STAKEHOLDER MANAGEMENT: A BEST PRACTICE WITHIN THE PREDEVELOPMENT PHASE OF MIXED USE PROJECTS

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Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degree of

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ABSTRACT

As a management process real estate development can be abstract and cumbersome. Demand for space, availability of capital, regulatory conditions and other variables can be forecasted, but never entirely predicted. The role of a development manager relies heavily on the strategic application of a process that is fluid and dynamic. By investigating the methodology employed to develop large mixed-use projects, this thesis intends to demonstrate the significance of the predevelopment phase in order to clarify how certain best practices, specifically stakeholder management, can enhance performance. A theoretical framework and process map is offered that outlines the predevelopment process. Data was solicited through direct interviews and secondary sources then synthesized into a series of three case studies on predevelopment. Strategic relationships with vested and non-vested parties advocate the application of stakeholder management theory. The intent of this research is to equip the development manager with a theoretical compass, integral in navigating the uncertain and risk-laden waters within real estate development.

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INTRODUCTION

Process & Typology

Managing the real estate development process is akin to steering a ship homeward in the late night hours lacking a map. A direction might be sensed, but the veil of darkness encumbers the sight and tests determination. In truth, there are signals to follow, and instruments that guide, but ultimately you are navigating a course based on experience, instinct, and the best information available. The early stages of the real estate development process can feel just as intimidating. A development manager often envisions the final product, but possesses no map or chart to guide him toward a profitable outcome. There are many feasible options to consider, but which course of action leads to the most efficient use of time and resources? Those who have taken the ride may know the subtle twists and turns, which signals to look for, and which uncontrollable events pose the greatest risk. An experienced developer, much like a weather-beaten sea captain, can sense when the tides are turning and can steer his ship towards home in the stormiest of conditions.

As a management process real estate development can be complex and cumbersome. Often the decision maker is reacting to varying conditions on a moment-by-moment basis. Demand for space, availability of capital, regulatory conditions and other variables can be forecasted, but never entirely predicted. The role of a development manager relies heavily on the strategic application of a process that is fluid and dynamic. Given the individuality of sites, market conditions, and political context few real estate deals ever evolve through the same sequence of events. However certain phases of the

development process are in fact distinct and predicable. Most developers start with an idea, determine its feasibility, and assemble a deal structure prior to commencement.

Its also reasonable to assume that more informed decisions made on the front end will lead to greater success on the backend. If a sea captain plans accordingly and confirms a forecast prior to leaving the docks, his ability to weather the storm should significantly increase. The captain may elect for a greater investment in provisions anticipating a longer trip. In the planning stages of development, changing a course of action is relatively easy and cost effective, but further into the journey a deal progresses, the more complicated and expensive it is to change scope or direction. Commitments to partners, lenders, contractors, and tenants form constraints on a real estate deal and bind the manager from making drastic changes.

Therefore, the early stages of development or the predevelopment process warrants an investigation to determine which best practices lead to successful outcomes. In order to narrow the scope of research this work will focus on the predevelopment efforts related to a growing trend in real estate, the renaissance of mixed-use developments (MXD). This product typology has re-emerged over the last decade as developers and investors seek to mitigate risk, increase cash flows, and expand marketability through the diversification of office, retail, residential, hotel, and cultural uses.

As defined by the Urban Land Institute, mixed-use developments combine three or more significant uses planned to mutually support each other. Designed as physically and functionally integrated, these projects take advantage of the positive externalities generated by compatible uses and create a sum of parts greater than it's whole (Miles, 2001). In many cities the combination of residential, commercial, and cultural uses are producing self-sustaining communities with inherent long-term stakeholders. Street level retail, multi-family residential, and office uses are blended together in urban settings as a strategy to revitalize city blocks. These complimenting functions create better utilization of services and create destinations that generate with longer activity periods.

The National Association of Office and Industrial Properties Mixed-Use Development Forum suggests that mixed-use projects should outperform their competitors over the long run, but that management challenges and logistics are considerable. At a minimum these sophisticated deals require:

- A long-term view from flexible and well-capitalized investors
- Consummate skill in dealing with a complex array of regulatory authorities and community groups
- A meticulous analysis of the appropriate infrastructure and amenities required to be economically viable and respond to market demand

By investigating the process employed to develop mixed-use projects, this thesis intends to demonstrate the significance of the predevelopment phase in order to clarify how certain management practices can enhance performance. From concept through deal formation, shifting elements often rock the boat and prohibit forward progress. Development managers that grasp the process can apply best practices to mitigate their risks and yield the best returns possible.

Questions to be addressed in this thesis:

- What are the best practices utilized during the predevelopment process?
- What improvements can be made to the process in today's environment?

This thesis begins with a literature review on the real estate development process. Various players within the industry are identified along with their impact on the implementation of mixed-use projects. Based on this review, a theoretical framework and process map is offered to organize the data collection phase. Data was solicited through direct interviews with real estate professionals and synthesized into a series of three case studies on predevelopment. From that a summary of the best practices and the lessons learned are presented. The intent of this research is to equip the development manager with a theoretical compass, which is useful in navigating the uncertainty and risk-laden waters within real estate development.

Chapter 2

LITERATURE REVIEW

Real Estate Industry Overview

To describe the dynamic nature of mixed-use real estate development one needs to identify the major players along with their decision-making capacity. Development managers provide leadership in conceptualizing and implementing real estate deals, but they are only one of a multitude of players with the real estate industry. A strategic framework for understanding the fundamentals of the real estate industry will assist in illustrating this system dynamic.

When considering the various interests involved in real estate, there are five segments that interact with a given property and each other (Roulac, 1996). These segments compose a cast of characters that make decisions primarily based on their internal needs. These segments include:

- Space Users
- Investors
- Developer/Owners
- Service Providers
- Public Interest

At the intersection of these players' interest lies in the real estate asset. The property life cycle of the asset consists of development, operation, and the eventual disposition. The players are involved with the asset at various stages and receive some type of benefit in return. Figure 1 depicts the functional interdependency of the various players relating to the real estate asset.

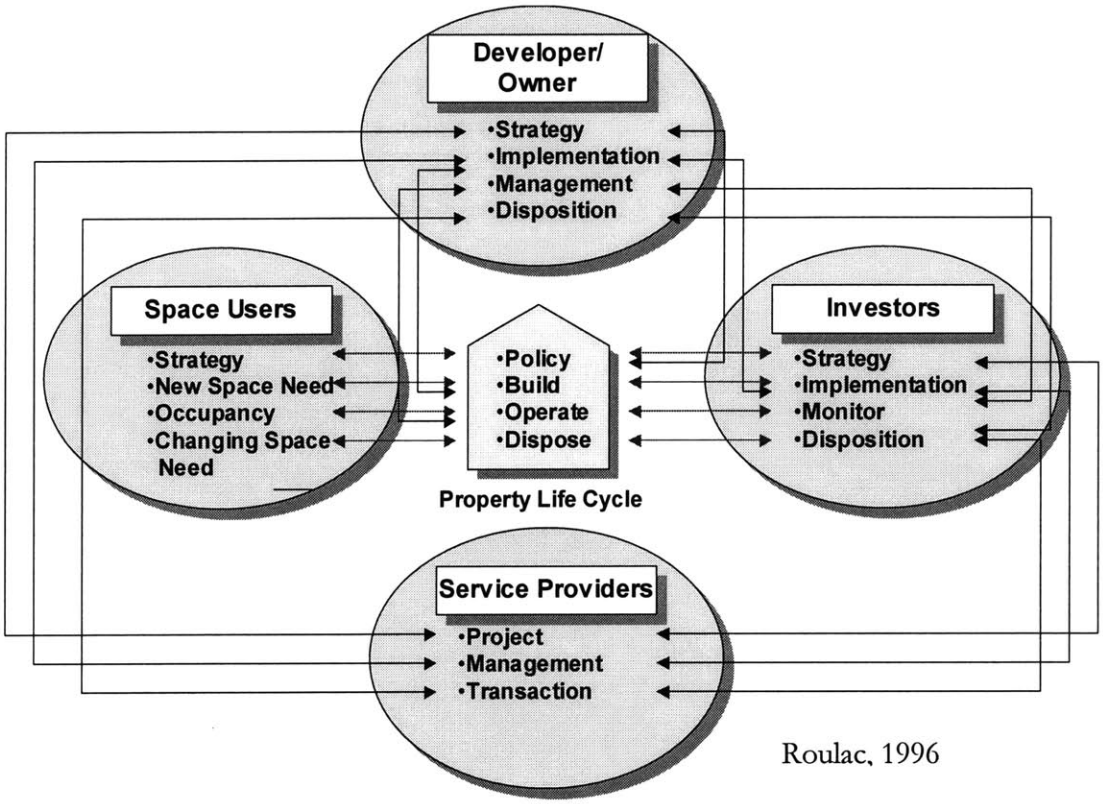


Figure 1. Functional Interdependency Between Players

Space Users: Tenants are vested in utilizing space for their primary organizational purpose. They pay rent that generates cash flows for the real estate asset. Their primary motives are to maximize efficiency, reduce occupancy costs and remain flexible. They are constrained by both space market conditions and capital market conditions.

Investors: Real estate investors supply the capital that funds the short and long term asset objectives. In return for their investment they expect an annual dividend and return of capital over some duration. Their primary motives are to preserve or maximize the return. They are constrained by the development costs and asset performance during its life cycle.

Developer/Owner: Developers are involved with perceiving a need and initiating a concept around a strategic site. Determining the feasibility and structuring the deal are core competencies. They usually have organizational capacity to plan and execute a real estate project. Asset managers are involved in acquiring and operating existing assets. . They monitor the financial performance of the asset and oversee the property management function. Developer/owners are constrained by the investor's return objectives and the space market in which the asset exists.

Service providers: Brokers, project managers, and property managers receive compensation for performing real estate services. They seek to differentiate themselves through cost, expertise, scale and function. They are motivated by owner/managers who seek their services and are constrained by the effects of the space market and capital market.

Public Interest: municipal agencies and interest groups represent the public sector's perspective. Their function is to advocate for the common good and promote social objectives. They collect tax revenue and protect the health safety and welfare of the community. The public interest is both motivated and constrained by both the needs of the local community. Figure 2 depicts the five primary players as stakeholders within the real estate development process.

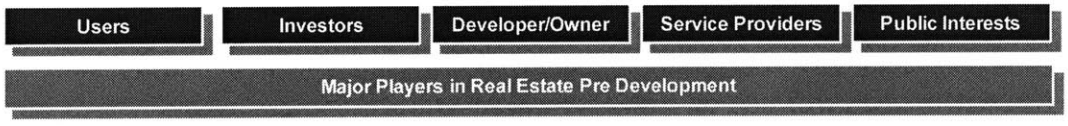


Figure 2. The Players

Every real estate development involves transactional forces between these various sectors and the careful prioritization of their concerns and interests. For instance demand for services and supply of space are forces normally exerted by developer. The overall result depends on the strategies employed by each player.

These transactional forces create a complex dynamic to which the development manager decipher and respond to. As users demand more new space in the market, a competent developer can coordinate the various components to access capital, acquire a site, and propose a solution to the tenant's need. But if capital becomes restricted or an appropriate site is not available, more pressure will be exerted on the developer to create another solution. As dealings occur between players, relationships are established through financial transactions. Capital flows primarily between households, properties, businesses, and investors. Figure 3 is a depiction of the financial transactions between players.

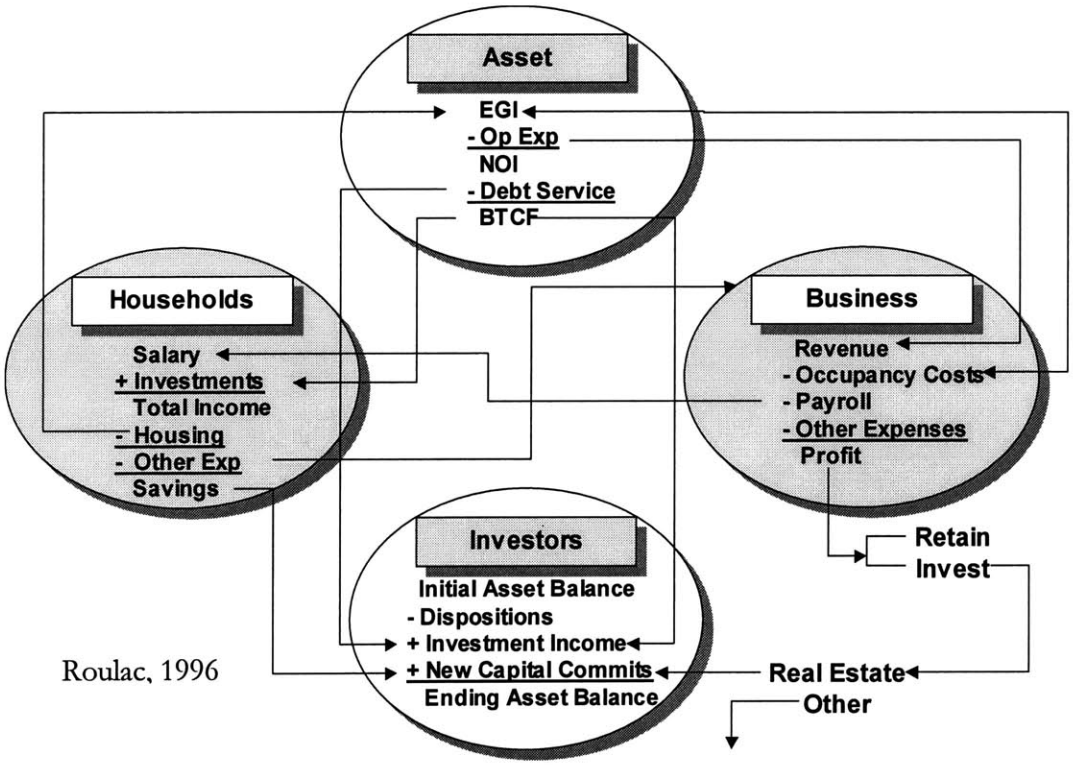


Figure 3. Financial relationships between players

Real Estate Development

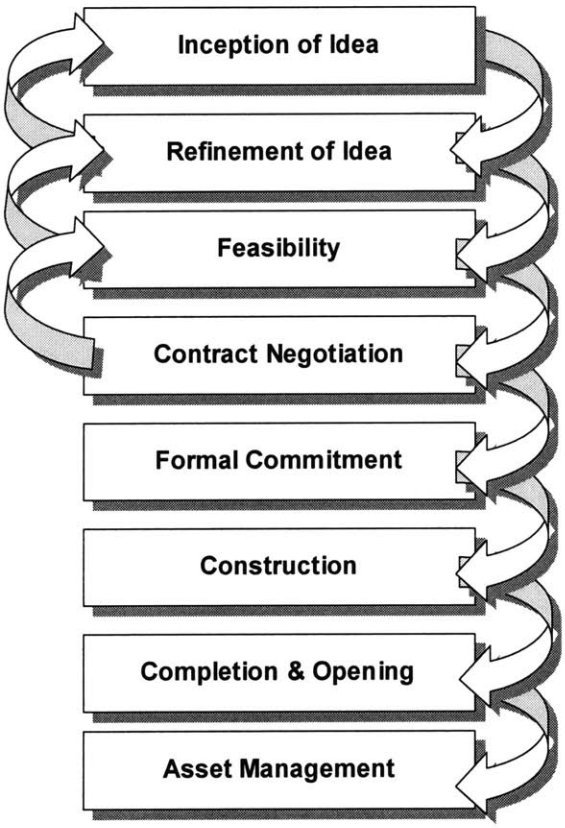


Figure 4. ULI Eight Stage Development Model

As a single player within the real estate industry, the developer/owner or development manager attempts to orchestrate and influence the interests of the other segments. His/her objective is to align the interests of these various stakeholders with the vision conceptualized for a given site. The outcome is a development process that is a complex management challenge.

The Urban Land Institute advocates an eight-stage model of the development process in Figure 4 (Miles, 2000). They remind us, that even with a process map, real estate development is anything but linear and is frequently more of an art than science. Forward-looking developers understand the impact current decisions have on future

events and plan an exit strategy throughout each stage. The eight-stage model recognizes a sequence of events that culminates with an idea and terminates with an occupied property that is owned and managed as an investment asset.

Inception of an idea often starts with an unmet need the developer identifies through experience and market knowledge. Back of the napkin calculations combined with a mental sorting process produce quick feasibility studies and narrows a dozen ideas down to one solid idea.

Refining the concept involves identifying an appropriate site, informal dialogue with advisors, and producing pre-design concepts to test the waters with potential tenants. If the concept passes all the check points then the developer will likely option the site to gain control and continue his research.

Determining the feasibility of the concept, is often referred to as due diligence. This includes conducting formal market surveys, determining the market depth and rents, estimating hard and soft costs of project development. In this stage, the developer demonstrates that the proposed project is feasible from a legal, physical, and financial perspective.

Contract negotiations is a phase where the developers ability to influence others is key. Final design, financing terms, community approvals, and construction contracts are all contemplated and negotiated to the mutual satisfaction of investors and potential users.

Predevelopment Defined

According to attorney Stuart Saft, there are three primary stages of real estate development: predevelopment, development, and redevelopment. After land has been identified as a potential development site, Saft outlines the predevelopment phase as "a stage where population centers move closer to the real estate, making development more

likely (Saft, 1990, p.43)." He describes development as the process of turning land into income producing property and redevelopment as the re-use of existing properties.

The value of a property is likely to appreciate most between the pre-development and development stages. The highest amount of risk occurs early in the project when land is procured, hard and soft costs expended, the property produces no income. Given the high amount of risk and the potentially large value creation, emphasis should be placed on the predevelopment phase as a process to bring about the successful development of mixed-use projects.

Referring back to the ULI eight-stage model and for the purposes of this research, the predevelopment phase will be defined as the first five stages, which result in formal commitments from lenders, contractors, and possibly tenants. These fives stages Inception, Refinement, Feasibility, Contract Negotiation and Final Commitments can be restated as the five stages within predevelopment: Conceptualization, Site Control, Feasibility & Due Diligence, Go-No-Go, and Deal Formation. Figure 5 depicts the relationships between the five stages.

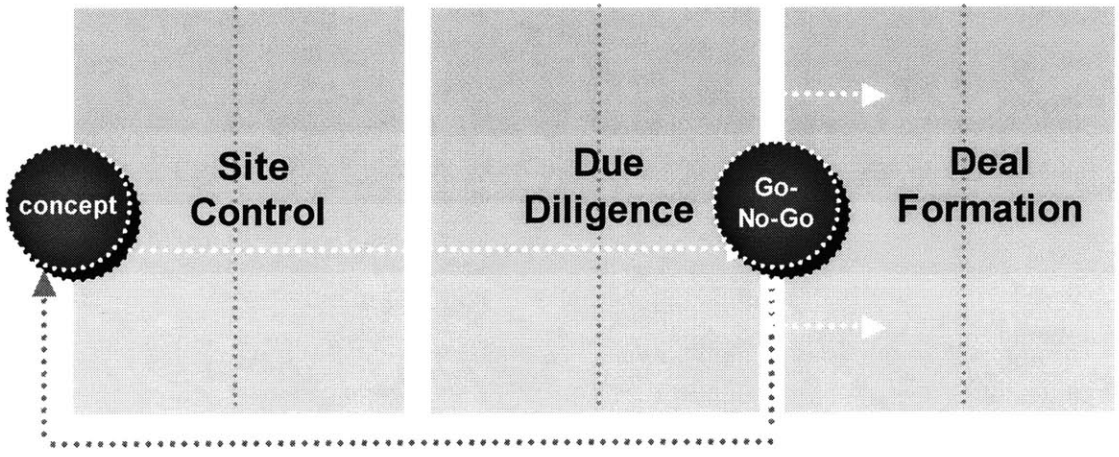


Figure 5. Five Stages of Predevelopment Process

The Mixed Used Predevelopment Process

Conceptualization

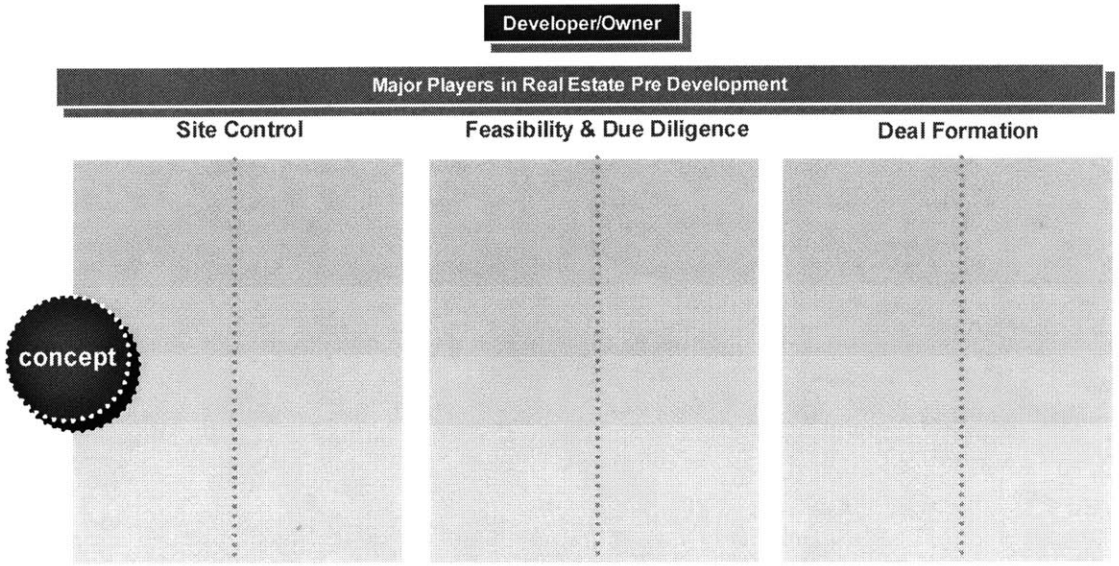


Figure 6. Conceptualization Stage of Predevelopment

As shown in Figure 6, the concept for a mixed-use project starts with the motivation of the developer. Often guided by the firm's mission, the concept seeks to fill a market need identified through a variety of methods. The astute development manager will have instinctive answers to the what, where, who, and why questions which make up a development concept.

- What- What product type works best? Precedent
- Where- Which site is suitable? Site
- Who- Which tenants will succeed? Market Potential
- Why- Why will this work? Synergy

What? Precedent

First described by ULI, the definition of mixed-use development is still applicable today.

> *" Three or more significant revenue producing uses that are mutually supportive, physically and functionally integrated, and developed in conformance with a coherent plan."*
>
> Mixed Use Developments: New Ways of Land Use, 1976, p. 23

The concept of mixed use developments draws from a number of precedents, but many consider Rockefeller Center in New York City to be a pioneering example of an urban mixed-use development in concept, scale, design, and services rendered. Constructed between 1932-1952 and consisting of over seventeen million square feet, Rockefeller Center has withstood the test of time through a constant evolution that responds to the changing demands of the market. Significant characteristics that apply to current concepts of MXDs include (Schwanke, 1987):

- Accommodating pedestrians and vehicles through a combination of plazas and street systems working together.
- Providing total services that serve the needs of all users groups on site. Service retail and hotels are primary examples
- Evolution over time. Through continual updating and modernization, the Rockefeller family, which up until recently owned the complex, delivered a very competitive product.
- Management's continual attention to tenant demands.

Mixed-use development emerged as clear development trend in the 1960s. Located in downtown areas, they were an ideal typology to fit into a national urban renewal agenda. In the 1970's MXDs took a more suburban form becoming large scale and internally focused, detaching themselves from the city street. The 1980's brought a new wave of smaller suburban projects with higher propensity to include residential uses (Schwanke, 1987). Fueled by an emphasis on new urbanism, the 1990's projects were integrated

back into the city fabric with an emphasis on adaptive re-use of old buildings, activated streetscapes, and the provision of lifestyle amenities.

Clearly one of the most important reasons that Rockefeller Center prospers to this day is attributed to its prime location. Comprised of twelve acres along Fifth Avenue, blocks from Central Park, the chosen site for this project is at the heart of midtown Manhattan's business and cultural district. Selecting the right location is paramount to achieving the desired blend of uses.

Where? The Site

Site identification is function of many variables. A site might be underutilized or vacant when the developer recognizes the adaptive re-use potential. In dense urban areas, the site may be owned by a public entity investigating redevelopment possibilities. Or the site might be listed for sale, and a developer determines the land value based on the potential income streams. Mixed-use projects require a location that justifies the density requirements. Regardless, the "where" is one of the most basic elements of the conceptualization stage, and an experienced development manager should have an instinctive ability to discover potentially suitable locations. The criteria regarding site selection are discussed further within the site control stage of the predevelopment process.

Who? Market Potential & Tenant Mix

Successful contemporary MXDs rely on assessing the market potential for the best tenant mix. No prescriptive formula for the ideal composition of uses exist, rather the mix often evolves from the very early conceptual stages through project execution. As important as the initial selection is, the long-term success depends equally on how well asset managers adjust the particular uses over time. MXDs are enduring, multi-phase projects that must remain flexible to be economically successful (Trishler, 2001). Zoning and covenants should allow owners to substitute, adjust, and relocate uses within a

development or zone. The depth of the market will quickly indicate the potential uses for a given mixed-use site. Individual components often studied for applicability include:

- Office
- Hotel
- Residential
- Retail & Restaurants
- Cultural & Entertainment
- Recreational
- Parking and Transportation

The appropriate mix of these uses is unique to each site and situation. The selection and inherent linkages form an urban tapestry that captivates the user. More discussion of the demand characteristics of each use is included during the feasibility & due diligence phase.

Why? Synergy

Through the evaluation of potential market demand for various uses, the overall tenant mix within a project emerges. A subsequent question becomes how does the various uses effect each other? Mutually supportive functions generate long-term success by creating self-supporting mechanisms with healthy cash flows. These market synergies are difficult to predict in an absolute sense, but experience suggests certain fundamentals (Schwanke, 1987).

- Internally generated on-site market demand
- Indirect benefits of mutual location
- Creating enough critical mass as a destination

The first fundamental derives from on-site market support. Office workers and residents create demand for a certain amount of local retail and commercial services. The second

recognizes positive externalities generated from compatible uses, creating a more cohesive sense of place. The third fundamental recognizes that a certain size project attracts attention and generates traffic for retailers. River East Center, a two million square foot MXD in Chicago, supports residential, retail, hotel and entertainment functions. The internal convenience and mix of destinations serves both the local marketplace as well as attracts visitors. Without critical mass a MXD place making strategy will likely fail.

Through the considerate exploration of what, where, who and why the conceptualization phase is a creative and unbiased exercise. Innovation initiates a voyage of limitless possibilities and connections. Once a concept is born, the logistics of its securing it potential and determining the feasibility point the development team towards the next stage of the process.

Site Control

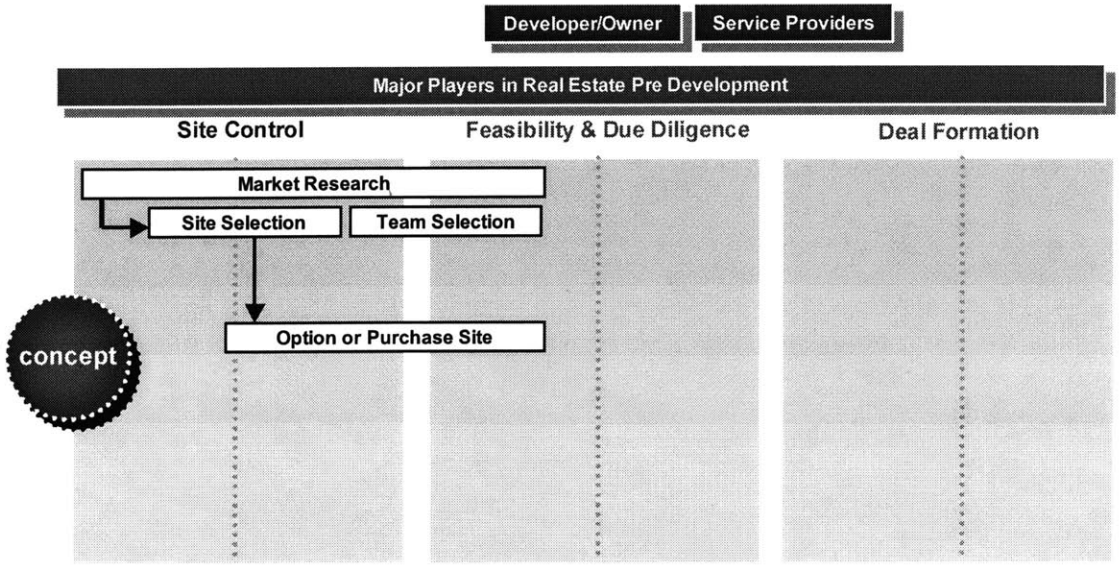


Figure 7. Site Control Stage of Predevelopment Process

Obtaining site control is a vital step in the predevelopment process as shown in Figure 7. Site control allows the developer to remove the intended development site from open market. Prior to executing any type of agreement, a development manager must do the appropriate research to make the best selection. These steps include:

- Team Selection
- Market Research
- Site Selection
- Option or Purchase of Site

Team Selection

Often the most important decision a manager can make is selecting the right team (Miles, 2001). As projects become more sophisticated and uses are combined, knowledgeable advice from committed service providers will inevitably make the project more

successful. A dynamic process requires the ability to anticipate and respond to change. Open communication, creative problem solving, and experience gained from other similar projects become the essential ingredients to a functional team. The primary service providers a development manager might rely on include:

- Design Consultants- Architects, engineers, and land planners are important team members in assuring the aesthetic, regulatory, and political components of the project are secure. Ensuring the health safety and welfare of the public is a serious responsibility. But design consultants also help orchestrate community support and enable a vision that may exist in the minds of many. Experience with mixed-use projects is important, but creativity and listening skills are probably more important (Miles, 2001).

- Marketing & Public Relations- All too often project promotion can take a back seat to other pressing issues. A reliable marketing and PR consultant can help gauge demand and communicate the vision in a consistent and professional manner. Large projects are often sources of controversy and media attention, a good PR firm can proactively communicate with stakeholders and generate good will from the early stages (Miles, 2001).

- Attorneys & Accountants- Due to the complex array of partnership agreements, restrictive covenants, reciprocal agreements, leases, contracts and loan documents an experienced real estate attorney is essential. The best attorneys anticipate problems and mitigate risk through legal documentation. Project accounting is also important for full disclosure to investors, lenders, and ensuring proper management of accounts payable and rent rolls (Miles, 2001).

- Financial Players- Equity partners, construction lenders, and permanent lenders play a significant roll through capital allocation. Each has unique risk/return

expectations and tenure requirements. Equity investors expect the highest returns, as they are typically the last to be paid. Construction lenders rely on a permanent loan take-out and permanent lenders rely on a project's cash flow to mitigate their risk. A proven track record and good business relationships go a long way to securing a fair and flexible capital structure (Miles, 2001).

- Construction Manager & GC- As an owner's representative, a construction manager has accountability for delivering a project on time, within budget, and at the highest quality possible. General contractors are committed to perform the work specified in the contract documents through a team of subcontractors and suppliers. GCs rely on clear direction from architects/ engineers and reliable cash flow from the developer/owner. General contractors are often selected through either a competitive bid process or a negotiated fixed fee arrangement (Miles, 2001).

- Brokers & Leasing Agents- Brokers and leasing agents are hired to sell the project to prospective tenants or buyers. Projects with large residential components are often turning to in house sales team to promote the quality of life and communal aspects of MXDs. Brokers need to know the local market dynamics, identify potential users, and effectively communicate the vision, and negotiate on behalf of the developer. Compensation is dependent on whether the agent is independent or in-house but is often based on a traditional commission structure (Miles, 2001).

Market Research

According to Dowell Myers and Kenneth Beck, there are two essential dimensions for real estate market research: macro and micro. A structured market analysis will evaluate both the macro-economic conditions of a particular market as well as the specific micro

characteristics of an individual location (Miles, 2001). These functions are carried with the aim to both determine current market conditions and forecast future results.

The macro analysis determines the present supply and demand characteristics of the market: absorption rates, rents, capitalization rates and vacancies. Research departments at national brokerage firms such as CB Richard Ellis, Cushman and Wakefield, and Oncor track and publish quarterly regional market data and trend analysis. But it's really the forecast of future conditions that matter most. Using economic models, forecasters can predict with relative certainty growth in employment, population, and space needs.

The microanalysis is more location specific. Depending on comparable projects and historical information, a manager must estimate what the mixed-use project will generate in rents, vacancy allowances, and net operating income, which will determine loan amounts and future asset values. Figure 8 depicts the relationship between micro and macro in a four square model.

Beyond surveying the local environment it also important to review the regulatory and political climates. Town centers and mixed use planning are currently in favor with many municipal planning authorities, however it is important to gauge regulatory and political constraints associated with complex projects. Relationships with city councils, planning agencies, state and municipal transportation authorities, environmental regulators, and public utility officials are important in assessing the public sector's level of support. Thorough market research will reveal and identify potential barriers, allowing the development manager to plan an appropriate development strategy.

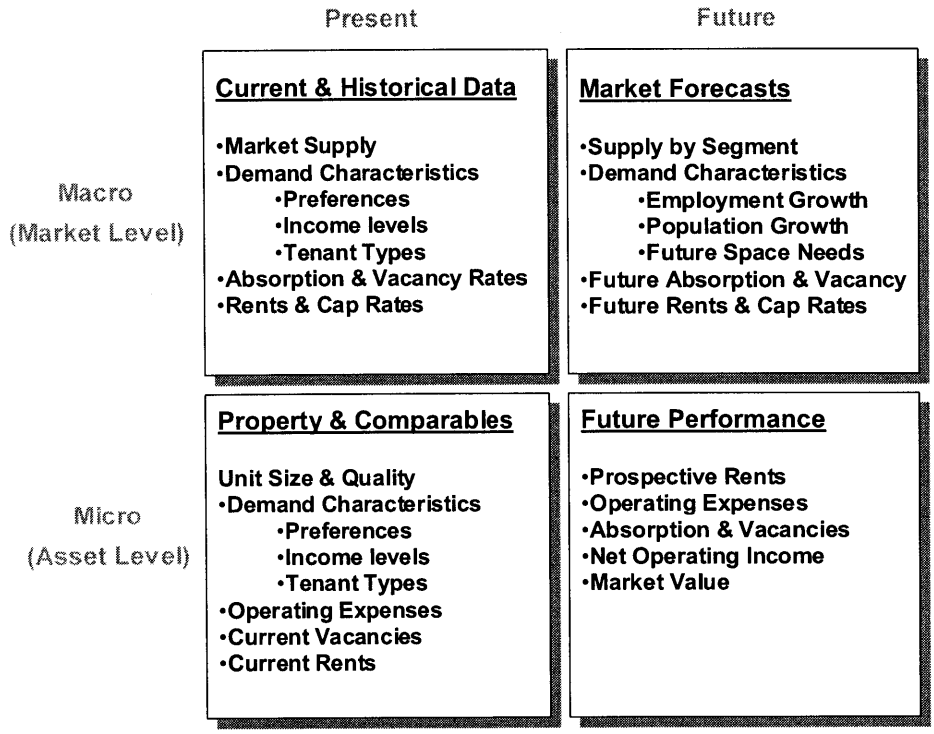


Figure 8. Interrelating the Two Essential Dimensions of Market Research.

Site Selection

Deciding upon the best location is a critical component and ought to be based on market research. Criteria for site selection should be set early, outlining the ideal size, locality, and contextual characteristics for a mixed-use deal. Many projects are situated within the central core of cities and have become catalysts for economic redevelopment. Developers look for sites that can sustain a high density of residential, retail, and commercial uses. Often located near a transit node, MXDs demand a visible location with good access for both pedestrians and vehicles. Mockingbird Station in Dallas is located on seven acres at the intersection of a Dallas Area Rapid Transit line and the North Central Expressway. The project integrates over 500,000 square feet of office, specialty retail, hotel, and apartments. Locations like this also attract additional

challenges through additional regulatory hurdles, stakeholder constituencies, and environmental concerns (Handel, 2002).

The ULI Mixed Use Handbook advises one to gauge the strength of the following attributes (Schwanke, 1987):

- Proximity –adjacency to activity centers & neighborhoods
- Access and visibility- to highways, transit, pedestrian nodes
- Site constraints- size, shape, topography
- Land use regulations- zoning, codes, historic districts, etc
- Potential uses- market demand, size of market, timing
- Ownership- land availability, efforts to assemble
- Cost- price to acquire given above

The strength of these attributes assist in deciding the appropriateness of a given locale. The most successful MXDs are located where capacity for a large of amount of developed square footage, either through acreage or floor to area ratios (FAR) is available. Urban sites utilize FAR as a means to create high density, where an edge city MXD may have a large site to achieve the same amount of developed space. High visibility and exposure is critical to generating traffic and interest in a project in the early stages. Rhowes Wharf in Boston with its waterfront location benefits from high visibility reaching an icon-like quality as a waterfront destination. Premium sites are often located within non-homogenous environments with a history of mixed uses, such as central business districts and master planned communities. Having municipal or regulatory support for high density and mixed use facilitates the entitlement process and generates public support for developers.

Upon evaluation of site alternatives the development manager should consider the as of right zoning, which determines the allowable square footage. If a project can avoid the public scrutiny of the re-zoning process, it will be more valuable. Other considerations include environmental, physical aspects and whether environmental remediation might be

necessary. Are existing structures in need of relocation or demolition? How accessible is the site for both the vehicle and pedestrian? Utilities and infrastructure should also be surveyed to determine the public services that are currently available on site. And finally the residual land value needs to be determined based on the proposed mix of uses.

Option or Purchase of Site

Site control via a private landowner is usually achieved through the use of an option agreement. An option agreement allows the prospective purchaser the right to purchase a given property without having an obligation to buy. An agreement binds the owner for a certain period of time from selling the property. This duration of time is utilized to analyze property conditions and determine the feasibility of the developer's concept (Saft, 1990).

If the landowner is a public entity disposing or attempting to put the land back on to the tax rolls, acquisition and site control can be more cumbersome. Typically there are three methods of the public sector provision of land (Kayden, 2002).

- Request For Proposal Method
- Auction Method
- Negotiated Sales Agreement

The Request for Proposal (RFP) method is frequently used for parcels targeted with mixed-use redevelopment. RFPs invite competing parties to submit their concept and offered price for acquiring and developing a given site. The RFP method gives the public sector the discretion to select the winning developer based on a set of criteria beyond price. Factors including compatibility with urban context, competence of the developer, tax revenue creation, job creation, public space requirements, and other perceived public benefits weigh heavily in these decisions. After the winning developer is selected, a negotiation phase begins, when the developer and land owner come to terms on both

major and minor items, ultimately signing a land disposition agreement (Kayden, 2002). Although RFPs are common, they are frequently not the preferred method by which the private developer engages the public sector. The duration to obtain site control is often long and arduous and the process is not immune to political tinkering and impartiality (Kayden, 2002).

The auction process is a more straightforward approach, which results in the highest responsible bidder acquiring the site. The process is a more streamlined, impartial method of disposing of land and effective method of obtaining site control for the developer. However the result can lead to land speculation or undesirable development, which municipalities try to avoid. Therefore the auction method is becoming less frequent (Kayden, 2002).

The last method of public provision of land is through a sole source method of a negotiated sale. In this situation the public sector would pre-select a preferred development manager who is reputable and has experience with the type of project desired by the community. A qualified developer could also approach the municipality with a concept and negotiate directly to become the development partner. According to James Stuckey of Forest City Ratner (FCR), a New York based development firm that specializes in mixed-use development, FCR only enters public-private partnerships through a sole source method. "Our negotiation strategy is to develop a working relationship where we understand their public objectives and they understand our hurdle rates (Stuckey, April 8, 2002)." The resulting effect is an open book relationship with full disclosure and aligned interests.

By achieving site control, the development manager has ideally anchored the project without committing unnecessary resources. Careful planning and market research should expose strategic advantages that will unlock potential value. Armed with a talented crew and secure location the development manager can now begin to formally assess the concept's viability and practicality.

Feasibility & Due Diligence

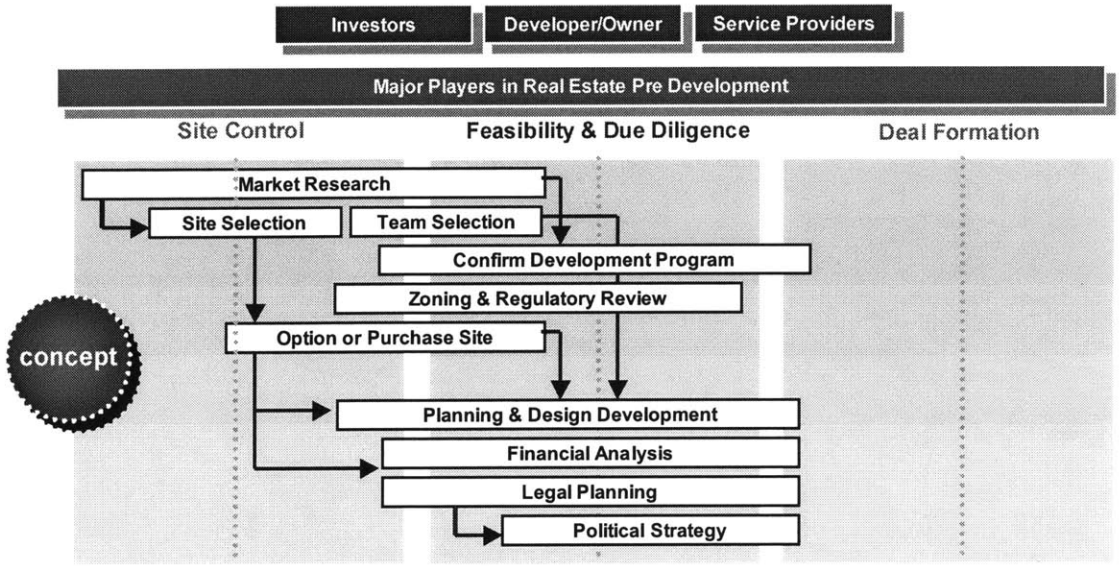


Figure 9. Feasibility Stage of Predevelopment Process

Depicted in Figure 9, the due diligence phase confirms or denies the feasibility of the MXD concept. By gathering information on many unknown variables, the due diligence period is where the developer really quantifies the risks associated with a given project. Upon thorough evaluation of the following areas, a developer can significantly improve the likelihood of project success.

- Confirm Development Program
- Zoning & Regulatory Review
- Planning & Design Development
- Financial Analysis
- Legal Considerations
- Political Strategy
- Investor Considerations

Confirm Development Program

Confirming the anticipated functions within a mixed-use assembly requires knowledge of feasibility and market demand of each potential use. Office, hotel, residential and retail spaces are core uses that most MXD projects incorporate. But many developers are finding that cultural, entertainment, and recreational uses solidify a project's desirability and brand image. Each use must be looked at both on its own financial merits and as a part of the larger concept to determine its appropriateness.

- Office- Office space is found in a majority of MXDs. Understanding the regional and sub-market supply/demand characteristics weigh heavily in determining the appropriate amount of office space. Absorption rates, rental rates, and employment growth will help assess the demand side, but knowing which new competing projects that are in the pipeline is equally important in determining supply. Tenant demand for mixed-use amenities must also be evaluated to determine market potential (Schwanke, 1987).

- Hotel- Hotel rooms are a necessity to accommodate a variety of guests, especially business travelers. The scale and level of service varies among projects, from luxurious to limited service. Hotels help to distinguish the project's image and generate market synergy. Once a market support area is determined, the development manager must forecast the volume of demand from commercial, convention, and vacation travelers. Accessibility to airports and ground transportation, along with a proven operator are essential elements for hotel success (Schwanke, 1987 & Peloquin 1999).

- Residential- Apartments and condominiums add both complexity and vibrancy to MXD projects by adding twenty-four occupancy. A residential base implores a sense of permanence to a project, but requires enhanced privacy and security. Due to extreme infrastructure costs, more success is found with the higher end for sale units. Demand is a function of household size and income, job growth,

desirable location, and accessibility. Supply of competing units and absorption rates must be monitored and timed accordingly. It is important to truly understand the target market's taste and buying decisions when to determining feasibility (Schwanke, 1987 & Peloquin 1999).

- Retail & Restaurant- Both lifestyle and service retail components are dependent on the other MXD components, unless retail serves as an anchor. Local and national tenants rely on critical mass of both regional traffic and internal inhabitants. Demand is a function of local demographics and visitor spending patterns. Hotel visitors buy on impulse, office workers need lunch options, residents require traditional retail services, and destination shoppers are attracted to uniqueness. A strong retail mix requires a co-operative branding and marketing campaign designed to attract customers throughout an 18-hour day (Schwanke, 1987 & Frankel 2001).

- Cultural & Entertainment- Movie theaters, concert halls, galleries, and museums introduce a unique aspect to MXD that is becoming a key ingredient. The downside is that they rarely are self-supporting and often require initial subsidies to function properly. Developers should be careful to select and recruit strategic cultural and entertainment tenants that align with the project's intended brand and identity. The more affluent the residential base, the more likely galleries and museums will succeed. Determine the value created by the cultural amenity to justify the use and allocate appropriate resources that support it (Schwanke, 1987).

- Recreational- Private athletic clubs, YMCAs, parks and open space serve as functional gathering spaces that create a strong sense of community within MXDs. They extend the hours of operation and create another attractive amenity that draws from internal and local residents. Health and fitness clubs are often the most popular recreational amenity especially with condo and

apartment dwellers. Both national and local operators can be secured at market rental rates, if the demographics are conducive. Plazas, parks and green spaces contribute to the sense of place and have become a mandatory element of new MXD projects (Schwanke, 1987)

- Parking & Transit- Shared parking arrangements between residential and commercial uses reduce volume and expense. Structured and underground parking can cost a project between $15-$50,000 per space. As more public agencies promote urban transit, developers are utilizing transit stops as a means of also reducing parking requirements. Estimating peak parking demand depends on fluctuating activity cycles between uses and an accurate forecast of multipurpose trips (Gosling, 1998).

Zoning & Regulatory Review

An important component of the due diligence phase is assessing the land use, zoning, and environmental regulations for the intended site. Most improvements made to land and infrastructure require approvals from a variety state and local governmental agencies Knowing the regulatory restrictions and approval processes quantify and mitigate on of the greatest risks in real estate development.

The primary methods of regulating local land use for mixed-use developments include (Miles, 2001):

- Comprehensive Planning
- Zoning Ordinances
- Subdivision Regulations
- Capital Improvement Programs

A comprehensive area plan sets forth the public's interest for how a geographic area should grow. Periodically updated every ten years, comprehensive plans serve as a road

map for planners and developers to follow when proposing new projects. They typically signal the type, location, and quantity of desired growth in a particular area. Development managers should always consult a comprehensive area plan when determining the feasibility of a project.

Zoning ordinances are intended to regulate land use over a defined area, such as a neighborhood or districts. They are rigid regulations that often specify singular permitted uses, height restrictions, parking requirements, lots sizes, and non-conforming uses. They also specify the procedures needed to rezone a property. If there are no statutory requirements linking zoning ordinances with comprehensive planning, communities will often impose higher restrictions as a method of growth management (Saft, 2000).

Mixed-use development often requires a paradigm shift on land use regulation. Municipal planners generally perceived MXDs as a positive growth trend, but most zoning ordinances were originally drafted as restrictive covenants designed to limit mixed uses. Innovations such as overlay districts, incentive zoning, and mixed-use zoning seek to reverse a trend that has lead to accelerated urban sprawl. By creating new incentives and performance standards to combine residential and commercial uses, planning agencies are opening the door for greater acceptance of well-planned MXD projects.

Subdivision regulations enable municipalities to set and maintain standards regarding lot size, lot shape, roads and infrastructure. Approvals are needed before a developer can subdivide a piece of property into various parcels. Capital improvement programs prioritize construction spending on infrastructure spending. Often the capital expenditures will guide regional growth as developers often depend on the public sectors' provision of roads, water and sewer lines (Miles, 2001).

State agencies also play a role in the regulatory environment. Highway departments, railroad systems, environmental regulators, and others control access to valuable infrastructure requirements for MXD projects. Often little or no coordination is required

with local planning jurisdictions, resulting in a complex series of misaligned interests and political relationships that need to be managed by the development teams.

Planning & Design Development

As the public becomes better educated to the benefits of quality design, MXDs are setting the standard for place making strategy. Success of recent projects like City Place in West Palm Beach and Metreon at Yerba Buena Gardens in San Francisco highlight how strong urban design can weave a neighborhood back together. Unlike the super-blocks of the '70s and '80s contemporary MXDs are designed to respect the urban fabric by placing individual components within an existing street pattern. Certain keys to successful urban design include (Egan, 1999):

- Project Identity- An image and aesthetic that reflects the history, culture, and character of the locale.
- Articulation of Elements- a collection of unique components integrated to create a sense of place and destination.
- Active Streetscape- Human scale facades with visually compelling storefronts and amusements that encourage pedestrian activity.
- Linkages- Alleys, sidewalks, bridges and passages that connect the MXD to its surrounding context. Pocket parks encourage human interaction.
- Accessibility- Projects have public transportation components or facilitate ease of travel to and from the MXD.

Determining the optimal size, density and configuration requires architectural analysis through plans, sections, and elevations. Responding to site constraints, zoning restrictions, program adjacency needs, and aesthetic concerns requires a creative and flexible approach. Copley Place in Boston mandated an air-rights design that traverses a complex series rail lines, highways, off ramps, and service roads. The project was conceived around a hotel and retail mall occupying a prominent corner, which few

considered feasible. A series of overhead skywalks connects the site to other retail anchors creating a seamless transition between destinations.

There are many considerations when developing the architectural vocabulary within MXDs. The external aesthetic concerns and interior space planning require diligent thought and manipulation. Facades, massing, and material selection need to be sensitive to the surrounding context and project unique identity consistent with the branding image. Many projects like Science City at Union Station in Kansas City are incorporating the adaptive reuse of historic structures to emphasize the contextual elements. Internally, circulation patterns, adjacencies, visual connections, and building code regulations will dictate many aspects. Building systems such as HVAC, acoustics, fire protection, lighting and electrical need to be carefully laid out by specialized consultants that are familiar with the operating and costs constraints found in most MXDs.

Parking considerations are another major design constraint within many MXDs. The density of uses and rentable square feet often make structured or underground parking a requirement. As many retail tenants demand adjacent parking provisions, creative solutions regarding accessibility, security, and availability prevail. Public outdoor open spaces are required amenities for most MXDs. Pocket parks, fountains, lawns, and play areas enliven the public realm by replacing large sidewalks and acres of surface parking lots. Sensitive placement of green space and connections to neighboring amenities serve to better incorporate a project into its community.

Financial Analysis

Most development managers seek to achieve the highest value creation through four primary methods in real estate: stabilized cash flows, long-term asset appreciation, tax advantages, and service fees (Schwanke, 1987). A flexible financial model predicts the value created through each method and determines the feasibility and optimal mix of costs and revenues. Through a discounted cash flow (DCF) analysis a manager can

determine if the MXD project's return on equity (ROE) and internal rate of return (IRR) meets his/her requirements. In order to run a DCF, three primary components of the financial model need to be determined after the development program is confirmed:

- Total Development Budget
- Operating Proforma
- Discount rate

The total development budget is comprised of three primary components: land, hard costs and soft costs. The land acquisition cost can be based on a residual land value or market comparables. If the land is already under control through an option agreement, the development manager should a good sense as to the cost/acre it will take to acquire the land. Hard costs represent the total construction expenses including: site-work and infrastructure, base building construction, and tenant improvements. Estimates of these figures are usually based on a per gross or rentable square foot number. Figure 10 exhibits the total development budget line items that might be used during financial analysis. See Appendix B for a list of current construction unit cost estimates.

Total Development Budget

Land
- Acquistion cost

Hard Costs
- Site work & utilities
- Base building
- Tenant Improvements
- Hard Cost Contingency

Soft Costs
- Design Fees
  - Architecture & Planning
  - Engineering
  - Environmental & Transportation
  - Other Consultants
- Legal & Accounting Fees
- Insurance & Taxes
- Permitting Fees
  - Testing & Inspection
  - Surveying
- Financing Costs
  - Origination Fees
  - Construction Loan Interest
  - Permanent Loan Fees
- Marketing
  - Advertising & Promotion
  - Leasing Commissions
- Development Overhead & Fees
- Soft Cost Contingency

Adapted from Miles, Real Estate Development Principles & Process, 2000

Figure 10. Total Development Budget Worksheet

The operating pro-forma forecasts the project's rental income streams and operating expenses over the holding period. Rental rates can be determined through market research and should be expected to fluctuate over time. Operating expenses can be verified through resources, such as the Experience Exchange Reports published by the Building Owners & Managers Association (BOMA). These reports document actual building expenditures based on their type, size, and location. See Appendix C for a list of

development and operational data for various building types. Figure 11 displays the typical line items found within a simple operating proforma.

Simple Proforma

Asset Operations

Potential Gross Income	(rent/sf x rentable sf)	PGI
Less Vacancy Allowance	(vacancy rate x PGI)	- v
Plus Other Income	(eg: parking & signage)	+ OI
Less Operating Expenses	(taxes, insurance, utlities)	- OE
Net Operating Income		NOI
Less Capital Expenditures	(TI,commissions,cap ex)	- CI
Property Before Tax Cash Flow		PBTCF
Less Debt Service	(interest & principal)	- DS
Less Income Tax	(taxable income x tax rate)	- IT
Equity After Tax Cash Flow		EATCF

Reversion

Property value at time of sale	(end yr NOI/terminal cap rate)	V
Less selling expenses	(commissions)	- SE
Net Sales Proceeds		NSP
Less capital gains tax		- CGT
Less outstanding loan balance		- OLB
Reversion After Tax Cash Flow		RATCF

Adapted from Geltner, Commercial Real Estate Analysis & Investments

Figure 11. Simple Proforma Worksheet

The combination of the annual cash flows from operations and reversion are called the Net Cash Flows. Once the future net cash flows for the entire holding period are determined, a discount rate is applied to reach a present value. The discount rate is a dollar weighted average total return expected by the investor and should reflect the investor's opportunity cost of capital. Meaning, it's the average return an investor could

expect to receive from an alternative investment of similar risk. The discount rate is comprised of the risk free rate and a risk premium (Geltner, 2001).

$$r = r_f + RP$$

Equation 1. Discount Rate

The discounted net cash flows are then subtracted from the initial total development costs to arrive at a Net Present Value (NPV) for the project. According to the NPV Investment Decision Rule, a manager will seek to maximize the NPV across mutually exclusive alternatives and never choose a negative NPV investment (Geltner, 2001). The Internal Rate of Return (IRR) is the discount rate achieved when the NPV is equal to zero. IRR is a classic measure of return for real estate investments as it accounts all the benefits (cash flow, reversion, and tax benefits) over the holding period of the project.

Once the project is determined to be a positive NPV investment, sources of financing can be explored. Sources of debt and equity come from both the public and private capital markets. Private debt includes construction and permanent loans from sources such as commercial banks, credit companies, and insurance companies. Public debt, typically for permanent loans, includes commercial mortgage back securities and corporate bonds Equity is also available from public and private sources. Sources for private equity typically include pension funds, opportunity funds, and high net worth individuals. Public equity is reserved for publicly traded corporations such as real estate investment trusts and real estate operating companies.

Other hybrid forms of debt and equity are also emerging as financing vehicles for mixed - use projects. Mezzanine loans are high interest subordinated loans that help to fill equity requirements. In return for a lower interest rates or lower equity requirements, participating loans enable lenders to share a portion of the operating and residual earnings. Debt/equity joint ventures are also becoming more accepted practice for high profile, large scale mixed use developments. Over the last few years pension funds with

union affiliations are actively seeking debt and equity partnerships within large mixed-use deals (Fantini Gorga, 2002).

Investor Considerations

A study of due diligence practices used by institutional real estate investors found during periods of weak property markets the due diligence efforts is very stringent and thorough, but during strong property markets the standards become somewhat relaxed (Roulac, 2000). Because institutional capital is becoming a primary source of both debt and equity for developers of mixed-use projects, it is appropriate to understand their priorities in determining whether to invest in a project.

The study of over 51 institutional real estate investors indicates that these capital partners place a high priority on projected vacancy rates, local market trends, and environmental reports when assessing investment options. Market rental rates, and the strength of the local economy are significant considerations when partnering with a developer. They are less concerned with national real estate markets, tax implications, or the size of the investment relative to other factors in making a decision. The strength and capacity of the development team is more of a factor in slower market and less so in a strong one. Tenant quality and pre-leasing commitments are important considerations in either type of economies (Roulac 2000).

Legal Planning

Strong legal counsel is a strategic form of risk mitigation within MXDs. Real estate attorneys provide vital guidance throughout most of the predevelopment process. Legal strategy within the feasibility stage comes through primarily in three areas.

- Due diligence related to land assembly and acquisition.

- Joint venture ownership structuring.
- Exit Strategies

Land assembly and acquisition functions take place when obtaining site control, but often carry into the feasibility stage as well. Acquisition due diligence involves the thorough investigation of the real estate asset prior to purchase. Most attorney's advocate that the first step in due diligence is to get a checklist. A checklist gives a development manager a structure for analyzing transaction. It also helps allocate responsibility for specific tasks between team members. A potential buyer should request of the seller all related plans, maps, reports that the seller has within in his possession. The areas of investigation for most types of real estate fall into five main categories: environmental, physical condition, title issues, approvals & entitlements, and personal property (Jacobson, 2001).

The primary strategy in structuring an option agreement is to maintain the most flexibility while providing the least amount of financial exposure. Contingency clauses, within an option agreement, might contain guarantees on title quality and provide for a return of the down payment in the event the property cannot be rezoned or entitled. Registering the option agreement is another risk control measure aimed at establishing the chain of title, in case of a subsequent sale. Subordination clauses within the option agreement are also beneficial as they expedite the ability to obtain financing for the project (Miles, 2000)

Due to the size, complexity, and financial investments associated with large MXDs, many development firms are forming joint venture partnerships with capital partners. Joint ventures allow developers and capital sources to share the risk and rewards associated with MXDs. A development manager should be aware of the various forms of deal structures and through legal consultation determine the ideal arrangement. Ranking from the lowest to highest on the risk/reward scale, the five primary forms of JV structures include (Thomas, 2002):

- Fee Development: The safest option for development managers is the straight fee development transaction. Many developers choose this structure, especially in a

high-risk environment. The capital partner will own the property during the entire construction period containing the developer's risk exposure. The most the manager will have at risk is a portion of the total development fee if there are cost overruns. In exchange for the guaranteed fee and small amount of risk the developer also gives up most of the control.

- Joint Venture Partnership- Not frequently used today, the joint venture general partnerships were popular in the '70s and early '80s. The arrangement allows for a flexible capital structure, but exposes partners to the personal liability for the responsibilities of the partnership. This is why limited partnerships and LLCs have become the preferred structure today. In this structure the developer has a pro-rata share of the investment through his equity contribution. This makes it easier to attract capital partners, but less flexible on the exit timing.

- Incentive Fee Development- Another alternative is a development fee structure with the potential to earn additional profits through asset performance. Under this arrangement, the capital partner owns the property and the developer earns a standard development fee plus has the potential to earn an incentive fee. The additional payout, also known as a promote, is based on the financial performance of the asset. The development manger will have more control than a fee deal, but most of the long term value creation and control reside with the capital partner.

- Joint Venture Partnership w/ Landowner- This structure is used when a developer partners with a landowner who wishes to retain ownership in the project. Land value usually equals 10 to 20 percent of the total development costs, and landowners expect their pro-rata share of ownership without any additional risk. Generally, the landowner becomes a limited partner, which gives most of the control to the developer. As the land is considered an equity contribution, this type of structure is usually easy to finance.

- Agreement to Purchase Upon Completion- The most lucrative but risky deal structure for a developer is a sale agreement upon completion. An institution will often agree to purchase the asset after it's been fully developed and leased. The two parties determine ahead of time all terms and conditions for the sale. In this case the developer retains all the entitlement, construction and leasing risk, but also keeps all the development profit.

Developers and financial partners involved in a joint venture should carefully consider exit strategies during the legal planning stage. Most deal structures utilizing a limited liability corporation are intended to be flexible and accommodate many diverse arrangements. Some exits are designed as a component of the original deal and some are emergency exits for when things go awry. Legal experts consider it better to determine ahead of time each side's exit rights rather than relying on restrictive statutory default provisions (Surkin, 2002). The basic exit strategy options include:

- Sale of the project
- Sales of partnership interests
- Drag along rights; the initiating member can require the sale of the entire venture
- Buy-sell agreements, the right to buy or sell the other's interest is predetermined.

Gateway Village, a 1.5 million square foot MXD in Charlotte, NC utilizes a joint venture deal structure between Bank of America (BofA) and Atlanta based REIT Cousins Properties. The joint venture agreement allows for the bank to occupy the build-to-suit space under a 15-year master lease agreement. The bank provided the land as an equity contribution and Cousins matched it with its own equity. BofA and Cousins equally shared the entitlement and construction risk, as well as the leasing risk on the third party space. Cousins received the development fees and a subsidiary of BofA generated investment-banking fees on the issuance of securitized debt. The bank will benefit from this arrangement in two ways: they will receive the tax benefits from depreciation, and through the off-balance sheet financing, have a lower expense write-off, therefore

boosting net income. Because the interest rate was tied to the bank's credit rating, rather than the real estate asset, the resulting costs to finance was much lower than traditional sources. Also, due to the accelerated amortization created by the short-term security, the bank will have priority over any net sales proceeds that result from an early sale, with the joint venture taking a junior position.

Political Strategy

The public sector is considered to be a foremost stakeholder in the real estate development process. Local and state governments often wear many hats; as regulators, as potential landlords, as subsidy providers, and as defenders of public benefits. Developers need to be acclimated to their political environment in order to determine which role the public sector will play at what times. Some municipalities encourage new real estate investment through the guise of economic development and some defend the status quo by penalizing new concepts. In building a public sector strategy a development manager should consider three primary objectives:

- Identify the various public sector stakeholders
- Educate oneself on the regulatory framework
- Explore the possibilities of public private partnerships

MXDs have many stakeholders within the public sector. Elected officials, state regulators, local planning authorities, public utilities, highway departments, and others are all pieces of an urban agenda. Each possesses their own idiosyncrasies and unique ways of doing business and making policy. Open relationships with the representatives from these various stakeholders will facilitate a higher likelihood of project success. Managers should identify each stakeholder and determine their perspective of a proposed development concept. Spaulding & Slye, a Boston based real estate firm, will frequently approach local planning staffs and elected officials with questions about ideal

development scenarios prior to starting the design process. They've found that by treating the public sector as a vested partner the approval process is much smoother.

A prudent development manager needs to be aware of potential public-private partnership opportunities that might benefit a proposed project. Public subsidies are designed to encourage private development for two main reasons: Either a public need can't be met by the private sector alone or, it would be unfair or illegal to force the private sector to provide for the public need (Kayden, 2002). Subsidies for MXDs can come in all shapes and sizes. Categorical grants earmarked for certain programs and community development block grants were frequently utilized by the federal government to facilitate an urban agenda. Today the federal government relies heavily on local governments to distribute and prioritize public subsidy spending.

At this point, all the risks and rewards should be quantified, pointing towards a final destination. Plans, elevations, discounted cash flow statements, zoning review; legal and political strategies serve as navigational charts. A formal development proposal is assembled to justify the MXD as a viable investment. The development proposal is submitted to the highest authorities within the development organization to confer a Go-No-Go decision. Then it will be time to hoist the anchor.

Go-No-Go

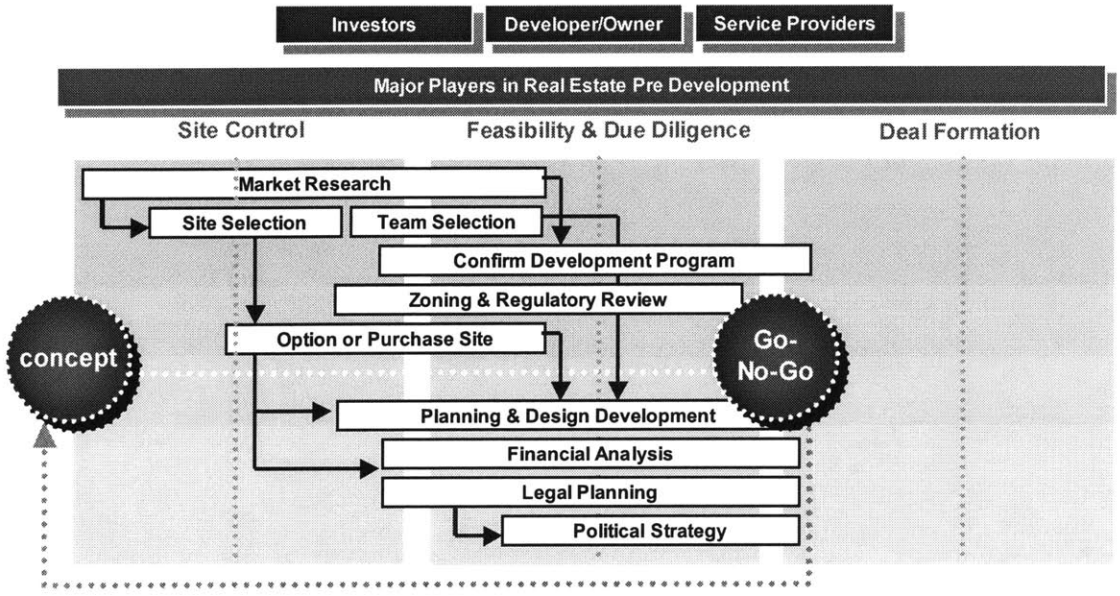


Figure 12. Go-No-Go Stage of Predevelopment Process

The Go-No-Go decision point is an important point of departure within the predevelopment process. Ideally, most of the feasibility analysis is complete and the development concept is either validated or proven flawed, as shown in Figure 12. At this point, the developer will opt to proceed into the Deal Formation phase or return back to the concept phase and retool the original idea. This point is usually demarcated with the decision to go hard on the land and put significant capital at risk. It represents a point of departure that is difficult to return from.

The Deal Formation phase starts to formalize the tentative agreements discussed during due diligence and creates a legal basis for the project to proceed.

Deal Formation

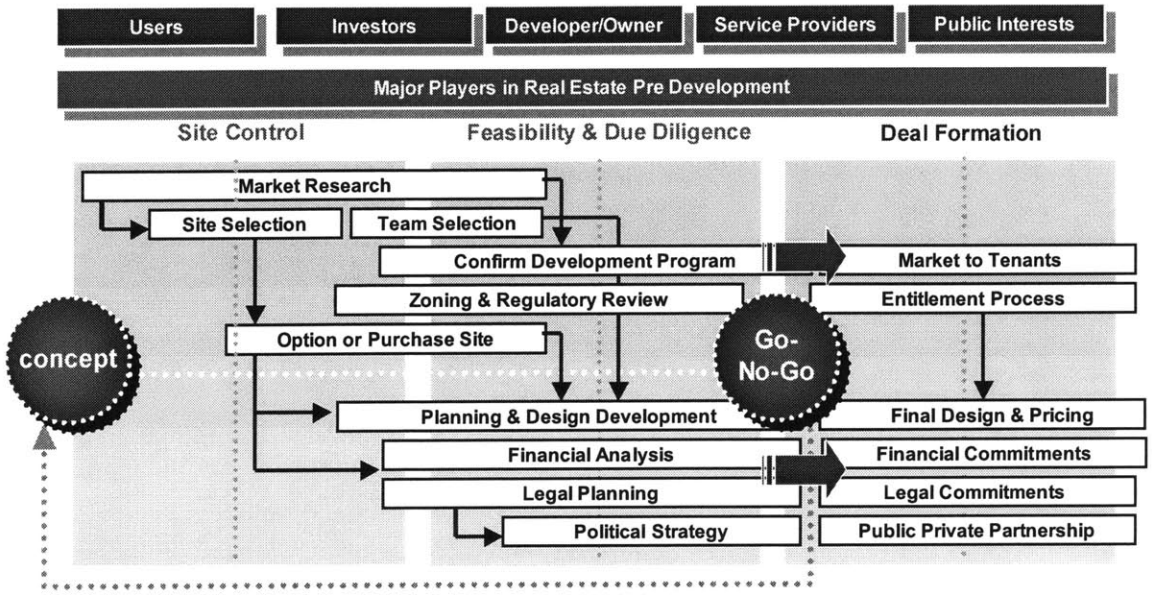


Figure 13. Deal Formation Stage of Predevelopment Process

Once the key decision to proceed with a deal is made, project specifics need to be confirmed and documented. Figure 13 represents the components and players coming together to form the predevelopment process. The general steps taken during the Deal Formation phase include:

- Marketing to Tenants
- Navigating the Entitlement Process
- Final Design & Pricing
- Obtaining Financial Commitments
- Legal Commitments
- Political Strategy

Marketing to Tenants

Once the decision is made to actively proceed with an MXD, a public identity and brand image needs to be crafted that aligns with the concept. Based on the target markets identified within the market research, a branding strategy often emphasizes either the local character or some unique aspect of the geography. Projects like Bethesda Row in Maryland, Peabody Place in Tennessee and Addison Circle in Texas, tied their branding effort to the local region and attempted to reinforce the image of an urban village type destination. The higher end and more upscale the concept is the more clarity a brand should have. Millennium Partners recently partnered with WDG Ventures in San Francisco to develop the South of Market Four Seasons Hotel and Residences, a clear use of branding to establish identity and location. A distinct brand image will not only attract potential tenants and users, but will also assist in facilitating a public relations strategy and public approval process.

Beyond the initial branding strategy, a clear and consistent marketing strategy emphasizes the holistic nature of the MXD while actively promoting individual components. Effective programs sell the lifestyle and communal benefits first and then market individuals spaces or units Gerald D Hines Interests utilizes a comprehensive marketing strategy for mixed use projects which encompass: media and public relation consultants, website & printed collateral, a sales/visitor center, and leasing agents & brokers. The combined efforts are planned and orchestrated to attract the highest quality credit tenants and curiosity from the general public (Bocanegra, 2000).

Media relations are often hard to control, but milestone events such as project announcements, groundbreaking, topping off parties, and dedications should include invitations and press releases. Reporters and journalists can create public awareness, which in turn generates tenant interest. Public relations tie closely with media relations. Managing the communication and relationships with various public sector stakeholders

serves to generate positive perceptions and good will. Some development firms bring the media and PR functions in house, but most seem to rely on agencies and consultants.

The emergence of the Internet makes communicating to potential tenants and brokers a great deal more efficient. Website and printed materials should be coordinated with the overall brand. Developers should invest in establishing a dedicated website that promotes the lifestyle, amenities, floor plans, availability, and leasing contact information. Commercial listing sites such as Co-Star and Loop-net manage massive databases of available properties, which generate exposure and prospective leads (Bocanegra, 2000).

But brokers and in-house agents facilitate most real estate transactions (Miles, 2000). In house project leasing and sales agents are valuable in controlling the brand and communicating a consistent image. Both residential and commercial agents should be familiar with the details of the MXD concept and know how to differentiate between competitors in the marketplace. Agents need good relationships with outside brokers and become technically competent in communicating building systems, layouts, and operational information. According to Cushman Wakefield broker Rob Griffin, successful brokers have a singleness of purpose, effectively listen, and know to treat people, as they would want to be treated (Bocanegra, 2000).

Entitlement Process

Entitlements are any approvals required from the public sector necessary for making land and infrastructure improvements. The maze of regulations and obligatory requirements for MXDs are complex due to the diversity of uses, density, and often out-of-date zoning ordinances. The development manager should build a complete list of required approvals and be familiar with the processes needed for obtainment. Larger public policy objectives heavily influence the entitlement process, and managers should approach the public sector as a partner within the entitlement process.

Each location will have a diverse set of requirements for obtaining entitlements. Some jurisdictions have complete autonomy within local government to approve or deny new investment. Zoning, site plans approvals and subdivision regulations are usually handled within local government. Environmental protection, state highway construction, and larger growth management policies are frequently managed by state agencies. Wetlands and coastal properties are often subject to federal oversight from the Army Corp of Engineers. Development managers need to incorporate and plan for additional regulation when executing MXDs. Regardless of which entitlements need to be obtained, a similar method is applicable within many jurisdictions and agencies. Figure 14 outlines a common approach.

Overview for Obtaining Entitlements

Phase	Role	Responsibilities
Conceptual Phase	Developer	Identifies site and basic concept Determines feasibility & seeks input from stakeholders
Pre-application Phase	Developer	Prepares basic project description: location, uses, densities Meets with public staff to discuss and seek input. Determines approval process and other stakeholders
	Public Staff	Checks for conformance w/ master plan & overriding policy
Application Phase	Developer	Prepares draft plans and specifications for review
	Public Staff	Routes application to required agencies Meets with developer to resolve questions Initiates public notification to effected parties
	Developer	Prepares final plans and specifications for submission
	Public Staff	Final report and recommendations to public officials
Public Decision Phase	Public Officials	Hold public hearings with developer presentations Solicits public input on concept
	All	Propose modifications in response to concerns
	Public Officials	Approve, conditional approval, or deny

Adapted from Miles 2000, Typical Procedures for Development Approval, p265

Figure 14. Phases of Entitlement Approval

Despite the market demand and concept strength, conflict with adjoining neighbors or advocacy groups is frequently inevitable. Steps should be taken by the development manager to mitigate these concerns and facilitate compromises when ever possible.

In the case of re-zonings, it's advisable to seek the land seller's support for the project early on and determine which approval or zoning category will be best suited for the concept. If the concept does not conform to the comprehensive plan, request an amendment during the concept or pre-application phase. Outside lobbyists and consultants are useful if the concept is controversial or contested (Wiggins, 2002).

During the pre-application phase it is important to reach out to various stakeholders. Planning staff should be consulted first to confirm feasibility and determine the process. Meeting with neighborhood associations and advocacy groups to solicit input and build consensus is a critical step. Seek letters of support if possible. The draft applications should be thorough and well conceived. Include all necessary information to convey the affirmative impact the concept will have within the jurisdiction. Utilize all applicable service providers to deliver the most relevant information. Presentations should be timed away from elections and applicants should always attend public hearings to positively represent the concept.

During the public decision phase there is usually a 30-60 day lag between the hearing and decision. If within legal parameters, an effective strategy is to contact decision makers to determine their position and negotiate any last minute adaptations to the concept. Plan to make concessions to win support from decision makers. MXD developers can offer many incentives to win approvals including: additional landscaping, open space, and affordable housing components (Wiggins, 2002). Aesthetics and community safety are paramount concerns that will envelop the public discussion throughout the entitlement process.

Final Design & Pricing

The final design for the MXD is likely to evolve through the entitlement process's latter stages. If careful planning and stakeholder input has been well incorporated during the early planning phases, the adjustments should be minor. As the scheme moves through the latter stages of design development site plans, elevations, total square footage, building systems, and operating requirements become clearly defined. The architectural and engineering consultants begin producing drawings and specifications, which will serve as contract documents for construction.

At this point a construction manager is usually brought on board to verify build-ability and to estimate the cost of construction. Most general contractors and construction management firms offer pre-construction services. Some developers keep a construction manager in-house, to serve as an owner's representative through the execution of the project. Upon verification of construction pricing, the manager can confirm that the total development budget is still inline with overall return expectations.

At this point construction bidding or negotiations with a pre-selected general contractor may begin. With the scale and complexity of most MXDs, few projects are actually let out for bidding. Developers will often pre-select two or three reputable firms early in the design stage and solicit pricing on fees and overhead. Upon making a selection the general contractor is asked to provide pre-construction services. This allows the builder to get familiar with the project before signing a cost plus agreement with a guaranteed maximum price. The ability to accurately estimate cost, lock in pricing, and share savings creates a more collaborative team approach toward building construction.

It's also important to recognize the roll property managers can play during the final design and pricing stage. As the operator of the built asset, the property manager will have first hand knowledge of unsuccessful design strategies that are inefficient or insecure to operate.

Legal & Financial Commitments

At the end of the deal formation stages is the convergence of the predevelopment process. The development manager negotiates contracts for all the players involved with the development team. An optimal deal structure is ironed out and commitments from service providers, construction lenders, equity partners, and most likely permanent lenders. Contracts bind development team members to perform specific tasks and functions related to the overall concept. They serve as another form of risk mitigation and set the expectations for overall performance.

During the conceptual, site control, and due diligence stages, the development manager acts as a promoter and investigator. After the Go-No-Go decision the manager serves primarily as a negotiator. Negotiation strategy should not be overlooked as a best practices within the predevelopment process. In every real estate negotiation the manager needs to persuade, neutralize, or satisfy the other party. Attorney Joshua Stein suggests that there are three mechanisms in achieving this intent (2001).

- Verify the other party is authorized to impart as well as extract benefits
- Determine if the speed of negotiations is a strategic advantage or not
- Develop a good working relationship with the other side

When negotiating its important to plan the timing of discussions and monitor progress. Its also an advantage to defer sticking points to the later stages of talks when the other side may be more motivated to close the deal and overlook the issue. Preparation and knowing the details within the document will serve the negotiator well. It is also important to emphasize that substantive aspects should not be traded for speculative rights.

James Sebenius states that negotiating is more than just getting your own way, its about finding a solution where both parties feel that they've acquired and created value for their own organization (2001). He suggests there are six common traps that most negotiators often fall into.

- Neglecting the other side's problem. Often negotiators brings a one sided perspective to the bargaining table. A developer negotiating with a hostile advocacy group may not realize the true objectives or motives behind the opposition. Sebenius suggests utilizing a broad perspective & research an adversary's position before coming to the table.

- Letting price become the dominate factor in negotiation- as soon a the dollar becomes the primary concern of both parties, negotiations often suffer. By taking a comprehensive view of all relative aspects to the negotiation, both sides can realize value and preserve their working relationships.

- Parties often take immovable position. Many negotiation coaches suggest putting the problem on the other side from both parties. Using a joint problem solving techniques that distinguishes the problem from the people develops trust and creates both perceived and real value.

- Trying too hard to find non-existing common ground. Not all parties will agree and find consensus, thus compromise & tradeoffs are needed when there is no middle ground. Relationships are often better preserved when neither party is fully satisfied rather than one group being totally dissatisfied.

- Not understanding of Best Alternative to Negotiated Agreement- BATNA- for both themselves and the other party. Without knowing the true walk away options each side has its difficult to determine who's really bluffing. According to Sebenius negotiators should have a sense of the best outcome if agreement is not possible.

Public Private Partnerships

Mixed-use projects offer more opportunity for public partnerships than most forms of development. MXDs have inherent attributes such as efficient land use, pedestrian orientation, and public open spaces that elected decision makers view positively. For public officials, determining the cost effectiveness of private partnerships is accomplished through a combination of real estate financial analysis and social cost benefit analysis.

Public private partnerships come in many forms and redefine the traditional roles within the development process. In this capacity each side shares in both the risk and rewards offered through real estate. Through partnering with the public sector developers can achieve more short and long-term benefits through enhanced disclosure and public discourse. These benefits scan be direct subsidies or indirect assistance in areas such as permitting, land assembly, or infrastructure. Areas that should be considered for partnership potential in the political strategy phase include (Miles, 2002):

- Direct Financial Assistance
  - Land Assembly- Acquisition, demolition, write-downs or relocation
  - Capital Improvements- Infrastructure, parking decks, open space, facilities
  - Grant Assistance- Cost sharing and pre-payment of development studies
  - Debt Financing- Direct loans, below market interest rates, loan guarantees
- Indirect Assistance
  - Zoning & Density Bonus- Increasing allowable FAR on site
  - Lease Commitments- Agreeing to take space in project
  - Expedited entitlements- Regulatory relief from zoning or building codes
- Financing Strategies
  - Intergovernmental Grants- Block grants, UDAG, Section 108 backed loans
  - Local Debt Financing- General obligation bonds, revenue bonds
  - Off Budget Financing- Ground leases, tax abatements, sale-lease-backs
- Dedicated Sources- Tax increment financing and special tax districts

Public subsidies should be necessary, sufficient, and not excessive (Kayden, 2002). When pursued, their purpose should align with a project's financial gaps. For example if land is too expensive, the developer should solicit a land write down from the public sector. Or if taxes are prohibitive, the developer should request tax relief. Figure 15 is a list of potential public subsidies that align with a project income statement.

Asset Operations		Potential Public Subsidy
Potential Gross Income	PGI	Rent Subsidy
Less Vacancy Allowance	v	Public Sector Lease
Plus Other Income	OI	Cash Subsidy
Less Operating Expenses	OE	Property Tax Abatement
Net Operating Income	NOI	
Less Capital Expenditures	CI	Infrastructure Improvements
Property Before Tax Cash Flow	PBTCF	
Less Debt Service	DS	Tax Exempt Financing
Less Income Tax	IT	Tax Credits & Accelerated Depreciation
Equity After Tax Cash Flow	EATCF	

Figure 15. Public Subsidy Considerations Aligned with Proforma

Over the last few decades the role of the public sector has evolved from strictly oversight, regulatory, and providing infrastructure, to one of more active participation through public-private partnerships.

Through this discussion of predevelopment's five distinct phases it should be clear that lucrative mixed-use developments begin with a well-conceived concept. Obtaining site control and performing due diligence will lead to an ultimate investment decision. The deal formation combines the five major players' interests to define the terms and conditions of the pending project. Although the exact course of action may alter from project to project, the general relationship between these five phases are consistent in delivering rewarding results. The next chapter takes a closer look at three case studies that embody the spirit of the predevelopment process.

Chapter 3

RESEARCH

Data Collection

This research is an extension of work initiated through the 2002 Managing Successful Deals Seminar at the MIT Center for Real Estate. The intent of the seminar was to comprehend the characteristics of successful large urban mixed-use real estate deals and interview the developers with experience developing these projects (Schuck, 2002).

Best practices for managing the overall real estate development process were identified. Real estate service providers such as Trammell Crow Company, Jones Lang Lasalle, and Spaulding & Slye were consulted on their methodologies for managing complex projects. Most organizations categorize the development process into sequence of events with broad categories such as strategic planning, site analysis, entitlements, planning & design, construction, and occupancy coordination. A shift in focus to the earliest stages of development led to the following research.

Thirteen projects, generally considered by the real estate community to be strong examples of mixed-use developments were selected for review. Each developer was invited to present the deal in a closed-door setting as data was collected through an interactive discussion based on a consistent set of questions. Each deal was scrutinized to determine management strategy, critical success factors, and lessons learned. Schedules, milestones, approvals, and planning phases were solicited to build a project timeline.

The selected projects were located primarily on the east coast and ranged in size from 79,000 sq ft to 5.4 million square feet. Most projects are complete but a few are still in the predevelopment phase, having obtained significant approvals and entitlements.

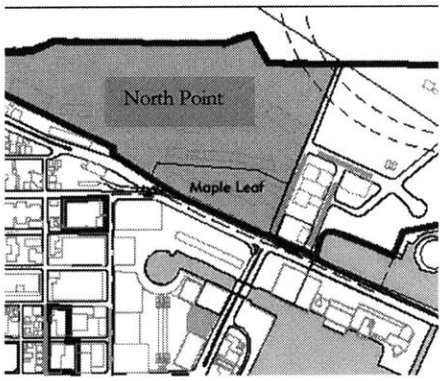
From that point, an additional seven projects were reviewed adding location and geographical diversity to the sample set. Some of the additional projects incorporated the principles of new urbanism and traditional neighborhood development. The data was collected through second hand sources, incorporating taped presentations, interviews, and existing case studies published by the National Association of Industrial and Office Properties. Collectively, these deals exhibit similar challenges in terms of project complexity, mix of uses, and deal structuring. Appendices D & E summarize the project attributes, critical success factors and lessons learned from each of the twenty projects.

From the sample set, three case studies are included here to illustrate the application of the predevelopment process and the lessons learned by experience professionals. Each of the three case studies exhibit similar tenant mixes and are situated within an identical geo-political context, the Boston metropolitan area. Where the projects differ is in their management strategies, especially regarding stakeholder relations. The three case studies that follow include:

- North Point, Cambridge MA
- Millennium Ritz Towers, Boston MA
- University Park at MIT, Cambridge MA

CASE STUDIES

Project:	**North Point**
Location:	Cambridge, MA
Developer:	Spaulding & Slye Colliers 225 State Street Boston, MA 02109 (617) 523-8000
Uses:	
Office/R&D	2,101,000 sq ft
Hotel	75,000 sq ft
Residential	2500 apartments & condos
Retail	75,000 sq ft
Parking	6000 spaces
Acreage:	48 acres- urban 6 acres of open space
Estimate Cost	$1.2 Billion
Open	2005-2010



Concept & Site Acquisition

The idea for this urban mixed-use community began with the demise of railroad freight volume flowing into the heart of Boston. Situated on Cambridge's easternmost edge, the longtime owner Guilford Transportation decided in 1999 that there was a higher and better use for 48 acres of underutilized Boston & Maine Railroad land. Their original concept was to create value through the transformation of dilapidated warehouses and rail yards into a European style village. A public announcement by local development partner Farmer & Flier Associates of Brookline was greeted with early skepticism from a variety of stakeholders, as the announcement was made without any prior input or

communication. Guilford quickly realized that in order to proceed, it needed a local development partner who understood the process and could bridge the gap within the community.

In May 2001, Spaulding & Slye, a leading Boston real estate services firm was hired. As a joint venture partner they added the credibility and expertise needed to navigate this giant project through the very political environment. Through their experience on the Fan Pier project in South Boston and strong relationships with the City of Cambridge planning staff, Spaulding & Slye needed to shape a vision for the project by listening to the public sector's priorities for the East Cambridge community. Since it was the largest single tract of developable land within the City of Cambridge, a diverse group of stakeholders emerged to voice their opinion. So many rose up in fact the City of Cambridge decided to impose a building moratorium in East Cambridge until a new area plan could be implemented. The East Cambridge Planning Study Committee was formed to address the impact on not only North Point but also the entire East Cambridge area.

Feasibility Due Diligence

Since site control was not an issue, the development team shifted its focus to formulating a stakeholder management strategy that would enable the team to expedite a re-zoning of the property. The team needed to understand whom the various players were, what their interests and expectations were, and what relationships existed in order to reach towards a successful rezoning. This exercise also helped evaluate the political landscape and identified political resources that could be called to champion the proposal. A key result of the re-zoning process would determine the appropriate balance between commercial and residential development. Guilford/ Spaulding & Slye needed zoning for at least 40% commercial space to make the deal viable.

A stakeholder map was assembled outlining the various relationships between the various vested and non-vested parties. Political leaders, planners, regulators, neighborhood advocates, environmental advocates, other developers, local retailers, and a variety of other parties were diagramed on a map and linked to each other. The map helped develop an outreach strategy that would enable the development team (both directly and through its consultants) to contact all stakeholders and let their opinions be heard. This outreach effort was a conscious strategy used to diffuse the nay Sayers by giving them a forum to voice their concerns.

Various Stakeholders included:

- Association of Cambridge Neighborhoods
- Charles E Smith Residential
- City of Cambridge Community Development
- Conservation Law Foundation
- East Cambridge Neighborhood Assn
- Eastern Cambridge Planning Study Committee
- Friends of the Community Bike Path
- Massachusetts Bay Transit Authority
- Metropolitan District Commission
- MA State Representative Tim Toomey
- Boston Globe & Boston Herald

After mapping the political landscape, the development team began by bringing their ideas to the city planning staff and elected officials. It was important for these stakeholders to not be blindsided by neighbors or the press. From that point they reached out to other elected officials, neighbors, competing developers and advocacy groups. They made a conscious effort to speak at stakeholder monthly meetings and participate in the public dialog that ensued. The largest adversary came in the form of the Association of Cambridge Neighborhoods (ACN), an alliance of neighborhoods representatives concerned with the impact future development on existing neighborhoods.

Concurrently with the rezoning and stakeholder work, environmental due diligence was taking place to determine which engineering challenges may lie beneath the surface. The site contained a variety of warehouse and distribution type facilities, but very few manufacturing venues. The land is comprised of urban fill; built up over the last century. The team determined that some remediation would be required before construction can begin.

Architectural and planning firms Sasaki, Greenberg & Associates, and CBT were hired to begin the master planning efforts. Given that less than 38% of Cambridge commuters drive to work, the intent to build a transit-oriented pedestrian friendly community became a driving force in the design.

Go-No-Go

The stakeholder strategy proved to be effective as on October 21, 2001, after 18 months of work, the Cambridge City Council unanimously approved a rezoning for the East Cambridge community that allows the development team to build up to 40% commercial space on the 48 acres. Even though this re-zoning is only one of many approvals needed in the entitlement process, but became a significant milestone within the predevelopment process. As a result over 2.9 million square feet of residential and 2.1 million square feet of commercial space will be constructed on the North Point property.

Deal Formation

As a trade-off for getting the property re-zoned for up to 50% commercial space the development team needed to make a number of concessions that establish a public-private partnership with the community. Extractions include:

- 15% Affordable Housing component
- 20% Open Space preservation (6 acres)

- Relocation of the Lechmere T station (except electric infrastructure)
- Internal multi-use bike paths possibly linked to a regional bikeway system

Most of these concessions will be developed throughout the phasing of development, distributing the infrastructure investment over the life of the project. The exact timing and sequence of these improvements will continue to be negotiated throughout the duration of the entitlement process.

Another major component of the deal formation phase includes the entitlement process. By December 2002 the team hopes to have most of the permissions in hand in order to begin construction. The long road to groundbreaking includes a variety of submissions and approvals including:

- Draft Environmental Impact Report filed 4/02
- Final Environmental Impact Report filed 10/02
- Planned Unit Development Approval TBD
- MEPA Approval TBD

The PUD approval from the City of Cambridge grants the developer overall approval on the master plan concept, and will entitle up to twenty-two parcels of land for development. As each individual parcel is being designed the city has the option to review and comment on building aesthetics and orientation. A separate but smaller multifamily project led by developer Charles E Smith Residential will be built on an adjoining parcel. In order to win PUD approval the North Point team needs to act in cooperation with this competing project, as the city and state views these two projects comprehensively.

Lessons Learned:

As the project continues to evolve, early wins suggest certain lessons applicable to future projects. These lessons indicate that identifying and managing stakeholder relationships is paramount to the early stages of development.

- Determine public priorities for surrounding neighborhoods
- Stakeholder analysis generates a strategic advantage in navigating the entitlement and approval process. Utilize strategic intelligence to form appropriate deal structures
- Proactively communicate with stakeholders in order to set clear expectations and gain valuable feedback.
- Engage consultants that will enhance development team's credibility with community and elected officials.
- Build consensus through involving stakeholders early in process. Do not surprise elected officials and regulatory agents.
- Align infrastructure improvements with phased construction in order to not overburden front-end investments. Plan to provide public concessions roughly proportional with overall private investment.
- Find a partner with a low land basis, so not to get overwhelmed by debt service

Figure 16 indicates the pattern of steps taken during North Point's early stages replicate the predevelopment process outlined in Chapter 2.

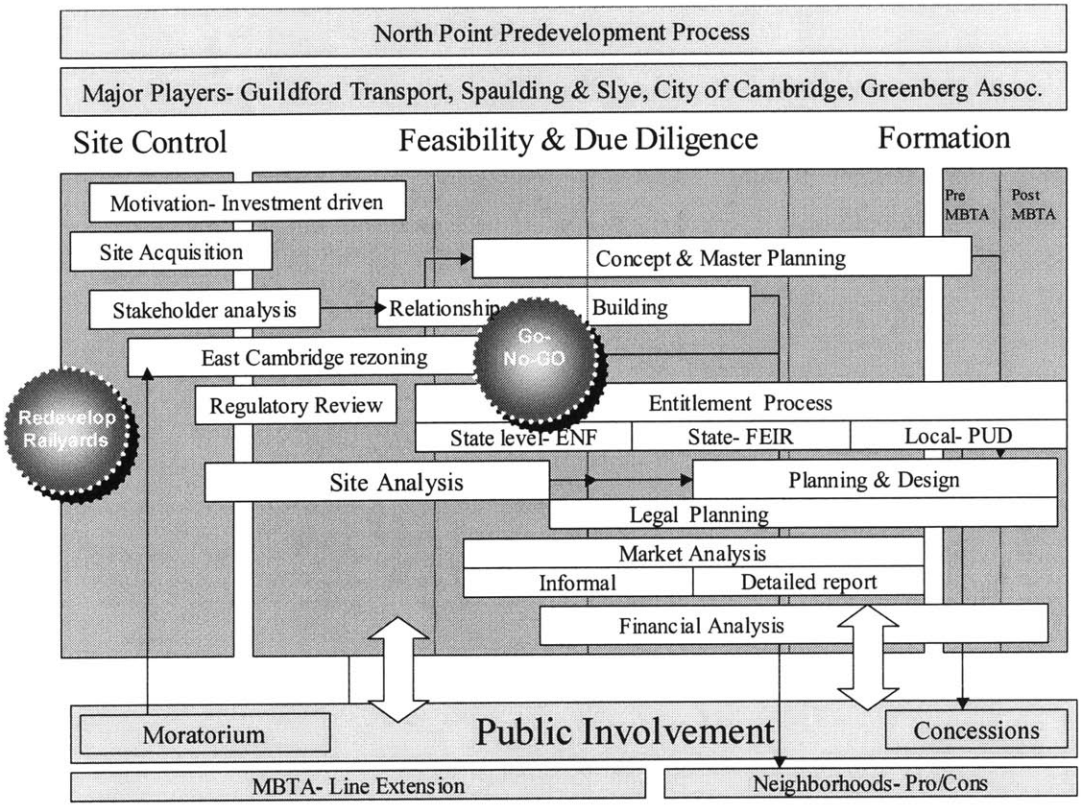
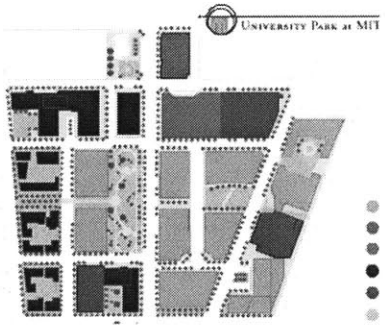


Figure 16. North Point Predevelopment Process Map

Project:	**University Park at MIT**
Location:	Cambridge, MA
Developer:	Forest City Commercial 38 Sidney Street Cambridge, MA 02139 (617) 225-0310
Uses:	
Office/R&D	1.3 million sq ft
Retail	93,000 sq ft
Hotel	210-room conference hotel
Residential	502 rental units
Parking	2680 spaces
Acreage:	27 total acres- urban 7 acres of open space
Total Cost:	$560 million
Opened	1989-2004



Conceptualization

University Park at MIT is catalytic project that results from three decades of determination and perseverance. When completed the campus will comprise over 2.3 million square feet commercial and residential space. The concept is an element of the MIT Endowment Fund's strategy to foster the transfer of technology into the commercial sector. The original idea is attributed to MIT's 1969 Assistant Treasurer Fred Watriss and his real estate advisor Thomas Horan of Meredith Grew. They intended to duplicate the success experienced with the Tech Square project in the 1950s, and revitalize a blighted industrial district into a vibrant commercial district. Rather than wait for the Kendall Square focused Cambridge Redevelopment Authority, MIT President Howard Johnson authorized the acquisition of neighboring parcels in order to address Cambridge's two most pressing needs: housing and commercial development.

In 1992 when the Institute embarked on search for a development partner to execute its vision, MIT's objectives were stated as such:

- Secure a good economic return for the Endowment
- Protect long term campus growth
- Foster technology transfer
- Create employment opportunities for students and grads
- Provide collaborative or advisory opportunities for faculty

Site Control

In 1970 MIT secured an 18-acre property from the Simplex Cable Company. The Morss family started the manufacturing business in Cambridge in 1888 and expanded the operation into several buildings within the Cambridgeport community. Upon acquiring the site, a joint advisory committee of MIT faculty and staff set out to determine its highest and best use. Their conclusion was to develop 1200 units of market rate housing and use commercial and retail space to help offset the investment.

A prolonged recession and potential Inner Belt Highway quickly forced the plans to a back burner. Over the next ten years MIT continued quietly assembled another 25 parcels to complete a 27-acre contiguous site. Throughout the late seventies, MIT leased the property to existing tenants with plans to relocate remaining residents. Because the site was filled in tidal river flats and hosted previous industrial uses, MIT took responsibility for much of the environmental cleanup required. The cost of the remediation efforts was eventually shared 50/50 with the development partner through a back charging against the ground lease.

Feasibility & Due Diligence

In 1979 the Polaroid Corporation approached MIT about building a new corporate headquarters and research facility on the Simplex site. After two years of analysis the company decided to pursue another option, at that point MIT sent out a request for proposals to for-profit developers. Thirty-eight firms responded and Forest City Enterprises was selected in 1983 based on their mixed-use concept and experience. The firm signed a 20-year agreement that would allow University Park to be developed on 75-year ground leases with improvements reverting back to MIT at the end of the term. Hiring an outside developer with a reservoir of financial resources was also intended to serve as a buffer between the MIT and the Cambridge community.

Unfortunately the strenuous relationship between MIT and the City of Cambridge, referred to locally as "town-gown politics", kept MIT at the forefront of the process. In the late seventies, a self-appointed interest group called the Simplex Steering Committee (SSR) initiated a series of referenda aimed at alternative uses for the site. The City of Cambridge opposed expansion of MIT's campus due to a fear of revenue erosion. In addition to tax base preservation, the City also solicited the inclusion of affordable housing and a relatively low density to mitigate traffic concerns. The extensive public dialog with these groups forced the project to endure painful rezoning process. It took over four years to reach consensus on the master plan and zoning requirements. In 1987 the Blue Ribbon committee recommended mixed-use development with up to 300 mixed income residential units.

In protest of the MIT's successful rezoning SSR staged a large protest rally and month long sit-in on the property. Dubbed "Tent City" the initiative aimed to persuade MIT to renovate and provide 250 more units of low-income housing. Campus police ended the sit-in in November of 1988. In 1989 the Rent Control Board granted MIT permission to relocate three dilapidated rent control units on Blanche Street in exchange for 12

replacement units. Later the next year, MIT dedicated the renovated Kennedy Biscuit Loft building into 140 units, half of which were affordable.

Go-No-Go

After years of delay and protest the zoning petition was approved for University Park in January 1989. It took another three years of petitions, hearings, and community meetings before the Cambridge City Council finally re-zoned a 70-acre section of Cambridgeport, allowing for the development phase to begin. Despite a proactive approach to responding to community and public concerns, MIT endured a prolonged battle with local advocacy groups over the issue of rent control preservation.

Deal Formation

As each parcel is developed, Forest City acquires the land from MIT through a 75-year ground lease. The ground rent is determined as a percentage of the adjusted basis in land value. Rents ranged from $13/sq ft in 1996 up to $40/sq ft in 2000, and are structured to be senior to mortgage financing. MIT also participates in the upside by receiving 15% of gross rents above a certain benchmark as well as 15% of any proceeds from refinancing or sale of an asset.

Throughout the prolonged zoning process, the market dramatically changed for commercial construction. Rather than office space, as originally envisioned, the market was calling for biotech laboratory space. The flexibility granted to Forest City in their development agreement allowed for the team to capture this opportunity. Millennium Pharmaceuticals, a Cambridge startup which focuses on gene therapy and predictive medicines, decided to house their corporate headquarters and labs at University Park. Since signing their first lease in 1994, Millennium has taken over 615,000 square feet of space in the park.

The development has progressed in four distinct phases since 1992, giving Forest City the ability to spread the risks and cost of infrastructure over a number of years.

Phase 1 1992-1996

- Three R&D Buildings on Lansdowne & Sidney
- Two Residential Buildings including Kennedy Biscuit

Phase 2 1996-1998

- Office-Retail on Massachusetts Avenue
- Star Market and Double Tree Hotel on Sidney Street
- Parking Deck on Franklin Street

Phase 3 1997-1999

- Two R&D Buildings on Sidney Street
- Parking Deck on Pilgrim Street
- Public Open Space- University Park Common

Phase 4 2000-2002

- Four R&D Buildings on Lansdowne
- One Residential Building on Lansdowne & Sidney
- Parking Deck on Lansdowne
- Public Open Space- Lansdowne Quad

The urban design of University Park is based on a framework of street edges and green spaces that serve to weave the campus into the surrounding urban fabric. Serving as a unifying element to bridge the gap between the citizens of Cambridge and MIT the Common is a tranquil urban retreat and serves as the heart of the master plan. Located along Sidney Street, it provides a sense of destination and human scale within the context of six story buildings. The common received 1999 Massachusetts Horticultural Society Urban Landscape Award for its successful design.

Lessons Learned

MIT borrowed many lessons on the private development of urban mixed-use projects. Relationships with various stakeholders and effective communication strategies enable the process and facilitate successful outcomes.

Specific lessons include:

- Overestimation of the effectiveness of using a development partner to buffer the relationship between Cambridge and MIT
- As the success of the project evolved, more retail space could have been absorbed and added a sense of street level activity to the campus
- Prime location adjacent to MIT's main campus and Central Square offers convenience and amenities that attract corporate users.
- Flexibility is crucial in master planning, allowing the campus to evolve to respond to changing market conditions
- MIT's long term commitment and ownership allows project to benefit from low land basis and superior infrastructure.

A graphic representation of the predevelopment process is pictured in Figure 17.

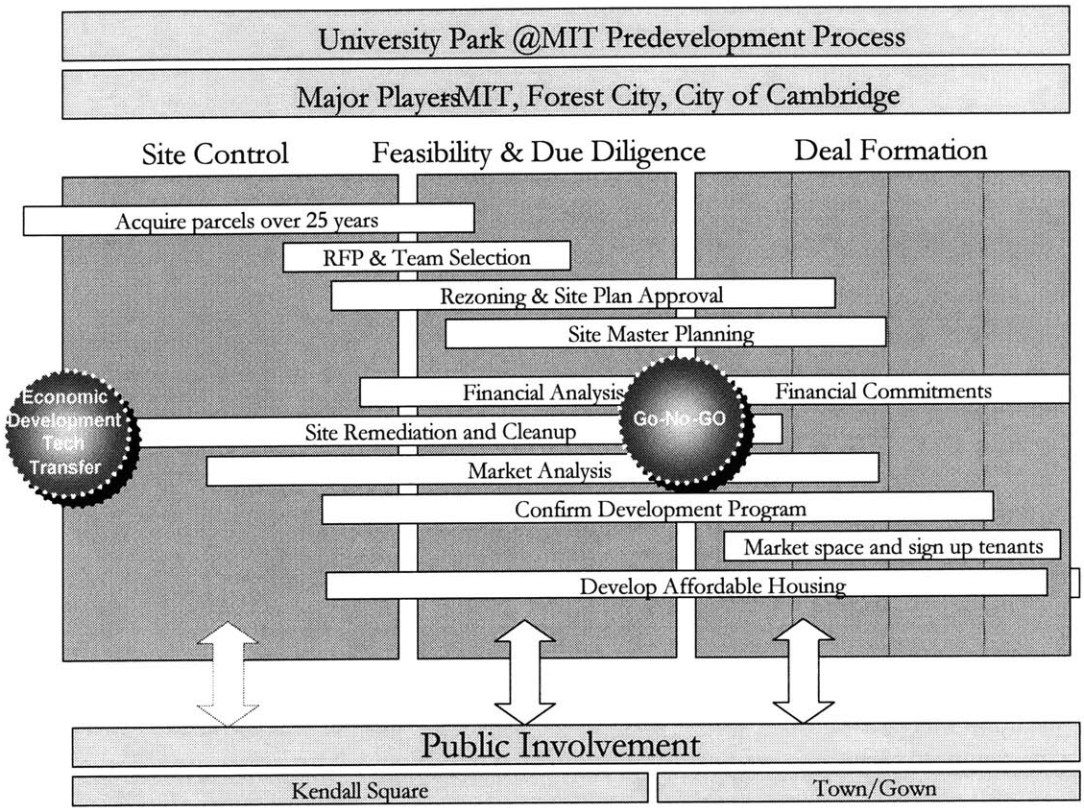


Figure 17. University Park @ MIT Predevelopment Process Map

Project: **Ritz Carlton Towers**

Location:	Boston, MA
Developer:	Millennium Partners/MDA
	75 Arlington Street
	Boston, MA 02116
	(617) 451-0300
Uses	
Hotel	193 Luxury Hotel
Retail	50,000 sq ft
Residential	304 Luxury Condos
	63 Extended Stay Apartments
Entertainment	19 Screen Loews Theatre
Recreation	100,000 sq ft LA Sports Fitness Center
Parking	1100 spaces
Acreage:	2 acres- urban
Total Cost:	$515 million
Opened	Summer 2001

Concept

Beginning with a concept proven successful in New York City's Lincoln Square, Millennium Partners in conjunction with Macomber Development Associates (MDA) sought to introduce a sophisticated model for urban mixed use to Boston. Through the development of a 193 room Ritz Carlton Hotel combined with 304 high end condominiums, a 19 screen Loews Theatre complex, 63 extended stay apartments, a 100,000 sq ft LA Sports Club, street level retail, and 1100 space garage, the Ritz Carlton Towers establishes a vibrant destination that generates pedestrian activity over 18 hours a day.

The concept was the invention of founding partner Christopher Jefferies who believes that real estate development involves the business of anticipating and responding to lifestyle patterns. The firm seeks large accessible sites in 24-hour cities such as Boston,

New York, Washington DC, and San Francisco. With a background in multi-family development, the firm's management saw the opportunity to add value through the blending of upper-income destination type uses. By establishing the Ritz Carlton brand as a component of the project, the developers set the expectation of quality for the entire project.

A precedent for using a luxury mix-use model as a catalyst for neighborhood revitalization also existed across the Boston Common. The Heritage on the Garden located on Boylston Street was successfully developed by the Druker Company a few years prior. That project was built as an upscale residential condominium project adjacent to the Four Seasons Hotel and transformed a tattered edge of the Theatre District. Millennium/MDA knew another project of this magnitude could succeed with the right support.

Site Control

Originally planned for an air rights parcel located over the Massachusetts Turnpike near the Hynes Convention Center, the concept for this project actually preceded the site. Located near the Boston Common and Downtown Crossing, a retail and transportation node, the actual site has long been associated with the Boston's red light district, locally known as the Combat Zone. Over time, new investment and concentrated efforts by neighboring Chinatown have whittled the Combat Zone down to almost non-existence.

The site was targeted for a proposed development throughout the eighties and nineties, the last of which was a 1.7 million square foot project known as Commonwealth Center (CC). Citigroup, an investor in CC, took back the site from the unsuccessful developer and marketed the site for sale. Rather than selling, Citigroup became an equity partner in the Millennium project and was able to extend the entitlements obtained for the CC deal.

Acquisition of the Ritz Carlton brand came through the purchase of the existing Ritz Carlton Boston property located across the Common. The elder Ritz property was an

established focal point of Boston's high society, but was in need of repair. Millennium/MDA's plan was to introduce a new Ritz Carton to Boston at the Washington Street site, close, renovate and re-open the old Ritz achieving a two-fold purpose: establish a luxury component at the new site and add value back to the traditional venue.

Feasibility & Due Diligence

Feasibility was a function on understanding the local market dynamics. When Millennium Partners of NYC teamed up with Boston based MDA, Jefferies knew he needed local expertise to execute a project of this magnitude. Financial feasibility evolved throughout the process, but was first determined through the traditional back of the napkin approach, balancing potential income with ballpark development costs to determine if the project could generate sufficient cash flows. Market research was not exhaustively undertaken in the early stages. It was a combination of local market knowledge and Millennium's confidence in obtaining the hotel and theatre commitments. MDA knew how many units could be sold at which price points. Pinnacle Advisory Group was hired to consult on the due diligence of the hotel component.

The design was advanced by Millennium's architect Gary Handel & Associates of New York. Handel proposed a scheme that would offer a human scale at street level and respond to the context of the skyline through sloping caps on the tops of the buildings. Programmatic challenge was to stack uses vertically on a site with many front doors. Pre-design input was solicited from the potential anchor tenants such as the Ritz and Loews Theatres.

Planning for the entitlement process in a high barrier to entry market like Boston requires patience and relationships. The development team knew that half the battle had already been won by having the MEPA approval from the preceding concept. Boston's mayor Tom Menino and Boston Redevelopment Authority (BRA) Director Tom O'Brien had

already expressed support for the project. If Millennium/MDA could convince the neighboring Chinatown community that this project would generate mostly pedestrian traffic, they expected smooth sailing for the rest of the permits required by the BRA.

Go-No-Go

A decision to formally proceed occurred as the required pieces began to fall into place. Commitments from the hotel operator and theatre chains assured the deal could move forward early in the predevelopment process.

Deal Formation

Because the property was acquired with as of right zoning for over one million square feet and a MEPA permit, the entitlement process was on condense timeline compared to other projects of similar magnitude. Much of the deal formation relied on negotiations various stakeholders including the City of Boston through the BRA. Extractions required by the BRA included over a million dollars of improvements to the Boston Common across the street, assistance with the renovation of adjacent Paramount Theatre, including the fabrication of a new replica sign and façade stabilization.

Other stakeholders that the development team had to negotiate with included the City of Boston traffic department, the Chinese Consolidated Benevolent Association, the Boston Parks & Recreation Department, the Boston Fire Department, and the St Francis House. Each group needed assurance that the proposed development would not adversely impact their own interests. The Chinatown business owners actually saw the project as a means of attracting more pedestrians to help fill over 52 restaurants within their community.

The final design resulted in over 1.8 million square feet distributed into two sleek modern high rise towers. The conscious decision to utilize a modern aesthetic respectfully sets

the project apart from its historic context. Granite, glass, and steel planes are assembled together to establish a building aesthetic consistent with its Lincoln Square brother. Framed views over the Boston Common, Charles River, and Financial District offer residents a premium that can not be interrupted by future development thanks to an agreement with the BRA. The financial structure was composed of a 20% equity contribution from foreign investors and a syndicated construction loan was obtained through Fleet and Chase Manhattan Banks. The developer utilized their equity first to demonstrate project commitment to the lenders.

Bovis Lend Lease was hired as the project's construction manager through a negotiated agreement. Bovis brought the expertise and capacity to deliver as well as the balance sheet to back it up. The developer used a cost plus fee with a Guaranteed Maximum Price contract to help expedite delivery, maintain quality, and control cost. The total construction budget is was approximately $350 million dollars.

Downtown Boston's high-end luxury housing market had seen few new projects break ground in the nineties. Ritz Towers, Trinity Place, and the Belvedere served to fill an underserved niche and compete head to head. The target market were buyers located within Beacon Hill and the Back Bay neighborhoods, who were looking for expanded space with modern amenities. The Ritz Towers' design firm was able to adequately anticipate buyer preferences and offer outstanding views, which enabled quicker sales. The three year condominium sales program met expectations by pre-selling 60% of the units, ranging from $415,000 up to $6 million per unit.

Lessons Learned

Through the journey, Millennium/MDA ascertained the knowledge to be successful with large urban mixed use projects. A strong concept and strategic partners allowed the development team to take risks, other were not willing to take. Relationships played a large part in managing the process. Specific lessons include:

- Strong relationships with city officials, contractors, and other stakeholders are vital. Tailor your communication efforts with each in order to be most effective.
- Quality development results from a singular vision which is communicated through the best team possible.
- Developers need strong project managers to control the process, especially during construction phase. Managers need to know what's going on within an organization. Communication flows in two directions.
- A good precedent and past success helps to sell the vision the externally.
- Sell community lifestyle rather than bathrooms and kitchens. The concept of Ritz luxury was perceived well before prospects even viewed a unit.
- As market conditions change, respond accordingly and be able to renegotiate with finance partners.

A graphic representation of the predevelopment process is pictured in Figure 18.

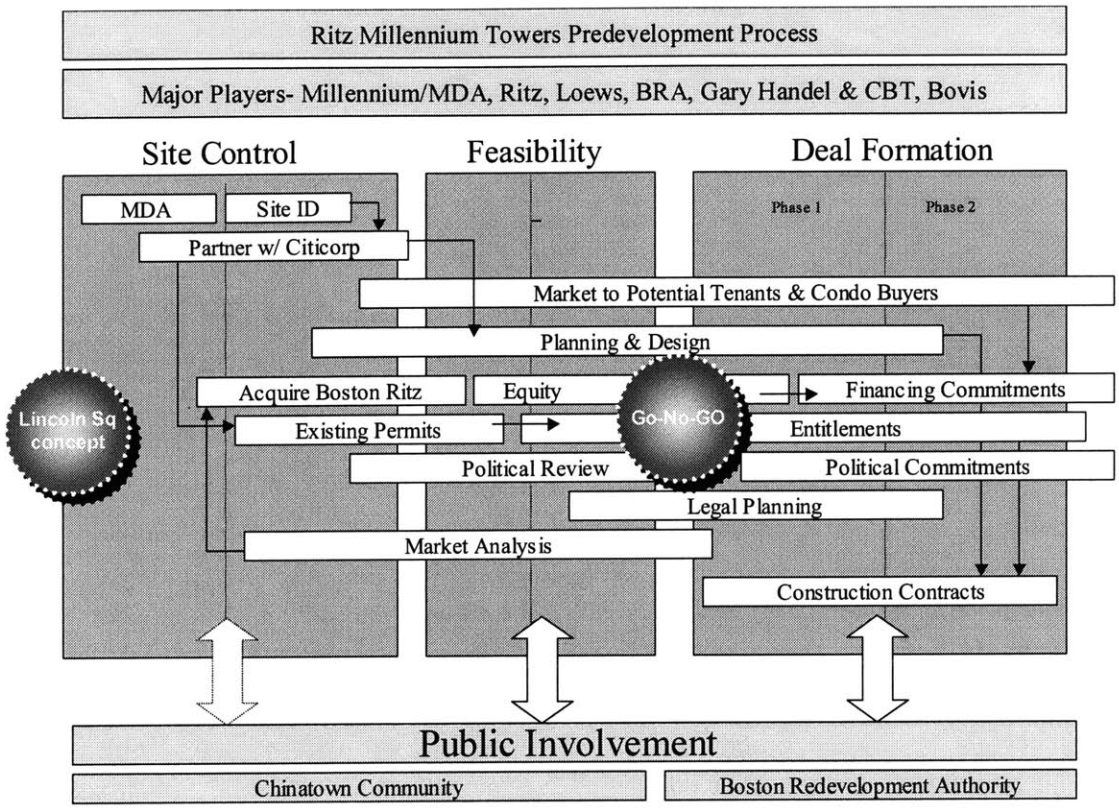


Figure 18. Millennium Ritz Towers Predevelopment Process

Chapter 5

ANALYSIS & CONCLUSIONS

Lessons Learned

Through these case studies and interviews with the development community (See Appendix A), evidence indicates that mixed-use projects require a refined approach towards development. A fusion of location, demand, design, and investment criteria steer these deals in diverse directions, but the underlying predevelopment process holds true. Developers point out that MXDs have higher risk and rewards but require more patience and personal fortitude. Managing complexity in stormy conditions requires tenacity and generates results. Appendix D presents a summary of project attributes for twenty mixed-use projects. Each developer/owner was requested to list three factors that were critical to the project's success, as well as three lessons learned from the experience; these best practices are summarized in Appendix E. It is apparent that developers use assorted strategies to manage the predevelopment process, but eight best practices are widespread. Ranked in order of significance they include:

- Effective relationships with stakeholders
- Long-term outlook for achieving returns
- Quality Design & Place Making
- Market knowledge and timing
- Flexible concept
- Strong location
- Clear Vision

- Public-private partnerships

Due to the drawn-out delivery and significant initial investment a long-term investment horizon defrays the risk of short-term market cycles. North Point as an example has a twenty-five year investment outlook. Quality design and place making are significant in building enduring projects that attract pedestrian activity. A high premium is placed on the design of MXDs across the country. Market knowledge and timing go hand in hand. An intimate knowledge of market trends determines the critical point to make a Go-No-Go decision. Economic cycles are difficult to predict, but successful projects time the market perfectly.

A flexible concept enables projects to serve a market niche and respond to adversity. University Park at MIT highlights an urban revitalization strategy that evolved from a simple business park to an integrated biotech campus over twenty years. Vision generates concept and is a precursor to innovation. The motivation comes from a variety of sources, but as Millennium Ritz Towers exemplifies, communicating vision motivates high performing teams. Finally, the complexity and resource requirements of MXDs demand a renewed approach to public private partnerships. Mutual planning and public policy objectives lead to risk sharing and enhanced public/private benefits

From these eight best practices, stakeholder management is centrally positioned. In fact, of the twenty projects reviewed, sixteen developers/owners responded that community outreach, strategic partnering, or managing relations were either a success factor or lesson learned. Stakeholder related topics received the highest response rate of all categories, collecting 24 responses. Figure 19 provides breakdown summary of the success factors and lessons learned from Appendix E.

	Success Factors
11	Stakeholder Management
5	Long term outlook
7	Quality design
4	Market Knowledge/Timing
1	Flexibility
5	Strong location
4	Vision
2	Public Private Partnerships

	Lessons Learned
13	Stakeholder Management
5	Long term outlook
3	Quality design
3	Market Knowledge & Timing
5	Flexibility
1	Strong location
1	Vision
2	Public Private Partnerships

Total Responses	
24	Stakeholder Management
10	Long term outlook
10	Quality design
7	Market Knowledge & Timing
6	Flexibility
6	Strong location
5	Vision
4	Public Private Partnerships

Figure 19. Success factors rankings

Necessary relationships include community decision makers who influence the entitlement process. Through consistent service of tenant needs a manager builds stakeholder credibility. Investors require developers with established track records. Mutually conceived return objectives and revolving discourse, enable a development team to mobilize capital over an extended horizon. Only through a collaborative approach with the public sector will a project actually be realized. Building trust and credibility with each major player results in stakeholder commitment and recurrent support. These practices best dovetail with the skillful application of stakeholder management theory.

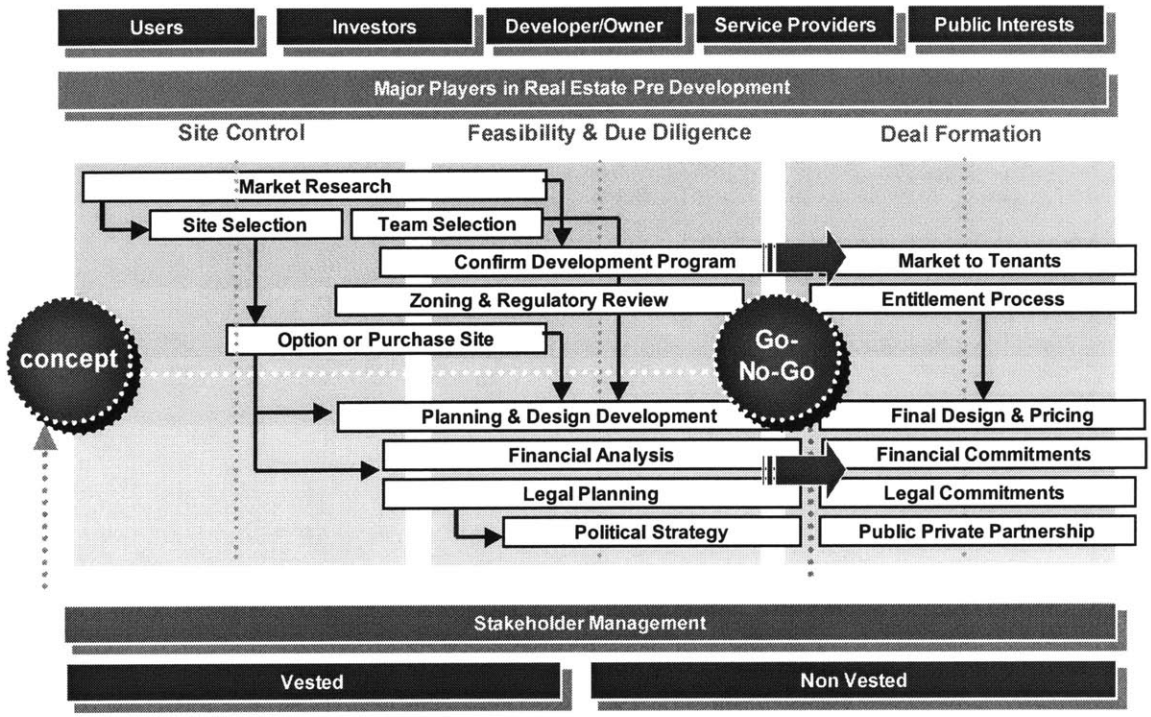


Figure 20. Stakeholder Management in the Predevelopment Process

Stakeholder Management Theory

Steering the development of mixed-use projects equates to managing player expectations. Mitigating a predevelopment risk involves the application of stakeholder management theory. This practice involves identifying stakeholders, knowing their expectations, composing an action plan, and monitoring their satisfaction. In the end, people facilitate projects more than processes do.

The definition of corporate stakeholders has evolved over the last twenty years. An early definition credited to Freeman is still widely used today. He labels a stakeholder as any group or individual who can affect or is affected by the achievement of the project objectives (Freeman, 1984). Later versions include the firm itself, employees,

shareholders, customers, and suppliers as primary stakeholders, with the media and various special interest groups classified as secondary stakeholders (Clarkson 1995). Donaldson and Preston expand the definition of stakeholders to include investors, political groups, customers, employees, trade associations, suppliers, and governments (1995). For purposes related to mixed use developments, the Project Management Institute's (PMI) definition is appropriate. PMI defines project stakeholders as:

> "*Individuals & organizations who are actively involved in the project or whose interests may be positively or negatively affected as a result of project execution or successful project completion.*"
>
> Project Management Body of Knowledge: PMI, 1996, p. 16

Evidence from the research suggests adoption of a stakeholder approach within the predevelopment process will lead to more successful outcomes. Mutually supportive stakeholder relationships build trust, open lines of communication, and serve to align interests around a common cause. In contrast, mistrust and conflict between a development manager and effected parties often result in delays and cost overruns throughout a project lifecycle. Managers have also discovered that effective stakeholder strategies enhance a firm's reputation for socially responsible behavior (McManus, 2002).

Stakeholders are classified into two distinct types: vested (also known as strategic) and non-vested (sometimes called moral). Vested stakeholders have a direct interest and can influence success by providing or withholding resources. Tenants, lenders, managers, design consultants and regulators are considered vested stakeholders in the real estate process. Non-vested stakeholders are those who can affect and are affected by a project, but don't control direct resources (Jergeas, 2000). They influence results by exerting pressure upon the project through other stakeholders. Within the major players non-vested stakeholders include customers, secondary lenders, advocacy groups, and neighborhood associations. Figure 21 breaks down several potential vested and non-vested stakeholders within a typical MXD.

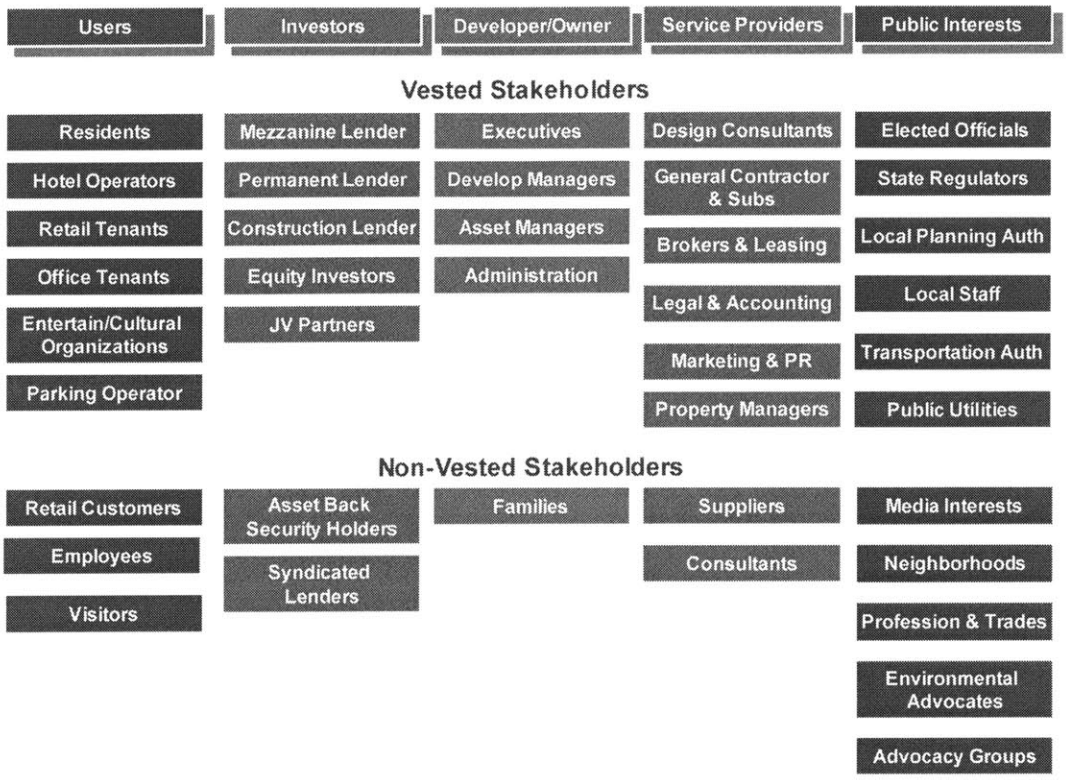


Figure 21. Vested and Non-Vested Stakeholders in MXDs

Mixed-use developments offer a complex series of relationships between both vested and non-vested stakeholders. The developer needs to clearly identify all the various stakeholders and understand their expectations early in the predevelopment phase. Appendix F illustrates a sample stakeholder analysis worksheet. The worksheet helps organize various constituencies by identifying their expectations, attitudes, and influence levels related to the project. Attitudes will vary over time, but its important to recognize if a stakeholder has sufficient awareness and whether they are supportive or not. The level of influence they exert upon the project and other stakeholders is also a fundamental assessment. An action plan determines the appropriate types of interaction and frequency required. Regular communication will not only inform the stakeholder, but will serve as a feedback mechanism that is vital in monitoring expectations.

The use of a stakeholder organigraph can assist to visually layout the various parties and relationships between one another. They are composed of hubs and webs that reflect why organizations exist and how they interact (Mintzberg, 1999). Steps to building a stakeholder organigraph include:

- Locate the MXD concept at the center as the hub of the matrix
- Identify all vested and non-vested stakeholders affiliated with the project. Create subgroups around satellite concerns or issues
- Establish primary relations between hub and satellites and secondary relations between various stakeholder entities. These connections form a web of communication that represents both strong and weak relationships.
- Identify potential conflicts or relationship building opportunities

Acknowledging stakeholders with aligned or opposing interests serve to develop a strategy for dealing with potential conflicts. At the same time, relationships needing extra attention can be identified and planned for accordingly. Spaulding & Slye's success with the entitlement process at North Point was directly attributed to effective stakeholder management. Early in the concept stage, the development manager identified and mapped out all local, state, and other public officials that could influence the approval process. He identified each constituency and neighborhood group, with influence over public officials. An organigraph similar to Figure 22 was formed by the development manager to effectively navigate this project through the public approval process.

McManus writes, "Projects fail because the various stakeholders have different and conflicting expectations about their roles...stakeholders have varying degrees of power and access to resources (2002, p.11)." Organigraphs provide a matrix to facilitate early stakeholder participation and monitoring throughout the process. Developing an action

plan and documenting correspondence with both vested and non-vested stakeholders will assist in evaluating stakeholder participation and satisfaction.

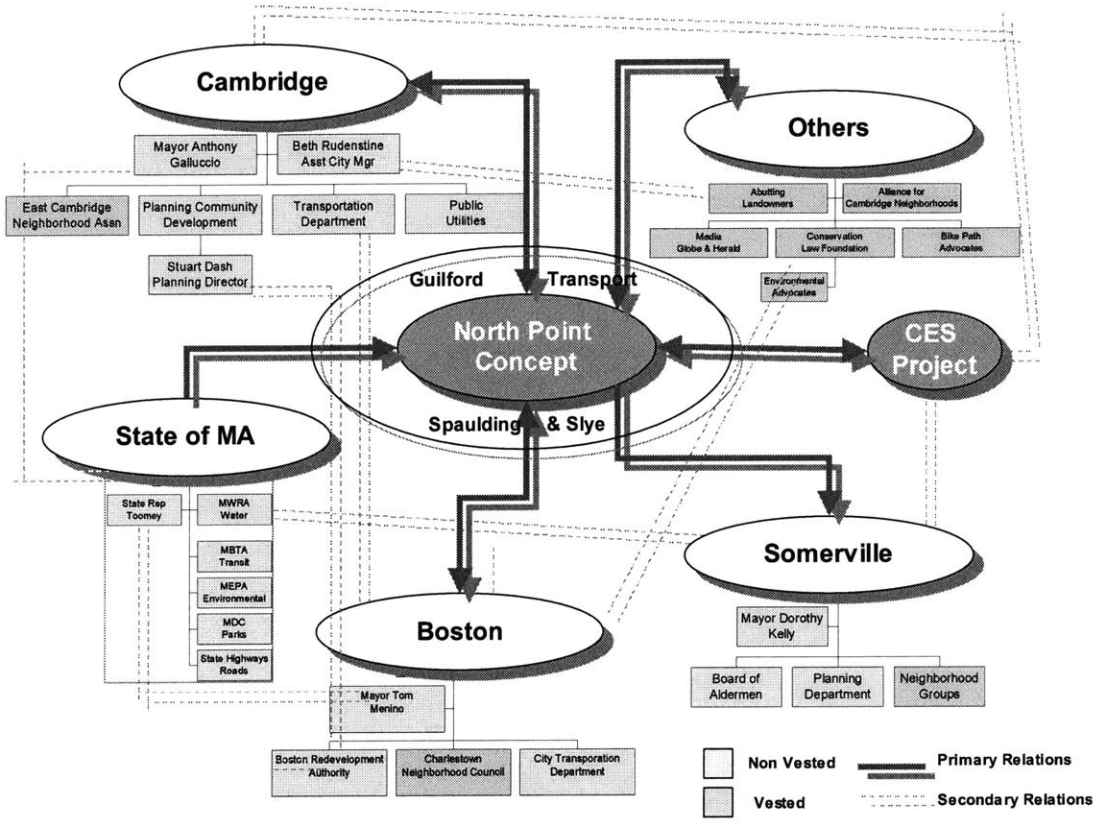


Figure 22. Stakeholder Organigraph for North Point

North Point, represented at the map's hub, is managed by Spaulding & Slye and their joint venture partner Guilford Transportation. Satellites were created around municipal jurisdictions as the land for the project fell into three different Massachusetts communities. The secondary relations represent the links between the jurisdictions and non-vested stakeholders. This web of relationships is actually denser than shown. Each hub has a series of stakeholders that relate to one another through a hierarchical structure. In most cities and towns the mayor's office can exert influence over the more

than the entitlement process. Mayors Menino, Galluccio, and Kelly all played a role by politically supporting the rezoning efforts in Cambridge.

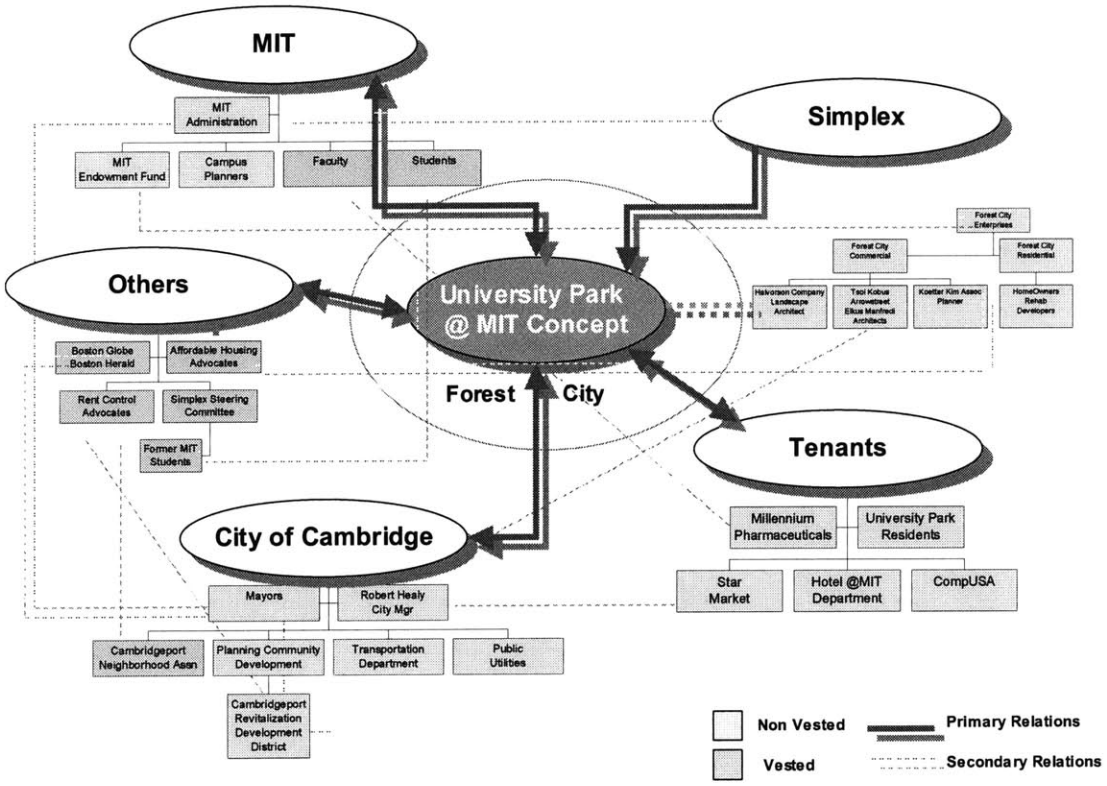


Figure 23. Stakeholder Organigraph for University Park

The organigraph for University Park at MIT in Figure 23 is configured around the stakeholders within Cambridge. Components of MIT were both vested and non-vested stakeholders. Students and faculty were impacted, but did not control resources, while the administration and endowment shaped the concept and deal structure. Within the City of Cambridge, planning officials and administrators clearly influenced the flow of approvals and municipal support. But affordable housing, rent control advocates, and Cambridgeport neighbors were on the outside of discussions and were adamantly

opposed in the early stages. Secondary relationships create an informal web of communication between a variety of both vested and non-vested stakeholders.

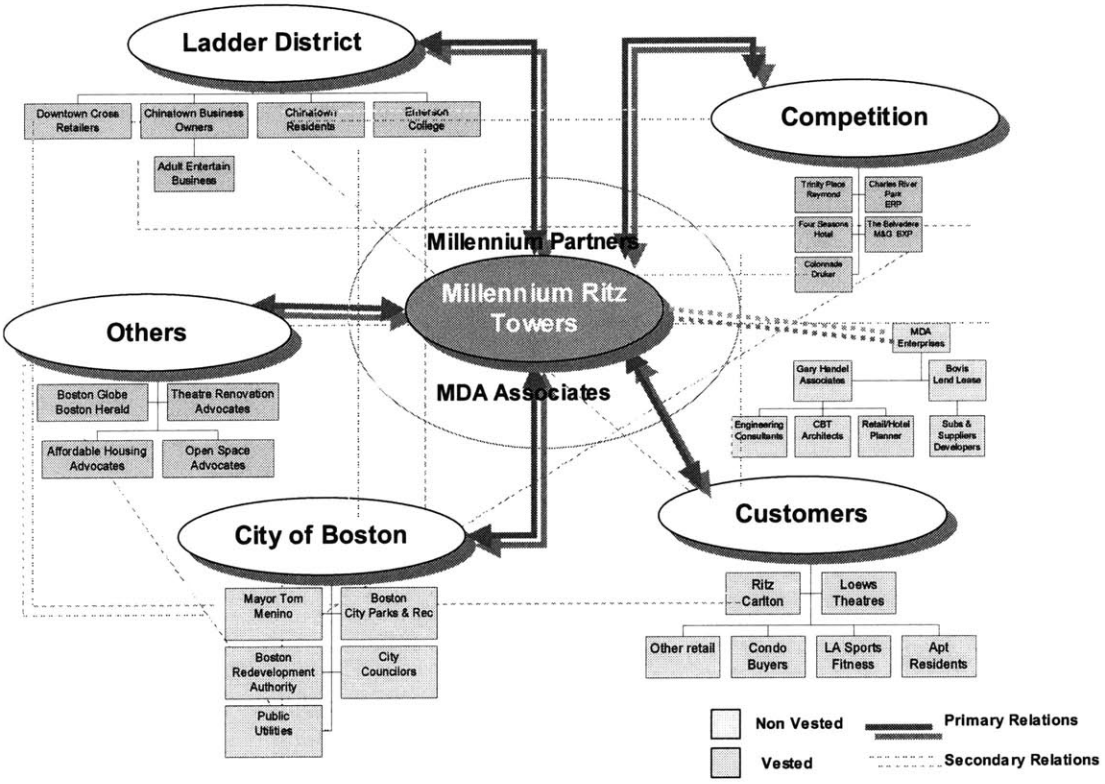


Figure 24. Stakeholder Organigraph for Millennium Ritz

Given Millennium Ritz Towers' hotel and luxury condominium components, the satellites in Figure 24 are organized around players: users, the public sector, and competing developer/owners. Competitors within the hotel and condo components are non-vested stakeholders but do in fact exert influence through supply and rents. Customers including the hotel, retail tenants, and residents are vested stakeholders for they control the supply of cash flow to the asset. The Ladder District, the neighborhood where the site is located, has a variety on non-vested stakeholders, including retail businesses, Emerson College, and the Chinatown community. The City of Boston was instrumental in expediting the approval process through the Boston Redevelopment Authority. A

web of secondary relationships existed between Mayor Menino's office and a variety of other stakeholders, such as the theatre community. This series of relationships led to Millennium's agreement to fund theatre restoration of an adjoining property.

Influencing Stakeholders

The Clarkson Center for Business Ethics at the University of Toronto published seven principles that developers can utilize to manage stakeholder expectations (CCBE, 1999, pp. 1-5.) The Principles of Stakeholder Management include:

1. Acknowledge and recognize legitimate stakeholders, integrating their ideas into decision-making.
2. Listen and openly communicate with stakeholders.
3. Adopt policies & procedures sensitive to stakeholder concerns.
4. Recognize interdependence of stakeholders and treat equitably.
5. Work with public & private entities to avoid risk and harm of corporate activities.
6. Acknowledge potential conflicts & avoid activities that would alienate stakeholders.
7. Acknowledge the potential conflicts between (a) a manager's own role as corporate stakeholders, and (b) their legal and moral responsibilities for the interests of all stakeholders.

In the words of University of Illinois-Chicago Professor Eugene Szwajkowski "I steadfastly believe that disclosure is to stakeholder management as location is to real estate (2000, p.388)" Disclosure and openness may be the essence of these seven principles. It is important to remember that managing stakeholders equates to managing people. "People are a project organization's only real resource. It is the individuals associated with any project who create and implement ideas. Without them, nothing would exist: there would be no memory, no strength, and no advantage. The basic value, which is so important, is `respect for people' (McManus, 2002, p12.)".

The application of these seven principles to the real estate development process is symbiotic. The case data suggests that development managers often acknowledge and

respond to the vested stakeholders (i.e. investors and tenants) in order to close a deal. However, the principles intend for all stakeholders, especially non-vested, be recognized, communicated with and monitored to avoid project disruptions. Stakeholder management should become an underlying feature within the entire predevelopment process.

Final Thoughts

Managing the complexity associated with mixed-use real estate development enables new options for pedestrian oriented destinations with greater collective returns. The methodology prescribed throughout this text represents acquired knowledge and practices utilized in today's marketplace. The five phases of the predevelopment process systematically advance an idea into a validated mixed-use concept worthy of investment. Best practices applied through the predevelopment process include a long term outlook, quality design and place-making, and astute market knowledge, but none appear to be as significant as managing stakeholder expectations.

Stakeholder management theory (SMT) has practical applications within real estate development as interested parties either facilitate or disrupt successful outcomes. Vested stakeholders hold a direct interest and control resources while non-vested stakeholders influence results by exerting pressure indirectly. Identification, clarifying expectations, developing an action plan, and collecting feedback are the essence of stakeholder management theory. The relevance of SMT equates to a form of real estate risk mitigation, which should not be overlooked. With this enhanced view of process and strategy, more development managers should be able to chart new courses toward stakeholder satisfaction.

Appendix A

Interviews & Presentations:

Cox, Ralph.	Senior Vice President, Spaulding & Slye Colliers	April 30, 2002
Elkus, Howard.	Principal, Elkus Manfredi Architects	April 23, 2002
Fewin, Mark	Principal, Trammell Crow Company	June 13, 2002
Haar, Linda.	Assist. Director, Boston Redevelopment Authority	April 18, 2002
Johnston, Jeff	Director of Acquisitions, Cathartes Investments	April 4, 2002
Karman, James	President & CEO, Spaulding & Slye Colliers	April 4, 2002
Kramer, Robert	President, Haile Plantation Corporation	May 15,2002
MacNeil, Kathy	Senior Associate, Millennium Partners- Boston	April 25, 2002
Maguire, Joe	Director, MIT Real Estate	April 10, 2002
Massey, Mark.	Vice President, Leggat McCall Properties	March 7, 2002
McLeod, Bruce	Owner, Bruce McLeod Real Estate	Feb. 12, 2002
Natelli, Tom	Principal, Gaithersburg Community Associates	May 15, 2002
O'Boyle, Erin	Senior Vice President, Beacon Capital Partners	April 18, 2002
Provost, David	Vice President Marketing, Boston Properties	April 18, 2002
Roth, Peter	Principal, New Atlantic Development Corporation	Mar. 14, 2002
Saclarides, John	Senior Vice President, Bank of America	April 25, 2002
Stuckey, James	Executive Vice President, Forest City Ratner	April 8, 2002
Vickery, David	Principal, Spaulding & Slye Colliers	April 4, 2002

Appendix B

Development and Construction Unit Cost Estimates

Adapted from MIT Design for Urban Development Class
Boston Location Specific Data

SITE COSTS		
Pier & Wharf Construction:		
New Bulkhead Construction	$5,000	per linear foot
Excavated Material (for new water area, canals, etc)	$1.50	per cubic ft incl. hauling
Fixed Pier Construction (wooden)	$150.00	per square foot
Floating Dock Construction (steel/hybrid)	$125.00	per square foot
Roadways: (incl. lighting, drainage, utilities)		
2 lane	$350.00	per linear foot
4 lane	$500.00	per linear foot
4 lane w/ landscaped median	$600.00	per linear foot
Peripheral/Buffer Landscaping (Sod, Shrubs, sprinklers)	$10.00	/gsf
Public Open Space		
60% Paved	$35.00	/gsf
20% paved	$28.00	/gsf
Semi-Public & Private Open Space		
60% Paved	$30.00	/gsf
20% paved	$24.00	/gsf

PARKING CONSTRUCTION COSTS		
Structured Below Grade (within slurry wall dam):	$35,000	/car
Structured Above Grade (on piling foundations):	$24,000	/car
At grade:		
Bituminous	$1,000	/car
Concrete	$1,150	/car
Cobblestone	$2,800	/car
Brick	$2,400	/car

BUILDING CONSTRUCTION COSTS		
Base Building (New Construction - includes shell, elevators, stairs and basic electrical, water, sewer, fire protection service; no mechanicals)		
1 story steel bldg - 15% masonry (whse/retail shell)	$40.00	/gsf (assumes spread footings)
1 to 3-1/2 floor wood/steel stud frame; wood or Dryvit exterior	$65.00	/gsf (assumes light piling fndns)
1-4 floor steel/concrete; masonry & glass ext.	$90.00	/gsf (assumes piling fndns)
4-8 floor steel/concrete; masonry & glass ext.	$110.00	/gsf (assumes piling fndns)
8+ Steel/Concrete w/ stone veneer & glass	$125.00	/gsf (assumes piling fndns)

TENANT FIT UP (includes mechanical & electrical)		
Office	$50.00	/nsf
R&D-Lab	$95.00	/nsf
Retail	$90.00	/nsf
Residential	$75.00	/nsf
Hotel (incl FFE)	$110.00	/gsf
Other 1		/nsf
Other 2		/nsf

DEVELOPMENT SOFT COSTS		
Architecture/Engineering	7.5%	of hard costs
Legal and other Professional	6.0%	of hard costs
Retail/Office Leasing	25.0%	of annual rent roll
Residential Condo Marketing/Sales Commissions	5.0%	of gross sales
Taxes During Development Period	$250,000	per year
Construction Loan Origination Fee	1.0%	of loan amount
Construction Loan Interest Rate	7.0%	50% avg outst. bal over loan per.
Permanent Financing Fee	1.0%	of loan amount
Permanent Loan Interest Rate	8.0%	30 year, self amortizing
Development Mitigation Fees to City	1.5%	of total development costs

Appendix C

Estimated Development and Operational Data

Adapted from Fantini & Gorga Master Money Matrix Feasibility Edition, April 2002
Boston Location Specific Data

Product Type	Description	Development Cost psf	Gross Rents psf	Operating Expense psf	NOI psf	Return on Cost	Cash on Cash 25% equity	Loan Feasibility
Downtown Office	Class A space in high rise tower	$375	$50	$16	$34	9.1%	36.3%	No. Supports $260 DC and 30% equity
Suburban Office	Class A space in suburb space	$200	$28	$12	$16	8.0%	32.0%	No. Supports $110 DC and 40% equity
Research & Development	Class A space in suburb space	$100	$9	0	$9	9.0%	36.0%	No. Supports $75 DC and $35 psf equity
Neighborhood Retail	Grocery anchor community center	$200	$25	0	$25	12.5%	50.0%	Yes. But costs range
Regional Mall Retail	Department store anchor center	$300	$50	$20	$30	10.0%	40.0%	Maybe. where tenant interest is confirmed
Luxury Apartments	Class A Mid to high rise blg in good location	$350	$40	9	$31	8.9%	35.4%	Yes. Strong Demand but limited sites
Suburban Apartments	Class A & B units stick construct	$140	$19.80	$6.80	$13	9.3%	37.1%	Yes. Strong demand
Luxury Condominiums	Class A units in mid to rise in good location	$350	$450			25.7%		Yes. Need 25% equity on good site
Luxury Hotel	Downtown full service hotel	$500	100	80	$20	4.0%	16.0%	No.

Appendix D

Mixed-Use Project Data

Collected from Schuck, 20002, Seaside Institute, and NAIOP E-Book of Mixed Use Case Studies

ID	Location	Context	Acreage	Square Footage
1	Cambridge, MA	Urban	48 acres	5,200,000
2	Atlanta, GA	Urban	51 acres	4,800,000
3	Boston- Back Bay	Urban	12 acres	3,500,000
4	Boston- Seaport Dist	Urban	18 acres	3,000,000
5	Boston Common	Urban	1.8 acres	1,800,000
6	Charlotte, NC	Urban	15 acres	1,600,000
7	Cambridge, MA	Urban	27 acres	1,340,000
8	West Palm Beach, FL	Urban	65 acres	600,000
9	Boston- Seaport Dist	Urban	60 acres	600,000
10	Boston- Back Bay	Urban	.5 acres	160,000
11	Dorchester, MA	Urban	1.8 acres	70,000
12	Forth Worth TX	Suburban	3500 acres	19,000,000
13	Denver CO	Suburban	3000 acres	14,000,000
14	Atlanta, GA	Suburban	25 acres	3,400,000
15	Atlanta, GA	Suburban	34 acres	1,500,000
16	Gaithersburg MD	Suburban	87 acres	935,000
17	Gainsville FL	Suburban	50 acres	240,000
18	Walton County, FL	Suburban	91 acres	158,000
19	Wayland, MA	Suburban	26 acres	150,000
20	Las Vegas, NV	Suburban	40 acres	

Appendix D Continued

Mixed Use Project Data

Collected from Schuck 20002, Seaside Institute, and NAIOP E-Book of Mixed Use Case Studies

ID	Project Budget	Types of Uses	Opened
1	$1200 MM	Residential, retail, office, R&D	2008
2	$1000 MM	Office, life style retail, hotel, Residential	2002
3	$525 MM	Hotel, retail, office, resident	1984
4	$ 1200 MM	Office, Residential, Hotel, Museum	2012
5	$500MM	Hotel, apartments, retail	2001
6	$250 MM	Office, retail residential	2001
7	$268 MM	R&D, Resident, Retail, Office	2002
8	$142 MM	Retail, Multifamily, Office	2000
9	$180MM	Convention space, hotel, parking	2004
10	$43 MM	Residential, Retail	2002
11	$11 MM	Afford Multifam, Retail, Office	2002
12		Office, residential, industrial, hotel	
13	$4000 MM	Office, retail, Residential, Recreation	2003
14	$336 MM	Office, Retail	1996
15		Office, residential, retail, hotel,	2003
16	$ 80 MM	Office, retail, resident, civic	1999
17	$75 MM	Office, retail resident, hotel, civic	1995
18		Office, retail resident, hotel, civic	1984
19	$28 MM	Assist Liv, Multifam, Single Fam	1999
20	50MM	Office Retail, Industrial, Flex	2002

Appendix E

Mixed Use Project Data
Success Factors & Lessons Learned

Collected from Schuck, 20002, Seaside Institute, and NAIOP E-Book of Mixed Use Case Studies

ID	Success Factors	Success Factors	Success Factors
1	Community input	TOD Design	Long term outlook
2	TOD Design	Public private partners	Location
3	Strategic Partners	Public private partners	market knowledge
4	Regulatory support	Community outreach	Long term outlook
5	Vision	Market knowledge	Proven track record
6	Vision	Corporate needs	JV Partnership
7	Flexibility	Community outreach	Long term outlook
8	Critical mass	Product Mix	Good Design
9	Vision	Mayor's support	Job creation
10	Good location	Market timing	Proven track record
11	Tax credit deal	External relationships	Niche Market
12	Location	Scale	Good infrastructure
13	Community input	City building	Long term outlook
14	Tenant credit	Asset quality	Reputation
15	Good design	Good location	Long term outlook
16	Sense of community	Builder relationships	Volume
17	Good design	Product Mix	market knowledge
18	Vision	Sense of Place	Good Design
19	Strategic Partners	Healthy Demand	Community Outreach
20	Good location		

	Success Factors
11	Stakeholder
5	Long term
7	Quality
4	Market Knowledge &
1	Flexibilit
5	Strong
4	Vision
2	Public Private

Appendix E Continued

Mixed Use Project Data
Success Factors & Lessons Learned

ID	Lessons Learned	Lessons Learned	Lessons Learned
1	Stakeholder analysis	Urban planning	Public Private
2	Work with stakeholders	Coordinate entire deal	Strategic Marketing
3	Long term outlook	External outreach	
4	External relationships	Public realm	Market timing
5	Stay flexible	Review success	
6	Public outreach	Revitalization	Long term outlook
7	Manage relationships	Strategic Partners	Revitalizing take time
8	Public Private Partners	Local character is good	
9	Market timing	Hotel Financing is hard	
10	Pick good partners	Stay flexible	Good design
11	Integrity	Devil is in details	Political relationships
12	Stay flexible	Take risks	
13	Patience	Manage stakeholders	
14	Relationships	Ethics	
15	Manage complexity	Manage stakeholders	Keep land basis low
16	Sell community first	Stay flexible	Long term outlook
17			
18	Long term Value creation	Create a destination	Be creative
19	Integrity	Market knowledge	Vision
20	Community Outreach	Tough soil conditions	

	Lessons Learned
13	Stakeholder
5	Long term
3	Quality
3	Market Knowledge &
5	Flexibilit
1	Strong
1	Vision
2	Public Private

Appendix F

Stakeholder Analysis Worksheet

Development Project:	MXD Sample
Review Date	Today
Development Mgr	Mr. Confidence

ID Nonvested	Stakeholder Groups	Contact Info	Objective/ Expectation	Awareness H/M/L	Support H/M/L	Influence H/M/L	Action Plan
	Users						
1	Residents Homeowners Assn	Name, address, phone	Space delivery, smooth transition	H	H	H	Monthly update meetings, newsletter
2	Retail Tenant 1	Name, address, phone	Space delivery, foot traffic, sales	H	H	H	Bi-weekly project meetings
3	Retail Tenant 2	Name, address, phone	Space delivery, foot traffic, sales	H	H	H	Bi-weekly project meetings
4	Retail Tenant 3	TBD					TBD
5	Hotel Operator	N/A					
6	Office Tenant 1	Name, address, phone	Space delivery, smooth transition	H	H	H	Bi-weekly project meetings
7	Office Tenant 2	Name, address, phone	Space delivery, smooth transition	H	H	M	Bi-weekly project meetings
8	Office Tenant 3	TBD					TBD
9	Cultural Tenants	Name, address, phone	Larger space, rent subsidies, foot traffic	H	H	M	Monthly update meetings
10	Customers	TBD	High quality assessable destination	L	M	H	Market research
	Investors						
11	Equity Partners	Name, address, phone	Maximize returns, hedge risk	H	H	H	Obtain commitments, weekly phone
12	Mezzanine Lender	Name, address, phone	Maximize returns, short term capital	H	H	H	Obtain commitments, bi-weekly phone
13	Permanent Lender	Name, address, phone	Long term capital deployment	H	H	H	Obtain commitments, monthly phone
14	Construction Lender	Name, address, phone	Short term capital deployment	H	H	H	Obtain commitments, as needed
15	CMBS Buyers	TBD	Acquire risk adjusted cash flow	L	L	L	Work through IB as needed
16	Syndicated Lenders	TBD	Share risk	M	M	L	Work through construct/perm lenders as needed
	Developer/Owner						
17	Executives	Name, address, phone	Manage risk, project reputation	H	H	H	Manage expectations daily
18	Development Mgr	Name, address, phone	Manage risk, ensure resources	H	H	H	Weekly project meetings, Daily Phone
19	Asset Mgr	Name, address, phone	Oversee operations and returns	H	H	H	Weekly project meetings, Daily Phone
20	Construction Manager	Name, address, phone	Time, cost, quality	H	H	H	Weekly project meetings, Daily Phone
21	Administration	Name, address, phone	Support development team	H	H	H	As needed
22	Friends/Family	N/A	Project reputation	H	H	L	Company newsletter & events
	Service Providers						
23	Architect	Name, address, phone	Service client w/ quality, cost, schedule	H	H	H	Weekly project meetings
24	Engineers	Name, address, phone	Service client w/ quality, cost, schedule	H	H	H	Weekly project meetings
25	Landscape Architect	Name, address, phone	Service client w/ quality, cost, schedule	H	H	M	Weekly project meetings
26	Urban Planning	Name, address, phone	Service client w/ quality, cost, schedule	H	H	M	Weekly project meetings
27	General Contractor	Name, address, phone	Good CDs, time, cost, schedule	H	H	H	Weekly project meetings
28	Project Leasing	Name, address, phone	Lease space ASAP, commissions	H	H	H	Weekly project meetings
29	Investment Bankers	Name, address, phone	Obtain capital commit, commissions	H	H	H	Weekly project meetings
30	Attorney	Name, address, phone	Manage risk	H	H	H	Weekly project meetings
31	Accountant	Name, address, phone	Account for all transactions	H	H	L	Bi-weekly project meetings
32	Market Research	Name, address, phone	Determine market forecast	H	H	H	Bi-weekly project meetings
33	Media/ Public Relations	Name, address, phone	Communicate Vision	H	H	M	Bi-weekly project meetings
34	Property Management	Name, address, phone	Maintain quality and cost	H	H	M	Bi-weekly project meetings
35	Suppliers & Vendors	TBD	Obtain business	H		L	As needed through GC & Consultants
36	Other Consultants						
	Public Interests						
37	Elected Officials- Local	Name, address, phone	Stay informed, represent constituency	M	H	H	Face to face introduction mtg, quarterly updates
38	Elected Officials- State	Name, address, phone	Stay informed, represent constituency	L	M	H	Face to face introduction mtg, quarterly updates
39	State Regulators	Name, address, phone	Regulate land, air, water resources	M	M	H	Preapplication mtgs, follow process

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