# Fundamentals of Real Estate Value

**DRAFT** Chapter

**Chapter 11. The 3-Cs: Creating, Controlling and Capturing Value** 

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## The 3-Cs of Real Estate Value: Create, Control and Capture

### Value in Dual Spatial/Capital Market

### Integrated Spatial/Capital Market Linkages Over Time

As noted, real estate operates in two distinct but related markets: spatial markets and capital markets. As such, there are distinct but related value propositions. On the spatial side, value is predicated in part on the supply and demand for real estate facilities. On the other hand, on the capital side value depends on the supply and demand for real estate as financial assets; investments that are collateralized on some underlying real estate interests. Since real estate has both as space-time and money-time nature, the issue of timing takes on added meaning especially in light of the durable, capital-intensive nature of real estate that generally makes development decisions an "irretrievable commitment" of scarce resources. Exhibit 11-1 looks at the value proposition for real estate from a longitudinal (i.e., over time) perspective which integrates the spatial and capital markets. As noted, the spatial side determines the Net Income a project is likely to generate given the competitive environment and Supply/Demand (S/D) balance that define its ability to generate Gross Income and the leakage or costs associated with operating the property that are netted out to arrive at Net Income that can be used to compensate capital. Once that income is determined, the Capital Market S/D balance for real estate assets factors into the required Rate of Return (Rr). The Rr is the return that is necessary to attract capital and provide a return that is commensurate with the associated risk of the investment.<sup>1</sup> Once the Value supported by the Capital Markets is determined, the spatial side kicks in again, allocating costs to the factors of production.



#### Longitudinal Nature of Real Estate: Capital/Spatial Interactions

<sup>&</sup>lt;sup>1</sup> There are a number of different terms that are used to define rates of return in real estate. While sharing some commonalities, the different terms can have dramatically different meanings and should be carefully defined to avoid confusion. In general, the rate of return is the rate that equates income to value: R = Income/Value.

### Implications of Longitudinal Nature of Space/Capital Markets

In most product categories, the job of manufacturers of end-user products and finished goods ends when the product rolls off the assembly line. From there it enters the distribution channel (e.g., packaging, marketing, shipping, and fulfillment) through which it is placed in the retail channel or delivered to endusers. This post-manufacturing process does not materially change the product itself, but makes it more attractive and/or accessible to consumers. Once in the end-users possession, most durable products are placed in service with little end-user transformation beyond routine maintenance and repairs. The initial price for a manufactured product is based on how well it satisfies market demand and

... most tangible products are wasting assets with value declining through wear and tear. In many categories this "useful life" has declined over time. Indeed, after several years of service many products are cheaper to replace than to repair and thus are at the end of their economic life when the cost of repair is no longer justified.

how it compares to competing products in terms of some value/price relationship (i.e., S/D for that product category).

Over time, most tangible products are deteriorating assets with value declining through wear and tear. In many categories this "useful life" has declined over time. Indeed, after several years of service many products are cheaper to replace than to repair and thus are at the end of their economic life when the cost

... there are some significant differences in the real estate manufacturing process that distinguish it from other product categories. First, "land" which is one of the key factors of production is not a wasting asset. Second, the "manufacturing" phase of real estate goes beyond the mere production stage... Third, as a financial asset with income generating potential, the financial side of the asset... is undergoing constant change. of repair is no longer justified. Other products become functionally obsolete before the end of their economic life due to rapid changes in technology or other advances that shift demand to replacement products. At that point, the value of a product affected by such forces approaches its net salvage value; the value of components less the costs of disposal or recycling.

The manufacturing or development of real estate shares some commonalities with many other durable products. Indeed, with the addition of land, the same factors of production (i.e., materials, labor, capital, entrepreneurship) that go into the manufacturing of most products are involved in producing real estate. However, there are some significant differences in the real estate manufacturing process that distinguish it from other product categories. First, "land" which is one of the key factors of production is not a wasting asset.<sup>2</sup>

 $<sup>^{2}</sup>$  This does not suggest that land cannot be depleted and/or lose value through erosion or other natural forces, but that it is durable and does not disappear even though it may be converted from a positive resource to a negative resource through contamination or other factors that make it a public nuisance or hazard.

Second, the "manufacturing" or spatial production cycle for real estate goes beyond the mere production

stage. Due to the multidimensional nature of real estate (i.e., static, environmental and linkages) and its durable, long-term nature, the spatial product is undergoing continuous post-manufacturing change. That is, since each of these three dimensions are changing over time and two of them are external to the physical static attribute itself, from a holistic perspective the composite product (i.e., SEL) is undergoing continuous change. Third, as a financial asset with income generating potential, the financial side of the asset which bestows value on income-generating property is undergoing constant change. These changes range from internal changes associated with the rent roll (e.g., lease terms, tenancy, rents, expense levels and payment) to changes in the S/D for assets in the capital market.

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In addition to competition for capital, the capital market's perception of the relative risk associated with real estate affects the required Return (Rr) necessary to attract capital over time and hence the value of that income stream. In essence, the capital market is buying a "set of assumptions" about the incomegenerating and residual value of a property; assumptions which can dramatically and rapidly change due to changes in attitudes or perceptions only some of which are linked to the spatial market.

	Land Asset Component	<ul> <li>Key factor of production</li> <li>Not a wasting asset</li> <li>Has residual value although it may be negative in case of contamination or hazards</li> </ul>
	Spatial Production Cycle	<ul> <li>Dimensionality: static, environmental and linkages</li> <li>Internal change due to malleability; renovation, rehab, capital improvements</li> <li>External change due to neighborhood development and changes in transit or linkages</li> </ul>
	Financial Asset Production Cycle	<ul> <li>"Set of Assumptions" in proforma are mere estimates</li> <li>Net income generating potential changes</li> <li>Capital market risk tolerances and return requirements change</li> </ul>
		Exhibit 11- 2

#### Longitudinal Nature of Real Estate Manufacturing Process



#### **Post-Production Changes in Spatial/Capital Real Estate Product**

Exhibit 11-3

As illustrated in Exhibit 11-4, the mere development of a project is not sufficient to maintaining a value proposition over time. Indeed, the investment of land, labor and capital may actually create projects for which the whole is worth less than the sum of its parts. That is, the income-generating potential for a project at completion is not adequate to provide the required rate of return to justify the initial investment. Furthermore, since real estate is a wasting asset and the proforma income stream is not guaranteed, the value proposition takes on a longitudinal dimension. Indeed, in order to create "sustainable value" real estate projects must be able to create an enduring value proposition. The appropriate measure of success of a development is not merely the ability to create a value that exceeds production costs at inception. Rather, it depends on the ability to hold or increase that value over the long term by delivering a product that satisfies an enduring demand for space.

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### The 3-Cs of Real Estate Value: Create, Control and Capture

There are three key components of the long-term value proposition for real estate. These components can be labeled the 3-Cs of value: Create, Control, and Capture. The ability to exercise the full creation, control and capture processes over the full life cycle of a property is paramount to success. The 3-Cs can be applied on both the spatial and capital sides of the market. By understanding how this proposition plays out over the full cycle of a property and by exploiting inefficiencies in the market, some parties can consistently outperform the market. The ability to "beat the market" in real estate relates to the "intangible value"

proposition associated with the asset

The ability to "beat the market" in real estate relates to the "intangible value" proposition associated with the asset class. Loosely defined, intangible value is the creation of excess value that transcends the level achievable in the normal or "reasonably informed" market. It should be noted that "intangible value" can be positive and enhance the value proposition for real estate over time or it can be negative and cause an erosion or evaporation of the value proposition.



3-Cs of Value: Creating, Controlling & Capturing

Exhibit 11-4

class. Loosely defined, intangible value is the creation of excess value that transcends the level achievable in the normal or "reasonably informed" market. It should be noted that "intangible value" can be positive and enhance the value proposition for real estate over time or it can be negative and cause an erosion or evaporation of the value proposition. Thus, those who either do not have the necessary understanding of spatial and capital real estate market fundamentals not only will not be able to benefit from the value proposition in a consistent and reliable manner over time. The failure to do so can create a drag on performance over time or due to the capital intensive nature of real estate, can trigger wipeouts that ripple far beyond the real estate market and threaten the very survival of the enterprise. Thus, to enjoy a sustainable value proposition in real estate, one must be able to create, control and capture value.





Exhibit 11-5

up front, there are also opportunities during the operation and termination

stages of the product life cycle. For example, value can be created by repositioning existing assets to lower their risk profile and/or increase income generation. Similarly, projects can be renovated or redeveloped, thus creating a new product cycle for the upgraded property. Thus, Creating Value for real estate takes on a temporal frame that spans the entire life cycle. The same is true for Controlling Value which depends in part on decisions and/or actions that are taken prior to the completion of a project (e.g., design, quality, efficiency, pre-leasing, financing). Finally, Capturing Value can depend on decisions that are made up front or subsequent operational decisions including: financing, lease terms, renewal options, conversion options, buy/sell agreements and incentive compensation.

## Creating Value: A Life Cycle Approach



### **Creating Value**

### Spatial Value Equation

The value equation for new real estate projects is related to the basic Value = Income/Rate which determines the value of a completed project. The value creation involves the extent to which the cost of creating the project exceeds the value of the completed project which is (i.e., V = I/R). Thus, Value Creation (VC) is calculated by:

#### Value Created = Market Value Completed – Cost to Complete

### VC = MvC - Cc

The value creation process can best be explained by a relatively straightforward example of the development and sale of a single family home. As noted in Exhibit 11-7, the fully loaded cost of constructing the 2,500sf house is \$300,000. When the \$100,000 land costs are added in, the total cost to complete is \$400,000. This includes a 10% profit margin on the construction of the house, and 30% on the land value. If the homebuilder captures both profits, the margin on total cost would be 15% or \$60,000. Now, if the builder can sell the house for \$220/sf with a 5% sales expense, the Value Created (VC) is \$122,500 (\$550,000 - \$27,500 - \$400,000). If the homebuilder also developed the site and captured the 30% margin on the land the combination of Value Created and profit margin yields \$182,500 or 33% of the Market Value Completed.

				Profit Margin				
Component	Units	lotal	Share of	Profit	Profit in	% of		
		Dollars	Cost	Margin	\$'s	Total		
Construction Cost								
Size of House in sf	2,500							
Cost/sf	\$120							
Construction Cost		\$300,000	75%	10%	\$30,000	8%		
+ Land Cost		\$100,000	25%	30%	\$30,000	8%		
Cost to Complete		\$400,000	100%		\$60,000	15%		
Market Value Completed	\$220	\$550,000						
- Sales Expense	5%	\$27,500						
= Value Created (VC)		\$122,500						
Value Cr	Value Created (VC) + Profit							

#### Example of value Creation

Exhibit 11-7

### Creating Value via Site Assemblage

In many urban markets, the optimal scale of large-scale commercial development exceeds the capacity of individual sites controlled by fragmented ownership. For example, the development of large-scale office project in a fully developed urban core can span one or more blocks. In most cases, these blocks consist of multiple parcels owned by a number of different parties. In order to support large-scale development it is often necessary to acquire a number of contiguous sites through a series of individual transactions.

As illustrated, the assemblage of individual sites into a larger parcel can reposition a property relative to the larger market. In effect, the developer may be able to increase the intensity and density of development on the assembled property. Thus, value could be created if the potential development and value upon completion on the assembled site exceeds the value that could be supported by developing the individual holdings as free-standing properties. This value creation could be further enhanced by taking advantage of economies of scale to lower development costs and spread out land costs. Finally, by putting the property to a higher and better use, the developer may be able to attract larger, credit tenants who are willing to pay a premium for space thus amplifying value creation even more.

Exhibit 11-8 illustrates how site assemblage may create value. As noted, the four smaller

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sites are located in the same CBD node, but as free-standing sites, can only accommodate small scale, low density development. This limitation can be caused by site configuration, ingress/egress requirements as well as by existing zoning restrictions on maximum building envelopes.

Exhibit 11-9 presents an example of four sites that total 45,000sf. As noted, the allowable density is fairly low with a floorarea-ratio (FAR) allows 2 square feet of building per square foot of site. Due to the low density, the land cost averages around \$60/sf and the total cost is \$20.3m. Given the efficiency ratio and net rents for the quality of space that could be developed on

the individual sites, the cumulative net income



#### Site Assemblage Value Creation

would be around \$2m/year. Since each site has different risk/return profiles, the cap rates would be somewhat different ranging from 7.5% to 8%. Using the appropriate cap rates (i.e., V=I/R), the Market Value Completed (MvC) would be \$26.1m. This would indicate a Value Created (VC) of \$5.79 million which is a healthy 29% over cost.

		Site Size	EAD	Gross	Land Cost/sf	Cost/SE	Land Cost	Construction	Total Cost to
Sit	es	(sf)	FAN	<b>Building Size</b>	Lanu Cost/si	COST/ SP	Lanu Cost	Cost	Create
	Site 1	10,000	2.0	20,000	\$50.00	\$180	\$500,000	\$3,600,000	\$4,100,000
	Site 2	8,000	2.0	16,000	\$40.00	\$180	\$320,000	\$2,880,000	\$3,200,000
	Site 3	12,000	2.0	24,000	\$60.00	\$180	\$720,000	\$4,320,000	\$5,040,000
	Site 4	15,000	2.5	37,500	\$80.00	\$180	\$1,200,000	\$6,750,000	\$7,950,000
То	tal	45,000		97,500			\$2,740,000	\$17,550,000	\$20,290,000

#### Value Creation on Individual Sites

Sites	Gross Building Size	Efficiency (Rent/Gross)	Net Rentable	Net Rent/sf	Net Rent/yr	Cap Rate	Market Value Completed	
Site 1	20,000	75%	15,000	\$23	\$337,500	8.00%	\$4,218,750	
Site 2	16,000	75%	12,000	\$25	\$300,000	8.00%	\$3,750,000	
Site 3	24,000	80%	19,200	\$27	\$518,400	7.50%	\$6,912,000	マク
Site 4	37,500	80%	30,000	\$28	\$840,000	7.50%	\$11,200,000	×
Total	97,500		76,200		\$1,995,900			\$26,080,750
Value Create	ed							\$5,790,750

Exhibit 11-9

While the Value Creation achievable via development of the individual parcels is attractive, it pales in comparison to the VC creation potential for the assembled sites. As noted, it is assumed the assembled site may receive a higher FAR of 5.0 due to the ability to share parking, ingress/egress and other amenities. At that density level, the allowable gross building size would be significantly larger at 225,000sf. Although the cost/sf would be higher, the premium costs would be more than offset by higher rents the building may attract from potential tenants. Indeed, the project has a cost of \$52.2m and a value creation of \$21.8m. These numbers are conservative and assume the average cap rate (7.75%) for the smaller properties, greater building efficiency (85%), higher construction costs (\$220) and a slightly higher net rent (\$30). This would be \$16m more (i.e., \$21.8-\$5.79m) than the individual properties.

#### **Excess Value Created on Assembled Sites**

Assembled P	arcels							
Cost to Create	Site Size (sf)	FAR	Gross Building Size	Land Cost/sf Cost/SF		Land Cost	Construction Cost	Total Cost to Create
Total Site	45,000	5.0	225,000	\$60.89	\$220	\$2,740,000	\$49,500,000	\$52,240,000
Value on Completion	Gross Building	Efficiency (Rent/Gross)	Net Rentable	Net Rent/sf	Net Rent/yr	Cap Rate	Market Value	Ţ
Total Site	225,000	85%	191,250	\$30	\$5,737,500	7.75%	completed	\$74,032,258
Value Created								\$21,792,258
Excess Value Created: Aggregate Parcel vs. Individual Sites								

Exhibit 11-10

Another example of the value creation potential associated with site assembly can be extracted from the case of large-scale resort or recreational developments. The most visible example of such value enhancement is the development of Disneyworld in Florida. While the developers were able to assemble much of the holdings through a series of "quite" transactions, once the word got out the remaining parcels became more "valuable." While these higher values could not be paid for each parcel, on the margin they were absorbed into the overall cost of assemblage and thus were not deal-breakers but part of the costs of assemblage. Interestingly, the Disney corporation realized that they should have actually acquired more holdings than needed for the venue which might have helped further insulate the park from competition and could have thwarted the development of the Kissimmee Florida which became a viable low-cost option for many budget-conscious vacationers. Not only did the "leakage" of these customers hurt on-campus hotel sales, but they also diluted the ancillary sales for food and beverage that could have created an even more profitable venture.

To avoid creating value for others who snap up outparcels some mall developers have begun to assemble the contiguous properties to control competition from third-parties, protect the integrity of the mall proper, and create a land play that can benefit the mall ownership. A similar 'lesson learned" was experienced by many mall developers who have bemoaned the encroachment of "power centers" and "off-mall" strip centers that spring up on outparcels. In many cases, these contiguous properties are converted to retail uses by developers hoping to intercept traffic to the mall. To the extent they were successful in luring mall shoppers, these venues cannibalized potential sales. To avoid creating value for others who snap up outparcels some mall developers have begun to assemble the contiguous properties to control competition from third-parties. Such

strategies can also help protect the integrity of the mall proper, and create a land play that can benefit the mall ownership. Thus, land assemblage can be a critical element of "value creation."

### Creating Value via Basic Entitlements

In addition to land assemblage, another early phase of VC relates to the "entitlement" of land. Briefly, entitlements are the land use approvals (e.g., zoning, permits) that must be secured from various governmental bodies with regulatory oversight of real estate before a project can be developed. The process of getting land entitled can be extremely challenging in some jurisdictions in which land usage is highly regulated. Although the process may seem contentious at times, it is essential to the development and value creation process. In most jurisdictions, before a project can be started, the right to use the land for the intended use and the intensity of use must be secured. In some jurisdictions the entitlement process is inherently contentious, especially when developers must secure approvals from stakeholders and other public parties who may have a vested interest in the project or the environs in which it is located. However, before a project can be started, the right to use the land for the intended use and the intensity of use must be secured. Depending on the nature of the land, its location and the proposed use, the entitlement process may require obtaining explicit approvals from a range of local municipal, county, regional, state or national governmental bodies. This situation could occur in the case of a site located in a local jurisdiction that falls in an area that has been designated as of critical concern at the county, regional or state level. It may also apply to sites that are located in certain areas (e.g., coastal zones, floodplains) or have environmental conditions (e.g., wetlands, brownfields) that

By successfully working through the labyrinth of approvals, a developer may be able to capture a monopolistic position which can create added value. Over time this monopoly may be eroded as others petition for similar changes under the equal treatment doctrine.

trigger state or federal oversight. Alternatively, the proposed use may be a locally undesirable land use (LUL) for which local opposition prevents a land developer from obtaining approvals at the local level (e.g., electrical stations, landfills, nuclear power plants, recycling centers, water treatment plants). In such cases, it may take state or federal intervention to overturn local objections which can be both costly and time-consuming. By successfully working through the labyrinth of approvals, a developer may be able to capture a monopolistic position which can create added value. Over time this monopoly may be eroded as others petition for similar changes under the equal treatment doctrine.

Existing Zoning	<ul> <li>Current zoning designation</li> <li>Zoning restrictions on nature and intensity of use</li> </ul>				
Local Development Review Process	<ul> <li>Creation of proposed development; use and intensity</li> <li>Planning Dept. review of proposal for compliance with zoning</li> <li>Planning Dept. recommendation</li> </ul>				
Other Reviews	<ul> <li>Public meetings and open hearings</li> <li>Design review of other approvals &amp; requirements</li> <li>Regional and state reviews: areas of critical concern</li> <li>National reviews: environmental, wetlands, national priorities</li> </ul>				
Administrative Decisions & Actions	<ul> <li>Decision for approval or denial</li> <li>Conditional Uses &amp; Variances</li> <li>Petition to Zoning Appeals Board or Board of Adjustment</li> </ul>				
Judicial Review of Land-Use Decisions	<ul> <li>Exhaustion of administratvie remedies &amp; valid cause of action</li> <li>Preliminary Hearing and expedited review</li> <li>Stay pending review, review and supplementation of Record</li> <li>Relief: standards, decisions, definitive, compensation &amp; damages</li> </ul>				

#### **The Entitlement Process**

#### Exhibit 11- 11

While many projects have no trouble securing entitlements, in some cases the process may prove to be contentious and wind up in courts for final resolution. While judicial intervention may be necessary in some cases, due to the added expense, delays and uncertainty it should be considered as a last resort. In most cases the entitlement process is better approached through consensus building and collaborative decision-making. The developer can lead this process by engaging the key parties and stakeholders in a

discussion of the options and cost/benefit of alternative solutions. A developer's goal of obtaining entitlements and approvals can be furthered by adopting the notion of "Most Fitting Use" where the

developer approaches real estate as a scarce resource and all parties of interest recognize that from an economic perspective development decisions often constitute irretrievable commitments of those resources.

The fact that real estate development is often an "irretrievable commitment" of scarce resources from an economic perspective is illustrated in Exhibit 11-12. This example uses the same 4 sites in the previous example but assumes they have been assembled to a 45,000sf parcel at a cost of \$50/sf of land. The FAR is the average of the individual parcels as the owner opted to retain the current entitlement rather than fight for an up-zoning of the

A developer's goal of obtaining entitlements and approvals can be furthered by adopting the notion of "Most Fitting Use" where the developer approaches real estate as a scarce resource and all parties of interest recognize that from an economic perspective development decisions often constitute irretrievable commitments of those resources.

project. This initial development was successful and resulted in Value Created of \$7.15m over the total Cost to Create.



#### **Development: An Irretrievable Commitment of Scarce Resources**

#### Exhibit 11-12

Assume that the initial development was put in place and a new developer wants to acquire the improve site and convert it to a more intense and profitable "Highest and Best Use." The trigger for this change is the opening of a new transit station in the immediate area which has made the site ideal for a "Transit-Oriented Development." To encourage infill development and capitalize on the new transit connections, local officials and stakeholders are more than willing to up-zone the property to and FAR of 4.0, roughly double the existing density. As noted, the proposed development would replace the existing 97,500sf building with a higher quality 180,000sf building that would cost some 22%/sf more but would also generate a higher proforma income of \$30/sf vs. \$26/sf/year. While the proposed redevelopment might

make sense if the land value remained around \$50, the existence of the initial development raises the imputed land cost is now \$410/sf. The dramatic increase stems from the fact the developer of the initial project will not sell the land for less than the Market Value Completed of the \$26.98m project. Given the higher land cost, the total Cost to Create the TOD project would be more than the Market Value Completed (\$66.6m vs. \$57.4m). Thus, even though the new project would reflect a more dense use of the land, generate more income and be more politically palatable, the proposed redevelopment would be financially infeasible. The only way to make the project pencil out would be to write down the land to the residual value that the proposed redevelopment could support.

### Enhanced Entitlement Value Creation

Once a zoning ordinance has been created and validated, the system becomes largely fixed with limited options to deviate from permitted uses and intensities of use. Due to the capital-intensive, durable nature of real estate development, the expectation that zoning designations will be maintained is a critical component in allowing the free market system to function. Despite this important role, zoning designations can be rendered unsuitable due to changes in the environs and linkages affecting a particular area or site. Thus, rather than accepting existing zoning as a given, it may be appropriate to challenge the current restrictions to allow the deployment of land for more appropriate uses that satisfy both public and private market considerations.

### **Alternative Zoning Changes**

Exhibit 11-13 provides some alternatives for changing permitted uses and intensities of use from existing zoning designations. First, a developer may appeal for a zoning variance for a specific parcel that would allow the development of some use that is not permitted or change some of the restrictions that guide the intensity or design of a permitted use. While not changing the guidelines for the zone classification and have spill-over impacts on



#### Exhibit 11-13

surrounding land, the variance would only apply to an individual parcel or development. It should be recognized zoning variances are often difficult to obtain since they can establish precedents which may be cited by other landowners under the "equal treatment doctrine." Second, a developer could apply for a conditional use permit. If such an option is offered, certain uses or intensities that are not explicitly permitted under the zoning designation could be allowed if certain "conditions" are satisfied. Third, a developer could apply to have a site re-zoned or up-zoned to allow for an unapproved or more intense use. This change would be the most dramatic and may be the most difficult to obtain as it requires the

reversal of existing policies. It also requires extensive public scrutiny including hearings at which all affected stakeholders have an opportunity to weigh in on the proposed changes. In addition, unlike entitlement efforts for projects that comply with existing land use restrictions enjoy a presumption of validity, the burden of proof that a proposed change is in the public's best interest falls on the developer.

#### **Re-zoning to Enhance Value**

Exhibit 11-14 illustrates a proposed up-zoning for a parcel that currently has a 3 story height limitation. The developer proposes up-zoning the site to allow a 6 story project. The more intense use is appealing on a number of fronts including the ability to spread out land costs and reduce costs/unit. In addition, the more intense land use may allow the developer to increase amenities over those a lower density development may be able to afford. Finally, the taller structure could allow the developer to offer more view units, thus increasing the income generating potential of the project.<sup>3</sup> The economics associated with re-zoning a property are presented in Exhibit 11-15. In this case, the





existing zoning is Neighborhood-Commercial with a 35 foot height (NC-35). The proposed zoning would allow the development of a 65 foot building (NC-65). As noted, the initial zoning would allow the development of a building that would have a Market Value Completed of \$5.3m with a Cost to Complete of \$4.1m for a Value Created of \$1.2m. On the other hand, the more intense use would allow development of a project with a Market Value Completed of \$15.9m building with a Cost to Create of \$12.5 and Value Created of \$3.4m. The difference between the two projects would be an additional \$2.2 million in Value Created or excess profit for the developer.

Sites	Site Size (sf)	FAR	Gross Building Size	Land Cost/sf	Construction Cost/SF	Land Cost	Construction Cost	Total Cost to Create
Original Zoning: NC 30	10,000	2.0	20,000	\$50.00	\$180	\$500,000	\$3,600,000	\$4,100,000
Proposed Zoning: NC 65	10,000	5.0	50,000	\$50.00	\$240	\$500,000	\$12,000,000	\$12,500,000

Up-Zone	Value	Creatio	n Pote	ntial
-				

Sites	Gross Building Size	Efficiency (Rent/Gro ss)	Net Rentable	Net Rent/sf	Net Rent/yr	Cap Rate	Market Value Completed	
Original Zoning: NC 30	20,000	85%	17,000	\$25	\$425,000	8.0%	\$5,312,500	
Proposed Zoning: NC 65	50,000	85%	42,500	\$30	\$1,275,000	8.0%	\$15,937,500	
						١	/alue Spread	\$10,625,000
					Value Crea	ted Origina		\$1,212,500
					Value Creat	ed Propose	d Up-zone	\$3,437,500
					Premium Pro	posed vs O	rig.	\$2,225,000
							E	xhibit 11- 1

<sup>&</sup>lt;sup>3</sup> On the surface, it might appear that this increase in height restrictions would axiomatically create value. The reality is a bit different, since the taller building may be constrained by parking requirements and/or higher land and construction costs a more intense building may not always result in increased value.

Although the option to re-zone properties is built into most zoning systems, when initiated by a developer the process is inherently adversarial. That is not to suggest strong opposition, but that a compelling case must be made to justify a change and to avoid potential criticism or resistance. The adoption of the notion of "Most Fitting Use" as opposed to "Highest and Best Use" offers a framework that might help streamline the process and avoid conflict. In essence, the determination of most fitting use is based on a collaborative approach that explicitly recognizes multiple perspectives and the need to make trade-offs. As noted in Exhibit 11-16, the Most Fitting Use (MFU) model includes three distinct types of use analysis: Most Suitable Use; Most Politically Palatable Use; and the traditional Highest and Best Use (HB Use).



### Most Fitting Use Paradigm

Exhibit 11-16

In general, the "Most Fitting Use" model blends the perspectives of the three major constituencies --space producer, space user, and community/neighborhood-- to arrive at a compromise use that represents the optimal use in light of competing goals and objectives. In general, MFU applies the same core criteria in H&B Use analysis, with the exception of "maximization of land value." Rather, the MFU substitutes the "fit" criterion which incorporates the preferences and values of other constituencies outside of those directly involved in the ownership, development or usage of the property.

The first stage of Most Fitting Use is to identify the Most Suitable Use to which the site can be placed. Briefly, this type of analysis determines which of the potential uses would value the site most in terms of its static attributes, environmental attributes and linkage attributes. In order to make such a determination, the development team must understand the evaluative criteria various user groups bring to the table that affect their needs. This type of "empathy" is used in rating a site's attributes from the perspective end users, as well as assigns weights to represent their relative importance. In essence, the analysis focuses on identifying the potential uses that have the highest weighted ratings across the key real estate attributes.

							-
Factors/Attributes	Office	Retail	Industrial	Apartment	Hotel	Average	
Static							
Size, Layout	5	3	4	7	5	4.8	
Ingress/Egress	4	2	2	6	4	3.6	
Topo/Drainage	5	5	3	7	7	5.4	
Subtotal	14	10	9	20	16	13.8	
Environs							
Land uses	3	3	8	2	2	3.6	
Quality/Value	4	4	8	4	3	4.6	
Safety/Security	6	6	8	4	6	6	
Subtotal	13	13	24	10	11	14.2	Š
Current Linkages							
Public	6	5	4	5	4	4.8	
Vehicular	6	4	3	6	6	5	
Pedestrian	4	2	2	7	4	3.8	
Proposed Linkages	9	7	3	9	8	7.2	
Subtotal	25	18	12	27	22	20.8	N
Adjusted Linkages (4 vs 3 vars)	18.75	13.5	9	20.25	16.5	15.6	
Total	45.8	36.5	42.0	50.3	43.5	43.6	$\langle \downarrow$

Most Suitable Use: Ratings of SEL Dimensions

This example explores the potential re-zoning for a parcel currently zoned for industrial use. The analysis explores whether the "Most Fitting Use" might come from one of the four other major "food groups" of uses: office, retail, apartment and hotel. As noted, the analysis rates the static, environmental and linkages of the site

**Exhibit 11- 17** using the key attributes that make up each SEL

dimension on a scale of 1-10. These independent ratings are then added up to arrive at scores for each dimension with the highest score being the most "suitable" fit.<sup>4</sup>

Once the site has been rated for the SEL dimensions, the next stage is to assign weights to each dimension to reflect the relative importance the potential uses would attach to each of the categories. As noted, the weights differ for each potential user reflecting their basic utility functions. Weighted Ratings of SEL Dimensions

Weightings						
Factors/Attributes	Office	Retail	Industrial	Apartment	Hotel	Average
Static	40%	30%	30%	25%	40%	33%
Environmental	30%	30%	10%	25%	20%	23%
Linkages	30%	40%	60%	50%	40%	44%
Total	100%	100%	100%	100%	100%	100%

Weighted Ratings							
Factors/Attributes	Office	Retail	Industrial	Apartment	Hotel	AVG	
Static	5.6	3.0	2.7	5.0	6.4	4.5	
Environmental	3.9	3.9	2.4	2.5	2.2	3.0	
Linkages	5.6	5.4	5.4	10.1	6.6	6.6	
Total	15.1	12.3	10.5	17.6	15.2	14.2	
Adjusted to 50 point scale	8.4	6.8	5.8	9.8	8.4	7.9	

Exhibit 11-18

Exhibit 11-18 presents the weighted ratings, obtained by multiplying the SEL ratings by the respective SEL weightings. As noted, the Apartment use is the most "suitable" followed by the hotel and office. The "worst" use is the existing industrial which helps make the case for the rezoning of the site to accommodate another use.

<sup>&</sup>lt;sup>4</sup> The Linkage attributes are weighted to reduce them to the same base (i.e., 3 vs. 4) as the other attribute categories.

Once the Most Suitable Use has been determined, the analysis turns to the most "Politically Palatable Use." The objective of this phase is to rank-order the attractiveness of the potential uses to the local government, neighbors and other stakeholders. In essence, this phase of analysis can prioritize the alternative land uses with respect to their relative appeal to the broader community. The analysis can help avoid unnecessary confrontation with various stakeholders whose input can be expressly considered in the ultimate use decision.

### Most Politically Palatable Use

<b>Community Benefits: Unweighted</b>								
Factors/Attributes	Office	Retail	Industrial	Apartment	Hotel	AVG		
Market								
Economic Base	8	8	3	7	7	6.6		
Tax Base	8	8	2	6	7	6.2		
Infrastructure	6	6	3	5	8	5.6		
Neighborhood								
Design / Fit	5	9	2	7	6	5.8		
Compatible Use/Synergy	6	9	3	8	5	6.2		
Total	33	40	13	33	33	30.4		

<b>Community Benefits: Weighted</b>									
Factors/Attributes	Wgt	Office	Retail	Industrial	Apartment	Hotel	AVG		
Market									
Economic Base	10%	0.8	0.8	0.3	0.7	0.7	0.7		
Tax Base	10%	0.8	0.8	0.2	0.6	0.7	0.6		
Infrastructure	20%	1.2	1.2	0.6	1	1.6	1.1		
Neighborhood									
Design / Fit	30%	1.5	2.7	0.6	2.1	1.8	1.7		
Compatible Use/Synergy	30%	1.8	2.7	0.9	2.4	1.5	1.9		
Total	100%	6.1	8.2	2.6	6.8	6.3	6.0		

As noted in this exhibit, the community may have different preferences for the use of a particular site or district, seeking to obtain greater urban efficiencies and improve the overall harmony and quality of life it affords its residents. In this case, two major dimensions have been identified: market and neighborhood. The market attributes include the economic base, the tax base, and infrastructure. The neighborhood attributes include the design/fit of the potential uses, as well as the relative compatibility with

surrounding uses and the potential synergies they could contribute.

Exhibit 11-19, the existing industrial use is the least favored both on unweighted an weighted bases. On the other hand, the retail use emerges as the most attractive, followed by apartment and hotel.

Exhibit 11- 19

#### **Highest and Best Use**

In the Highest and Best Use analysis, the maximization of land value is added to the traditional feasibility criteria to compare alternatives. This expansion recognizes the fact that different uses have different return potentials and, at the same time, may entail different risks. The impact of adding "maximization of value" places emphasis on the relative economics of the alternatives. As noted, the current industrial use is rated the lowers

Unweighted: Highest & Best Use								
Criterion		Office	Retail	Industrial	Apartment	Hotel	AVG	
Legally Permissable		10	8	9	6	8	8.2	
Physically Possible		10	8	10	8	8	8.8	
Marketable		4	2	4	7	6	4.6	
Financially Feasible		4	4	2	8	6	4.8	
Maximum Value		9	4	2	8	6	5.8	
Total Scores		37	26	27	37	34	32.2	

Weighted: Highest & Best Use								
Criterion		Office	Retail	Industrial	Apartment	Hotel	AVG	
Legally Permissable	10%	1	0.8	0.9	0.6	0.8	0.8	
Physically Possible	5%	0.5	0.4	0.5	0.4	0.4	0.4	
Marketable	30%	1.2	0.6	1.2	2.1	1.8	1.4	
Financially Feasible	35%	1.4	1.4	0.7	2.8	2.1	1.7	
Maximum Value	20%	1.8	0.8	0.4	1.6	1.2	1.2	
Total		5.9	4.0	3.7	7.5	6.3	5.5	

Exhibit 11-20

on financial feasibility, especially if the land is marked to market under a different development or use scenario. After applying the weights that in this case are determined by the developer, the apartment use emerges as the H&B Use, followed by hotel and office.

### **Most Fitting Use**

Unweighted Adjusted Most Fitting Use							
Criteria		Office	Retail	Industrial	Apartment	Hotel	AVG
Most Suitable Use		8.4	6.8	5.8	9.8	8.4	7.9
Politically Palatable		6.1	8.2	2.6	6.8	6.3	6.0
Highest & Best Use		5.9	4.0	3.7	7.5	6.3	5.5
Unweighted Ratings		6.8	6.3	4.0	8.0	7.0	6.4

Weighted Adjusted Most Fitting Use							
Criteria	Wgts	Office	Retail	Industrial	Apartment	Hotel	AVG
Most Suitable Use	40%	3.4	2.7	2.3	3.9	3.4	3.1
Politically Palatable	30%	1.8	2.5	0.8	2.0	1.9	1.8
Highest & Best Use	30%	1.8	1.2	1.1	2.3	1.9	1.6
Weighted Ratings	100%	7.0	6.4	4.2	8.2	7.2	6.6

After the three types of use analysis have been completed, the results can be combined into an integrated Most Fitting Use model. As noted, this analysis requires that the weighted scores be adjusted to a common point base to avoid over-representation by one of the types of analysis. Once the various use ratings have been Exhibit 11-21 aggregated, they can be

assigned weights based on the relative importance assigned to them in the decision model. In this case, the most weight is assigned to the Most Suitable Use with the other users receiving equal weights. Once again, the apartment use emerges as the Most Fitting Use, followed by the hotel and office. At this point, the analysis can explore

the cost/benefit tradeoffs among the final scores to determine if the preliminary results hold up.

			_				
Attribution Analysis Weighted Adjusted MFU							
Criteria		Office	Retail	Industrial	Apartment	Hotel	AVG
Most Suitable Use		48%	43%	55%	48%	47%	48%
Politically Palatable		26%	38%	18%	25%	26%	27%
Highest & Best Use		25%	19%	26%	27%	26%	25%
Weighted Ratings		100%	100%	100%	100%	100%	100%

Deviation from Average							
Criteria		Office	Retail	Industrial	Apartment	Hotel	AVG
Most Suitable Use		7%	-13%	-26%	25%	7%	0%
Politically Palatable		2%	37%	-57%	13%	5%	0%
Highest & Best Use		8%	-27%	-32%	37%	15%	0%
Weighted Ratings		6%	-3%	-36%	25%	9%	0%

Exhibit 11-22

well as the final phase can also be changed to determine the "robustness" or stability of the conclusion. This form of sensitivity analysis can also help regulators and stakeholders maintain a sense of perspective and create boundaries that prevent them from placing excess reliance on a particular variable or criterion. For example, to get Retail to emerge as the Most Fitting Use, the weights would have to be heavily skewed toward "Most Politically Palatable" use with little or no weights assigned to Most Suitable and Highest & Best Use which in both cases, are dominated by Apartments.

## compiled, attribution analysis can be applied to understand which of the use models drives the final results, as well as compare how the scores for the uses differ from the averages. To engage the various stakeholders in the final

Once the Most Fitting Use

results have been

deliberations, the weights in each of the phases as

### **Attribution Analysis of Most Fitting Use**

### Creating Value via Incentive Programs

Interest in mixed-use development has dramatically increased over the past decade. Some of this interest stems from the belief that mixed-use projects are economically viable and can help create more walkable, pedestrian-friendly, socially desirable neighborhoods. While this assumption has intuitive appeal, mixed use development is relatively new for many developers and is more complex to develop and manage than individual use projects. Mixed-use projects are often more expensive to construct due to differences in design and structural requirements associated with different types of uses. Since such projects are relatively new in many markets, they To encourage mixed-use development and compensate for some of the added complexity and risk, many local jurisdictions offer incentive programs to encourage such development. Incentive programs are designed to affect certain desired behavior by changing the "value proposition" for developers.

are also more difficult to quantify in terms of return/risk parameters and thus must often provide higher proforma returns to compensate investors for potentially higher risk. Finally, many lenders are fairly conservative when it comes to new types of projects such as mixed-use, with particular concern over the viability of retail space in some projects. In addition mixed-use projects are often associated with other changes (e.g., low parking ratios) from proven practices, and often attract smaller non-credit tenants than larger single-use properties that are more flexible and can appeal to more established tenants.



#### Mixed-Use Incentive: Density Bonus

To encourage mixed-use development and compensate for some of the added complexity and risk, many local jurisdictions offer incentive programs to encourage such development.<sup>5</sup> Incentive programs are designed to affect certain desired behavior by changing the "value proposition" for developers. This strategy can be illustrated by reference to a typical mixed-use incentive program which provides a "density bonus" for developers who combine retail and residential into a mixed-use project. Exhibit 11-23 illustrates a mixed-use incentive program in Seattle. The extent of the incentive for adding retail to the

**1-23** first floor of a residential project differs by the base zoning district in which a site is located. In this case, the NC-30

refers to Neighborhood-Commercial with a 30 height cap, which NC-65 has a 65' height cap. In an early version of the mixed-use incentive program, by adding retail to the first floor a developer would be able to add another floor of residential beyond what is permitted under the standard height cap. Thus, if the cap was 3 stories of residential only, if it included retail the max building would be 4 stories of residential on

<sup>&</sup>lt;sup>5</sup> In addition to incentives, some jurisdictions actually mandate mixed-use development in certain designated areas. For example, for a number of years Bellevue Washington dictated mixed-use projects throughout the downtown core. Although this requirement has been relaxed and the notion of "retail" expanded, the requirement affected a lot of development activity.

top of 1 story of commercial space. This bonus is attractive in the sense that it allows the developer to spread the land costs over more residential units, thus reducing the marginal cost of land and has the added bonus of creating more view units with the increased floor of residential.

### Value Impacts of Density Bonus

	3 Story	5 Story N	/lixed-Use		
Component	Residential	Residential	Retail		
Lot size	20,000		20,000		
Lot Coverage Ratio	80%		90%		
Building Height	3	4	-		
Gross Building	48,000	72,000	18,000		
Land Ratio: Res Only	12%				
Construction Cost/sf	\$160	\$160	\$200		
<b>Total Construction Cos</b>	\$7,680,000	\$11,520,000	\$3,600,000		
Land Cost	\$1,047,273	\$797,922	\$249,351		
Total Cost to Create	\$8,727,273	\$12,317,922	\$3,849,353		
Cap Rate	7.0%	7.0%	8.5%		
Net Income Required	\$610,909	\$862,255	\$327,195		
Net Income Ratio	80%	80%	85%		
Gross Income Required	\$763,636	\$1,077,818	\$384,935		
Efficiency	85%	85%	80%		
Net Building sf	40800	61200	14400		
Rent/Net sf/year	\$19	\$18	\$27		
Average Unit Size	800	800	3600		
Number of Units	51	77	2		
Required \$/unit/mo	\$1,248	\$1,166	\$8,019		
Market Rent	\$1,500	\$1,500	\$30		
Market Value Complet	\$10,491,429	\$15,840,000	\$4,320,000		
Value Created	\$1,764,156	\$3,522,078	\$470,649		
Total Value Created	\$1,764,156		\$3,992,727		
	Excess Valu	Excess Value Created			

As with all interventions that affect the intensity or nature of land use decisions, mixed-use density bonuses can have a significant impact on Value Created as well as on market behavior. Exhibit 11-24 provides a summary of the value creation impacts of a typical mixed-use density program. The base case is a 3 story residential project which as a total Cost to Complete of \$8.7m and generates 51 apartment units. In this case, the Market Value Completed is \$10.5m which translates to a required average rent/unit of \$1,248/month. If the market can support \$1,500 average rent, the Value Created is \$1.77m which is around 20% above the cost.

The 5-Story option has a total Cost to Complete of \$12.3m for the 4 stories of residential and \$3.8m for the retail including tenant improvements. The land cost of \$1.05m for the raw site

**Exhibit 11-24** was the same in the 3 and 5 story projects, and was allocated between

the residential and commercial on pro rata basis using the relative costs of construction as the base. The commercial portion of the space has a cap rate of 8.5% to reflect the greater marketing risk. As noted the combined residential and retail components have a Value Created of \$3.99m which is a significant premium of \$2.2m over the 3 story project.

The value creation for the retail component is relatively low, although the raw figures understate the contribution since the addition of the retail is what enables the developer to capture the extra value. In case the retail market is soft and the first floor space doesn't capture the required rent, the excess value can be used as an implicit subsidy to reduce the retail rents. Thus, although the retail component might not work on its own, it makes a positive contribution to the mixed-use project and creates a value premium. Interestingly, lenders recognized the lack of economic viability for the retail portion of some mixed-use projects and did not give as much credit to the proforma rents forecast for such space, focusing on the core residential rent to support the underwriting. In reality, in many cases the "retail" space may be occupied by merchants who are drawn by the lower rents and may be more auto-dependent than initially

envisioned. While these types of tenants may still support the neighborhood and add to the walkability they may be more auto-dependent and have higher parking needs than initially envisioned.

Creating Value via Views and View Easements

In some cities, topography and land form allow the development of properties which offer unrestricted views of the urban skyline, mountains, water bodies or other amenities. These properties or units within properties will often create a significant view premium in value over non-view properties or non-view units. The attractiveness of views partially explains why upper floor units often sell or rent at higher prices than units on middle-or-lower floors. Thus, when a site offers the potential for views the development of properties that maximize view creation can create value beyond alternative projects



Exhibit 11-25

that are designed with little attention to such amenities.

### Harbor Steps: Seattle Price & Views<sup>6</sup>

Floorpla	n	Bed	Bath	SqFt	Available	Rent From
	Studio SW	0	1	560	2/1/2011	\$1,250
	Studio NE	0	1	660	2/5/2011	\$1,325
	Studio SE	0	1	515	Please call	Please call
	1BR Courtyard	1	1	600	1/15/2011	\$1,396
	1BR City	1	1	880	1/15/2011	\$1,467
	1BR Partial Water	1	1	660	1/15/2011	\$1,553
	1BR Water	1	1	775	1/20/2011	\$1,774
ि ह य	Penthouse 1BR City	1	1	1350	1/15/2011	\$1,805
	1BR + Water	1	1	825	Please call	Please call
	2BR Partial City	2	2	1000	1/15/2011	\$1,898
	2BR City	2	2	1125	1/15/2011	\$2,001
	Penthouse 2BR Water	2	2.5	1835	1/15/2011	\$3,855

View Units: Harbor Steps



Exhibit 11-27

Exhibit 11-27 presents the rental schedule for view and non-view units in the Harbor Steps apartment project in Seattle. As noted, different views have different prices providing added revenue over non-view units. This pricing structure allows the owner to offer some lower price units as well as premium units.

Exhibit 11-26

<sup>6</sup> Downloaded on 1/13/2011 from <u>http://www.equityapartments.com/washington/seattle-apartments/downtown-seattle/harbor-steps.aspx</u>

Gross Building SF

#### **Rental Structure Value Creation Base Case**

90,000

Exhibit 11- 28

Exhibits 11-29 and 11-30 provide an example of rental structure can be used to increase value over rental models that apply generic pricing that fails to capture potential market rent. As noted in the example, a developer has proposed the development of a five story 90,000 gross square foot building. Given a 12% land/total ratio and a cost of \$180/sf, the total cost to create would be \$18.4m. At a 7% cap rate and a Net Income Ratio of 82% the required gross rent/sf/year would be \$20.54. Assume the average gross market rent is \$24/sf/year the Market Value Completed would be \$21.5m for a Value Created of \$3.1m.

Exhibit 11-30 presents the value premium that could be generated by creating a rental schedule that more accurately reflected the market's willingness to pay. The model is applied by expressing the rent/floor as a percent of the base or average rate of \$24/sf. In this case, the middle floor is designated as the "base revenue unit" (BRU) or average floor, with the top floor

# Floors 5 Bldg Footprint 18,000 Efficiency 85% Net Rentable 76500 Construction Cost/sf 180 Land Ratio 12% \$16,200,000 Total Construction Cost Land Cost \$2,209,091 Total Cost to Create \$18,409,091 Cap Rate 7% \$1.288.636 Net Income Required Net Income Ratio 82% \$1,571,508 Gross Income Required Gross Rent/sf Required \$20.54 \$24.00 Gross Rent/sf/yr Market Market Value Completed \$21,507,429 Value Created \$3,098,338

with views renting at a 40% premium. The 4<sup>th</sup> floor rents at 125% of the base, with the 2<sup>nd</sup> discounted and the 1<sup>st</sup> at a modest

120% due to greater productivity associated with the ground floor. As such, the rents range from a high of \$33.60/sf for the top floor to a low of \$21.60 for the 2<sup>nd</sup> floor. These discounts or premiums could be extracted from the market or based on primary research. In this case, by applying the rental structure the net income would be \$1.73m which using the Cap rate of 7% would translate to a Market Value Completed of \$24.7m which would provide a Value Created premium of \$3.1m and a total Value Created of \$6.3m. A similar approach could be used to develop premium pricing for corner units or for units with more desirable yields to increase net income without overcharging for non-view or non-premium units.

	#Floors/	Rentable	Rent @%			Net
Type of Floors	Туре	sf/Floor	BRU	Gross Rent/sf	In	come/Floor
Top Floor (s)	1	15,300	140%	\$ 33.60	\$	421,546
4th Floor	1	15,300	125%	\$ 30.00	\$	376,380
Middle Floor (s)	1	15,300	100%	\$ 24.00	\$	301,104
2nd Floor	1	15,300	90%	\$ 21.60	\$	270,994
1st Floor	1	15,300	120%	\$ 28.80	\$	361,325
Total Rent/SF/yr.		76,500			\$	1,731,348
		Market	/alue with Rent	al Structure	\$	24,733,543
		E	xcess Value Cre	ated	\$	3,226,114
			Total '	Value Created	\$	6,324,452

#### **Rental Structure Value Creation Premium**

Exhibit 11-29

### Value Creation via View Control: Easements

In some markets in which views create significant value, owners have learned to place a premium on "protected views." Protected views may be created by restrictions on uses that could block a view, by natural landform or other conditions that prevent development from impinging on views, or by market

forces in which the value of existing development essentially pre-empts redevelopment of taller structures. In some cases, certain areas can be subject to public view easements which can protect site lines along certain paths. In addition, restrictions on building heights are typically written into zoning codes but can also be put in place through subsequent legislation. For example, in Seattle a height cap was placed on office buildings in the downtown in the early 90s as a backlash against some tall office towers that were perceived as "Darth Vader" type buildings that marred the horizon and ruined the city-scape. Ironically, this backlash created value for the pre-existing buildings as it effectively gave them a monopoly on views and protected them from encroachment by other tall buildings. Interestingly, after more than a decade of capping building heights, the height cap was lifted and public policy actually shifted toward allowing

In some markets in which views create significant value, owners have learned to place a premium on "protected views." Protected views may be created by restrictions on uses that could block a view, by natural landform or other conditions that prevent development from impinging on views, or by market forces in which the value of existing development essentially pre-empts redevelopment of taller structures.

taller, thinner buildings as a way of increasing density and creating a more vibrant downtown. Thus, "view restrictions" provided by the public sector may not always be permanent, creating the potential for windfalls and wipeouts depending on the extent to which they affect development decisions and restrict free-market behavior.

#### Harbor Steps: Private View Easements



Exhibit 11- 30

In addition to public restrictions that protect views, the private sector can encumber sites with view easements to protect views for targeted properties. This was the case in the previous Harbor Steps project. The initial developers acquired excess land between the site of the project and the waterfront. Since the excess land was at a significantly lower grade than the Harbor Steps project, under existing zoning it could not be developed to create views and thus was surplus property. To ensure that the property could not be up-zoned, the owner placed view easements on the property before selling it to a third party. In effect, these view easements created a permanent restriction on the building envelope that could be placed on the site and protected views in perpetuity.

#### **Building Envelope with and with View Easement**

An added bonus attached to the view easement was the creation of an option that could be exercised in the future to create even more of a value premium. Exhibit 11-32 illustrates the difference in development potential with and without the view easement. Due to height and set-back constraints, a building on the affected site will be both shorter and narrower than what would be permitted under the existing zoning. If the developer of the site with



Exhibit 11-31

protected views re-acquires the site, the view easements could be extinguished creating a monopoly value. As in the case of up-zoning the increased density could increase the value-creation on the site. Since the general market would not have access to this value, the acquisition price for the land would not include the added development potential. Thus, the site would have enhanced value to the original developer and would provide a competitive advantage over other developers.

### Creating Value via Large-Scale Multi-Use Development

The interconnected nature of real estate with contiguous properties, land uses and users, along with linkages to the surrounding environs provides real estate with a synergistic potential not available in other asset classes. By carefully orchestrating the mix of real estate offerings in a particular location or area, a developer can take advantage of synergies whereby the "whole project" or the aggregation of the linked components becomes worth more than the sum of the parts. In a technical sense, these synergies are referred to as agglomeration benefits whereby the project or targeted area becomes more selfsustaining, offering an array of goods and services that create magnetic attraction for customers seeking To encourage mixed-use development and compensate for some of the added complexity and risk, many local jurisdictions offer incentive programs to encourage such development. Incentive programs are designed to affect certain desired behavior by changing the "value proposition" for developers.

a more integrated, efficient and coordinate real estate-related experience. This principle is well-known in the retail arena, where the combination of tenants and the ability to match the cumulative mix to the demographics of the trade area is of paramount concern. This same principle has been applied to largescale multi-use projects which are comprised of various combinations of retail, residential, and office users.

The rational for the creation of commercial nodes or centers helps explain the success of vibrant downtowns that contain a mix of retail, office, commercial, residential and hotels (e.g., Chicago, New York, Seattle). Despite these notable success stories, the creation of viable multi-use nodes that are comprised of an informal network of properties controlled by fragmented ownership can be difficult to orchestrate. Thus, the success of such districts can depend on the support of and advocate who is focused on protecting the integrity of the region and helping advance its cause. In some cases this role is served by

a downtown or business association, the success of such efforts ultimately depends on the voluntary cooperation of individual owners. While this form of informal collaboration can occur it is not guaranteed, especially during times of market duress when some owners may be forced to look to their own best interest rather than that of the common good. Additionally, some absentee owners or owners who do not understand spatial market fundamentals may not be aware of the importance of helping maintain the integrity of such districts or what they can do to reinforce it.

To help supplement the efforts of the private sector to create viable urban nodes, the local government can play a critical role. This support can take a number of forms ranging from encouraging certain land uses to providing the infrastructure (e.g., parking, parks and recreation) and services (e.g., police, fire, safety) necessary to support the targeted area. Unfortunately, such government support can change over time, especially during times of severe budget stress which may result in a reduction of critical services. It can also occur after the election of a new set of government officials who may not be responsive to the needs of the local business community or have conflicting agendas. An example of this would be a major change in parking policies that could restrict spaces and/or increase costs thus

One of the strategies for creating and maintaining a viable commercial node that is insulated from the risks of political whims and economic self-interests is the development of large-scale multiuse projects. While patterned after mixed-use projects and successful urban centers, such developments have the advantage of centralized management and ownership.

skewing shoppers to other retail options. Similarly, a change in transportation policies that are adopted to promote mass transit and discourage use of automobiles may hurt retailers who depend on automobile-dependent customers who reside outside of the proximate area.



**The Bellevue Collection** 

One of the strategies for creating and maintaining a viable commercial node that is insulated from dependence on voluntary collaboration among owners and support of elected officials is the development of large-scale multi-use projects. While such projects benefit from positive synergies with neighboring properties, in some cases they can be less dependent

**Exhibit 11- 32** on such support. One of the key advantages of large-scale multi-

use projects is centralized management and ownership. This allows the developer to play a role that is analogous to that of a regional mall manager, paying close attention to the mix of uses and tenants to

create a more cohesive, synergistic offering. This place-bound experience can be further enhanced by paying attention to the contiguous areas surrounding the project, to create further synergies.

A successful example of a large-scale multi-use project is the Bellevue Collection created by Kemper Development in Bellevue Washington; a vibrant node that complements the Seattle downtown in the larger urban setting. As noted in Exhibit 11-33, the "Bellevue Collection" has been carefully integrated to create an interlinked network of compatible uses in which the individual pieces benefit from the synergy and connectivity among the various uses. By connecting the buildings through a combination of activated streets and skyways, the project is somewhat self-contained; benefiting from the success of the larger urban center in which it is located but not as dependent on its success as free-standing projects in the same market. By recognizing its linkages to the larger urban core, the developers have also been able to capitalize on other development activity, adjusting the tenant mix and price points to appeal to the changing demographics in the immediate trade area without diluting its appeal to customers in the broader trade area from which it draws.

	Retail	Office	Hotel	Residential	Total
Bellevue Square	1,331,300	-0-	-0-	-0-	1,331,300
Bellevue Place	62,700	433,800	672,400	-0-	1,168,900
			733 rooms		
Lincoln Square	309,600	540,400	312,600	230,900	1,393,500
			337 rooms	148 units	
Total	1,703,600	974,200	985,000	230,900	3,893,700
			1,070 rooms	148 units	

**Bellevue Collection: Mix of Uses** 

In terms of uses, the Bellevue Collection is anchored by the retail and restaurant space with some 1.7 million sf strategically positioned in three interconnected buildings. The development also includes almost a million sf of offices, over 1,000 hotel rooms and 148 units of high-end residential condominiums. By operating these distinct but related land uses as a whole, management has been able

to create positive synergies that have enhance performance and

Exhibit 11-33

created significant intangible value. While it might seem like the multi-use project may have been envisioned at its inception, the reality is that various components were acquired along the way, picking up the pieces of abandoned projects that lacked the synergy that the developers were able to create. Going forward, additional pieces of the puzzle are envisioned, although significant attention is being place on "controlling value" to ensure that the project is able to respond to changes in demand and competition.

### Large-Scale Multi-Use Research Parks

In addition to large-scale commercially-oriented projects in urban markets, the trend toward multi-use projects has carried over to other types of projects. An example of this trend is the evolution of large-scale technology and/or research parks which has been moving to multi-use models. This trend has emerged on a global scale as countries position themselves in the global economy, competing for knowledge companies that are being actively recruited and are increasingly seeking specialized campus settings.



Exhibit 11-34 presents a snapshot of the 151 large scale parks (over 250 acres) in terms of positioning and tenant composition.<sup>7</sup> As noted, the vast major of parks classify themselves as mixed-use. While this market concentration may seem intuitively acceptable in light of the recent surge of interest in mixed-used development, the classification does not accurately reflect the growth in this sector.

**Exhibit 11- 34** After exploring the 101 mixed-use parks in more detail in terms of what they really

offered, the majority of them were comprised of parks that "mixed" industrial, flex and R&D. However, some 40% of the parks did indeed boast a true mix of uses, including offices, research facilities, light manufacturing and distribution along with retail, restaurant, hotels, and residential. This growing trend toward mixed-use campuses is even more pronounced when reviewing the announcements of park expansions and the overall strategy of adding more complementary land uses to the mix, especially retail and residential. In addition, a number of parks are seeking to add recreational amenities to help create healthier, more walkable communities. To foster greater connections among tenants, pathways are being configured as "interconnected" networks, with plazas and pavilions to encourage congregating. Extending this strategy even further, some parks are adding sports fields and other large active recreational amenities.

### **Tenant Preferences for Research/Technology Parks**



<sup>&</sup>lt;sup>7</sup> DeLisle, James R., "Real Estate Requirements of Emerging Technology Industry," Situs Research, 2005.

### **Composition of Technology Parks**

Factors	Attributes	Criteria
Static Att	ributes	
	Site	
	Core Site Size (biotech, R&I	Min 200-300 acres
	Mixed-Use	Min 100 acres mixed-use
	Expansion	Min 100 acres
	Quality	No environmental
	Core Infrastructure	In place, up front
	Structure	
	Improvements	High consistent quality
	Scale, Context	Moderate scale, 2-3 story
	Design/Re-use	Flexible; suitable for reconfiguration
	Parking	Adequate on-site parking for uses
Environm	ental Attributes	
	Quality	Campus feel
	Natural Amenities	Adequate open space, parks
	Community Orientation	Create opportunites for "connections"
	Harmony	Represent a balanced mix of tenants
	Education	Offer advanced education or training
	Recreation	Exercise paths, trail system
	Security	Defensible boundaries, zones
Linkages		
	Airports	Within 20 minutes
	Research Universities	Within 30 minutes
	Urban Centers	If suburban, 30 minutes
	Major Shopping	30 minutes
	Highways	Adjacent to or proximate
	Transportation	Accessible to mass transit
	Affordable Housing	Within 30 minutes and/or on-site
Managem	ent	
	Ownership	Single or Joint Venture for Continuity
	Style	Institutional style
	Master Plan Guidance	Mandatory including phasing
	Capitalization	Adequately funded for up-front costs
	Phasing	Developed in stages, with exit strategies
	Flexibility	Ability to respond to changing demand
	Intangible Value Creation	Proactive, mall-like management
	Operational Requirements	Consitent, disciplined management

In terms of the staticenvironmental-linkage dimensions of technology/research parks, tenants are looking for a number of attributes as noted. They are also concerned about the on-going operation of the park, which translates to a number of management preferences designed to provide a balance between consistency and quality of the overall enterprise operation. At the same time, tenants recognize the importance of providing management with flexibility to allow them to respond to changing market conditions and/or technological innovations.

Exhibit 11-36

### Creating Value via Land Development

Once the entitlements for a property have been approved, another value creation opportunity is "land development." In this phase, the land is prepared for vertical development (e.g., sticks and mortar buildings) by adding the infrastructure, roads, utilities and other off-site amenities that are necessary to support on-site development. As noted in the example, the raw land cost per unit may be \$50,000 before entitlements and offsite improvements. By getting the site entitled and adding sewer, water and storm drainage, as well as rough grading, offsite roads and other off-site fees, the value of the land increases to

\$125,000. By adding the final on-site improvements (e.g., on-site roads, hookups and final grading, the lot is ready for construction and the value has risen to \$200,000 which is four times the raw land costs. If the target market could support a \$500,000 house and building costs and profit came to \$120/sf, the site would support a 2,500 sf house. At the same time, the aggregate land cost would be 40% of the total.







In terms of profit, if the land developer sells to homebuilders, the profit margin could be 30% for a total value creation of \$60,000 which would be 12% of the total cost of the finished house. From the homebuilder's perspective, the profit margin (i.e., value creation) would be a more modest 10% for \$30,000 on the cost of construction which would be 6% of the total cost including land. On the other hand, for the land developer the profit margin would be 30% for \$60,000 or 12% of total cost. If the homebuilder was also the land developer, the value they create would be \$90,000 or 18% of the total cost. In the past, this increased margin attracted many homebuilders into the land development side of the business. However, when the market collapsed in 2006 it also made many homebuilders insolvent and unable to carry the burden of developed land. Other homebuilders had exited the land development business prior to that time, realizing that the high margins on land development are justified due to the higher risk and costs.

#### Land Development Margins

	Dollars	Value Creation and Margins			
Component		Profit Margin	Dollars	Margin on Cost	
Construction Cost	\$300,000	10%	\$30,000	6%	
Land cost	\$200,000	30%	\$60,000	12%	
Total Cost	\$500,000		\$90,000	18%	

Exhibit 11-38

### Creating Value via Development

To create value for a project, a developer takes on the risk of investing capital in a project in anticipation that the value of the project upon completion will exceed the costs of production. During development, the risk associated with development goes through a number of phases. In the initial phases or project planning and entitlements, proposed projects have a relatively high mortality rate. That is, many never move beyond this stage. Given this level of risk, the required returns are relatively high to compensate for the fact the project may not be completed and the investment may not be recovered.

To create value for a project, a developer takes on the risk of investing capital in a project in anticipation that the value of the project upon completion will exceed the costs of production. During development, the risk associated with development goes through a number of phases. In the initial phases or project planning and entitlements, proposed projects have a relatively high mortality rate.

**Development: Value Premium vs. Cost** 



project becomes more marketable and the

has relatively little value in terms of

if the project is not completed, the land

by the potential

demolition costs to

project. During the

costs of production increase while the

risks decrease as the

remove an unfinished

marginal cost to complete declines. However, until it hits a critical point in completion, little value has been created regardless of the investment of materials, labor and capital. Indeed, if the project is abandoned the value may be negative reflecting a deduction against the raw land value for the costs of demolition and site preparation. By the time a project has been completed, the risks have declined to those associated with a speculative building. Some of these risks may have been laid off via pre-leasing or presales although the developer faces risks of bringing the property in on time and on budget to activate the leases or sales contracts.

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Exhibit 11-39

		Takal		Pi	ofit Margi	n
Component	Units	lotal	Share of	Profit	Profit in	Margin
		Donars	Cost	Margin	\$'s	on Cost
Construction Cost						
Size of House in sf	2,500					
Cost/sf	\$120					
Construction Cost		\$300,000	75%	10%	\$30,000	8%
+ Land Cost		\$100,000	25%	30%	\$30,000	8%
Cost to Complete		\$400,000	100%		\$60,000	15%
Market Value Completed	\$220	\$550,000				
- Sales Expense	5%	\$27,500				
= Value Created (VC)		\$122,500				
Magin without and with Land			22%		\$182,500	33%

#### **Residential Development Value Creation**

The value creation for building development is similar for residential forsale properties and incomegenerating commercial properties. Exhibit 11-40 presents the Value Created for a hypothetical 2,500 square foot house. As noted, the Cost to Complete is \$400,000 including \$100,000 in land Exhibit 11-40 costs. Once the house is completed, its market

value based on comparable sales is \$550,000 or \$220/sf. After netting out sales expenses of 5%, the Value Created is \$122,500. Thus, although the building only had an 8% profit margin built into the construction, if the Value on Completion is actually \$550,000, the total profit margin is \$122,000 or 22% of the Value on Completion. If the homebuilder was also the land developer, the profit margin would be \$182,500 which is 33% of the Market Value Created.

The value creation for commercial property is similar to that of residential if the properties are being sold. However, if the property is to be held as an investment -or will be valued as an investment propertythe Market Value Completed is a function of the income generating potential, the risk of the investment and the capital market return requirements. During the construction phase, a property has high risk and little value due to the uncertainty surrounding the costs of completion and the income-generating potential. Once the property has been completed and reached stabilized occupancy levels, the value increases as the risk

Once the property has reached stabilized occupancy levels, the value increases as the risk declines to an operating period risk level and the property begins generating revenue. At this point, the cap rate play (i.e., decline in required yield) creates a premium in the value which exceeds the cost of construction. This premium becomes the profit that the developer generates through entrepreneurial efforts.

declines to an operating period risk level and the property begins generating revenue. At this point, the cap rate play (i.e., decline in required yield) creates a premium in the value which exceeds the cost of construction. This premium becomes the profit that the developer generates through entrepreneurial efforts. The extent of profit margin depends on the level of the income the project generates under existing leases and the risk or uncertainty surrounding future revenue streams. This risk is associated with the credit-worthiness of the tenants, the rent roll pattern, and the positioning of the property relative to competitive alternatives that influences the level of rents it can command relative to the broader market.

	Proforma:	Developer's
Cost and Revenue Items	Speculative	Fee
Gross sf	588,235	
Efficiency Factor	85%	
Net Rentable sf	500,000	
Land Cost	\$25,000,000	
Cost/Gross sf	\$220	
Tenant Imp/sf	\$40	
Total Construction Costs	\$152,941,176	
Cost to Complete	\$177,941,176	8%
Cap Rate	8.00%	
Net Income Required	\$14,235,294	
Net Income Ratio	80%	
Gross Income Required	\$17,794,118	
Gross Rent Required/sf	\$35.59	
Gross Market Rent Actual/sf	\$40.00	
Net Income Proforma	\$16,000,000	
Market Value Completed	\$200,000,000	\$14,235,294
Value Created	\$22,058,824	
Total Profit and Value		\$36,294,118
Developer's Margin on Cost		20%

#### **Creating Value Commercial Property Development**

The value creation of development can be best illustrated with a brief example. Take the property profiled in Exhibit 11-41. As noted, the 588,235 sf building has an efficiency factor (i.e., rentable to gross) of 85% which translates to 500,000sf of net rentable space. If the land costs are \$25m, the total Cost to Create is \$177.9m. Assume the cap rate is 8% since the development is speculative and faces leasing risk. The \$14.2 million is the Net Income required to compensate the investor each year. To convert that to Gross Income or rent required, the vacancy and operating expenses must be netted out. This is achieve by dividing the Net Income by the Net Income Ratio to get to \$17.8m which, when divided by the 500,000sf net rentable is \$35.59/sf/year gross rent. That is the gross rent/sf the new tenants must pay on average to support the project's cost and provide the 8% return needed to compensate for risk. Now, if the gross market rent is actually \$40/sf, the Market Value Completed is \$200m for a Value Created of

Exhibit 11- 41

\$22m. If the developer has an 8% profit margin built into the costs, the total margin would be 20% or \$26.3m.

### Creating Value via Leverage

In cases where the cost of debt or leverage is lower than the cap rate or yield on a project the use of leverage can create some additional value. Assume the buyer of the previous property has the ability to obtain an 80% loan at a rate of 6%. Since the loan rate is lower than the required 8% cap rate (Rr) for the project as a whole, the blended rate –which is known as the Weighted Cost of Capital

(Wcc)—is lower. Using the basic equation V = Income/Rate and substituting the Wcc for

	Proforma:	
Cost and Revenue Items	Speculative	
Cap Rate	8.00%	
Net Income Proforma	\$16,000,000	n
Market Value Acquired	\$200,000,000	
Loan-to-Value	80%	
Mortgate Rate	6.00%	
Weighted Cost of Capital		6.40%
Market Value Leve	\$250,000,000	
Vale Created via Lev	\$50,000,000	

### Leverage Impact on Value Created

Exhibit 11-42

the rate, the value impact can be isolated. The Weighted Cost of Capital is the blended rate:

$$Wcc = (LV * Mtg Rate) + ((1-LV)*Rr)$$
  
= (80% \* 6%) + (20% \* 8%)  
= 6.40%

Now, the Market Value Completed with leverage is \$250m (i.e., \$16m/6.4%). In this case, the leverage created \$50m in value.

#### Leverage Value Created Wipeout

	Market Value	Market Value
Return and Leverage Items	on Purchase	at Sale
Cap Rate	8.00%	8.00%
Net Income Proforma	\$16,000,000	\$16,000,000
Market Value Completed	\$200,000,000	
Loan-to-Value	80%	80%
Mortgate Rate	6.00%	8.00%
Weighted Cost of Capital	6.40%	8.00%
Market Value Leveraged	\$250,000,000	\$200,000,000
Vale Created via Leverage	\$50,000,000	
Initial Leverage	\$200,000,000	ļ
Initial Equity	\$50,000,000	
	Equity on Sale	\$0

While the Value Created by leverage may be attractive, it should be noted that it is not without risk. That is, the buyer has paid more than the Market Value Completed without leverage for the project, using the leverage to support a higher price at the fixed income level of \$40/sf. Although the higher price might be justified, if mortgage rates rise at the time of sale, the Value Created premium can quickly disappear leaving the borrower with a property that has note equity value or is underwater. As noted in Exhibit 11-43, if mortgage rates increase 200basis points to 8%, the equity in the

**Controlling Value Over Life Cycle** 

Exhibit 11-43 previous example is wiped out. In such an

environment, cap rates may also increase creating negative equity.

## Stage 2: Controlling Value

Once value has been created, attention shifts toward controlling or protecting value. Controlling value occurs on the physical side of the asset dealing with maintenance, repairs and replacements. It also extends to the financial side of the asset since the value of commercial property depends on its ability to generate income over



#### Exhibit 11-44

Controlling value occurs on the physical side of the asset dealing with maintenance, repairs and replacements to ensure the property is adequately maintained to avoid degradation. It also extends to the financial side of the asset since the value of commercial property depends on its ability to generate income over time. This income generation in turn depends on the ability to attract and retain the tenants who comprise the initial rent roll... time. This income generation in turn depends on the ability to attract and retain the tenants who comprise the initial rent roll as well as the ability to replace them when leases expire. At the same time, the value of that income stream and other economic and non-economic benefits a project may entail must be managed in terms of the capital market environment in which such benefits will ultimately be priced. As both a spatial resource and a capital asset, the reality is that real estate operates in a dynamic, and at times, hypercompetitive market.



Exhibit 11-46

As a tangible asset that is fixed in location real estate is subject to a number of internal and external change agents. The fact that all three dimensions of the underlying product construct are changing over time elevates the importance of continuous asset and property management. For example, the Static

Attributes (i.e., building, site improvements, landscaping) are all wasting assets and subject to erosion over time. To protect the integrity of the physical sides of the asset, property and asset management oversight must be deployed to ensure it is properly maintained and retains a competitive position in the market. The same is true with the financial elements of the property; the income-generating ability must

be managed to ensure the net cash flows and hence value are in line with proforma projections. This income-generating potential is derived in part from the environmental (e.g., immediate surroundings) attributes that create the context within which the property resides as well as from the linkages attributes or connections among places that give a property its logistical value. In addition to continuous change, the environmental and linkages elements of real estate depend on external forces of which many are beyond the control of the manager but which none-the-less can materially affect its competitive position in the broader market and its appeal to space users.

In addition to responding to changes in competitive supply, the value of a property can be materially affected by changes in demand for space. Changes in demand can emanate from gradual demographic shifts within a trade area or neighborhood that cause changes To protect the integrity of the physical sides of the asset, property and asset management oversight must be deployed to ensure it is properly maintained and retains a competitive position in the market. The same is true with the financial elements of the property; the income-generating ability must be managed to ensure the net cash flows and hence value are in line with proforma projections.

in the composition of the customer base. They may also originate in changes in preferences or business practices that affect demand for real estate and hence the value of existing properties. For example,

Changes in demand can emanate from gradual demographic shifts within a trade area or neighborhood that cause changes in the composition of the customer base. They may also originate in changes in preferences or business practices that affect demand for real estate and hence the value of existing properties. technological innovations may reduce the importance of some linkages, allowing tenants employees to work in a more virtual manner and hence put less emphasis on linkages. Similarly, a shift to more dynamic business models may translate to the demand for more flexible real estate spaces which allow tenants to reconfigure space at a relatively low cost.

The emergence of heightened social awareness and the desire of tenants to demonstrate corporate social responsibility may shift demand away from inefficient buildings causing a decline in value toward more efficient buildings causing a premium in rents and hence values. While the market may react to such shifts in demand over time, due to the inelasticity of supply there are some lag times between a shift in demand and the ability to satisfy that change. To control the value

proposition for real estate during periods of dramatic change in spatial and capital markets, properties must be strategically managed. On the spatial side, management must ensure that properties are closely aligned with space users and have the ability to determine whether an apparent change in demand is merely a cyclical reaction to some event or trigger, or whether it is an enduring demand that will have a long-term impact on value.

### Property & Asset Management to Control Value

The objective of a property management system it to manage the day-to-day operations of a building, making appropriate trade-offs regarding the level of maintenance and tenant satisfaction and the operating budget. The scope of property management is fairly broad, depending on the underlying mission and goals and objectives with which they have been charged. At a basic level, property management addresses items associated with the accessibility, safety and integrity of the building. Beyond these basic core functions they also oversee routine maintenance as well as preventive maintenance that affect the livability or habitability of the premises for current and prospective tenants. Finally, property

The objective of a property management system it to manage the day-to-day operations of a building, making appropriate trade-offs regarding the level of maintenance and tenant satisfaction and the operating budget... the asset manager operates at a more strategic level than the property manager and is charged with understanding the unique drivers of value, market forces and emerging trends that affect the broader sector of the market within which a particular property type operates.

managers are often charged with managing the leasing project, engaging leasing agents and negotiating with prospective tenants. The parameters within which they make leasing decisions are often made outside of the property management function although they may be significantly involved in such deliberations.

#### **Objective and Scope of Property Management**

# **Objective of Property Management**

- To make appropriate trade-offs between facility and user needs and budgets
- To maintain focus on a property or building focused
- To operate in a tenant-oriented mannter; approaching them as customers

# Scope of Property Management

- Leasing: negotiate terms and conditions within policies
- Property Maintenance: oversee routine and preventive
- Property Management: safety, accessibility & livability

As noted in Exhibit 11-48, a property management system reflects a continuous loop starting with some goals and objectives that lead to the initial design. Once the system has been designed, individual property managers must be trained and the system must be implemented. To ensure the system is working, specific metrics must be established to gauge the performance of the system. This is particularly important since the system



operates on a budget and thus the property manager must determine the appropriate level of response for various types of event triggers. Thus, certain guidelines should be established to determine the nature and timing of response paying close attention to the cost/benefit equation as well as to difficult trade-offs that have to be made between customer satisfaction and operational solvency. Once the system is in place and operating, the performance can be audited to determine if additional value engineering is needed or if other adjustments are warranted.



Exhibit 11-49

The asset management function differs somewhat from the property management function although in smaller operations both functions may be performed by the same parties. In general, the asset manager

Benchmarking and Trend-lining Service Calls

operates at a more strategic level than the property manager and is charged with understanding the unique drivers of value, market forces and emerging trends that affect the broader sector of the market within which a particular property type operates.

#### **Objective and Scope of Asset Management**

# **Objective of Asset Management**

- To provide strategic support as property or industry sector specialists
- To provide actical oversight of detailed tasks
- To connect property and portfolio management level decision-makers

## Scope of Asset Management

- Help achieve investor's goals
- Ensure property is professionally managed to industry standards
- Develop and implement effective asset management systems

Exhibit 11-50

As with other managerial systems and operational programs, the asset and property management programs are designed to ensure that they satisfy certain goals and objectives. While some of these objectives address the physical and financial needs of an individual property such decisions are typically made with an eye to how that particular property fits into to the larger portfolio or to its peer universe of other properties. As with other decision-support systems associated with real estate, the asset management system is a continuous operational model that culminates in monitoring and feedback. This requirement stems from the dynamic and competitive arena within which most properties operate.



### Creating/Controlling Value via Leasing

The owner of a building can create value on an existing building by leasing it to AAA-credit tenants. This has the effect of significantly reducing the leasing risk which translates to a lower cap rate. It also reduces tenant credit risk which could cause a decline in income from the levels in the proforma that may have been based on contractual lease terms. As noted in Exhibit 11-52, the reduction in a cap rate from 8% to 6.2% associated with upgrading tenant quality can Create a value premium of \$58m on the project in the previous example.

	Market Value	Market Value:
	Speculative	AAA Pre-
Proforma Items	Leasing	leased
Gross sf	588,235	
Efficiency Factor	85%	
Net Rentable sf	500,000	
Land Cost	\$25,000,000	
Cost/Gross sf	\$220	
Tenant Imp/sf	\$40	
Total Construction Costs	\$152,941,176	
Cost to Complete	\$177,941,176	
Net Income Ratio	80%	
Gross Market Rent Actual/sf	\$40.00	
Cap Rate	8.00%	6.20%
Net Income Proforma	\$16,000,000	\$16,000,000
Market Vlue Acquired	\$200,000,000	
Market Value AAA Leased		\$258,064,516
Value Created via Leasing		\$58,064,516

#### **Creating Value via AAA Credit Leasing**

Exhibit 11-52

**Intangible Value** 

### Creating/Controlling Intangible Value

The notion of "intangible value" has triggered significant debates among appraisers and others charged with predicting prices or explaining the value proposition for real estate. Intangible value is recognized in other asset classes (e.g., goodwill, branding, trade secrets) which are more efficient than the real estate asset class and hence somewhat more difficult to establish and capture. On the other hand, given the inefficiency of real estate coupled with low barriers to entry and the absence of uniform practices, the existence of intangible value is more common.

Interestingly, the notion is also less understood and hence not as well recognized and by extension, accurately priced in the market.



Simply stated, to the extent that management transcends typical market practices and/or possess monopolistic rights to superior real estate that cannot be replicated, the resultant intangible value can attach a premium to the value of a property that can endure during its operating period. Simply stated, to the extent that management transcends typical market practices and/or possess monopolistic rights to superior real estate that cannot be replicated, the resultant "intangible value" can attach a premium to the value of a property that can endure during its operating period. On the other hand, to the extent that management lags best practices or controls inferior, commodity type space, the property value is likely to suffer from negative intangible value and suffer from discounts to value. This is particularly true during periods of the real estate cycle in which spatial and capital markets are aligned and investors focus on market fundamentals associated with the spatial side of the market.

#### Sources of Intangible Value

Income Premium	<ul> <li>Excess rents over market</li> <li>Percentage Rents</li> <li>Other Income: kiosks, services, amenities</li> <li>Rent roll; synergy &amp; tenant retention</li> <li>Advertising and promotion</li> </ul>
Operational Premium	<ul> <li>Economies of scale</li> <li>Cost management programs</li> <li>Cost Sharing: pass-throughs and reimbursements</li> <li>Project Enhancement</li> </ul>
Entity Value-Add	<ul> <li>Branding</li> <li>Goodwill and reputational value</li> <li>Market presence and relationships</li> <li>Insitutional leverage; access to capital</li> </ul>
Entrepreneurial/ Management Value	<ul> <li>Entrepreneurial value, creativity</li> <li>Specialized skills and/or labor force</li> <li>Trade secrets</li> <li>Market knowledge</li> </ul>

Exhibit 11-54

The value of real estate can be associated with three elements: the value of the real estate itself; the value of any personal property that affects the value of the property as a going concern (e.g., a liquor license for a bar); and, intangible assets. These latter assets are associated with the fact that the nature and quality of management can make a significant difference in the value of the property. The notion of intangible value is critical to an accurate estimate of the value of a property, since in the absence of such extraordinary measures, the premium would quickly dissolve, with the value reverting to the "average" for such an asset. On the other hand, inferior or below-standard management practices can create negative intangible

value; a situation in which the property is worth less than it would if the management practices were upgraded to the market standard. In such cases, it may be possible to "create value" without changing the underlying product itself. Intangible value can be created through several avenues including those that create income premiums, operational premiums, entity values and management values.

Income Premium. The creation of intangible value through income premiums occurs when a property or asset manager may be able to command rents that exceed those in the market as a whole. This could occur in shopping centers where a combination of tenant mix and leasing skills may create a situation where tenants can afford to pay premium rents above what they could otherwise afford. The notion of "affordability" can be illustrated by reference to the "Real Estate Capture Ratio (RCR)." Briefly, in a retail context this is the percent of revenues generated at a particular location that can be allocated to real estate at that location. This is also referred to as the "Total Occupancy Cost" ratio. In essence, the ratio is used to determine the rent that can be paid at an outlet and allow the tenant to stay competitive.

The creation of intangible value through income premiums occurs when a property or asset manager may be able to command rents that exceed those in the market as a whole. This could occur in shopping centers where a combination of tenant mix and leasing skills may create a situation where tenants can afford to pay premium rents above what they could otherwise afford.

A typical Total Occupancy Cost ratio for retailers is 14% of gross sales. If the rent exceeds that amount, the tenant can become the "high cost" provider when costs for labor and goods are added back into the equation. Over time, the merchant will not be able to compete and will lose sales. Alternatively, if the sales projections are not met, the individual unit is likely to be an underperformer relative to other stores in the chain. Some retailers are willing to continue to operate outlets that are not unit profitable to maintain market share and will be willing to subsidize those operations. However, over time competitive pressures will make poorer performing or unprofitable outlets candidates for closure.

### Real Estate Capture Ratio: aka Total Occupancy Cost



Exhibit 11-55

Given the importance of unit level cash solvency, in order to justify higher rents the owner must be able to help tenants increase total sales. This can be achieved by proactive matching of the tenant mix to the demographics of the trade area to increase traffic and insulate the center from leakage due to sales being lost to other malls. Traffic and sales can also be increased through advertising and promotional strategies that elevate the mall to the level of a destination. An example of this would be the Snowflake Lane celebration created by developers of Bellevue Square which helps attract customers to the mall and to ancillary facilities including restaurants,

hotels and business services. Mall managers could also increase sales through a related strategy tied to percentage rents which would provide short-term kickers to rent until rents were reset in accordance with lease maturities or base rental adjustments. Finally, managers could increase the productivity of a mall by adding kiosks, pushcarts and other temporary spaces, or by adding concierge or other services to increase revenues. To the extent that managers can create a mall that benefits from symbiotic relations and outperform the market as a whole, they can create intangible value. This intangible value is a premium over the value that would be justified if the property performed on par with comparable properties.

To the extent that managers can create a mall that benefits from symbiotic relations and outperform the market as a whole, they can create intangible value. This intangible value is a premium over the value that would be justified if the property performed on par with comparable properties.

Exhibit 11-56 illustrates how tangible value can be created for a regional mall that has been running for some 7 years. As noted, three scenarios of mall management (e.g., passive, typical/best practice, or premium) could be applied to the mall. Under the passive approach, tenants are automatically renewed with no particular strategy to respond to changing demographics and new competition that has moved into the trade area. As a result, gross sales have slipped to \$250/sf putting downward pressure on affordable rents which are determined by applying a 14% Total Occupancy Cost rate and netting out expenses.



#### **Income Premium: Regional Mall**

Exhibit 11-56

As noted, the passive management of the mall has resulted in an increase in the risk profile which has driven up cap rates to 8.5% rather than the proformas estimates. This translates to a value of \$280/sf which is less than the initial cost of construction. This creates a negative tangible value of \$76.7m for the 1msf net rentable mall. In the second scenario, the management operates at a best practice level, with sales/sf increasing to \$400 which translates to a net rent of \$45/sf. Since the mall is competitively performing and has defended itself against the new competition, it commands a lower cap rate of 7.5% which translates to a value of \$508/sf. Compared to the initial costs; this scenario represents an intangible value of \$191m. In the third scenario, the manager pulls out all the strings, drawing on its entity value (e.g., branding, goodwill, market presence and relationships) and management value (e.g., entrepreneurial creativity, specialized skills, trade secrets and superior market knowledge) to increase sales to \$600/sf. At this level of productivity, the mall has been elevated to the level of a trophy property, commanding a 6.5% cap rate. Under these conditions, the value of the mall increases to \$879/sf with a tangible value creation of \$627.7m over the initial cost of construction. This change in value would be phased in gradually as the increase in productivity would be reflected in periodic appraisals which would measure the "unrealized intangible value" creation that occurred over time.

	Passive	Best Practice	Premium
Cost and Revenue Items	Management	Management	Management
Gross sf	1,176,471	1,176,471	1,176,471
Efficiency	85%	85%	85%
Net Rentable sf	1,000,000	1,000,000	1,000,000
Land Cost Ratio	16%	16%	16%
Land Cost	\$64,985,994	\$64,985,994	\$64,985,994
Cost/sf	\$250	\$250	\$250
Tenant Imp/sf	\$40	\$40	\$40
Construction Cost	\$341,176,471	\$341,176,471	\$341,176,471
Total Cost	\$406,162,465	\$406,162,465	\$406,162,465
Gross Sales/sf	\$250	\$400	\$600
Gross Sales	\$250,000,000	\$400,000,000	\$600,000,000
Real Estate Capture Ratio	14%	14%	14%
Gross Income	\$35,000,000	\$56,000,000	\$84,000,000
Net Income Ratio	80%	80%	80%
Net Income	\$28,000,000	\$44,800,000	\$67,200,000
Net Income/sf	\$28	\$45	\$67
Cap Rate	8.5%	7.5%	6.5%
Market Value Completed	\$329,411,765	\$597,333,333	\$1,033,846,154
Value/sf	\$280	\$508	\$879
Value Created (Tangible)	(\$76,750,700)	\$191,170,868	\$627,683,689

**Intangible Value: Rent Premium** 

Exhibit 11-57

### **Operational Premium/Discount**

As a tangible asset, improved real estate is subject to physical deterioration due to normal wear and tear which can cause erosion in value. Similarly, real estate must be adequately maintained, with periodic infusion of capital for replacement of mechanicals and other short-lived components. For the first several years the "value created" by the developer establishing the initial rent roll carries forward on the basis of existing leases. As leases begin to roll in three years, net income declines as tenants are attracted to another property in part due to poor maintenance. At this point the manager tries to play catch up but faces rising expenses due to deferred maintenance and deterioration of mechanical systems. Tenants are quick to pick up on the decline in operations, opting not to renew leases or to demand lower rents. To replace tenants, management has to cut rents even further. At the end of the 5<sup>th</sup> year, revised proformas reflect a project in trouble, with deferred maintenance requiring a capital infusion and expenses remaining above forecast. At this point, the analyst is faced with valuing a reduced income stream over the holding period. The proformas would also reflect a decline in net terminal value due to weak stabilized income at the end of the holding period. This would translate to a higher exit cap rate and a lower terminal value, thus further eroding value. When these future benefits are brought back to the present value, they indicate erosion in value, some of which is attributable to negative tangible value. At that point, the owner may be forced to "realize" the decline in value by selling the asset at a discount or accepting a lower return than projected under the proformas.



#### **Negative Value: Operational Deficiency**

Exhibit 11-59 provides an example of how value can be lost in a project over time through a combination of passive management and/or changing competitive market conditions. As noted, the financial set of assumptions in the 5<sup>th</sup> year differs dramatically from the stabilized proforma that supported the initial \$212m value. In this case, the rent has dropped to \$35/sf/year, vacancy rates increased to 15%, and cap rates have risen to 8% in response to the deterioration in operating fundamentals. Under this scenario the Market Value Completed plummets to \$129m, a decline of 39% from the stabilized proforma value when the building was initially sold.<sup>8</sup> Once the value has melted down as in the previous example, the owner of the property

Year 5: Actual Proforma: **Revenues &** Stabilized Cost and Revenue Items Expense Gross sf 588,235 Net Rentable sf 500,000 Cost/Gross sf \$220 Tenant Imp/sf \$40 \$40 Total Construction Costs \$152,941,100 Gross Income/sf \$40.00 \$35.00 \$20,000,000 \$17,500,000 Gross Income + Vacancy 6% 15% 25% + Operating Expenses 25% Net Income \$13,800,000 \$10,500,000 Cap Rate 6.50% 8.00% \$212,307,692 \$131,250,000 Market Value Completed \$1,200,000 \$1,800,000 - Tenant Improvements Net Market Value Completed \$211,107,692 \$129,450,000 Value/sf \$358.88 \$220.07 Value Created (Loss) -\$81,657,692 Value Margin -39%

Exhibit 11- 59

faces some difficult decisions. One option would be to sell the property and take the \$110m unrealized loss and move on with other more profitable business.

### Defensive Capital to Control Value

In many projects, efforts extended to maintain and control value during the operating period focus on increasing asset value or increasing returns. While intuitively unattractive, there are times when value control and maintenance takes on a defensive stance. That is, real estate projects may periodically require the infusion of capital that is dilutive to earnings and/or results in a decline in value. On the surface it might appear that such investment should not be made based on pure economics. In order to make such decisions one must step back and look at the consequences of not deploying additional assets on the underlying value proposition. For example, in the previous case, even if the renovation efforts do not hit the proformas, they might have been justified in terms of wealth preservation and/or minimization of losses.

In many projects, efforts extended to maintain and control value during the operating period focus on increasing asset value or increasing returns. While intuitively unattractive, there are some times when value control and maintenance takes on a defensive stance. That is, real estate projects may periodically require the infusion of capital that is dilutive to earnings and/or results in a decline in value.

### **Negative Value Creation**

<sup>&</sup>lt;sup>8</sup> While these numbers may seem extreme, they were actually quite common after the market collapsed in 2007.

Assume in the previous case the asset and property manager concluded that as bad as the 5<sup>th</sup> year figures were, the project was on track to lose \$55m more in value over the next two years. To avoid further meltdown, they argued that corrective action was necessary and the owner should invest \$60/sf for a total of some \$35m in defensive capital. They argue their case by comparing the "no action" Year 7 proforma to the Defensive Capital Year 7 proforma. While the rents are still projected to fall, they only decline to \$30/sf while the vacancy rate, expenses and cap rates all hold. Under this scenario, the value from year 5-7 will decline \$14.95m which is not attractive unless compared to the alternative of a \$55m loss. Thus, while the renovation may seem economically irrational on the surface, the consequences of a failure to make an investment would have far more serious consequences. The losses and meltdown could be even greater than forecast if the failure to renovate the property resulted in additional tenant defections. This would be especially true if some key tenants had co-tenancy agreements that allowed them to break leases due to the loss of some key anchors. The end result might be a complete meltdown of the property to the value of the land net of the cost of demolition. Unfortunately, while this might seem like an unusual case, it is much more common than might be expected.

Cost and Revenue Items	Proforma: Stabilized	Year 5: Actual Revenues & Expense	Year 7: Projected if Stay on Path	Year 7: Defensive Capital
Gross sf	588,235			
Net Rentable sf	500,000			
Cost/Gross sf	\$220			\$60
Tenant Imp/sf	\$40	\$40	\$40	\$40
Total Construction Costs	\$152,941,100			\$35,294,100
Gross Income/sf	\$40.00	\$35.00	\$25.00	\$30.00
Gross Income	\$20,000,000	\$17,500,000	\$12,500,000	\$15,000,000
+ Vacancy	6%	15%	25%	15%
+ Operating Expenses	25%	25%	20%	25%
Net Income	\$13,800,000	\$10,500,000	\$6,875,000	\$9,000,000
Cap Rate	6.50%	8.00%	9.00%	8.00%
Market Value Completed	\$212,307,692	\$131,250,000	\$76,388,889	\$112,500,000
- Tenant Improvements	\$1,200,000	\$1,800,000	\$2,000,000	-\$2,000,000
Net Market Value Completed	\$211,107,692	\$129,450,000	\$74,388,889	\$114,500,000
Value/sf	\$358.88	\$220.07	\$148.78	\$229.00
Value Created (Loss)		-\$81,657,692	-\$55,061,111	-\$14,950,000
	Value Margin	-39%	-43%	-20%
	Return on Mar	-42%		
	Value Recover	\$40,111,111		
		Return on Defe	nsive Capital	102%

### **Defensive Value Recovery**

#### Exhibit 11-60

Another example of the deployment of defensive strategies can be extracted from cases that have occurred in the recent market turmoil. Consider an owner of a 50,000sf shopping center with a 25,000sf anchor tenant. Due to the recent recession, the tenant who is currently paying \$20/sf net rent approaches the owner and asks to renegotiate a lease option. If the owner will renew the lease, the tenant agrees to

pay half the option rent level (i.e., \$12.50/sf vs. \$25) and will forego tenant improvements and renew the lease for another 5 years. The initial reaction of the owner may be to let the tenant walk to avoid taking the inevitable hit on value. However, from a wealth preservation perspective, the owner may be well advised to take the lower rent and extend the lease. This is especially true if the market rates have fallen to \$12 and vacancy rates for comparable space are in the upper teens. In such an environment the owner would have to absorb a number of months with vacant space, and then would have to pay tenant improvements to attract a new tenant along with granting concessions and paying full leasing commissions. Unfortunately, such situations are very common pointing to the importance of staying on top of changing market conditions and developing

If the owner will renew the lease, the tenant agrees to pay half the option rent level (i.e., \$12.50/sf vs. \$25) and will forego tenant improvements and renew the lease for another 5 years. The initial reaction of the owner may be to let the tenant walk to avoid taking the inevitable hit on value. However, from a wealth preservation perspective, the owner may be well advised to take the lower rent and extend the lease.

objective, dispassionate approaches which allow one to set egos aside and respond to ever-changing market dynamics.

### Control of Value via Tenant Risk Management

As noted previously, once a property is up and running and reaches a stabilized occupancy rate (i.e., fully leased with exception of some structural vacancy associated with tenant turnover) the required yield declines due to a reduction in uncertainty and risk associated with lease up. At that point in time, the risk to the future income stream is affected by tenant credit and the will and ability to make payments. In

... a shopping center manager may include lease provisions that stabilize the cash flows by preventing tenants from going dark (i.e., closing down operations) but avoiding penalties associated with breach of contract by continuing to pay rent. The objective of including such lease provisions is recognition that the loss of such a tenant's operation can have a negative impact on the value of the center. general, the higher the aggregate tenant's credit rating, the lower the default risk (i.e., breach of contract) and thus the lower the risk to the cash flows. This translates to a lower risk-adjusted yield requirement from investors which, other things being equal, translates to a lower cap rate and hence a greater value. An example of tenant risk management that can create value is the operation of an effective tenant retention program.

To manage tenant risk related to performance and productivity, a shopping center manager may include lease provisions that stabilize the

cash flows by preventing tenants from going dark (i.e., closing down operations) but avoiding penalties associated with breach of contract by continuing to pay rent. The objective of including such lease

provisions is recognition that the loss of such a tenant's operation can have a negative impact on the value of the center. This is especially true if the tenant plays an important role in creating positive synergy among tenants and draws customers and thus increases the productivity of the property as a whole. On the

other hand, a manager may develop a program to insulate the mall from underperforming tenants. For example, a manager may include kick-out clauses which allow the expulsion of an under-performing tenant whose operation is dilutive to total property sales and productivity. Such provisions, coupled with proactive management of the rent roll upon maturity of leases allows the manager with superior market knowledge based on an understanding of trade area demographics and competition assemble a mix of tenants that not only protects the trade area, but contribute to above average sales. Similarly, the strategy may expand the trade area to attract additional customers creating more synergy and further increasing sales. As noted, assuming leases are properly structured, the increase in sales will translate to higher rents, lower risk-adjusted return requirements and ultimately higher values.

### Control of Value via Duration Management

... a manager may include kick-out clauses which allow the expulsion of an under-performing tenant whose operation is dilutive to total property sales and productivity. Such provisions, coupled with proactive management of the rent roll upon maturity of leases allows the manager with superior market knowledge based on an understanding of trade area demographics and competition assemble a mix of tenants that not only protects the trade area, but contribute to above average sales.

The concept of duration can be extended to real estate with some modifications that take advantage of the unique nature of leases. That is, the property manager can manipulate the effective duration or price elasticity by creating a bundle of leases that are structured to offset rising interest rates and cap rates ...

### The

notion of duration is used to quantify the interest rate risk associated with bonds. Bonds and real estate share the fact that both investments can provide periodic cash flows and retain some terminal value upon disposition. The present value of those cash flows (i.e., what they are worth today) is inversely correlated with interest rates; as rates increase, the value of future benefits declines. While the calculation of duration is fairly complicated, the underlying premise is fairly simple. That is, the duration of an investment indicates this exposure of the value of future cash flows to changes in interest rates when the coupon or cash flow is relatively fixed or constant. The calculation of duration recognizes that more distant cash flows will be more significantly impacted by changing rates. Since the bond market is efficient, the duration of a bond can be used to

compare alternatives based on standardized measures of the price elasticity relative to changes in interest rates.

The concept of duration can be extended to real estate with some modifications that take advantage of the unique nature of leases. That is, the property manager can manipulate the effective duration or price

elasticity by creating a bundle of leases that are structured to offset rising interest rates and cap rates by stabilizing or increasing the underlying net income without shortening the average lease term. Consider the following examples. First, a manager may negotiate a 7-10 year lease which locks up the tenant and avoids costs associated with turnover (e.g., commissions, tenant improvements, concessions). However, rather than establishing a fixed rent for the entire period, the manager negotiates rental adjustments at certain predefined periods in time at which rent grows in pre-defined steps or bumps to market. Second, a manager may consciously stagger leases to spread out the maturity dates and thus dampen the exposure to cyclical swings in market conditions of supply and demand and thus reduces market risk. Third, a manager may insulate net income (i.e., income after expenses) by negotiating expense pass through terms which some of the shift the risk of rising expenses to tenants and spreads them out on a pro rata basis.

### Creating Value via Renovation/Greening

A way of creating enhanced value of existing real estate is through repositioning an existing Gross sf asset that can be upgraded to current market standards. This Cost/Gross sf can take the form of a renovation Tenant Imp/sf in which modest improvements are made in a property to correct some physical, functional or economic obsolescence. Exhibit Gross Income + Vacancy 11-61 uses the same example of the stabilized new development Net Income project to show how a property Cap Rate can lose value over time. In this case, assume that after five years vacancy rates and operating Value/sf expenses have risen and rents have declined. As a result of the added risks due to the potential for further erosion, the market

now demands an 8% cap rate. As noted, the actual proformas now

Year 5: Actual 5th Year Proforma: Renovation; LEED **Revenues &** Stabilized Certification Expense Cost and Revenue Items 588,235 Net Rentable sf 500,000 \$220 \$100 \$40 \$40 \$40 \$152,941,100 \$58,823,500 Total Construction Costs **Renovation Costs & Mvalue** \$188,273,500 Gross Income/sf \$40.00 \$35.00 \$40.00 \$20,000,000 \$20,000,000 \$17,500,000 15% 6% 6% + Operating Expenses 25% 25% 20% \$13,800,000 \$10,500,000 \$14,800,000 6.50% 8.00% 6.00% \$212,307,692 \$131,250,000 \$246,666,667 Market Value Completed \$1,200,000 \$1,800,000 \$1,200,000 - Tenant Improvements Net Market Value Completed \$211,107,692 \$129,450,000 \$245,466,667 \$358.88 \$220.07 \$417.29 Value Created (Loss) -\$81,657,692 \$57,193,167 Value Margin -39% 30% **Defensive Value Created** \$116.016.667 **Return on Defensive Capital** 197%

## Renovation/LEED Certification of Existing Building

Exhibit 11-61

supports a value of \$129m; a whopping loss of \$81.7m or 39% of negative value creation. At this point, the property may be classified as distressed with the owner faced with taking the hit in the value loss or of trying to reposition the asset through renovation and upgrades.

Assume in this case the owner's asset management team has proposed a relatively bold move of upgrading the property and elevating it to a LEED certified Existing Building. The conversion to the green standard is expected to cost \$60/sf with another \$40/sf for deferred maintenance, repairs and cosmetic upgrades for a total cost of \$100/sf. In total, the asset managers are arguing for \$58.8m capital

improvement program which is some 45% of the then-current value. Assuming the renovation is approved and the new proformas figures are hit, the vacancy rate could be expected to decline to long-term averages, operating expenses would be reduced due to greater efficiencies, and rents would increase due to greater appeal to tenants. Under this scenario, the property would be repositioned and would attract institutional buyers with a 6% cap rate. At that point, the \$14.8m income would translate to \$245m in Net Market Value Completed. Thus, the Value Created through renovation would be \$57m; a 30% increase over the actual proforma value of \$129m plus the \$58.5m in capital expenditures. Assuming the numbers are correct, the defensive Value Created is the swing between the Market Value without renovation/LEED of \$129m and the Net Market Value Created after of \$245m; almost a 2:1 ratio. While such figures are attractive, it should be noted that repositioning properties to enhance value is an extremely complex process that can easily fail to deliver the proformas results.

### Creating Value via Asset Assemblage & Arbitrage

In a strategy that is analogous to creating value through land assembly, some real estate players "create value" by taking advantage of differences between the demand functions, scale of operations and elasticity among segments of capital market players. In a strategy that is analogous to creating value through land assembly, some real estate players "create value" by taking advantage of differences between the demand functions, scale of operations and elasticity among segments of capital market players. For example, many larger institutional investors operate at such a scale of operations that smaller, individual smaller properties are not institutional grade in terms of the ability to source, underwrite and manage. This creates an arbitrage opportunity in which value can be created by an investor who acquires a series of high quality assets that are non-institutional based on their smaller size. As such, they can sometimes be acquired at relatively high cap rates since they fall beneath the radar screen of larger institutional investors. However, once they are assembled

into a pool of assets the portfolio can achieve sufficient scale to become institutional and may trade at lower institutional cap rates.

The application of an asset assemblage strategy can be illustrated in the industrial sector. In many cases, the industrial market includes a number of smaller industrial/warehouse properties that have solid spatial market fundamentals. On the surface such properties offer stable cash flows and thus should be able to attract investors seeking core assets for which risk-adjusted hurdle rates of return are lower than other investors. Unfortunately, this may not be a viable acquisitions strategy for larger investors. Consider the case of an acquisitions officer charged with sourcing \$200 million in industrial properties for such investors simply doesn't have the time/resources to process 50-100 small deals in the \$2m-\$5m price range. Thus, such assets are often left to smaller investors who require higher returns due to smaller scale and greater sensitivity to risk.

Value Creation via Asset Assemblage



This difference in yield requirements between larger and smaller investors creates an arbitrage opportunity that can be capitalized on to take advantage of the different buyer behavior and pricing algorithms. Exhibit 11-62 illustrates how the asset assemblage strategy can be used to create value. The underlying objective is to assemble a portfolio of smaller industrial properties to create sufficient scale that the assemblage can be repositioned from non-institutional grade to institutional grade properties. As noted, the individual investments are relatively small, lowdensity but located in an attractive industrial zone. By assembling the assets, the scale of operation can be increased. An added bonus is that the individual properties likely contain some opportunities for redevelopment by which the density of some holdings can be increased, spreading out the land costs and creating additional value.

Sita Siza (cf)	Lot	Gross	ss Land Patio	Cost /SE	Land Cost	Construction	Total Cost to	
Sites	Coverage Building Size	COSt/ SP	Land Cost	Cost	Create			
Site 1	100,000	80%	80,000	16%	\$60	\$914,286	\$4,800,000	\$5,714,286
Site 2	120,000	80%	96,000	16%	\$60	\$1,097,143	\$5,760,000	\$6,857,143
Site 3	200,000	80%	160,000	16%	\$60	\$1,828,571	\$9,600,000	\$11,428,571
Site 4	100,000	80%	80,000	16%	\$60	\$914,286	\$4,800,000	\$5,714,286
Total	520,000		416,000			\$4,754,286	\$24,960,000	\$29,714,286
			Land \$/sf	\$9.14				
	Individual Properties			Individual Investor		Institutional Investor		\$865,714
	Building Size	NNN Rent	Net Income	Can Rate	Individual	Cap Rate	Institutional	Value on
Sites	Dunuing Size	NINN KEIK	Net income	cap hate	Market Value		Market Value	Acquisition
Site 1	80,000	\$5.50	\$440,000	8.00%	\$5,500,000			
Site 2	96,000	\$6.00	\$576,000	7.50%	\$7,680,000			
Site 3	160,000	\$5.50	\$880,000	8.00%	\$11,000,000	6.0%	\$39,600,000	
Site 4	80,000	\$6.00	\$480,000	7.50%	\$6,400,000		$\rightarrow$	\$9,020,000
Total	416,000		\$2,376,000		\$30,580,000			
Value Created via Assemblage							30%	
Exhibit 11- 6								

#### Industrial Property Assemblage & Arbitrage

Exhibit 11-63 presents how the arbitrage opportunity might be used to create value. As noted, the individual sites contain 416,000sf of industrial space with a recent Cost to Create of \$29.7m. The four industrial properties currently rent for \$5.50 to \$6.00/sf/year on a NNN basis with the tenants covering all expenses. The cap rates range from 7.5% to 8% to appeal to smaller investors. As noted, the first and third sites create slightly negative value creation, with the cost to create and acquire below the respective market values. While this might suggest the investor should not acquire these assets, if the focus remains on the arbitrage strategy the answer is different. When the sites are combined, the acquisition creates a modest value premium of \$865,714 above the cumulative cost for a modest 3% spread if the properties are held individually.

Once the properties are under single ownership, the scale of the aggregate holdings of \$30.6m total value elevates the assemblage to the status of an institutional class of property which can support a lower cap rate. In this case, the institutional cap rate of 6% translates to an assembled value of \$39.6m which creates an arbitrage value creation of \$9m which is 30% more than the aggregate value of the individual holdings. The premium might be even greater if aggregate holdings had high credit tenants or if they were diversified, helping reduce exposure to individual tenant credit risk. In such cases, the diversification benefits could justify lower risk-adjusted returns and thus enhance portfolio value by further reducing cap rates.



### **Stage 3: Capturing Value**

Exhibit 11-64

The final stage in the value proposition for real estate focuses on capturing or monetizing the value that has been created and/or maintained. During these initial stages, the resultant value reflects a paper gain; that is, the value is carried on the books but is not monetized until the value is ultimately captured. Although presented as a linear process, the value capture stage may actually be triggered during one of the earlier stages. This can occur through a number of approaches including the use of pre-sale agreements, formation of partnerships or ventures, application of leverage, and negotiation of options. The ultimate form of capturing value is an outright transaction where the owner sells their entire interest in a particular property. In some cases, the owner may opt for alternative approaches including a partial sale, an exchange for a comparable property plus or minus differences in market value, or recapitalization of the equity and/or debt. The property may also be contributed to another entity in return for securities in an outright transfer, or for a partial or full debt obligation as in the case of a purchase money mortgage (i.e., seller financing).

### **Summary Chapter 11**

- The Value Proposition. Although the real estate market is comprised of two distinct but related markets: the Spatial Market and the Capital Market, the underlying value proposition is fairly consistent: Value = Income/Rate.
- The 3-C's. In looking at real estate value, one should understand the importance of the 3-Cs over the complete life cycle of a project: planning and development/acquisition, operation and disposition.
- Creating Value. In real estate, value can be created through a number of avenues including:
  - Planning/Development VC includes land assemblage, entitlements, use of incentive programs, re-zoning to increase density, creating easements. Value can also be created through land development, vertical development and leverage.
  - During the operations phase, value can be created through a number of strategies that increase the productivity or income a property generates, or reduces the associated risk. Properties can also be repositioned to appeal to lower cap rate buyers thus increasing value of a given income stream.
  - In the disposition phase, value can be created through renovation or rehab or through asset assemblage and arbitrage.
- Controlling Value
  - Once created, real estate value must be controlled via asset and property management.
  - Intangible value can create and retain premium to value.

#### • Capturing Value

- Value is ultimately captured through sale of an asset.
- Real estate sales can be carved up by interest to further increase net sales proceeds and capture added

#### Concepts

- Dual spatial/capital markets
- Longitudinal nature of real estate products
- The 3-Cs of value
- Site assemblage
- Entitlements: basic approvals
- Re-zoning to increase density
- Most Fitting Use
  - Most Suitable Use
  - o Most Politically Palatable Use
  - Highest and Best Use
- Density bonuses and incentive programs
- View easements and value impacts
- Land development and value creation
- Development to create value
- Leverage to create value
- Dynamic forces affecting value
- Property Management
- Asset Management
- Intangible Value
- Income premiums to increase value
- Negative value creation
- Defensive capital and value protection
- Tenant risk management and value impacts
- Lease duration and value of rent roll
- Asset assemblage to create value
- Capturing value via sale
- Other strategies to capture value

### The 3C's: A Life Cycle Perspective



value.	

# Section 3: Real Estate Finance