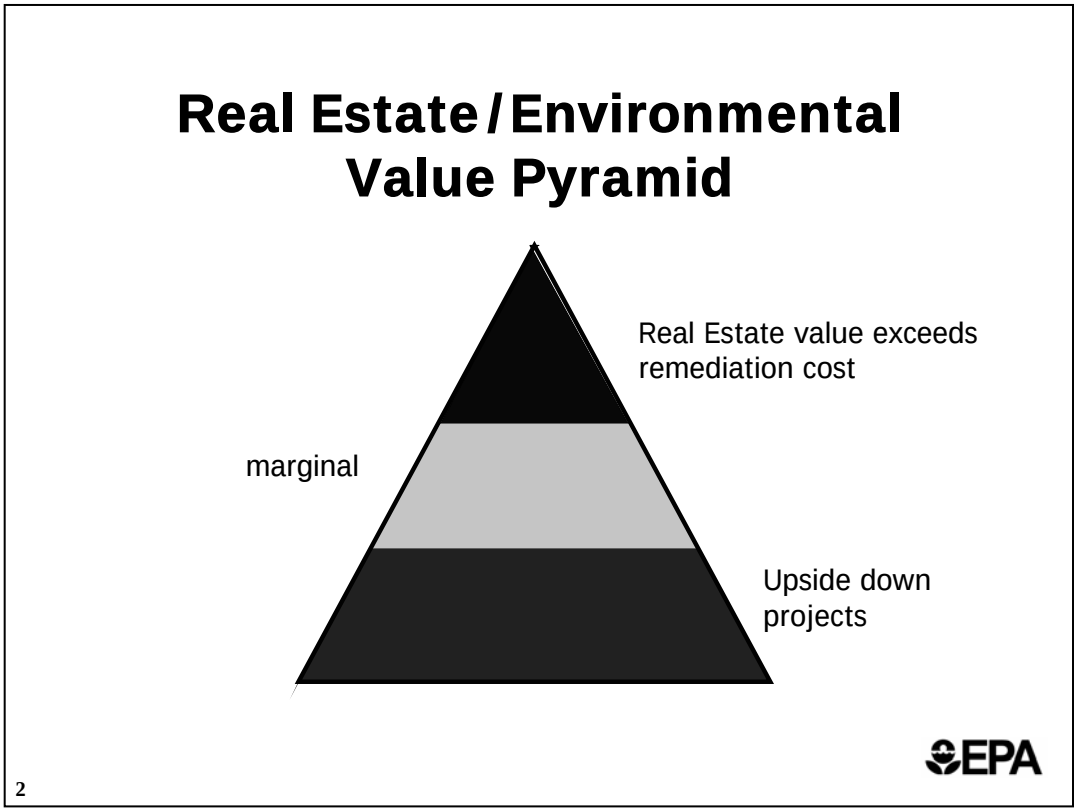
REAL ESTATE FINANCE BASICS

A Clu-In Primer

1



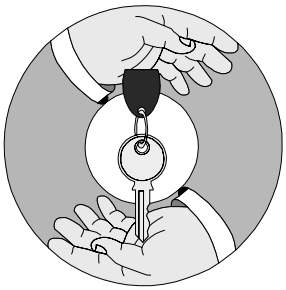
Discussion Notes:

Properties with contamination are unusually complex and difficult to develop. Some contaminated sites have significant real estate potential, some have some value that can be uncovered, and some have very limited economic value.

Redeveloping contaminated sites is not an easy task. Many sites are heavily encumbered, and not immediately developable. The key is to make the site attractive to the general real estate market.

This process can be used to determine if the site is a valuable one, a marginal one, or if it is seriously upside down. The discussion will look at EPA's use of the Reuse Assessment and how a developer might view the same process.

Who is the Real Developer?



- Developer Adds Value
  - Equity:
    - must have money at risk
  - Ownership:
    - must have control of site
  - Financing:
    - must have financial capability to complete project
  - Tenant/User:
    - must have tenant or capacity to attract tenant/user

EPA

3

Discussion Notes:

Understand who the real developer (decision-maker) is. The developer adds value to the project.

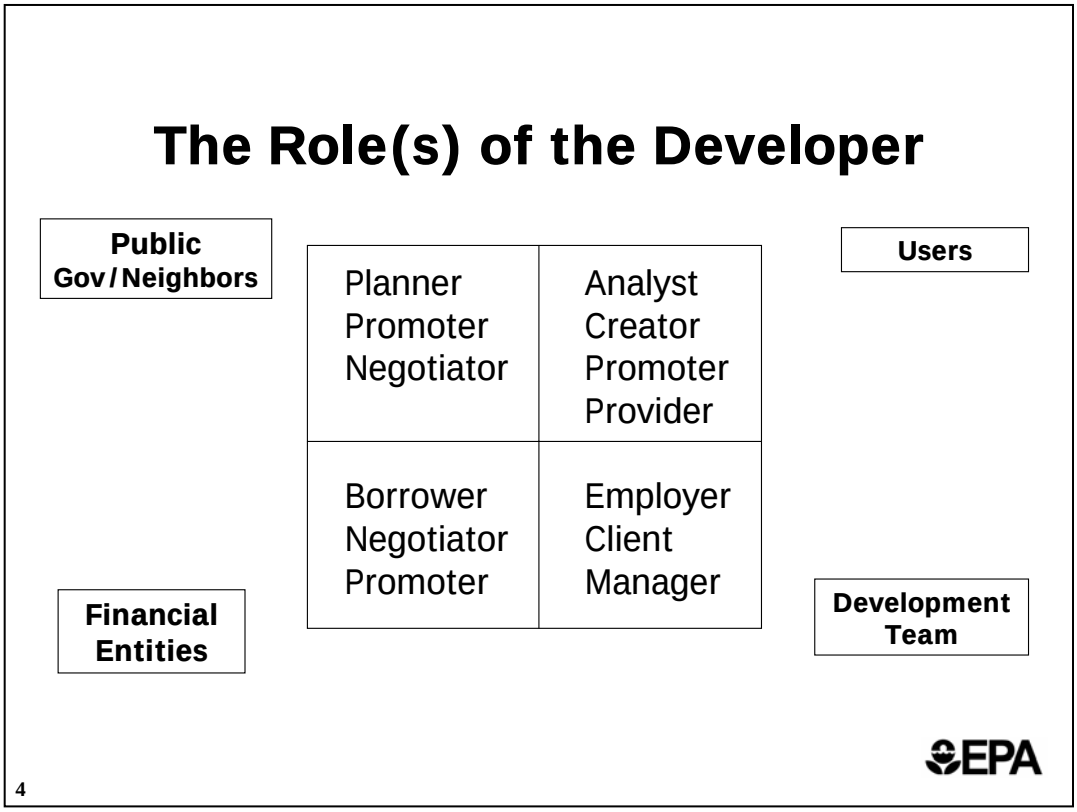
How does one assess the capability of a developer to complete the project? The real developer is not always apparent. Many individuals in a deal may represent themselves as the developer, but it is important to understand who the real developer is.

•Equity: must have money at risk
(partnerships, LLCs, Community Developers, joint ventures, public/private partnerships)

•Ownership: must have control of site
(options, contacts, liens, title)

•Financing: must have financial capability to complete project

•Tenant/User: must be the end user, have one in mind, or have the capacity to attract one



Discussion Notes:

The developer wears many hats and performs several functions. Insight into these roles can help one understand the actions developers might take as part of a redevelopment.

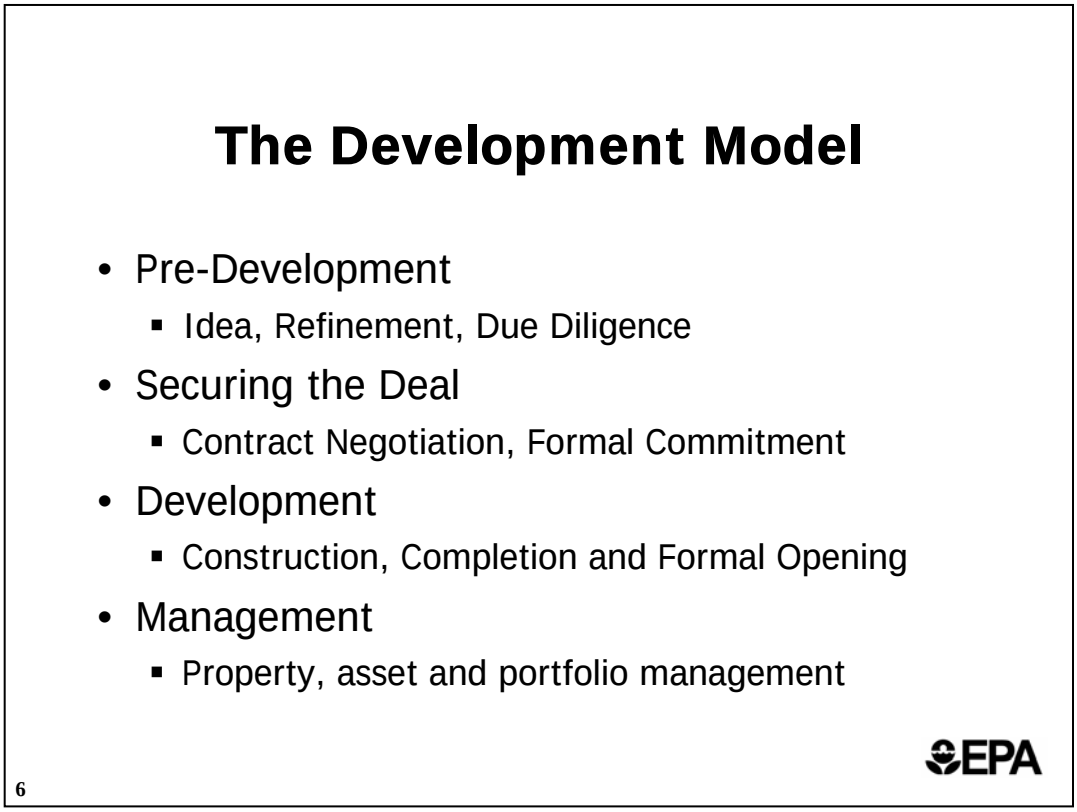
Discussion Notes:

Standard Development:

Engineers, Architect, Appraiser, Market Analyst, Real Estate Brokers, Attorneys, Mortgage Brokers, Tenants/Users, Lenders, Planners, etc.

Contaminated Property, add:

Environmental consultants, attorneys, insurers and representatives of the community



Discussion Notes:

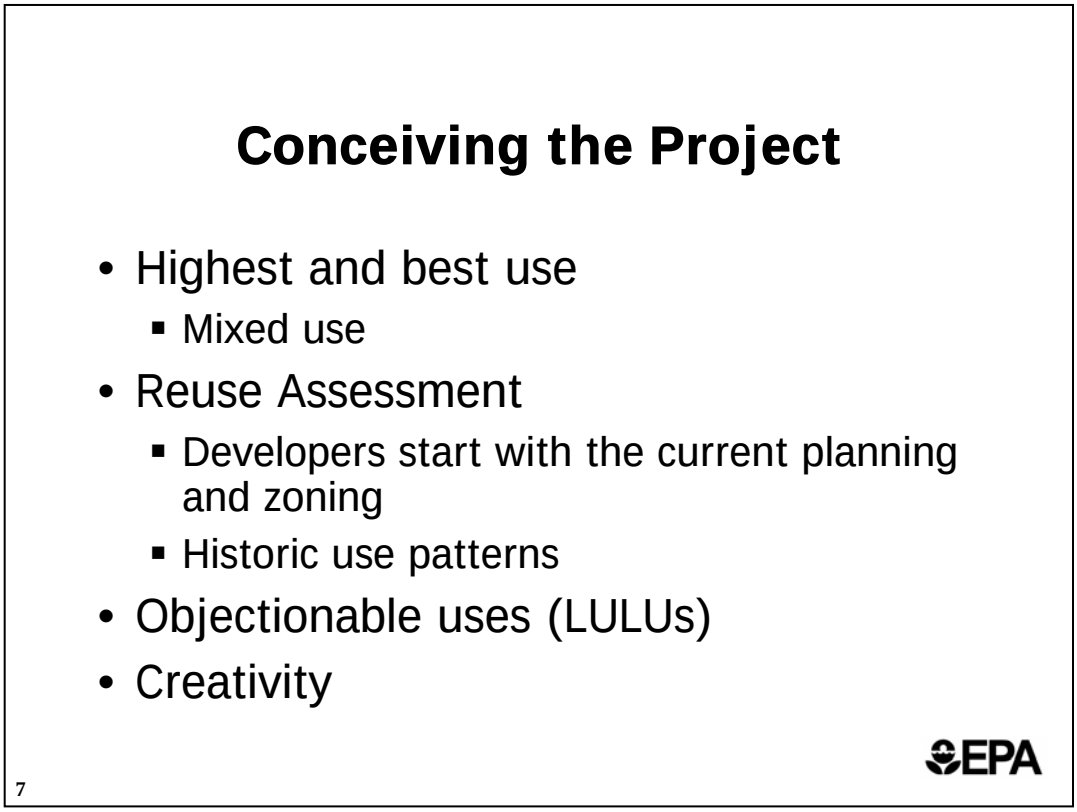
Provide an overview of the Real Estate Development Process in general terms – the steps the developer goes through to complete the deal.

Key phases in every development. As we will discuss later in the course, these phases can be broken down into smaller steps, can occur sequentially and/or simultaneously, but are necessary for every deal.

- Pre-Development: Idea, Refinement, Due diligence (feasibility, marketing, identifying end-user)
- Securing the Deal: Contract Negotiation, Formal Commitment
- Development: Construction, Completion and Formal Opening
- Management: Property, asset and portfolio management

Comment:

More about the Development Process will be discussed during the second day.



Discussion Notes:

Reuse Assessment:
Most developers start by looking for sites that they know will be marketable to end-users. Then, they check planning & zoning to see whether the end use works or if a variance is needed. The value of the project determines the developer's interest in challenging zoning. Different kinds of developers have specific types of end users in mind.

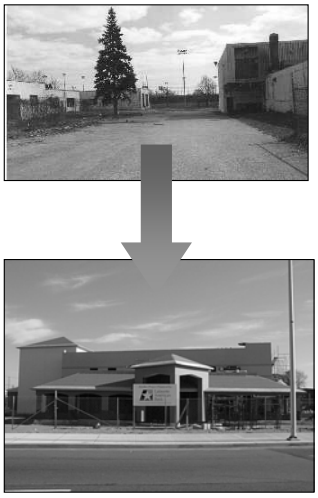
Highest and best use:
The concept of highest and best use in development terms is the use that produces the greatest value for the property.

Objectionable Uses:
LULUs – locally undesirable land uses: transfer stations, power plants, jails. Land uses that a neighborhood would believe would affect their quality of life. These are always uses that need to go somewhere.

Creativity: ice rinks, unusual uses (Meadowlands)

Reuse Assessment

- Property
- Environmental
- Community
- Financial



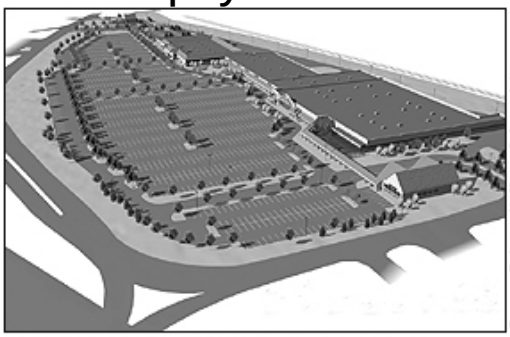
8

Discussion Notes:

Discuss the four major components of a reuse assessment

Market Analysis and Feasibility

- Who will be the end-user
- What price will end-user pay
- The impact of stigma
- Predevelopment marketing
- Build-to-Suit



A conceptual drawing of the future shopping center at the Raymark Industries, Inc., Superfund Site.

9

Discussion Notes:
In undertaking a market analysis, the key question is always: Who will be the ultimate user(s) of the site and what price will they pay? Certainly, one can get into reams of demographic data and draw up sophisticated pro formas, etc. but at the end of the day, two axioms always dominate:

1) Market conditions will call the shots with respect to usage (unless special uses are demanded by the local community, etc.)

2) What is the risk/reward ratio? Developers don't want to pursue projects needlessly if there are hidden "deal busters" or if they have to spend an inordinate amount of time and effort for a project that is only going to give them a marginal return. If the payoff is big enough, it might be worth the fight. However, suppose, for example, that a future liability issue negatively impacts the ability to get financing, it could come back to affect the pocket book. Developers are not only going to be concerned with the economic issue but also with the possible impact on reputation.

Example:
Portland dredge disposal proposal.

Discuss how stigma impacts all normal market analyses. Stigma can also be an issue in attracting developers and impact how developers market to an end user.

Clearly, many projects are marketed early on for specific users--- retail especially. Projects may become build-to-suit for specific user (big box, restaurants, - specific formulas must be met - Home Depot-Wal-Mart-Grocery) Since formulas are known up front, it is fairly easy to assess reuse potential. Other end users, however--- perhaps the industrial warehouse or the garden office complex -- might require a more detailed market analysis to get a sense of viability.

Example:
Raybestos Superfund Site in Stratford. Bankruptcy court superceded EPA in choosing developer.

Feasibility – Due Diligence

- Evaluating the potential of a contaminated property
  - Quantifying Risk
  - Will project show sufficient return for the work and risk

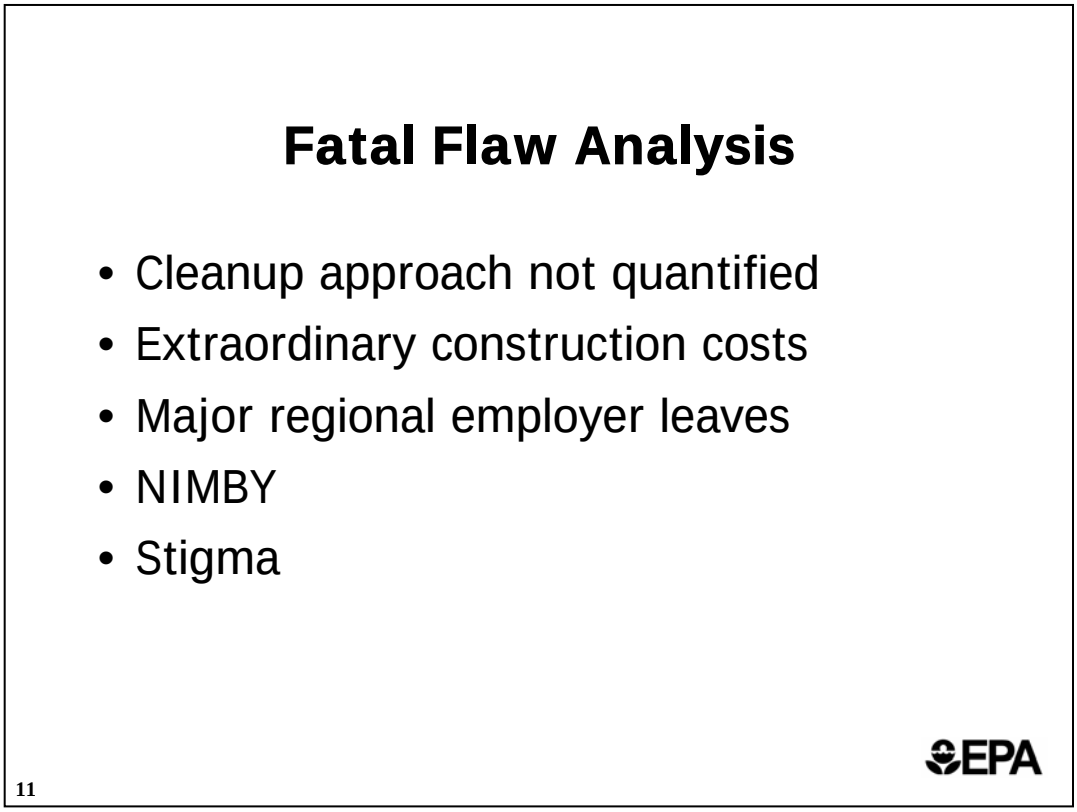
10

Discussion Notes:

Feasibility: How to evaluate the potential of a contaminated property. Measuring potential costs against potential benefits.

Will project show sufficient return for the work and risk?

What are the anticipated returns?



Discussion Notes:

Discuss the fatal flaw analysis.

Development based on unrealistic regulatory approvals.

- Based on unrealistic returns, rental rate, occupancy rates, etc.
- Approval take longer than anticipated
    - Zoning approval questionable
    - Cleanup approach not quantified
    - Groundwater – bedrock, off-site
    - Uninsurable risk
- NIMBY – overcoming opposition not worth value
- Stigma so great that some uses, such as residential, are not marketable

Comment:

More about the fatal flaw analysis will be discussed during the second day.

"Back of the Envelope" Feasibility – Land Only

- Land Value Clean $ 1,000,000
  - Acquisition Costs $ 300,000
  - Remediation $ 400,000
  - Tax Lien $ 100,000
  - Soft Costs $ 200,000
  - Total $ 1,000,000
- Does it work?

EPA

12

Discussion Notes:

Discuss how a developer begins to make sense of the numbers. Developers invest a substantial amount of time and effort in determining feasibility – these are opportunity costs. Developers often run a "back of the envelope" feasibility before investing large sums in detailed due diligence.

Discuss sample "back of the envelope" feasibility:

Land Value Clean	$ 1,000,000 – based upon recent appraisal
Acquisition Costs	$ 300,000 – purchase & sale contract
Remediation	$ 400,000 – paid by buyer, fixed price contract backed by cost cap insurance
Real Estate Tax Lien	$ 100,000 – paid by buyer
Soft Costs	$ 200,000 – opportunity costs, attorneys, environmental consultants, environmental insurance

Acquisition and remediation cost equals clean value, not bargain. Profit in project must come from the development.

Discuss alternative acquisition scenarios, for example:

- If seller were to accept negotiated price of $100,000
- Plus indemnities and insurance at a cost of $ 75,000
- Then total acquisition cost is $175,000

Leaves some $125,000 potential profit on acquisition.

Pro-Forma

A statement that represents the probable future net operating income of an investment property.

This could also be called an:

- Operating or Cash Flow Statement
- Income & Expense Analysis
- APOD (Annual Property Operating Data)

13

Project Costs:						
	Acquisition, Soft Costs, Hard Costs, Remediation, Carry Costs					
		Total Project Costs of			$100,000	
Net Operating Income (NOI)						
	Gross Income			$14,000		
	Operating Expenses			($4,000)		
	Net Operating Income			$10,000		
Cash on Cash Operating Return						
	NOI/Project Costs		$10,000/$100,000		10%	
Leverage	20% Down (Equity of $20,000), 80% Mortgage ($80,000) at 6%					
	Gross Income			$14,000		
	Expenses			($4,000)		
	Debt Service (Carry)			$4,800		
	Net Cash Flow			$5,200		
Leveraged Return						
	Net Cash Flow/Equity					
	$5,200/$20,000				26%	
Project Value and Capitalization						
	NOI/Cap Rate = Project Sale Value					
	$10,000/.10				$100,000	

Real Estate Finance Basics

- Introduction to Leverage

14

Discussion Notes:

Discuss the use of pro formas. What information is included in a pro forma. Discuss this simple pro forma.

If the cap rate is higher, the project value is lower. The cap rate reflects risk. If property is held and rents go higher, while costs and mortgage remain same, then NOI and Net Cash Flow are higher. If cap rate remains same, then leverage return and equity value are higher.

If after several years Net Cash Flow is $12,000 Project Value is $120,000 (same cap rate) $80,000 mortgage still in place, equity has doubled to $40,000. You could refinance (80% of %120,000= $96,000), pay off first mortgage and keep $16,000.

Project Costs/Project Value = Cash on Cash Return

Leveraged Return and Yield require more calculation

Internal Rate of Return measures all cash flows over time, includes residual value.

This is a very comprehensive tool that involves inflation and other assumptions. It can be deceptive, but is still used in the industry extensively.

Reference Page:

Full page printout of spreadsheet is included in Appendix A

Potential Gross Income

Total income attributable to real property at full occupancy before vacancy/collection loss and operating expenses are deducted.

15

Rent

Contract Rent

The actual rental income specified in a lease.

Market Rent

The rental income that a property would most probably command in the open market. This is estimated from the current rents being paid and asked for comparable space as of the date of analysis.

16

Vacancy & Collection Loss

An allowance for reductions in potential income attributable to vacancies, tenant turnover, and nonpayment of rent.

17

Effective Gross Income

The anticipated income from all operations of the real property after an allowance is made for vacancy & collection loss.

18

Operating Expenses

The periodic expenditures necessary to maintain the real property and continue production of the effective gross income, assuming prudent and competent management.

19

Operating Expenses
(Include but not limited to)

- Real estate taxes
- Insurance
- Utilities
- Repair and maintenance
- General and administrative
- Management
- Salaries

20

Net Operating Income

The actual or anticipated net income that remains after all operating expenses are deducted from effective gross income, but BEFORE mortgage debt service, depreciation, and replacement reserves.

21

Potential Gross Income (PGI)

Less: Vacancy & Collection Loss (V&C)

Equals: Effective Gross Income (EGI)

Less: Operating Expenses

Equals: Net Operating Income

22

What is a Cap Rate? Where do they come from?

- Investor Surveys
- Derived from Comparable Sales

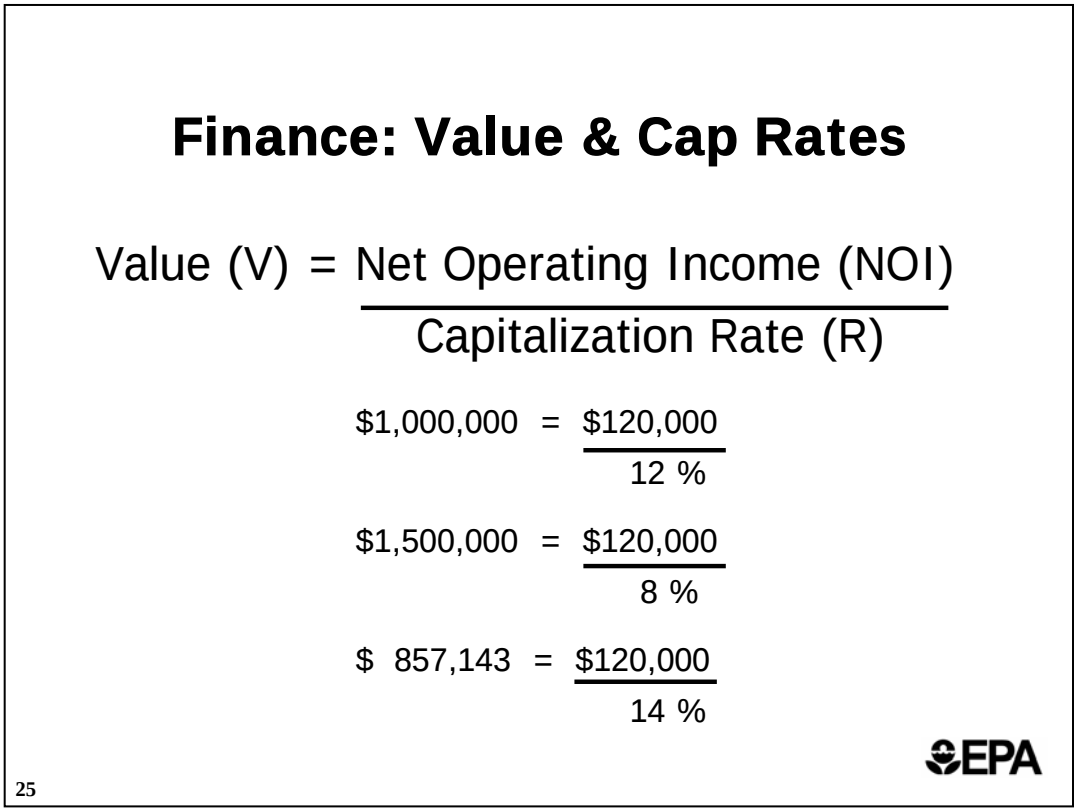
The Capitalization Rate ("Cap Rate") is a market driven number. It is essentially a measure of risk and reward.

23

Residual (or Terminal) Cap Rate

An overall capitalization rate used to estimate the resale of a property; usually based on the anticipated stabilized income for the year beyond the holding period.

24



Discussion Notes:

Discuss the formula for cap rates. Review the very simplistic examples of how a change in the cap rate has a huge bearing on value.

Brownfields typically have a higher cap rate because of greater risk.

Finance: Value & Cap Rates

- Rate for typical property types
  - Downtown office 8.5%
  - Suburban Office 9.1%
  - Industrial 8.9%
  - Research & Development 9.2%
  - Apartments 8.5%
  - Full-service Hotel 9.8%
  - Limited-service hotel 11.1%
  - Community Shopping Center 9.1%
  - Regional Mall 8.5%

26

Discussion Notes:

Discuss the various cap rates associated with property types

- Downtown office 8.5%
- Suburban Office 9.1%
- Industrial 8.9%
- Research & Development 9.2%
- Apartments 8.5%
- Full-service Hotel 9.8%
- Limited-service hotel 11.1%
- Community Shopping Center 9.1%
- Regional Mall 8.5%

Example: Sarasota

- Site Location
  - Sarasota, Florida along I-75
- Size
  - 84 acres
- Improvements
  - 284,000 ft^2 industrial building
- Historic Use
  - Manufacturing

27

Discussion Notes:

Walk through the Sarasota site. Discuss existing conditions and the market value of the site. Discuss why the site has such great potential, but developers were scared to invest.

Example: Sarasota

- Redevelopment Plan:
  - Renovate existing building for office and light industrial use
  - Frontage to be restaurants, hotel and highway oriented retail
  - Back acreage to be big box retail or distribution

28

Discussion Notes:

Walk through the Sarasota site. Discuss proposed redevelopment.

Existing building: continue light industrial vs reposition for more office (more costs, for more return).

Frontage land (Golden Triangle) – obviously retail, selecting best tenants, mostly price - but some thought as to entry to development (turned down huge gas station.

Interior – large remainder – office (as nearby to the west), light industrial, retail – may need additional parcel to improve access.

Example: Sarasota

- Environmental Issues:
  - Active RCRA, HSWA permits and consent order
  - Groundwater & soil contamination on and offsite
  - 45 acre TCE plume
  - Removing Stigma

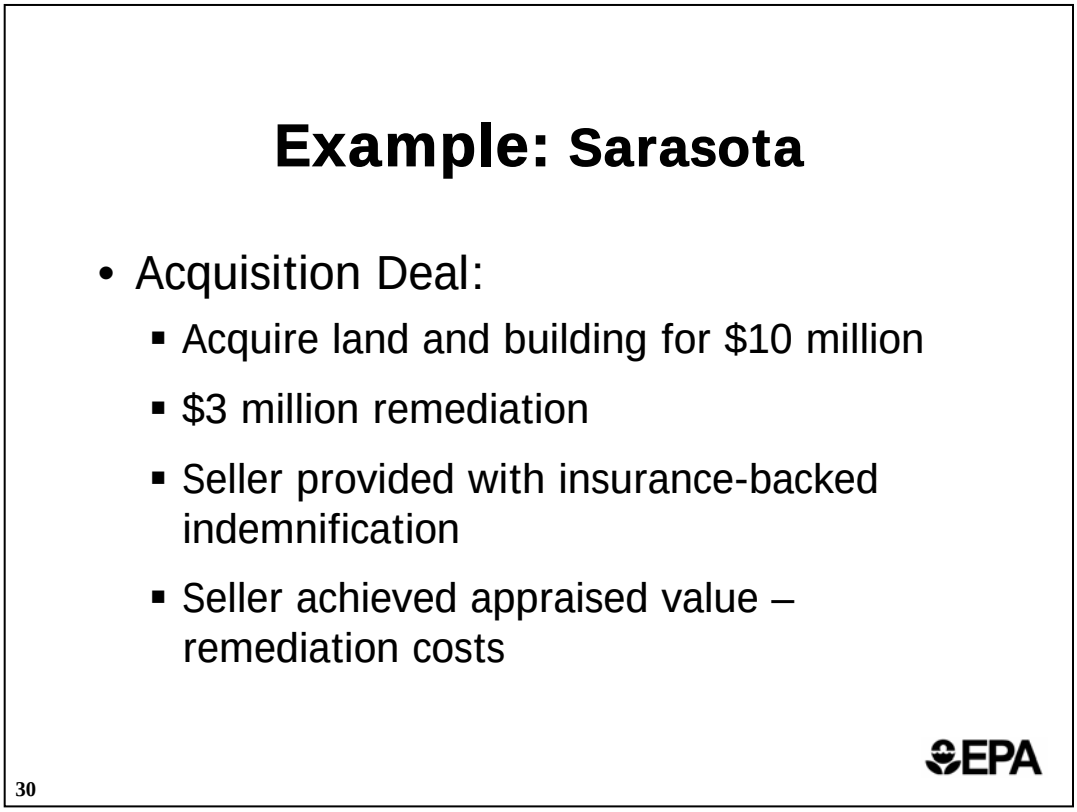
29

Discussion Notes:

Walk through a sample site. Discuss how the environmental issues complicated the redevelopment.

In the case of Sarasota, several million was spent on investigation, and treatment plant. Both the owner and contractor benefit from long, slow remediation.

Removing stigma: renamed Fruitville Road Business Center. Owners let 4H Club hold fair on the location that EPA helicoptered onto ten years ago.



Discussion Notes:

Walk through a sample site. Discuss how the deal was structured.

Seller achieved appraised value ($13,000,000) minus estimated remediation costs with substantial guarantees and insurance that remediation would be completed.

Example: Sarasota

- Exit Strategy:
  - Improve groundwater treatment system to reduce cleanup time to under five years
  - Sell retail and industrial parcels when clean
  - Lease existing building
  - Refinance or sell when fully occupied

31

Discussion Notes:

Walk through a sample site. Discuss exit strategy.

Developer able to sell parcels when clean, developer benefits from faster clean-up.

Category	Item		Amount	
Purchase Price (Appraised value - remediation co			$10,200,000	
Insurance, Attorneys			$200,000	
Total Acquisition Cost				$10,400,000
Hard Costs				
	Remediation		$3,000,000	
	Rehabilation of Existing Building			
		270,000 SF @ $15 PSF	$4,050,000	
	Sudivision Roads and Utilities		$2,200,000	
Soft Costs				
	Architects, Engineers, Land Use Attorney		$937,500	
	Real Estate Brokers		$300,000	
Carrying Costs				
	8 % of Acquisition Cost for two years		$1,664,000	
	10 % of all other costs, average one year		$1,048,750	
Total Development Costs				$13,200,250
Total Project Costs				$23,600,250
Project Sale Price Upon Completion				
Sale price of existing building				
	Income	270,000 SF @ $18 PSF	$4,860,000	
	Expenses		$2,860,000	
	Net Operating Income		$2,000,000	
	Capitalization Rate		8.5%	
	Sale Price		$23,529,412	
Land Sales		50 acres @ $250,000/acre	$12,500,000	
Total Sale Price of Project				$36,029,412
Net Profit (Total Sale Price of Project - Total Project Costs)				$12,429,162
Cash on Cash return				52.67%
Simple annual return over two years				26.33%

Example: Sarasota

- Pro forma

32

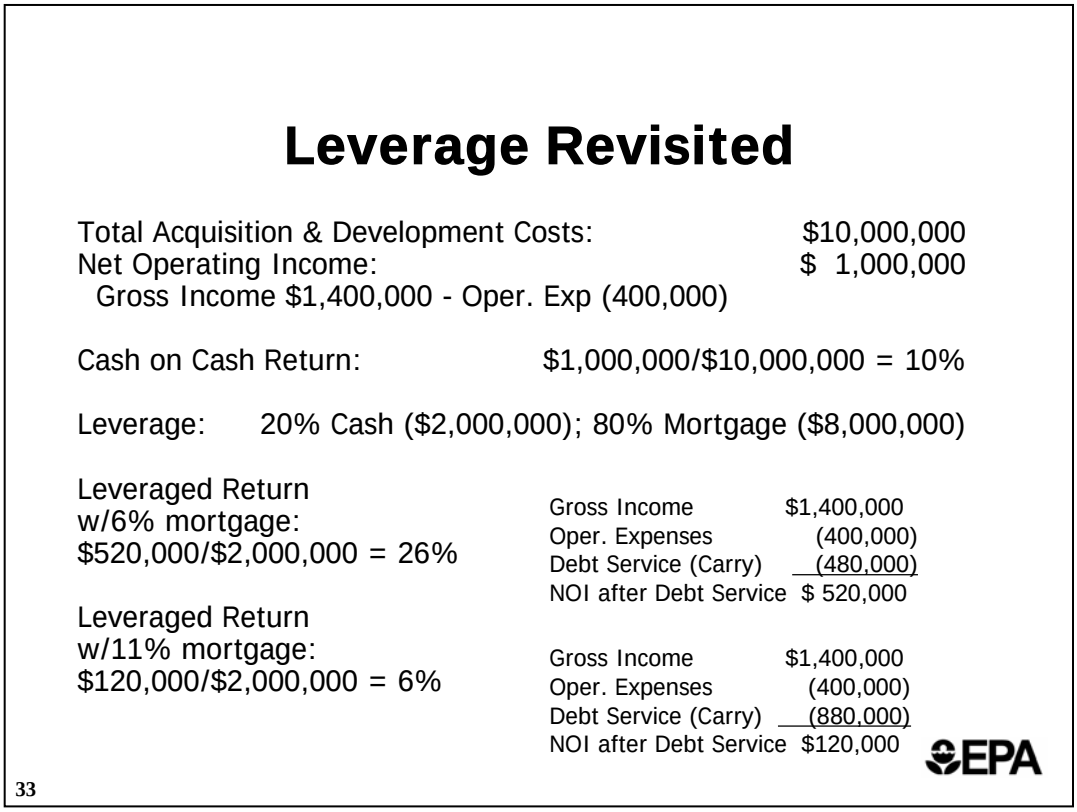
Discussion Notes:

Discuss pro forma on the Sarasota site.

Refer class participants back to the EPA Reuse Assessment. Show the differences between EPA's assessment program (qualitative) and a developer's assessment (quantitative).

Reference Page:

Full page printout of spreadsheet is included in Appendix A



Discussion Notes: continue to discuss leverage.

Total Acquisition of Development Costs: $10,000,000

Net Operating Income:

Gross Income	$1,400,000
Oper. Expenses	(400,000)
NOI	$1,000,000

Cash on Cash Return: $1,000,000/$10,000,000 = 10%

Leverage: 20% Cash (Equity of $2,000,000); 80% Mortgage ($8,000,000) at 6% interest

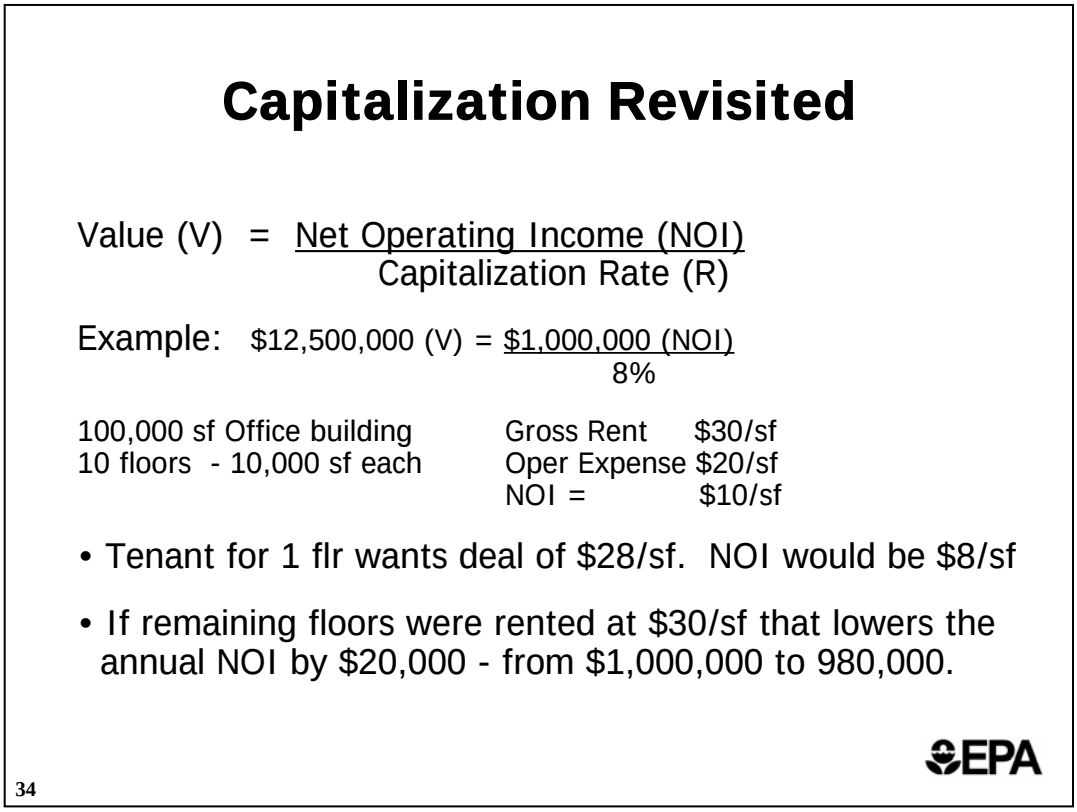
Leveraged Return With Mortgage at 6%: $520,000/$2,000,000 = 26%

Gross Income	$1,400,000
Oper. Expenses	(400,000)
Debt Service (Carry)	(480,000)
NOI after Debt Service	$ 520,000

Leveraged Return With Mortgage at 11%: $120,000/$2,000,000 = 6%

Gross Income	$1,400,000
Oper. Expenses	(400,000)
Debt Service (Carry)	(880,000)
NOI after Debt Service	$ 120,000

So, if interest rate is higher than return on an all cash basis, leveraged rate of return will be lower. However, not necessarily bad for sometimes appropriate to incur a lower return in exchange for having less cash in the deal.



Discussion Notes:

Discuss capitalization

Rates of Capitalization are employed to establish value.

Value (V) = Net Operating Income (NOI)
Capitalization Rate (R)

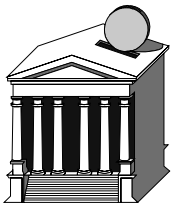
In earlier example: $12,500,000 (V) = $1,000,000 (NOI)
8%

Assumptions:

1) The property in this example is an office building with ten floors of 10,000 square feet each for a total of 100,000 square feet.
2) Gross Rent is $30/sf; Operating Expenses are $10/sf; NOI is $10/sf.
3) A tenant for one floor only wants to make a deal at $28/sf. If he did so, the resulting NOI per foot would be $8/sf since the operating expenses would be the same.
4) If the remaining nine floors were all rented at $30/sf, why would the Landlord not be willing to perhaps give this one tenant a break and rent out that one floor for $28/sf? That only lowers the annual NOI by $20,000--- down to $980,000 from $1,000,000.

Because capping the new NOI of $980,000 at the same 8% produces a value of $12,250,000---a reduction in value of $250,000! Landlord accordingly might give an extra month or two free rent if he had to but would be reluctant to lower base rent.

Financing Phases



- Land Acquisition
  - Special terms for contaminated sites
  - Purchase money mortgages/joint venture
- Construction
  - Including remediation
- Permanent Sources of Capital

EPA

35

Discussion Notes:

Financing Phases:

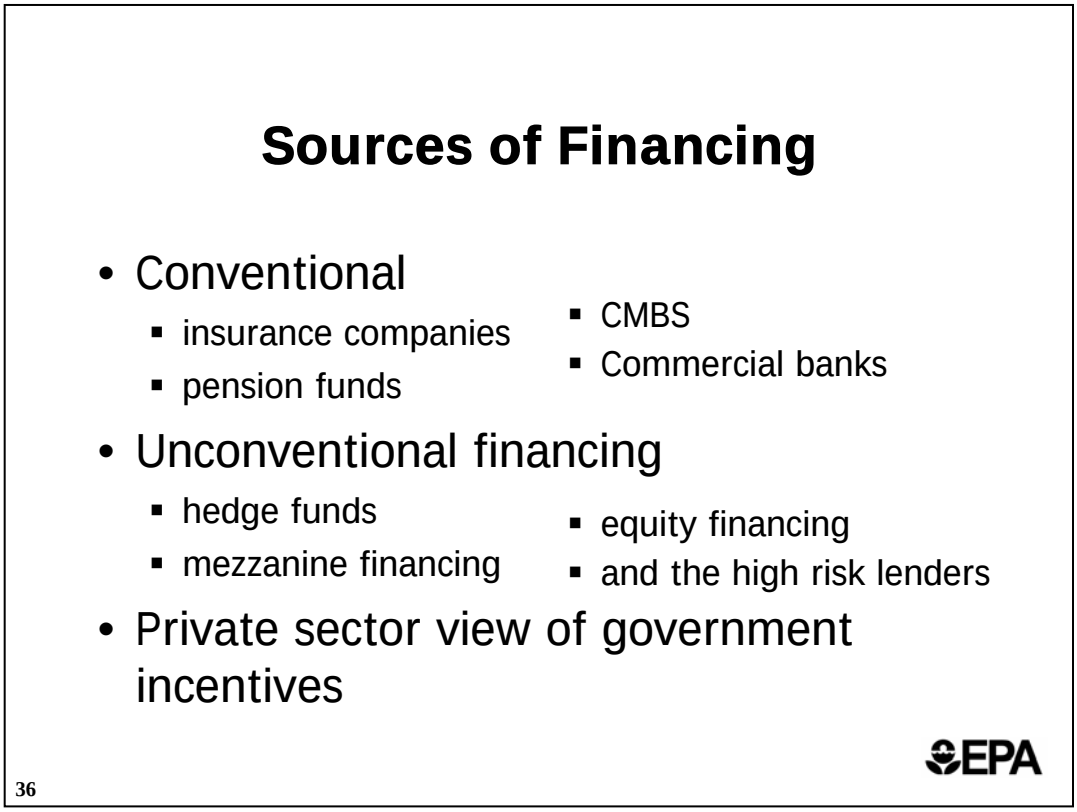
Land acquisition

- Special terms for contaminated property
- Purchase money mortgages/joint venture
  - One way of acquiring site
  - Look at the where the money is taken – at the back, not at the front
  - Special complication if owner is PRP.

Construction

- and sometimes Remediation

Permanent Sources of Capital



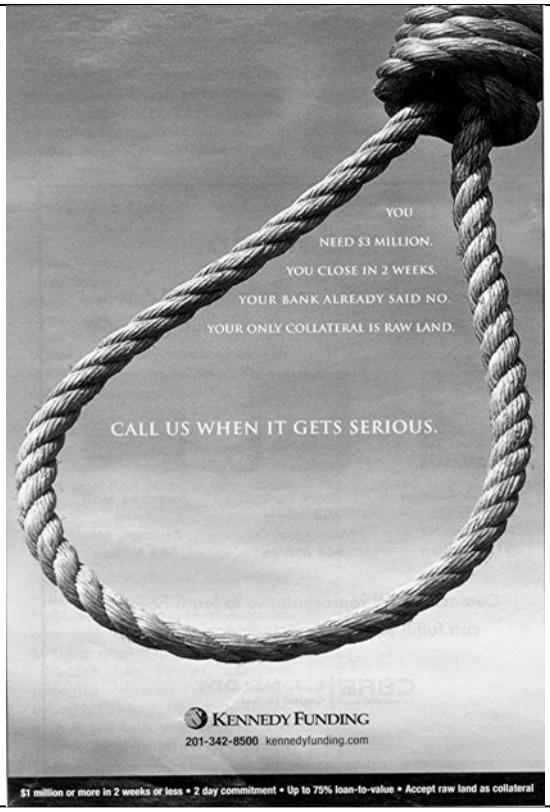
Discussion Notes:

Making an unconventional project fit into the conventional boxes; insurance companies, pension funds, CMBS, commercial banks.

Stress the importance of the ability to finance the project. Developers need OPM--- other people's money. Without it, there would be very little development.

Unconventional financing: hedge funds, mezzanine financing, equity financing and the high risk lenders

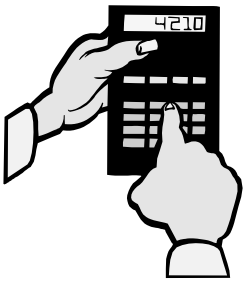
The private sector view of government incentives: "Icing o n the cake, but they want it all"
Incentive may save deal – but depends on the size of the deal and depends on the incentive.


YOU
NEED $3 MILLION.
YOU CLOSE IN 2 WEEKS.
YOUR BANK ALREADY SAID NO.
YOUR ONLY COLLATERAL IS RAW LAND.
CALL US WHEN IT GETS SERIOUS.
KENNEDY FUNDING
201-342-8500 kennedyfunding.com
$1 million or more in 2 weeks or less • 2 day commitment • Up to 75% loan-to-value • Accept raw land as collateral

37

What will the project be worth?

- Real Estate Appraisal Approaches
  - Income basis
  - Comparables
  - Replacement Value



38

Discussion Notes:

Real estate appraisal basic approaches:

Income:
Determine net operating come (basically rental income minus vacancies and all costs), then capitalize income(calculate the present value of the income stream). It can be very sophisticated, involving rent projects, tenant roll-over, maintenance and replacement costs and residual value upon sale. Most developers do not get into the present value analysis to determine viability – just when it's time to get a loan.

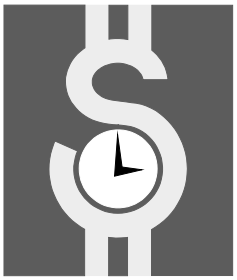
Comparables:

Find recent sales as similar in location, type and condition as possible.

Replacement Value (Opportunity costs):

What would it cost if you had to create the same facility nearby.

Pro Forma Analysis



- How much
- When
- The time value of money
- Scenarios analysis / Sensitivity analysis
- Yield
- Internal rate of return

EPA

39

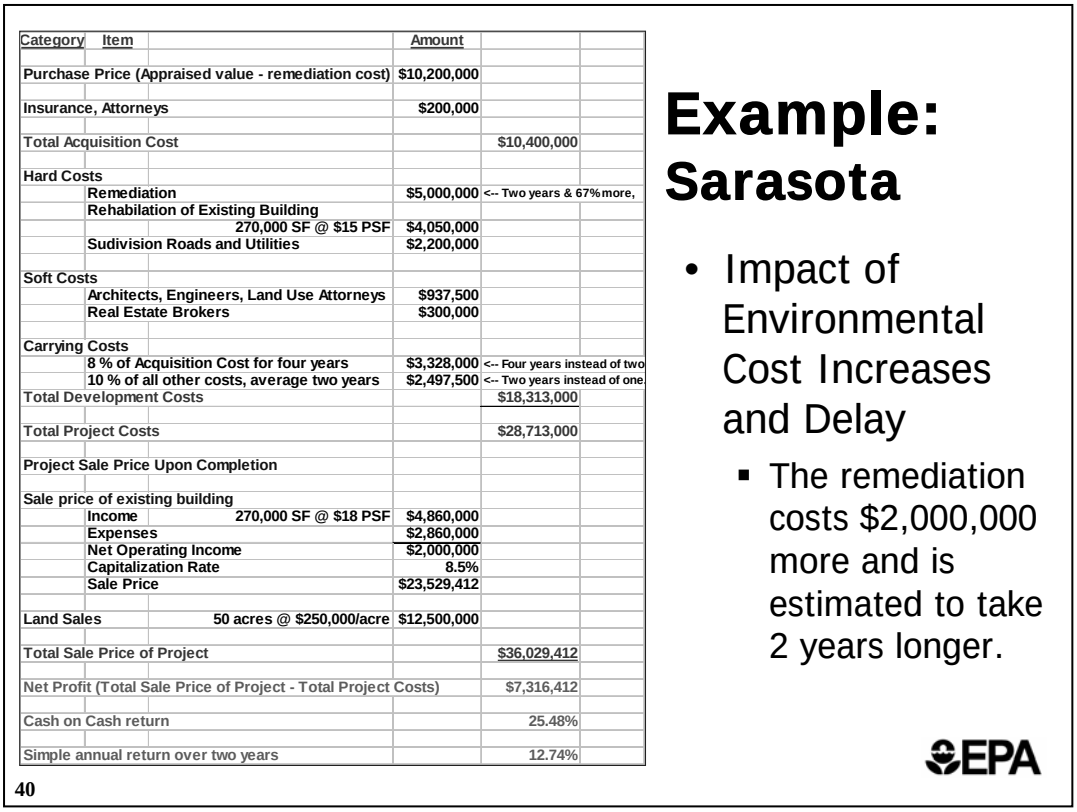
Discussion Notes:

Pro Forma Analysis:

When all issues, including environmental, come down to how much and when.

Discuss: Time value of money

Discuss “what if” scenarios.



Discussion Notes:

Return to the Sarasota example. Discuss and display the financial impact when the cost of remediation increases.

The impact of cost increases point back to the reuse assessment. Developer may have to go back to square one and determine if the proposed use is right given the new information.

Reference Page:

Full page printout of spreadsheet is included in Appendix A

Category	Item		Amount		
Purchase Price (Appraised value - remediation cost)			$10,200,000		
Insurance, Attorneys			$200,000		
Total Acquisition Cost				$10,400,000	
Hard Costs					
	Remediation		$5,000,000	<-- 2 yrs & 67%more	
	Rehabilation of Existing Building				
		270,000 SF @ $15 PSF	$4,050,000		
	Sudivision Roads and Utilities		$2,200,000		
Soft Costs					
	Architects, Engineers, Land Use Attorneys		$937,500		
	Real Estate Brokers		$300,000		
Carrying Costs					
	8 % of Acquisition Cost for four years		$3,328,000	<-- 4 yrs instead of 2.	
	10 % of all other costs, average two years		$2,497,500	<--2 yrs instead of 1.	
Total Development Costs				$18,313,000	
Total Project Costs				$28,713,000	
Project Sale Price Upon Completion					
Sale price of existing building					
	Income	270,000 SF @ $15 PSF	$4,050,000	<-- Rents drop $3/sf	
	Expenses		$2,860,000		
	Net Operating Income		$1,190,000		
	Capitalization Rate		9.5%	<-- Cap rate rises 1%	
	Sale Price		$12,526,316		
Land Sales		50 acres @ $250,000/acre	$12,500,000		
Total Sale Price of Project				$25,026,316	
Net Profit (Total Sale Price of Project - Total Project Costs)				-$3,686,684	
Cash on Cash return				-12.84%	
Simple annual return over two years				-6.42%	

Example: Sarasota

- What if the remediation takes longer
- What if the market softens
  - Rental rate drops to $15 PSF from $18 PSF.
  - The capitalization rate on sale rises to 9.5% from 8.5%.

41

Discussion Notes:

Return to the Sarasota example. Discuss and display the financial impact when the market softens, lease rates decrease.

Reference Page:

Full page printout of spreadsheet is included in Appendix A

Cashing Out

Acquisition:	Purchase Price	$ 9,000,000	
	Insur., Attorneys, etc.	200,000	$ 9,200,000
Hard Costs:	Remediation	300,000	
	Rehab of Existing Bldg (270,000sf x's $15/sf)	$ 4,050,000	
	Roads & Utilities	200,000	4,550,000
Soft Costs:	Architects, Land Use	650,000	
	Real Estate Brokers	100,000	750,000
Carrying Costs:	8% of acquisition costs(2yrs)	1,472,000	
	10% of all other costs (1yr)	530,000	2,002,000
Total Project Costs:			$16,502,000

42

Discussion Notes:

Discuss cashing out – this is what the developer wants

Acquisition:	Purchase Price	$9,000,000	
	Insur., Attorneys, etc.	200,000	$ 9,200,000
Hard Costs:	Remediation	300,000	
	Rehabilitation of Existing Bldg (270,000sf x's $15/sf)	4,050,000	
	Roads & Utilities	200,000	4,550,000
Soft Costs:	Architects, Land Use	650,000	
	Real Estate Brokers	100,000	750,000
Carrying Costs:	8% of Acquisition Costs (2 yrs) (8% x's $9,200,000 x's 2)	1,472,000	
	10% of All Other Costs (average 1 yr) (10% x's $5,300,000 x's 1)	530,000	2,002,000
Total Project Costs:			$16,502,000

Cashing Out

Value: Gross Income (270,000sf x $18/sf) $4,860,000
Operating Expenses ($10.59sf)
(2,860,000)
Net Operating Income (NOI) $2,000,000

Sale Price = NOI/Cap. Rate = $2 MM/8.5% = $23.5 MM
Project Cost $16.5 MM
Potential Profit on Sale: $7 MM

Should the Developer Sell? Is There Another Option?

43

Discussion Notes:

Discuss cashing out – this is what the developer wants

Value:	Gross Income (270,000sf x's $18/sf)	$4,860,000
	Operating Expenses ($10.60sf)	(2,860,000)
	Net Operating Income (NOI)	$2,000,000
	Cap Rate 8.5% or $2,000,000/8.5% = Value of	$23,529,412
Potential Profit on Sale:		$ 7,027,412

Cashing Out

NOI/Debt Coverage = Cash Available for Debt Service

2.0 MM/1.2 = 1.65 MM

Interest rate of 6.0%, 25 year amortization period
Maximum achievable mortgage = $21.3 MM

Total Cost:	$16.5 MM
Total Mortgage	$21.3 MM
Equity in Property	$0
Cash Taken Out of Deal	$4.8 MM

44

Thank You

After viewing the links to additional resources, please complete our online feedback form.

45