PHASED REPOSITIONING
OF A 1960'S CONFERENCE CENTER

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ABSTRACT  

Repositioning strategies for real estate assets often call for renovation work to be performed  
in occupied buildings in phases. Qualities and characteristics of buildings from the 1960's  
and 1970's, and of conference centers as a type of real estate asset are presented,  
particularly in how they relate to repositioning such assets. Repositioning is defined, and  
issues involved in the repositioning process are discussed as they apply to the feasibility of  
undertaking the process for a 1960's-built conference center hotel in a phased way. A  
detailed case study highlights the issues involved in repositioning, and includes market,  
facility, building configuration, net income and discounted cash flow analyses for three  
distinct approaches to repositioning.  

The paper concludes with an evaluation of the phased approach and suggests that while  
phased repositioning may often be seen as necessary, given certain owner objectives and  
constraints, such an approach needs to be judged against lost economies of scale and the  
intensive management and coordination effort required. Different approaches will be  
appropriate for different situations, but a phased approach to repositioning will inevitably  
require rigorous and comprehensive attention both in planning and execution in order that  
cost, schedule, marketing and operating impacts can be minimized. The paper identifies  
some basic principles about how one approaches such phasing.  

Thesis Advisor: Dr. Henry Irwig  
Title: Senior Lecturer, Department of Civil Engineering
For Geraldine and Matthew
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Chapter 1
INTRODUCTION

1.0 Repositioning Defined
For property to remain competitive in the marketplace, owners and operators of real estate assets must regularly evaluate their facilities and operations against similar, often newer properties. They must at all times be aware of their customers' expectations and requirements and be prepared to meet them or else face a declining share of their market. For the purposes of this paper, repositioning is defined as a program undertaken to improve a building's competitiveness in the market and enhance its value. Repositioning, by this definition, is distinct from 'adaptive reuse' which aims to change the purpose for which a building exists. The definition presented encompasses 'change-in-use' only in-so-far as the process is meant to change attributes of the building (product or service) to appeal to new market segments. A repositioning program may not even deal with the physical structure, and simply address services, or image and customer perception through a well defined marketing effort. However, components of many repositioning programs for real estate assets include physical upgrades of systems and facilities, reconfiguration, or cosmetic improvements. A critical element of every repositioning program is the marketing and communications effort, which must alter the perception of the property to facilitate both the retention of current customers and to make strides in increasing market share. It is a process which is market driven, focusing not only on the physical structure but also on such intangible factors as presence, image and market position.

1.1 Why Repositioning is a Timely Topic for Study
The 1990's are ushering in dramatic changes within the domestic economy. Oversupply of many types of real estate assets, economic recession, and continued failures of financial institutions are factors which severely affect businesses, particularly within the highly
derivative real estate industry. With new construction now occurring at a much slower pace than during the past decade, repositioning is the vehicle property owners are using to preserve their delicate market shares and to draw attention to their products.

The time to reposition, it may be argued, is simply when occupancy is slipping below acceptable levels or when reception to the property is less than expected. [23] For owners of older properties this may translate into taking the necessary measures in order to compete with more modern facilities with state of the art amenities. But newer is not necessarily better. A repositioned older property that has the necessary combination of attributes can often compete favorably with new properties, particularly when part of the repositioning program is a marketing effort that successfully signals the value of the repositioned property in the market. For the near future one can only predict the continuation of attempts to reposition real estate assets. When the economy is in a downturn, it may provide the opportunity to attract clients from a declining pool of increasingly discerning prospects. And when the economy turns around, repositioning may be necessary for older properties to compete with new developments.

1.2 Building Period and Real Estate Development Studied
This paper looks at a particular building period – 1960's and 1970's, and a particular type of real estate development – hospitality, specifically the conference center. The building period of the 1960's and 1970's was chosen for study in order to determine whether there emerge some common principles with regard to renovation of structures built during that period. For reasons suggested in this paper, 1960's and 1970's buildings are likely to have a much shorter life than more traditionally built older stock. In the 1990's many of these buildings will reach their first period of major capital improvement and replacement. The increasing unsuitability of these properties, in economic and operational terms, requires that owners evaluate their buildings and the markets they serve. In some cases,
due principally to obsolescence, this evaluation will point to the need for new-build in new locations. In others it will point to renovation and repositioning as a way for a property owner to cure a building's deficiencies and respond to market requirements.

To a large extent, a conference center is appraised for value on its ability to generate income. Hospitality industry properties such as conference centers and hotels are unique in commercial real estate because income is dependent on high-volume, short term rentals and an array of marginally profitable services. Both the preponderance of facilities and the fact that today conference center business is largely dependent on the stability of other businesses in a recessionary economy have put significant downward pressure on conference center income levels. Business meetings, from which conference centers derive the majority of their business, have become fewer in number and for fewer participants. To prevent the erosion of market position and the gradual slide into an under-managed state, conference center operators need to evaluate their facilities in terms of their appearance and systems, keeping up to date with current trends and customer expectations.

1.3 Methodology

A review of the real estate literature reveals that very little has been written on repositioning in a way that draws together the array of disciplines involved. The research for this paper included extensive interviews with individuals in both the construction and real estate industries as well as a review of relevant literature drawn from an interdisciplinary search. In the course of the research it became apparent that a repositioning program must address questions in the following areas:

- Market analysis and evaluation,
- Customer analysis and evaluation - which segments of market demand offer the greatest opportunity for growth,
- Facilities analysis and evaluation - what steps are required in terms of the building itself to respond to that potential,

- Financial analysis and evaluation - forecast of expected future benefits and costs arising from a repositioning investment, and application of a decision-making criteria to compare the benefits to the costs of the investment.

This focus of this paper is a detailed case study in order to analyze how such questions might be addressed in the repositioning process. Three distinct approaches are explored for the property - a 1969-built structure serving as a conference center hotel - with particular emphasis placed the development and evaluation of a phased approach. Such an approach is commonly considered for 1960's and 1970's buildings in order to accommodate an owners operational requirements for the building, as well as financial constraints. Questions which are posed for the case building include:

- whether it is possible to phase the repositioning project,
- what are the constraints of a phased repositioning, and to what extent do they impede the process,
- in terms of cost, is it beneficial to phase the repositioning project,
- what are some of the critical factors in developing a phasing strategy.

1.4 Outline of Paper

The introductory chapter has just been presented. It defines the topic, some parameters of the discussion, and the research methods used to form the discussion.

Chapter two describes general characteristics of buildings constructed in the 1960's and 1970's, and issues related to maintenance, depreciation, renovation and repositioning of these real estate assets.

Chapter three introduces the case study project. The property is described, and the conference center concept is presented in order to have the necessary background.
information about the conference center industry required to understand repositioning issues related to it. A market study is presented along with a competitor analysis, customer profile, and demand analysis in order to answer the repositioning questions of "who we are," and "where do we want to be."

Chapter four presents a facility evaluation of the case building. Deficiencies in the building are outlined and three renovation and repositioning approaches are introduced.

Chapter five presents a configuration analysis of the case building and explores how the floorplates can be reconfigured in a way which responds both to current and anticipated market requirements as well as to operational objectives.

Chapter six outlines issues of scheduling, implementation and marketing related to a phased repositioning of the case building. Schedule assumptions are presented and a construction plan described.

Chapter seven evaluates the three repositioning approaches from an investment performance perspective. For each approach, assumptions and estimates for construction costs, operating revenues, expenses, occupancies and room rates are given in order to project net operating income for an eleven year period. A discounted cash flow analysis is then presented and the approaches evaluated.

The final chapter critiques the appropriateness of the phased approach as a strategy for repositioning the case building. Some general principles related to how one makes a phased repositioning approach work are discussed.
CHAPTER 2
CHARACTERISTICS OF 1960'S AND 1970'S BUILDINGS

2.0 Introduction
When physical deficiencies of a building become the focus of an asset repositioning, an
understanding of the building type and period is essential in determining the viability of the
built asset. For the reasons outlined in this chapter, buildings from the 1960's and 1970's
embody a host of interrelated problems that may ultimately compromise an owner's
objectives, particularly in a phased repositioning of the real estate asset.

2.1 Building Depreciation, Obsolescence and Performance
The ultimate function of any building is to maximize the benefits to be derived (financial or
otherwise) over the life of that structure at minimum expenditure. Into any completed
building, consciously or not, a permanent operating cost is built into the design that lasts
over the life of the building. To design with maintenance in mind is not a conspicuous
practice, yet over the life-span of the building an owner will meet maintenance and repairs
costs equal to twice or three times its initial capital costs. [49] The great majority of
buildings constructed during the 1960's and 1970's are now reaching their first period of
major capital improvement and replacement, and actual resources devoted to maintenance
of these building assets have been rising significantly for a number of years. Owners who
are providing these resources recognize the need for maintenance and renewal of the
required stock to be well planned and efficient.

The period of major capital improvement and replacement for 1960's and 1970's buildings
has arrived at a time when these buildings are still relatively new. In order to understand
why such expenditures are required to maintain the utility of these buildings requires an
understanding of the causes of asset depreciation and obsolescence. The following definitions seem particularly useful for the present discussion: [3]

"Depreciation is a loss in the value of a property investment. Because depreciation is a problem even in times of increasing values, it should be more fully defined as a loss in the real value of a property investment. Because the grant of valuable planning permissions can disguise depreciation, a complete definition for this research is a loss in the real existing use value of a property investment."

"Obsolescence, on the other hand, is one of the causes of depreciation. It is a decline in the utility not directly related to physical usage or the passage of time. By contrast, other causes of building depreciation - physical deterioration being the main one - fall outside the definition of obsolescence. Obsolescence results from changes which are extraneous to the building."

The author of the above definitions describes how there are three main qualities of a building which are differently affected by physical depreciation and building obsolescence as the joint causes of building depreciation. These are the external appearance, which suffers from both; the internal specification, which suffers from both; and the configuration of the building which can suffer only from obsolescence. When evaluating a particular building it is important to look at both depreciation and obsolescence, but to also consider changing patterns in use and user requirements. The case project, introduced in the next chapter, presents a facility evaluation which considers whether a particular building is able to adapt to the requirement of a new generation of users.

If the future of a single building is in question, then all the elements which are likely to be costly to maintain should be examined. This should include expensive one-off items which may occur in the future such as structure, facade, roof finishes, and HVAC. It should also include the smaller repetitive unplanned items of work which may be a substitute for more
major problems and should not be deferred, because the real costs of deferring work may become obscured until a major failure occurs.

2.2 Characteristics of 1960's and 1970's Buildings

The following characteristics of 1960's and 1970's buildings have been identified which relate in varying degrees to depreciation, obsolescence and performance:

*Basic Configuration* - Many buildings from the 1960's and 1970's are similar in configuration characteristics, including building widths and depths, structural spans, and the use of a central service cores. Very small floorplates were the dominant configuration characteristic in this period, which by the late 1970's resulted in many of these buildings being unable to adapt to the specifications required by a new generation of uses. Lucy Benjamin, in her masters thesis titled "1960's Office Towers in the City of London: Obsolete or Recyclable?" writes about how it was under these circumstances that the 1960's towers on London Wall came to be seen as obsolete and in need of redevelopment by the late 1970's. [6]

*Structure & Facade* - A common characteristic of 1960's and 1970's commercial construction is the use of short-life materials that were prone to decay (e.g., various metals), combined with some poor design detailing producing a significant demand today for maintenance and renovation funds. One area of poor detailing was imposed by an aesthetic preference for a flush-surface facades where inadequate thought was put into water run-off and penetration issues. Many 1960's and 1970's buildings are today suffering from deteriorated condition of window gaskets, sealants, and where water has actually penetrated the building for long periods of time there is the potential for structural damage to the curtain wall and its supports.
There is a strong link between energy conservation work in existing buildings and maintenance and repair in relation to putting many of these buildings into an acceptable state. The need to renew elements such as a glazing system (e.g. replacing single pane glass with higher energy efficient insulating glass) provides the opportunity to deal with energy aspects, contributing to savings in maintenance and utility costs.

*HVAC* - The use of two-pipe system design of HVAC from this period result in an inadequacy of the system to service user demands, especially in areas of long spring and fall seasons such as the Northeastern, United States. The importance of HVAC on various measures of building performance can not be overemphasized. HVAC systems are widely recognized as having the most significant impact on the comfort level of users, and hence the financial performance of the built asset. Also, air conditioning costs can be over 50% of a building's total energy expense. Therefore, any steps that can be taken to maximize HVAC efficiency will have a significant impact on operating costs. The upgrade or replacement of HVAC systems provides the opportunity to make the equipment sensitive to the demands and use of buildings and to increase overall energy efficiency. [28]

*Roofs* - Flat roof construction using built-up felt on a variety of substrates was a dominant feature in the 1960's and 1970's. Some of these roofs failed very quickly, due either to unsuitable substrates or to poor workmanship, and the remainder have required or will require replacement before their expected life. The condition of a roof should take priority in capital planning for repair and replacement, as the potential cost related to damage of a building's interior finish and structure over time can be considerable.
**Code Compliance** - Code compliance issues in 1960's and 1970's buildings tend to be more limited in scope when compared to older buildings. However, many of these buildings are affected by state and local government regulations that have mandated alterations be made to existing buildings in order to meet more stringent fire protection standards. Typical requirements of this legislation include the installation of sprinkler systems, the reconfiguration of corridors and the substitution of fire retardant materials for combustible and toxic ones. [7] In addition to these fire safety issues, many buildings from this period also need to meet code compliance in relation to egress and handicapped access issues.

**Asbestos** - A complicating characteristic related to 1960's and 1970's buildings' structures is the extensive use that was made of friable asbestos for fireproofing and insulation. Prior to the banning of asbestos in 1973, asbestos products were used extensively for fire protection of steel superstructures of commercial buildings. This is the most troublesome application of asbestos containing materials (ACM) because of the ease with which it can be disturbed and by the fact that it covers such large areas of the building. ACM in a building places one of the most severe constraints to renovation as its presence tends to compromise the interests of many of the parties associated with a building, and requires the need for sophisticated management skills in the effort to manage the material in place. [31] Virtually any significant renovation activity will interact with ACM in 1960's and 1970's buildings, and some of these activities will necessitate the removal, rather than the management of the material.
2.3 Summary

Owners who are evaluating 1960's and 1970's buildings for renovation and repositioning typically face common constraints. From an operations perspective, these buildings are most often occupied, and it often important for the buildings to remain in use during the period of renovations and upgrading. This may also be a desired objective given an owners financial constraints. These buildings are relatively new for the improvements required, and owners may find it difficult to finance a comprehensive renovation/repositioning project beyond existing debt on the property, particularly given a weakened financial community and oversupply of space. For these reasons a phased approach to repositioning needs to be explored in which portions of work can be done over time. Such a process, however, would always result in lengthened duration of construction and, despite best efforts by all parties, disruption of building services, operations and users. This is especially the case in 1960's and 1970's buildings which tend to have a host of interrelated physical problems, and where no single element can be addressed adequately without fully considering the other elements.
CHAPTER 3
MARKET ANALYSIS AND EVALUATION

3.0 Introduction
This chapter introduces the case study project. The property is described, and the conference center concept is presented. This will provide the necessary background in order to understand the repositioning issues related to the conference center industry. A market analysis and evaluation is presented along with a competitor analysis, customer profile, and demand analysis in order to answer the repositioning questions of "who we are," and "where do we want to be."

3.1 The Center for Continuing Education
The Center for Continuing Education (The Center) was originally a cooperative venture of six land grant universities. With substantial grants from a sponsoring foundation, the first phase of construction was completed in the fall of 1969 offering a unique setting on 8.5 wooded acres adjoining a university campus. The Center's principal aim was to serve as a catalyst and convener of educational programs that examine concerns of the region. Its design program focussed on continuing study by resident adults within a university environment. Today The Center is a full-service, dedicated conference center which has matured and evolved from its original vision, but at the same time is striving to realize some of the more integral aims of that vision. [43]

3 - Building Complex:
The Center is comprised of the following three buildings:

- A low-rise learning center with seminar rooms, an auditorium, dining facilities, and various ancillary spaces and facilities;
- The A-Tower, which is an 8-story residential building completed in 1969; and,
• A 1988-built residential building, the B-Tower, linked to the A-Tower at the first floor level and served by its front desk, reception and lounge facilities.

(Exhibit 3.1 presents a site plan of The Center)

In this chapter, and the chapters to follow, questions of real estate asset repositioning are applied to The Center. An emphasis is placed on the renovation and marketing issues related to the A-Tower, particularly how such issues are managed in a phased way. The A-Tower is the key element in a repositioning program for The Center, as the building's depreciated condition has increasingly handicapped the overall conference center operation from adequately responding to market demand.

3.2 Community of Learning

Prior to the design of The Center complex, a conference of experts developed a set of guidelines suggesting the kind of physical environment best adapted to the nature and purposes of The Center. At the heart of their recommendations was the concept of a 'community of learning' which would provide multiple opportunities for personal interaction and ready access to educational resources. In order to accommodate the needs of the conference participants, The Center was to have an atmosphere of informality and comfort. A need for privacy among participants was to be addressed, as far as economics would allow, by providing single rooms in the residential tower for those who wanted them. They stressed that the facilities must be flexible and capable of accommodating a variety of needs. In addition, because The Center depends to a large extent for its functional and economic success on 'repeat business,' it seemed obviously important to impress visitors in some memorable way. The building itself was thought to be one of the most powerful factors in creating the desired impression, in combination with the use of the natural setting and a creative design of the interiors. [43]
EXHIBIT 3.1

- Site Plan -

The Center for Continuing Education
3.3 The Conference Center Concept

The conference center concept had its origins in the 1960's when large corporations began purchasing often uneconomical old mansions and converting them into meeting-place retreats for the members of their executive ranks. These early conference centers were often dedicated to the needs of one corporation, hence their utility was limited. From these origins a new real estate asset type developed in the hospitality industry. Professional conference center operators emerged who built and operated centers that were available to broad categories of users. This evolution was encouraged by the recognition by corporations and meeting planners of the benefits dedicated conference centers provided. Conference centers offer businesses an isolated, self-contained environment for meeting, learning and leisure activities. A principal attraction of dedicated conference centers is the attention paid to the aims of conferees, such as the minimization of the loss of meeting momentum caused by outside distractions. Such distractions are typically experienced in hotels which may provide meeting space, but are often deficient in physical layout, staff training and activities programming when the measure of acceptability is on the meeting environment. [13]

The conference center concept and segment in the hospitality industry has experienced strong demand growth in recent years. This growth is attributable to both the industry trend toward differentiated facilities and to a growing preference of companies to use conference centers for their group meeting needs. The International Association of Conference Centers (IACC) sees the principal advantage of dedicated conference centers as the ability of conferees to properly "tackle specific projects, take part in concentrated training sessions, and learn teamwork within or among departments." [50] In a reflection of these aims, IACC believes that conference centers embrace characteristics that make them distinct from hotels. Conference center (s'):
• meeting rooms are designed for meetings only; hotels offer multipurpose function rooms designed to accommodate a variety of uses,

• employ staff within a conference-services department and have a distinct audiovisual department specifically responsible for serving the needs of its conferees,

• derive the majority of their patronage from small conference-type meetings,

• should provide a full selection of recreational activities and amenities,

• exist to serve their conferees first; meetings and those who attend them always take precedence.

3.4 Types of Conference Centers

IACC reports annually on the statistical and financial profile of the conference center industry in which it identifies four main types of conference centers - executive, corporate, university, and resort. Each type targets a different market niche. [13]

Executive Conference Centers: are typically designed to meet the specialized requirements of mid-upper level executive/managerial meetings. Corporations schedule such meetings to discuss strategic planning, sales and marketing, or to sponsor educational and training seminars. Suitable centers should offer distraction-free environment, full support and amenities and first class lodging facilities.

Corporate Conference Centers: are executive conference centers owned and operated by a specific corporation intended principally for in-house use.

Educational and Nonprofit Conference Centers: are similar to in nature to corporate centers but are owned and sponsored by colleges, universities and medical centers hosting predominantly educational meetings.

Resort Conference Centers: are executive conference centers that emphasize the availability of recreational activities in a resort setting.

note: The Center is an a Educational and Nonprofit Conference Center, though it competes in certain instances with the other types of centers.

3.5 Conference Center Operations and Marketing

Conference centers typically cater to small meetings of ten to sixty people (industry average of 30). The average length of stay is approximately two to three days, but has been shortened recently due principally to company cut-backs in a recessionary period. Most
conferees pay a rate that has been termed in the industry, the Complete Meeting Package (CMP), which is an all inclusive charge for the guest room, three meals, coffee breaks, and conference services. The CMP provides a marketing advantage for conference centers because the system simplifies budgeting and planning by making the majority of meeting costs determinable up-front. This knowledge is important to a number of individuals who may potentially influence whether and where a meeting takes place. These 'buyers' may include someone from within the organization for which the meeting is being organized, or increasingly it will include a professional meeting planner whom the company has engaged in organizing the event. In either case, it is important for sales and marketing to assure the decision maker that: [50]

- total costs are understood up front,
- the needs of the group will be met in a timely and professional manner,
- the group can look to a single contact person at the conference center whose task is to meet these needs,
- the conference center, by virtue of its design, its setting, and its staff offers the appropriate mix of tangible and intangible variables which combine to make it place in which the group can have the most effective meetings.

3.6 Conference Center Design

In addition to being in the hospitality industry, conference centers are actually in the communications and education business as well. As such, audiovisual features as well as meeting and overall facilities are integral components of a conference center's differentiation and segmentation strategy. Meeting rooms must meet an array of criteria which all serve to enhance comfort, security and amenity requirements of conferees. They have to be designed with an understanding of how people learn or share information in meetings so that the meetings themselves are more effective. As companies have shortened average length of meetings, sometimes by cutting a day from their retreat, they are trying to fit more into the time they have left. The meeting environment, with respect to the ability of conferees to learn, has become that much more important. [12]
The design of the guest rooms depends to a certain extent on the particular market segments to whom the conference center will be marketing. In addition to meeting the standards of comfortable lodging design, some common characteristics which all guest rooms in conference centers are expected to feature include a large, well-lit work area with a direct-dial, push-button telephone with a message light, and a computer terminal hookup. When planning the design or renovation of the guest rooms, conference center operators need to assess the requirements of their customer mix. A conference center that is considering the addition of guest rooms to its facility, or is planning the renovation of existing guest rooms, should incorporate the feedback of its existing clients in the program development. In some instances, decisions will be prompted by market conditions (e.g., replacing old, worn furniture and fixtures), or by the opportunity to improve operating performance (such as replacing an inefficient HVAC system). In certain cases the benefits of an amenity (e.g., such as providing a kitchenette or fax and computer center) might justify a project whose costs exceed the immediate return. The ability to please one's clients and improve competitive position in the marketplace is of considerable value.

3.7 AREA OVERVIEW

The following section describes the current commercial and economic climate in which The Center operates. This information is useful in a repositioning program in forming estimates and assumptions on the potential market demand for a repositioned property.

3.7.1 Economic Climate

The New England regional economy is currently in the midst of a significant downturn that began in the late 1980's. This trend follows a period in the early 1980's when the New England states enjoyed the highest growth rate in their history, and surpassed national averages. Unfortunately they are also predicted to surpass the nation in the depth and
length of their economic slump. Unemployment has risen sharply and is having detrimental effects on wealth and perceived wealth. In 1987 the State of New Hampshire had an average annual unemployment rate of 2.5% compared to a national average of 6.2%. By 1991 New Hampshire's average annual unemployment rate had risen to 7.3% compared to a national average of 6.2%. [42] This downturn has had a major impact on population centers throughout New Hampshire and the region. Resultant declines in employment levels, and both tourist and business-related travel have caused a decline in the performance of many of the hotels and conference centers throughout the region. Conference center operators, who derive a majority of their trade from businesses, form a consensus of opinion on the following trends:

- Companies are scaling back on the number of meetings that they book out-of-house,
- The number of participants at meetings has been decreasing,
- Companies are much more price sensitive, often asking for ways to lower the CMP price, yet at the same time require high quality of facility and service.

3.7.2 Commercial and Industrial Development

One of the most relevant economic indicators that directly reflects the economic health and level of commercial lodging demand is the trend in commercial/industrial development and absorption within an area. While it is difficult to directly quantify commercial transient demand based on the amount of occupied office space, any changes or trends in the amount of space tend to have a proportional impact relative to commercial lodging demand.

The town in which The Center is located is primarily residential in nature, with the university second in actual land usage. Of the 15,000 acres of land that comprises the Town, 5,500 acres is used for existing residential use, 1,800 acres comprises the university, 60 acres house commercial uses and 120 acres is existing office/research development. Of the remaining land area, 5,100 acres are available for development to
varying degrees of intensity. The 60 acres of existing commercial use is primarily located in the downtown. Commercial uses include retail professional offices which cater to the local community and the university. While the Town contains some commercial and industrial development, the surrounding cities and towns, particularly Portsmouth, are considered the commercial and industrial hubs. [42]

While commercial and industrial activity is largely at a standstill, there is a project in the planning stages that would have a major impact on the region. Pease Air Force Base, in Portsmouth, NH was closed in March 1991, but is being studied for possible reuse as an international business hub. The 4,257-acre development would include a commercial airport, international trade center, foreign trade zone, high-tech research park and assembly plants. Planners for the Pease redevelopment envision the creation of as many as 12,000 jobs over the next two decades. The City of Portsmouth is currently negotiating with a few companies that are interested in relocating to the former base. Hence, although the closing of Pease Air Force Base has had a negative effect on the economic health of the area, the effect should be mitigated in the future by the redevelopment of the base.

At the time when Pease is redeveloped, and a new commercial airport is created, a major weakness of The Center will be addressed. The Center's proximity to a major airport represents one of its principal weaknesses with regard to locational characteristics, particularly for national account conference business. Although customers can fly to Manchester, NH and Portland, ME, the nearest major airport to The Center is Logan International Airport in Boston, MA. Travel time from Logan to The Center averages one hour twenty minutes. This places The Center at what is generally recognized in the conference center industry to be the limit of acceptable travel time from a major airport.
3.8 DEMAND ANALYSIS - CUSTOMER PROFILE

The recession has taken its toll on the meetings industry in the last two years, causing a reduction in attendance, number of meetings held and total expenditures. These findings are highlights of the 1992 'Meetings Market Report,' conducted biennially by Market Probe International, a New York-based research firm. [25]

According to the report, the sharpest declines were in the Association Conventions segment. On the corporate side, the total number of meetings declined 7 percent between 1989 and 1991, from 866,800 to 806,200, with a drop in total attendance of 15 percent, from 58.43 million to 49.57 million. The amount of money spent by companies on meetings declined 10 percent, from $9.69 to $8.73 million. Companies surveyed in the corporate segment report a shift toward more specialized meetings offering information that cannot be obtained elsewhere and where there is immediate and obvious value in their content.

Like many of the competing properties in its region, The Center has experienced the effects of tougher economic times. The relatively favorable corporate meeting statistics presented above, however, may be an indication that even during downtimes in the economy, companies still need to meet and plan. But the meetings are fewer, more focused and involve fewer participants. The Center has performed well relative to the competition in many of their market segments, which are described below:

3.8.1 Business Group Segment

As a dedicated conference center, The Center derives most of its demand from group meetings (70% group related business compared to 30% transient) The types of organizations represented by this segment include business and government organizations,
trade associations, professional seminars and academic institutions. The majority of business group demand comes from either the immediate area or within the region including the City of Boston. The Center's marketing department differentiates their customers for this segment into three basic categories; low, middle and high. This differentiation enables The Center to tailor various CMP's to the needs and budget constraints of various organizations.

The low rate segment seeks no-frills, lower priced rooms and meals. It is often contract business for a given period going forward. The Center is performing very well in this category, however, because this segment receives the lowest rate, and offers a lower profit margin, it is not a segment The Center wishes to expand. The two other segments, middle and high, each pay a higher rate for the room and require better quality meals for which they are willing to pay a premium. At this point, the disparity in quality between the A- and B-Towers allows for differentiation between these segments.

### 3.8.2 University-Related Group Segment

As a university based and owned conference center, The Center derives a significant amount of business from the parent institution. These groups are typically more price-sensitive than those in the middle- and high-end market described above. The university's calendar of events is diverse with athletic and cultural events attracting visitors to the area. Parent's weekend, homecoming, and football games attract many visitors to the area who need overnight accommodations. The Center has been cautious not to establish for itself a student atmosphere, as the most recent management is mindful of the negative reaction such a presence has on conferees who represent the majority of The Center's business.
3.8.3 Program-Related Group Segment

One of the founding objectives of The Center was to create an ideal environment committed to education and continuing adult learning. Rather than educate from the perspective of only higher education, business or government, The Center was instead to be a convener of educational resources and a catalyst for positive change. The foundation monies granted to The Center have been dedicated to the development of these aims through a program office. This office seeks to generate conference and meeting business emphasizing regional issues, including the environment, agriculture, coastal management, ageing and education.

3.8.4 Transient Segment

Transient segment for The Center includes tourist and independent business travelers who are primarily university-related. Tourism in the Town centers around the university, and throughout the year tourists participate in university sponsored events, visit students or inspect the campus. Additionally, during the fall months, tourists come to the area to enjoy the fall foliage. Portsmouth, located nearby, has a very active summer and fall tourist season.

Transient business is appealing to The Center for filling the gaps in the hotel once the conference center business has claimed their rooms. Transients who are not university-related also pay "rack rate", or the highest book rate on the rooms before any discount. In addition, they do not demand space in the conference center which is for the exclusive use by the conferees. Disadvantages to the transient trade include the erratic schedule adjustments which puts stress on the hotel to accommodate the transients' needs in light of the commitment to booked conference business.
3.9 COMPETITIVE SUPPLY ANALYSIS

In formulating an opinion of the competitive position of The Center, an analysis was performed of the conference center and lodging markets within its market. The properties that are considered to be competitive with The Center are either local full-service hotels and/or conference centers, up-scale historic inns, or inns that target the small meetings market. All the properties considered are located in the northeast. In addition, based on the regional and local appeal of The Center, a sample of several competitive lodging facilities have been identified in the region.

3.9.1 Competitive Position

Based on an analysis of the competitive properties, The Center possesses the following strengths and weakness relative to the competing facilities:

*Major Strengths:*
- Quality of service and reputation,
- Appeal of site characteristics,
- A good price/value relationship afforded to all market segments,
- University affiliation (re: university-related business potential).

*Major Weaknesses:*
- Disparity between A- and B-Tower rooms,
- Location in terms of access to major airport,
- Limited recreational and health equipment on site,
- University affiliation (re: negative reaction by segments of the business community toward a university setting for company meetings).
3.9.2 Competitive Supply

The following paragraphs discuss the attributes of the selected competitive hotels and conference centers. As mentioned previously, they represent a sample of properties throughout the region that would compete for group/meeting demand, tourist/leisure demand, independent business traveler demand and university-related demand with The Center.

*Sheraton Portsmouth* is located in the historic district of downtown Portsmouth. The 148-room property is several years old, and is part of a complex comprised of shops and condominiums which encircle a courtyard. The Sheraton Portsmouth offers a restaurant, two lounges, a health club and indoor pool and approximately 11,000 square feet of meeting space. A guest room addition is being discussed, however at the time of this paper no formal go-ahead has been confirmed. The Sheraton Portsmouth is competitive with The Center in all demand categories.

*Holiday Inn* is located in Portsmouth, New Hampshire. The 130-room hotel has nine meeting rooms that can accommodate up to 250 people. It offers access to an outdoor swimming pool and fitness center. The Holiday Inn is competitive with The Center for tourist/leisure and independent business traveler demand.

*The Inn at Exeter* is located in Exeter, New Hampshire, on the campus of Phillips Exeter Academy. The 50-room inn caters to small corporate groups from greater Boston, and the Route 128 corridor in Massachusetts. The group meeting business is augmented by tourist/leisure and corporate demand emanating from the Academy. The inn has a 42-seat restaurant which attracts both in-house guests and local patrons form as far away as Newburyport and Dover. The property currently has a banquet seating capacity of 93 persons and they are planning an expansion in order to accommodate banquets and weddings of 150 to 200 persons. The Inn at Exeter is competitive with The Center for corporate meeting demand.
The Hanover Inn is located in Hanover, New Hampshire adjacent to the Dartmouth College campus. The 92-room inn is owned and operated by Dartmouth College. The property has meeting rooms that can accommodate 10-250 persons and has a very successful food and beverage operation. It offers a formal restaurant and a more casual grille as well as outdoor dining during the summer. The Hanover Inn is competitive with The Center for corporate meeting demand.

Ocean Edge Resort and Conference Center is located in Brewster, Massachusetts. The 90-room facility offers an indoor pool, sauna, fitness center, private whirlpool, golf facilities, tennis courts, and beaches. Their rooms consist of 62 kings, 28 doubles, and 2 suites with a wet bar. They offer complete handicap facilities in rooms, restaurant, and public areas. Conference facilities are in a restored mansion housing 11 meeting rooms, holding 120 people. The Ocean Edge is competitive with The Center for corporate meeting demand.

Factory Mutual Conference Center and Inn is located in Norwood, Massachusetts. The 126-room conference center is owned and operated by Best Western, a national hospitality company. Factory Mutual offers the facilities of a dedicated conference center, the primary purpose of which is to accommodate small to medium sized meetings. Factory Mutual offers an outdoor pool, sauna, and exercise equipment. Factory Mutual is competitive with The Center for corporate meeting demand.

The Center for Executive Education at Babson is located at Babson College in Wellesley, Massachusetts. The 130-room dedicated conference center was opened in 1988 and is managed by Harrison Conference Services, a national conference and education center management firm. Babson offers excellent recreation and fitness facilities at a racquet, swim and health club at the college and adjacent to the Center. The dining room and many of the 16 meeting rooms look out onto a densely wooded area, which is similar in appeal to The Center's setting. Babson has a locational advantage of being only twenty minutes from Logan Airport. The price/value relationship, however, is not considered as strong as the Center's when B-Tower rooms are available. Babson is a primary competitor with The Center for high-end corporate meeting demand.
3.10 Summary

At the time of this study, The Center competes reasonably well against more centrally located conference centers for group meeting demand. This is due largely to a cost focus strategy, while still delivering superior quality service. The locational disadvantage relative to the competition, however, may become a more significant disadvantage for The Center if the competitive supply begins to lower its CMP prices in order to prevent the loss of an increasingly cost-sensitive business clientele.

The limited on-site recreation facilities is a disadvantage which will result in the loss of business to certain groups who consider such amenities important in their buy-decision. Because of the intensity of working sessions, recreation often plays an important role in the overall success of a conference center. Most conference centers offer a selection of on-site recreational facilities, and a growing number employ fitness professionals who can assist meeting planners in incorporating recreation into the conference program.

The Center should consider both short and long-terms remedies to the recreation question. In the short term, equipment should be added to the cardiovascular machines offered. Also, The Center could create walking/jogging/biking maps of routes which emanate from The Center. Events could be sponsored that would offer an outlet for conferees on break from meetings, bring area publicity, and enhance The Center's image of as a place concerned with issues of health, fitness and the environment. In the long term a fitness center complete with equipment, sauna, steam rooms and showers would adequately respond to recreation needs. Such a facility could be created beneath the B-Tower.

The most significant disadvantage for The Center relative the competition is the condition of the A-Tower, and disparity between this building and the B-Tower. While the difference in the quality of the A- and B-Towers have offered a logical layering of room rates, and has
enabled The Center to target the various rate-sensitive segments described above, this quality difference has also created problems. Groups that will only accept the B-Tower often decide not to book their conferences at The Center if they are told that some of their members would have to stay in the A-Tower due to availability.

Beginning in August 1990 the Sales Department began a 'Lost Business Report,' documenting business lost due to the deteriorated condition of the A-Tower. From this date through September 1993 bookings, the report shows nearly $400,000 in lost revenue due to the condition of the A-Tower. This number was derived from actual business lost as recorded from date of contact with declining companies, including General Electric, Liberty Mutual, Cabletron, Digital Equipment, and Hewlett Packard. It is quite possible that the actual lost business is far greater, as companies that have attempted, yet failed to book B-Tower rooms may begin to assume that The Center cannot meet their demand for better quality rooms.

In an economic recession operators in the hospitality industry need to be aggressive in their short-run planning, coupling it with the right marketing approach. They must also recognize the importance of long-term planning in order to position themselves for when the economy recovers. It is the long-term planning that is the key to successful repositioning - establishing a strong and formidable presence in the market rather than allowing market or customer defections to dictate the strategy. For The Center, the A-Tower represents the principal element in a repositioning strategy. Whether this process should be done in a phased way is a question this paper explores in detail in the following chapters.
CHAPTER 4

FACILITY ANALYSIS AND EVALUATION

4.0 Introduction

This chapter presents a facility analysis and evaluation of the A-Tower, outlining its strengths and describing the deficiencies which need to be remedied to achieve a substantive repositioning. As mentioned above, the A-Tower is a 1969-built residential building which, in combination with the 1988-built B-Tower, serve as a hotel for The Center. It has been indicated in the last chapter that due to the A-Tower's deteriorating physical condition, The Center is not performing up to its potential. Deferred maintenance, outdated fixtures, and general disrepair of the A-Tower has created a poor image for the property among certain customer segments. The business implications of this situation are described and three approaches to repositioning are presented.

4.1 Eight-Story Tower

The A-Tower, with a total gross area of approximately 28,000 square feet, incorporates the following facilities: [5]

- Floor 1
  - front desk and reception
  - lounge (exercise room)
  - vending machine room

- Floors 2-8
  - either 8 or 6 guest rooms per floor (total of 54 guest rooms)
  - 1 meeting alcove per floor
  - 1 large maids closet per floor
  (approx. 3,500 square feet per floor)

- Basement
  - hotel services (partial)
  - mechanical equipment

- Penthouse
  - mechanical equipment
  - roof deck

(Exhibit 4.1 presents a plan of the typical residential floor of the Adams Tower)
EXHIBIT 4.1

- A-Tower -

Typical Residential Floor - Existing Configuration
The seven upper floors containing the guest rooms accommodate a maximum of 80 guests, each with a private bath. The majority of the rooms are singles, which in the thinking of the original program anticipated the need for privacy. However, some singles are convertible to two-occupancy rooms, which originally intended to provide lower priced accommodations and facilitate married couples' attendance at conferences.

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**Exhibit 4.2 The Center for Continuing Education - Design Elements**

![Diagram of A-Tower](image)

**4.2 A-Tower - Strengths**

The design of The Center complex was strongly influenced by the reaction of the original design architect to the natural beauty of the sight. His concept, apparent to every visitor to The Center today, was to fit the buildings in among the trees, leaving the natural setting as undisturbed as possible. This was achieved with no greater success than with the A-Tower, and accomplished by means of the following: (See exhibit 4.2) [5]

- Reliance on a triangular module - segments of a hexagon composed of small dimensional increments - which reduced the building's bulk and allowed it to be tailored to the topography of the woodland.

- Use of external materials which echoed the colors of the surrounding woodland (green glazed tiles), reflected the woodland (dark reflective glass), and mimicked its forms (exposed painted structural steel columns).
With regard to the A-Tower, in particular, the following was also a critical element of the design strategy:

- Restriction of the size of the floorplate of the tower, resulting in a small footprint at ground level and a proportionately tall, vertical structure.

4.3 Facility Evaluation

A hallmark of the complex as a whole, and the A-Tower in particular, is its sense of intimacy and the successful integration of the buildings with the natural environment. This is largely due to the rigorous implementation of the various architectural mechanisms outlined above. Unfortunately, however, many of these mechanisms, together with the factors set out below, have led to severe deficiencies in the A-Tower when its facilities are evaluated against current standards and needs.

The following is a list of the deficiencies of the A-Tower developed from several sources. These sources include, existing reports, customer and meeting planner evaluations, discussions with The Center personnel, and several visits to the property:

**Interior Spaces:**

- The small and awkward shape of the bedrooms and bathrooms
  - determined in large part by the small floorplate and the use of the triangular module.

- Inadequacy of the meeting alcoves on floors 2 through 8 in providing sufficient or usable space for educational purposes.

- The limited amount of non-dedicated space for informal get-togethers at the first floor level
  - caused by the need to convert the lounge to an exercise room.
Furnishings:

- The design and condition of the furniture and furnishings in the bedrooms, especially the limited desk and layout space
  - influenced both by the failure to implement the craft approach originally envisioned and the many years of use these items have seen.

Electrical:

- Inadequacy of lighting both in the guest rooms and in common areas
  - resulting from the lack of appropriate and controllable lighting fixtures by desk spaces, bed-sides, and hallways.

HVAC System:

- Inadequacy of the heating, ventilation and air-conditioning system, especially during the relatively long spring and fall seasons
  - resulting from the limits of the original two-pipe system design, the minimal thermal insulation qualities of the fixed-pane windows and the difficulties of maintenance and repair
- Energy inefficiency of the heating, ventilation and air-conditioning system.

Plumbing:

- Condition of piping and fixtures and inability of system to delivery appropriately tempered water upon demand
  - resulting from the deterioration of the equipment, piping, and fixtures.

Sprinklers:

- Absence of elements of state-of-the-art life safety systems
  - resulting from the lack of a requirement for this technology when the tower was constructed in 1969.
Elevators:

- Frequent break-down of elevators and the unappealing finishes of the cabs
  - resulting originally from their modest quality and from over 20 years of use.

Exterior Facade:

- Water leakage through the window system
  - occasioned by the deterioration of the caulking and the progressive rusting of the metal window frames.

- Limited buckling of the glazed tile section of the exterior wall
  - possibly caused by thermal effects or rusting of supporting steel elements

- Energy inefficiency of the single-pane glazing system.

Roof:

- Water leakage through the roofing system
  - occasioned by the deterioration of the original built-up, flat roofing system.

- Water leakage from the edge flashing
  - occasioned by the deterioration of this material.

Asbestos:

- The tower contains a variety of asbestos containing materials. Of particular note is the very friable nature of the sprayed-on fireproofing and its extensive application. This is due to the following:
  - the complex shape of the structure
    (necessitating many structural elements requiring fireproofing)

  - the small floorplate
    (resulting in much overspray on the deck)

  - the time of application of the fireproofing
    (resulting in overspray on surfaces of other interior building systems and components).
Many of the physical deficiencies of the A-Tower outlined above can be attributed to age of the facility and its component parts, while others were incorporated into the original design and specification of the building. The combined effect of these deficiencies impact the overall performance of The Center. Marketing implications were described in the last chapter - that for certain market segments The Center is operating not as a 115, but as a 61 room conference center. There is an inadequate supply of higher quality rooms during periods of peak demand. It is essential, for the viability of The Center, to accommodate this demand in order to compensate for slower periods in their business cycle.

The overall performance of The Center is also negatively affected by higher operating and scheduled maintenance costs, as well as many smaller, repetitive and unplanned items of work in the A-Tower. The latter are substituting for more major items which should not be deferred, because the real costs of deferring work becomes obscured until a major failure occurs. The continued neglect of the A-Tower is storing up potentially enormous costs for the future, and is seriously compromising the quality of experience for many of the customers.

4.4 RENOVATION APPROACHES

4.4.1 Interdependence

In recognizing the individual deficiencies of the A-Tower outlined above, it is clear that if the prime objective is be achieved, it is not a case of any one system or element being better than another, but the integration of all. For example, the thermal comfort of the guests is prejudiced both by the negative characteristics and deteriorating condition of the window system as well as by the unsatisfactory operation of the air-conditioning. Proper operation of the air-conditioning system is, at least partially, influenced by the extent to which the system can be maintained. This, in turn, is limited by the presence of asbestos.
4.4.2 Comprehensive Approach

At one extreme would be a comprehensive approach which recognizes the interdependence of various elements and deficiencies outlined above. This option would aim to take all of floors 2-8 out of service at one time, and would offer a more efficient, less costly and more rapid construction process with a shorter total period of disruption to the facility and its guests. The scope of work for this comprehensive approach would involve the following:

Demolition: • Complete interior demolition of floors 2 through 8 as part of a comprehensive asbestos removal program.

• Selective demolition of areas on first floor, basement and penthouse to upgrade equipment and facilities and remove remaining asbestos.

Facade:

• Replacement of curtain wall with new glazing system, with opening windows and insulating glass.

• Repair of glazed brick walls to remove minor buckling and ensure long-term integrity.

Roof: • Replacement of built-up flat roofing material with EDPM roofing system complete with fiberboard panels for added insulation.

• Replacement metal edge flashing.

Interior: • Full rebuild, in new configuration, with upgraded finishes, state-of-the-art electrical and electronic outlets, and high-end bathroom fixtures and fittings. Selective improvements and enhancements to first floor including decorative wall and floor finishes.

Systems: • Installation of new HVAC and sprinkler systems, and new electrical distribution on residential floors.

Refurbishing of elevator cabs.

This first strategy aims to reduce the risk of exposure to asbestos by allowing specialized abatement contractors to remove the asbestos from the building. From an investment perspective, this 'gross removal' strategy seeks to trade short-term revenue for long-term value (which includes reduction is risk of liability from exposure to asbestos). Pay back
from this approach is seen as being enhanced when the building is undergoing comprehensive market reorientation involving extensive renovation of the building. [31]

4.4.3 Minimalist/Delayed Approach

At another extreme of the spectrum would be a minimalist alternative aimed at improving simply the appearance and user perception of the guest rooms. This option, currently being employed by The Center, includes the refurnishing and redecoration of the guestrooms without modification to walls, systems, and substantial impact on the ACM. While this may offer short-run rate and occupancy improvements, it should be seen merely as a survival strategy resulting in little, if any fundamental change in user comfort or experience of the facility. It does not address the serious deficiencies outlined above which are defining both the condition and performance of the building. To reflect this fact, it is assumed that this approach would simply delay the major work addressed in the comprehensive approach.

This strategy relies on the implementation of a procedure known as an operations and maintenance program in order to reduce the risk of exposure to ACM. This program includes routine air and dust monitoring, special training, licensing, and medical monitoring of property personnel. When this strategy is taken to its extreme it prohibits all activities that might interface with ACM regardless of their utility in maintaining the building, updating to meet codes and market conditions, or addressing the needs of users. Short of this extreme it requires strict control and supervision of all operations in the building to ensure that the asbestos is not damaged to the point of contaminating the premises. From an investment perspective, the objective of this strategy is to maximize revenue in the short-term. Unfortunately, sole reliance on this strategy will inevitably compromise the long-term objectives of the owner. [31]
4.4.4 Phased Approach

While the comprehensive approach addresses the deficiencies outlined above, and fulfills The Center's stated objective of repositioning the A-Tower, The Center's traditional sources of funding cannot necessarily be relied on for the significant capital contributions required for such an undertaking. The Center may also have difficulty incurring additional debt above that which was incurred from prior expansions. It is believed that any monies that The Center receives from their traditional sources will have to be supplemented to a large extent by a well-planned fund-raising campaign. It is also believed that the length of time required to implement the comprehensive approach would compromise The Center's commitment to existing contracted business in the A-Tower. These constraints call for the need to develop a phased approach to the A-Tower repositioning. This approach is developed in detail in chapter 6.

From an asbestos point of view, this strategy seeks to achieve a balance between gross removal and operational control of asbestos. Its aim is to enable The Center to plan a specific course of action related to when asbestos abatement can be done, and how much can be done at any given time, while addressing these questions in relation to all the relevant factors, including financing, operations, marketing, and construction. The objective of this strategy is to achieve an optimum balance between short- and long-term objectives. Successful implementation requires not only careful long-term planning, but also meticulous ongoing coordination and control of all the relevant factors mentioned above. [31]

4.5 Summary

The physical condition and quality of a conference center's design are clearly factors in its success. Although the appeal of The Center is greatly enhanced by the fact that the physical structures are encompassed within a heavily-wooded area, this appeal is
diminished by the deteriorated state of the A-Tower. This tower is in need of not only a cosmetic upgrade, but also a major renovation in order to keep pace with customer expectations and competitor products. This is perhaps the only way to effectively reposition the A-Tower in the marketplace and to improve the overall performance of The Center. This last point is crucial, for the ultimate performance of a piece of real estate often is determined not by its strongest element, but by its weakest. [46]
CHAPTER 5
CONFIGURATION ANALYSIS AND EVALUATION

5.0 Introduction
This chapter presents a configuration analysis of the A-Tower. Some basic principles for developing appropriate reconfiguration solutions are presented. An evaluation of the market and long term objectives of The Center are then considered in suggesting reconfiguration solutions for the tower. It is suggested that the A-Tower can reasonably adapt to the needs of contemporary users, given the restrictive characteristics of its floorplate, in order to re-gain suitability in economic and operational terms.

5.1 Configuration Analysis - Basic Principles
Analysis of the A-Tower has suggested a number of basic principles which might be useful in developing appropriate reconfiguration solutions. These principles serve to address the deficiencies discussed above without compromising the positive aspects of the design. Among these are the following: [5]

- Utilize excess, wasted space in foyer in front of elevators by incorporating it into rooms on perimeter of the tower.

- Gain additional space in rooms by reducing the number of bathrooms per floor through the creation of suites.

- Create more usable space and better positioning of furniture and fixtures by rebuilding walls dividing bedrooms and bathrooms in a location which is perpendicular to the walls currently dividing one bedroom from another.

- Relocate space between perimeter rooms by repositioning parts of walls dividing these rooms, where advantageous.

Underlying these suggestions is the realization, drawn from the experience of prior abatement work in the tower, that the asbestos abatement effort will, of necessity, result in the demolition of a significant portion of the interior surfaces of the tower.
5.2 MARKETING CONSIDERATIONS

Analysis of both the market (present and potential) and the long-term aspirations of executives for The Center have suggested a number of design solutions for the reconfiguration of the A-Tower. In the analysis below, there are two client segments whose needs and requirements drive the configuration analysis decision criteria. The first segment is the middle and higher-end conferees introduced earlier, who are less price sensitive, but demand higher quality. The second group is the small meetings/retreats market, which is seen as offering a significant area for future demand growth. It is believed that if the needs and requirements of the two customer segments just identified are met by the reconfiguration of the A-Tower, then The Center can safely assume that they have been met for the array of other customers as well.

5.2.1 Business Group Segment

As described above, The Center has had to turn away a significant amount of conference business due to the condition of the A-Tower. A question that arises when planning the reconfiguration, is the extent to which the objections to the tower have to do specifically with the size of the rooms. In order to answer this question a refurbished model room was created in the A-Tower within the restrictive confines of its existing layout.

Executives from customer companies, who had previously refused A-Tower rooms, responded favorably to the model room and found it to be acceptable accommodation for conferees in their groups. Clearly one should not conclude from this that the minimalist approach described above solves the A-Tower's problems - the reasons for this are many and have been described. However, it does imply that the small size of the rooms - resulting from original architect's use of the triangular module, coupled with the restriction of the floorplate - is compensated by some other attributes of the building. This quality is
perhaps the architect's successful integration of the A-Tower into its natural, wooded environment. This is an integration that is no less apparent today than it was in 1969.

5.2.2 Small Meetings/Retreat Segment

In thinking about the repositioning of the A-Tower one needs to come to terms with what the future of meetings will be, and to determine whether The Center can position itself in a particular niche. A niche that The Center should explore is the small meetings/retreat market. The reasons for this emerge from two principal factors - one relates to market trends as the meetings industry adapts to changes in business management and structure. The other relates to A-Tower itself, and particularly how this building has the potential to realize a unique synergy with the meetings industry market trends.

Many conference centers have seen demand shift from large, highly structured sales meetings and strategic planning sessions to small scale retreats that stress team-building or improving communication strategies. It is a shift that is defined in many respects by casual rather than corporate image. Current trends in management practices identify the need for executives to no longer passively supervise employees, but instead to manage a team of people. This is a breakdown of the traditional hierarchical structure, and aims to unleash people's creativity, help the individual and the organization in general accept change, and improve cross-departmental communication. For many, the ability to successfully embrace these practices represents an organization's most valuable strategic advantage. In order to be positioned for the future, a conference center will need not only to respond to the ways in which successful companies are adapting the changes in their own businesses, but it must actively promote change within its own organization in order to anticipate the market. [26]
5.2.3 Relevance to A-Tower

Retreats are generally off-site meetings during which small groups spend two to three days brainstorming particular topics, or solving a particular problem. It is generally thought that team-building retreats are far more productive with fewer than 10 participants. This may include a couple of chief officers from a company and a number of the department heads. A repositioned A-Tower could be uniquely suited to the kinds of meetings just described. With the creation of two suites and four single rooms as one option, or eight single rooms as another, entire residential floor(s) of the A-Tower could be marketed as a private retreat space. The existing study alcove could be enlarged by incorporating the excess, wasted space in the foyer in front of the elevators. This enlarged space could easily accommodate the number of guests on the floor and would be an ideal meeting space. The existing maids closet could be used as a kitchenette or service area. These groups would require intensive service and fine cuisine - both are strengths of The Center. They would also require recreation, which is currently a weakness, but for which there is potential for improvement both on site and in the surrounding area.

A certain attitude towards buildings is necessary to bring about the effective implementation of this methodology. It requires acceptance that buildings are adaptable and need to be designed, and continually redesigned and managed to respond to the changing demands of users. There is an increasing need for buildings to accept new technologies to avoid functional obsolescence. This means that thinking in terms of maintenance of the status quo is not enough. Like an individual or an organization, a building's capability can be enhanced through change so that it becomes more responsive to, and can begin to anticipate contemporary demands.
5.3 Spatial Arrangement:

Exhibit 5.1 illustrates the floor plan of typical residential floor resulting from application of the conclusions discussed above. The plan shows: [5]

- A 'Management Retreat" option providing the following configuration on a floor
  - Four enlarged single rooms with improved bathrooms and closet space.
  - Two 2-room suites with living room, kingsize or two-bed bedrooms, and enlarged bathrooms.
  - One sizable study alcove or seminar room which can accommodate 12 people and can be outfitted for various educational functions.

Two alternative plans have been conceived which were also generated from the above mentioned objectives and conclusions:

- An 'Intensive Residential option providing the following configuration on a floor:
  - Four enlarged single rooms with improved bathrooms and closet space.
  - Three double rooms.
  - One small suite.
  - One sizable study alcove.

- An 'Executive Program' option providing the following configuration on a floor:
  - Four large suites.
  - One sizable study alcove.
EXHIBIT 5.1

- A-Tower -

Reconfigured Residential Floor
5.4 Summary

The configuration options suggested in this chapter result in an arrangement which provides accommodation for a variety of residential needs and sufficient space for a variety of educational functions and themes which can vary from floor to floor. Market, funding and operations criteria will determine the best option or mix of options. The market analysis suggests that some combination of the 'Management Retreat,' and the 'Intensive Residential' options will best respond to market potential. It should also be noted, however, that the configuration options suggested would adequately respond to the needs of customers from all The Center's market segments, not merely the segments discussed at length in this chapter. This is largely due to the options responding to recognized deficiencies without compromising the positive aspects of the design.

To answer the question as to what mix of options would best meet the operational requirements of The Center would require more market research than the time constraints for this study allowed. The phased approach to repositioning, described in the next chapter, offers The Center an advantage in determining the correct mix of options. Namely, that options constructed in an early phase can be 'tested' in the market prior to the construction of a later phase.
CHAPTER 6
PHASED REPOSITIONING APPROACH ANALYSIS AND EVALUATION

6.0 Introduction
This chapter outlines issues of scheduling, implementation and marketing related to a phased repositioning of the A-Tower. First, reasons for developing a phased approach are described. Constraints to implementing this approach are then discussed along with principles for working within these constraints. Finally, a construction plan is presented which attempts to accommodate the owners objectives and constraints, while still addressing the extensive deficiencies in the A-Tower.

6.1 Criteria
There are some primary reasons for developing a phased approach to the repositioning of the A-Tower. First, as described above, the owner has stated that the traditional sources for funding capital investment projects at The Center cannot be relied upon for the current project. Rather, a more realistic approach would be for these sources to supplement monies received from a fund raising effort. Such a process would take several years requiring portions of the work to be completed over time. Second, The Center has contracted with various long-term customers to provide a certain number of rooms at specified times, and for specified rates in the future. It is believed that if the comprehensive approach is implemented, the seven month shutdown of the A-Tower required to perform the work would compromise these commitments. Finally, because it is essential for periods of high demand to compensate for slower periods, a seven month shutdown of the A-Tower is thought to sacrifice too much of the high demand period to the construction project.
6.2 Constraints & Recommendations

Several issues are apparent which warrant careful review and attention in planning the renovation for the A-Tower. Recognition of the special conditions which apply to occupied hotels is crucial to achieving efficient construction with minimal room occupancy loss and minimum inconvenience or disruption to hotel guests and staff. Several constraints are described below and recommendations are suggested:

**Marketing a Building Under Phased Renovation** - One of the components that makes repositioning work, in the final analysis, is successful project marketing to communicate the improved aspects of the project to prospective customers. Critical to all repositioning strategies is determining the appropriate message to the marketplace. The creation of this message is made more challenging when the project is phased over time. In a sense, all the parties involved in a substantive way with the renovation become a part of the repositioning team, and their varied and often divergent interests need to be focused on a singular agenda.

*Recommendation:*
The above mentioned constraint is one of the more complex issues of the phased approach, for no matter what substantive measures are taken to alleviate the concerns of customers, there may be a perceived weakness in The Center as a place to meet. This perception is likely to carry over into the period of the year when construction is not even underway, as it may be thought that the project is an ongoing event. The current strategy of marketing a realization of the original architects "vision," may strike the curiosity of customers, but some will inevitably choose to wait until the vision is fully realized before booking their meetings at The Center.

**Shielding Occupants from Construction Activity** - Every precaution should be taken to minimize noise from demolition and construction, particularly when it is assumed that a percentage of hotel occupants will need to study in their rooms during the day.
Recommendation:
A buffer zone should be designated above and below the work area which will help shield occupied space from disruptive activity. One floor buffers around the work zone are typically designated for occupied hotel renovations. The A-Tower presents an especially difficult situation, however, given its restrictive floorplate and work required. Given this fact, it is thought that disturbance to some customers is inevitable even with a best effort from all involved.

Managing Materials - The mobilization and demobilization of resources in a phased renovation require tight control of critical items.

Recommendation:
Arrangements need to be secured with suppliers to ensure the availability of desired materials through the duration of the renovation project. Cost of these items will need to be agreed on up-front so that the supplier does not bargain from a monopoly position two years into the project. Some materials should be warehoused on site in a dedicated space in the construction zone. Delivery times for materials should be coordinated with the operator to minimize disruption to the operation of the hotel.

Coordination of Building Services - The nature of phased renovation work requires frequent contact with the operator with regard to schedule, deliveries, and for bringing specific floors in and out of service.

Recommendation:
Typically the superintendent and the operator's chief engineer contact each other as needed and work together throughout the renovation periods. The operator needs to be given adequate notice (at least 24 hours) whenever the contractor requires the shut-down of any portions of the electrical, mechanical, plumbing and fire protection systems which affects parts of the hotel not under construction. The operator needs to be updated on the current schedule during the entire construction.
Program Management - Successful coordination of a phased renovation given the above mentioned issues and constraints requires careful planning and meticulous management attention.

Recommendation:
So as not to overburden any one individual or department, and to provide a multifaceted view which is not biased by one or another concern, a project team should be either developed in house or hired to direct the program management. Complications are inevitable in multiple areas, including scheduling, coordination, hiring, evaluation, administrative and cost accounting, and regulatory and code compliance.

Asbestos Coordination - Asbestos abatement work is an integral component of each phase of the project.

Recommendation:
Tight control of the asbestos contractor is crucial to a timely completion of each phase. Along with schedule, the primary concern is in isolating the occupied areas for the building during the removal process. With air handlers circulating conditioned air through most of the facility, a breach in the containment barrier could pose health risks to the occupants as as grind the building's operations to a halt. Contaminated areas would require extensive cleaning at great expense before business could resume. A program manager could provide the necessary oversight.

Window of Opportunity - Work should be scheduled and completed so as to minimize loss of occupancy.

Recommendation:
Completion of phases during periods of low occupancy is of extreme importance. These periods are from November through March, as illustrated in Exhibit 6.1.
### Historical and Projected Occupancy

**Exhibit 6.1**

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<td>82%</td>
<td>81%</td>
<td>49%</td>
<td>41%</td>
<td>59%</td>
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Note: Beginning July 1992 numbers shown are projected occupancies.
Access to Work Area - Workers need access to the renovation area, but such movement should be coordinated as to minimize disruptiveness to hotel operation and customers.

Recommendation:
The elevators need to remain operational during the abatement and construction process. One elevator will be dedicated to hotel users and will be programmed to bypass the renovation zone. The other elevator will be dedicated to the abatement and subsequent construction workers who will be required to access the elevator only from the renovation zone or from the basement.

6.3 Method
This section describes a proposal to complete the renovation and repositioning of the A-Tower in a phased way. It attempts to comply with the owner's operational objectives and stated financial constraints. This discussion supports and further defines the schedule assumptions presented in the previous section. Rooms demolition, abatement and renovations will proceed from the upper floors downward. There are three phases:

1. Exterior Improvements,
   Central core abatement and improvements,
   Floor one (1) demolition, abatement and improvements, and
   Floor two (2) demolition and abatement.

2. Floors six (6), seven (7), and eight (8) demolition, abatement and improvements.

3. Floors three (3), four (4), and five (5) demolition, abatement and improvements, and
   Floor two (2) improvements.

6.4 Construction Plan

Phase 1:
Installation of a new roof is targeted as the first project because of its deteriorated condition. The urgency derives from evidence of water leakage, in some cases invading friable asbestos, and resultant damage. Replacing the roof first would
also prevent the unnecessary damage to the interior improvements from this project. In addition to protecting the building, fixing the roof pre-empts the marketing backlash that would occur from a substantial leak.

Although there is evidence of some water penetration, replacement of the curtain wall is not as high a priority as the roof. The principal benefits of a new curtain wall are the positive effects it would have both on occupant comfort (in providing operable windows and aiding the HVAC system to adequately control air quality and temperature) and energy efficiency. Replacement of the curtain wall in the initial phase would require the application of a construction detail allowing for the project to occur without disturbing the asbestos fireproofing applied to the structural steel. Further investigation needs to occur in order to develop this detail.

A temporary, full height construction partition will be erected to close off access into the A-Tower from the hotel's main entry. It will be erected in such a way as to allow hotel staff and occupants access into the B-Tower. By constructing this wall the entire A-Tower becomes a demolition, abatement and construction zone in order to perform asbestos removal from the central core, housing the elevator shafts, laundry and trash chutes, and pipe chase. After the central core has been abated, and contaminated areas have been cleaned and tested, openings from the central core into each floor will be sealed. This detail adds on time and expense, but is necessary in order to prevent the re-contamination of the central core during subsequent abatement phases. All additional duct work, piping and vents will be set in place in the central core to allow for subsequent tie-in of HVAC, plumbing and sprinkler systems on each floor. Ample vertical riser space can be captured from the existing maids closets on each floor for this project. New HVAC equipment will be installed in the basement. Elevator equipment will be upgraded, and the elevator dedicated to hotel occupants will receive an interior cab upgrade.

Selective demolition will be performed on floor one (1), basement and penthouse to upgrade equipment and remove remaining asbestos. Interior demolition will also take place on floor two (2) as part of a comprehensive asbestos removal program, and will be performed while the building is shut down as it would be highly disruptive to first floor lobby operations otherwise. Additionally, floor
two (2) will serve as an intermediary zone throughout the project and will provide space to warehouse materials. Phase 1 is the only phase during which the building will be shut down entirely. Phase 1 is to be performed in year 1 with a duration of 4.5 months.

Phase 2:

Phase 2 begins with complete interior demolition of floors six (6), seven (7) and eight (8), as part of a comprehensive asbestos removal program. Floor five (5) will also be taken out of service to provide a one floor buffer between construction and occupied rooms. Floor five (5) will go back into service once disruptive activities are complete on floor six (6). This pattern of upward completion of disruptive activities repeats throughout the phase.

The air handling system will be disabled on the floors where asbestos is being removed. This shutoff reduces the possibility of building contamination. Once these floors have been abated, cleaned and tested, they will receive a full rebuild, in a new configuration, with upgraded finishes, state-of-the-art electrical and electronic outlets, and new bathroom fixtures and fittings.

Installation of new piping, vents and ducts on these floors will tie into the new systems installed during Phase 1. Note that by phasing the renovation of a building two operational systems are required in some instances, as in the case of HVAC where the original system must service floors not yet renovated, and a new system services the renovated floors. This will inevitably add inefficiencies to the phased process compared to the comprehensive. Phase 2 is to be performed in year 2 with a duration of 3 months.

Phase 3:

Phase 3 begins with interior demolition of floors three (3), four (4) and five (5) as part of a comprehensive asbestos removal program. Phase 3 proceeds in a similar way as Phase 2, but with a completion of disruptive activities from the top down. The buffer floor for Phase 3 will begin with floor six (6), and will then drop. All four floors, two through five (2-5) are completed during this phase. The elevator dedicated to abatement and construction workers will receive an interior cab upgrade. Phase 3 is to be performed in year 3 with a duration of 4 months.
6.5 Summary

Interior demolition and reconstruction, performed in conjunction with modifications to a building's layout, vertical, mechanical and electrical systems requires meticulous attention to detail and coordination even under the most relaxed constraints. Attempts to perform these tasks in an operational building is a true test of the technical and management skills of all involved.

This chapter has outlined an analysis of issues related to a phased renovation and repositioning of the A-Tower. Its main focus were issues of schedule and implementation. The physical product by the end of the third year in the phased approach is the same as for the comprehensive approach. The aim in both cases is to thoroughly address the deficiencies in the A-Tower and to reposition the building to respond to current market demands and promising market segments. Both approaches recognize that these deficiencies are not independent of one another, and that no single element can be addressed adequately without fully considering the other elements. But whereas the latter is accomplished in a 7-month shutdown of the building in year one, the former is accomplished over several years in phases totalling 11.5 renovation months. The added construction time, in combination with the difficulties in marketing a property under renovation for a longer period result in higher construction costs and potential lost business for The Center.
CHAPTER 7

NET OPERATING INCOME PROJECTIONS &
DISCOUNTED CASH FLOW ANALYSES

7.0 Introduction

Any successful real estate investment requires careful analysis of the many contingencies on which the decision depends. Decisions on investment should be guided by some basic steps including: [32]

- Identification of the goals, objectives, and constraints of the various participants in the process,
- Analysis of the overall investment environment, such as the market in which the investment decision is made,
- Forecast of expected future benefits and costs arising from the investment,
- Application of decision-making criteria to compare the benefits to the costs of the investment and to accept or reject the investment under the assumptions and input variables.

Thus far this paper has considered the first two steps stated above. The Center’s goals, objectives and constraints have been discussed throughout. The market environment has been discussed at length and include issues related to the economy, competitive supply and demand. This chapter presents analyses of steps three and four - first by projecting the annual net operating income derived from each of the three repositioning approaches over an eleven year period, and then comparing benefits to costs by performing a discounted cash flow analysis from which the net present value of each investment scenario is considered.

7.1 Projected Net Operating Income

In the analysis which follows, projections of net operating income before existing debt service are developed for an eleven year period based upon specific estimates and
assumptions relative to future expectations. Projections are made for eleven years in order for each repositioning approach to reach stabilized annual net operating income. The expectations are based on an analysis of historical economic indicators, anticipated constraints and market potential, and the costs and benefits derived from the three repositioning approaches at different times. The following general assumptions are made with respect to the three repositioning approaches:

**Comprehensive Approach:** A-Tower is shut down for a 7-month interior demolition, abatement and construction period during year one. All renovation work is completed during this period, as well as replacement of all furniture, fixtures and equipment. The repositioning process continues after year one in relation to marketing and operating The Center.

**Phased Approach:** A-Tower is shut down for a 4.5-month interior demolition, abatement and construction period in year one; floors 2, 6-8 are taken out of use for varying periods of renovation in year two; floors 2, 3-5 are taken out of use for varying periods of renovation in year three. All renovation work is completed by the end of year three, as well as replacement of all furniture, fixtures and equipment. The repositioning process continues after year three in relation to marketing and operating The Center.

**Minimalist/Delayed Approach:** A-Tower rooms are redecorated over first two years. A-Tower is shut down for 7-month interior demolition, abatement and construction period during year five. All renovation work is completed during this period, as well as the completion of replacement of all furniture, fixtures and equipment. The repositioning process continues after year five in relation to marketing and operating The Center.

Exhibit 7.1 presents eleven year net operating projections for the three repositioning approaches. Each pro-forma is preceded by a table of assumptions which support the projections.
Comprehensive Approach: Table of Assumptions

Base Year is actual fiscal year ended June 30, 1992,

Rooms Available in A-Tower during year one decrease from base year due to 7-month shutdown,

Occupancy Rate
- A-Tower - year one same as base year; year two increase 12%; year three increase 10%; year four increase 8%; year five increase 6%; years six and seven increase 4% per annum; years eight and nine increase 3% per annum; years 10 and 11 remain stabilized.
- B-Tower - year one decrease 10%; year two increase 8%; year three and four increase 6% per annum; year five and six increase 4% per annum; year seven increase 3%; years eight to eleven remain stabilized,

Average Room Rate
- A-Tower - year one same as base year; year 2 increase 17%; year three increase 8%; year four increase 5%; years five and six increase 4% per annum; years seven to eleven increase 3% per annum.
- B-Tower - year one same as base year; years two to four increase 5% per annum; years five to eleven increase 3% per annum,

Operating Expenses are equal to .64 of Total Revenues in base year; .65 in year one; .635 in year two; years three to seven decrease .005 per annum due to increased economies of operation due to higher occupancies; years eight to eleven stabilized at .61,

A&G expense increase 3% per annum,

Maintenance expense year one same as base year; year two decrease 10%; years three to eleven increase 3% per annum,

Utilities expense year one same as base year; year two decrease 10%; years three to eleven increase 3% per annum,

Marketing expense years one and two increase 8% per annum; years three to eleven increase 3% per annum.
## PROJECTED NET OPERATING INCOME

### COMPREHENSIVE APPROACH

Current value dollars (fiscal year ending June 30)

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<td>71%</td>
<td>74%</td>
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<td><strong>AverAge Room RAtE</strong></td>
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<td><strong>Total Revenues</strong></td>
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<td>$223,585</td>
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<td>$213,481</td>
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<td>$240,275</td>
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<td>$299,564</td>
<td>$308,551</td>
<td>$317,808</td>
<td>$327,342</td>
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<td><strong>Univ. Charges</strong></td>
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<td>$146,100</td>
<td>$146,100</td>
<td>$146,100</td>
<td>$146,100</td>
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<tr>
<td><strong>Total Expenses</strong></td>
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<td><strong>Net Operating Income</strong></td>
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<tr>
<td></td>
<td>$65,761</td>
<td>($306,658)</td>
<td>$214,765</td>
<td>$402,234</td>
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<td>$1,222,643</td>
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</table>
**Phased Approach: Table of Assumptions**

**Base Year** is actual fiscal year ended June 30, 1992,

**Rooms Available** in A-Tower year one decrease from base year due to 4.5-month shutdown; years two and three also lower than base year due to floor demolition and renovations,

**Occupancy Rate**
- A-Tower - year one same as base year; year two increase 5%; year three increase 10%; years four and five increase 8% per annum; year six increase 6%; years seven to ten increase 3% per annum; year eleven stabilize.
- B-Tower - year one decrease 6% from base year; years two to ten increase 3% per annum; year eleven stabilize,

**Average Room Rate**
- A-Tower - year one same as base year; year 2 increase 3%; year three increase 10%; year four to six increase 8% per annum; years seven to eleven increase 3% per annum.
- B-Tower - year one same as base year; years two to four increase 5% per annum; years five to eleven increase 3% per annum,

**Operating Expenses** are equal to .64 of Total Revenues in base year to year 2; years three to eight decrease .005 due to increasing economies of operation at higher occupancies; stabilize year nine at .61,

**A&G expense** years one to four increase 4% per annum; years five to eleven increase 3% per annum,

**Maintenance expense** year one increase 3% from base; year two same as year one; year three decrease 4%; year four decrease 3%; years to eleven increase 3% per annum,

**Utilities expense** year one same as base; year two decrease 8%; year three increase 1%; years four to eleven increase 3% per annum,

**Marketing expense** years one to three increase 8% per annum; year four increase 5%; year five increase 4%; year six increase 3%; years seven to eleven increase 2% per annum.
### Projected Net Operating Income

**Phased Approach**

(current value dollars  
(fiscal year ending June 30)

<table>
<thead>
<tr>
<th></th>
<th>base</th>
<th>year 1</th>
<th>year 2</th>
<th>year 3</th>
<th>year 4</th>
<th>year 5</th>
<th>year 6</th>
<th>year 7</th>
<th>year 8</th>
<th>year 9</th>
<th>year 10</th>
<th>year 11</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rooms Available</strong></td>
<td>41,975</td>
<td>32,777</td>
<td>37,834</td>
<td>37,834</td>
<td>41,975</td>
<td>41,975</td>
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<td>41,975</td>
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<tr>
<td>A-Tower</td>
<td>19,710</td>
<td>10,512</td>
<td>15,569</td>
<td>15,569</td>
<td>19,710</td>
<td>19,710</td>
<td>19,710</td>
<td>19,710</td>
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</tr>
<tr>
<td>B-Tower</td>
<td>22,265</td>
<td>22,265</td>
<td>22,265</td>
<td>22,265</td>
<td>22,265</td>
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<tr>
<td><strong>Rooms Occupied</strong></td>
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<td>17,491</td>
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<td>21,432</td>
<td>24,629</td>
<td>25,885</td>
<td>26,997</td>
<td>27,807</td>
<td>28,641</td>
<td>29,500</td>
<td>30,220</td>
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<td>11,852</td>
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<td>12,574</td>
<td>12,951</td>
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<td>B-Tower</td>
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<td>13,456</td>
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<td>14,704</td>
<td>15,145</td>
<td>15,599</td>
<td>16,067</td>
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<tr>
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<td>53%</td>
<td>54%</td>
<td>57%</td>
<td>59%</td>
<td>62%</td>
<td>63%</td>
<td>66%</td>
<td>68%</td>
<td>70%</td>
<td>72%</td>
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<tr>
<td>A-Tower</td>
<td>42%</td>
<td>42%</td>
<td>44%</td>
<td>49%</td>
<td>53%</td>
<td>57%</td>
<td>60%</td>
<td>62%</td>
<td>64%</td>
<td>66%</td>
<td>68%</td>
<td>68%</td>
</tr>
<tr>
<td>B-Tower</td>
<td>62%</td>
<td>59%</td>
<td>60%</td>
<td>62%</td>
<td>64%</td>
<td>66%</td>
<td>68%</td>
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<td>72%</td>
<td>74%</td>
<td>76%</td>
<td>76%</td>
</tr>
<tr>
<td><strong>Average Room Rate</strong></td>
<td>$65.74</td>
<td>$67.98</td>
<td>$69.35</td>
<td>$73.48</td>
<td>$76.60</td>
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<td>$89.10</td>
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<td>$81.96</td>
<td>$84.42</td>
<td>$86.95</td>
<td>$89.56</td>
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<tr>
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<td>$72.67</td>
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<td>$94.68</td>
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<td>$37,736</td>
<td>$29,734</td>
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<td>$41,869</td>
<td>$44,005</td>
<td>$45,895</td>
<td>$47,272</td>
<td>$48,690</td>
<td>$50,151</td>
<td>$51,374</td>
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<td>$1,611,246</td>
<td>$1,928,530</td>
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<td>$2,313,211</td>
<td>$2,452,668</td>
<td>$2,600,574</td>
<td>$2,757,445</td>
<td>$2,906,919</td>
<td>$2,992,585</td>
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<td>$1,946,000</td>
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<td>$234,334</td>
<td>$241,364</td>
<td>$248,604</td>
<td>$256,063</td>
<td>$263,745</td>
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<td>$146,100</td>
<td>$146,100</td>
<td>$146,100</td>
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<td>$146,100</td>
<td>$146,100</td>
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<td>$146,100</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
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<td>$3,416,752</td>
<td>$3,676,346</td>
<td>$4,153,363</td>
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<td>$4,741,569</td>
<td>$4,949,074</td>
<td>$5,166,333</td>
<td>$5,422,436</td>
<td>$5,668,750</td>
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<tr>
<td><strong>Net Operating Income</strong></td>
<td>$65,761</td>
<td>($207,268)</td>
<td>($25,640)</td>
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<td>$372,143</td>
<td>$523,456</td>
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<td>$806,377</td>
<td>$936,197</td>
<td>$1,048,208</td>
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<td>$1,197,879</td>
</tr>
</tbody>
</table>
**EXHIBIT 7.1**

(page 5)

**Minimalist/Delayed Approach: Table of Assumptions**

*Base Year* is actual fiscal year ended June 30, 1992,

*Rooms Available* in A-Tower during year five decrease due to 7-month shutdown,

**Occupancy Rate**
- A-Tower - years one and two increase 4% per annum; years three and four increase 5% per annum; year five same as four; years six and seven increase 8% per annum; years eight and nine increase 4% per annum; years ten and eleven increase 3% per annum.
- B-Tower - years one to four increase 3% per annum; year five decrease 8%; year six increase 4%; years seven to nine increase 3% per annum; year ten increase 2%; year eleven stabilize.

**Average Room Rate**
- A-Tower - years one through three increase 5% per annum; year four increase 3%; year five same as four; year six increase 8%; years seven and eight increase 4% per annum; years nine to eleven increase 3% per annum.
- B-Tower - years one to four increase 3% per annum; year five same as four; year six increase 5%; year seven increase 4%; years eight to eleven increase 3% per annum.

**Operating Expenses** are equal to .64 of Total Revenues in base year to year four; year five increase to .65; years six to eleven decrease .005 per annum due to increased economies of operation at higher occupancies; stabilize year eleven at .61.

**A&G expense** increases 3% per annum,

**Maintenance** expense years one to four increase 6% per annum; year five same as year four; year six decrease 15%; years seven to eleven increase 3% per annum,

**Utilities** expense years one to four increase 3% per annum; year five same as year four; year six decrease 10%; year seven to eleven increase 3% per annum,

**Marketing** expense years one to four increase 5% per annum; year five increase 8%; year six increase 5%; years seven to eleven increase 3% per annum.


## Projected Net Operating Income

### Minimalist/Delayed Approach

*Current value dollars*

(fiscal year ending June 30)

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rooms Available</strong></td>
<td>1,496,963</td>
<td>2,066,680</td>
<td>2,808,372</td>
<td>3,446,304</td>
<td>4,849,688</td>
<td>5,642,080</td>
<td>6,590,151</td>
<td>7,061,029</td>
<td>7,558,862</td>
<td>8,080,128</td>
<td>8,632,554</td>
</tr>
<tr>
<td><strong>Other Rooms Revenues</strong></td>
<td>3,745,696</td>
<td>4,300,397</td>
<td>3,446,304</td>
<td>4,849,688</td>
<td>5,642,080</td>
<td>6,590,151</td>
<td>7,061,029</td>
<td>7,558,862</td>
<td>8,080,128</td>
<td>8,632,554</td>
<td>9,212,994</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>5,442,659</td>
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<tr>
<td><strong>Operating Expenses</strong></td>
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<td>4,320,410</td>
<td>4,849,688</td>
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<td>6,590,151</td>
<td>7,061,029</td>
<td>7,558,862</td>
<td>8,080,128</td>
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<td>9,212,994</td>
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<tr>
<td><strong>Net Operating Income</strong></td>
<td>1,703,324</td>
<td>1,798,299</td>
<td>1,904,150</td>
<td>1,846,388</td>
<td>1,852,296</td>
<td>1,644,111</td>
<td>1,590,172</td>
<td>1,471,029</td>
<td>1,058,162</td>
<td>7,080,224</td>
<td>6,532,554</td>
</tr>
</tbody>
</table>
7.2 Discounted Cash Flow Analyses

This section presents a comparison of benefits to the costs of each repositioning approach using a discounted cash flow model. This model is based on the concept that the value of a real estate investment is equal to the present worth of the future cash flows from operation, plus the present worth of the reversionary value of the property at the end of the holding period. The latter is determined in this analysis by capitalizing the net operating income in year eleven by terminal capitalization rate of 12%. If the present value of the cash flows exceeds the present value of the costs of investing, the investment is accepted. If the present value of the cash flows is less than the percent value of the costs, the investment is rejected. [32] The discount rate selected is 14%. This selection, and the 12% terminal capitalization rate, are considered appropriate given assumptions about the market which were previously discussed. An inflation rate of 4% annually was applied to all construction costs incurred after year one.

Exhibit 7.2 presents discounted cash flow analyses for the three repositioning approaches.
### DISCOUNTED CASH FLOW ANALYSIS
- **COMPREHENSIVE APPROACH** -
  (fiscal year ending June 30)

#### EXHIBIT 7.2

**NET OPERATING INCOME**

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
<td>Reversion @</td>
<td>$-306,658</td>
<td>$214,765</td>
<td>$402,234</td>
<td>$590,713</td>
<td>$737,219</td>
<td>$883,473</td>
<td>$1,021,364</td>
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<tr>
<td>Cost of Sales</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Sales Proceeds</td>
<td>3%</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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**NET CASH FLOWS**

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
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<td>Construction Cost</td>
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<tr>
<td>(Loss)</td>
<td>$-5,200,000</td>
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**CASH FLOW AFTER CONSTRUCTION**

<table>
<thead>
<tr>
<th>Year</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV Factor @</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Factor</td>
<td>0.877192982</td>
<td>0.769467528</td>
<td>0.674971516</td>
<td>0.592080277</td>
<td>0.519368664</td>
<td>0.45586548</td>
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<td>0.350559055</td>
<td>0.307507943</td>
<td>0.26974381</td>
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</table>

**NPV OF CASH FLOWS**

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV Factor @</td>
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<td>$1,662,909</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>12.50%</td>
<td>$1,450,630</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>13.00%</td>
<td>$1,248,212</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>13.50%</td>
<td>$1,055,168</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>14.00%</td>
<td>$871,039</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>14.50%</td>
<td>$695,388</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>15.00%</td>
<td>$527,803</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>15.50%</td>
<td>$367,893</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV Factor @</td>
<td>16.00%</td>
<td>$215,289</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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**NPV OF INVESTMENT SCENARIO**

<table>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,188,694</td>
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<tr>
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</tbody>
</table>

**SENSITIVITY ANALYSIS**

<table>
<thead>
<tr>
<th>PV Factor @</th>
<th>NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.00%</td>
<td>$1,662,909</td>
</tr>
<tr>
<td>12.50%</td>
<td>$1,450,630</td>
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<tr>
<td>13.00%</td>
<td>$1,248,212</td>
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<tr>
<td>13.50%</td>
<td>$1,055,168</td>
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<td>$695,388</td>
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<td>15.00%</td>
<td>$527,803</td>
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<tr>
<td>15.50%</td>
<td>$367,893</td>
</tr>
<tr>
<td>16.00%</td>
<td>$215,289</td>
</tr>
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</table>

72
DISCOUNTED CASH FLOW ANALYSIS
PHASED APPROACH
(fiscal year ending June 30)

<table>
<thead>
<tr>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
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</tr>
<tr>
<td>($207,268)</td>
<td>($25,640)</td>
<td>$104,618</td>
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<td>$9,982,327</td>
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</tr>
<tr>
<td>Net Sales Proceeds</td>
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<td>CONSTRUCTION COST 4%</td>
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<td>($2,078,000)</td>
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<tr>
<td>CASH FLOW AFTER CONSTRUCTION</td>
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</tr>
<tr>
<td>PV FACTOR @ 14%</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>0.877192982</td>
<td>0.769467528</td>
<td>0.674971516</td>
<td>0.592080277</td>
<td>0.519368664</td>
<td>0.455586548</td>
<td>0.399637323</td>
<td>0.350559055</td>
<td>0.307507943</td>
<td>0.26974381</td>
<td></td>
</tr>
<tr>
<td>NPV OF CASH FLOWS</td>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>($2,374,796)</td>
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<td>$271,867</td>
<td>$312,821</td>
<td>$322,259</td>
<td>$328,192</td>
<td>$322,332</td>
<td>$2,922,811</td>
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<tr>
<td>NPV OF INVESTMENT SCENARIO</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>($418,310)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tbody>
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SENSITIVITY ANALYSIS:

<table>
<thead>
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<th>PV FACTOR @</th>
<th>NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.00%</td>
<td>$206,153</td>
</tr>
<tr>
<td>12.50%</td>
<td>$37,345</td>
</tr>
<tr>
<td>13.00%</td>
<td>($122,705)</td>
</tr>
<tr>
<td>13.50%</td>
<td>($274,448)</td>
</tr>
<tr>
<td>14.00%</td>
<td>($418,310)</td>
</tr>
<tr>
<td>14.50%</td>
<td>($554,693)</td>
</tr>
<tr>
<td>15.00%</td>
<td>($683,977)</td>
</tr>
<tr>
<td>15.50%</td>
<td>($806,524)</td>
</tr>
<tr>
<td>16.00%</td>
<td>($922,672)</td>
</tr>
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</table>

EXHIBIT 7.2
(page 2)
### Discounted Cash Flow Analysis - Minimalist/Delayed Approach

(fiscal year ending June 30)

#### Net Operating Income

<table>
<thead>
<tr>
<th>Year</th>
<th>Reversion @ 12%</th>
<th>Cost of Sales @ 3%</th>
<th>Net Sales Proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$106,361</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>$155,160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>$213,619</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>$267,880</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>($211,445)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>$401,909</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>$549,798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>$673,126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>$800,122</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>$914,828</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>$1,007,279</td>
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#### Net Cash Flows

<table>
<thead>
<tr>
<th>Construction Cost 4%</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
<th>Year 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>($375,000)</td>
<td>$106,361</td>
<td>$155,160</td>
<td>$213,619</td>
<td>$267,880</td>
<td>($211,445)</td>
<td>$401,909</td>
<td>$549,798</td>
<td>$673,126</td>
<td>$800,122</td>
<td>$914,828</td>
<td>$1,007,279</td>
</tr>
</tbody>
</table>

#### Cash Flow After Construction

<table>
<thead>
<tr>
<th>PV Factor @ 14%</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
<th>Year 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.877192982</td>
<td>$106,361</td>
<td>$155,160</td>
<td>$213,619</td>
<td>$267,880</td>
<td>($211,445)</td>
<td>$401,909</td>
<td>$549,798</td>
<td>$673,126</td>
<td>$800,122</td>
<td>$914,828</td>
<td>$1,007,279</td>
</tr>
</tbody>
</table>

#### NPV of Cash Flows

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<tr>
<th>NPV of Investmen Scenario</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
<th>Year 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>($235,648)</td>
<td>$119,390</td>
<td>$144,187</td>
<td>$158,607</td>
<td>($3,163,705)</td>
<td>$183,105</td>
<td>$219,720</td>
<td>$235,970</td>
<td>$246,044</td>
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#### Sensitivity Analysis

<table>
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<tr>
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<th>NPV</th>
</tr>
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<tbody>
<tr>
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<td>$678,508</td>
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<tr>
<td>12.50%</td>
<td>$588,679</td>
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<tr>
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<td>$425,096</td>
</tr>
<tr>
<td>14.00%</td>
<td>$350,738</td>
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<tr>
<td>14.50%</td>
<td>$280,962</td>
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<tr>
<td>15.00%</td>
<td>$215,507</td>
</tr>
<tr>
<td>15.50%</td>
<td>$154,129</td>
</tr>
<tr>
<td>16.00%</td>
<td>$96,596</td>
</tr>
</tbody>
</table>

EXHIBIT 7.2

(page 3)
7.3 Summary

The following conclusions may be drawn from the discounted cash flow analyses, assuming that the various assumptions and estimates are accurate:

Comprehensive Approach:
The positive net present value of $871,039 indicates that the present value of cash flows to be received from an investment in the comprehensive approach exceeds the equity invested; the investment is superior to the other two approaches from an investment performance perspective.

Phased Approach:
The negative net present value of $418,310 indicates that the present value of cash flows to be received from an investment in the phased approach is less than the equity invested; the investment is problematic with regard to return on investment.

Minimalist/Delayed Approach:
The positive net present value of $350,738 indicates that the present value of cash flows to be received from an investment in the minimalist/delayed approach exceeds the equity invested; the investment, however, is inferior to the comprehensive approach from an investment performance perspective.

Obviously the net present value depends on the discount rate and other assumptions used to calculate the present value of the cash inflows. This discount rate should reflect the minimum rate of return required by the investor to make the investment, considering the risk incurred. When discount rate sensitivity analyses are applied to the three repositioning approaches, both the comprehensive and minimalist approaches have a positive net present
value at a discount rate of 16%. A far lower discount rate, between 12.5 and 13% would be necessary before phased approach realized a positive net present value on investment.

To further evaluate the approaches, particularly with respect to analyzing risk, the owner would examine some of the assumptions by analyzing both a pessimistic and an optimistic scenario by running sensitivity analyses on:

- Future occupancy rates,
- Future room rates,
- Operating and other expenses
- Terminal cap rate

The assumptions and estimates for the projected net operating income and discounted cash flow analyses in this chapter should be seen as representing one possible scenario for each of the repositioning approaches presented. These scenarios clearly indicate that the phased approach is an inferior investment decision, which is due to the combined effect of the following factors:

- The difficulties and inefficiencies in marketing and operating a building that is being renovated in phases over time,

- The extensive inter-relatedness of physical deficiencies in the A-Tower indicate the need for a holistic approach to renovation in order that each element is addressed adequately and efficiently,

- When compared to the comprehensive approach, the investment performance of the phased approach is weakened by reaching a stabilized net operating income, and establishing a new image in the market later rather than sooner.
8.0 CONCLUSION

When planning a repositioning project, scope of work and degree of change to the building are determined by its age and condition, its original design and competitive market trends. 1960's and 1970's buildings provide one of the broadest categories of structures that will be remodeled or rebuilt, creating over the next years a comprehensive reflection on changing patterns in use and of taste. [6] The strategies that owners may employ for these projects, particularly in periods of low investment, may recognize the needs of active property operations, yet are cost-efficient in terms of the resources and scheduling of the work required. In many situations this points to the use of a phased approach as the most cost effective repositioning strategy. This paper has considered approaches for the repositioning of a 1969-built conference center hotel and concludes with respect to this particular building, that:

- it is possible to phase the project, however,
- phasing would be an intricate process given the type of building, its attributes and configuration,
- phasing would be such an intricate process as to become exceedingly interwoven with the marketing, operation, and management of the overall business,
- in terms of cost, it would be beneficial if it were possible to arrange not to phase the repositioning project.

While it is possible to phase the repositioning and renovation of the A-Tower, addressing the deficiencies (physical and market related) which have been outlined in this paper require extensive asbestos-related demolition and reconstruction along with modifications to the building layout and systems. The cost premium for performing this scope of activities within a restrictive floorplate such as in the A-Tower in a phased way exceeds the benefits to be derived from taking all the residential floors out of service at one time.
In addition to a construction cost disadvantage, the slower construction process and longer period of disruption to the facility and its guests would result in exceedingly high demands on both the operation and particularly the marketing of the Center. The overall business may ultimately suffer from the perception by users that the hotel is not only under construction, but that this effort will take several years to complete. Even when the construction phases are restricted to certain slow months of the year, a negative perception may form and business may be lost to competing properties. The reasons for this conclusion seem even more apparent when one considers that a conference center's whole environment, guestrooms included, is marketed as a place sensitive to a conferees need to study and to concentrate.

The development of the phased approach in this paper has, however, revealed some general principles related to how one attempts repositioning/renovation projects that are implemented in a phased way. For example, it is important to understand the physical characteristics and layout of a building, as it helps not only in identifying areas of value-creating reconfiguration, but also to solve technical issues which arise in the renovation project. Buildings will vary in their characteristics and in the complexities with which a planner must deal in scheduling phased renovation activities. A thorough analysis of building layout and understanding of the inter-relatedness of physical deficiencies will aid in identification of the appropriate scope of work scheduled in each phase and how it is to be performed. The A-Tower should be seen as an extremely complex case given its restrictive floorplate, highly interrelated physical deficiencies and extensive scope of work required. However, many characteristics of the A-Tower that have been described are held in common by other buildings constructed in the 1960's and 1970's, as discussed in chapter two of this paper.
Once the scope of work, building layout and characteristics are fully understood, the building should be zoned in a way which will lead to a sequence of work that is logical for the work required, and least disruptive to building occupants. Thought should be put into whether there are linkages between activities; which activities take precedence over others; which activities can be performed concurrently; and which activities conflict with each other. [54] For example, proceeding with the vertical elements first, as suggested for the A-Tower, recognizes the inter-relatedness of the building's deficiencies and the need for a holistic approach for at least one renovation phase.

Another factor which influences the development of a phasing strategy relates to the building use and to the various cycles in which a building operates. The use to which a building is put influences what kinds of cycles need to be identified. In the development of a phased renovation of a commercial office building, for example, one needs to evaluate the building's overall occupancy, and particularly the existing lease structures in order to identify windows of opportunity over time to renovate space. Conference centers, on the other hand, do not operate on long term lease cycles. They are unique in that income is dependent on high-volume, short-term rentals which typically peak during certain periods of the year. The duration of a particular renovation phase is often defined by the slower periods when occupancies are low, and when loss of revenues are minimized.

Phased repositioning may be seen as necessary given limited available resources. However, phasing needs to be judged against lost economies of scale and the intense management and coordination effort required. For such an approach to succeed in its aim, it must be viewed as a highly interactive and iterative process. This cannot be more the case than in a building such as the A-Tower, typical of 1960's and 1970's buildings, in which overall rebuilding requirements and building characteristics demand rigorous attention both in planning and execution in order that cost, schedule, marketing and operating impacts can be minimized.
REFERENCES


[38] Murphy, Paul J., "Abatement - Not Always By the Book," Journal of Property Management, pp. 30-34.


