value of those assets as a percentage of the organisations total capital investment. These charts are derived from research of major non-property corporations in the UK Varcoe, B.J. (1993:3)

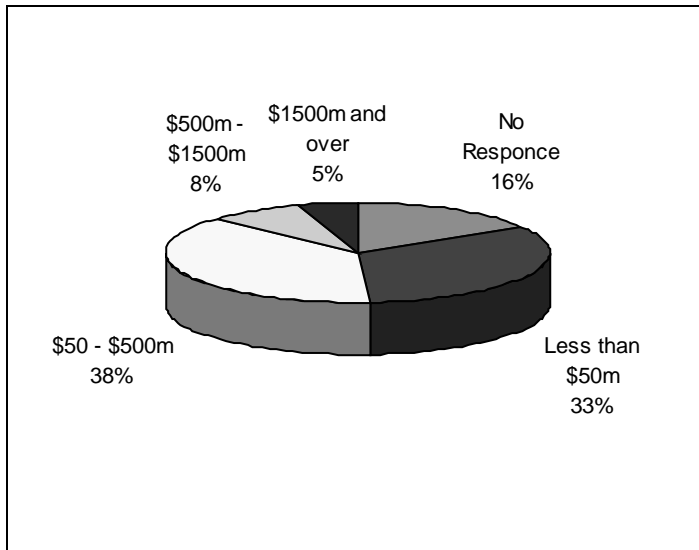
**Figure 1 Premises as Corporate Assets**



Source: Varcoe, B.J. (1993)

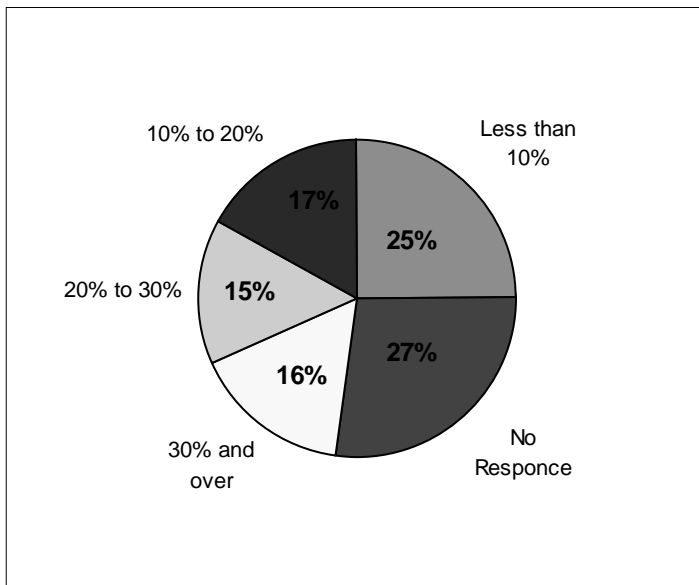
Similar figures for the total capital investment of major organisations has been observed from Australian studies. Jones Lang Wootten (1991) undertook a survey of 500 Australian corporations that owned significant amounts of operational property, but, which were not in the property industry. Figure 2 shows the total market value of property holdings and the distribution of the size of holdings across the survey participants. Figure 3, again illustrates the proportion that property assets represent of the total organisations asset holdings.

**Figure 2 Total Market Value of Organisations Property Assets**



Source: Jones Lang Wootten (1991:5)

**Figure 3 Proportion of Property Assets to Organisations Total Assets**



Source: Jones Lang Wootten (1991:5)

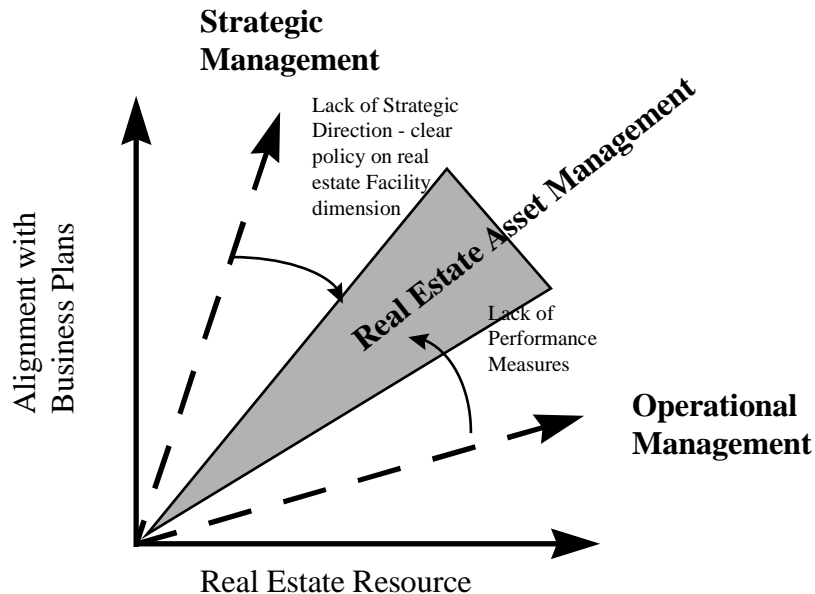
The above figures clearly illustrate that typical corporate assets invested in real property range from 10% to over 30% of the total available capital funds. While these assets represent a very large amount of sunk capital until recent times they were looked upon as a 'free good' to be hidden within the corporate overheads. Jones Lang Wootten (1991:7), and Then, D.S.S. (1998:1). Even in the public sector it has been recognised that the traditional accounting methodology mitigates against the recognition of real property assets as significant assets. The ANAO (1996:Pt2, 2.42) highlights this fact stating:

*'The separation of capital and recurrent costs for budgeting purposes militates against a whole-of-life approach to asset management. Assets purchased with capital funds once approved, are treated effectively as 'free' goods in subsequent years so there is little ongoing incentive to ensure service potential is optimised.'*

The goal then in corporate real estate differs from that of investors and as such a different set of performance measures should be adopted. An emerging model of CRE best practice has developed over recent years identifying the synergy between operational management and corporate strategic management, this is illustrated in

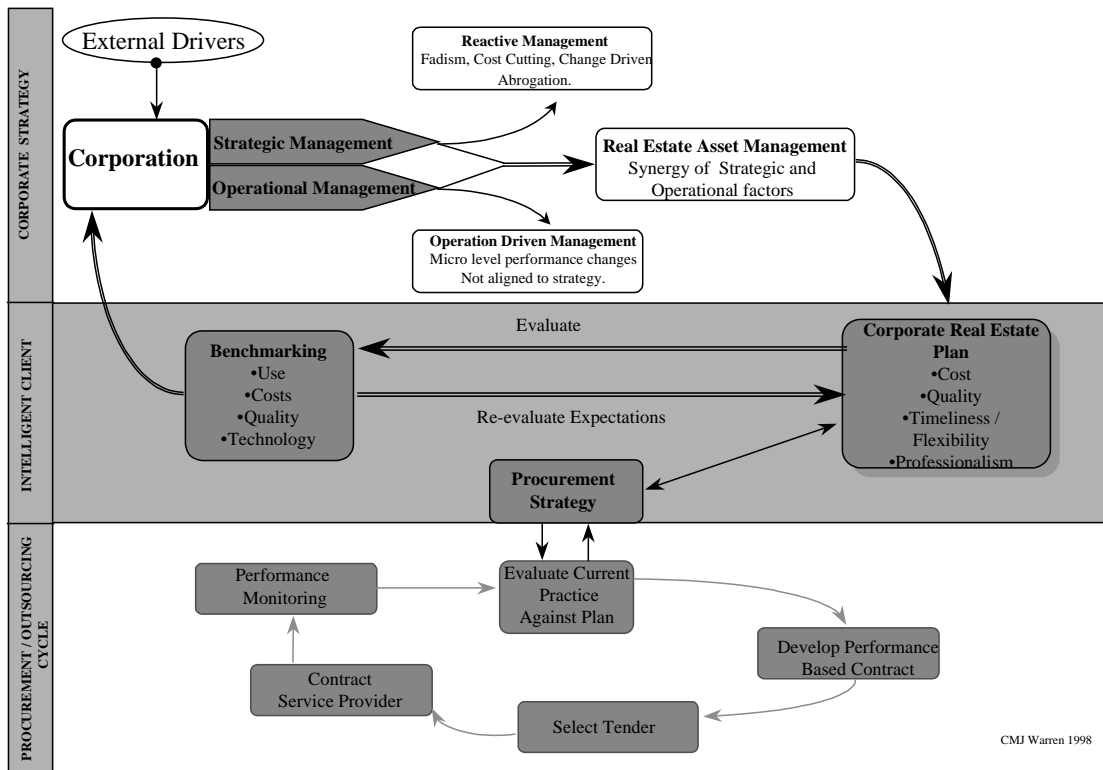
Then D.S.S. (1997:3). Figure 4, where alignment of strategy will lead to an asset management plan that optimises performance.

**Figure 4 Conceptual Representation - Real Estate Asset Management**



Source: Then D.S.S. (1997)

This synergy model has been further expanded into a holistic model incorporating the need to align strategic and operational management into one business wide Corporate Real Estate Plan. The development of a corporate plan is however, not of itself sufficient to drive the overall organisation forward. From the plan an implementation strategy must be developed and perhaps the most important element of all a comprehensive benchmarking system implemented that allows for continual feedback.



CMJ Warren 1998

**Figure 5 Emerging Asset Management Model**

The final element that holds the structure together is the holistic element, it connects the corporate plan with its implementation strategy and performance benchmarking back to the highest level of the corporation through management reporting lines. These influence the way the organisation operates as a single entity not as a core business which demands support from enabling structures beneath, but one that works in harmony to achieve an overall best result for all stakeholders. Warren, CMJ (1998).

In conclusion it is quintessential when looking at the performance of property assets to look at the purpose to which that asset is to be put and to develop performance indicators that match that desired outcome. As stated above cost is one small though significant element in the equation but at present is the only element for which any significant performance measures are available within Australia. Further performance indicators need to be developed for both the investment and corporate occupier in order to demonstrate best practice across wider parameters of quality and business performance.

### Environmental Performance

Environmental performance is another operational issue in the context of performance measurement as discussed above. In terms of energy use and more particularly energy costs both investment managers and corporate real estate managers monitor this aspect closely undertaking building audits and benchmarking against other assets. There is again very limited benchmarking material available produced by the PCA and then not regularly updated for all Australian centres. There is a need to provide more reliable and independent data in this area. The broader issues of greenhouse gases and carbon credits

is in our experience not widely considered in practice as at this time no statutory or financial imperatives exist.

In regards to water and waste management practice varies, water while an operating cost represents a small percentage of total costs and often waste minimisation strategies are comparatively expensive so reducing the take up of such strategies. On the other hand waste minimisation particularly through paper products is widely practised as there are practical savings derived from nil cost collection and the high profile of recycling at the domestic level creates a demand among occupiers of commercial property. There are, however no readily available published data on water use standards or for waste recycling against which to measure performance.

One very significant element of waste which to our knowledge has not been subject to much research or practical measurement is the significant waste caused during commercial property fitouts. There has been an increasing trend in recent times, particularly with the property recession of the early nineties that resulted in payment of high lease incentives, to move offices on a more regular basis. This churn in the markets is further exacerbated by the trend to shorter lease terms now typically between 3 and 5 years. While the open plan office may be reducing partition waste we believe that still significant resources are being wasted with ever increasing regularity.

### Life-cycle costing

Life-cycle costing is an issue for both long-term investment and CRE managers. In evaluating designs and preparing cashflows more attention should be paid to the whole life of the structure rather than just the initial construction cost. Post occupation practice varies with on only the larger organisations moving to performance based maintenance and looking at the balance between routine maintenance and breakdown maintenance. The development of new performance measurement has tended to mean that owners are evaluating assets over their whole life and expecting obsolescence and redevelopment rather than an asset that lasts in perpetuity. This view was succinctly put in the area of future development of government property when it was said that 'Government is no longer in the business of building heritage properties' Williams R (1993)

### Section 3 Input Saving technologies

In our experience the use of IST in buildings is largely instigated at the design stage and is dependent on the owners requirements of the asset as discussed above. There is in general limited input at this stage from the property or facilities management side who will operate the building throughout its life. There is a trend where cost savings can be demonstrated to incorporate energy efficient lighting and similar IST. While this technology may be specified in the design phase there is very limited post occupation evaluation undertaken, as discussed above the availability of published performance measures is negligible and thus facility managers are limited in the degree to which they can evaluate the efficiency of such measures.

In practice occupiers often do not appreciate some of the technology designed to save on operating costs. In one example a new government building was fitted with zoned lighting with sensors and dimmers, within the first month of occupation the staff had taped over the sensors to maintain 100% lighting as 'they didn't like the dimmed lights'

The post construction installation of IST is cost and convenience driven, and there has to be a demonstrated saving in implementation with a minimum of disruption to occupants. While the recent focus on operating costs has made facilities managers more aware of cost saving techniques the move to greater competition and a focus on core business activities has to some degree had a negative impact in reducing the level of active management of facilities and thus implementation of savings strategies is often missed.

### Appropriate input pricing

The motivation for ISTs is the saving in operating cost whether this is to the investor or CRE manager. If there are no significant demonstrable savings then it is highly unlikely that any scheme will be initiated. This situation is further confused with the recent changes in the energy market and the progressive implementation of contestability in the market. The significant cut in energy costs in some southern states will have an affect on the feasibility of some ISTs implemented before the advent of contestable markets and competitive energy pricing. It is conceivable that the payback for some schemes may never be realised at the reduced energy costs.

The uncertainty in the market does make it more difficult to perform meaningful analysis of cost and energy saving measures. Until the market becomes more stable in pricing terms, analysis of these schemes will need to show a greater level of saving or risk margin than might otherwise have been the case. Typically asset managers analyse data from energy audits in terms of payback periods using simple cashflow techniques incorporating a cost of money plus risk margin to determine the feasibility of a scheme. If at the input stage the accuracy of future energy costs can not be predicted then the sensitivity of the analysis effected and the risk premium perhaps increased to compensate.

### Other Issues

As indicated above the various stakeholders involved throughout the life of a property have different aims and objectives depending on their profession. This is particularly true in the gap between the construction and operational phase of a building. The competitive environment often means that architects and builders are required to minimise initial construction costs. The property or facilities managers aim is to minimise operating costs while at the same time adding value. The two professions primary aims do not necessarily fit together as additional expenditure initially may save in latter reduced maintenance cost over the life of an asset. This is the essence of life-cycle costing and looking at the whole picture. Members of the Royal Institution of Chartered Surveyors are perhaps unique in being part of an organisation that not only specialises in the construction phase with quantity surveyors and project managers but also the occupation phase with valuers, leasing specialists and property and facilities managers. This unique background achieves a greater understanding of the whole property process and is a skill which should be encouraged along with a greater involvement of post construction professionals in the early stages of evaluating a project.

The current structure of the majority of commercial leases in our opinion mitigate against the take-up of ISTs. Commonly leases are signed on a gross basis thus the major part of the buildings energy costs are fixed in the initial lease based on a base years



consumption. In subsequent years the tenant pays any increases over the base year. Thus the difference to the tenant will remain relatively small and from the managers point of view any reductions in energy will be passed on to the tenant in a reduced level of overall increases. It is important however that the building has as low as possible operating cost as when compared with other properties the proportion of net rent received will vary assuming constant face rents. Thus an incentive to minimise costs without sacrificing quality exists but in the scheme of total rents the amounts are modest.

Budget separation of operating and capital items is generally more prevalent in the public sector as mentioned above in the ANAO quote. The important factor here is the availability of suitable performance indicators based on a standard accounting methodology. If managers are able to benchmark performance then there would be a greater likelihood that systems would be developed to properly account for capital expenditure.

### Facilitating adoption of input saving technologies.

We believe that the take-up of ISTs in Australia is at a reasonably high level and that our commercial buildings are well served by our designers builders and managers in reducing input costs. As discussed above ours is a dynamic industry that has come a long way over the past couple of decades in the construction and management of property assets. The days of property being a free good in business terms has long gone and as demonstrated leading edge corporate real estate managers are part of the core business management structure. In order to further enhance the up-take of ISTs promotion of technologies not only to the designers and builders but to the property and corporate facilities managers is important. In order for managers to invest in new technologies they must be able to demonstrate cost effectiveness through cashflow analysis. The current drawback to adequately evaluating building performance is the general lack of quality performance data against which to benchmark. The current measures prepared by the PCA while excellent are restricted in their scope and require complementary measures of quality and input resources to further their use.

We believe that government does have a role in furthering the use of ISTs as a guardian of the environment and signatory to the Kyoto protocol it is incumbent on government to encourage our industry to participate in waste reduction and energy conservation. Recent programs have had an effect particularly in encouraging building owners and managers to undertake energy audits. This impetus should not be lost and the government should work with professional organisations such as ours to promote the benefits of ISTs and encourage their use by perhaps addressing some of the performance measures issues discussed above.

We trust that these observations on the commissions issues paper are of assistance and our members look forward to working with government to continually improve the performance and quality of our built environment.

**Clive M J Warren FRICS**  
**Chairman**  
**Queensland Branch**  
**Royal institution of Chartered Surveyors**

## Bibliography

- ANAO. Australian National Audit Office, (1996), Better Practice Guide: Asset Management Handbook, ANOA, Canberra.
- Deloitte Touche LLP, (1996) Corporate Real Estate Cost Reduction and Outsourcing Initiatives, Deloitte & Touche/NACORE, USA.
- Douglas, J. (1996), Building performance and its relevance to facilities management Facilities V14 No.3/4 pp23-32
- Downey, K. Current trends in benchmarking commercial real estate in Brisbane. Unpublished, Post Grad Thesis, University of Queensland 1998.
- Facilities Management Benchmarking On-Line Conference (1998), FM Datacom Conference proceedings Jan-March 1998.
- Jones Lang Wootten (1991) Property Research Paper - Manageing Operational Assets, JLW, Sydney
- PCA Property Council of Australia (1998) Commercial Property Operating Cost Handbook.
- Then D.S.S. (1997), Real Estate Asset Management - An Integrative management framework for considering the role of operational assets in strategic business planning. Asian Real Estate Society. Conferance. Hong Kong October 1997.
- Then, D.S.S. (1998), A Model for Considering Operational Property as an Enabling Resource to Business, Royal Institution of Chartered Surveyors, Research, London.
- Varcoe, B.J. (1996), Business Driven Facilities Benchmarking, Facilities, Vol 14 No. 3/4 March/April 1996, pp 42-48
- Varcoe, Barry. J. (1993), Facilities Performance; Achieving Value for Money Trough Performance Measurement and Benchmarking, Property Management, Vol. 11, No. 4,
- Warren, CMJ (1998). Facilities Management as a Core Function of Business, Facilities Management 98 - Exhibition Seminar Brisbane Nov 1998
- Williams R (1993) IIR Conference - Government Property Management. Sydney 1993