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REAL ESTATE FINANCE GRADUATE SCHOOL OF BANKING UNIVERSITY OF WISCONSIN - MADISON AUGUST 16, 1983

BANKERS ?

"WHAT THE SHOULD KNOW ABOUT REAL ESTATE VALUES AND APPRAISAL FOR MORTGAGE LENDING PURPOSES"

- 1. Traditional appraisal process--normalized assumptions
 - A. Date of appraisal--hold harmless clause
 - B. Definition of value--hold harmless clause
 - 1. Five basic conditions--cash equivalency
 - "Financing typical of the market"
 - 3. "As financed"
 - 4. Limiting conditions
 - C. Highest and best use (most probable use)
 - 1. Technically feasible
 - 2. Legal and political feasibility
 - 3. Effective demand
 - 4. Financing viable
 - D. Legal property description
 - 1. Land
 - 2. Building and improvements
 - 3. Tangible personal property
 - 4. Intangible personal property
 - 5. Public entitlement and their transferability
 - E. Essence of collateral
 - 1. Salvage value (exit value vs. finished value)
 - 2. Going concern value
 - 3. Profit centers for services
 - 4. Commodity value
 - 5. Franchise value
 - 6. A set of assumptions about the future
 - 7. Credibility of expertise
 - F. Three approaches to value
 - Market comparison (suspect due to engineered prices)
 - Cost approach (invalid since collateral is a customer which determines liquidity price of space-time inventory--just like self-liquidating retail loans)
 - Income approach (NOI/OAR is infantile for commercial loans)
 - G. Appraisal reconciliation
 - 1. Three approaches should not produce same number
 - 2. Go with method with best data

- H. Problems with traditional appraisal for commercial properties
 - 1. Methods have no predictive power
 - 2. Fair market value is normalized economies rather than behavioral
 - 3. Lenders have corrupted process by using appraisal to vindicate a decision rather than make a decision
 - 4. Lenders have corrupted process by requiring borrower to pay appraiser directly
 - 5. Lawyers have corrupted process by confusing their advocacy with appraisal objectivity
 - 6. Appraisal organizations have been unable to improve process because of laws of defammation, American tradition of reciprocity, economic weakness, inertia of courtroom precedence

Contemporary process of appraisal

- A. What is the issue for which the appraisal is required?
- B. What is the definition of property to be appraised?
- C. What is the definition of value?
 - 1. Fair market value
 - 2. Most probable price
 - 3. Liquidation value
 - 4. Insurable value
- D. What is most probable use?
 - 1. Physical attributes
 - 2. Legal/political attributes
 - 3. Linkage attributes
 - 4. Dynamic attributes
 - 5. Environmental attributes
 - 6. Matrix of alternatives
- E. Who is most probable buyer?
 - 1. Motives
 - 2. Criteria
 - 3. Limitations
- F. Which method best predicts buyer/seller behavior?
 - 1. Inference from past transactions
 - 2. Simulation of decision method
 - 3. Normative methods
- G. Demonstration of value conclusion as compatible with buyer/financing constraints
- H. An appraisal is a fictitious feasibility study
 - 1. Underscore assumptions
 - 2. Business research problem

III. Trends in appraisal

- A. Cash flow modeling
 - 1. Basic financial budgets
 - 2. Cash flow projections
 - 3. Sensitivity analysis
- B. Intensive analysis of market position
 - Occupant market
 - 2. Political market place
 - 3. Next user market position
- C. Use of letter of engagement for appraisal services
 - 1. Advancing fiduciary law
 - 2. National Counsel of Real Estate Investment Fiduciaries
 - 3. Appraisers as consultants/separate letter from appraiser to remain confidential
 - 4. Merrill-Lynch approach definition of value
 - 5. Appraiser/lawyer development of appraisal issues
 - 6. The appraisal team--engineer, lawyer, land planner, data manager, and appraiser

REVENUE REQUIRED BY CAPITAL BUDGET LOAN TO COST RATIO APPROACH

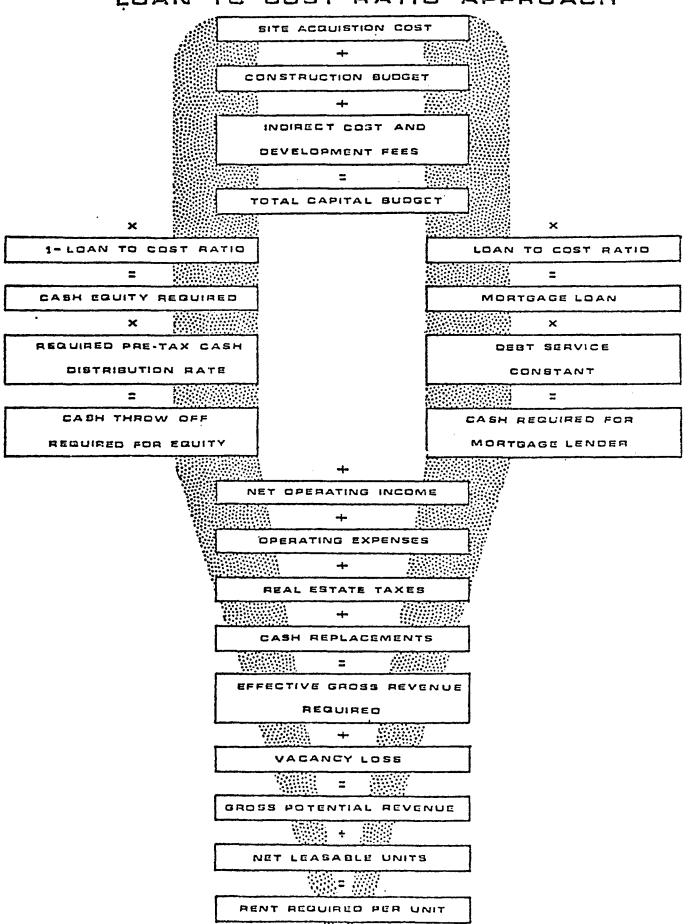
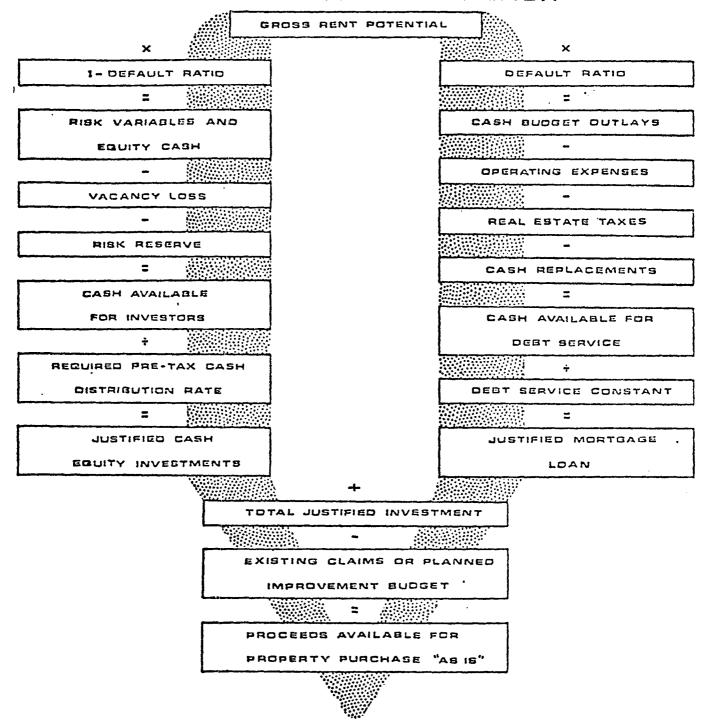
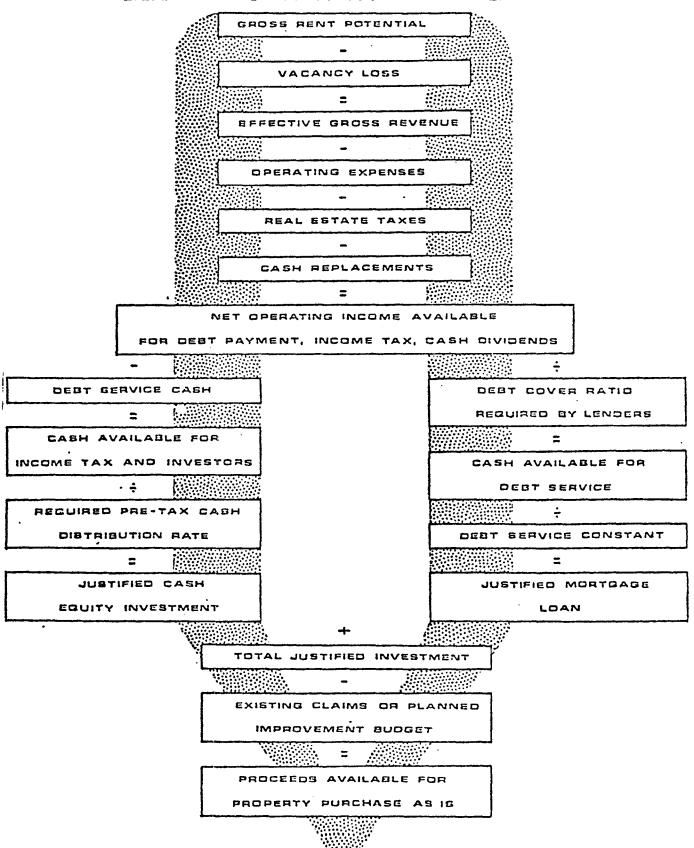


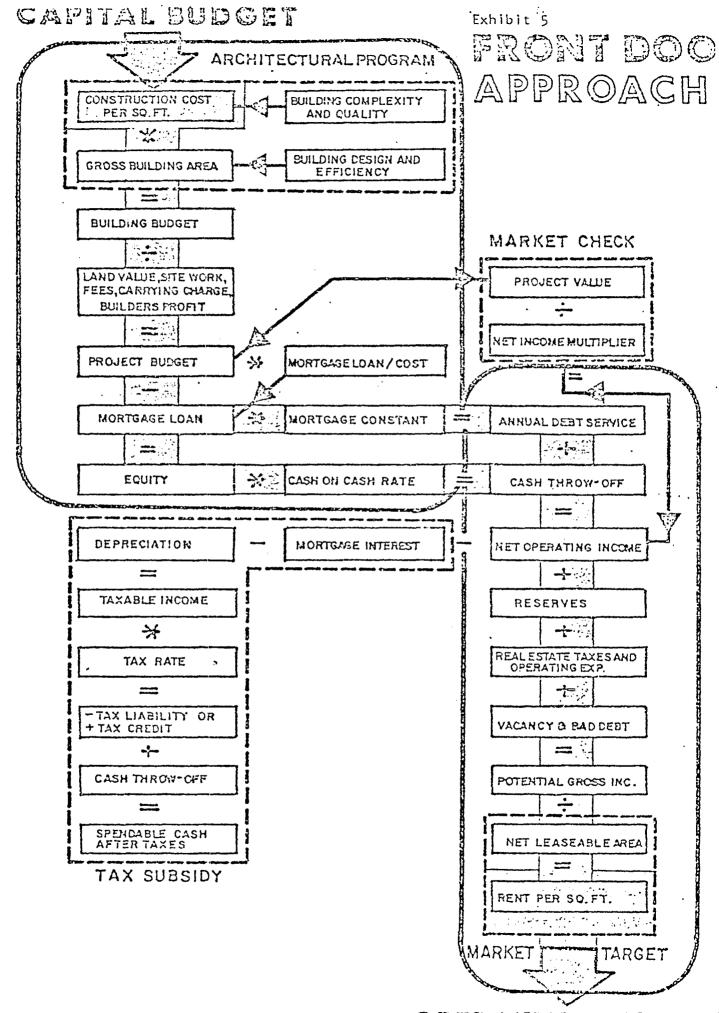
Exhibit 3

REVENUE JUSTIFIED CAPITAL BUDGET DEFAULT RATIO APPROACH



PEVENUE JUSTIFIED CAPITAL BUDGET DEBT COVER BATIC APPROACH





OPERATING MUDGE

ABA'S NATIONAL SCHOOL OF REAL ESTATE FINANCE

AT THE UNIVERSITY OF WISCONSIN MADISON, WISCONSIN

SPONSORED BY Housing and Real Estate Finance Division

Consumer Financial Services Group



AMERICAN BANKERS ASSOCIATION

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ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE-COURSE II-1985 SESSION

SUNDAY, JULY 14	MONDAY, JULY 15	TUESDAY, JULY 16	WEDNESDAY, JULY 17	THURSDAY, JULY 18	FRIDAY, JULY 19
	8:00-9:15 Finance & Risk Management Concepts Graaskamp	8:00-10:30 Financial Statement Analysis	8:00-10:45 Financial Statement Analysis	8:00-9:15 Economic Risks of the Dynamic Income Property Market Johannes	8:00-9:15 Lending Pitfalls and Opportunities with Limited Partnerships Jarchow
	9:30-10:30 Basic Financial Plan Graaskamp	Giovinazzo	Giovinazzo	9:30-10:30 Trends in Public Participation of Construction Financing George	9:30-10:30 Lending Pitfalls and Opportunities to Joint Ventures Jarchow
	10:45-12:15	10:45-12:15	11:00-12:15	10:45-12:15	10:45-12:00
11:00-5:00 Registration	The Property Loan Proposal	Letter of Commitment (Straight Permanent Loan)	Organization & Compensation of Mortgage Lending Staff	Hedging Construction Loan Interest Costs 1) For the Borrower 2) For the Lender	Case Study of Mixed Use Commercial Development Utilizing All Forms of
	Graaskamp	Brogelman	Thomas	Marek	Commercial Finance
	12:15-Class Picture	LUNCH 12:15-1:00			Boisclair
	1:15-2:45 Analysis of the Market & the Individual Lease Graaskamp	1:15-2:45 Preparing for Closing Rieselbach	1:15-3:00 Construction Lending: Administration, Cost Analysis, Control and Disbursement	1:15-2:45 Income Property Loan Case Study See Room Listings in Book	12:00-1:00 Examination
3:30-5:00	3:00-4:30	3:00-4:30	Buchanan	3:00-5:00	
The Real Estate Process (The New Approach to Real Estate Systems) B10 Commerce	Analysis of Collateral Values Graaskamp	Bankruptcy and Chapter 11 and the Income Property Loan Merg	3:00-4:45 Construction Lending Case	Public/Private Financing of a Commercial Mixed Use Development George	
	4:45-5:30 Drafting Elements of Risk Control for the Property, the Borrower, and the Package Proposal	4:45-5:30 Insurance Considerations for the Mortgage Lender	Duckese		
Graaskamp	Graaskamp	Graaskamp	Buchanan		
6:00 Reception & Dinner	6:45-8:30 Interest Rates, the Over Valued Dollar & Banking Deregulation B10 Commerce Wilmeth	DINNER 5:30-6:15 6:45-8:30 Break-out Groups Financial Statement Analysis"Homework"	COOK-OUT		

RESIDENTIAL PROPERTY MORTGAGE LENDING

Real Estate Finance - Course I American Banking Association July 14-19, 1985 University of Wisconsin-Madison

SUNDAY - July 14

3:30-5:00 PM

THE REAL ESTATE PROCESS (Graaskamp)

- A. The real estate enterprise system
- B. Real estate decisions and the decision maker's cash flow
- C. Consumer cash cycles as a basis for loans
 - 1. Buyers and renters
 - 2. Existing owners and tenants
 - 3. Future users
- D. Solvency, not value is the source of security
- E. Cash surplus -- the source of credibility
- F. Competitive pricing -- the source of profitability
- G. Government policy and the cash flows of homeowners

MONDAY - July 15

8:00-9:15 AM

HISTORICAL EVOLUTION OF RESIDENTIAL LENDING (Johannes)

- A. Pre-1930 practices
- B. Post-1930 reforms of mortgage documents, institutions, and secondary markets
- C. Post-Will reform of borrowers, secondary markets, and forms of ownership
- D. Economic policy and housing finance

9:30-10:30 AM

COMPETITIVE BANKING UNDER CURRENT ECONOMIC CONDITIONS (Johannes)

- A. Mortgage lending and bank performance
- B. Lending relative to the economic cycle
- C. Anticipated economic conditions
- D. Bank philosophy and quidelines for the '80's

10:45-12:15 PM

SINGLE FAMILY HOME LOAN (Ohmart, Wagasky, McCowan)

- A. Legal forms
- B. Role in bank portfolio plan
- C. Vital statistics and trends

1:15-2:45 PM

SINGLE FAMILY HOME LOAN UNDERWRITING AND CLOSING (Ohmart, Wagasky, McCowan)

- A. The package
- B. The property (and its appraisal)
- C. The people (and their financial statements)

D. The proposal (Loan terms and features)

3:00-5:00 PM

SINGLE FAMILY CASE STUDIES - APPRAISAL APPLICATION (Ohmart, Wagasky, McCowan)

- A. Appraisal process problems
- B. Computer processing and automation of home lending
- C. Delinquency and value
- D. Analyzing the standard Freddie Mac appraisal form

EVENING JOINT SESSION

7:00 PM

ECONOMIC DEVELOPMENT OF THE REGION TO STABILIZE HOME PRICES AND COMMERCIAL REAL ESTATE VALUES (Howell)

TUESDAY - July 16

8:00-9:15 AM

THE USE OF MORTGAGE GUARANTY INSURANCE (Graaskamp)

- A. Delinquency and foreclosure costs
- B. FHA and VA programs
- C. The private mortgage guaranty program
- D. Changing programs and rate structures

9:30-10:30 AM

COMPLICATIONS OF THE ALTERNATIVE RATE MORTGAGE (Villani)

- A. Accepted patterns for the ARM
- B. Modified delinguency and foreclosure rates
- C. Issues for guaranty insurance
- D. Economic policy and the ARM

10:45-12:15 PM

SECONDARY MORTGAGE MARKETS (Waugh)

- A. Short history of development
- B. Alternative secondary markets presently available
- C. Significance of secondary markets to originators
- D. Institutional trends and innovations

1:15-2:45 PM

SECONDARY MORTGAGE MARKETS CONTINUED (Waugh)

- A. Advanced commitments
- B. Sale of existing mortgage portfolios
- C. Servicing commitments

3:00-5:00 PM

SECONDARY MORTGAGE MARKET ARITHMETIC (Waugh)

- A. Pricing for yield
- B. Pricing bids
- C. Cost of funds

5:00-6:00 PM

OPTIONAL SLIDE LECTURE ON RESIDENTIAL DESIGN AND ENERGY EFFICIENCY (Graaskamp)

7:00-8:30 PM

CONCURRENT SESSIONS

- A. Measuring profitability (Johannes and Kramer)
- B. Alternative rate mortgages (Wagasky and Villani)
- C. Secondary mortgage market (Ohmart and Waugh)

WEDNESDAY - July 17

8:00-9:30 AM

COMPLIANCE WITH FEDERAL REGULATION OF SINGLE HOUSEHOLD LOAN PROGRAMS (Chamness)

- A. Consumer Protection Act (Truth in Lending Law)
- B. Real Estate Settlement and Procedures Act
- C. Equal Credit Opportunity Act
- D. Bankruptcy Act
- E. Other

9:45-10:45 AM

SINGLE FAMILY HOME LOAN SERVICING (Swan)

- A. Accounting controls
- B. Float control
- C. Delinguencies and workouts
- D. Insurance and bonding
- E. Costing of services

11:00-12:15 PM

ORGANIZATION AND COMPENSATION OF MORTGAGE LENDING STAFF (Joint Session) (Thomas)

- A. Job definition and structure of authority
- B. Fee structure
- C. Fixed base plus performance commissions
- D. Bonuses based on performance
- E. Standards of staff time to production

1:15-3:30 PM

CONSTRUCTION LENDING FORMATS AND PITFALLS ON SINGLE FAMILY LOAN FORMAT (McCoy)

- A. Analysis of plans, specs and bids
- B. Mechanics liens and waivers
- C. Project vs. custom building

- D. Relationship with homeowner's builder
 E. Site inspection alternatives
- F. Draws and retainage issues

3:45-5:30 PM

COMPLIANCE CASES (Chamness, Wagasky, Ohmart)

WEDNESDAY EVENING COOK-OUT

THURSDAY - July 18

8:00-9:45 AM

ANALYSIS OF HOUSING MARKETS (Graaskamp)

- A. Price deflation factors
- B. Beyond demographics: segmentation by lifestyle
- C. Affordability issues and public finance
- D. Product change trends

10:00-12:15 PM

ANALYSIS OF RESIDENTIAL LAND DEVELOPMENT FINANCING PROPOSAL (Barrett)

- A. Site selection and analysis
- B. Consumer profile and product specification
- C. Engineering and capital budgeting
- D. Merchandising program and capital budgeting
- E. Capital budgeting and financing sources
- F. Case study of a tract loan and density zoning (GraaskampP

1:15-3:30 PM

ANALYSIS OF MULTI-FAMILY RENTAL LOAN PROPOSAL (Shepard and Graaskamp)

- A. Principls of loan -- back door approach (Graaskamp)
- B. Property analysis and project design (Shepard)
- C. Rend structures and operating characteristics
- D. Alternative loan formats

3:45-5:00 PM

FINANCIAL ANALYSIS OF AN APARTMENT HOUSE INVESTMENT AND MORTGAGE LOAN FOR ELDERLY HOUSING (Graaskamp)

- A. Pricing of rental units
- B. Pricing of supportive services
- C. Operating costs
- D. Credit enhanced tax exempt financing

OPEN EVENING

FRIDAY - July 19

8:00-9:30 AM MANAGEMENT SKILLS MODULE (Healey)

9:45-12:15 PM MANAGEMENT SKILLS MODULE (Continued) (Healey)

1:15-3:00 PM WRITTEN EXAM

INCOME PROPERTY LENDING

Real Estate Finance - Course II
American Banking Association
July 14-19, 1985
University of Wisconsin-Madison

SUNDAY - July 14

3:30-5:00 PM

THE REAL ESTATE PROCESS (Joint meeting with Residential Property Section) (Graaskamp)

- A. The real estate enterprise system
- B. Real estate decisions and the decision maker's cash flow
- C. Cash cycles as a basis for loans
 - 1. Investors and tenants
 - 2. Municipal cash flows
 - 3. Future users
- D. Solvency, not value is the source of security
- E. Cash surplus -- the source of credibility
- F. Competitive pricing -- the source of profitability
- G. Government policy and project cash flows

MONDAY - July 15

8:00-9:15 AM

FINANCE AND RISK MANAGEMENT CONCEPTS (Graaskamp)

- A. Risk and risk management defined
- B. Strategic elements of risk management for the lender
- C. Strategic concerns of the borrower
- D. Risk management methods
- E. The synthesis -- pleasure, pain, and bail-out

9:30-10:30 AM

BASIC FINANCIAL PLAN (Graaskamp)

- A. Front door back door approach
- B. Default point/debt cover ratio
- C. Sensitivity analysis

10:45-12:15 PM

THE PROPERTY LOAN PROPOSAL (Graaskamp)

- A. Income quality
- B. Property proforma
- C. Profile of the borrower
- D. Profile of the lender
- E. Cash flow model for negotiation

1:15-2:45 PM ANALYSIS OF THE MARKET AND THE INDIVIDUAL LEASE (Graaskamp) A. Market research of commercial space B. Absorption vs. capture rates C. Analysis of a commercial leasing strategy D. Analysis of an individual lease Pitfalls in proforma analysis 3:00-4:30 PM ANALYSIS OF COLLATERAL VALUES (Graaskamp) Α. How to read an appraisal B. How to select an appraiser C. The relevance of resale price D. Loan and lease guarantys DRAFTING ELEMENTS OF RISK CONTROL FOR THE PROPERTY, 4:45-5:30 PM THE BORROWER, AND THE PACKAGE PROPOSAL (Graaskamp) A. The implicit assumption B. Negative incentives C. Positive incentives D. The case study **EVENING JOINT SESSION** ECONOMIC DEVELOPMENT OF THE REGION TO STABILIZE HOME PRICES 7:00 PM AND COMMERCIAL REAL ESTATE VALUES (Howell) TUESDAY - July 16 8:00-9:15 AM FINANCIAL STATEMENT ANALYSIS (Giovinazzo) Α. В. С. FINANCIAL STATEMENT ANALYSIS (continued) 9:30-10:30 AM Α. В. C. 10:45-12:15 PM LETTER OF COMMITMENT Specifications of financial terms Specifications of collateral В. General condition C. Computing the fees D.

1:15-2:45 PM PREPARING FOR CLOSING A. The checklest B. Pushing for position C. Anticipating resistance to enforcement 3:00-4:30 PM BANKRUPTCY, CHAPTER 11 AND THE INCOME PROPERTY LOAN (Merg) Constraints imposed on secured creditors B. Constraints imposed on landlord/tenant relationships C. Recent court cases protecting borrowers Recent and proposed legislation favoring lenders Estoppel of the mortgage lender pursuing preferred claims 4:45-5:30 PM INSURANCE CONSIDERATIONS FOR THE MORTGAGE LENDER (Formisano) Α. Named insured, mortgagee clause, and other primary methods B. Personal injury liability C. Errors and omissions coverage D. Due diligence and the fiduciary FINANCIAL STATEMENT WORKSHOP PROBLEMS 7:00-8:30 PM (Giovinazzo) Α. В. С. WEDNESDAY July 17 8:00-9:15 AM FINANCIAL STATEMENT ANALYSIS (Giovinazzo) Α. В. 9:30-10:45 AM FINANCIAL STATEMENT ANALYSIS (Giovinazzo) Α. В. €. ORGANIZATION AND COMPENSATION OF MORTGAGE LENDING STAFF 11:00-12:15 PM (Joint Session) (Thomas) A. Job definition and structure of authority B. Fee structure C. Fixed base plus performance commissions D. Bonuses based on performance

Standards of staff time to evaluate production

E.

1:15-2:45 PM		STRUCTION LENDING ON AN INCOME PROPERTY LOAN hanan)
	A. B. C. D.	Scheduling the draws
3:00-4:30 PM		-PARTITE AGREEMENTS chanan)
	A. B. C.	Buy/sell agreements Conditional letter of commitment
4:45-5:30 PM		VICING CONSTRUCTION LOAN DISBURSEMENTS chanan)
	A. B. C. D.	, 3
WEDNESDAY EVENING CO	00K-(DUT
THURSDAY - July 18		
8:00-9:15 AM	ECO	NOMIC RISKS OF THE DYNAMIC INCOME PROPERTY MARKET
	A. B. C.	Aggressive banking
9:30-10:30 AM		NDS IN PUBLIC PARTICIPATION OF CONSTRUCTION FINANCING orge)
	A. B. C.	
10:45-12:15 PM		GING CONSTRUCTION LOAN INTEREST COSTS rrick)
	A. B. C.	Fungible mortgage futures Hedging for the lender Hedging for the borrower
1:15-2:45 PM		OME PROPERTY LOAN CASE STUDY NO. 1 ristianson, Graaskamp, Marrick)
	A. B. C.	

3:00-5:00 PM

PUBLIC/PRIVATE FINANCING OF A COMMERCIAL MIXED USE DEVELOPMENT (George)

- A. Credit enhancements
- B. HODAG and UDAG
- C. Blended funds
- D. Trends and forecasts

OPEN EVENING

FRIDAY - July 19

8:00-9:15 AM

LENDING PITFALLS AND OPPORTUNITIES WITH LIMITED PARTNERSHIPS (Jarchow)

- A. IRS and SEC rules controlling debt
- B. Marketing constraints on debt of limited partnerships
- C. Financing limited partnership subscriptions
- D. Assessment of limited partners for deficits

9:30-10:30 AM

LENDING PITFALL AND OPPORTUNITIES TO JOINT VENTURES (Jarchow)

- A. Joint venture partners liabilities for debt
- B. Joint venture sanctions for capital subscription
- C. Comparison of joint venture strengths and weaknesses to those of limited partnerships

10:45-12:15 PM

CASE STUDY OF MIXED USE COMMERCIAL DEVELOPMENT UTILIZING ALL FORMS OF COMMERCIAL FINANCE (Boiclair)

- A. Structuring a joint venture with foreign capital
- B. Design of a project for tax exemp IRB financing
- C. Design of a project for tax incremental financing to encourage economic development
- D. Marketing a project to create collateral value

1:15-3:00 PM

WRITTEN EXAM

Name)				

1985 ABA National School of Real Estate Finance

Final Exam - Course I: Residential Real Estate Finance

- 1. Prior to the Great Depression, most mortgages were:
 - a. 30 year, fixed rate fully amortized loans
 - b. Short term balloon mortgages with low loan/value ratio and no amortization
 - c. Variable rate, fully amortized mortgages
 - d. 40 year, fixed rate, fully amortized loans
- 2. The Dual Banking System refers to:
 - a. The existence of large and small institutions
 - b. The existence of both banks and thrifts
 - c. The existence of both Federal and State charters
 - d. The existence of fixed rate and variable rate lending
- 3. Variable rate mortgage instruments:
 - a. Shift interest risk from the lender to the borrower
 - b. Shift interest risk from the borrower to the lender
 - c. Eliminate interest risk for both borrower and lender
 - d. Eliminate borrower default risk
- 4. Which statement is true?
 - a. S&L's can now make unlimited consumer loans
 - b. S&L's can now make unlimited noncollateralized C&I loans
 - c. S&L's can now make umlimited C&I loans backed by commercial real estate
 - d. S&L's can now offer NOW's and business demand deposits
- 5. Which agency insures mortgages?
 - a. FSLIC
 - b. FHLBB
 - c. FDIC
 - d. FHA
- 6. Which act separated commercial from investment banking?
 - a. National Bank Act of 1863
 - b. Banking Act of 1933
 - c. Bank Holding Company Act of 1956
 - d. Depository Institutions Act of 1980
- 7. According to Kane, the development of the current financial system is being dictated by:
 - a. Cost considerations and incorrectly priced guarantees/insurance
 - b. The free market
 - c. More restrictive government regulation
 - d. An expected long term decrease in interest rates

- 8. Prior to commencing a mortgage foreclosure proceeding when a mortgage instrument approved for use by the FMNA/FHLMC is utilized, is a preliminary notice of foreclosure required before publication is commenced in accordance with state law?

 Yes or No
- 9. Banker X has received a telephone call from Borrower Y requesting a 60 day extension to pay taxes owed on mortgaged property and another 30 days to make a principal and interest payment. X agreed orally to the extension and Y made the principal and interest payment, but failed to pay the taxes, even though the next principal and interest payment was also made. X commenced foreclosure proceedings and Y sued X to enjoin the proceedings. Should Y succeed? Yes or No
- 10. The FNMA morgage-backed security guarantees:
 - a. payment of both interest and principal, whether or not collected
 - b. payment of both interest and principal when collected
 - c. payment of interest only, whether or not collected
 - d. payment of interest only when collected
- 11. Which of the three approaches used in the appraisal process typically receives the greatest emphasis and reliance for residential properties?
 - a. cost approach
 - b. market data or direct sales comparison approach
 - c. income capitalization approach
- 12. Which of the following aspects of comparable sales are generally not permissable:
 - a. properties should be as comparable as possible in age, style, and location as the property being appraised
 - any source of information may be used for obtaining the data on comparable properties, including realtor's listings
 - c. the adjusted comparable sales price should not vary by more than 15% from the actual sales price
- 13. If the lender charges the borrower for the expenses of the appraisal and the borrower requests a copy of the completed report, the lender should comply with the request. True or False
- 14. The major non-controllable cash flows for most banks are associated with:
 - a. deposits
 - b. loans
 - c. federal funds transactions
 - d. securities transactions
- 15. A negative rate-sensitivity gap is appropriate funds management strategy when:
 - a. the rate of inflation moderates
 - b. the interest rate outlook is uncertain
 - c. the bank is retail or consumer oriented
 - d. the rate of inflation accelerates
- 16. Among the following sources of bank funds, the most expensive is:
 - a. subordinated debt
 - b. adjustable-rate preferred stock
 - c. large certificates of deposit
 - d. retained earnings

- 17. The Scioto National Bank has earned a return on its average total assets of 1% in recent years. The bank's leverage multiplier is 15 times, and it paid out 40% of its earnings in cash dividends. What is the approximate rate of asset growth that can be supported by the internal generation of equity capital?
 - a. 8 percent
 - b. 12 percent
 - c. 9 percent
 - d. 6 percent
- 18. Bank net profit margins are relatively high because:
 - a. its equity capital is relatively low
 - b. its returns on assets are relatively low
 - c. its risk exposure is relatively low
 - d. its asset yields are relatively low
- 19. The ratio of a bank's earning assets to total assets is determined largely by:
 - a. the size of its loan portfolio
 - b. its investment in banking offices and other facilities
 - c. its skill in managing its cash position
 - d. its mix of deposits
- 20. The operation of the deposit insurance program in its present form:
 - a. reduces the need for restrictive bank laws and regulations
 - b. reduces the cost of bank funds
 - c. reduces the willingness of banks to take interest-rate risks
 - d. reduces bank earnings
- 21. A bank anticipates that interest rates will decline. In this situation, the bank should:
 - a. increase the maturity of its assets
 - b. build up a net Federal funds sold position
 - c. come to market now with a common stock issue
 - d. increase its asset sensitivity
- 22. A growing equity mortgage (GEM) results in negative amortization in the early years of the loan. True or False
- 23. For national banks, adjustable rate mortgage payments must be sufficient to amortize the entire loan without a substantial balloon payment by the end of the thirtieth year. True or False
- 24. In deciding on alternative mortgage programs, a lender must consider:
 - a. cost and ability to service
 - b. borrower acceptance
 - c. source and cost of funds
 - d. asset and liability management
 - e. government agency programs
 - (a) c is not correct
 - (b) a, d, e are correct
 - (c) d only is correct
 - (d) all are correct

Page Four.

- 25. Life styles can best be described as the way people:
 - a. take part in leisure time activities
 - b. dress and invest their money
 - c. spend their time and money
 - d. decorate their homes
- 26. Analysis of the housing market requires segmentation of demographic data
 - a. to determine annual absorption rate
 - b. to estimate size of market as a basis for judging an acceptable capture rate
 - c. to determine house style and size
 - d. to estimate growth in markets over time
- 27. Housing investments will not have rapid increases in value for the next ten years as experienced in the 1970s because
 - a. family formation and demographics are unfavorable
 - b. family-size and lifestyle are changing
 - monthly cost of 1970 style home will favor alternative residential lifestyles
 - d. cost to borrow, cost to operate, lifestyle, and demographics favor smaller, attached units at the expense of larger detached suburban homes
- 28. Elderly congregate housing must compromise between:
 - a. size of private apartments and amount of community space
 - percentage of monthly payment for traditional rent and percentage allocated for services
 - c. collateral value of real estate and commercial value of services provided
 - d. all of the above
- 29. The graduated payment mortgage expects to improve its payment and collateral risk due to:
 - a. the rate of inflation
 - b. the principle of tilt
 - 3. the principle of equity build-up
 - 4. seasoning
- 30. The adjustable rate mortgage shifts traditional risk responsibilities among the parties depending on:
 - a. the ability of the borrower's income to rise with inflation
 - b. the relationship of the interest rate index chosen to the long-term nature of the mortgage
 - c. the claim settlement policies of the private mortgage guarantor
 - d. the impact of rising mortgage rates on price levels and liquidity of residential mortgage market
 - e. all of the above
- 31. Residential land development financing should be based on
 - a. different loan formats for different functions such as infrastructure construction, land control, upfront soft costs, and retail sales contracts
 - b. existence of a final takeout quarantee at a future point in time
 - existence of a careful study of market absorption and capture rates for the immediate neighborhood
 - d. all of the above

- 32. The private mortgage guarantee rate plan is
 - a. always selected to minimize monthly payments for the borrower
 - b. usually selected to minimize monthly payments for the borrower
 - c. usually selected to minimize monthly payments for the borrower with longest term available for lender
 - d. occasionally chosen to minimize bookkeeping for the servicer
- 33. Collateralized mortage obligations (CMO) differ from past due securities because
 - a. principal payments are reinvested until maturity
 - b. all principal payments are concentrated on repayment of a subset of bonds issued to create short, medium, and long-term maturities
 - c. repayment on time is not guaranteed by GNMA or private guarantor
- 34. Most originators of residential mortgages plan to raise the money in the secondary market and
 - a. make their money in servicing fees
 - b. make their money in arbitraging between capital markets
 - c. break even on the mortgages, but profit from related businesses such as building, brokerage, insurance, and services
 - d. protect the originator against risks of delinquency and default due to aggressive underwriting
- 35. The most serious gaps in insurance programs related to residential mortgage lending are
 - a. earthquake and flood insurance for the homeowner
 - b. earthquake and mortgage impairment coverage for the lender/investor
 - c. fidelity and liability insurance for the condominium project
 - d. errors and omissions coverage for the appraiser
 - e. contingent construction construction liability insurance
- 36. Architectural planners require definition of a program and apartment building design requires very detailed
 - a. merchandising research studies
 - b. specific tenant target profiles
 - c. promotional strategies prior to design and construction
 - d. a rent study for average rents in the neighborhood
 - e. a full financial analysis and sensitivity study for solvency at different rent levels
- 37. Which of the following ratios or trends exhibit stable long-term norms in the U.S. economy?

 (Indicate all correct answers)
 - a. The rate of growth of nominal GNP
 - b. The ratio of growth of the narrow money supply (M1) to GNP
 - c. The overall capital-output ratio (the ratio of physical capital to GNP)
 - d. The rate of gowth of real GNP
 - e. The ratio of non-financial debt to GNP

- 38. Which of the following statements concerning ordinary business cycles are correct? (Indicate all correct answers)
 - The annual rate of debt expansion is a leading indicator of cyclical change
 - b. Excessive inventories are a principal cause of the termination of cyclical expansions
 - c. Building permits for private housing starts are an important lending indicator
 - d. The ratio of debt to GNP typically increases in the latter part of cyclical expansions
 - e. Inflation trends in the current cyclical expansion are similar to prior World War II expansions

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1985 ABA National School of Real Estate Finance

Final Exam - Course II: Income Property Financing

1. In most instances, interest rate risk can successfully be exchanged for credit risk.

T or F

- 2. Mortgage securities can:
 - A. Result in yield pickup
 - B. Marketing gain upon sale
 - C. Provide liquidity
 - D. Be generated with any alternative mortgage instrument
 - E. Be used as collateral
 - (a) All are correct
 - (b) A, B, C are correct
 - (c) D is not correct
 - (d) B and E are not correct
- 3. In today's market, it is not necessary for banks to make open end construction loans to be an active lender.

T or F

- 4. Name four major risks to be underwritten in making a construction loan:
 - (a) credit, contractor, legal, market
 - (b) credit, economic, construction, people
 - (c) credit, construction, market, people
 - (d) none of the above
- 5. On both variable and fixed rate mortgages, Villani argues the two key predictors of default are:
 - (a) monthly payment/income; loan/value
 - (b) maturity; loan/value
 - (c) interest rate level; maturity
 - (d) neighborhood; downpayment
- 6. Which Federal Reserve policy is not procyclical?
 - (a) interest rate targeting
 - (b) free reserves targeting
 - (c) monetary aggregate targeting
 - (d) all the above are procyclical

- 7. In response to increased interest risk, banks and thrifts have:
 - (a) concentrated more on matching the maturity and duration of their assets to that of their liabilities
 - (b) tried to rely more on noninterest sources of income and expenses such as fee income
 - (c) tried to diversify risk across product and geographic lines
 - (d) all the above
- 8. Which of the following are good banking practices to protect a potential lender-creditor's interest in regard to a loan, should the borrower-debtor file a Chapter 11 proceeding?
 - a. File a foreclosure action against the borrower-debtor whose loan is in default.
 - b. Maintain secured collateral confortably in excess of the loan balance.
 - c. Provide a sixty (60) day grace period for default.
 - d. Perfect security interests in collateral in regard to a loan within ten (10) days of the execution of the loan documents.
 - e. Include default provisions in loan documents that state filing a bankruptcy petition constitutes a default under the promissory note and mortgage.
 - f. Provide for an absolute assignment of rent and/or accounts receivable upon the occurence of any mortgage default.
 - g. Pursue an active controlling role in the management and/or operation of borrower/debtor's business.
- 9. Which of the following prepetition payments and/or transfers of interests in properties from a borrower-debtor might be subject to recovery by a trustee or a debtor in possession for the bankruptcy estate?
 - a. Payments on an under secured loan within ninety (90) days before the filing of the petition.
 - b. Regular monthly loan payments pursuant to a well established amortization schedule.
 - c. Property recovered pursuant to a strict foreclosure.
 - d. Lump sum payments of outstanding loan principal in regard to a loan that is not in default.
- 10. Filing of a bankruptcy petition stays which of the following collection procedures:
 - a. Enforcement of a judgment against a debtor.
 - b. Setoff against a prepetition debt.
 - c. Proceeding to collect alimony, maintenance, or support payments pursuant to a divorce action.
 - d. Garnishment of borrower-debtor's wages.
 - e. Actions to evict.
 - f. Continuation of a criminal action against borrower-debtor.

- 11. The cash breakeven ratio is more important than the debt cover ratio test because:
 - a. It combines business risk and financial risk
 - b. It combines static and dynamic risks
 - c. It establishes gross revenue as a common point of reference for financial analysis
 - c. It represents all cash demands on the enterprise
- 12. Cash revenues for income property are more significant than base rent because:
 - a. They are sensitive to lag in collecting passthroughs
 - It is difficult to distinguish rents from repayment of tenant improvement loans
 - c. Management profits are concealed in tenant assessments
 - d. Percentage rents are important to loan security
- 13. Gross rent multipliers are misleading indicators of value because:
 - a. Potential gross rent conceals concessions
 - b. Rents are no longer comparable per unit of area
 - c. Rents are no longer comparable in terms of additional passthroughs
 - d. Appraisers are careless about services and furnishings which may be included in gross rents
- 14. The four C's of real estate finance are:
 - a. Character, credit, capacity, and connections
 - b. Cash downpayment, credit, and credibility
 - c. Customer control, credit, and cash up front
- 15. For large commercial buildings the banker needs his own architect and engineering consultant because:
 - a. Big name architects from out-of-town may not have experience with local conditions
 - b. Local architects may be influenced by owner to favor short term economy rather than long term life cycle operating characteristics
 - c. Special uses such as elderly housing require special background
 - Technical details make large differences in economic value and cash flows in the long run
- 16. Marketing research should stress:
 - a. Absorption rate statistics for type of space in question
 - Capture rate statistics for project
 - c. Market segments intended to be served by a project
 - d. Capture rate achievable due to degree of monopoly in serving certain segments

17. Debt service coverage ratios are the same for all income property.

T or F

- 18. A debt service coverage ratio of 1.20 means:
 - a. The loan is 80% loan to value
 - b. The project is preleased at an adequate level
 - c. You have \$1.20 of net income (before debt service) for every \$1.00 of debt service required
 - d. Your expense ratios need to be adjusted
 - e. None of the above
- 19. The financial feasibility of real estate developments should always be judged by the projects ability to meet operating expenses and debt service upon full lease-up.

T or F

20. Interest rates on mortgage loans can be thought of as a composite of the real rate of interest, a premium for risk and a premium for expected inflation.

T or F

21. When inflationary pressures increase, greater weight must be given by the lender to the <u>future</u> appreciation of a property as opposed to the current value.

T or F

22. Real estate collateral value which depends on tax shelter benefits to borrower would justify parital endorsement of mortgage note.

T or F

- 23. The maximum real estate mortgage justified on an income property should be determined by:
 - a. Space rents, debt cover ratio, and real loan constant
 - b. Space rents, debt cover ratio, and cash constant
 - c. Loan to value ratio
 - d. Estimated resale price less costs of sale
 - Estimated resale price less costs of sale plus escrowed collateral
- 24. The self interest of the bank is to earn market rate returns on capital and recover loan principal on schedule so that if collateral is super adequate, the loan officer should not:
 - a. Question design
 - b. Question fiscal impact on community
 - c. Cost effectiveness of design solution
 - d. Remind borrower of social and economic implications of that type of capital
 - e. Provide unsolicited comment or ethical observations

- 25. Several different profitability measures are interrelated, revealing several ways that rates of return can be improved. The rate of return on assets is determined by which one of the following relationships:
 - ROR owners X Asset Turnover equity
 - b. ROR owners X ROR equity sales
 - c. ROR X Asset Turnover sales
 - d. ROR X Leverage Factor
- 26. In addition to an ageing analysis, the two major ratios used to evaluate the quality of accounts receivable are which of the following:
 - a. Current Ratio and Accounts Receivable Turnover
 - b. Accounts Receivable Turnover and Number of Days Sales in Accounts Receivable
 - c. Quick Ratio and Number of Days Sales in Accounts
 Receivable
 - d. Accounts Receivable Turnover and the Rate of Return on Accounts Receivable.
- 27. The approach to cash flow analysis described in our seminars divided the sources and uses of cash into three major categories: operations, discretionary decisions and financing. Which of the following activities would be included in the operations category:
 - a. Gains on the sale of fixed assets (as a deduction) and charges in accounts receivable and accrued expenses.
 - b. The charge in the short-term construction in progress account and the payment of dividends.
 - c. The charge in the accounts payable account, losses on the sale of a truck (as an addition) and the sale of common stock.
 - d. An increase in accounts payable and notes payable and a charge in the deferred taxes balance.

28. A company has the following balance sheet:

Cash Accounts Receivable Inventory Fixed Assets (Net)	\$ 10,000 40,000 50,000 100,000
Total	\$200,000
Accounts Payable Accrued Expenses Notes Payable - ST Notes Payable - LT Owners Equity	\$ 20,000 20,000 10,000 70,000 80,000
Totai	\$200,000

Net sales for the year were \$1,000,000 and net income for the year was \$80,000. Which set of values are the correct figures for the specified ratios:

Quick Ratio		Asset Turnover	ROR Assets	Leverage Factor	ROR owners equity	
						
a.	1.0	1	4%	1.50	10%	
b.	1.25	5	8%	2.50	20%	
c.	1.0	5	40%	2.50	100%	
d.	2.0	12.5	16%	1.25	20%	

- 29. For national banks, adjustable rate mortgage payments must be sufficient to amortize the entire loan without a substantial balloon payment by the end of the thirtieth year. Tor F
- 30. The coverage factor when analyzing an income property refers to:
 - a. The ratio of gross tenant income to tenant expenses.
 - b. The ratio of the first year estimated net operating income to the proposed annual debt.
 - c. The ratio of the average estimated income to the proposed debt.
 - d. The ratio of credit tenant net income to proposed annual debt.
- 31. The capitalization rate refers to:
 - a. The ratio of gross income to value.
 - b. The ratio of the first year net operating income to value.
 - c. The net worth of the borrower.
 - d. The discounted cash flow of the property's net income stream.

- 32. Value appreciation in the long term for an income property is the result of:
 - a. Increasing net income
 - b. Falling interest rates
 - c. Decline in expected returns to equity dollars
 - d. All of the above
- 33. Fair market value appraisals must distinguish between the value attributable to land and buildings and price increments attributable to special financing terms.

T or F

34. Project feasibility refers to compatability with physical, market, and political constraints while "economic feasibility" suggests the numbers may work under a specific set of conditions.

T or F

- 35. Which of the following appraisal methods can be used to subtly overstate value:
 - a. The Ellwood approach to capitalization
 - b. Cost to reproduce
 - c. Failure to adjust market comparable for financing term and personal property
 - d. Projection of rental increases without cost of leasing or related changes in refinancing costs
 - e. All of the above
- 36. The most serious risk for income property construction loans lenders are:
 - a. The competence of the borrower
 - b. The financial solvency of the builder
 - c. An interest rate based on a loading plus prime
 - d. An overrun in construction costs
 - e. Failure to rent-up at the expected rate of absorption
- 37. An appraisal of an income property is suspect:
 - a. If all three approaches to value conclude at nearly identical values
 - b. If the appraiser has eliminated the cost approach or market approach as inappropriate
 - c. If the appraiser has failed to identify the supply of competitive space and documents rate of absorption of this space
 - d. If the appraiser failed to document computations of expenses for income statement

- 38. Lease analysis for to be built real estate pledged as construction loan collateral should stess:
 - a. Conditions permitting cancellations by landlord
 - b. Conditions permitting cancellation before occupancy by the tenant
 - c. Conditions before occupancy providing remedies to the tenant
 - d. Definition of specific space to be leased and services to be provided
- 39. Type of escalator clause in each lease is critical to determine:
 - a. Time lag for cash collection from tenant
 - b. Proration based on total space or occupied space
 - c. Thoroughness of appraiser in estimating revenues for discounted cash flow
 - d. Reasonableness of cash estimated available for debt service
 - e. Relative bargaining power of landlord
- 40. The preferred method for appraising fair market value of an income property today is:
 - a. Market comparison approach based on normalized net income multipliers or price per unit of net leaseable area
 - Ten year discounted cash flow on pretax basis encumbered by existing leases
 - c. Ten year discounted cash flow as in (b.) assuming specific financing terms assumable with purchase of project
 - d. Ten year discounted cash flow as in (b.) with financing at the current market rate on an after tax basis
- 41. Which of the following occurrences would cause the most difficulty in remarketing a low floater tax exempt bond issue;
 - a. Interest rate fluctuations
 - b. Implementation of the proposed flat tax
 - c. A change in the credit worthiness of the borrower
 - d. A change in the credit worthiness of the letter of credit issuer
- 42. Which of the following characterizes Japanese investment in the United States?
 - a. Strong focus on tax shelters
 - b. Long investment horizon
 - c. Unwilling to write long term letters of credit
 - d. Primary importance placed on credit worthiness of borrower. Secondary importance placed on underwriting characteristics of the real estate.
 - e. b. and d. above
 - f. a. and c. above

- 43. Which of the following ratios or trends exhibit stable long-term norms in the U.S. economy? (Indicate all correct answers)
 - a. The rate of growth of nominal GNP
 - b. The ratio of growth of the narrow money supply (M1) to GNP
 - c. The overall capital-output ratio (the ratio of physical capital to GNP).
 - d. The ratio of non-financial debt to GNP
- 44. Which of the following statements concerning ordinary business cycles are correct? (Indicate all correct answers)
 - The annual rate of debt expansion is a leading indicator of cyclical change
 - Excessive inventories are a principal cause of the termination of cyclical expansions
 - c. Building permits for private housing starts are an important lending indicator
 - d. The ratio of debt to GNP typically increases in the latter part of cyclical expansions
 - e. Inflation trends in the current cyclical expansion are similar to prior World War II expansions
- 45. From a limited partner's perspective, syndicatable debt generally has the following characteristics:
 - a. A term of not more than 10 years, a fixed rate of interest, nonrecourse
 - b. A term of 10 years, an adjustable rate of interest, partially recourse
 - c. A term of at least 10 years, a fixed rate of interest, nonrecourse
 - d. A term of at least 10 years, an adjustable rate of interest, recourse
- 46. FNMA will purchase tax exempt mortgage bonds to provide credit enhancement but it does not provide credit support during construction.

T or F

- 47. Which of the following is not an advantage of HUD enhancement?
 - a. High mortgage ratio
 - b. No personal liability
 - c. Mortgage assumable on sale
 - d. Low out-of-pocket fees not included in mortgage
 - e. 1% prepayment penalty
- 48. A Standard & Poors rating on a credit enhanced tax exempt bond represents a judgment as to the likelihood of timely payment of the bonds according to their term but does not address the likelihood of redemptions or other payments of bonds prior to maturity.

Sunday, July 14, 1985 3:30-5:00 p.m. Course I

THE REAL ESTATE PROCESS

James Graaskamp

FIRST MODULE

THE NEW URBAN LAND ECONOMICS

Presented By

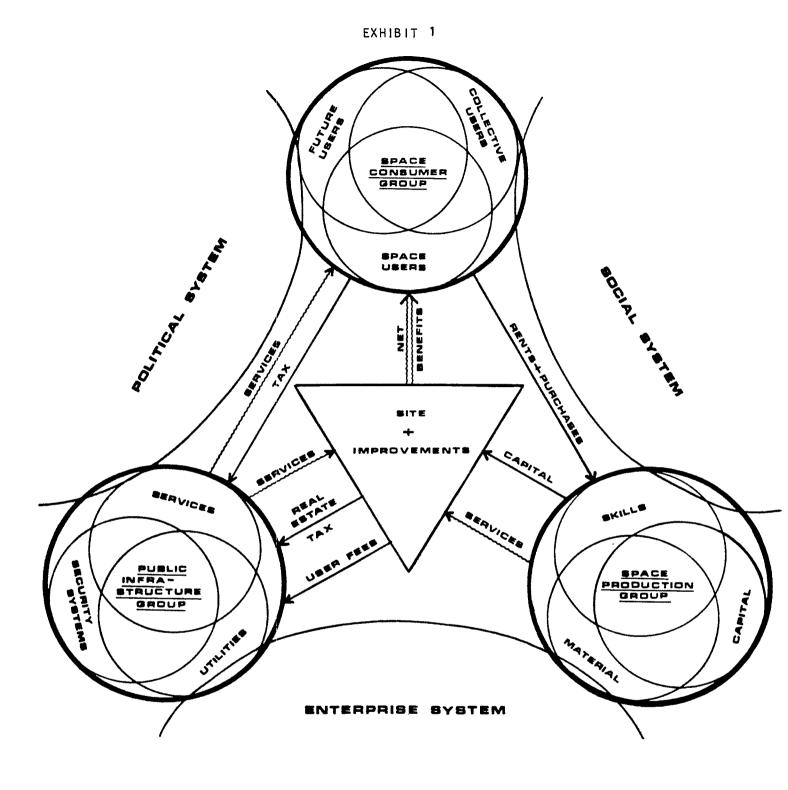
Professor James A. Graaskamp, Ph.D., CRE, SREA University of Wisconsin School of Business

FIRST HOUR

I. BASIC CONCEPTS AND DEFINITIONS

- A. Real estate is a tangible product defined as artificially delineated space with a fourth dimension of time referenced to a fixed point on the face of the earth.
 - Real estate is a space-time unit, room per night, apartment per month, square foot per year, tennis court hours, or a condominium for two weeks in January at a ski slope.
 - 2. To the space-time abstraction can be added special attributes to house and contribute some form of activity. Contribution is efficiency, security, comfort, or well-being.
 - 3. Improvements from survey market to city layouts to structures define space.
 - 4. Legal contracts and precedents define time.
 - 5. Rights of use are defined by public values, court opinions.
 - 6. Private rights to use are those which remain after the public has exercised its rights to control, to tax, or to condemn.
- B. A real estate project is a cash cycle business enterprise which combines a space-time product with certain types of management services to meet the needs of a specific user. It is the process of converting space-time needs to money-time dimensions in a cash economy.

- 1. An enterprise is an organized undertaking whose form and behavior at any point in time is a concensus or synthesis of forces outside the enterprise attempting to determine its form and behavior and focus within the organization which can affect form, behavior, and sustaining energy over time.
- 2. A real estate business is any business which provides expertise necessary to relate spacetime need to money-time requirements and includes architects, brokers, city planners, mortgage bankers, and all other special skills.
- 3. The true <u>profit centers</u> in real estate are in the delivery of services and cash capital.
- 4. Equity ownership is the degree to which one enterprise controls or diverts cash from another real estate enterprise.
- 5. Public ownership exists to the degree real estate taxes, user fees, and other charges take a percentage of gross revenue in excess of service cost.
- 6. A consumer must view space as one part of a total consumption system involving direct cost, surface cost, transportation cost and negative income of risk.
- C. The real estate process is the dynamic interaction of three groups, space users (consumers), space producers, and the various public agencies (infrastructures) which provide services and capital to support the consumer needs. (See Exhibit 1.)
 - Each of these three decision groups represent an enterprise, an organized undertaking. All are cash cycle enterprises constrained by a need for cash solvency, both short and long term.



THE REAL ESTATE PROCESS

- 2. A desirable real estate solution occurs when the process permits maximum satisfaction to the consumer at a price that he can afford within the environmental limits of land while permitting the consumer, producer, and the government cash cycle to achieve solvency cash breakeven at a minimum, after full payment for services rendered.
- 3. <u>Solvency</u> of the total process, not value, <u>is</u> the <u>critical issue</u>.
- 4. Land is an environmental constraint and not a profit cener.
- 5. Land provides access to a real estate business opportunity and is not the opportunity itself. Real estate business wants to control land to create a captive market for services.
- D. The consumer group requires three levels of marketing sensitivity.
 - 1. The collective consumer operating through the political process must be convinced that it should provide permits, zoning, or other approvals which franchise project.
 - 2. The individual consumer who rents or buys must be convinced he will improve the activity housed in terms of convenience, efficiency, security, and well-being at a periodic cash cost which is affordable.
 - 3. <u>Future users</u> consist of undefined future tenants representing a change in use which requires flexibility of site, structure, or services to maintain market edge, and therefore presumed resale liquidity.
- E. Recognition of the fact that profit maximization must be limited by concerns for physical environment and community priorities for land use has resulted in redefinition of the most basic concept in appraisal; i.e. highest and best use, in the authorized terminology handbook sponsored by the American Insitute of Real Estate Appraisers and

the Society of Real Estate Appraisers. Compare the 1971 definition with that for 1975:

Highest and best use concept -A valuation concept that can be applied to either the land or improvements. It normally is used to mean that use of a parcel of land (without regard to any improvements upon it) that will maximize the owner's wealth by being the most profitable use of the land. The concept of highest and best use can also be applied to a property which has some improvements upon it that have a remaining economic life. In this context, highest and best use can refer to that use of the existing improvements which is not profitable to the owner. It is possible to have two different highest and best uses for the same property: one for the land ignoring the improvements; and another that recognizes the presence of the improvements. p. 57, Real Estate Appraisal Principles and Terminology, Second Edition, Society of Real Estate

"Highest and best use: That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal. Alternatively, that use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and which results in highest land value. The definition immediately above applies specifically to the highest and best use of land. It is to be recognized that in cases where a site has existing improvements on it, the highest and best use may very well be determined to The existing be different from the existing use. use will continue, however, unless and until land value in its highest and best use exceeds the total value of the property in its existing use. Implied within these definitions is recognition of the contribution of that specific use to community environment or to community development goals in addition to wealth maximization of individual property owners. Also implied is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best

use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use. In the context of investment value an alternative term would be most profitable use.

Real Estate Appraisal Terminology, Edited by Byrl N. Boyce, Ph.D., SRPA, Ballinger Publishing Co., Cambridge, Mass., 1975. (Emphasis added.)

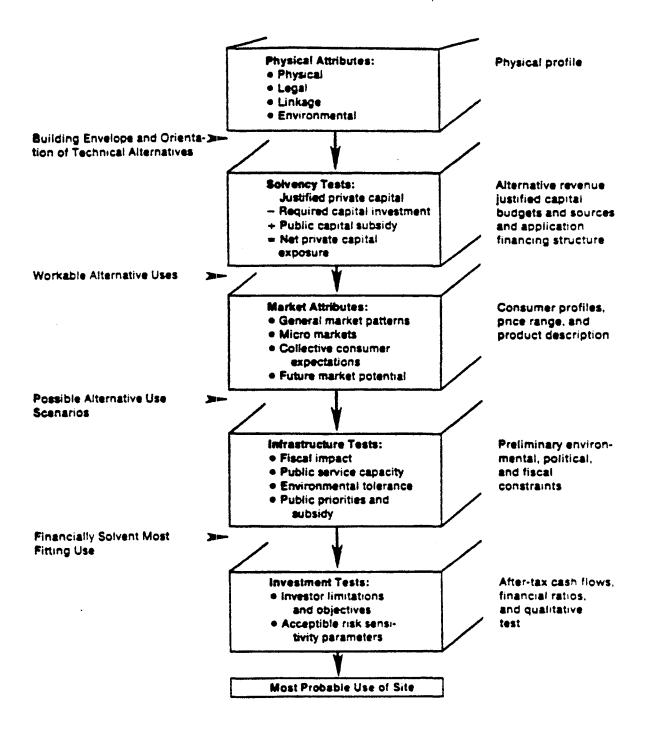
- G. The purchase of a piece of real estate today involves the acceptance of a great many assumptions about the future. Those who take care to validate these assumptions in a period of transition as to public land use control tend to have the most successful investment.
 - 1. Business decisions today make explicit recognition of their assumptions and the need to act under conditions of uncertainty.
 - Business risk is the difference between assumptions about the future and realizations, and the proforma budget and the end of the year income statement.
 - 3. Risk management is the control of variance between key assumptions and realizations.
 - 4. An appraisal is a set of assumptions about the future productivity of a property under selected conditions of certainty.
 - 5. A feasibility study is a test of a particular proposal under alternative sets of assumptions about the future and its tolerance for variance or priority for certainty.
- H. The concept of highest and best use of land was a commodity concept which did not consider externalities adequately. It is being replaced by concepts of most fitting use and the concept of most probable use.
 - 1. The <u>most fitting use</u> is that use which is the optimal reconciliation of effective consumer demand, the cost of production, and the fiscal and environmental impact on third parties.

- 2. Reconciliation involves financial impact analysis on "who pays" and "who benefits"-thus the rash of debate on how to do impact studies.
- 3. The most probable use will be something less than the most fitting use depending upon topical constraints imposed by current political factors, the state of real estate technology, and short-term solvency pressures on consumer, producer, or public agency.
- 4. Most probable use means that an appraisal is first a feasibility study of alternative uses for a site in search of a user, an investor, and in need of public consent.
- I. In seeking the most fitting and most probable use, the inner city planner and private property appraiser must interact to determine how community objectives and consumer and production sector solvency can be achieved simultaneously.
 - 1. A real estate decision has only two basic forms. Either a site is in search of a use and consumer with the ability to pay, or a consumer, need or use with a defined ability to pay is seeking some combination of space-time attributes he can afford.
 - 2. The individual consumer with needs and a budget is the drive wheel.
 - 3. The public sector represents the community owned consumer service delivery system, seeking to minimize marginal cost to the consumer and average cost to the community at large.
 - 4. The production sector responds to a derivative demand for engineering and management expertise.
 - 5. Real estate is a collective decision and a product of the political process.

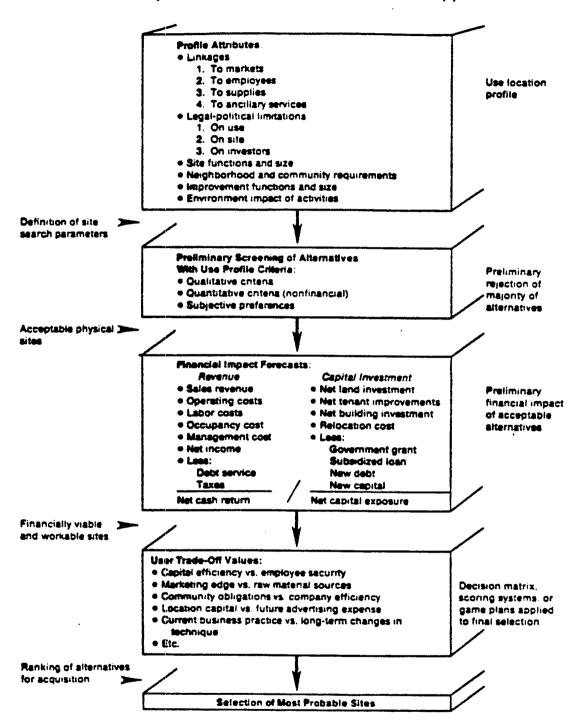
- J. Critiquing the form and adequacy of a real estate solution is analogous to the artistic concept of judging the success of an art object by relating form of the solution to the context to which it was created.
 - 1. Context includes those elements which are fixed, given, or objective and to which any solution must adapt.
 - 2. Form-giving elements are those variables within the artist's control, i.e. options or alternatives at a particular time.
 - 3. A solution is judged for its correctness or success in terms of the degree of fit of the form proposed to the context.
 - 4. Feasibility analysis is concerned with the degree of fit or the extent of misfit between a proposed course of action and the context within which it must operate or fit.
 - 5. Success therefore depends on how appropriately the problem is defined; testing feasibility depends primarily upon accurate and comprehensive definition of the context.
- K. Ultimately there are only three major decision formats for real estate and land economics.
 - 1. A location (and related improvements) in search of a justified use.
 - 2. A justified use in search of the best fitting location (and related improvements).
 - 3. Money in search of an investment in location and related improvements—the conversion of space—time needs to money invested over time.

EXHIBIT 3

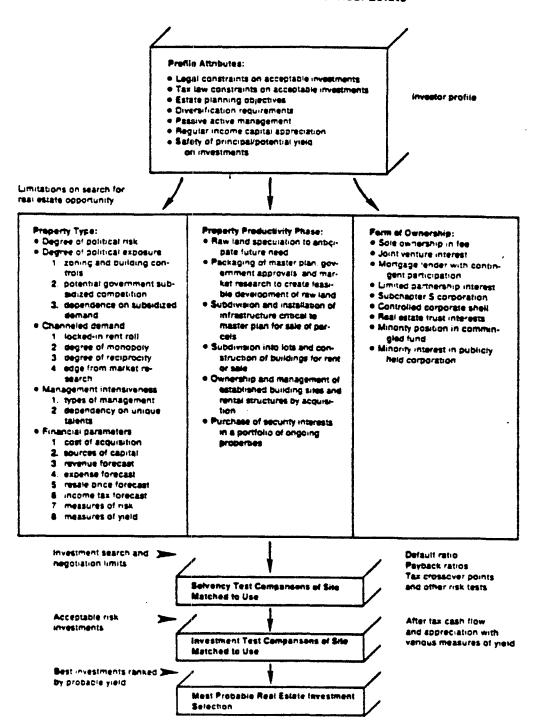
Analysis Process: In Search of a Use(s) For a Site



Analysis Process: The Search For a Site For a Use(s)



Process for Investor Selection of Real Estate



Thursday, July 18, 1982 Course I

ABA--HOUSING MARKET RESEARCH

- 1. Every real estate project is a cash cycle enterprise which depends on customers willing to spend dollars in their own self-interest. Not only is each real estate project an individual enterprise, it is also a subsystem within a network of collective interdependent enterprises, each of which must be persuaded that their own needs and goals are furthered by interfacing with certain real estate.
 - A. In the broadest sense, market research investigates any factor influencing communication, persuasion, or recognition of needs and motivations in the transactional interface of enterprises in the real estate network. This includes local political controls on entitlement to new entrants, the bargaining power of customers and suppliers, and changing land use patterns and technologies affecting land use.
 - B. In the narrower sense, market research is concerned with securing a customer's commitment to the enterprise with a high degree of predictability to control the variance in cash flows, growth in values, and other financial performance derivative of a customer.
 - C. To paraphrase Peter Drucker, once business has created a customer, everything else it does may be redundant.
 - D. In a market system, free enterprise is the art of creating one's own monopoly, at least for a moment, in the mind of the customer for partial protection against price competition and the necessity of sharing a limited market.
 - For products, monopoly requires at least one element of control in terms of raw material, location, and political entitlement, relevant design, unique design, unique service, control of distribution channels, or good timing.
 - For services, monopoly requires control of the customer through behavioral conditioning, or consumer inertia toward an opportunity to change habits.
 - Real estate is a combination of product and service, and therefore real estate monopoly has the greatest number of options to exploit when shaping marketing efforts of the firm.
 - 4. The long lead time required to change supply to meet demand creates unique opportunity for developing a monopoly by decision-making finesse relative to politics of location, timing of financing, and delivery and forecasting of demographic shifts and changing consumer preference.
- II. Repayment of a loan according to its terms presumes the real estate

enterprise revenue and net income is generated on schedule as anticipated in the pro forms. Revenue and net presume a customer so that the ultimate risk management control is the ability to identify and benefit from customer behavior and commitment. The housing customer must be motivated to invest money in his self-interest.

- A. Traditional market research depended on the demographics of age, family status, income, education, and locational patterns.
- B. Market supply was defined in terms of structural category (single family detached, attached, multi-family) and further subdivided by tenure--ownership, rental, coop, or condo.
 - Absorbtion rates indicate the ratio of a defined supply of existing units sold, rented, AND OCCUPIED in a given year.
 - 2. CAPTURE RATES are the critical product of market research—the sahre of market required to sell or rent the proposed project.
- C. The housing industry has moved beyond demographics to sophisticated analysis of family values and life-styles.
 - 1. Psychographics use multi-dimensional demographic subsets as a proxy for preferences in style.
 - More recetnly, it is recognized that within age, income, education, there are significant subgroups, such as the VALs system developed by the Stanford Research Institute sociologists.
 - 3. The American housing consumer is highly programmable and far more segmented than the banking market. Bankers have discovered upscale, private, personal, family, and mass submarkets. The upscale housing market may have fifteen subcategories in a town the size of Madison.
- D. The developer must also research the collective consumer who sets the political attitude relative to political entitlements and must complete that research before any project plans are announced.
 - 1. Contiguous land ownerships
 - 2. Neighborhood associations
 - 3. Alderperson and City Council attitude
 - 4. Decision patterns of commissions with jurisdiction
 - 5. Legislative trends toward new regulations during time cycle of development

- E. There are four significant areas of specialization in customer research for housing.
 - 1. Market Research is defined as research of secondary date sources to define trends, patterns of geographic fragmentation and clusters of market segmentation which scale the size of any enterprise opportunity and provide a link between site and marketplace. Shifts in the demand/supply equilibrium of space/time units will be derivative of changes in: demographic trends; psycho/social value trends; available investment capital allocations and interest cost trends; technological trends; environmental trends; energy cost impact trends; locational preferences; income redistribution through federal fiscal budget and tax policy.
 - 2. Merchandising research is defined as primary research of specified subsets of customers and competitive supplies in order to confirm appropriate ratios for the disaggregation of aggregate data to identify location, space and amenity needs, and to specify levels of effective demand. (According to a Chicago builder, the market for two-bedroom townhouses may be subdivided among 13 different family status groups.)
 - 3. Political research is defined as primary research of specified subsets of political decision makers and their constituents in order to anticipate and influence legislative decisions, commission rulings and attitudes of specific political persons and blocs. Projects must be marketed to collective consumers to minimize the generation of political resistance to the project by inadvertently providing features or marketing themes that stimulate negative political action.
 - 4. Promotional research is defined as investigation of media channels, messages and subliminal codes that communicate and motivate the customer. In the case of real estate, the product is so big it envelops the customer as a primary media using forms, colors, textures as well as spatial layouts to communicate sensitivity to the needs of the prospect.
- III. The developer/borrower will build anything he can finance, and whatever he buids will have an impact on the community, for good or bad, for 100 years. The banker has an ethical responsibility to understand market needs, capacity, taste, and sensitivity. He must also recognize the limitations of market research models.
 - A. An example of disaggretation of demographic data
 - B. An example of housing ownership population segments
 - C. An example of housing segmentation and behavioral preference combined to scale a market

- D. An example of product research by the trade to define common housing feature preferences
- IV. The marketing of existing homes must also be sensitive to the need for the product to relate to the center of the market rather than the edge of the market. It is well-known that in the Midwest an outdoor swimming pool may not add value to a house, while a nostalgic piece of architectural bric-a-brac such as a stained glass window or fireplace may add a significant premium to the rental of an apartment.
 - A. Merrill Lynch Relocation Realty requires the appraiser to value a home by deducting the cost of repainting the interior in beige, recarpeting where necessary, or repainting the exterior.
 - B. Buyers are conditioned to prejudge a housing product by the approach zone-the route through the immediate neighborhood, the road into the project, the path to the door, and the entry porch. These must be consistent with community standards (example of New York Housing Authority contemporary in Deerfield, NY).

GENERALIZED ALLOCATION OF MARKET RESEARCH METHODS

FOR REAL ESTATE ASSET MANAGEMENT

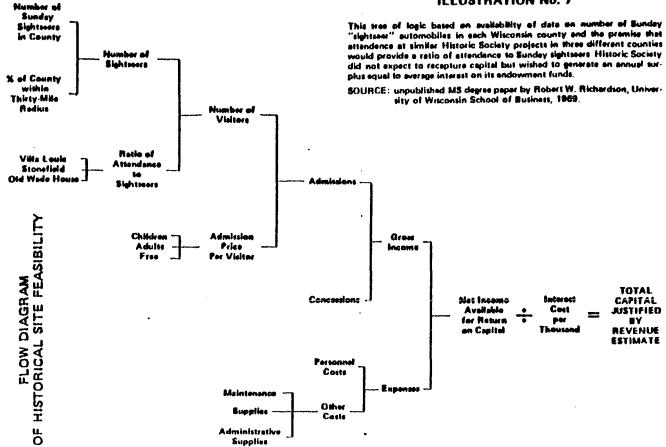
	TRUTH- NORMATIVE	BEAUTY (INTUITIVE)	CHANCE- STATISTICAL
Market	Gravitational models Input-output Shift-share Census data and planning counts Social prototypes (hierarchy of needs)	Subjective forecasts Delphi studies	Dynamic time series model for forecasting Regression analysis Cluster analysis
Merchandise	Non-systematic survey/research Competitive property inventories Standard plan selection	Focus groups Personal interview Experience logs Marketing diaries	Factor analysis Conjoing analysis Random telephone survey AID analysis Multi-dimentional scaling
Political	Flow chart of political process	Focus groups Personal interview Expert opinion	Random telephone survey Precinct voting profiles Legislative voting records
Promotion	Standard advertising channels for distribution and established building forms	Focus groups Architectural models, testing of visual and tactile codes	Factor analysis Conjoint analysis Random telephone survey

and textures

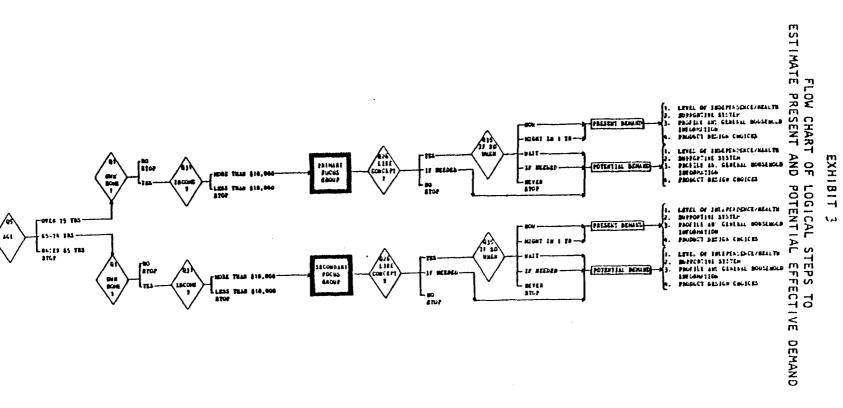
EXHIBIT 2 DEMAND FOR ELDERLY RESIDENTIAL CARE UNITS

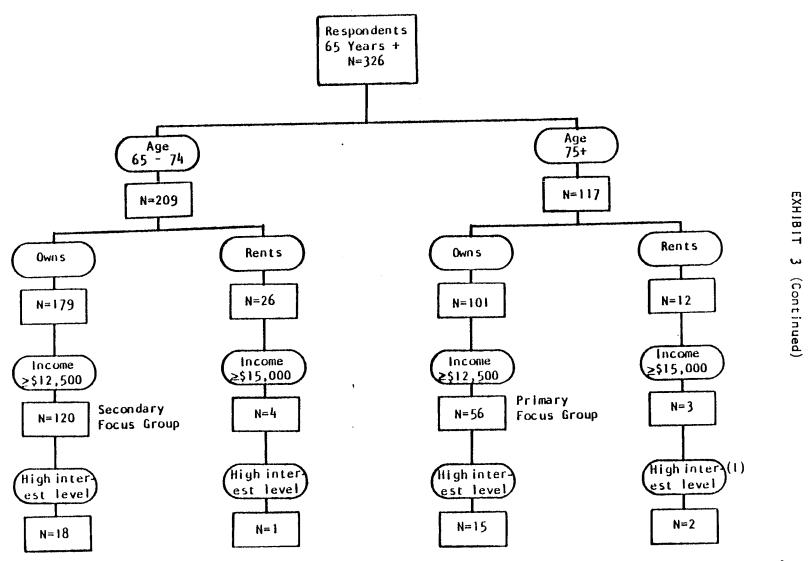
•	
Persons In County age 65 and over In 1970	21,914
Adjustment 1970-1974 to reflect the number of persons moving into the 65+ bracket and the application of mortality rates by age and sex	245
Estimated persons in County age 65 and over in 1974	22,159
Less persons 65÷ presently in nursing and residential care facilities in County 1,792	
Less persons 650 presently in government subsidized housing for the elderly 638	2,430
Persons age 65+ in the conventional housing market in County in 1974	19,729
<pre>FEStImated number of persons financially qualified for and sariously interested in moving into the proposed resi- dential care development</pre>	4,270
Household equivalent (+ 1.519 persons per household)	2,811
*Less estimated number who will not convert serious interest Into any form of action (50%)	1,406
"Less the percentage who, while seriously interested, said (before they heard the hypothesis) that their next home would probably be outside County (13.3% from survey questionnaire)	
rless those disqualified because their current health status necessitates care beyond the scope of services to be provided in the residential care units (5.4% (from survey)	262
Elderly households in County qualified for and seriously interested in moving into the proposed development	<u>263</u> 1,142
Plus an allowance for those elderly households coming from outside County to enter the proposed development(10%)	127
Elderly households qualified for and seriously interested in moving into the proposed development	1,269
Share of market opportunity area who stated in survey that for their next dwelling unit their first preference would be an apartment, in a highrise, midrise, or garden building:	
Highrise or midrise 28.0% Garden 49.1 77.1%	978
Less estimated numbers of households who might move into competitive developments available supply of units	270
Households that can be considered candidates for the proposed development	708
That share of households who said they would be willing to Within 1 year from now 15.6% - 110 households Within 2 years 31.2% - 220 "Within 5 years 53.4% - 378 "708	move:
A project of 100 units requires a capture rate of: 91% for a 1 - year absorption rate 90% for a 2 year """ 14% for a 5 year """	

ILLUSTRATION No. 7



Source: James A. Graaskamp. A Guide to Feasibility Analysis, (Society of Real Estate Appraisers, 1972), p.40.





(1) High degree of interest in project is defined as those who answered Question #47 with a 1, 2, or 3 response. These respondents are interpreted as having serious interest now or interest in a year or so. See questionnaire in Appendix for exact wording of the question.

POTENTIAL MARKET SEGMENTS

- I. Singles Unmarried, active, mobile, many interests, entertain informally, few financial burdens, recreation oriented. Buy basic furniture, basic kitchen equipment, cars, stereos, and vacations.
- II. Young Marrieds, #1 Young couple, working wife, entertain informally, amateur gardeners, planning on family. Better off financially than they will be in the "family formation" future. Buy durables cars, kitchen equipment, furniture, and vacations. Rate housing as a need for-more living space.
- III. Young Marrieds, #2 Discretionary income available, deferring family, active, entertain informally and often, some formal entertaining, independent, dual-person working household, do-it-yourself buffs, sports car. Rate housing as an investment.
- IV. Compact Family/Move Down Discretionary income available, interested in no maintenance, informal living, some formal entertainment. Away from home often, occasional visits from family or guests, focus on both active and passive recreation.
- V. Divorcees/With Children Family oriented activity, limited entertainment, informal lifestyle, limited maintenance.
- VI. Full Nest, #1 Home purchasing at its peak, even though liquid assets are low. Dissatisfied with financial position, and amount of money saved. Conscious of monthly payments; family activities. Unemployed female with numerous interests, mostly child oriented. Lifestyle is casual and informal. Interested in new products, buy washers, dryers, T.V.'s, baby food, dolls, wagons, etc.
- VII. Full Nest, #2 -- Family move-up market, as financial position gets better, some wives work. Interested in larger sized packages. The most price/size sensitive group.
- VIII. Established Family -- Making monthly payment comfortably, some discretionary income as more wives work, approaching peak of economic and social lifestyle curve, some formal entertaining, older children and teenagers, many interests.
- IX. Luxury Families -- Have arrived, tremendous discretionary income, very formal house, don't entertain often, but when they do, it's formal, dine out often, no maintenance, privacy mandatory.

- X. Empty Nester Home ownership at its peak, more satisfied with financial position. Small or no debt. Family is often away from home, occasional visits from family. Mobile in attitude, but permanent in residence, near grandchildren, many hobbies, one child in college, one or two children married, selfsufficient couple.
- XI. Active Retired Still working two or three days per week, active either socially or politically in community or church affairs, self-sufficient, many hours away from home, do not entertain often, but when they do, it's semi-formal. Winter/summer residences. Likely to sell home before retirement.
- XII. Retired Drastic cut in income, dependent, limited activities outside community. Winter/summer residences.

From:

HOUSING MARKETS by Michael Sumichrest and Maury Seldin, Dow-Jones Irwin, 1977.

14

Segmented analyses

As a follow-up to the two preceding chapters, this chapter breaks down the housing market into site and product analysis. It is designed as a practical application of a market analysis to a specific problem and is illustrated with examples. This chapter contains little theoretical discussion; it is designed to provide step-by-step tools for the market analyst.

The chapter is divided into several sections. The first discusses how to segment demand by income and the second considers supply/demand balance by products and price comparison. Other sections look at product design, absorption, and special studies such as selection of best sites (or cities), specialized markets, and foreign markets. The final section provides further practical suggestions on how to analyze markets.

SEGMENTED DEMAND BY INCOME We have noted that housing needs are not synonymous with housing demand. A poor area may have great needs but little demand for the housing which can be supplied. Much demand for new housing is caused by upgrading and mobility.

For-sale housing

Incomes determine the price level of units which can be absorbed. We do not recommend that an analyst spend time working out estimates of family (or household) income. The use of FHA tables (as indicated in Chapter 12) should be left to federal government employees, who have the time and resources to reconstruct data from decennial benchmarks to the present. The data so obtainable by an analyst are not any better and possibly are worse than what is obtainable from county or state governments or what can be found in most libraries or Sales Management magazine. However, such information should be supplemented with other income estimates such as those from the Bureau of the Census and other national sources. Care should be taken to be sure of the definition used for "income," and the unit should be carefully identified as to household, family, or per capita income.

Combining data on incomes with price ranges of new homes being

built and homes being sold should give sufficient detail as to potential price ranges of houses likely to be in demand. The nine steps below illustrate how this can be done.

Step 1. Get the income distribution of families or households for the area under investigation. This can be in the form presented in Table 14–1 or another similar form. Table 14–1 shows the distribution of incomes by families for Prince George's County, Maryland, with changes between periods.

الم الماء ا

	19	60	19:	70	19	74	Average change, 1		Average change, 19	
ما families	Number 87,453	Percent 100.0%	Number 163,400	Percent 100.0%	Number 166,700	Percent 100.0%	Number 7,595	Percent 8.7%	Number* 700	Percent 0.4%
:ly income nler 4,000 51,000–4,999 52,000–7,999 52,000–9,999 51,000–11,999	10,848 7,276 30,921 15,962 {17,853	12.4 8.3 35.4 18.3 20.4	9,820 4,108 21,224 20,122 21,925 30,028	6.0 2.5 13.0 12.3 13.4 18.4	4,700 3,400 9,900 12,600 16,800 24,400	$ \begin{cases} 2.8 \\ 2.0 \\ 5.9 \\ 7.6 \\ 10.1 \\ 14.6 \end{cases} $	-103 -317 -970 416 {3,410	-1.0 -4.4 -3.2 2.6 19.1	-1,100 -200 -2,500 -1,700 -1,100 -1,300	-11.2 -4.9 -11.8 -8.5 -5.0 -4.3
1:5,000-24,999 1:5,000-34,999 1:5,000-49,999 1:5,000 and over	3,918 {675 - \$ 7,344	4.5 0.8	46.285 {9,173 715 - \$12,450	28.3 { 5.6 0.4	53,600 17,200 4,200 1,000 18,900 \$15,400	32.1 10.3 2.5 0.6 11.3	4,237 { 921 -	108.1 136.5 	1,600 {2,700 60	3.5 {29.4 8.4

we: Family income not adjusted for inflation.

How to interpret the data:

- 1. There is a significant drop in the number of families with incomes under \$9,999. This income group changed from 55,274 in 1970 to 30,600 in 1974—a drop of 45 percent.
- 2. The major growth has been in the income categories of over \$25,000, from 9,888 families in 1970 to 22,400 families in 1974—an increase of 126 percent.
- 3. The largest single income category remains between \$15,000 and \$24,999, 32.1 percent in 1974 with 53,600 families. But even this category increased 16 percent since 1970.
- 4. Overall there has been a significant improvement in incomes, suggesting a better support for housing purchases in the future.

Step 2. Get a reading on what is being built, by price ranges. This is shown in the first two columns of Table 14-2.

Data in boxes are used in Table 14-3. Sounded to the nearest 100. Figures under 100 rounded to the nearest 10.

Name: Department of Commerce. Bureau of the Census, 1960, 1970, Census of the Population; Washington Center for Metropolitan Studies; Metro Metrics, Inc.

¹ See July issues of Sales Management for surveys of buying power.

Table 14-2. Completed new single-family units, Washington SMSA and Prince George's County, Md. (percentage by price range)

Price ranges	Washington SMSA	Prince G Co., 1		Prince George's Co. unsold units	Interpretation
\$25,000-27,499					•
\$27,500-29,999 \$30,000-34,999 \$35,000-39,999	. 7.9	13.9 16.9	30.8%	72% 6 5	Very slow sales Slow sales
\$40,000-44,999 \$45,000-49,999	. 14.5	22.2 19.5	41.7	55 67	Slow sales Very slow sales
\$50,000-59,999 \$60,000-69,999	. 19.9	15.0	27.5	53 45	Slow sales Mediocre sales
\$70,000 and over		4.5		40	Reasonably good sales
Total	. 100.0%	100.0%		60% (average)	Bad sale situation in all categories

Source: FHA, Washington, D.C. Insuring Office, Form 2398S, 1975.

Step 3. Get a reading on how well the price ranges of new homes are selling, by price range. This is illustrated in the last two columns of Table 14-2.

How to interpret Steps 2 and 3 for Prince George's County:

- 1. Over 40 percent of all new single-family units built are in the middle price range, between \$40,000 and \$50,000.
- 2. About 30 percent of all units built are priced under \$40,000.
- 3. 27.5 percent of the units are over \$50,000.
- 4. The cheapest units do not sell as well as the most expensive units.
- 5. No single price range is selling well. This is a strong indication of a bad market.

Step 4. Recap the changes in families from income groups (extract the data from the boxes in Table 14-1), as shown in Table 14-3.

How to Interpret the data: The income distribution indicates that the lower end of the single-family detached housing market is by far the strongest. At \$20,000 income, the midpoint of the \$15,000-\$24,999 range, with a 2.5 price/income ratio, the \$50,000 sales-price market has the greatest potential. The strong market ranges down to \$40,000, if it can be built, and up to \$60,000, which is thinning out and approaching the next category.

Step 5. Match incomes to loans (using either a two or two and one half times the family income ratio). This is shown in Table 14-4.

Table 14-3. Number of families with income over \$15,000, Prince George's County, Md., 1974

	Fam	ilies	Average annual change in families.
Income bracket	Number	%	1970–1974
\$15,000-24,999	53,600	32.1%	+1,600 {+2,700
\$25,000-34,999		10.3	∫±2.700
\$35,000-49,999		2.5	
\$50,000 and over	1,000	0.6	<u>+ 60</u>
Total		45.5%	+4,360

Source: U.S. Bureau of the Census, 1960, 1970 Census of the Population; Washington Center for Metropolitan Studies; Metro Metrics, Inc.

Table 14-4. Conventional mortgage loan ranges, Prince George's County, Md., 1974

	Debt-free	Debt-free
	loan range @	loan range @
Income bracket	2 times income	2.5 times income
\$15,000-24,999	\$30,000-50,000	\$37,500-62,500
\$25,000-34,999	\$50,000-70,000	\$62,500-87,500
\$35,000-49,999	\$70,000-100,000	\$87.500-125,000
\$50,000 and over	\$100,000+	\$125,000+

How to Interpret the data: Family incomes in the ranges shown in Table 14-4 are considered viable for potential new home purchasers. Most lenders operate within the following guidelines in accepting mortgage loan applicants:

- 1. Conventional loans are made at two times gross income or, put another way, principal, interest, real property taxes, and insurance (PITI) should not be over 25 percent of the family's gross income.
- 2. FNMA and FHLMC set the guidelines in their underwriting, and 80 to 90 percent of the lenders use these guidelines so they can package and sell loans to these two agencies.
- 3. Another measure used for conventional loans is that 33 percent of gross family income can be used for PITI and outstanding debts that have more than six months of payments remaining to be made.
- 4. FHA and VA loans are handled under more liberal terms. Loans can be made at two and one half to three times gross income. Up to 35 percent of gross income can be spent on housing in this instance. Since new laws have been enacted, the wife's income is counted fully, providing she has a work record extending over two years or more.
- 5. At a \$15,400 median family income, a family without debts could qualify for a \$31,000 conventional mortgage loan or a \$46,000 VA mortgage. The difference is substantial, especially in the Prince George's County market, where housing is expensive.

Step 6. Blow up the 45.5 percent total of income groups considered in Table 14-3 to 100 percent. Table 14-3 shows that 32.1 percent of all families in Prince George's County had incomes of between \$15,000 and \$24,999. All together, about 45.5% of all families in the county have income high enough to be potential home buyers. Thus, more than one half of all families do not have income high enough to be considered potential home buyers. Using a universe of families with incomes over \$15,000, or 76,000 families (Table 14-3), the 45.5 percent income group is increased to 100 percent as shown in Table 14-5.

Step 7. Using Sales Management data or a finer breakdown of incomes from a county office (or an update from the decennial census), a more detailed breakdown of each income group is derived. The income-group and home-price (or loan) ranges have been identified in Table 14–4 for either

Table 14-5. Conversion of percentages of four categories of incomes to 100 percent

Income	Percent of all families		Converted to 100%		
\$15,000-24,999	32.1%	**	70%		
\$25,000-34,999	10.3	=	22		
\$35,000-49,999	2.5	=	6		
\$50,000 and over		=	2		
Total		=	100.0%		

Source: Authors.

two or two and one-half times the family income. When the largest group, people making between \$15,000 and \$24,999 annual income, is broken down, it is found that the 70 percent of families in this price range have the potential to qualify for the price range of homes shown in Table 14-6.

Table 14-6. Breakdown of \$15,000-\$24,999 income group (using two times income ratio) to qualify families for certain price ranges of homes

Price range of homes	Percent of families in group wh could qualify for these homes			
\$30,000-34,999	23%			
\$35,000-39,999	20			
\$40,000-44,999				
\$45,000-49,999	<u>12</u>			
Total				
Course, Author				

Step 8. Break down the remaining income groups into various price ranges of homes. For the balance of the income groups the distribution of price ranges of homes they could qualify for is indicated in Table 14–7.

Table 14-7. Percentage of families who could qualify for homes in price ranges over \$50,000 (using 2 times income ratio)

Income bracket	Price range of homes	Families who could qualify for homes
\$25,000-34,999	\$50,000-59,999	12%
\$35,000-49,999	\$60,000-69,999	10
\$50,000 and over	\$70,000 and over	8
Total	•	30%
Grand total, Tab	les 14-6 and 14-7 total:	s 100%
Source: Authors,		

Step 9. Recap average annual demand and price ranges. Total annual demand for Prince George's County between 1976 and 1980 was estimated at 5,860, or a total of 29,300 for the period. Of this total, demand for single-family homes was estimated at 19,000, or 3,800 annually. Demand for single-family homes by price ranges as shown in Table 14–8.

Table 14-8. Projected demand for single-family homes by price ranges, Prince George's County, Md., 1976-1980

Price range	Percent	Number
\$30,000-34,999	23%	870
\$35,000- 39,999	20	760
\$40,000-44,999	15	570
\$45 ,000-49,999	12	460
\$50,000-59,999	12	460
\$60,000-69,999	10	380
\$70,000 and over	8	_300
Total		3,800

Source: Authors.

Demand by age groups

For specialized demand determination, age groups are a good tool to work with. For instance, demand for nursing homes requires a distribution of income of people over 55 years of age. One such breakdown is shown in Table 14-9.

Table 14–9. Number of households by household income and age of head, 55 and older, Montgomery County, Md., 1973 (excludes group quarters)

Ave of board					Househo	ld income				
Age of head of household	Under	\$10,000	\$10,000	-15,999	\$16,000	-21,999	\$22,000	-24,999	\$25,	000+
	No.	%	No.	%	No.	%	No.	%	No.	%
55-64	2,653	8.7%	4,867	16%	4,867	16%	2,944	9.6%	14,598	47.9%
65+	9,131	42%	4,606	21%	2,619	12%	1,150	5.3%	4,149	19.2%

Source: Montgomery County Planning Board, Montgomery County Census Update Survey, Population and Housing Profiles, No. 6, Third Report, March 1975, p. 18.

New rental units

Several steps are needed to estimate demand of new rental units. These are as follows:

- 1. Break down income groups into monthly rental ranges.
- 2. Distribute potential households (or families) by bedroom sizes.
- 3. Determine the features and amenities that are important to prospective tenants.
- 4. Determine type of unit to be built and get cost estimate.
- 5. From cost analysis, determine the front-end equity requirement, operating cost, and net return on investment.

After this has been done, it may be found that a project to fit the potential consumers may not be feasible at all. But for the first step—the determination of the market demand—data on vacancies, incomes, and number of potential demanders is essential.

Income/rent distribution. Table 14-1 showed that in 1974, in Prince George's County, 43 percent of all families had an income under \$15,000. These families, unless they already owned a home, could not purchase a new one under normal circumstances. Renters generally have lower incomes than homeowners. For instance, the 1974 Annual Housing Survey

by the Bureau of the Census shows a median income for renters of \$8,200 and for homeowners of \$14,100 (Table 14-10); 81.6 percent of all renters nationwide had incomes below \$15,000 in 1974, nearly double the share of families with these incomes in Prince George's County.

Table 14-10. Percentage distribution of income for families in owner- and renter-occupied units, 1974

Income	Owners		Renters	
Less than \$2,000	2.4%		6.7%	
\$ 2,000-2,999	3.2		8.3%	
\$ 3,000-3,999	3.4		8.6%	
Total, \$2,000-3,999		9.0%		23.6%
\$ 4,000-4,999	3.7		6.3%	
\$ 5,000-5,999	3.6		6.7%	
\$ 6,000-6,999	3.5		6.2%	
\$ 7,000-9,999	10.9		17.8%	
Total, \$4,000-9,999		21.7		37.0
\$10,000-14,999	23.7		20.8%	
\$15,000-24,999			13.9%	
\$25,000 and over			4.8%	
Total, \$10,000-25,000 and over		69.3		39.4
		100.0%		100.0%
Median income	\$14,100		\$8,200	

Source: Department of Commerce, Bureau of the Census, Annual Housing Survey: 1974, Table B-1, p. 28.

In 1974 over one half of all renters paid up to 25 percent of their incomes in rent. An additional 17 percent paid between 25 and 34 percent of their incomes for rent, and 27 percent paid over 35 percent. Still, their median rent was only \$155 per month nationwide in 1974, with nearly 20 percent paying less than \$100 per month and only 5.2 percent paying over \$300 per month.

If only 25 percent of gross income is allotted to payment of rent, what income groups would there be in each rental bracket? How much would renters be able to pay each month for new apartments? Table 14–11 shows such an income/rent distribution.

In the 1974-1976 period, nobody could build new conventionally financed rental units renting for under \$150 per month in the Washington area. Therefore, for purposes of market analysis, it is just as well to ignore

Table 14-11. Income versus ability to pay rent (25% of family income allotted to rent)

	Annual rent		Perce	ent of families
Income group		Monthly rent	United States	Prince George's Co.
\$ 2,000-2,999	\$ 675	\$ 52	_	-
\$ 3.000-3.999	875	73	-	-
\$ 4.000-4.999	1,125	94	_	-
\$ 5,000-5,999	1,375	114	-	-
\$ 6,000-6,999	1.625	135		
\$ 7.000-9.999	2,000	166	17.8	26.0
\$10,000-14,999	3,125	260	20.8	38.8

Sources: Preceding tables.

income groups making less than \$7,000; these families will not, as a rule, be demanding new rental units. For practical purposes, only income groups with incomes over \$7,000 should be considered. Table 14-11 shows (columns 3 and 4) that nationally 20.8 percent of all families are able to pay rents of \$260 per month; in Prince George's County, the percentage is 38.8.

A similar comparison can be made locally. Table 14–12 reports a survey of major rental projects in Fairfax County, Virginia, in which the cheapest rent paid was found to be \$176 per month for an efficiency apartment, with four-bedroom units going at \$381 per month in 1974. By January 1975 the cheapest rent found was \$192 per month, with the bulk of the units renting at \$239 (two-bedroom units).

Table 14-12. Average rents for apartments in major rental projects, Fairfax County, Va., 1974-1975

	Janua	ry 1974	Janua	ry 1975	Percent rent
Size of unit (no. of bedrooms)	Average rent	Units surveyed	Average rent	Units surveyed	change, 1974–1975
Efficiency	3176	1.021	\$192	1.040	9.1%
1-bedroom		12,208	210	13,119	10.5
I-bedroom and den		1,951	235	2,103	9.8
2-bedroom	217	16.180	239	16,369	10.1
2-bedroom and den	246	1,536	273	1,800	11.0
3-bedroom	281	2.512	299	2,635	6.4
3-bedroom and den	286	166	323	163	12,9
4-bedroom	. 381	18	380	23	(0.3)
Overall county average		35,592	\$233	37,252	9.4%

Source: Urban Development Information System; authors.

What can be built in one city in that area is shown in an estimate made by Collins and Kronstadt, Architects and Engineers (see Tables 14–13 and 14–14). This estimate showed that a new efficiency could be built for \$12,-600 a unit and could require a monthly rent of \$190. The difference of 8 percent for a new apartment unit over average rents (\$176) being paid in the

Table 14-13. Economic determination of apartment size for proposed project, Woodbridge, Va.

	Step	Efficiency	1 bedroom	2 bedroom	3 bedroom
1.	Rent per month, including utilities	\$ 190	3 225	\$ 265	\$ 300
2.	Rent per year, including utilities	2,280	2,700	3,180	3,600
3.	Rent multiplier	4.8	4.8	4.8	4.8
4.	Loan amount		\$13,000	\$15,300	\$17,000
5.	Operating expenses and taxes, 42%	960	1,130	1,330	1,510
6.	Debt service, 9.5%	1,050	1,240	1,450	1,630
7.	Total, Steps 5 and 6	2,010	2,370	2,780	3,160
8.	5% vacancy	110	130	160	180
9.	Gross income less vacancy	2,170	2,570	3,020	3,420
10.	Cash flow per year	160	200	240	260
11.	Required return on equity capital, 10%				
12.	Maximum equity capital investment	1,600	2,000	2,400	2,600
13.	Maximum total project cost				
	(land and building)	\$12,600	\$15,000	\$17,700	\$19,900

Source: Collins, Kronstadt, Leahy, Hogan: Architects, Planners, Engineers, Silver Spring, Md., 1976.

Table 14-14. Cost breakdown of proposed rental project, Woodbridge, Va.

	Step	Efficiency	1 bedroom	2 bedroom	3 bedroom
I.	Raw land cost	\$1,800	\$ 1,800	\$ 1,800	3 1,800
2.	Land development costs:				
	Clearing and grading	200	200	200	200
	Sewer surcharge		250	250	250
	Sewer and water tap charges	300	300	320	340
	Storm drainage	100	100	100	100
	S&W laterals	50	50	50	50
	Roads, parking, walks		380	400	420
	Engineering	100	100	100	100
	Total	\$3,160	\$ 3,180	\$ 3,220	\$ 3,260
3.	Financing costs:				• 250
	Points, 2%		\$ 260	\$ 310	\$ 350
	Interest, 8%		<u> 780</u>	930	1,050
	Total	. \$ 880	\$ 1,040	\$ 1,240	\$ 1,400
4.	Community facilities costs:				
	Landscaping		\$ 100	\$ 100	\$ 100
	Pool and recreation	300	340	380	<u> 420</u>
	Total	. \$ 400	\$ 440	\$ 480	\$ 520
5.	Rent-up costs		230	270	300
6.	Total all costs, Steps I through 5		\$ 4,890	\$ 5,210	\$ 5,480
•7.	Allowable building cost		\$10,110	\$12,490	\$14,420
8.	Projected building cost per sq.ft.		\$ 13.00	\$ 12.50	\$ 12.50
9.	Gross apartment unit area, sq.ft.		778	999	1,154
10.	Building efficiency (%)		90%	90%	90%
11.	Estimated apartment unit area, sq.ft		700	899	1,039

Includes builder's fee and overhead, legal, architect costs.
 Source: Collins, Kronstadt, Leahy, Hogan; Architects, Planners, Engineers, Silver Spring, Md.

Table 14-15. Go or no-go, based on rents now paid and suggested in new project

Type of unit	Rent now paid	New rent	Go-No-Go
Efficiency	\$176	\$190	Go
l bedroom		225	Go
2 bedroom		265	No-go
3 bedroom		300	Go T

Source: Authors.

spring of 1976 in the area is not unreasonable. The average being paid for one-bedroom units was \$202, and the cheapest a new unit could be built for was \$225. This was an 11.3 percent difference, still fairly reasonable. The three-bedroom average rent being paid was \$283; the average new-unit cost was \$300, or a 6 percent difference, also quite reasonable. The two-bedroom unit was a problem, as the cost of it was too high in relation to what the current rents were. The go-no-go computation is shown in Table 14-15.

Gross rents are determined in a different fashion by the Federal Housing Administration. Their form is shown in Exhibits 14-1 and 14-2.

SUPPLY/DEMAND BALANCE

Chapter 12 demonstrated several ways of determining whether the market is in balance, overbuilt, or underbuilt (see Tables 12-16 through

Exhibit 14-1. FHA method of estimating demand

INSTRUCTIONS FOR ESTIMATING QUALITATIVE DEMAND FOR NEW MULTIFAMILY HOUSING

- 1. Looplete Enhibit & about on work short, p. 277, se fallows
 - Date (3): Instructions under 2., below, are applicable to the following: All renter households in areas with 10,000 ionshitants or units: Centus Depart Mc(1), Table 13 for SISSA's, constituent counties, and places of 50,000 ionshitants or over, 18hle 20 for places of 20,000 ionshitants or over, 18hle 20 for places of 23,000 ionshits in the 18h of the 20 for places of 23,000 ionshits in the 18h of the 20 for places of 33,000 ionshits heigh-10 as more: Census Separt Mc(3), 18hle a-12.
 - Hole (II): Instructions under 1., below, are applicable in the full order of the full real of the full real
- 2. If applicable under Note (1), unter in Column (8) of Exhibit A, the 1948 registroccupied units by
- 1. If applicable under Note (11), enter in Column (8) of Enhibit A, the 1960 total accupied units by maker of accuma.
 - a. Enter in Column (C) at all levels from 3 persons through 6-ar-more persons the estimated (or 1960) percentage of renter-occupied units to total occupied units in the area under atter.
 - b. Add 18 percentages points to the percentage estimated in 1.a. shows and enter the result on the i-person line is follown (C).
 - c. Multiply the numbers in Column (8) by the percentages in Column (C) and enter the results in Column (8).
- 6. Multiply the numbers in Column (B) by the appropriate percentages in Columns (E), (G), (I), and (E). Enter the results in Columns (F), (H), (J), and (L).
- 5. Later on the total line the totals for Columns (P), (H), (J), and (L), respectively.
- A. Compute a percentage distribution from the total line as follows:
 - a. Combine totals in calumna (F), (H), (J), (L) and enter grand total under Calumn (B).
 Hater- Bo not total column (B).
 - b. Develop a percentage distribution by dividing totals for calumns (F), (H), (J), (L) by the grand treal under calumn (B) and enter percentages on percent distribution line for respective
- a. The annimum conventional gross rants for nonsubsidized new family housing are obtained for two badroom valle-up apartennts from absorption aureops, local builders and conitars, and other inforced persons.

b. The citizen gross cost derived in tal above times 6.30 equals the gross cost 6 or a 636 wall; times 6.35 equals the gross root for a 1.36 unit; times 1.35 equals the gross root for a 1.36 unit; times 1.35 equals the gross root for a 3.46 unit;

......

\$167 m .70 = \$ 75 gross ront for 0-88 \$167 m .65 = \$ 91 gross ront for 1-86 \$107 m 1.15 = \$123 gross ront for 3-88

- c. The minimum curvantional rents developed in thi above, may be obtained to experient the calculations achievable rents for mentalitized new multifactly heaving at mother calculator for fith Section 407, 221(411) market sate, 221(4111) and for conversional flamoring.
- 8. Apply the percentages developed in Schibit A, Stop bibl to the annual quantitative descend for multifactly bousing antered in heading of surbsheet. Enter on untildeet, p. 277 (Sabble C) the extractor of densed at the appropriate administ great rent levels for each unit disc (Column 18), IC3, IB3 and E3, are , Eng 705.
- 9. To obtain domand at succeeding higher cost levels, swillply the estinates developed in Strp # b: the appropriate factors shown in Eshibit B, p. 227.

	Musher of Budcount							
Gruse fest.	G-88	-Bh	2-88 2-88	1-88				
\$100 and ever								
110_ "								
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130 "	15							
140	10							
154	3	300						
140		130						
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370								
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270				14				
390			18					
210			5	•				
308				,				

Assumes a 100 unit annual demand and a unit size distribution of 1% for 0-50, 40% for 8-50, 40% for 2 A4, and 7% for 3-50.

Exhibit 14-2. FHA work sheet WORK SHEET FOR ESTIMATING THE QUALITATIVE DEMAND FOR NEW MULTIFAMILY HOUSING

_____ POPULATION GROUP_

LOCA	LITY					-	POPULATIO	N GROU	·		_
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	acc	ט פשוקט	NITS		015	TRIBUTI	ON OF PE	RSONS	TINU YE	SIZE	
PERSONS				0	8R.	1	• 8A	2	• ER		3 - 84
	TOTAL	RENTER	RENTER	PER- GENT	NUMBER	PER- CENT	NUMBER	PER- CENT	NUMBER	PER- CENT	NUMBER
(A)	(8)	(C)	(0)	(E)	(F)	(6)	(H3	(1)	(1)	{K}	(4)
1				22		44		10			
2						64		37			
3						34		67			
4						13		69		19	
5								39		21	
6+								18		32	

EXHIBIT B

TOTAL %DIST.

EX	нів	IT	C

UU ATIVE								
		FACTORS FO	DR	GROSS RENT		MULTIFAL		
					0 - 66	1 - 88	2 - BR	3 - 84
0 - sr.	i = \$R.	2 - 6 R	3 - 84	(A)	(8)	(C)	(01	(E)
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Source: Department of Housing and Urban Development, "FHA Techniques of Housing Market Analysis (mimeographed), 1970, p. 277.

12-24). Here we want to apply this type of analysis to the immediate site. The metropolitan areas and counties dealt with in Chapter 12 are most certainly a good indication of the overall market strength, but they are not detailed enough for a site location analysis.

To clarify, consider the following example. In mid-1976, an investor was interested in acquiring a site at Arlington, Virginia. He had read that the Washington market was doing quite well, but with little production due to sewer moratoriums and no-growth policies. Should he purchase land and build high-rise condominiums?

Without going into a great deal of detail, the following is the response to his question an analyst might have suggested:

Yes the Washington market is doing quite well, but some parts are doing better than others. For instance, there are practically no condominiums available in the District of Columbia. Units in Montgomery County are selling quite well, as little is being built. Fairfax County, Virginia, is another matter; there a great deal of inventory is available. As far as Arlington is concerned, no investor would buy land there at this time, since that area has been heavily overbuilt. Sewer moratoriums forced investors to move there; they overbuilt, and there were many foreclosures. On July 3, 1976, one project, apparently worth \$18 million, was sold back to the lender, Chase Manhattan Bank, for \$12 million. This was done after the builder, Arlington Ridge Road Associates—one of whose partners is former Northern Virginia Representative Joel T. Broyhill—defaulted on more than \$12 million in loans that were due in March. There is still a heavy concentration of condominium units in that area, called "condo canyon."

This, of course, is only a general scatement, and it must be supported by a detailed local analysis. This is the finding of such an analysis:

Since the market for apartment units is just beginning to recover, economic events portraying current land transactions are sparse. Contact with builders and developers has revealed that the aftershock of the recession has significantly altered their willingness and ability to pay premium prices. Condominium development has virtually ceased, and developers are not interested in this market at all. The condominium land market may be 18 months to two years away, while the rental market is now beginning to recover.

A format can be designed to suit any particular research project. The example used here is for a fictitious metropolitan SMSA and considers data for 26 subdivisions in a suburban township. In the for-sale market the following steps are appropriate:

Step 1. Determine whether or not the market is in balance in the general area construction will take place. This can be done by using the approach suggested in Chapter 12. Using the unsold inventory as a benchmark against which to measure annual production, units under construction, and presold units will provide sufficient information in any area on the balance of the market (see Tables 12-17 through 12-21).

Table 14-16 shows that markets are entirely different when considered

Table 14-16. Completed units and unsold new units, Metropolis SMSA, suburban township, and proposed development

	Completed	No.	Percent	
Type	units	unsold	unsold	Remarks
SMSA				
Single family	. 3,756	164	4.4%	Excellent
Attached	. 2.627	474	18.1	Good
Attached Condominium	. 788	236	31.3	Satisfactory
Condo	. 3,686	1,689	45.8	Unsatisfactory
Suburban township				
Single family	. 697	39	5 .6	Excellent
Attached	. 12 5	0	0.0	Excellent
Attached Condominium	. 233	31	13.3	Good
Condo	. 43	8	18.6	Satisfactory
Development site				
Single family	. 435	482		Excellent
Attached	. 25	31	-	Excellent
Attached Condominium		ones available ones available		

Source: Federal Housing Administration; Metro Metrics, Inc.

in segments. In this example, single-family units were selling very well, but condos were in real trouble in the SMSA. In the suburban township the situation was similar, but the condo market was not glutted simply because there was very little new on the market. As far as the proposed development site was concerned, there were more sales than units completed in both singles-family units and townhouses. But there were no newly built condo units in that area at all.

Step 2. Determine what types of units are being built and are selling. This is summarized in Table 14-17. The table clearly shows that the two-story and split foyer were the best selling types, with monthly sales above average. The poorest showing was made by ranch types, with rates well below the others.

Table 14-17. Type of units built and monthly sales rates, 26 subdivisions, suburban township, January 1976

Type of unit	Percentage breakdown of units built	Cost per sq.ft.	Monthly sales rates per subdivision
Two story	28%	\$31.64	4.55
Split foyer	44%	\$37.36	3.50
Split level		\$38.59	2.80
Ranch		\$39.78	1.80
Total	100%	\$36.36	3.16
		(average)	(average)

Source: Metro Metrics, Inc.

Step 3. Identify the price range selling. See Table 14-18.

Step 4. Identify what is ahead. Such information as completed unsold units, units under construction, permits issued and outstanding, approved plans, plans under review, and recently rezoned land helps determine future market conditions. Since we are dealing with a limited area in the

Table 14-18. Identification of price range selling, 26 subdivisions, suburban township, January 1976

Average price	Sq.ft. in unit	Cost per sq.ft.	Monthly rate of sales per subdivision	Interpretation
\$46,933	1,000-1,300	\$39.95	4.90	Excellent
\$52.200	1.300-1.600	38.58	3.30	Very good
\$60,725	1,600-2,000	34.52	4.20	Excellent
\$67.740	2,000-2,500	30.48	1.75	Satisfactory
\$97,900	2,500 and over	35.92	1.32	Slow
Source: Authors.				

example, the analysis of what is ahead or in the pipeline must be more specific. As an example of the necessary information, Table 14-19 gives data provided by the Chesapeake and Potomac Telephone Company showing Washington metro area units under construction, projects remaining active, and project demand.

Two dates shown (the year has been deleted because this form should serve as an illustration rather than pinpointing an exact date) refer to two periods, June 15 and September 15. Total residential units under construction increased in the three-month period to 37,526 from 32,494, or a 5,032 unit change. The remaining units in active projects declined 2,678 units, and units planned increased by 10,739 units (indicated by boxes in Table 14–19).

The total area information means little to an investor or builder however, they must know what is happening in the immediate area.

Table 14-20 (from the same source) shows detailed information on each project in the District of Columbia. For the first project, identified as Benning Park Terrace, a location is shown, and it is indicated that 281 apartment units were completed as of September 15 of that particular year. Another 230 apartment units called Eastgate had footings poured, and so on.

Planned construction is indicated at 2921 Knox Place, S.E., for example, for 62 apartments units, planned to start in the fourth quarter of the same year (status is indicated in the last column; plans 4 means starting in the 4th quarter).

From this detailed information a map should be constructed to show locations of each project so as to get a reading on what is underway and what is planned ahead, and when. Or a simple tabulation will show the information, as in Table 14–21. The conclusion in this instance would be that there are too many projects ahead of the planned one. Unless there are some special circumstances (such as units for the elderly or subsidized units), the project should not be built.

A conclusion of findings in a competitive survey of single-family homes could read as follows:

There is a considerable amount of units in the pipeline. There are 33,150 approved subdivision lots in the township, with another 31,000 pending ap-

Table 14-19. Chesapeake and Potomac Telephone Co., Washington Administrative Area, major construction projects

	D.C.	Maryland	Virginia	Total
Under construction				
Housing units				
6-15	-	2,330	776	3,106
9-15	_	3,687	390	4,077
Apartment units		0,00,		
6-15	6,696	12.874	9.818	29,388
9-15	7.727	16.410	9.312	33,449
Total residential units	*,****	10,110	0,012	00,110
6-15	6,696	15.204	10.594	32,494
9-15	7,727	20.097	9,702	37,526
	•		•	
Change	+1,031	+4,893	-892	+5,032
Office space, floors				
6-15	164	71	114	349
9-15	126	50	135	311
Change	-38	-21	+21	-38
Remaining in active projects				
Housing units				
6-15		13,549	492	14,041
9-15	_	13,810	1,683	15,493
Apartment units			·	
6-15	1.534	30.723	8,657	40.914
9-15	2.267	29,422	5,095	36,784
Total residential units	4,50	,	-,	
6-15	1.534	44.272	9.149	54,955
9-15	2,267	43,232	6,778	52,277
Change	+733	-1.040	-2.371	-2,678
Projects planned	T100	-1,040	-2,511	2,010
Housing units				
		3,755		3,755
6-15	-		-	6.784
9-15	-	6,78 4	-	0,704
Apartment units		80.000	10.150	44 100
6-15	7,106	20,909	16,178	44,193
9-15	6,257	24,834	20,812	51,903
Total residential units	.			<u> </u>
6-15	7,106	24,664	16,178	47,948
9-15	6,257	31,618	20,812	58,687
Change	-849	+6,954	+4,634	+10,739
Office space, floors		•	•	
6-15	76	99	161	336
9-15	38	38	59	135
~ ~~	- 38	-61	-102	-201

Source: Chesapeake and Potomac Telephone Co.

proval. Sewer taps authorized and remaining to be used number 20,500. Approximately 7,500 of these are for single-family units that can be built in 1976 and 1977. There is a great deal of competition from other subdivisions, which are located primarily in the Northern drainage basin and in the Southern drainage basin where your site is located. There is an abundance of undeveloped residential acreage being brought into production. The 1970–75 period averaged 4,800 acres annually for low-density residential units, about 65 percent higher than the rate of the sixties. The project will encounter a highly competitive and risky period for development. Great caution must be exercised so that the project does not get caught overextended in what is going to be a notably overbuilt market. In addition, the township's housing situation is complicated by a substantial number of new housing units in the

Table 14-20. Chesapeake and Potomac Telephone Co., District of Columbia construction data

Name of project	Location	Project	Status
A	. ANACOSTIA CENTER		
Construction started-Residential			
* Benning Park Terrace	53rd & G St	281A	Completed
* Eastgate (N.C.H.)	Benning Rd. bet. F & G Sts., S.E.	230A	Footings
* Garr (Owner)	1701 Gainsville St., S.E.	82A	Interiors
H. L. & E. Weisman	50th & A Sts., S.E.	123A	52 completed
			71 plans
* Hilltop Apartments	Suitland Pkwy, & Ala. Ave.	224A	Footings
Martin & Xavier	2900 Nash Pl., S.E.	48A	U.C.
* Smith Apts	4911 thru 4919 C St., S.E.	65A	Completed
* Stromp Garden Apts	2337 Green St., S.E.	98A	Completed
Construction planned - Residential	·		-
Collier & Vogell (owner)	2921 Knox Pl., S.E.	62A	Plans 4
Corby Apts.	Hartford St., S.E.	100A	Plans 4
† Goldsten Apts.	5401 Call St., S.E.	108A	Plans 4
Naylor Rd. Garden Apts	28th St. Nr. Naylor Rd., S.E.	92A	Plans 4
Reinsch (owner)	333 Anacostia Rd., S.E.	51A	Plans 4
† Smith Apts	2300 Good Hope Rd., S.E.	869A	Plans 2
	B. BENNING CENTER		
Construction started—Residential			
Deanwood Gardens	54th & Blaine St.	86A	Rehabitn.
Elder Michaux (owner)	Kenilworth Ave. & Hayes St., N.E.	680A	680 U.C.
† James Apts.	916 Eastern Ave., N.E.	106A	Facing
, ,			
C.	BROOKLAND CENTER		
Construction planned - Residential			
N.C.H.A.	Montana Ave. at Bryant St., N.E.	155A	Plans 4
* Change since last report. † New item.	·		

Source: The Chasapeake and Potomac Telephone Co.

Table 14-21. Summary of current activity in Area A, within one mile of proposed project

Item (multiples)	Number of units	Remarks
Proposed project	2,010	Annual absorption rate estimated at 600 3.2 years of supply 15.4 years of potential supply
Source: Authors.		

pipeline. This happened because of the enormous growth the township experienced during the 1960-69 period, when 108,734 new housing units were built. This compares to 43,239 for the ten-year period before that and to 25,406 for the five-year period between 1970 and 1975. With that growth during the 1960s, everybody expected substantial future activity in the township. As a result, people purchased land, and this ended up in a large amount of units now in the pipeline.

Step 5. Product-type comparison. There are many forms of product comparisons, but the most popular way to do this is with a "shopping comparison" of projects, several examples of which have been given above.

Exhibit 14-3. Survey of townhouse development profiles, Washington, D.C. metropolitan area, February 1972 (excerpts)

- KĘŢ	DEVELOPMENT DEVELOPER AREA	TYPE OF DEVELOP- MENT	M00E3,	BEST SELL- ING MODEL	HODEL	BO.RMS./ BATHS	SQUARE FEET	SALES PRICE	PRICE SIZE RATIO	DATE SALES START- ED	TOTAL UNITS PLANN- ED	20CB	SALES AVER- AGE	CLOSING COS73
1	AUTUMN WALK Tare Constr. Co., Inc. Silver Spring Mentgomery County	Conda- mintus	A. Winter B. Spring G. Summer	1	Yes Yes	1/21, 1/21, 1/15	1,115 1,172 947	\$29,990 \$30,990 \$26,990	\$26,90 \$26,44 \$28,50	1/72	30 25 26 27 28	12 4 2 18	r	\$1,600
ż	BRANDYHINE STATION Bosse Cascade Upper Meriboru Prince Georges County	Fee Simple PUB	A. Calvert B. James C. Patusert D. Delaware E. Severn F. Petomac G. Cherles		Yes Yes Yes Yes No He	3/2 3/15 3-4/25 3-4/2 2-1/2 1-4/25 3-4/25	1.400 1.260 1.408 1.560 1.200 1.644 1.408	\$2\$,990 \$24,500 \$25,500 \$26,500 \$23,990 \$27,500 \$26,500	\$18.56 \$19.44 \$18.21 \$16.99 \$19.59 \$16.72 \$18.93	4/76	345	195	Į.	încluda ed
3	MIDLAND (Lake Braddork) Yeonas Annanda le Fairfax County	Fee Simple PuB	A. Archweel B. Blanton C. Deven B. Easten	z z	Yes Yes Yes Yes	3/1% 3/2% 2/1% 3/1%	1.070 1.070 970 1.070	\$27,100 \$27,100 \$26,800 \$27,100	525.33 525.33 527.63 525.33	s/n	85 85 27 65 782	175	r	Includ- ed
4	BURKE (AME (Lake Braddock) Yeonas Annandale Fairfax County	Fee Simple PUO	A. Hempton B. Abington C. Radford D. Bedford E. Covington	x	Yes Yes Yes Yes	75.7 71.7 71.7 71.7 71.7	1,553 1,682 1,682 1,682 1,778	\$31,750 \$33,750 \$33,750 \$34,750 \$36,750	\$23.44 \$27.07 \$29.07 \$29.66 \$20.67	2/72	33 17 23 10 92	3 7 21	7	\$1,200° \$1,500
5	CROFTON TOUNE Levitt & Sons Crafton Ann Arundel County	fee Simple PuO	A. Gibbon B. Enfield C. Canterbury D. Dorset E. Jameston	x	Yes Yes Yes Yes	1/2 1/1 2/1 1/1 2/1	1,275 1,535 1,340 1,400 870	\$28,990 \$28,990 \$26,500 \$28,990 \$24,990	\$22,74 \$16.89 \$19.78 \$29.71 \$28.72	4/69	390	J S S	r.	\$ 600 \$ 643
6	DISCOVERY James Caffitz Fredrick Fredrick County	Fee Simple PuB	A. Bescon B. Challenge C. Dress	1	Yes Yes Yes	3/14 3/2, 4/2,	1,064 1,264 1,228	\$21,590 \$22,590 \$25,990	\$20.67 \$18.19 \$21.16	1/72	133	25 25 4 36	5	\$ 800 - \$1,100
7	HERETAGE COURT Carl Freemin Annandale -Fatrfax County	Garden Condo- minium PUO	A. 1 BR. 8. 2 BR. C. 3 BR. D. 4 SR.	I	He Ha Yes Yes	1/1 2/2 3/2 4/2	\$45 1,220 1,475 1,760	MA \$26,990 \$30,490 \$33,990	MA 522.12 520.67 519.31	9/71	42 157 75 14 286	78 66 9		includ- ed
3	KIMMERLY PLACE Artery 511-er Spring Hontgomery County	Conde- Hintum PUB	A. Anders B. Kimberly C. Entron D. Banner E. Pollard	x	Yes Yes Yes Yes Yes	2/2 3/2'; 3/2'; 3/2'; 4/2';	950 1,250 1,300 1,800 1,520	\$25,990 \$29,990 \$31,990 \$33,980 \$35,990	\$27,36 \$23,99 \$24,61 \$18,08 \$23,68	10/71	40 57 16 40 17	8 16 5 16 5 5	7"	\$1,498 - \$3,590

Source: Bill Elliot and Associates, A Marketing Feasibility and Design Criteria Study of New Housing Types for Lake Ridge, a Planned Community, Prince William County, Va., Table 20, pp. 86-87.

(Exhibit 12-27 is a detailed version.) There is no easy way to do such a study; it involves much legwork, patient observation, and the careful recording of all details. Some guidelines for doing a comparative study are:

- 1. Get brochures of all models, with floor plans.
- 2. Get information on prices and financing.
- 3. If you cannot get accurate information from personnel in the sales office:
 - a. Read the map on the wall to determine the units sold and available.
 - b. Go to the construction site. Construction people are generally more friendly to people looking for information than sales personnel are
- 4. Prepare an outline of what you want to find out. Concentrate on main features and items.

LIBRICING LIBRICING	GE GE	BASE- MERT	FIRE-	CERT- RAL A/C	MILT (N YANET- IES	CARTH-	REFRIG- ERATUR	OTSH- WASHER	TYPE OF STONE	CARE. DIS- POSAL	MASHER/ DRYER	ON SITE RECREATION	MONTHLY MAINT.
COMM. 952 20 year 7.2	Hene Hene Hene	Finish Finish Finish	Hone Hone Hone	incl.	Fermica Fermica Fermica	Vood	incl. incl. incl.	inci. inci. inci.	Free Styne	inct. inct. inct.	lasic fasic fasic	Paci	126.
Find 995 7% OA COMP	None None None Home Home None	\$2,000 \$2,000 \$2,000 \$2,000 \$2,000 \$2,000 \$2,000	Rane Hane Hane Hane Hane Hane	\$895 \$895 \$895 \$895 \$895 \$895 \$895	formica formica formica formica formica formica formica	Veed Veed Veed Veed Veed Veed	incl. loci. incl. loci. loci. loci. loci.	\$195 \$196 \$195 \$195 \$195 \$195 \$195	Gree In •	(m). (m). (m). (m). (m). (m).	\$200/\$140 \$200/\$160 \$200/\$160 \$200/\$160 \$200/\$160 \$200/\$160 \$200/\$160	Peel_Club_Self Peel_Club Club	5175/te 5139/te 5 58 te
CORT: 152 30 yes 82 552 25 yes 82 881 30 yes 7-2/42	Hene Hene Hene Mend	\$1,000- \$1,500	Hone Hone Hone Hone	incl. incl. incl. incl.	Rene Hone Hone Mane	Vood Vood Vood Vood	incl. incl. incl. incl. incl.	\$225 \$225 \$225 \$225	Orep In	incl. incl. incl. incl.	\$450. \$450. \$450. \$450.	Poul Tennis Courts Fishing,Beating Bike Trails	\$ 12.50
CDMF; 905 JE yes 7-1/45 805 JE yes 7 % S 755 JE yes 7 % S	Hone Hone Hone Hone	Finish Finish Finish Finish Finish	Hany Hane Hane Hane Hane	incl. incl. incl. incl.	Hone Hone Hone Hone	Vood Vood Vood Vood	inti. inti. inti. inti. inti.	incl. incl. incl. incl. incl.	Ores In	incl. incl. incl. incl. incl.	incl. incl. incl. incl. incl.	Feel Tennis Courts Fishing.Socting Bibe Trails	\$ 12,50
ли, ук 7 с 38 уга	Rene Rene Rene Rene Rene	\$3.510 \$3,000 \$3,000 \$3,000 \$3,000	5650 5650 5650 Henre 5650	incl. Incl. Incl. Incl. Incl.	formica Formica Formica Formica Formica	Hood Hood Hood Hood Hood	inel. inel. inel. inel.	\$220 \$220 \$220 \$220 \$220 \$220	Orep In	194 596 596 590 390	incl. incl. incl. incl. incl.	Pool.Tennis Courts, Club House, Galf	ATI-SSE Poul & ClubSZ3 Golf & Club SS3
Core: 1915 - 7-3/45	None None None	ifiere Grade Fermi t	Hang Hang Hang	\$650 \$775 \$800	Formica Formica Formica	Care	inci. inci. inci.	inci. loci. loci.	Free Stand	inci. inci. inci.	Incl. Incl. Incl.	Peel, Tennis Courts Basket- Ball, Child Care Conter	\$ 8,00
COM: 1512 25 yes 85 963 25 yes 83 865 25 yes 71,5	Hone Hone Hone	STab STab STab STab	Sone Sone Sone Agne	inci. inci. inci. inci.	Formica Formica Formica Formica	Veed Veed Veed	incl. incl. incl. incl.	inci. inci. inci. inci.	Gree [#	incl. incl. incl. incl.	incl. incl. incl. incl.	Feet	nd 590. 560. 572.
CONT: 196 25 yes 7:5	Hone Hone Hone Hone	STAB STAB 1990 Finish STAB	Lone Lone Lone Lone	Imi. imi. imi. imi.	Formica Formica Formica Formica Formica	Vood Vood Vood Wood	Incl. Incl. Incl. Incl.	inci. inci. inci. inci.	Free Stand	incl. incl. incl. incl. incl.	incl. incl. incl. incl. incl.	Peels,Play Areas	s \$1 0 .

- 5. Get a feeling of the product, talk to people who already have purchased or who have just gone through the model. Listen to people talking in the model homes.
- 6. Make sure you get information on all the features offered and whether they are part of the standard pricing or are optional.

Step 6. Recommendations. There is no prescribed form a recommendation must follow. Its main features should include a go or no-go recommendation; suggestions on when to start, how many and what type of units to build, features to be included, and price. One such recommendation is shown in Exhibit 14-4. Details on other types of recommendations are given below.

Financing and marketing recommendations. An analyst should make recommendations as to the type of financing best suited for the proposed

Mesearch and the Semsittive Housing Market

Patricia P. Rosenzweig

If the dismal economy of the past few years has had any genuine benefit, it may be that the building industry is becoming increasingly aware that success is dependit upon meeting market requirements. No longer can farket studies be commissioned only to please the lender. Real questions are being asked. What must I produce to assure the saleability of my product? Who will buy? What, specifically, does that market require? How price sensitive is that buyer? What does a unit look like when priced this way? What distinguishes it from lower and higher price levels?

The reasons for the increased inquiry are probably quite

- The housing market appears to be more discriminating. Even an "inexpensive" house costs a great deal of money. For any given amount, the buyer probably can only meet some of his preferences and, therefore, must decide what the minimum requirements are.
- The recovery in the housing industry is uneven. Not all geographic, price, and design segments of the market have regained significant vitality. Thus, builders are being very careful to avoid "avoidable" mistakes and not to miss that which is available.
- The length of the recession has caused the builder to sense he has lost touch with the market. Those who have been buying in the past few years have been largely "forced moves"-mainly job relocations. The "normal mover," those upgrading, have not been in the housing market, except at the highest income levels, for over two years. The builder is duly wary of changes in attitudes and expectations since the last time he faced a "normal" situation.

The result is that more design and marketing oriented research is needed, more is being done, and more is being encouraged. However, the nature of the research -conducted to resolve specific problems at a specific location—and the nature of the client—sometimes relatively small and generally very cash conscious—has caused researchers to use cost-effective, highly focused techniques. Thus, the researchers have also benefited from this traumatic period in that they are facing challenges of finding new creative tools to assist in realworld, nontheoretical problems.

Some of the techniques our firm has used are described on the following pages. Not all of them are applicable to every situation. Constraints of budget, time and manpower, market complexity and familiarity with the market are among the factors which dictate the combination of appropriate techniques.

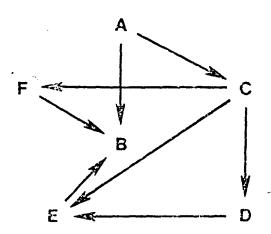
Comparables

Housing market studies have typically relied heavily upon examination of "comparables," a technique inherited from the appraiser. Rent or sales structure, vacancy rates, sales or rental pace (absorption rate), unit and site amenities, and bedroom mix are arrayed for all projects seeking an equivalent market to that which is proposed. That technique is probably quite reliable when the market is active. However, today it is necessary to go beyond the ordinary matrix—or at least expand upon it.

Sales Staff Interviews. Interviews with sales personnel must supplement raw data. Such questions as the following can be fielded easily and willingly on the phone. If the raw data is not readily available, more familiar forms will often get even more meaningful results:

- · What is your total mix of size by price? Which ones do you have left? . . . or, which of your units are selling best? In one recent case, management would not release the total mix of units available, but did say that all of the lowest priced units had been presold. This fact was important in confirming the degree of price sensitivity of the marketone where the lowest price unit was \$75,000 and, in the building in question, the lowest price had been \$125,000.
- What site amenities do you have? . . . and what is the most important sales (rental) feature? In the group of buildings sampled, relatively standard amenities existed. Only through the subjective question was the importance of "view" identified as a feature distinguishing units and, thus, among the more important decision factors.
 - In another case, typical of the past few months, the importance of landlord assumption of heating costs was initially brought to light through this question.
- What is your market area? Who typically purchases a unit?... or, what is your competition? This last "form" serves several purposes. First, it enables you to limit your universe realistically -particularly in a new market. Secondly, it enables judgments on hierarchies—a building generally will not be considered competition by management unless they consider it equal to or better than their own. Thus, you can evaluate the "ideal" by charting by whom and how frequently a given project is mentioned and then characterizing the "ideal." In the accompanying chart 1, "B" was selected as "Competition" by three of six buildings in the market; when "B" was contacted, the response was, "We have no competition; we are unique." "E" and "F" were identified as potential only if "people didn't care about customizing or about the quality of the kitchen or location." But without probing, "B" stood alone.

CHART I Identification of Competition in a Market



Perhaps the most important benefit from sales personnel interviews which go beyond straight fact gathering is the sense of the market. Parenthetical phrases are important: "It's not bad-we've sold five units a month." In other words, the owners were satisfied with five units a month. Why? They shouldn't be. The perception of this dissonance led to a very important finding: all buildings in this market were owned by contractors. Further exploration of project economics showed that to keep the sales price at marketable levels, the only profit available was in the construction process itself.

Historical Tracing. Particularly where there is no housing shortage, and with large developments, tracing the prices or characteristics of comparables over time have proven useful. On the theory of market elasticity, in one study directed at determining the acceptability of small lot detached and attached housing in an exurban market, the sales price of units was traced over a two-year period. Only developments which were essentially complete for the twoyear period were selected in order to avoid, as much as possible, price increases necessitated by increased development costs.

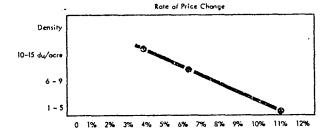
Honejne Marret

Sales price increases were categorized by density, site amenities, and total cost. An examination of the median changes by group showed an inverse relationship between density and rate of price increase, i.e., the lower the density, the greater the rate of increase. The average increase in higher density developments was 6.4 percent, moderate density (townhouses) increased 9.9 percent, and detached homes, 11 percent. The average absolute price also was progressively higher, so that the rate of increase was not distorted by a lower basis on the lower density units. Higher density increased \$2,143; mid-density increased \$3,687; lower density increased \$5,375 (see chart 2).

Examination within each group indicated that the market was seeking the "better" or more luxurious developments. In high density, only developments with on-site recreation showed price increases at all;

CHART 2

Rate of Change in Sales Price by Development Density



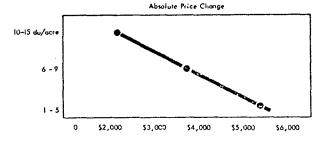
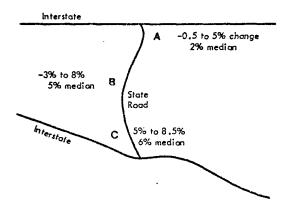


CHART 3
Rent Changes in Market Area Towns



in moderate density developments, those without recreation uniformly fell below the median; those with recreation and an amenity fee were above the median. In lower density, the greatest percent increases were in the units with the highest original price. However, in this case, there was no variation associated with recreation.

In another situation, the market area was defined as a two-township area oriented around a state north-south road bounded by an interstate at the north and at the south (see chart 3). Three communities formed a chain along the north-south axis. Rent changes which were achievable over the past two years, in each of the three towns, were compared with vacancies. It was found that, where vacancy data was available, the higher the vacancies, the lower the rent increase. This "correlation" is important since valid historical tracing is normally more easily available than vacancies (which management does not like to discuss).

A parallel technique, only available where comparables include a supply of phased developments, is based on the theory that the experienced developer knows his market best. This technique involves the systematic comparison of sequential stages of the same development. If the price increase has been at or below the rate of inflation, look for what has been eliminated, made smaller, or what material has changed. Similarly, where a significant price increase has occurred, look for what has been added.

Several years ago this technique was used in the Boston suburbs where unit sizes were quite large, apparently due to the influence of the design standards of the Massachusetts Housing Finance Agency. With cost increases and no significant rent increases, it was necessary to see what changes had been made to make the economics work, to see what the developer felt he could cut back on without jeopardizing his market. It is important to do this within the same development rather than comparing units in different developments, because within the same development, a developer is conscious of the competition which turnover in earlier phases creates with new units. He designs the second phase to compete effectively with himself on earlier phases. Without dramatic changes clearly designed to reach different markets, he must make changes which are either indiscernible and not decisive to the prospect or he must exchange something important which has been taken away for something visible and less costly.

In one of the Boston area developments, first and second phases were compared with the following changes observed:

- · Metal room and closet doors changed to wood, with no visible change (indiscernible cost reduction);
- Removal of second window in living/dining area (unimportant cost-reducing design feature);
- Molded plastic shower stall in second bath, instead of conventional materials (potentially risky design change);
- Supplementary small tube T.V. set in each kitchen hooked up to existing security system (highly positive, visible, low-cost addition);
- Use of unimproved, but partitioned basement space for craft rooms—exposed cinder-block walls and wallboard partitions, cement floors equipped with potters wheel, kiln, a few power tools, and storage lockers (visible, low-cost addition not available elsewhere in the market, generating sufficient income to amortize cost and cover maintenance).

Interviews With Off-Site Sales Personnel

Frequently the only "comparable" is sold out so that on-site staff is not available. Alternatively, the builder has a range of markets and wants to select the one with the broadest potential. In these cases, it is frequently appropriate to interview the major realtors selling on a unit-by-unit, scattered-site basis. Questions can be similar to on-site, but even greater care is needed to get behind the advertising jargon.

- "Wooded" Natural or maybe landscaped? In one market, the preference was for landscaped because of rodent and bug control and, apparently, as a status symbol as it required a gardener.
- "A Good Neighborhood" One market defined a separation between "Executive" (\$50,000-\$75,000 homes) and "Luxury" (\$75,000+).

Specific questions which have been useful in gaining specific responses are:

- What three home features are absolutely essential to this market? You may miss something that "goes without saying" if you rely solely on this question, but you pick up those features you may otherwise miss. For example, four-bedroom units with 21/2 baths "went without saying," but this question picked up the importance of natural materials, wood or metal cabinets, not formica; slate foyer, not tile; the importance of a family room, and of a full basement.
- If you could build the perfect unit for the XYZ. market, and it was located in (a particular) part of town, how many would you build at one time and how fast would you sell out? While their judgment in specific numbers should not necessarily be relied upon, the relative strength of the market segment becomes very clear. In a recent case, six interviews were conducted with the top sales people from the top six real estate companies in the target price range. All questions prior to this one met with enthusiastic responses on the strength of the market. How many would they build? Two to five at one time (8-15 per year), and two said they would not build at all, speculatively (not even models), at that price range.

In general terms, these interviews provide a sound orientation to a market, geographically and socially. They are useful preceding analyses of comparables and survey research in markets with which you have limited prior experience.

Moriging Warker

Survey Research

Field Survey. The tricks in dealing with cost-conscious survey research are limiting the universe and limiting the length and complexity of the instrument as to reduce the training required. Most importantly, however, is the necessity to avoid "preferences" and get to "requirements." A number of methods have been used by our office.

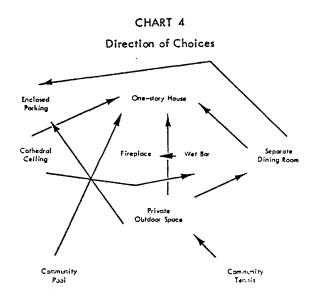
Language: Very strong and specific language is used. One survey instrument used such phrases as:

- · How many bedrooms and baths would you
- What living areas would you require?
- If the washer/dryer connections were in the garage, would this be acceptable?
- Which of these features is an absolute requirement?
- Would it be mandatory for you to sell your current home first?

Paired Choices: On several occasions we have used pairs of features, sometimes similar, sometimes not; sometimes both "desirable", sometimes both relatively insignificant. Interesting findings can be reached, particularly when used to compare different types of developments.

In one survey among a homogeneous income group currently living throughout the target metropolitan area, each time the choice involved something nearer or further from the structural characteristics of the unit itself, the feature closer to the structure was chosen; more indoor space preferred over more patio or outdoor space; larger private outdoor space preferred over tennis courts; separate dining room preferred over larger private outdoor space (the larger dining room was preferred in this instance, even though a one-story house and enclosed parking were both preferred over the dining room).

The accompanying chart is ordered in tiers structural, interior design, private outdoor space. and community space. The direction of the arrows indicates the direction of the preferences. Notice that in no case does the direction of the arrows go down or away from the basic unit structure.



In another survey, findings were segmented by whether the respondent's current place of residence in the market area was in an attached or detached unit:

- A separate dining room is extremely important. to the home dweller and less so to the townhouse dweller. For example, 71 percent of home occupants would choose a separate dining room and a smaller kitchen, rather than a larger kitchen and a "dining area"; this is true of only 57 percent of townhouse occupants.
- A "family room" is more important to the townhouse market than to this single-family detached market. Among townhouse dwellers. 43 percent prefer a family room to a basement, whereas this is true of 29 percent of homeowners

Presumably, this greater emphasis is for two reasons: first, the townhouse occupant has

already given up a bedroom (mean size 2.5 bedrooms vs. 3.2), a separate dining room, and a "big backyard." This household needs room to breatne. From the detached occupant's point of view, he has given up no traditional space and is not committed to convenience.

- So long as he has a basement to convert to a family room if he really wants one, he is satisfied, even if he has to do it himself.
- Both townhouse and single-family detached dwellers would trade unit size for a two-car garage.
- · Traditional architecture is very important to the single-family home market but not to the townhouse market. Only 18 percent of the single-family detached market preferred "modern" to "traditional" architecture. The townhouse market divided 49-51 percent.
- A "patio-size yard with a tot-lot nearby" is an unacceptable alternative to a "big backyard" to the detached homeowner, but more acceptable to the townhouse market. Eighty-two percent of homeowners versus 69 percent of townhouse owners prefer a big yard and no tot-lot to a small yard and a tot-lot.
- · Proximity to a park is not an acceptable alternative to a detached house for a detached home occupant, but it is an incentive to those now living in townhouses: 59 percent of townhouse occupants prefer "a townhouse with a view of a park" to a "conventional house driving distance from a park." No homeowners had that preference.
- Active recreation is important to the townhouse dweller but not to the detached dweller. For example, 71 percent of townhouse dwellers prefer "nearby pool and tennis" to a "neighborhood grocery store." The precise opposite choices were made by homeowners.

"What Three Things . . .": At the conclusion of field surveys, when cues are available and when the respondent is fully oriented to giving specific answers, our office asks two or three final questions:

- · Of all the things we've talked about, or any others for that matter, what three things would you never give up?
- · What three would you readily do without, or give up first?
- Is there anything missing from this house (unit) or area that you, in the future, would insist on?

In one particular case, the findings were illuminating and critical. The market was very expensive single-family detached homes in a medium-sized midwestern city with a large and active market for new housing priced over \$75,000. Through a faulty assumption in the design of the survey instrument, no mention whatsoever was made of air-conditioning. It was simply assumed that any new unit at that price would somehow provide air-conditioning in that climate.

Notwithstanding that the respondent had not been conditioned, air-conditioning was the single most frequently mentioned response. Rather than being "standard equipment," it was identified as being a sales opportunity (or a cost savings).

On a more theoretical basis, this series of questions was illuminating in respect to the buyers' orientation. The clue to the finding was that more respondents who had bought an existing, new ("spec") nouse identified things they did not need than those who had built their own home. This suggested that when going into an existing unit, they buy more than they need in order to get what they want. The thing they generally get more of is space. Of those who indicated they could do without something, 88 percent mentioned a room or "size." In other words, of all units sampled, nearly one-third (32 percent) are bigger than the buyer necessarily needed. Finished and unfinished basements, bedrooms, dining room, living room, third bath, and patio were all things they could do without. In the lower priced market, the buyer trades away an extra room for his ability to buy at all. In a high-priced market, one buys an extra room to get the equipment or location he requires.

Listings and Records. Raw data at the project or market level is frequently useful. In any geographic or product market, it is important to know what income group can be attracted and, more importantly, what the relationship is between income and willingness to pay. In this latter factor, markets differ widely, not only as a matter of supply and demand, but as a matter of attitude. On several occasions, there was the opportunity to examine initial applications to early stages of the subject development or of directly comparable developments. Ratios of income to rent or income to sales price can be calculated. Primary data

Monsing Market

collection is obviously superior to rules of thumb (25 percent of income available for rent or 2.5 times income available to purchase) in determining the income level to be attracted at a given market price or in determining the market price by knowing the income level. Within Metropolitan Chicago's 201 communities with populations of 2,500 or more, home value/income varies from 1.2 to 2.8. Within the 10 highest income areas, it varies from 1.7 to 2.8 and among the 10 lowest, from 1.2 to 2.2.

In one case, a golf-course townhouse development, this technique virtually eliminated income as a factor in market identification beyond a threshold level of about \$20,000. Regardless of how much was earned above that amount, the purchasing power was the same because age of the household head and household size were the determinants. Since, in this market, older "empty nesters" were able to liquidate a home with significant net proceeds permitting very large downpayments on new units, this market was, in fact, purchasing at four times income.

Weekly listings of units on the market through a multiple listing service proved extremely useful in one instance where the distribution of price and size of units actually on the market was needed. Elapsed time from the Census, differences between value of all homes, contrasted to value of homes for sale, value by number of bedrooms and bathrooms, and specific values over \$50,000 all required data other than the most recent Census of Housing.

Finally, records of the prior place of residence in first phase or the current occupants of comparable developments can prove extremely helpful in defining market area and developing a marketing program.

In one instance, it was found that over half the market came from out-of-town-they were transfers by major companies. The marketing program for a directly comparable development therefore relied heavily on "educating" the personnel-transfer departments of the community's major employers.

In the case described earlier, where there were three linear towns, analysis of immediate prior place of residence of housing occupants in the southern town indicated that nearly three-quarters would have used the expressway to the north to get to the site. Since the northernmost community had half the units, was the "softest" market (see chart 3), and had to be bypassed to reach the southern community, a marketing strategy was developed, emphasizing heavy signage along the access route to "notify" the market that it was worth their while to keep going.

During the period when builders are finding it necessary to fine-tune their product to suit the available market, they are simultaneously requiring research to be performed in a market where traditional techniques no longer suffice. Expanded exploration of "comparables," field research, and selected original data each assist in overcoming the gap in experience caused by two years of market inactivity. In almost all cases, the techniques described are designed to obtain behavioral information or strong attitudes, not preferences. The market is now facing the need to choose among alternatives and trade-off between housing elements previously attainable. Research, thus, must be directed at understanding the market's framework for decision making, its willingness and ability to pay, and the features it is willing to give up and those which are, at this time, immutable,

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LESLIE ENSOR STOCKMAN, DESIGN EDITOR and JUNE FLETCHER, FEATURES EDITOR





With 5,000 Americans turning 65 each day, the market for retirement housing is rapidly coming of age. Opportunities exist, and they're certain to increase.

ove over, baby boomers. Make way for your elders, who will constitute housing's hottest market for the rest of the century. The market looks good for two reasons. The number of Americans 65 and older is growing at an unprecedented rate, and their houses no longer suit their lifestyles. Consider these facts:

■ Every day another 5,000 Americans turn 65, joining the fastest-growing segment of the population, the elderly.

■ The 65-plus population grew by an estimated 6 percent between 1980 and 1983, compared to a 3-percent increase in the under-65 age group.

■ There are almost 30 million elderly Americans; or put another way, about 1 of every 8 Americans is 65 or older.

The growth in this sector will continue, too, so that by 2030 one in every five Americans will be over 65. And not only are the old increasing in numbers, they're getting older: At 2.2 million, the 85 and older age group was 20 times larger in 1980 than in 1900 and it's predicted to grow to 3.5 million by 1990.

Although poverty still plagues many elderly, this segment as a whole is surprisingly affluent. In 1983, 39 percent of elderly households had incomes of at least \$20,000. The elderly also are equity-rich, with 72 percent of elderly couples owning a home and 84 percent of that group owning them free and clear.

In many cases, though, the homes they own no longer are suitable. They're big and expensive to maintain. (Nearly half of the houses owned by older people were built before 1940.) Often they impose physical and social barriers to a full and comfortable life.

Many elderly live in deteriorated urban neighborhoods that are losing services, shops and long-time residents. The elderly who remain feel isolated and become easy targets for crime. Elderly living in the suburbs fare somewhat better, but in many towns they're tying up affordable housing that would be more suitable for young families.

Even if their houses are well-located, older houses are often too much house for older owners. They tend to be expensive to heat, require many repairs and lots of yard work

Yet many hang on to them, not simply out of sentiment but because there are neither affordable nor appropriate alternatives. "There isn't enough housing designed specifically for older people and what housing there is often isn't in the right location," says Leo Baldwin, coordinator of the American Association of Retired Persons's special projects. As a result, most elderly prefer to stay in their homes rather than move to a new town or even a new neighborhood.

All these facts and figures have stirred up the home building industry. Many predict housing for the elderly will boom in the late 1980s and 1990s the way housing for singles boomed in the 1970s and early 80s. Before too much ground is broken, however, it's time to look closely at this market. Is it as deep as it looks? Where are the opportunities for home builders and what are the pitfalls? And, most importantly, can home builders deliver the housing this market needs?

retirees in the country. It has 11 golf courses, 7 swimming pools and 17 tennis courts for its 46,000 residents. And there's plenty more, from boccie courts to concert halls in

the 8,900-acre project.

That represents a staggering investment unlikely to be repeated in the future, even by Sun City's developer, Del E. Webb Development Co. Although its second community, Sun City West, is on a scale comparable to Sun City, expensive land and money will force the company to hold future developments to about 15,000 residents, according to president Paul Tatz. "But we'll continue to put in the infrastructure and the amenities up front," he adds. "You can't sell homes in this market without them."

That's true even on a smaller scale. J. S. Hovnanian & Sons, Mount Laurel, N.J., isn't putting a golf course in its 717-unit Holiday Village, a community for those 52 and older. But it does have a ballroom in the clubhouse. Hovnanian's research showed that its buyers rated dancing their

number-one recreational activity.

At Holiday Village, which draws from the Philadelphia metropolitan area, buyers are like the vast majority of the nation's retirees. They don't want to leave their roots. "Our buyers won't go more than an hour from where they lived," says Stephen J. Hovnanian, vice president of marketing and operations. "And they prefer to be within a half hour of family and old friends."

Sun City, on the other hand, draws mobile retirees, but it still must make the move as trouble (and trauma-) free as possible. Prospective buyers can spend a week or two vacationing at Sun City West or they can rent an apartment there for a year before buying a house. Both programs are designed to let people "test drive" the community before

committing themselves to it.

The typical product for active retirees is a downsize, single-story, single-family house or duplex unit. Downsizing is a relative term, however. At Sun City, the average house has grown from 1,000 square feet when the project opened 25 years ago to about 2,000 square feet today. Tatz says the increase reflects the general increase in house size and an increase in the number of bathrooms people expect. Sun City also attracts affluent buyers, whose average net worth is more than \$200,000.

Pricing is tied to the value of the buyer's previous home, so a builder should know exactly where his buyers are likely to come from. "Builders should know the value of the homes their prospective buyers are selling and understand that a major portion of their equity, but not all of it, will be reinvested in housing. This market wants something left over to invest for future income," advises Stephen J. Hovnanian.

Projects such as Holiday Village and Sun City are marketed to and attract younger retirees. But the fastest-growing sector of the elderly population is older and needs a different kind of housing. Most people between 75 and 85 lead independent lives but need help with meals or house-keeping as they slow down. This can be a time of loneliness for people, too, as spouses and old friends die.

Congregate housing can be their lifeline, providing

PROJECT TYPES

Active retirement communities

These communities span a range of projects from entire new towns to modest subdivisions, but in all of them people must be of a certain age, usually about 50, before they can move in. Most offer a rich range of recreational opportunities, either as part of the project, such as a golf course community, or by virtue of its location, in a resort town, for instance. These projects attract active retirees (65 to 74 years old) and pre-retirees (55 to 64 years old) and don't provide health care facilities. But as these projects age, so do their residents, creating a demand for health care and other support services.

Congregate living

This is an updated version of the boarding house. Residents have their own apartments, complete with at least one bedroom and a kitchen. But one or more meals a day are served in a common dining room. This relieves older people from daily cooking chores and offers residents a chance for social interaction. Weekly maid service, transportation and organized activities usually are included in the rent, but most congregate projects don't provide health care services. Congregate housing allows ambulatory persons to live independently of their families. Residents usually are between 75 and 85 years old.

Life care communities

Usually campus-type projects, life care communities provide for nearly every contingency in an older person's life. Housing usually ranges from independent, detached cottages to skilled nursing facilities, with several levels of assisted living in between. Most of these projects require residents to pay a substantial entry fee as well as monthly rent in exchange for housing and care for the rest of their lives. But some life care developers now are abandoning entry fees in favor of a pay-as-you-go approach to health and support services. Life care residents usually are 85 years or older.

MARKET BREAKDOWN

The elderly market is not monolithic. Instead, it has three major segments, each with specific characteristics—defined by age and general fitness—and needs in shelter. Here's how most experts on elderly housing break down the market:

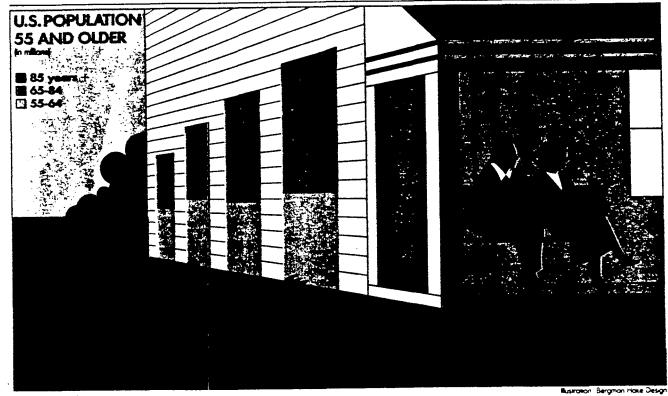
■ The go-go's. These are the "young" retirees, 65 to 74 years old. They are active, independent and want to enjoy

their newly acquired leisure.

■ The slow-go's. People between 75 and 85 years old who are starting to slow down but aren't ready for the rocking chair yet. They may, for example, enjoy a putting green instead of a full-fledged golf course. They may want a little help with meals and housekeeping. This is the prime market for congregate housing.

■ The no-go's. Yes, there are exceptions, but after 85 most folks have slowed down. They need help beyond meals and housekeeping. Services from personal care with dressing, bathing and other daily functions to skilled

nursing care often are required.



Mention retirement housing and most people think of the Sunbelt. Contrary to popular belief, however, most elderly don't yearn for a condo on the Gulf or a cottage in the desert. They almost always stick close to home, where family, friends and a lifetime of associations are. Only 4 percent of the elderly population moved to a different state in 1979.

In fact, of the seven states that account for half the country's elderly population, four-New York, Illinois, Ohio and Pennsylvania—are in the North. The others are Florida, California and Texas. "Builders thinking of entering this market should look for opportunities in their own backyards," says market consultant William Smolkin of the New Orleansbased firm, Hebert/Smolkin Associates.

The seniors market may be ubiquitous, but as Smolkin's analysis of the U.S. Census data shows (see charts on page 74), it's not necessarily deep. This is a pretty stationary population. While 23 percent of the general population changed address in 1980, only 9 percent of households 65 to 74 years old moved and 5 percent of those between 70 and 84 moved. Eliminate those whose incomes fall below \$18,500 and that's an annual market of less than 170,000 elderly buyers and renters spread across the entire country.

The market doesn't tie up into one neat bundle, either. It's comprised of at least three segments, which break down as follows:

■ ages 65 to 74, the young retirees;

■ ages 75 to 85, still independent but slowing down; and

■ ages 85-plus, the frail old.

Each segment has distinct housing needs. "Market research is critical in housing for the elderly because as the market gets older its housing needs become less and less like housing for the general population," says John Hebert of Hebert/ Smolkin. Building for this market often means offering more than shelter; projects can resemble the hotel business or the health-care business more than the housing business.

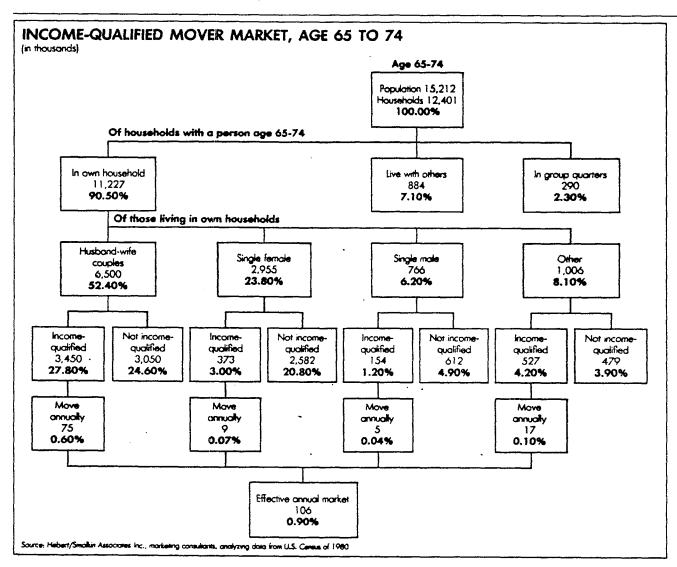
Housing for retirees falls into three categories, with plenty of variations within each type. They are:

- age-segregated communities for active retirees;
- congregate housing; and
- life care communities.

Age-segregated communities are the most familiar territory for many home builders. These projects limit buyers to people older than 45 or 50, though in fact the actual age of buyers usually is over 60. The lower entry age gives the project a youthful image that is in sync with the way active retirees see themselves.

Active is the operating word here. Golf, tennis, jogging, cycling and swimming are some of the many activities that the newly retired throw themselves into, and many communities offer lavish facilities that cater to these enthusiasms.

Sun City near Phoenix is perhaps the most well-known and certainly the oldest and largest community for active

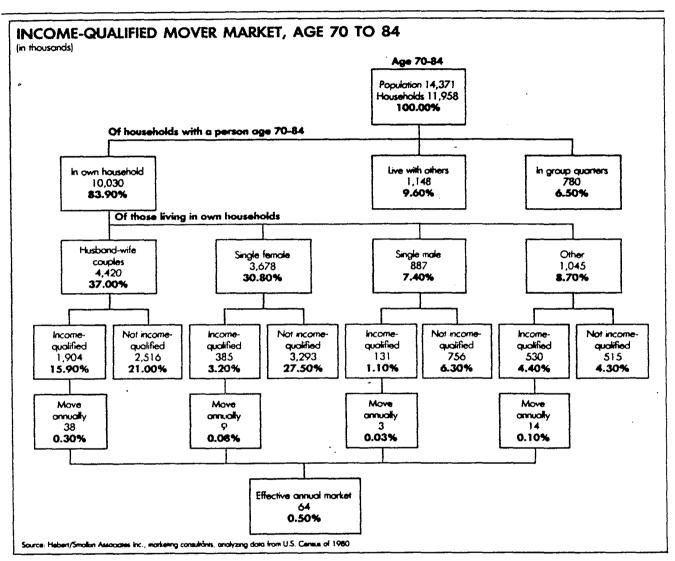


physical support and a built-in social life. Usually rental projects, such facilities offer a small but complete apartment and one or more meals a day served in a common dining room. Usually maid service, transportation and organized social activities are included in the rent.

Smolkin believes congregate housing is a good opportunity for builders as long as services stop short of health care. As it is, the daily management of a facility that offers meals, housekeeping, transportation and social programs will be enough to discourage most builders from entering the field.

But home builders have some skills that give them an edge over the not-for-profit developers who have traditionally dominated this market. Builders can deliver the housing itself more efficiently and, therefore, more inexpensively. M. Stroud Curran, manager of Laventhol and Horwath Health Care Division, Philadelphia, believes that if builders can deliver lower-cost congregate housing, the market will expand dramatically. "Until recently, hard costs for these projects were \$60 or \$70 a square foot, but now we're seeing [building] companies that can put them up for \$30 a square foot or less," Curran says.

Pacific Scene Inc., San Diego, is a good example of a home builder that is entering the retiree market. This year the company will open 14 projects in California, Arizona, Texas and New Mexico. Pacific Scene believes its residential expertise will enable it to deliver better-designed, higher-quality housing than many of the nonprofit sponsored and HUD-subsidized projects already on the market. And it will



be able to deliver that housing efficiently and on budget, so that it will be within the reach of moderate-income elderly.

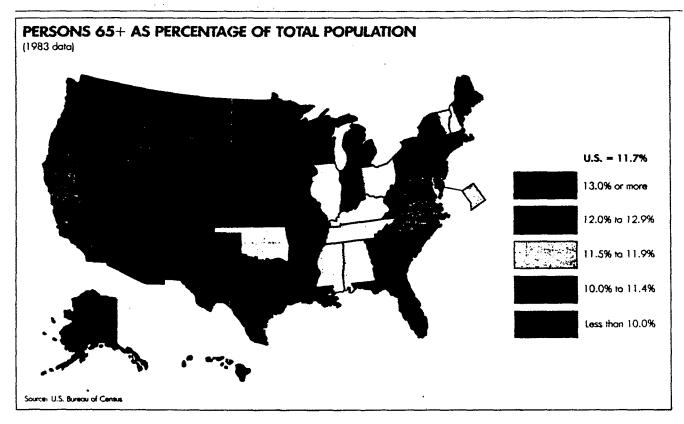
"Sheer demographics" convinced Pacific Scene to expand into the retirement market. "We saw a growing market that was not being adequately addressed," says Phil Rush, vice president. But Alan Scott, vice president of development, Wallick Company, Columbus, Ohio, views the numbers with skepticism born of 15 years in the elderly housing market. "Never overestimate the market," he cautions. Location, as usual, is the cornerstone of success.

The best places to build congregate housing are in areas that have significant numbers of elderly residents living in their own homes. Leon Ruderman, partner in T & R Development, a Los Angeles-based builder of congregate facilities,

offers this rule of thumb: "Count the number of seniors within a 20-minute drive of a particular site; 3 percent of that number will be your market but build for 1.5 percent to be safe."

The site itself should be within walking distance of shopping and in a good residential neighborhood. Ideal locations, though, can have one big drawback. "Adjacent property owners usually aren't thrilled to have this type of project next-door," says Judith Hamburger, project manager at CEH Partnership, Washington, D.C. Younger people especially object to the scale of these projects and the image an "old folks home" brings to the neighborhood, Hamburger notes.

Pacific Scene, for its part, has encountered little or no resistance to its congregate projects. The key to neighbor-



hood acceptance may be building height. The California developer's projects are only three or four stories high, while CEH must build more densely in order to pencil out.

Congregate housing can be a tough sell to the buyer as well. It's the last move a person is likely to make and is fraught with emotion. "You not only have to sell the concept to the buyer, you have to sell it to his or her trust officer, accountant and kids," says Maria Dwight, president of Gerontological Services Inc., a marketing research firm in Santa Monica, Calif. It can take six to 10 visits to a project before a person decides to move in. Sales people must be especially patient. And, because congregate housing is a new concept, education plays a big part in marketing. Ruderman has a high-powered video presentation he shows to prospective buyers, groups of retirees and civic organizations. Hamburger believes that, at the very least, a builder must have a model unit.

The biggest hurdle for would-be developers of congregate housing, however, may be the day-to-day operation. "Be prepared to be both a hotel operator and a social service agency," says Alan Scott. Food service, housekeeping, janitorial services, transportation services and social activities take congregate housing beyond the scope of normal multifamily rental management. And the management can make or break a project. "When we see a lot of people moving out,

we know we have a bad manager," says Ruderman.

He looks for hands-on people to manage T & R's properties. "We want someone who doesn't balk at pitching in when, say, the dishwasher doesn't show up," he says. The manager has to be sympathetic, too, often acting as a counselor and friend to the residents, yet all the while keeping an eye on the bottom line. Many in the field shy away from nursing home administrators who tend to treat residents like patients, creating a deadly institutional atmosphere.

Lease up time for congregate housing can take up to two years for a 120-unit facility. An absorption rate of about four units a month seems to be the norm. But the developer has to deliver services from day one. "You build up a significant operating deficit for the first couple of years," Wallick Company's Scott says. That can turn off lenders, especially because very few of them have financed congregate housing.

Rents for congregate apartments naturally depend on location and on the extent of services offered. Pacific Scene estimates that rents at its 14 projects will range from \$950 to \$1,400 monthly for a one-bedroom unit to \$1,250 to \$1,800 for two-bedroom units. Included in that will be two meals a day, weekly maid service, social activities, scheduled transportation and all utilities but the phone.

Congregate housing is undoubtedly a complex business, but life care developments—projects that provide housing,

meals, services and medical care—are even more complex. "Life care is really four businesses in one: housing, social services, nursing home and insurance. The insurance is the

most complex," says M. Stroud Curran.

In at least 10 states life care communities are regulated by state government. That's because these communities require buyers to put up large sums of money, called an endowment, in return for the guarantee that they will be taken care of for the rest of their lives. States can require financial disclosure, cash reserves and escrow accounts from life care

developers.

There have been enough bankruptcy stories in this field, too, to discourage all but the most intrepid builder. One such story is Fiddler's Wood near Philadelphia, a \$33-million project in the wrong location. There weren't enough retired people living in its vicinity, so few units were sold. The project never opened and subsequently was sold for \$11 million, Curran reports. In bankruptcy cases, courts have favored the tenants, holding developers to their obligations despite financial straits. "So far no old people have suffered in a bankruptcy case, and that scares lenders," Curran adds.

Life care is obviously not a business for every home builder. But it's become a logical progression for Dunn Wright, an Englewood, Colo., developer of congregate apartments. "Many of our tenants no longer could care for themselves," says partner William Wright. That led the builder to add catered living (daily assistance with dressing, house-keeping and meals) and nursing home care to two of its facilities. But the builder had to hire an experienced health care management company before its lender would give the go-ahead.

The field is attracting some of the country's biggest operators, too. Oxford Development Company, a Bethesda, Md.-based developer of rental housing, sees life care as a

logical extension of its businesses.

Oxford plans to have 2,000 units on line this year. The first project will open in Orlando, Fla. It will offer a range of for-rent housing, from patio homes for those who want completely independent living to congregate apartments with catered living services. There will be a nurse on duty 24 hours a day and Oxford will build a nursing home as soon as the state issues a certificate of need.

Residents won't pay an endowment but rents at the Orlando project will start at \$1,000 a month for a one-bedroom unit, with one meal a day, weekly maid service, laundry and medical alert system included. Residents will be able to buy more services (for example, two meals a day or extra housekeeping) if they wish. Medical services, personal care services and nursing home care will be on a pay-as-you-go basis.

The developer also is planning more moderately priced communities in which more services will be optional. Oxford plans to apply the expertise it's developed in building and managing 25,000 apartments to providing and managing the shelter aspects of the communities. But it will hire third-party managers for areas such as food service in which it has as yet no expertise.

THE 65+ POPULATION BY STATE

(1983 data)

State	Number (in thousands)	Percent of all ages
Alabama		11.9
Alaska	14	3.0
Alaska Arizona	356	12.0
Arkansas	329	14.1
California	2.615	10.4
Colorado	270	8.6
Connecticut	398	12.7
Delaware	65	10.8
District of Columbia	74	11.8
Florida		17.5
Georgia		9.8
Hawaii		8.7
Idaho		10.6
Illinois		11.6
Indiana		11.4
lowa		13.9
Karisas		13.9
Kentucky		11.6
Kentucky Louisiana		
		9.6
Maine		13.0
Maryland		10.1
Massachusetts		13.2
Michigan		10.8
Minnesota		12.3
Mississippi		11.7
Missouri		13.6
Montana	93	11.4
Nebraska		13.3
Nevada		9.1
New Hampshire	111	11.6
New Jersey		12.3
New Mexico		9.3
New York		12.6
North Carolina	667	11.0
North Dakota	85	12.5
Ohio	1,250	11.6
Oklahoma		11.9
Oregon	333	12.5
Pennsylvania		13.8
Rhode Island	135	14.1
South Carolina		9.8
South Dakota		13.6
Tennessee		11.8
Texas		
		9.4 7.6
Utah		7.6
Vermont	02	11.7
Virginia		10.0
Washington	47 5	11.0
West Virginia		12.8
Wisconsin		12.6
Wyoming	40	7.9
U.S., total	27,383	11.4

Source: U.S. Bureau of Census

FIVE-YEAR

PENELOPE LEMOV, BUSINESS EDITOR

LOCAL FORECAST

Most home builders follow national housing starts, but those aren't the figures that help them plan their business year. When national starts are booming, their local markets may be busts. On the other hand, during downturns, their markets may fly high. For example, while national starts are forecast to average a modest 1.5 million annually in the five years ahead, Charleston, S.C., is forecast to have 59 percent more starts on average in the next five years than it did in the previous five-year period. But starts in St. Louis are forecast

to drop 15 percent during the next five years.

Because no one market controls the industry or its future, this five-year forecast, prepared by the NAHB economics division in conjunction with the association's longrange planning efforts, keys in on 94 major local markets. The forecast gives a projected average of annual starts over the five-year period of 1985-89, and compares that with three previous five-year periods (1970-84). It compares what has happened with what NAHB economists believe will happen in the next five years in such big markets as New York City (building 7.1 percent less units in 1985-89 than in 1980-84), Dallas (building 29 percent less), Detroit (steady at 1.9 percent more than in 1980-84) and Phoenix (also steady at 1.7 percent growth) as well as in such smaller markets as New Haven, Conn. (building 34.9 percent more), Gainesville, Fla. (building 11.7 percent less), Akron (steady at 0.4 percent decline) and Bakersfield, Calif. (booming ahead at 50.2 percent more starts).

In making their predictions for percentage of change in a particular market, NAHB's economists relied on both the hard facts of permits, population change and household formation and on other information gleaned through discussions with builders and marketing experts in particular

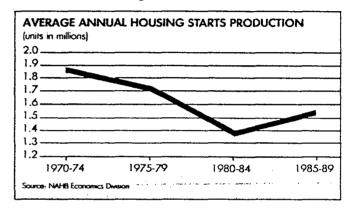
markets.

Some of the trends that emerge from a study of the local five-year forecast are:

- Regionally, the Northeast will be strongest with 29 percent more starts forecast in the next five years than in the previous five years, but the big local market winners will continue to come from the Sunbelt and the West.
- Several cities that had seen boom times—Denver, Houston, San Antonio, Miami—will not sustain their high-flying paces. However, several second-tier Sunbelt cities—cities that had been ignored in the first flood of attention to the Sunbelt—will take up the slack. This would include cities such as Memphis, Charleston, S.C., Daytona Beach, Fla., El Paso, Tex., Albuquerque and Tallahassee, Fla. Among the major markets, the highest flyers will be San Diego (up 63 percent), Anaheim, Calif. (up 25.3 percent), Fort Lauderdale, Fla. (up 30.8 percent), Philadelphia (up 22.7 percent) and Atlanta (up 23.6 percent).
- Most of the big losers will be concentrated, as they were in the first half of the 80s, in the Midwest "rust belt." As a region, Midwest will be down 1.8 percent, the only region expected to decline in the next five years. Unemployment problems continue to drain the vitality of many cities like Flint, Mich. (down 38.8 percent) and Toldeo (down 30.9

For those who keep a wary eye on national starts, NAHB's economic forecasters have modified good news: For the five-year period 1984-88 (the most current half-decade available) housing starts should average 1.5 million a year as compared with 1.4 in the previous five-year period (which

included the recession years from 1980 to 1982.) As the forecasters see it, 1985 should clock in with 1.5 million but a recession in 1986 and 1987 will mean 1.2 and 1.3 million starts, respectively. The light at the end of this tunnel is 1988 bursting with 1.8 million starts.



In compiling predictions for the national five-year forecast, NAHB's economists projected a generally more robust and inflation-free economy. They based their forecast on the following assumptions:

- GNP will average 2.4 percent annual growth, up from 1.1 percent during the previous five-year period;
- Real per capita disposal income will increase an average 2.6 percent annually, a significant improvement over declines in the previous five years;
- Inflation will stay under control and the Consumer Price Index (CPI), which averaged 8.5 percent annual increases during the previous five-year period will average 5.1 percent between now and 1988;
- Unemployment will be close to what it has been, averaging about 8.1 percent; and
- Interest rates will continue to remain high by historical standards, but they will be lower than they were during the previous period. Long-term rates (represented by bond yields) should be about the same as the previous period—about 12.2 to 12.3 percent,—but short-term rates (represented by the prime rate and Treasury bills) are expected to average 11.7 percent and 9.4 percent, respectively. In the previous period they had averaged 14.5 and 11 percent, respectively.

Neither the local nor the national forecast assumed a flat tax plan or elimination of tax-exempt bonds as a means of financing multifamily housing. Should either or both of these events take place, starts—in particular, multifamily starts—would be down 100,000 to 200,000 units.

On the more positive side national starts break down accordingly: Single-family will go from an average of 896,000 in 1979-83 to 961,000 in 1984-88, a 7.3 percent increase. Multifamily, without any tax problems, will go from averaging 481,000 starts annually to 549,000, a 14.1 percent increase. Overall, multifamily will increase its share of starts from 35 percent to 36.2 percent in the next five years.

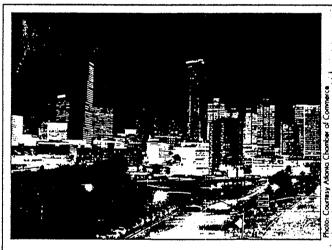
The following table shows the forecast for 94 markets arranged alphabetically by region. The accompanying stories highlight one market that's expected to boom, another that's likely to be a bust, a third that will hold steady and a fourth that looks like a sleeper.

National housing starts are a benchmark for the economy in general and the industry in particular. But housing is a local business. This five-year forecast takes a look at which markets are destined to boom, which will slip and how the second half of the 80s shapes up on local levels.

METI	RO ESTI	MATE	2		
EADE	CASTS,	1070-1		UAL	
rune	MADID,	I)/UTL	フロフ, AVER	AGES	
					Percent of
Metro area	1970-74	1975-79	1980-84	1985-89	change
NORTHEAST					
Boston Total	13,381	9,057	7,285	8,000	
Single-family Multifamily	3,407 9,974	4,543 4,514	3,947 3,338	5,000 3,000	
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Total	6,482 3,630	3,438 2,594	1,407 1,169	1,300	- CX
Single-family Multifamily	2,852	.844	238	200	
Harrisburg, Pa.			, , , , ,		
Total Single-family	2,399	2,169	1,299	1,500	
Multifornily	1,255	795	्र विक्रि. 1311 विक्रम	500	
Hartford, Conn. Total	4,600	3,284	3,179	4,000	
Single-family	1,979	2,382	2,346	2,800	4333
Multifamily	2,621	902	833	1,200	
Nassau-Suffolk, N.: Total Single-family Multifamily			5,357 4,107 1,250	5,500 3,700 1,800	
Newark, N.J. Total	4,899	5,358	3,952	4,200	
Single-family	2,284	2,936	2,747	2,700	
Multifamily	2,615	2,422	1,205	1,500	
New Brunswick, N.		2 002	2 444	4.000	
Total Single-family	2,503 1,358	2,902 1,535	3,664 2,001	4,000 2,000	10 2%
Multifamily	1,145	1,367	1,663	2,000	## 5 P.
New Haven, Conn.	0.204	1.074	1 402	2.000	
Total Single-family	2,396 824	1,974 1,170	1,483 875	2,000 1,200	43498
Multifamily	1,572	804	608	800	
N.JSomerset Co.					
Total Single-family	1,388 61 <i>7</i>	1,422 749	1,148 473	1,700 800	48.1%
Multifamily	771	673	675	900	
New York City					
Total Single family	35,144	10,810 3,904	12,914 3 300	12,000 3,000	73%
Single-family Multifamily	10,752 24,392	6,906	3,390 9,524	3,000 9,000	
		······································			A
Total	27,345	17,981	12,223	15,000	277 706
Single-family Multifamily	12,828 14,517	14,244 3,737	8,766 3,457	11,000 4,000	***************************************
Pittsburgh					
Total	9,021	8,187	4,322	4,000	-7.5%
Single-family	5,024 3,997	5,437 2,750	2,535 1,787	2,000	4 C. J. C.
Multifamily	3,77/	2,750	1,787	2,000	عموريت

Metro area	1970-74	1975-79	1980-84	1985-89	Percent of change
Rhode Island	***		•		die.
Total	5,928	4,681	3,241	4,000	
Single-family	2,987	2,983	1,940	2,500	23.4%
Multifamily	2,941	1,698	1,301	1,500	ESC. TAX
Rochester, N.Y.					STREET, THE STREET, ST
Total	6,126	2,767	2,174	2,000	2 00K
Single-family	3,079	2,474	1,694	1,200	- O.O.A.
Multifamily	3,047	293	480	800	
SOUTH		•			
Atlanta					
Total	27,500	14,183	32,367	40,000	
Single-family	11,200	11,441	21,389	25,000	23.6%
Multifornity	16,300	2,742	10,978	15,000	
Austin			· · · · · · · · · · · · · · · · · · ·		
Total	7,178	7,203	14,343	15,000	
Single-family	2,747	5,171	6,393	8,000	
Multifamily	4,431	2,032	7,950	7,000	
Baltimore					•
Total	19,900	13,286	10,654	12,000	25 7 15
Single-family	9,150	9,978	8,610	9,000	
Multifamily	10,750	3,308	2,044	3,000	
Birmingham, Ala.					
Total	6,9 99	4,956	2,586	2,500	
Single-family	2,833	3,249	1,502	1,500	
Multifamily	4,166	1,707	1,084	1,000	
Charleston, S.C.			and the state of t		
Tot al	3,047	3,266	5,047	8,000	
Single-family	2,005	2,037	2,888	5,000	75854
Multifamily	1,042	1,229	2,159	3,000	282.65
Charlotte-Mecklenburg Co.	., N.C.				_
Total	5,601	3,209	5,101	7,000	443
Single-family	2,174	2,279	2,570	4,000	10000000
Multifornity	3,427	930	2,531	3,000	
Dallas-Fort Worth					E5145
Tot al	31,657	35,020	63,400	45,000	
Single-family	16,158	20.684	31,200	30,000	
Multifornity	15,499	14,336	32,200	15,000	
Daytona Beach, Fla.	2 3	,		· · · · · · · · · · · · · · · · · · ·	
Total	4,043	3,630	5,026	6,000	
Single-family	1,832	2,909	3,376	4,000	
Multifamily	2,211	- 721 1074	1,650	2,000	
Delaware		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
Total	6,320	3,060	2,994	3,000	
Single-family	3,440	2,500	2,164	2,000	
Multifornity	2,880	560	830	1,000	10.30
El Paso, Tex.					
Total	5,655	2,939	4,580	7,000	
Single-family	2,136	2,138	2,255	3,000	
Multifamily	3,519	801	2,325	4,000	交叉的
- · · · · - · · · · · · ·	-,-,-		-,	-7,000	

Metro area	1970-74	1975-79	Percent (1980-84 1985-89 change
Fort Lauderdale, Fla. Total Single-family Multifamily	36,521 9,495 27,026	13,687 6,633 7,054	11,471 15,000 3,959 5,000 7,512 10,000
Gainesville, Fla. Total Single-family Multifamily	2,034 859 1,175	1,984 1,008 976	2,265 1,041 1,224 2,000 1,000
Greenville, S.C. Total Single-family Multifamily	3,360 1,647 1,713	1,642 1,350 292	1,916 2,000 1,056 1,200 860 800



ATLANTA: PICKING UP THE PACE

Atlanta's got what everyone wants, and it's not just peach trees, pecans and antebellum reminders of a heady bygone era. What makes Atlanta nirvana for home builders is simpler: Atlanta's economic recovery came faster than anyone expected, therefore, there's more demand for housing than supply.

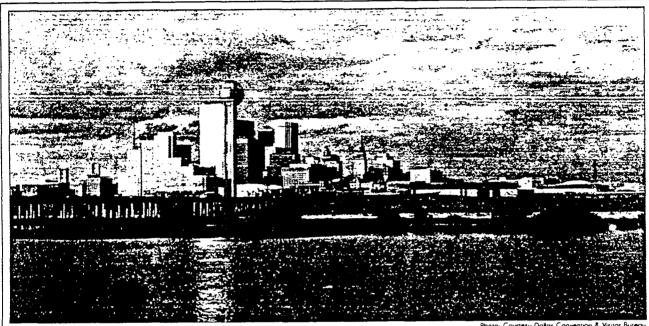
According to Alfred Gobar, a Brea, Calif., housing market consultant, demand is running at 45,000 units a year while housing starts have been in the 35,000unit-a-year range.

But builders are working hard to pick up the pace. In 1983 Atlanta ranked fourth in the country with 45,190 starts; last year Atlanta ranked third (behind Dallas and Phoenix) with 51,305 starts. In 1985 NAHB economists predict Atlanta will move into second place with 44,075 starts—a decline of 14 percent but still a pace that will put Atlanta ahead of every market except Dallas.

What's creating all the excitement? David Chatham, president of Atlanta's HBA and of Chatham Properties, a custom building company, ticks off Atlanta's strong points: The climate is appealing with mild weather and four distinct seasons; the airport is one of the busiest, largest and most up-to-date in the world. These two factors are behind Atlanta's appeal as a relocation market for corporations, many of which are opening regional and national headquarters in the city. In addition. Atlanta has no topographical barriers to expansion—no physical restraints like oceans or mountains. The infrastructure is in excellent shape—the highway system was recently re-built with federal funds-and there is no lack of water, natural gas or electricity.

Atlanta's population growth reflects these factors. growing at a rate of 2.5 percent a year. By 1989 metropolitan Atlanta will add another 310,000 residents. As it stands today, Atlanta with over 2 million people in the SMSA is the 10th largest metro area in the country. Over 60 percent of the net increase in population has been due to in-migration, and a large percentage of the newcomers are housing-hungry yuppies recruited by those corporations opening headquarters in Atlanta. In addition to yuppies, young empty-nesters also are a large market.

Although the Atlanta market has traditionally been dominated by single-family building, multifamily has been taking an increasing percentage of starts in recent years. According to NAHB's forecast figures. the five-year average starts for multifamily went from 2,742 in 1975-79 to 10,978 in 1980-84, a 300 percent increase. Single-family, meanwhile, went from 11,441 in 1975-79 to 21,389 in 1980-84, an 87 percent increase. Most observers believe multifamily's peak is past but that healthy growth will continue and that the single-family move-up market has plenty of room to grow.



DALLAS: TOO MUCH OF A GOOD THING

What's wrong with this picture? Here is Dallas, grown rich and aggressive on oil, growing sleek and smart on... high tech and getting friendly on a burgeoning service. industry. Its diversified economy has so encouraged population growth that the number of people there is expected to double to 6.8 million by the year 2000. Inmigration alone should account for nearly 107,000. new residents this year. The unemployment rate is an almost negligible 31/2 percent, and new industry continues to be attracted to the area: 80,000 to 85,000 new jobs were created last year and another 65,000 to 75,000 are expected this year.

It is a profile like this that has long kept major building companies like Fox and Jacobs, Pulte, U.S. Home, Ryan and Ryland and, in the multifamily sector, Lincoln Properties and A.G. Spanos, active in Dallas. After all, population growth and a healthy local econ-. omy are the underpinnings of a strong home building environment, and Dallas has them.

And yet, observers agree that Dallas, like her beloved Cowboys football team, will be thrown for a loss. Average annual housing starts, NAHB's economists predict, will be off an average of 29 percent for the next five years. Where Dallas averaged 63,400 annual starts in 1980-84, it should produce only 45,000 annual starts in 1985-89.

The main problem is that Dallas, and its sister city, Forth Worth, have had too much of a good thing. The Dallas-Forth Worth metropolitan area topped NAHB's metro forecast charts with a record-setting

112.500 starts in 1983 (second-place Houston had a mere 57,800) and topped the start list again last year with 82,900 starts—nearly 23,000 better than second-place Phoenix.

"You don't anticipate that that kind of record can be duplicated very often," is the straightforward explanation of Simon MacHugh, executive vice president of the Dallas HBA. "You don't want to set a record every year. It's not good for your market to grow that

While all Dallas housing sectors will feel the pinch, single-family will feel it least, absorbing only a 4 percent falloff. Mid-density housing should continue to sell well while condos-both new and convertedwon't. "New residents would rather have a small home and commute than buy a condominium," reports the Fuller Real Estate Market Report. To that MacHugh adds, "We've been a little ahead of ourselves in condos and more expensive single-family homes in certain parts of Dallas. There's inventory out there that needs to be absorbed which will have an impact initially on permits."

Multifamily will feel the brunt of the cutbacks. The number of available apartment units has increased by one-third in the past two years, due in good measure to outside investors toting syndication dollars that have overheated the multifamily market.

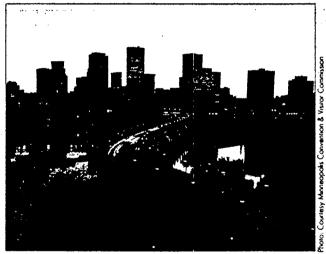
Dallas housing starts may go down, but don't count Dallas out. As William Gibson, chief economist with the RepublicBank Corp., Dallas, put it, "We're in a transition period. It's a transition from a very good period to a good period." Housing starts, as usual, are the harbinger of that change.

Metro area	1970-74	1975-79	1980-84	1985-89	Percent o
Houston					60,0
Totai	33,936	50,623	49,292	40,000	7 7
Single-family	16,225	26,402	27,162	25,000	1944 X
Multifamily	19,711	- · · · · · · · · · · · · · · · · · · ·	22,130	15,000	
Jacksonville, Fla.					
Totai 💮 💮	7,542	5,070	7,459	8,000	
Single-family	2,043	4,184	4,233	4,000	4
Multiformity	5,499	886	3,226	4,000	
Lakeland-Winter Haven,	Fla.				
Total	2,540	2,969	3,174	4,000	A SE
Single-family	1,404	2,393	1,795	2,000	
Multifamily	1,136	576	1,379	2,000	1/2 - 2/
Little Rock-N. Little Rock,	Ark.				
Total	3,716	2,461	2,737	3,000	nation.
Single-family	1,695	1,854	1,025	2,000	
Multifamily	2,021	607	1,712	1,000	
Memphis	The state of the s		and the second of the second o		
Total	11,788*	3,088	4,302	6,000	
Single-family	4,909	2,610	3,151	4,000	33999
Multifamily	6,879	478	1,151	2,000	
Miami	······································	**************************************	***************************************		
Total	28,182	12,246	14,200	12,000	1000
Single-family	8,626	7,166	5,332	6,000	77.7
Multifamily	19,556	5,080	8,868	6,000	
Nashville-Davidson Co.	•				
Total	5,835	3,405	4,492	5,000	
Single-family	1,591	1,274	· · · · · · · · · · · · 946 · · · · · · ·	2,000	
Multifamily	4,244	2,131	3,546	3,000	
New Orleans					
Total	12,118	8,012	8,260	8,000	155
Single-family	5,734	<i>5</i> ,027	4,444	5,000	
Multifamily	6,384	2,985	3,816	3,000	
Norfolk-Portsmouth, Va.					
Total	8,569	6,257	7,503	6,000	第二条
Single-family	3,341	3,837	4,194	4,000	transper of the
Multifamily	5,228	2,420	3,309	2,000	
Orlando, Fla.					
Total	14,864*	5,868	15,009	12,000	
Single-family	6,153	5,095	9,400	8,000	
Multifamily	8,711	773	5,609	4,000	
Raleigh-Durham, N.C.					90 71 7 VI
Total	3,500	3,011	4,332	4,000	
Single-family	1,334	2,262	2,739	2,500	
Multifamily	2,166	749	1,593	1,000	
Richmond, Va.					<u> </u>
Total	7,063	6,026	5,561	6,000	
	3,247	4,539	4,384	4,200	47.5%
Single-family					

^{*} represents permits outhorized

Metro area	1970-74	1975-79	1980-84	1985-89	Percent of change
Roanoke, Va.			,		_
Total	2,536	2,033	1,567	1,800	
Single-family	1,275	1,529	1,225	1,300	77.3%
Multifamily	1,261	504	342	500	
San Antonio			· · · · · · · · · · · · · · · · · · ·		
Total	7,359	4,803	15,920	9,000	A TOTAL CO.
Single-family	2,936	2,255	7,309	4,500	
Multifamily	4,423	2,548	8,611	4,500	
Sarasota-Bradenton, Fla.					
Totai	6,349*	10,450	7,756	9,000	
Single-family	2,362	5,490	3,520	4,500	
Multifamily	3,987	4,960	4,236	4,500	
Tallahassee, Fla.	<u> </u>	·		No. of the second	
Total	3,549*	1,712*	2,400 .	3,000	
Single-family	1,358	1,186	1,544	1,800	100
Multifamily	2,191	526	856	1,200	
Tampa-St. Petersburg	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
Total	29,824	13,134	21,361	20,000	44.102.7
Single-family	9,221	8,932	9,833	12.000	
Multifamily	20,603	4,202	11,528	8,000	
Tuisa				······································	30:302:30
Total	3,528	3,469	5,002	3,000	
Single-family	2,157	3,088	3,090	2,000	
 Multifamily 	1,371	381	1,912	1,000	33
Washington, D.C. Total	33,083	18,733	22,799	26,000	
Single-family Multifamily	14,214	13,949 4,784	18,8133,986	21,000 5,000	2
W. Paim Beach-Boca Rate					
Total	on, rid. 19,286	15,162	18,102	20,000	
Single-family	3,714	7,300	8,746	12,000	
Multifamily,	15,572	7,862	9,356	8,000	25.7.2
MIDWEST					
					•
Akron			was a little of the state of th		7
Total	4,450	3,085	2,511	2,500	
Single-family	2,270	1,950	1,321	1,500	11.5
Multifamily	2,180° d	·	1,190	1,000	
Canton, Ohio	A Company				
Total	2,354	2,438	1,886	2,000	
Single-family Multifamily	1,514 1,040	1,540 898	985 901	1,200 800	1000
		370	701		
Chicago Total	45,060	36,976	16,305	18,000	
Single-family	20,100	22,422	7,781	11,000	
Multifamily	24,960	14,554	8,524	7,000	
Cincinnati					
Total	9,888	9,005	4,914	5,000	
Single-family	4,408	5,502	2,898	3,500	4
Multifamily	5,480	3,503	2,016	1,500	1. 1. S. C.

Metro area	1970-74	1975-79	1980-84	1985-89	Percent of change
Cleveland Total Single-family Multifamily	9,794 4,738 5,056	7,696 5,232 2,464	2,985 1,809 1,176	3,500 2,500 1,000	
Columbus, Ohio Total Single-family Multifamily	9,794 4,738 5,056	6,122 3,821 2,301	4,792 2,753 2,039	5,500 3,500 2,000	
Dayton Total Single-family Multifamily	5,420 2,959 2,4 61	3,399 2,320 1,079	1,857 1,345 512	2,000 1,500 500	
Detroit Total Single-family Multifamily	29,738 15,650 14,088	20,439 14,507 5,932	7,853 4,557 3,296	8,000 5,000 3,000	



MINNEAPOLIS: STEADY AS SHE GOES

When talk turns to high-flying markets, Minneapolis and its twin city, St. Paul, best known for their bitter winters, seldom are mentioned. And yet, while housing starts in the Minneapolis-St. Paul SMSA don't reach lofty peaks, they never tumble into lowly valleys. Minneapolis is a steady, dependable market that does well in bad times and good. Proof: It has 15,000 starts a year for the past 15 years with a five-year average high of 16,849 in 1970-74 and a low of 14,260 in the 1980-84 period.

Unlike Atlanta, Dallas or Albuquerque, Minneapolis hasn't experienced dramatic population shifts, but there is some movement. The Twin Cities grew slightly—0.7 percent—between 1970 and 1980; fore- casters believe population growth will step up to 4 percent during the 1980s. When population figures are recounted and tallied in 1990. Minneapolis should rank 12th in the nation—and that's without the appeal of a mild climate or a famous downtown center.

Household unit formation has grown faster than the population, which means households are becoming smaller and the need for housing greater. Strong employment also helps housing demand. The area's unemployment rate is only 4.4 percent, down by onethird since 1983. The greatest growth in jobs has come from a burgeoning service industry and from finance/insurance/real estate companies, reports Lynn Donohue of the Minneapolis office of Laventhol & Horwath, a national real estate consulting firm.

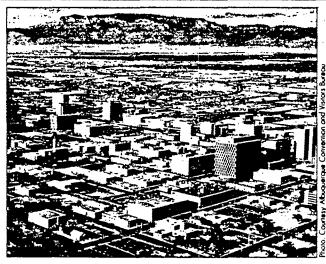
But the key to Minneapolis's overall success is its economic diversity. The area continues to attract and hold high-tech companies, medical centers and Fortune 500 companies such as Honeywell, Pillsbury, 3M, IBM and Control Data. Their presence means that recessions don't hit as hard or cut as deep as they do in cities dependent on one or two industries.

To serve the diverse and expanding economic base, office construction in downtown Minneapolis doubled in the last five years, creating for the first time a viable downtown housing market. High-rise living still is not popular in Minneapolis, which has traditionally been a single-family, suburban housing market. And not all the new downtown projects have succeeded. Those that have "are in good locations—near parks and the river-and have high amenities. The cheaper projects that aren't as well located are still looking for tenants," Donohue reports.

In the single-family market, starts fell 26 percent during the five-year period that included the 1980-82 recession, but NAHB's economists predict an 8.6 percent upswing in the five years to come.

Metro area	1970-74	1975-79	1980-84	1985-89	Percent of change
Evansville, Ind.					national states
Total	4,452	2,073	1,281	1,200	
Single-family	3,816	1,140	563	600	
Multifamily	636	933	718	600	
Flint, Mich.					
Total	3,925	2,377	817	500	- FR 194
Single-family	2,473	1,697	594	300	
Multifamily	1,452	680	223	200	23
Indianapolis					
Total	7,234	3,676	4,220	3,000	
Single-family	1,683	1,776	2,113	2,000	
Multifamily	5,551	1,900	2,107	1,000	
Kalamazoo, Mich. Total	1,444	4,531	1,320	1,200	30.00
Single-family	675	2,480	57}	600	
Multifamily	769	2,051	749	600	
Kansas City, Mo.	•	 			
Total	11,694	8,940	6,736	6,000	12 mm 4.3
Single-family	5,281	6,980	4,002	6,000	
Multifamily	6,413	1,960	2,734	2,000	
Madison, Wis. Total Single-family Multifamily	3,654 1,322 2,332	3,088 2,011 1,077	1,650 845 805	1,500 800 700	
Milwaukee Total Single-family Multifamily	8,962 4,257 4,705	7,965 4, 238 3,727	3,026 1,377 1,649	2,800 1,800 1,000	
Minneapolis-St. Paul		5			
Total	16,849	16,440	14,260	15,000	
Single-family	7,885	12,440	9,200	10,000	
Multifamily	8,964	4,000	5,060	5,000	
St. Louis				Park of N	2200
Total	14,364	12,340	9,422	8,000	
Single-family	7,840	9,584	5,204	5,000	10 m
Multifamily,	6,524	2,756	4,218	- 3,000	is in the
Springfield, III.	Service of the servic	and the second		grade set of the	
Total	1,171*	1,148*	330	400	
Single-family Multifamily	546 625	666 482	99 231	200 200	
Toledo	15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	***			
Total	5,019	4,260	2,170	1,500	6.07
Single-family	2,276	2,364	1,014	800	
Multifamily	2,743	1,896	1,156	700	
Wichita, Kans.					20.20
Totai	2,087	2,969	3,483	3,000	
	2,087 594	2,969 1,306	3,483 2,251 1,232	3,000 2,000 1,000	

Metro area	 1970-74	197	5-79	1980-84	1985-89	Percent of change
WEST Albuquerque Total Single-family Multifamily	5,429 2,454 2,975	2	. 030 798 232	3,052 1,628 1,424	7,000 3,000 4,000	
Anaheim, Calif. Total Single-family Multifamily	27,289 13,190 14,099	12	, 132 ,381 ,751	10,375 5,826 4,549	13,000 7,000 6,000	
Anchorage Total Single-family Multifamily	1,006° 452 554		364 109 255	5,689 2,759 2,930	5,000 3,000 2,000	



ALBUQUERQUE: NEW SUNBELT HOT SPOT

On a clear day—which is most every day in Albuquerque—residents of this young western city can see the majestic Sandia Mountains, mystical deserts, haunting pueblos and the steady flow of the Rio Grande River.

If they listen closely they can probably also hear the not-so-light tred of the armies of new arrivals from New York, Illinois and other points northeast and cold. Albuquerque, once a sleepy defense research center with a young but not very vibrant population, looks like it will be the next "hot" Sunbelt city. In-migration is swelling the metropolitan area's ranks from its present 470,000 to a predicted 630,000 in the year 2000, a 35 percent increase that catapults this edge-of-the-desert town into one of the five fastest growing cities in the country.

Mild winters, summers that aren't unbearably hot and nearby mountains are a magnet for retirees who don't want to pay the price or join the crowds at Phoenix and Tucson. Light industry also is moving in, attracted by an inexpensive, young and available labor force and an underground water supply that could support a population three times Albuquerque's size. What's not too attractive is Albuquerque's track record during economic downturns. "Things don't slow down during a recession," explains Mike Dontje, executive director of the Albuquerque HBA. "They stop."

A diversifying economy should smooth out those ups and downs and give Albuquerque the room to come into its own. "Everyone's been saying for years that we're the next San Antonio, that we're going to have explosive growth," Dontje says. Finally, it seems about to happen.

Multifamily builders already have anticipated that growth. "They saw the city's low vacancy rate (under 5 percent), heard about the population growth and, this year, went crazy," reports Dontje. When the dust cleared last year there were 5,300 multifamily starts, nearly four times as many as were built in 1983, with 3,000 to 4,000 units still in the pipeline. Dontje believes multifamily starts will continue to boom in the next two years, then the bottom will drop out.

The single-family market, which enjoyed 2,300 starts in 1984, appears to have more room to grow in a steady, long-term manner. The five-year forecast predicts 3,000 new starts a year, nearly double the number of average annual starts for 1980-84. The number is sustainable, Dontje claims, if interest rates stay down and another bridge across the Rio Grande (to the undeveloped western sector of the city) goes up.

The upper end (\$100,000 to \$125,000) of the single-family market is strong and builders putting up \$40,000 condos and \$75,000 detached houses also are doing well. Among the big builders active in the city are U.S. Home, Presley Companies and Wood Bros. More should follow. Dontje reports he is contacted weekly by builders interested in coming into the Albuquerque market.

Metro area	1970-74	1975-79	1980-84	1985-89	Percent of change
Bakersfield, Calif.					- A
Total	2,629*	4,360*	3,995	6,000	
Single-family	1,852	2,707	2,299	2,000	50.2%
Multifamily	1,074	1,653	1,696	4,000	
Boise	***************************************		······································		<u> </u>
Total	2,348	3,173	1,244	1,500	
Single-family	1,683	2,290	1,028	1,000	20.6%
Multifamily	665	883	216	500	
Colorado Springs			•		
Total	7,725	2,415	6,321	9,000	
Single-family	3,6 4 0	2,301	3,748	4,000	42.4%
Multifamily	4,085	114	2,573	5,000	
Denver-Boulder					1.000
Total	27,780	18,553	20,688	18,000	- A13709
Single-family	13,247	14,824	14,348.	10,000	
Multifamily	14,533	3,729	6,340	8,000	
Fresno, Calif.					
Total	2,496	3,115	2,360	4,000	
Single-family	1,057	1,395	1,073	2,000	69.5%
Multifamily	1,439	1,720	1,287	2,000	
Hawaii			•		100 march
Total	9,872	8,800	6,345	5,000	
Single-family	3,224	4,340	2,991	2,000	
Multifamily	6,648 🚟 -	4,460	3,354	3,000	***************************************
Las Vegas				_	Spiniers.
Total	7,446	9,739	8,929	8,000	Estras
Singl e-family	4,587	6,001	4, 793	5,000 •	
Multifamily	2,859	3,738	4,136	3,000	
Los Angeles-Long Beach			.41	,	
Total	41,668	32,623	23,731	25,000	
Single-family	9,171	13,292	7,660	8,000	
Multifamily	32,497	19,331	16,071	17,000	
Modesto, Calif.			•		
Total	2,926*	3,716*	2,123	2,000	
Single-family	1,513	2,604	1,103	, 1,000	The same of the sa
Multifamily	1,116	1,112	1,020	1,000	
Oxnard-Simi Valley, Calif.	, .				
Total	5,974	7,272	3,040	4,000	
Single-family	2,922	5,254	2.023	2,500	
Multifamily	3,052	2,018	1,017	1,500	
Phoenix					
Total	28,678	25,896	34,419	35,000	
Single-family Multifamily	1 <i>7</i> ,375 11,303	19,026 6,870	16,197 18,222	15,000 20,000	
Portland, Ore.			***************************************		
Total	14,121	15,282	7,150	5,000	200
Single-family	8,434	10,447	4,686	3,000	170
Multifamily	5,68 7	4,835	2,464	2,000	
· Troinicariay	0,007	7,000	4, 707	2,000	

Metro area	1970-74	1975-79	1980-84	1985-89	Percent or change
Riverside-San Berno	ordino, Calif.				
Total	15,706	25,154	17,831	20,000	
Single-family	8,443	19,823	13,295	14,000	
Multifamily	7,263	5,331	4,536	6,000	Trans Day o
Sacramento		tana araba arab		en e	
Total .	12,831*	10,854	7,978	7,000	
Single-family	6,162	9,203	<i>5,7</i> 00	5,000	
Multifamily	6,669	1,651	2,278	2,000	
Salem, Ore.			•		
Totai	2,749	3,924	1,146	600	A777
Single-family	1,746	2,680	917	500	1
Multifamily	1,003	1,244	229	100	
Salt Lake City-Ogde					in the second second
Total	8,555	11,875	6,456	6,000	7 193
Single-family	4,719	8,709	4,065	4,000	
Multifamily	3,836	3,165	2,391	2,000	
San Diego				د اور در اور اور اور اور اور اور اور اور اور او	
Total	25,971	25,299	15,339	25,000	
Single-family	11,692	13,096	<i>7</i> ,284	13,000	3300
Multifamily	14,279	12,203	8,055	12,000	
San Francisco-Oakle	and				*63553
Total	27,358	17,480	12,200	10,000	- TO 100
Single-family	11,929	12,010	7,280	6,000	
Multifamily	15,429	5,470	4,920	4,000	
San Jose					236
Totai	14,833*	10,569*	5,142	_ 5,000	
Single-family	7,637	7,320	2,927	3,000	10 mg 44 4
Multifamily	7,196	3,985	2,215	2,000	
Santa Barbara	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		······································	A
Total	2,540	1,944	1,754	2,000	
Single-family	897	1,220	1,061	1,200	14.0%
Multifamily	1,643	724	693	800	
Santa Rosa, Calif.					<u> </u>
Total	4,358*	3,821*	2,541	3,000	
Single-family	2,769	2,935	1,856	2,000	18:1%
Multifamily	1,589	886	685	1,000	
Seattle-Everett					
Totai	7,818	21,438	13,794	12,000	13 OOC
Single-family	5,249	11,738	6,696	5,500	Contraction of the second
Multifamily	2,569	9,700	7,098	6,500	
Stockton, Calif.				····	, 1 th
Total	3,044*	4,752*	2,518	3,000	
Single-family	1,520	2,817	1,471	1,500	19.1%
Multifamily	1,524	1,935	1,047	1,500	
lucson	5.27	7.000	0.440	10.000	
Total	8,176	7,822	8,643	10,000	
Single-family	5,001	5,026	3,036	5,000	15.7%
Multifamily	3,1 <i>7</i> 5	2 <i>,</i> 796	5,607	5,000	Care security

Source: NAHB Forecasting Service

BUILDER'S

1985 HOME BUYER SURVEY

Move-up buyers want bigger and better houses. But what, exactly, do they mean by bigger and better? That's what BUILDER's eighth annual home buyer survey determined.

LESLIE ENSOR STOCKMAN, DESIGN EDITOR with JUNE FLETCHER, FEATURES EDITOR, DEBORAH WOODCOCK, NEW PRODUCTS EDITOR

parks fly when a house presses a buyer's hot buttons. Hot buttons are the features and products that add perceived value to a house, that make it seem like an important step up for a home buyer. But knowing just which buttons really are hot isn't easy. And when housing climbs into the high-priced move-up categories, there are more and more buttons to press.

BUILDER's eighth annual home buyer survey zeroes in on move-up buyers, that is buyers of bigger, detached houses. A joint venture with George A. Fulton Research and Consulting, Fairfax, Va., the survey shows, among many other things, what size house buyers want, what they're willing to pay, why they want to move and which features turn them on.

The survey results are based on responses of 1.819 prospective new home buyers to a four-page questionnaire. The buyers were polled last fall at detached housing projects in seven major markets: the Virginia and Maryland suburbs of Washington, D.C.; St. Louis; New Jersey; Oklahoma; Dallas; Northern California and Southern California. To make sure all shades of move-up buyers were surveyed, the housing projects ranged in price from about \$100,000 to more than \$250,000.

Responses were analyzed by region and by the price prospective buyers said they would be willing to spend for a new house. In some cases the results are surprising, in other

River Run, Walnut Creek, Calif., is featured on page 102.

THE STEP UP

Anticipated Price range	Total Sample
Household income	\$54,500
Home value ²	
Current home	\$109,750
Planned purchase ³	\$131,400
Percent increase	20%
Square footage ⁴	
Current home	1,856
Planned purchase	2,212
Percent increase	19%
Equity vs. down payment ⁵	
Equity	\$44,800
Planned down payment	\$28,900
Percent equity for down payment	65%

BUTTONS

cases, however, they are not. For example:

■ Move-up buyers do want larger houses, typically about 20 percent bigger than the homes they live in.

Higher prices lead to higher expectations. As buyers go up the price scale, they expect to find more features and highquality finishes in a new house.

■ Energy efficiency does matter. It's one of the key things buyers look for in a new house.

■ Buyers want open living-dining rooms and kitchen-family rooms, but not too open. There should be some room separation. (Vaulted ceilings are more popular in the Sunbelt than in the East.)

Overwhelmingly popular are brick siding, fireplaces, ceramic tile, wood shake roofs, decks, microwaves, double lavs, two-story plans, dead bolt locks and wood flooring.

One of the most important and disconcerting findings is that prospective buyers gave the new houses they'd seen warm, but not hot, ratings. That means a lot of builders

aren't pressing enough hot buttons.
That's where the survey can

That's where the survey can help. It provides hard information about what choosy move-up buyers want. Prospects rated dozens of features and finishes on a scale of one to five, with one being least desirable and five being most desirable. The results, highlighted on the next 10 pages, are organized in tables that show what's hot and what's not in terms of exterior design and products and then in terms of

features and products in each room of the house. The information is further organized by price range of housing, and those features with the highest ratings—hot buttons—pop out in boldface type.

Following the survey results are profiles of four moveup projects filled with features that respondents rated high. The success of each of these projects proves that pushing the right hot buttons rings up sales.

LOCAL SPONSORS

Following are the local sponsors who conducted the surveys in each market: Building Industry Association of Northern California. Dublin, Calif.; Builders Association of Metro Tulsa, Tulsa; New Homes Division, Long & Foster Realtors, Fairfax, Va.; Berry-Fulton Research, Ballwin, Mo.; Home and Apartment Builders Association of Metropolitan Dallas, Dallas; Schlott-Fulton Research, Bernardsville, NJ.; Walker & Lee, Inc., Santa Ana, Calif.; Ryland Homes, Vienna, Va.

GET IT ALL

Copies of the complete results of BUILDER's 1985 home buyer survey are available. (Information is organized by the price range of housing that buyers indicated they were seeking.) To order a copy of the survey results, send a check for \$25 (payable to BUILDER) to BUILDER, 1985 Home Buyer Survey, 655 15th St., N.W., Suite 473. Washington, D.C. 20005.

Less than \$100,000	\$100,000 to \$125,000	\$125,000 to \$150,000	\$150,000 to \$175,000	\$175,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
\$42,000	\$46,300	\$54,000	\$60,000	\$62,700	\$69,800	\$83,000
\$75,150	\$84,000	\$104,500	\$124,000	\$136,800	\$160,300	\$192,200
\$89,000	\$110,300	\$129,400	\$146,500	\$167,100	\$214,400	\$256,600
18 %	31 %	24 %	18%	22%	34 %	34%
1,556	1,654	1,845	1,871	1,955	2,000	2,400
1,876	1,947	2,005	2,318	2,387	2,463	2,882
21 %	18%	9 %	24 %	22%	23 %	20%
\$30,100	\$32,100	\$39,300	\$48,400	\$60,100	\$66,500	\$116,700
<u>\$16,000</u>	\$22,200	\$25,800	\$31,600	\$41,800	\$45,900	<u>\$69,300</u>
53%	69%	66%	65%	70%	69%	59%

^{1,2,45-}median figures

^{3—}The planned purchase ance is based on the monthly payment prospects anticipate paying, the maximum interest rate they would accept and the amount of down payment they plan to make

BUYING POWER

he profile of the move-up buyer that emerged from the survey probably jibes with the image most builders have formed almost intuitively. Most are between 26 and 45 years old with well above average incomes. More than half of them have children (chart below).

Predictably these buyers are looking for more and better space. A house with 2,000 square feet is the minimum for move-up buyers and the size of house sought increases with price range. (The median increase in the size of house buyers want is 356 square feet.) In the lower price ranges—\$75,000 to \$125,000—buyers seem to want more space than they can afford, so it is important that plans be efficient and feel spacious.

Childless couples comprise a surprisingly important segment of the move-up market, especially in higher price ranges. For example close to half the prospects expecting to buy a house costing more than \$250,000 were two-person households. And as house price increases, prospects tend to be older, suggesting significant demand for detached, luxury housing for empty-nesters.

There is an interesting blip in the profile of buyers looking for houses that cost between \$150,000 and \$175,000. Singles make up a small but significant 14 percent

of this market and shouldn't be overlooked.

Move-up buyers seem to have their feet firmly on the ground when it comes to paying for the house of their dreams. And they know they'll have to pay more—and they're prepared to pay more—for a bigger, better new house. In fact they say they're willing to buy a house that costs 30 percent to 50 percent more than their current homes. But based on the highest monthly mortgage payment, interest rate and down payment they will accept or can handle, most are more likely to move up a more prudent 20 percent to 30 percent in price (chart previous page).

In general, prospective buyers who own the least expensive homes (median value \$84,000) and the most expensive homes (median value \$192,000) are prepared to go up in price the most. As a rule of thumb though, the move-up buyer plans to buy a house costing 20 percent more than the home he currently owns.

While that's not too surprising, more surprising is the percentage of equity in their current homes buyers will use for the down payment on the new home—only 65 percent. That suggests that many of these buyers have extra buying power—buying power that can be activated by builders who push the right hot buttons.

PROFILE OF SURVEY RESPONDENTS

Planned purchase price	Less than \$100,000	\$100,000 to \$125,000	\$125,000 to \$150,000	\$150,000 to \$175,000	\$175,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
Age					,		
25 or under	8. <i>7</i> %	<i>7.</i> 1%	<i>7.</i> 6%	2.0%	5.2%	2.9%	2.9%
26 to 35	40.0	41.6	40.3	36.9	30.9	30.2	26.9
36 to 45.	29.0	31.8	31.2	37.6	40.4	41.2	40.4
46 to 55	15.5	13.3	15.4	18.1	17.6	24.3	1 <i>7</i> .3
56 to 65	4.5	5.7	4.3	4.7	5.2	0.7	10.6
Over 65	2.3	0.5	1.2	0. <i>7</i>	0.7	0.7	1.9
Type of household							
Single male adult	3.0	0.9	3.3	4.0	1.5	1.5	1.9
Single female adult	3.0	2.8	3.3	2.7	4.1	0.7	1.0
Couple without children	34. <i>7</i>	35.8	37.5	36.9	27 <i>.</i> 5	32.4	41.8
Couple with children	52.9	<i>57.</i> 3	50.0	49.0	63.6	62.5	52.4
Single parent with children	3.4	2.3	2.1	4.0	1.1	0.7	1.9
Unrelated individuals	3.0	0.9	3.8	3.4	2.2	2.2	1.0

MOTIVATING FACTORS

Factors	Total	Less than \$100,000	\$100,000 to \$150,000	\$150,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
Larger home Larger yard Smaller home	50.8% 30.4 5.7	41.2% 29.4 4.2	55.5% 32.6 7.4	52.6% 26.0 3.7	53.4% 33.1 4.7	50.0% 38.6 6.1
Less yard maintenance	20.6	14.8	20.6	21.9	20.3	28.9
New product features	25.1	18.8	23.6	27.5	26.4	37.7
New design features	32.6	26.4	32.5	32.5	40.5	39.5
More energy efficiency	45.5	43.0	49.4	43.3	43.2	39.5
Investment potential	37.1	32.7	38.1	38.1	36.5	39.5
Tax advantages	37.4 18.4	31.2 17.0	39.2 21.2	37.4 18.0	42.6 17.6	36.8 11.4
Growing family Job transfer Closer to work	14.5 17.6	13.3 18.2	15.5 20.9	14.5 16.0	14.9 14.2	14.9 10.5
Better neighborhood Better schools Change of scene Tired of renting	32.3 19.8 15.7 10.3	29.7 19.1 18.2 15.8	34.5 21.5 13.9 12.9	30.7 20.8 17.5 5.6	37.2 16.9 14.9 7.4	31.6 18.4 12.3 1.8



Respondents were allowed to make multiple choices.





River Run, Walnut Creek, Calif. is featured on page 102.

LOOKING

ot every home can be a mansion, but houses for move-up buyers must have great curb appeal, even snob appeal. A good-size yard is important, and extra landscaping is a big, big plus. At the low end of the move-up market colonial elevations are the clear favorite, but contemporary is the choice at the top of the market (bottom chart). For all buyers finish materials that seem substantial and upscale are preferred (chart right).

The hottest buttons a builder can use on the exterior are:

Brick, the overwhelming choice for siding;

■ Decorative wood doors, clearly more popular than any other choice:

■ Wood windows, top rated by respondents; and

■ Wood shake roofs, followed closely by tile roofing.

Not all move-up housing can satisfy these champagne tastes, however. But it may be possible to use one or two of these features to lend a touch of class to more economical materials. A decorative wood door, for example, can be such a strong focus that it carries the rest of the front elevation. Brick, which may be too costly to use everywhere, can be used effectively as an accent wall or on a prominent chimney. In both cases brick can create the solid, expensive image buyers say they prefer.

Buyers also said they prefer two-story designs. Colonial architecture is the first choice of buyers looking for houses selling for less than \$200,000 and is most popular in the Southeast. Contemporary design is the first choice in California and number one nationally among those seeking houses

that cost more than \$200,000.

According to the survey, builders may be underestimating the appeal of exterior features such as decks and patios, upgraded landscaping, fencing and security lighting. Prospective buyers in every price range rated all of them as very desirable.





DESIGN PREFERENCES

Elevations	Less than \$100,000	\$100,000 to \$150,000	\$150,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
Tudor	10.2%	13.0%	16.0%	23.3%	21.6%
Colonial	36.2	38.2	33.4	21.6	16.4
Spanish	5.9	5.5	11.4	8.2	12.6
Contemporary	<i>27.7</i>	25.1	24.0	34.9	28.8
Victorian	13.6	11.1	9.1	6.5	14.4
Other	6.4	<i>7</i> .1	6.1	5.5	6.2

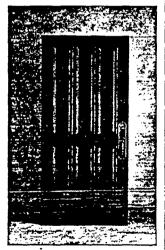
GAUGING T	HE RATINGS
1.0 to 1.9	Cool
2.0 to 2.9	Warm
3.0 to 3.9	Warmer
4.0 to 5.0	Hat
Buyers rated	a range of
features and p	products com-
monly found in	new houses
on a scale of	one to five,
with one being	g the least ap-
pealing and fi	ve being the
most appealin	g.
The most pop	ular features
appear in bol	dface type.

CREATING CURB APPEAL

Product features	Less than \$100,000	\$100,000 to \$150,000	\$150,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
Siding					
Aluminum	2.34	2.39	2.08	1.65	1.63
Brick	4.55	4.41	4.41	4.44	4.30
Cement block	1.53	1.51	1.56	1.58	1.45
Hardboard	2.15	2.17	2.17	2.11	1.99
Lumber	2.79	2.86	3.07	3.33	3.13
Plywood	1.47	1.49	1.48	1.57	1.44
Stone	3.76	3.71	3.92	3.99	3.84
Stucco	2.25	2.43	2.92	3.13	3.02
Vinyl	2.32	2.00	1.84	1.57	1.59
Roofing					
Asphalt or fiberglass shingles	3.42	3.16	2.84	2.46	2.43
Roof tile	2. <i>7</i> 0	3.03	3.33	3.45	3.61
Wood shake	3.76	3.84	4.03	3.98	3.88
Entry doors					
Decorative steel	3.26	2.98	2.68	2.36	2.40
Plain steel	2.03	2.06	1.85	1.64	1.51
Decorative wood	4.48	4.40	4.49	4.63	4.72
Plain wood	2.71	2. <i>7</i> 0	2.75	2.69	2.56
Windows					
Aluminum	3.14	3.19	3.10	3.04	3.07
Vinyl-clad wood	3.52	3.21	3.20	2.86	2.77
Wood	3.87	3.88	4.07	4.18	4.04
Garage					
Two-car garage	4.27	4.36	4.02	3.60	3.03
Three-car garage	2.83	3.08	3.64	3.97	4.48
Automatic garage door	4.27	4.26	4.36	4.46	4.59
Trim and landscaping					
Awnings	2.45	2.33	2.41	2.59	2.24
Shutters	3.65	3.74	3.63	3.46	3.47
Security lighting	3.78	3.73	3.89	4.11	4.14
Covered porch	4.25	3.98	3.98	3.83	3.61
Patio	4.23	4.13	4.17	4.40	4.14
Wood deck	4.39	4.27	4.22	4.29	3.83
Hot tub or spa	3.16	3.46	3.51	4.09	4.10
Trellis and plant shelves	3.07	3.16	3.19	3.50	3.42
Lawn sprinkler system	3.15	3.54	3.88	4.15	4.37
Upgraded landscaping	3.98	4.08	4.08	4.38	4.48
Fencing	3.71	3. <i>7</i> 7	3.80	4.18	3.95







See accompanying rating scale.

RIGHT RECIPE FOR KITCHENS

house can rise or fall flat on the merits of its kitchen. So it's especially crucial to know what the hot buttons are in that room.

Evidently, though, not many builders have the right recipe for their kitchens. While survey respondents rated the kitchens they'd seen in new homes as above average, there's room for improvement, especially in the \$250,000-and-up range. (The biggest shortcoming is storage space.)

What, then, do buyers want? To begin with, they favor an island kitchen layout. The questionnaire showed three common kitchen layouts—eat-in, u-shape and island—and asked buyers to rate them. In all regions and all price ranges the island plan came in first (bottom chart).

Another universal favorite is a walk-in pantry—an old-fashioned feature whose time has come again. The buyers liked some other tried-and-true features, too. Wood cabinetry, eating areas and double-bowl sinks were the three top-ranked kitchen features in the survey (chart right).

Builders in the Middle Atlantic states might do well to try ceramic tile kitchen counters, long a western favorite. Tile counters received high ratings in New Jersey and the Washington, D.C., suburbs where they are seldom used.

Ceramic tile flooring did well, too, particularly in housing that cost more than \$150,000. In the \$200,000-and-up ranges, hardwood kitchen floors are a favorite. Buyers in the lowest range want resilient vinyl flooring.

Buyers of the most expensive houses want a separate range and oven, but in the lower price categories they prefer the range and oven in one unit. Sinks break out along the same lines. At the top end, people lean toward porcelain sinks, but below that price they prefer stainless steel. Across the board, however, buyers want a microwave oven.



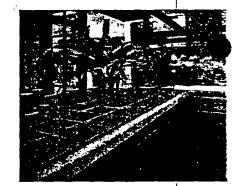
GAUGING THE RATINGS

GAUGING THE KATHOS
1.0 to 1.9 Cool
2.0 to 2.9 Warm
3.0 to 3.9 Warmer
4.0 to 5.0 Hot
Buyers rated a range of
features and products com-
monly found in new houses
on a scale of one to five,
with one being the least ap-
pealing and five being the
most appealing.
The most popular features
appear in boldface type.

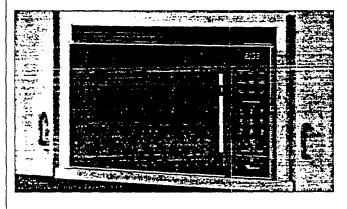
U-SHAPE, EAT-IN, ISLAND \$100,000 \$150,000 \$200,000 Less than More than to \$150,000 \$200,000 \$250,000 \$100,000 \$250,000 Kitchen layout 2.96 3.20 U-shape kitchen 3.11 3.04 2.95 Eat-in kitchen 3.42 3.29 3.39 3.29 3.29 3.65 3.85 Island kitchen 3.72 3.78 See accompanying rating scale.

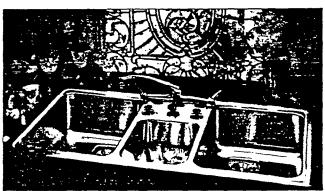
KITCHEN FAVORITES

				<u> </u>	
Kitchen features	Less than \$100,000	\$100,000 to \$150,000	\$150,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
European-style laminate					
cabinetry	2.91	2.76	2.83	2.71	2.80
Wood finish cabinetry	4.60	4.58	4.56	4.62	4.59
Barbecue cook top	2.93	3.09	3.21	3.61	3.58
Ceramic tile counter tops	3.66	3.67	4.00	4.23	4.22
Laminate counter tops	3. <i>7</i> 3	3.54	3.20	2.80	2.79
Eating area	4.51	4.47	4.54	4.50	4.49
Ceramic tile flooring	3.46	3.55	3.90	3.93	3.98
Resilient vinyl flooring	4.05	3.8 <i>7</i>	3.58	3.12	3.15
Wood flooring	3.44	<i>3.5</i> 0	3.55	3. <i>7</i> 9	3.84
Built-in food processor	2.48	2.55	2.71	2.93	3.21
Greenhouse window	3.71	3 <i>.</i> 58	3. <i>7</i> 7	4.03	3.73
Intercom	2.70	2.87	2.93	2.96	3.32
Island work area	4.01	3.95	3.99	3.98	4.11
Microwave oven	4.13	4.15	4.24	4.40	4.47
Double oven	3.56	3.85	4.06	4.31	4.37
Single oven	3.24	2.93	2.69	2.45	2.25
Range and oven separate	3.14	3.29	3.51	3.52	3.84
Range and oven together	3.92	3.83	3.51	3.54	3.23
Double-bowl sink	4.61	4.46	4.44	4.50	4.59
Single-bowl sink	2.00	2.18	2.20	1.90	1.89
Porcelain sink	3.25	3.18	3.39	3.58	3. <i>7</i> 0
Stainless steel sink	3.93	3.84	3.70	3.36	3.20
Snack bar	3.36	3.34	3.34	3.42	3.31
Trash compactor	2.82	2.89	3.10	3.54	3.80
Walk-in pantry	4.30	4.16	4.22	4.10	4.30



See accompanying rating scale.





MASTERLY SUITES

he master suite is a perfect place for hot buttons. Most existing homes have humdrum bedrooms and baths, so a new home with high-appeal features and appointments in the master suite really will seem like a big step up.

Most appealing are features that make life easier for two-income households. For example, buyers like a dressing area with a walk-in closet. Separate shower and tub in the master bath scored high as well. And two sinks in the bathroom were seen as very desirable by the respondents (top chart).

Buyers in the higher price ranges expect more expensive finishes and more luxury appointments in the master suite. When a house costs more than \$200,000, buyers want a private patio and balcony off the master bedroom. Ceramic tile floors and walls, upgraded fittings and whirlpool tubs also grow in appeal as price increases.

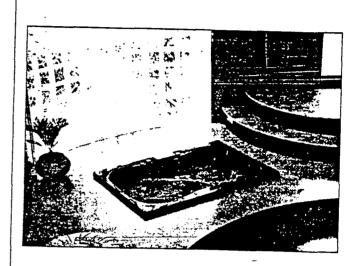
Storage space in the master suite is a very hot button. Buyers gave consistently high marks to linen closets and vanity storage in the master bath and walk-in closets in the bedroom. Built-in shelving systems have an especially enthusiastic following in the Southwest.

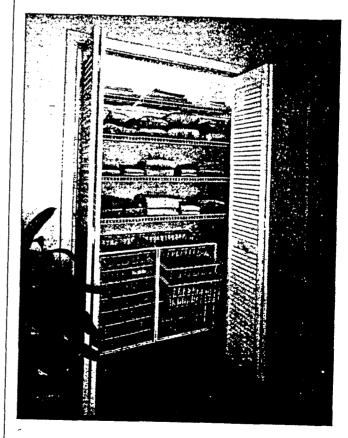
A fireplace in the master bedroom (bottom chart) warms buyers in California more than buyers in other markets, where it was seen as moderately desirable. The same is true of bay windows in the master suite. Buyers in the East gave this feature a somewhat cool reception, but its appeal grew as the markets headed west. And a sitting area in the master bedroom generated moderately enthusiastic interest, suggesting it's a nice but not necessary feature in most markets.

GAUGING THE RATINGS

1.0 to 1.9 $C \sim d$ 2.0 to 2.9 Warm 3.0 to 3.9 Warmer 4.0 to 5.0

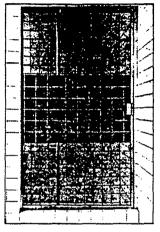
Buyers rated a range of features and products commonly found in new houses on a scale of one to five, with one being the least appealing and five being the most appealing. The most popular features appear in boldface type.





SPLASHY BATHS

Features	Less than \$100,000	\$100,000 to \$150,000	\$150,000 fo \$200,000	\$200,000 to \$250,000	More than \$250,000
Bay window	2.83	2.66	2.92	3.31	3.30
Upgraded fittings	3.93	3.92	4.06	4.17	4.27
Colored fixtures	3.67	3.33	3.40	3.49	3.55
Ceramic tile flooring	3.96	4.01	4.16	3.99	3.94
Linen closet	4.12	4.11	4.10	4.08	4.31
Mirrors	3.84	3.88	4.10	4.25	4.34
Separate shower enclosure	4.41	4.26	4.38	4.51	4.54
Two sinks (instead of one)	4.10	4.26	4.37	4.50	4.47
Vanity storage	4.09	3.99	4.02	4.11	4.21
Ceramic tile walls	4.32	4.36	4.47	4.43	4.42
Whirlpool tub	3.57	3.53	3.53	3.94	4.01

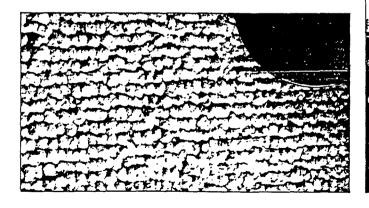


See accompanying rating scale.

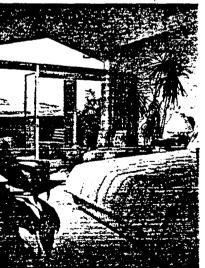
NOTHING SLEEPY

Features	Less than \$100,000	\$100,000 to \$150,000	\$150,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
Bay window	3.55	3.30	3.34	3.57	3.44
Balcony or patio	3. <i>7</i> 5	3.72	3.86	4.17	4.23
Dressing area with walk-in closet	4.52	4.53	4.51	4.72	4.67
Fireplace	3.52	3.41	3.57	3.80	3.99
Built-in shelving system	3.84	3. 7 1	3.63	3.67	3.74
Sitting area	3.61	3.62	3.76	3.92	3.79
Walk-in closet	4.59	4.60	4.61	4.66	4.49

See accompanying rating scale.







TAKING AN NSIDE

two-story house still tops the list for most move-up buyers. Half the respondents rated it their number one choice (chart below). Nowhere is the preference stronger than in the East, where more than twothirds of those surveyed gave two-story plans the top rating.

Dallas, in fact, was the only market surveyed to favor another plan, with buyers there favoring one-story plans by three to one. Split levels ranked a distant third in most markets, except in California, where they were ranked second.

No matter how many levels a house has, its floor plan should be relatively open, but with room definition. Only about 10 percent of the national market is ready for completely open plans and a fourth remains loyal to a plan with distinct room

Of the two-thirds who want a two-story plan, more than 60 percent want the master bedroom upstairs. The rest want it on the first floor. Although in Dallas, Oklahoma and St. Louis and in houses costing less than \$100,000, first-floor master suites have an edge.

Predictably, buyers prepared to spend more for a home expect the size to increase with price. Those prepared to pay less than \$100,000 for a new home expect 1,869 square feet, while those willing to pay more than \$250,000 want 2,882 square feet.

The price per square foot a buyer is willing to pay also rises with house price. Thus, those in the lowest price range are willing to pay about \$50 a square foot while those in the highest range will double that and more. This, in part, reflects the quality of materials and quantity of amenities buyers expect to find in their new homes.

While those expectations vary with price range and from region to region, the survey showed there are some interior features no move-up house should be without (chart right). They are: upgraded carpeting, dead bolt locks, a fireplace and hardwood flooring.



GAUGING THE RATINGS

1.0 to 1.9	Cool
2.0 to 2.9	Warm
3.0 to 3.9	Warmer
4:0 to 5.0	Hot

Buyers rated a range of features and products commonly found in new houses on a scale of one to five, with one being the least appealing and five being the most appealing.

The most popular features appear in boldface type.

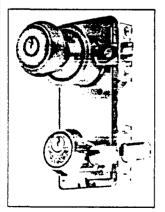
PLAN PREFERENCES

Plan type	Less than \$100,000	\$100,000 to \$150,000	\$150,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000
Single-story	36.1%	26.3%	19.0%	17.5%	23.2%
Two-story	48.4	54.2	57.3	59.6	57.0
Split-level	14.2	18.5	21.8	22.2	18.5
Other	1.3	1.0	1.9	0.7	1.3
Median expected square footage	1,869	1,980	2,364	2,463	2,882

THE INSIDE TRACK

Interior features	Less than \$100,000	\$100,000 to \$150,000	\$150,000 to \$200,000	\$200,000 to \$250,000	More than \$250,000	Favorite room for this feature
Upgraded carpeting	4.50	4.47	4.48	4.62	4.52	Master bedroom, living room, family room
Ceiling fan	4.07	3.80	3. <i>7</i> 2	3.82	3.67	Family room, master bedroom
Dead bolt locks	4.55	4.49	4.45	4.53	4.48	•
Fireplace	4.42	4.60	4.62	4.63	4.59	Family room, living room
French doors	4.05	3.91	4.00	4.07	4.27	Family room, dining room
Sliding doors	3.07	3.1 <i>7</i>	3.30	3.46	3.40	Family room, dining room
Hardwood flooring	4.01	4.01	4.07	4.29	4.26	Dining room, family room, living room
Tile flooring	3.31	3.34	3. <i>7</i> 5	3. <i>7</i> 2	3.8 <i>7</i>	Foyer, master bath, kitchen
Greenhouse section (sunroom)	3.47	3.48	3.64	3.88	3. <i>7</i> 9	Family room
Greenhouse window	3.64	3.58	3.72	4.08	3.87	Kitchen
Recessed or track lighting	3.33	3.42	3.49	3.84	3.87	Family room
Decorative moldings	3.98	3.96	4.02	4.13	4.19	Dining room, living room, family room
Wood paneling	3.56	3.50	3.48	3.63	3.51	Family room
Security system	3. <i>77</i>	3. <i>77</i>	3.97	4.14	4.24	/
Built-in shelving	3.90	3.89	3.97	4.08	4.16	Family room
Skylight	3.96	3.98	4.08	4.39	4.28	Master bath, kitchen
Step-up or step-down rooms	3.09	3.10	3.52	3.66	3.52	Living room
Central vacuum	3.23	3.15	3.24	3.40	3.57	
Vaulted ceilings	3.54	3.71	3.76	4.11	4.07	Living room, family room
Mirrored walls	2.76	2.72	2.91	3.33	3.20	Master bedroom
Wet bar	2.98	3.08	3.36	3.59	3.69	Family room
Window seat	3.58	3.44	3.55	3. <i>7</i> 8	3.57	Master bedroom

See accompanying rating scale.









July 16, 1915
Course II

course II

course II

name peril policy
the mortgage loan
five methods that

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ABA - MORTGAGE PORTFOLIO INVESTMENT NEEDS

James A. Graaskamp

- Insurance protection begins with basic coverage for the property owner, additional coverage for the secondary mortgage market investor, and excess coverage for loss of collatoral or vicarious liability of the originator and servicer.
 - A. Primary protection is the all risk policy or extended name peril policy purchased by the property owner and borrower. Because the mortgage loan creates two concurrent insurable interests there are five methods that have been used to insure the mortgagee:
 - 1. Mortgagee's policy covering his own interest. In case of loss the mortgagee is paid and the insurance company becomes subrogated to any fund received for payment on the mortgage so that this solution substitutes the insurance company for the mortgagee.
 - a. Advantages are mortgagee can select company and coverage but disadvantages the need to administer and pay premiums and mortgagor may duplicate cost by purchase of his own policy.
 - 2. Assignment of the mortgagor's policy which leaves the mortgagee vulnerable to possible suspension of coverage and no legal status as a contracting party eligible to reveive notice, etc.
 - 3. Endorsement of a loss payable clause is common on personal property collatoral but generally undesirable for real estate.
 - a. In most states the loss payable clause simply makes the mortgagee an appointee of the mortgagor to receive insurance proceeds, which are vulnerable to any defective elements in the contract. Moreover the lender is not a party to the contract and therefore bound without notice to the settlement.
 - b. In a few states the loss payable clause endorsement creates an unconditional and independent contract between the insurance company and the mortgagee.
 - 4. The standard mortgagee clause is the most prevalent because it does provide an independent agreement between the lender and the insurance company. It provides for notice in time to pay the premium, immunity from any acts of neglect of the borrower, permits the lender to pay the premium, but does require the lender to notify insurer of change of ownership or increase of hazard, and giving the mortgagee standing to sue the company.
 - 5. Special contracts are becoming more common between insurance company and the mortgagee which provide special modifications of small homeowner policies for the benefit of the mortgagee. Additional coverage may involve larger deductibles, stronger subrogation rights, and exemption of chattle mortgages from the scope of the agreement.

- B. Multiple use projects and assignment of permits, franchises, or merchants associations which control operations lead to complex insurance problems should the lender receive operating responsibility.
 - 1. For example the multi-family property and condominiums the association is required by FMNA to have the following endorsements:
 - a. Agreed Amount and Inflation Guard.
 - b. Demolition Costs.
 - c. Contingent Liability from Operation of Building Laws.
 - d. Increased Cost of Construction.
 - e. Non-owned/Hired Automobile Liability.
 - f. Water Damage.
 - g. Bailee's Liability.
 - h. Elevator Collision Liability.
 - i. Garage Keeper's Liability.
 - i. Host Liquor Liability.
 - 2. Federal Home Loan Mortgage Corporation (FHLMC) does not require all these endorsements specifically but instead calls for "all other coverages in kind and amounts commonly required by private institutional mortgage investors for projects similar in construction, location and use". FHLMC does look at insurance coverages in place as an indication of managerial sophistication and will accept basic deductibles up to one percent of policy face amount.
 - 3. Comments on endorsement.
 - a. Agreed amount endorsement removes coinsurance requirements. Servicer can negotiate appropriate amount relative to mortgage balance. Inflation guard endorsements are always prudent in a property program for the borrower.
 - b. Demolition cost endorsement should normally be required where the nonconformity law requires.
 - c. Contingent liability from operations of building laws should be required where such an ordinance is in effect.
 - d. Increased cost of construction of damaged building to a higher building code standard first requires 100 percent coinsurance on replacement costs and two endorsements above so lender doesn't receive any benefit.
 - e. Non-owned/Hired should be required in virtually all cases.
 - f. Bailee liability usually covered by blanket bond or umbrella liability.
 - g. Elevator liability is a must if elevators exist.
 - h. Host liquor liability should be covered under umbrella liability policy.

- C. Key problems to watch out for in basic coverage.
 - Coinsurance may have to be deleted and residual interest coverage substituted so that you have the flexibility to insure the loan balance or replacement cost. Since loan balance creates potential liability to the borrower due to coinsurance conflict, most servicers replace an expiring policy.
 - 2. Is the vacancy clause amended to avoid loss of vandalism and malicious mischief coverage on vacant, abandoned, or real estate owned/owned real estate property. Normally vacancy for 60 days suspends the vandalism, theft, and glass coverage.
 - 3. Flood, earthquake, or other catastrophe coverages such as mudslides and water pressure are usually excluded.
- D. Many lendors are directed to request a complete copy of the current coverage policy of the borrower, even for minor injuries.
 - 1. A certificate of insurance would do just as well as verification if the insurance carrier will consent to addition of a mortgagee clause and other specific policy provisions required by the lender.
- E. A critical clause is related to duties of the insured in the event of loss. There is a specific time frame for filing a signed, sworn proof of loss in accordance with a claim. This proof of loss is part of the consideration for the insurerance and must precede payment.
- F. It is not necessary to include the lender as a named insured. Generally it is not necessary as named insureds have stricter requirements and duties but they have greater control of loss settlement procedures and insurance company administrative notices.
- II. Insurance for the lender has expanded beyond fidelity coverages and errors and ommissions coverage to a variety of portfolio loss coverages due to increased recognition of earthquake, flood, and natural disaster as well as expanding levels of personal property, and bodily injury exposures.
 - A. Fidelity limits and bankers blanket bond coverages are provided in Exhibits 1 and 2.
 - B. One major bank active in all aspects of real estate has four major policies identified as
 - 1. Primary Property Insurance, 10,000,000/10,000,000 per occurrence and aggregate loss per year for earthquake, flood, and liability (see Exhibit 3 for policy index).
 - 2. Property Damage Insurance, \$20,000,000 X \$10,000,000 (see Exhibit 4).
 - 3. Property Insurance Byback Coverage (see Exhibit 5).
 - 4. Excess of Loss Property Insurance \$100,000,000 X \$30,000,000 (see Exhibit 6).

- III. Risk management for the mortgage portfolio can be divided into two major topics insurance and systems. Insurance is concerned with the responsibilities of the borrower, originator, secondary market investor and peripheral dual interest in the property. Systems is concerned with insurance servicing and risk management philosophy, from hazard control only to automated total portfolio tracking systems.
 - A. Choice of insurance product is related to choice of servicing system.

 Basic questions related to choice of a system are:
 - 1. How many loans do you now service and what is your expected growth over the next 12-, 24-, and 36-month period? Automation begins to make sense above 12,000 loans and in growth-oriented portfolios, especially multi-state.
 - 2. How many insurance clerks will this require? The average is 5,000 loans per clerk on a manual basis. Systems generally enable one clerk to service 35,000 loans on Hazard Only and 15,000 loans on Total Portfolio Tracking.
 - 3. Do you prefer micro or on-line? Which are you most comfortable with?
 - 4. How does this system fit your current procedures and special needs? In what areas must you have flexibility due to unique procedures, loans, or investors?
 - 5. What expenses do you pay for the sytem?
 - a. Cost per loan or flat charge per month?
 - b. Line charges?
 - c. Line installation?
 - d. Tape costs and frequency?
 - e. Cathode ray tube (CRT), modem, printer maintenance?
 - f. Training and retraining staff?
 - 6. What is the maintenance and downtime agreement?
 - 7. What is the vendor's credibility? These systems are expensive to develop and maintain, so the vendor's financial and professional credibility is paramount not the salesman's. How many users do they have, and may you contact any for references? Insurance servicing has enough problems without adding unexpected extras. Try to avoid being the test pilot.
 - 8. Software packages are available that not only track insurance and issue letters to the borrowers but place insurance as well. Depending on portfolio size the systems fit hardware from mini-micros to mainframes.

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EXHIBIT 1

Certificate of Insurance

WITH

UNDERWRITERS AT LLOYD'S, LONDON

(NOT INCORPORATED)

MORTGAGE BANKERS BLANKET BOND

Certifica	ate	
BAN	KERS INSURANCE	SERVICE CORP.
10 \$0	D. RIVERSIDE PLAZA . CHI	ICAGO, ILLINOIS 60606
Policy No. OC943 to MORTGA	GE BANKERS ASSOCIAT prvice Corp., 10 So. River	ed MORTGAGE BANKERS BEAMET BON TION OF AMERICA on beam por its member erside Plaza, Chicaro, Indas 60606, and the id,
Bankers Insurance Service Corp	p. hereby certifies that	
		31
(hereinafter called the Assured)	whose address is	
		ndling certain of its business transactions at es, is insured under said Policy as therein pr
of \$ pe	r iosa*	
from 12:01 A.M. of the	day of	19
to 12:01 A.M. of the	day of	19
	covers that it has sustain	to pay and make good to the Assured all suined in the manner hereinafter mentioned and limitations thereof.
review of the mortgage banker sary. The Underwriters wish to	's status will be conducte place on record their resen elve months if, in their op	iod of three years it is noted and agreed that ed not less than 60 days prior to each annivervation of right to vary the terms and condition pinion, a change is necessary. This notice in the
prior policy(ies) No.(s)		e to the Underwriters terminating or cancelling
cancellation to be effective as	of the time this Policy be	ecomes effective.

1. FIDELITY

BY REASON of and solely and directly caused by any dishonest or fraudulent act of the employees of the Assured, as defined, committed with the manifest intention of making improper personal financial gain for themselves wherever committed and whether committed directly or in collusion with others, including loss of property through any such act of any of the employees, as defined Salary, fees, commissions and other emoluments, including solary increases and promotons shall not constitute improper personal gent.

IT IS AGREED, however, that this insuring clause shall also indemnify the Assured to an amount not exceeding the Limit of Liebility of this bond or \$50,000, whichever is tess, against loss by reason of any such act of attorneys who are retained by the Assured to perform legal services for the Assured and the employees of such attorneys while such attorneys or the employees of such attorneys are serferming such services for the Assured.

"Employee" or "amployees" as used in this Bond shall be deemed to mean

- one or more of the Assured's efficers, clorks and other natural persens in the regular service of the Assured in the ordinary course of the Assured's business and whom the Assured compensates by selery, wages or commissions and has the right to govern and direct in the performance of such service.
- any natural person assigned to the Assured through an intervening employer or agency to perform the usual duties of any employee of the Assured on a contingent or part-time basis
- each natural person, partnership or corporation appointed by the Assured to act as its agent in the capacity of electronic data processor of checks or other accounting records of the Assured, while acting on behalf of the Assured or while in possession of money or other property belonging to the Assured or in which the Assured has an inferest. Each such agent and the partners, officers and employses of such agent shall be, collectively, one Employee for all the purposes of this Bond, excepting, however, subparagraphs (1) and (2) at Candition.
- 4. any natural person who is a director or trustee of the Assured while such directonor trustee is engaged in handling funds or other property of any Employee Welfare or Pension Benefit Plan established and maintained by the Assured for the benefit of its employees or any natural person who is trustee, fiduciary, administrator, efficer or Employee of any such Plan. It is agreed that the Deductible Amount applicable to loss sustained through acts or defaults committed by employees shall not apply to loss sustained by any Employee Welfare Pension. Benefit Plan covered under this Bond through acts or defaults committed by any Employee of any such Plan.

2. PREMISES

BY REASON of any Property being lost through theft or farceny (whether common-taw or statutory), or through burglary, robbery, false pretenses, hold-up, or mysterious unexplainable disappearance, or being damaged, destroyed or misplaced, howsoever or by whomsoever caused, while such Property is (or is supposed to be) in or upon any premises wherever situated, except while in the mail or with a carrier for hire, other than an armoured motor vehicle company, for the purpose of transportation.

2. BAMAGE TO OFFICES AND CONTENTS

BY REASON OF

a. tess or damage to all furnishings, factures, equipment, stationery, supplies or safes and vaults within any office of the Assured caused by burglary, robbery, hold-up, theft or farceny, or any attempt thereat or by vandalism or malicious mischief.

as through damage to any such effice caused by burglary, rebbery, fletd-up, theft or larceny, or any attempt therest, or to the interior of any such office by vandalism or malicious mischief, provided, that the Assured is the owner of such offices, furnishings, flutures.

provided, that the Assured is the owner of such offices, furnishings, flutures, equipment, stationery, supplies or safes and vaults or is flable for such less or demage, always excepting, however, all loss or damage through fire.

4. TRANSIT

BY REASON of any Property being lost, damaged, destroyed, stolen, mistald, misplaced, or "propriated, or made away with or having mystenously disappeaced, whether by the negligence of the Employees of the Assured, or otherwise, while in transit anywhere in the custody of any person or persons acting as messenger, except while in the mail or with a carrier for hire, other than an armoured motor vehicle company, for the purpose of transportation, such transit to begin immediately upon receipt of such Property by the transporting person and to end immediately upon delivery thereof at destination.

S. FORGERY

BY REASON of (a) forgery or afteration of, en er in any checks, drafts, receipts for withdrawal of funds or Property, certificates of deposit, letters of credit, warrants, money orders or orders upon public treasuries, or (b) the forgod signature, endorsement or afteration on or in any written instructions or advices addressed to the Assured by customers or banking institutions, or (c) the payment by the Assured of forgod or aftered promissory notes made by the Assured or of promissory notes bearing lorged endorsements. It is agreed that an endorsement upon a check or draft of a fictitious name or an endorsement

appen a check or draft, procured in a face to face transaction of the name of anyone impersonated, shall be deemed to be a forged endorsement and one further agreed that signatures mechanically reproduced on any background or with other identifying symbols, including the color thereof, shall be treated the same as handwritten signatures.

6. ERRORS AND OMISSIONS

BY REASON of payments which the Assured shall become obligated to make or account of a claim against the Assured or by reason of loss to the Assured simprigages interest caused by a negligent act, error or amission by the Assurec or any of the employees, in its capacity as mortgages or mortgage servicing agent which results in a failure.

- a. In provide Fire and Extended Coverage insurance
- by to provide Homoowners insurance or its equivalent (any multi-perpolicy combining insurance on real or personal property and liability, insurance) covering in part property of which the Assured is the mortgagee or mortgage servicing agent excluding however insurance applying to the ownership maintenance operation use leading or unloading of motor vehicles.
- c. to provide Mortgage Rademption Life insurance or Accident and Health insurance
- to provide flood insurance covering property located in designated special flood hazard areas where flood insurance has been made available under the provisions of the Flood Disaster Protection Act of 1973
- to notify the Federal Housing Administration or the Veterans Administration as insuring or guaranteeing agencies respectively of the inability to obtain fire insurance.
 - 2. a) to arrange to have a single family loan insured by the Federal Housing Administration or guaranteed by the Veterans Administration, or
 - b) to notify the Federal Housing Administration or the Veterans Administration within the prescribed notice period that mortgage payments are in arrears or to follow or carry out instructions by either agency in connection with the liquidation of a loan by means of foreclosure which may cause either agency to deny insurance or guarantee but in no event shall indemnity under (e) (2) (a and b) exceed the Limit of Liability of this bond or \$100,000, whichever is less.
- to notify a mortgage insurance company (other than the Federal Housing Administration or the Veterans Administration) as guaranteeing company, of mortgage payments that are in arrears, within the notice period required by each company but in no event shall indemnity exceed the Limit of Liability of this bond or \$100,000, whichever is less.
- g. to pay real estate taxes or special assessment taxes on mortgaged property, provided, however, that Underwriters shall not be liable for any loss unless the amount of such loss shall exceed the sum of \$100 and then for such excess only, but in no event for more than the Limit of Liability of this bond or \$50,000, whichever is less.

IT IS UNDERSTOOD, however, that the Assured shall make every reasonable effort to require, obtain and maintain valid insurance against at least the perils of Fire and Extended Coverage, payable to itself as mortgages or mortgage servicing agent.

IT IS FURTHER UNDERSTOOD that this clause shall exclude losses arising from the Assured's (or any ol its employees) activities as insurance agents, or otherwise, where the Assured's interest in the subject insurance is other than that of mortgages or mortgage servicing agent.

7. COUNTERFEIT CURRENCY

BY REASON of the receipt by the Assured, in good faith, (a) of any counterfeited or aftered paper currencies or coin of the United States of America issued or purporting to have been issued by the United State of America or issued pursuant to a United States of America statute for use as currency or (b) of any counterfeited or aftered paper currencies or coin of Canada issued or purporting to have been issued by Canada.

8. ATTORNEYS' FEES

IT IS AGREED that this Bond, in addition to the amount thereof, insures against all such reasonable attorneys' fees, costs and expenses as the Assured may incur in the investigation, resistance or defense of any demand, claim, suff, action or proceeding, which, if paid, established or successfully prosecuted, would result in a fees to the Assured covered by this Bond.

IT IS UNDERSTOOD, however, that in the event such loss, claim or damage is subject to a deductible, the Underwriters' herion are not liable herion for attempys' fees, costs and expenses, if such loss, claim or damage against the Assured is equal to or below the deductible

However, if such loss, claim or damage should exceed the deductible than Underwriters are liable for the proportion of such attorneys' less, costs and expenses that the amount of such loss, claim or damage recoverable under this liand bears to the sum of such amount and the amount of the deductible.

9. FIDELITY CLAIMS EXPENSE

17 IS AGREED that this Bond indemnifies the Assured to an amount not excooling \$5,000 for reasonable expense necessarily incurred and paid by the Assured in preparing any valid claim hereunder for loss caused by reason of the fraud, dichonesty forgery theft, larceny, embezziernent, wrongfur abstraction or misappropriation or any other dishonest or fraudulent act of any of the employees of the Assured

19. LOST INSTRUMENTS

IT IS AGREED that in the event of valid claim hereunder in respect of the loss of securities. The Assured may file a Lost instrument Bond for the purpose of ob-taining the issuance of duplicate securities.

IT IF FURTHER AGREED that subject to Underwriters' prior consent being obined to the filing of such Lost Instrument Bond, they will indemnify the Assured for such sum or sums not exceeding however, the limits of liability expressed in this Bond which the Assured may be required to pay either during the currency of this Bond or any time thereafter by reason of any indemnifying agreement delivered by the Assured to the Surety Company issuing the Lost Instrument Bond

11. WELFARE OR PENSION BENEFIT PLANS

in compliance with Title 1 of the Employee Retirement Income Security Act of 1974, payment by the Underwriters under this Bond to the first named Assured shall be held by such Assured for the use and benefit of any Employee Benefit Plan(s) (included as Assured herein) sustaining a loss, and to the exand that such payment is in excess of the amount of coverage required by such Act to be carried by said Plan(s) such excess shall be held for the use and benefit of any other named Plan(s) should such Plan(s) discover it has also sustained a loss hereunder

If Property of two or more Employee Benefit Plans is commingled, recovery hereunder for loss of such Property shall be shared by such Plans on a pro rata basis in accordance with the amount for which such Plan is required to carry bonding coverage under such Act

12. DIRECTORS AND OFFICERS LEGAL EXPENSE

IT IS AGREED that this Bond indemnifies the Assured to an amount not exceeding \$5,000 for such payment of money as the Assured shall make to reimburse any director or officer of the Assured for reasonable expenses and atforneys' less necessarily incurred by him (while a director or officer of the Assured or at any time thereafter) in defending any suit(s) to which he shall have been made a party by reason of his being or having been a director or an officer of the Assured during the term of this Bond provided that.

- In such suit(s) he is adjudged to have been not guitty of negligence or misconduct in the performance of his duties as a director or an officer of the Assured
- The amount stated in this Insuring Clause No. 12 shall be the limit of the Underwriters' kability for all reasonable expenses and attorneys' fees incurred by any one director or officer of the Assured during each period of twelve calendar months commencing with the effective date of this Bond

THIS BOND IS SUBJECT TO THE FOLLOWING DEFINITIONS, CONDITIONS. LIMITATIONS, WARRANTIES AND EXCLUSIONS -

A. DEFINITIONS

"Property" as used in the Bond shall be deemed to mean money, currency, coin, bank notes, Federal Reserve notes, postage and revenue stamps, U.S. savings stamps, bullion, precious metals of all kinds and in any form and articles made therefrom, jewelry, watches, necklaces, bracelets, gems, precious and semi-precious stones, bonds, securities, evidences et debt, debentures, acript, certificates, interim receipts, warrants, rights, transfers, coupons, drafts, bilts of exchange, acceptances, notes, checks, money orders, warehouse receipts, bilts of lading, withdrawal orders, conditional sales contracts, abstracts of titles, insurance policies, deeds, mortgages upon real estate and/or upon chattels and upon interests therein, and assignments of such policies, mortgages and instruments, and other valuable papers and documents, including books of account and other records used by the Assured excurrems, including books of account and other records used by the Assured in the conduct of its business (including films, tapes, discs or similar recording media customarily used by the Assured in the conduct of its business - fereinafter referred to as "Electronic and Photographic Records") and all other instruments similar to or in the nature of the toregoing in which the Assured has an interest or which are held by the Assured for any purpose or in any capacity and whether so held grafultously or not and whether or not the Assured is liable therefor.

8. JOINT ASSURED

(NOT APPLICABLE WHERE THERE IS BUT ONE ASSURED.) If more than one Assured is covered under this Bond, the first named Assured shall act or itself and for each and all of the Assured for all the purposes of this Bond. Knowledge possessed or discovery made by any Assured or by any partner or officer therest shall for all the purposes of this bond constitute knowledge or discovery by all the Assured It, prior to the termination of this Bond in its entirety, this Bond is terminated set on the Assured State of the Assured State of the Bond Assured State of the Bond State of the Bo is terminated as to any Assured, there shall be no hability for any loss sustained by such Assured unless discovered before the time such termination as to such Assured becomes effective. The kability of the Underwriters for loss or losses sustained by any or all of the Assured shall not exceed the amount for which the Underwriters would be liable had all such loss or losses been sustained by any

nne of the Assured. Payment by the Underwiders to the first named Assured of loss sustained by any Assured shall fully release the Underwriters on accounof such liss. If the first named Assured ceases for any reason to be covered under this Bond, then the Assured next named shall thereafter be considered as the first named Assured for all the purposes of this Bond

C. ADDITIONAL OFFICES OR EMPLOYEES-CONSOLIDATION MERGER OR PURCHASE OF ASSETS

If the Assured shall while this Bond is in force, establish any additional office of offices other than by consolidation or morger with, or purchase or assets of another institution, such office or offices shall be automatically covered hereunder from the dates of their establishment, respectively, and without the requirement of notice to the Underwiners of an increase during any premium seriod in the number of offices or employees at any of the offices covered hereunder or the payment of additional premium for the remainder of such

If the Assured shall, while this Bond is in force, merge or consolidate with, or purchase the assets of another institution, the Assured shall not have such coverage as is afforded under this Bond for loss which

- has occurred or will occur in offices or premises
- has been caused or will be caused by an Employee or employees or
- has arisen or will arise out of the assets acquired by the Assured as a result of such merger, consolidation or purchase of assets, unless the Assured shall
 - cause to be delivered to the Underwriters written notice of the proposed merger, consolidation or purchase of assets within 60 days of effective date of the merger, consolidation or purchase of assets.
 - obtain the written consent of the Underwriters to extend the coverage provided by this Bond to such additional offices. employees and other exposures, and
 - pay to the Underwriters an additional premium computed prorata from the date of such consolidation, merger or purchase of assets to the end of the current premium period

B. NOTICE OF CHANGE OF CONTROL

Upon the Assured's obtaining knowledge of a transfer of its wistanding voting stock which results in a change in control of the within thirty days of such knowledge give within Assured shall underwriters setting forth.

- or the names of the the names of the transferors and beneficial owners if the Stered in another name)
- rs if the state of the transferors and the the benderal owners), both immediately before and the total numb

and total number of the Swhed by the transferors and the transferoes (on he bending owners), both immediately before and after the center of outstanding shares of voting stock.

3. the support between outstanding shares of voting stock.

As defended the Common, control means the power to determine the managen stock ownership. A change in ownership 5 voting stock which results in direct or indirect ownership by a stock holder of an affiliated group of stockholders of ten percent (10%) or more of the Assurated he had been resulted to result in a security of the Assurated help for an affiliated group of stockholders of ten percent (10%) or more of the outstanding voting stock of the Assured shall be presumed to result in a change of control for the purpose of the required notice.

Failure to give the required notice shall result in termination of coverage of this Bond, effective upon the date of stock transfer for any loss in which any transferee is concerned or implicated.

E. EXCLUSIONS

THIS BOND IS WARRANTED FREE OF ALL CLAIM -

- For loss not discovered within the Bond Period set forth in the first peragraph of this Bond, provided, however, that if this Bond is terminated prior to the expiration date of said Bond Period this Bond is warranted free of all claims for loss not discovered prior to such date of termination. At or prior to the time of such termination or the expiration of this Bond the Assured may give to the Underwriters notice that it desires under this Bond an additional period of not exceeding twelve months within which to discover loss sustained by the Assured prior to the date of such termination or expiration of this Bond and shall pay an additional premium therefor. Upon not: ... a such notice the Underwriters shall give their written consent thereto, provided, however, that such additional period of time for discovery of such loss shall terminate forthwith on the effective date of any insurance obtained by the Assured or its successors in business replacing in whole or in part the insurance afforded by this Bond and in such event the Underwriters shall refund any unearned promium
- For loss resulting wholly or partially from the wrongful act or default of any Director or Directors of the Assured other than those who are salaried, pensioned or elected officers, or employees of the Assured, except when performing acts coming within the scope of the usual duries of an Employee of the Assured, or while acting as a member of any committee duly elected or appointed by resolution of the Board of Directors of the Assured to perform specific, as distinguished from general, directorial acts on behalf of the Assured

- 3 Fer loss sustained, either directly or indirectly, by means of forgery or afferation except when covered by insuring Clause No. 1, No. 5 or No. 7 of this Bond
- 4. For loss sustained, either directly or indirectly, through the forgery or alterations of, in or on any travelers' checks, accounts receivable ar assignments thereof, bills of lading, warehouse or trust receipts, or bills or receipts serving a similar purpose, except when covered by Insuring Clause No. 1 of this Bend.
- For less resulting from the complete or partial non-payment of, or default upon,
 - any loan or transaction in the nature of or amounting to, a tean made by or obtained from the Assured, or
 - b. any note: account, agreement or other evidence of debt assigned or sold to, or discounted or otherwise acquired by the Assured whether procured in good faith or through trick, arthos, fraud or false pretenses unless such loss is covered under insuring Clause No. 1 or No. 5.
- 6. For less or damage resulting from War, Civil War, Insurrection, Military, Maval or Usurped Power, Subterranean Fire, Earthquake, Volcanic Eruption or such like disturbance of nature in the United States of America or elsewhere, and, in addition, for loss or damage resulting from Riot or Civil Commotion in countries other than the United States of America or Canada. However, if any Property insured hereunder be lost or damaged by reason of Riot, Covil Commotion, Insurrection, Military, Naval or Usurped Power, while in transit in the circumstances recited in Insuring Clause No. 4, such loss shall not be excluded from the protection of this Bond by reason of this Warramy 6, provided that when such transit was initiated there was no knowledge of such Riot, Civil Commotion, Insurrection, Military. Naval or Usurped Power on the part of any person who acted for the Assured in initiating such transit.
- 7. For loss or damage in time of peace or war arising directly or indirectly from nuclear reaction, nuclear radiation or radioactive contamination howsoever such nuclear reaction, nuclear radiation or radioactive contamination may have been caused, provided, however, this peragraph shall not apply to loss or damage resulting from industrial uses of nuclear energy.
- For any loss resulting directly or indirectly from actual or fictitious trading whether in the name of the Assured or otherwise.
- Potential income, including but not limited to interest and dividends, not realized by the Assured because of a loss covered under this Bond
- All damages of any type for which the Assured is logally kable, except direct compensatory damages arising from a loss covered under this Bond.

F. SERVICE OF SUIT

IT IS AGREED that in the event of the failure of Underwriters hereon to pay any amount claimed to be due hereunder, Underwriters hereon, at the request of the Assured, will submit to the jurisdiction of any Court of competent jurisdiction within the United States and will comply with all requirements necessary to give such Court jurisdiction and all matters arising hereunder shall be determined in accordance with the law and practice of such Court.

IT IS FURTHER AGREED that service of process in each sult may be made upon Bigham Englar Jones & Houston, 14 Wall Street, New York, New York 10005, and that in any sult instituted against any one of them upon this Bond. Underwriters will abide by the final decision of such Court or of any Appellate Court in the event of an appeal.

The above named are authorized and directed to accept service of pracess en behalf of Underwriters in any such sult and or upon the request of the Assured to give a written undertaking to the Assured that they will enter a general appearance upon Underwriters' behalf in the event that such a sult shall be in-

Further, pursuant to any statute of any state, territory or district of the United States which makes provision therefor, Underwriters hereon hereby designate the Superintendent, Commissioner or Director of Insurance or other officer specified for that purpose in the statute or his successor or successors in office as their true and tawful attorney upon whom may be served any lawful process in any action, sult or proceeding instituted by or on behalf of the Assured or any beneficiarly hereunder arising out of this contract of insurance and hereby designate the above named as the person to whom the said officer is authorized to mall such process or a true copy thereof.

6. RIGHT OF ACTION

IT IS AGREED that the insurance granted herein shall be for the exclusive benefit only of the Assured named herein, and that in no event shall anyone other than the said Assured named herein have any right of action under this Bond.

IT IS FURTHER AGREED that with respect to any natural person, partnership or corporation appointed by the Assured to act as its agent covered under this Bond, this Bond does not afford coverage in tayour of any agent, as aloresald. Upon payment to the Assured by the Underwiters on account of any loss through fraudulent or dishonest acts committed by any of the partners, or employees of such agent, whether acting alone or in collusion with others, an assignment of such of the Assured's rights and causes of action as it may

News against such agent by reason of such acts so committed shall to the extent of such payment, be given by the Assured to the Underwriters, and the Assured shall execute all papers necessary to secure to the Underwriters the rights herein provided for:

M. TOTAL LIABILITY - NON-REDUCTION OF LIABILITY

PAYMENT OF LOSS under this Bond shall not reduce the liability of the Underwriters for other losses whenever sustained, provided, however, that the total liability of each of the Underwriters in respect of any loss.

- caused by any one burglary, rebbery or held-up or attempt thereat in which no Employee of the Assured is concerned or implicated.
- caused by any one unintentional or negligent act or omission on the part of any person whether one of the employees of the Assured or not, resulting in damage to or destruction or misplacement or mysterious disappearance of Property.
- ether than those specified in (1) and (2) preceding, caused by acts or emissions of any person whether one of the employees of the Assured or not, or acts or omissions in which such person is concerned or implicated.
- with respect to any one casualty or event other than those specified in (1), (2) and (3) preceding

is limited to the amount underwritten by his irrespective of the total amount of such loss or losses and regardless whether the cause of such loss or losses are within one or more than one of sub-divisions 1 to 4 inclusive

I. NON-CUMULATIVE COVER

REGARDLESS OF the number of years this Bond or any succeeding Bond of like nature with Underwriters at Lloyd's shall continue in force and the number of premiums which shall be payable or paid, the liability of the Underwriters as specified in this Bond shall not be cumulative in amounts from year to year or from period to period and subject always to the provisions of Warranty E. (1) a loss shall be deemed to attach to the Bond current at the first date of discovery of the loss, or any part thereof, and the Bond limit in effect at that time shall arrevail.

J. SUPERSEDED COVER

IF THE COVERAGE of this Bond replaces in whole or in part any other bond or policy of insurance by any insurer other than the Underwriters are terminated, cancelled or allowed to expire, Underwriters with respect to any loss or losses sustained prior to such termination, cancellation or expiration and discovered within the period permitted under such other bond or policy for the discovery of loss thereon, shalf be liable under this Bond only for that part of such loss or losses covered by this Bond as is in excess of the amount recoverable on account of such loss or losses under such other bond or policy, anything to the contrary in such other bond or policy notwithstanding

K. MOTICE

IT IS AGREED that written notice of the discovery of any loss or of an occurrence which may give rise to a claim for loss shall be given within a reasonable time by the Assured to Bankers Insurance Service Corp., 10 So. Riverside Plaza, Chicago, Binois 60606, together with all such particulars for the purpose of identification and other information as may be in its power. Within four months after discovery of any loss the Assured shall file with the Underwriters affirmative proof of loss itemized and duly sworn to, and shall, if requested by Underwriters, produce from time to time for examination by their representatives all books, documents and records pertaining to such loss. No suit to recover on account of loss under this Bond shall be brought before the expiration of two months from the filing of proof et loss as aforesaid on account of such loss, nor after expiration of lifteen months from the discovery as aforesaid of such loss.

L. TERMINATION

- This Bond shall be deemed terminated or cancelled as to any Employee
 - as soon as the Assured shall learn of any dishonest or fraudulent act on the part of such Employee, without prejudice to the loss of Property then in the custody of such Employee, or
 - b. Meen days after the receipt by the Assured of a written notice from the Underwriters, or by Bankers Insurance Service Corp. In their behalf, of their desire to terminate or cancel this Bond as to such Employee.
- 2. This Bond shall be terminated or cancelled as an entirety
 - sixty days after the receipt by the Assured of a written notice from the Underwriters, or by Bankers Insurance Service Corp., in their behalf, of their desire to terminate this Bond, or
 - upon the receipt by the Underwriters, or Bankers Insurance Service Corp. of a written request from the Assured to terminate this Bond, or
 - immediately upon the taking over of the Assured by a receiver or other liquidator or by State or Federal officials.
 - d. fen days after the receipt by the Assured of written notice from the Underwriters, or by Bankers Insurance Service Corp., on their behalf, of their desire to terminate this Bond by reason of non-payment of promium.

The coverage of this Bond shall not apply to any person, who is a gartner, efficer or employee of any agent covered under this Bond from and after the time that the Assured or any partner or officer thereof not in collusion with such person shall have knowledge or in maken that such person has committed any fraudulent or honest act in the service of the Assured or otherwise, whether such act be committed before or after the time this Bond is effective

if the period of limitation relating to giving of notice is prohibited or made void by any law controlling the construction thereof, such period shall be deemed to be amended so as to be equal to the minimum period of limitation allowed by

If terminated by the Underwriters the unearned premium shall be returned pro-agts but if terminated by the Assured the unearned premium is to be calculated and returned at shart period rates

M. OTHER INSURANCE OR INDEMNITY

IT IS AGREED that in the event of loss this Bond insolar as it covers losses also covered by other insurance carned by the Assured shall only pay claims (not exceeding the amount of this Bond) for the excess of the amount of such other insurance as may be in force when the loss is discovered

M. VALUATION

- SECURITIES. The value of any securities or foreign funds or currenis for the loss of which a claim shall be made, shall be determined by their closing market price or value on the day of the discovery of a loss and if there be no market price or value for the same or any of them on that day then the value thereof shall be the value as agreed tween the respective parties or in the event of difference as ascertained by arbitration. It is agreed, however, that should such scurities, funds or currencies be replaced by the Assured, with the approval of Underwriters or their attorneys, the value thereof then shall be the actual cost of such replacement
- BOOKS OF ACCOUNTS AND RECORDS in case of loss of, or damage to, Property consisting of books of account or other records used by the Assured in the conduct of its business. Underwriters shall be Nable under this Bond only if such books or records are actually reproduced and then for not more than the cost of blank books, blank pages or other materials plus the cost of labor for the actual transcription or copying of data which shall have been furnished by the Assured in order to reproduce such books and other records.
- ELECTRONIC AND PHOTOGRAPHIC RECORDS. In case of loss of or demage to Property, consisting of Electronic and Photographic Records, Underwriters shall be liable under this Bond only if such of replacing such records with blank media of the same or similar type plus the cost of labor for the actual transcription or copying of data which shall have been provided by the American REDFOC

Burefyship insurance reinsurance or indemnity taken by or for the benefit of Underwriters on account of the loss less the actual cost of recovery shall be distributed as follows

- tass not subject to deductible The Assured shall be fully reimbursed and any balance applied to the numbursement of Underwriters
- loss subject to deductible The Assured shall be reimbursed less the deductible amount the stance applied to reimbursement of Underwriters to the extent of their loss and any remainder paid to the Assured

P. LOSS PAYEE

IT IS AGREED that in connection with any loss covered by this Bond which involves the interest of one or more principals for whom the Assured services mortgages under a written agreement, at the written request of the Assured to Bankers Insurance Service Corp. such principals shall be named as loss payer on the applicable loss draft

Q. SUBROGATION

IT IS AGREED that the Underwriters upon the payment of any loss hereunde: shall become subrogated to all the rights and remedies of the Assured in respect of such loss

R. WARRANTY

IF THE ASSURED shall make any claim knowing the same to be false or fraudulent, as regards amount or otherwise, this Bond shall become void and all claim thereunder shall be forfeited, but no statement made by or on behalf of the Assured, whether contained in the application or otherwise, shall be deemed to be a warranty of anything except that it is true to the best of the knowledge and belief of the person making the statement.

2. MASTER POLICY

THIS BOND is issued solely for the information of the named Assured and follows the terms and conditions of the coverage provided such Assured under said Policy No. OC943 issued to MORTGAGE BANKERS ASSOCIATION OF AMERICA The rights and obligations of the parties are governed by the terms and conditions of said Policy which may be inspected in the office of the Mortgage Bankers Association of America, 1125 Fifteenth Street, N.W. Washington, D.C. 20005.

data which shall have been provided by the Assured for the reproduction of such records. O. RECOVERIES If the Assured shall sustain any loss covered by this Bond which exceeds the amount of coverage provided by this Bond, all recoveries except from	BANKERS INSURANCE SERVICE CORP. BY DATE
*The risk and sum hereunder% part of 100% of \$	with Underwriters at Lloyd's, London.

Percentages of participating companies are shown in supplementary certificate.

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HOR	RTGA	G-	BAN	KEKS	BLA	INKET	BUN	u

RIDER	NO	•	

DEDUCTIBLE RIDER

It is understood and agreed that payment of any loss or losses (as specified in Condition H) under the Bond to which this Rider is attached, shall be subject to the following deductible(s) as specified below:

DEDUCTIBLE AMOUNT	COVERAGE	
8	Insuring Clauses 1, 2, 3, 4, 5, 7, 8	3
\$	insuring Clause 6 except covera to failure to pay real estatua assessment taxes.	
The deductible(s) as specified above do not All other terms, limitations and conditions o		
This Rider shall become effective as of 12:01	A.M.of theday of	, 19
Attached to and forming part of Certificate No Policy No. OC943	of the Underwriters at L	Joyd' s , London
Issued to		
Dated at Chicago, Illinois	BANKERS INSURANCE SERVIC	E CORP.
	Ву	

EXTENDED ERRORS AND OMISSIONS RIDER

(Protection For Failure To Comply With Insurance Requirements as Stipulated under the terms of the mortgage or letter of commitment)

IN CONSIDERATION of an additional premium, it is understood and agreed that:

1. The Bond to which this rider is attached is hereby extended to include all sums which the assured shall become legally obligated to pay on account of any claim made against the assured and caused by any negligent act, error or omission of the assured or its employees which results in a failure to provide insurance required by the mortgagee under the terms of the mortgage and/or letter of commitment.

EXCLUDING, in any event all claims for failure to provide coverage for loss arising from the perils of earthquake.

2.	LIMIT OF LIABILITY			•
	The liability of the Underwriters on acceedDollars, (\$			
	a part of and not in addition to the amo	unt of the attached Bo	ond; subject me en	to Condition
3.	Coverage provided by this rider shall tached Bond.	be subject to the dedi	uctible applies ble to	Clause 6 of the at
=	All other terms, limitations and condi	tions of the attack	Bond remain unch	inged.
	This rider shall become effective as of	12:01 A.M. of the	day of	, 19
	Attached to and forming part of Certi Policy No	ficate No	of the Underwriters	at Lloyd's, Londor
las	sued to			
Da	ated at Chicago, Illinois	BANKERS I	NSURANCE SERVI	CE CORP.
_	19	Ву		

G.S. Burrows

EXTENDED SECURITIES FORGERY RIDER

IN CONSIDERATION of an additional premium now paid to us respectively by the Assured, the receipt of which we hereby acknowledge, we, the Underwriters, agree that the Bond to which this Rider is attached is hereby extended to cover such loss not exceeding the amount of \$\) (which shall be part of and not in addition to the sum insured by the said Bond) as the said Assured discovers that it has sustained

through the Assured's having, in good faith and in the course of business, whether for its own account or for the account of others, in any representative, fiduciary, agency or any other capacity, either gratuitously or otherwise, purchased or otherwise acquired, accepted or received, or sold or delivered, or given any value, extended any credit or assumed any liability, on the faith of, or otherwise acted upon, any securities, documents or other written instruments which prove to have been

- (a) counterfeited or forged as to the signature of any maker, drawer, issuer, endorser, lessee, transfer agent or registrar acceptor, surety or guarantor or as to the signature of any person signing in any other capacity, or
- (b) raised or otherwise altered or lost or stolen.

EXCLUDING, in any event, loss through FORGERY OR ALTERATION of, on or in any cheques, travellers' cheques, accounts receivable or assignments thereof, drafts, acceptances, withdrawal orders or receipts for the withdrawal of funds or Property, certificates of deposit, letters of credit, warrants, movey orders or orders upon public treasuries; and excluding, further, loss specified in Clause 5 of the second control or the second control o

Securities, documents or other written instruments shall be deemedeto under highest figural (including Original counterparts) negotiable or non-negotiable agreements in writing in which value is, in the ordinary course of business transferable by delivery or such agreements is writingly necessary endorsement or assignment.

Actual physical possession of such securities, document or other written instruments by the Assured, its correspondent bank or other authorized representative is condition precedent to the Assured's having relied on the faith of, or otherwise acted upon, such securities, documents or other written instruments.

The word "counterfeited" as used in this Rider shall be deemed to mean only an imitation of a security, document or other written instrument, as set forth in (a) above, which is intended to deceive and to be taken for an original.

Mechanically reproduced facsimile signaturs are treated the same as handwritten signatures.

The exclusions set forth in E (3), E (4) and E (5) of the Bond to which this Rider is attached shall not apply to the above insuring clauses of this Rider.

It is understood and agreed that, except as specifically provided in the foregoing to the contrary, this Rider is subject to the terms, exclusions, conditions and limitations of the Bond to which it is attached.

Coverage provided by this Rider shall be subject to any deductible applicable to insuring Clause 1 of the attached Bond.

All other terms, limitations and conditions of the	e attached Bond remain unchang	ed.
This Rider shall become effective as of 12:01 A.	M. of theday of	, 19
Attached to and forming part of Certificate No Policy No. OC943	of the Underwrite	rs at Lloyd's, London
ssued to	<u>.</u>	
Dated at Chicago, Illinois	BANKERS INSURANCE SERV	ICE CORP.
40	S v.	

EXHIBIT 2

TABLE I

REQUIRED FIDELITY BOND AMOUNTS FOR FHLBB REGULATED

SAVINGS AND LOAN ASSOCIATIONS

Base (Total Assets Plus Unpaid Balance of Serviced Loans)	Minimum Required Bond
\$ 500,000	\$ 75,000
1,000,000	150,000
5,000,000	270,000
10,000,000	450,000
50,000,000	825,000
100,000,000	1,230,000
200,000,000	1,650,000
300,000,000	2,070,000
400,000,000	2,490,000
500,000,000	2,910,000
525,000,000+	3,000,000Maximum Requ

POLICY INDEX

General Terms and Conditions SECTION I:

- 1) Assureds
- 2) Policy Term
- 3) Premium
- 4) Limit of Liability
- 5A) Perils Insured
- 5B) Perils Excluded
- 6) Application of Coverage
- 7) Property Excluded8) Valuation Clause
- 9) Demolition Clause
- 10) Debris Removal & Increased Cost of Construction Clause
- 11) Sue & Labor
- 12) Earthquake
- 13) Flood
- 14) Notice of Loss
- 15) Proof & Payment of Loss
- 16) Deductibles17) Non-Reduction of Limits of Liability
- 18) Subrogation & Subrogation Waiver19) Arbitration
- 20) Salvages & Recoveries
- 21) Brands & Labels Clause 22) Assistance & Cooperation of the Assured
- 23) Service of Suit Clause
- 23) Service of Suit Clause
 24) Carriers or Bailees
 25) Alterations and Use Clause
 26) Contributory Insurance
 27) Excess Permission
 28) Underlying Insurance
 29) Other Insurance

- 30) Coinsurance Waiver
- 31) No Control Clause
 32) Breach of Warranty Clause
 33) Errors & Omissions
 34) Required by Law

- 35) Liberalization
- 36) Titles of Paragraphs
- 37) Conflict of Wording
- 38) Cancellation
- 39) Inspection and Audit

Business Interruption; Extra Expense; Rental Value & SECTION II: Rental Income

- 1) Loss of Revenues
- 2) Extra Expense
- 3) Rental Income
- 4) Rental Value

SECTION III: Mortgage Interest Insurance

- 1) Physical & Consequential Damage
- 2) Liability
- 3) Taxes
- 4) Notification
- 5) The Right to Review Records
- 6) Mortgage Servicing Agreements

SECTION IV: Boiler and Machinery Insurance

- 1) Insuring Agreement
- 2) Exclusions
- 3) Valuations
- 4) Definitions
- 5) Special Provisions
- 6) Limit per Accident
- 7) Water Damage Limit
- 8) Ammonia Contamination Limit
- 9) Malicious Mischief
- 10) Other Insurance
- 11) Notice of Accident and Adjustment
- 12) Subrogation
- 13) Inspection
- 14) Suspension
- 15) Deductibles
- 16) Business Interruption (where applicable)
- 17) Locations
- 18) Endorsement

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- 22) Assistance & Cooperation of the Assured 23) Service of Suit Clause

- 24) Carriers or Bailees 25) Alterations and Use Clause 26) Contributing Insurance
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- 35) Liberalization
- 36) Titles of Paragraphs37) Conflict of Wording38) Cancellation

- 39) Inspection and Audit

Business Interruption; Extra Expense; Rental Value & SECTION II: Rental Income

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- 2) Extra Expense
- 3) Rental Income 4) Rental Value

SPOTION III: Mortgage Interest Insurance

- 1) Physical & Consequential Damage
- 2) Liability
- 3) Taxes4) Notification
- 5) The Right to Review Records
- 6) Mortgage Servicing Agreements

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- 3) Premium
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SECTION II: Business Interruption; Extra Expense; Rental Value & Rental Income

- 1) Loss of Revenues
- 2) Extra Expense
- 3) Rental Income
- 4) Rental Value

SECTION III: Mortgage Interest Insurance

- 1) Physical & Consequential Damage
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Section 1 Maximum LTV and loan amounts

Purchase money and rate and term refinance loans 1.1 page 5

> 1.11 Primary residences

> > - 80% and under: \$500,000 **--** 85%: \$350,000 **--** 90%: \$250,000

-- 95%:

\$150,000

1.12 Second/vacation homes

-80% and under: \$250,000

1.13 Foreign borrower

- 75% and under: \$200,000

1.14 Seller financed loans (for primary residences only)

- 90% and under: \$250,000

Equity refinance loans (for primary residences only) 1.2 page 5

> 1.21 Cash take-out

> > - 80% and under: \$250,000

1.22 Home improvement

- 90% and under: \$250,000

Section 2 Eligible loan purposes and required documentation

Purchase money loans page 6 2.1

2.11 Occupancy

2.11a Primary residence

- eligible

2.11b Second/vacation homes

- eligible

2.11c Foreign borrowers

- pledged funds equal to 12 months PITI

- U.S. VOD equal to closing costs

- executed buyer/seller affidavit required with premium remittance

2.12 **Documentation**

- new loan package required

Summary of contents

page 2

page 7 2.2 Rate and term refinances

- eligibility requirements same as for purchase money loans
- MGIC-insured existing loans do not require MGIC notification or approval if:
 - new instrument is MGIC-approved
 - mortgage payment does not increase
 - · loan balance does not increase
 - LTV category is unchanged
 - · new balance is reported on renewal billing statement

2.21 Documentation

- new loan package required

page 7 2.3 Equity refinances

2.31 Seasoning

- 24 months

Exception 1 - 12 months for 80% LTV (based on original value)

Exception 2 -- home improvement waiver

2.32 Source of financing

- institutional financing only

2.33 Payment rate

- note rate or fully indexed accrual rate

2.34 Negative amortization

- potential negative amortization only

2.35 Documentation

- new loan package required
- 24-month payment history

Section 3 Definition of terms

page 9

Section 4 Program limits and guidelines

page 11 4.1 Borrower qualification

- 28/36% for non-fixed payment loans
- 33/38% for fixed payment loans

page 11 4.2 Payment increase limits

4.21 Maximum payment increases

- annual 15% payment, 2% interest rate - may not be accumulated

4.22 Maximum consecutive annual payment increases

- consecutive annual payment increases greater than 7½% (or 1% interest rate equivalent) are not permitted

Bummary of contents

Uncapped ARMs and balloon mortgages page 11 4.22a - unlimited payment increases permitted if: payments are fixed for the first - 3 years on loans with LTVs of 90% and under, and 5 years on loans with LTVs over 90% • no negative amortization • no temporary buydowns or discounts of the note or payment rate Minimum initial payment rates page 11 4.3 4.31 Purchase money loans and rate and term refinances on owner-occupied, primary residences - payment rate floor hotline: 1-800-518-9900 (outside of Wisconsin) 4.32 Equity refinances and second/vacation home purchase money loans -note rate or fully indexed accrual rate **Negative amortization** page 11 4.4 - limited to 125% of original loan balance 4.41 Scheduled negative amortization - 90% LTV and under: 10% of original loan balance - over 90%: - not permitted - no scheduled negative amortization on second/vacation homes and equity refinances Seller contributions page 12 4.5 4.51 Seller temporary buydown contributions - over 90% LTV: 3% of value - 90% LTV and under: 6% of value - no buydowns on second/vacation homes 4.52 Zero coupon bonds - purchases where zero coupon bonds are given to the buyer are ineligible for insurance 4.53 Total seller contributions - over 90% LTV: 6% of value - 90% and under: 9% of value - none permitted for second/vacation homes 4.54 **Excess seller contributions** - excess treated as a sales concession: deducted from sales price and appraised value

Summary of contents

page 13 4.6 Mortgage program exceptions

- considered on a case-by-case basis

Section 5 Specific acceptable loan instruments

page 14 5.1 Mortgages with pledged account buydowns

- scheduled net mortgage balance may increase up to 95% of original property value

page 14 5.2 Wrap-around mortgages

5.21 Seasoning for nonpurchase transactions

- 24 months seasoning with no delinquencies during the past 12 months

5.21a Seasoning waiver

- for documented home improvement loans

Purchase money and rate and term refinance loans

Primary residences

1.1

1.11

LTV	maximum loan amount
80% and under	\$500,000
85%	\$350,000
90%	\$250,000
95%_	\$150,000

1.12 Second/vacation homes

LTV	maximum loan amount
80% and under	\$250,000

1.13 Foreign borrower

LTV	maximum loan amount
75% and under	\$200,000

1.14 Seller financed loans (for primary residences only)

LTV	maximum loan amount
90% and under	\$250,000

1.2 Equity refinance loans (for primary residences only)

1.21 Cash take-out

LTV	maximum loan amount
80% and under	\$250,000

1.22 Home improvement

	LTV	maximum loan amount
documented:	90% and under	\$250,000
undocumented:	80% and under	\$250,000

Section 2 Eligible loan purposes and required documentation

2.1 Purchase money loans

2.11 Occupancy

- 2.11a Primary residences first mortgage loans made to purchase properties occupied by the borrower, or the borrower's parent or child.
 - Student housing projects are considered non-owneroccupied and are, therefore, ineligible for MGIC insurance.
- 2.11b Second/vacation homes Second/vacation homes intended exclusively for the use and enjoyment of the homeowner. These properties may not be part of a rental-management pool or be primarily income-producing in nature.
- 2.11c Foreign borrowers Foreign borrowers are individuals who principally live and/or derive their income outside of the U.S. or U.S. possessions. The following criteria should be met:
 - funds equal to 12 months PITI payments must be pledged to the mortgage.
 - a Verification of Deposit from a U.S. financial institution in an amount equal to the funds needed to close the loan is required.
 - an executed buyer/seller affidavit must accompany premium remittance to MGIC.

2.12 **Documentation**

MGIC requires a loan package consisting of the following documents:

- Sales contract/purchase agreement
- Lender's loan application
- Verification of Employment
- 2 years tax returns for self-employed borrowers
- Verification of Deposit
- Credit report
- Appraisal report with photographs of the subject property
- MGIC mortgage insurance application

Section 2 Eligible loan purposes and required documentation

2.2 Rate and term refinances

A rate and term refinance is a loan to pay off existing lien(s) plus reasonable closing costs.

MGIC evaluates rate and term refinances no differently from purchase money loans. However, current documentation is required.

If the existing loan is currently MGIC insured, MGIC does not require prior notification or approval provided:

- the new instrument complies with MGIC guidelines or is otherwise approved, and
- the mortgage payment remains unchanged or decreases, and
- the loan balance does not increase (except for reasonable closing costs), and
- the LTV category is unchanged, and
- the new balance is reported on the renewal billing statement.

2.21 **Documentation**

A complete new loan package and a borrower payment history are required.

2.3 Equity refinances

Proceeds from an equity refinance exceed the outstanding principal balance of the existing liens being paid, plus normal closing costs. The borrower receives cash from the transaction and/or a portion of the loan proceeds are used to pay debts not secured by the property.

MGIC evaluates equity refinances according to the following guidelines:

2.31 Seasoning

MGIC requires 24 months seasoning for equity refinances, with two exceptions:

 In all states but California, only 12 months seasoning is required for proposed loan amounts up to 80% of value. Value is the lesser of the current value or the original value for underwriting purposes.

Section 2 Eligible loan purposes and required documentation

- 2.31 2) Seasoning requirements may be waived for home improvement loans where:
 - the contract for materials and services is submitted with the MGIC Application, and
 - the lender certifies completion of the improvements prior to issuance of the MGIC commitment, and
 - at least 80% of the new funds are used for home improvements.

2.32 Source of financing

To be eligible for MGIC insurance, both the existing financing and the new equity refinance must have been made through a lending institution

2.33 Payment rate

existing loan	payment rate
ARM	fully indexed accrual rate
fixed-rate	note rate

Payment increases may result only from market index adjustments.

2.34 Negative amortization

Negative amortization may result only from the application of payment caps.

2.35 **Documentation**

MGIC underwrites an equity refinance as a new loan. A complete loan package and a 24-month borrower payment history are required.

Section 2 Eligible loan purposes and required documentation

- 2.31 2) Seasoning requirements may be waived for home improvement loans where:
 - the contract for materials and services is submitted with the MGIC Application, and
 - the lender certifies completion of the improvements prior to issuance of the MGIC commitment, and
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2.35 **Documentation**

MGIC underwrites an equity refinance as a new loan. A complete loan package and a 24-month borrower payment history are required.

Certain terms in this module have universal definitions, while others are relatively new or recently defined. The terms defined below are italicized in the text of this module.

Accrual rate — the stated annual interest rate at which interest is calculated. The accrual rate is also called the note rate, the coupon rate, or the contract rate.

Amortization period — that period of time over which a calculated mortgage payment will fully repay a given loan amount at a given interest rate. A loan's amortization period may differ from its term, as in the case of an early ownership mortgage (EOM) or a balloon mortgage.

Buydown (temporary or permanent) — funds provided to the lender by the borrower or a third party for the purpose of reducing the borrower's monthly out-of-pocket payments. Permanent buydowns reduce the interest rate and monthly payments over the full amortization period of the loan. Temporary buydowns lower the borrower's payment for shorter periods such as one year, three years, or five years. Any buydown that remains in effect for less than the full amortization period of a loan is considered a temporary buydown.

Fully indexed accrual rate (FIAR) — the base index value of an adjustable rate mortgage plus the highest gross margin during the life of the loan.

Index — the initial rate upon which all future interest rate adjustments are based for an adjustable rate mortgage. Common indexes are one-year Treasury Securities, three-year Treasury Securities and the FHLBB contract rate.

Initial payment rate — the interest rate used to determine the amount of the initial monthly payment.

Loan term — a time period over which the loan amount must be paid in full. The loan may be paid in full either by a balloon payment or through fully amortizing payments.

Margin — an amount added to the index value to determine the accrual rate of a mortgage.

Section 3 Definition of terms

Negative amortization — the gradual increase in the balance of a loan, caused by adding unpaid interest to the loan balance. The unpaid interest is a result of monthly payments being less than the amount required to pay the interest. Negative amortization can be potential or scheduled. MGIC defines potential negative amortization as negative amortization that results from borrower optional payment caps on ARMs where:

- the initial payment and note rate are equal and at the FIAR, or
- the initial payment rate is below the FIAR, but the interest rate and payment rate adjustments are made at identical times.

Scheduled negative amortization is all other negative amortization which occurs during the life of the loan, assuming level market interest rates.

Non-fixed payment loans — loans featuring payment changes or the potential for payment changes during the first five years.

Rate concession (shortfall) — a reduction in the accrual rate from the fully indexed accrual rate offered by the lender to the borrower.

Scheduled payment increase — an increase in the borrower's monthly payment which occurs at a predetermined time and in a predetermined amount. Scheduled payment increases occur regardless of any fluctuations in the index and are typically set forth in the mortgage contract.

Unscheduled payment increase — a payment increase which results solely from an increase in the accrual rate caused by a change in the index, the margin, or both.

Section 4 Program limits and guidelines

4.1 Borrower qualification

MGIC qualifies borrowers at the *initial payment rate* using 28/36% ratios on *non-fixed payment loans* and 33/38% ratios on fixed payment loans. If the property is to be occupied by the borrower's parent or child, rental income from the property may not be used for borrower qualification purposes.

4.2 Payment increase limits

4.21 Maximum payment increases

Payment increases, whether scheduled, unscheduled, or a combination thereof, may not exceed 15% (or a 2% interest rate equivalent) annually. Increases may not be accumulated.

4.22 Maximum consecutive annual payment increases

Scheduled payment increases may not exceed $7\frac{1}{2}$ % (or a 1% interest rate equivalent) for consecutive years. For example, a 2-0 buydown is permitted, but a 4-2-0 buydown is not.

4.22a Uncapped ARMs and balloon mortgages — Unlimited payment increases are permitted on ARMs and balloon mortgage programs that feature fixed payment and interest rates during the first 3 years up to 90% LTV loans and during the first 5 years on over 90% LTV loans.

Discounts, rate concessions, temporary buydowns, and negative amortization are not permitted on such loans.

4.3 Minimum initial payment rates

4.31 Purchase money loans and rate and term refinances on owner-occupied, primary residences

MGIC will establish a payment rate floor on the first of each month. The current rate floor may be obtained by calling 1-800-558-9900 (outside of Wisconsin) or the nearest MGIC Underwriting Service Center. MGIC will use the payment floor in effect at the time of borrower application for underwriting approval. The application cannot be more than 90 days old.

4.32 Equity refinances and second/vacation home purchase money loans

Initial payment rates must be at the note rate or fully indexed accrual rate.

4.4 Negative amortization

All loans must cap or otherwise limit negative amortization to 125%.

Section 4 Program limits and guidelines

4.41 Scheduled negative amortization

Assuming level interest rates, scheduled negative amortization is permitted up to the following guidelines:

property type	ιτν	limit
• •	90% and under	10% of the original loan balance
owner-occupied ———	over 90%	not permitted*
second/vacation home and equity refinances	80% and under	loans with scheduled negative amortization are not eligible for insurance.

^{*}Exceptions will be considered on a case-by-case basis. However, scheduled negative amortization may not exceed 1% of the original loan balance during the first 12 months and 5% over the life of the loan.

4.5 **Seller contributions**

MGIC recognizes the need to protect borrowers from home prices which may be inflated due to builder/seller contributions. MGIC treats downpayments, gifts, decorating allowances, or anything of value contributed by the builder/seller as sales concessions, excepting the contributions noted in the following sections. The purchase price should be reduced by the value of the concession. In addition, all seller subsidies must be addressed in the appraisal.

4.51 Seller temporary buydown contributions

Seller contributions toward temporary buydowns are permitted up to:

Occupancy	LTV .	maximum seller contribution
Primary residences	over 90%	3% of value
	90% and under	6% of value
Second/vacat	ion	
home	80%	none permitted

ection 4 Program limits and guidelines

Zero coupon bonds

.52

Purchases where zero coupon bonds are given to the buyer are ineligible for insurance.

Total seller contributions

Total seller contributions including temporary buydowns, permanent buydowns, discounts, closing costs, and any other fees paid by the seller to facilitate borrower financing are permitted up to:

Occupancy	LTV	maximum seller contribution
Primary residences	over 90%	6% of value
	90% and under	9% of value
Second/vacation home	80%	none permitted



Excess seller contributions

Where total seller contributions exceed the limits set forth above, MGIC will treat the excess as a sales concession. That is, the excess amount will be deducted from both the purchase price and the appraised value. This adjusted property value will be used by MGIC in calculating loan-to-value and corresponding downpayment requirements.

Mortgage program exceptions

Lenders may have mortgage programs that do not comply entirely with the limits and guidelines above, but feature some meaningful offset to the deviation containing the underwriting risk. MGIC will consider such mortgage program exceptions on a case-by-case basis.

Section 5 Specific acceptable loan instruments

5.1 Mortgages with pledged account buydowns

The scheduled net mortgage balance (the MGIC insured loan amount) of loans with pledged collateral agreements may not increase above 95% of the original property value. Value is defined as the lesser of appraised value or sales price.

5.2 Wrap-around mortgages

A wrap-around mortgage is a mortgage with a face amount equal to the outstanding principal balance of an existing mortgage plus new funds to be advanced. The wrap-around mortgage is considered to be a first lien. Wrap-around mortgages with LTV ratios up to 90% are eligible for MGIC insurance.

5.21 Seasoning for nonpurchase transactions

MGIC requires at least 24 months seasoning. There may have been no delinquencies during the past 12 months.

5.21a Seasoning waiver — The 24-month seasoning requirement will be waived on home-improvement loans meeting the criteria outlined in Section 1.22.

Please contact your MGIC representative for information regarding the eligibility of any instruments not included in this section.

FIFTH MODULE

REAL ESTATE INVESTMENT ANALYSIS

Presented By

Professor James A. Graaskamp, Ph.D., CRE, SREA University of Wisconsin School of Business

FIRST HOUR

I. STRATEGIC PARAMETERS

Investment planning begins with certain strategic limitations and objectives of the investor which are well defined, systematic, and rational, as well as certain attitudes about the future which represent a less well defined web of bias controlling selection. These biases may, nevertheless, be rational anticipations about social, political, technological, or historical trends.

There is a hierarchy of real estate investment strategy screens which are always implicit in investor attitudes which are better utilized if they are made explicit as investors debate within their team or in the silence of their own den as to thrust of their real estate efforts.

- A. Personality, religious persuasion, or logic lie behind investor attitudes about the future, particularly perceptions of long-term socioeconomic trends for which forecasting is impossible and for which contingent events lead to alternative outcomes for our society whose broad, structural outlines we take for granted.
 - 1. America and the threat of expropriation, progressive isolation of war.
 - 2. The American response to the energy question.
 - 3. The American response to the resource conservation question.
 - 4. The American response to demographic shifts affecting housing, education, size of work force, community growth, etc.

- 5. The American response to shortage of capital in an era when most problems require capital intensive solutions.
- 6. The American response to the dilemma of incentive for expertise versus income stability for those without skills.
- B. In approaching real estate investment, the investor has to make a couple of clear axioms from which he proceeds to operate:
 - 1. Does portfolio theory and reasonable market efficiency of the securities market extend to real estate or does real estate have a great necessity and opportunity for those willing to incur the expense of property selection?
 - 2. Is the investor going to be an activist providing some levels of expertise and investment product creation or is he a passivist who will provide only capital.
- C. Given some investor mindset to the above factors and other anxieties, it is possible to formulate both broad strategic and selective tactical criteria. Such criteria should be developed in a systematic way in a general rank order of importance suggested as follows:
 - 1. Political exposure
 - 2. Degree of market control
 - 3. Management intensiveness
 - 4. Financial attributes from which investment classification can be drawn.
 - 5. Alternative decision points and liquidity
 - 6. Income tax strategy
 - 7. Estate planning and tax implications
- D. The non-financial aspects of a business must be understood before the numbers make any sense and before risk can be identified or evaluated. Thus,

the criteria in Section C can be expanded as follows:

1. Political exposure

- a. Land use controls
- b. Price controls (rent control, agricultural parity, FMR, etc.
- c. Subsidy of effective demand
- d. Controls of supply costs (wages, building codes, specifications, etc.)

2. Degree of market control

- a. Control of customer (contract, terrain, creation of tenancy)
- b. Reciprocity
- c. Monopolistic control of supply
- d. Profile of consumer through market research

3. Management intensiveness

- a. Development skills for the emerging real estate enterprise
- b. Operating skills
- c. Fungibility vs. personality (restaurant formulas vs. culinary)
- d. Mortality of skills

4. Financial attributes

- a. Trading property
- b. Emerging developemnt or technology investment
- c. Special situation investments
- d. Cash return investments
- e. Purchasing power preservation through tax shelter and retail indices
- f. Financial position in terms of any of the above relative to liquidity, control, and time line

5. Alternative decision points and liquidity

- a. Sunk cost of search and acquisition
- b. Investment escape alternatives
- c. Capacity for investment procrastination
- d. Liquidity

6. Income tax strategy

- a. Regulatory trade-offs
- b. Shift from single conduit to split between operating profit centers and capital gain centers
- c. Erosion of general tax subsidy and substitution of selective national priority incentive

7. Estate planning

- a. Continuity of management
- b. Liquidity for tax and bequest requirements
- c. Gradual loss of the stepped-up basis
- d. Careful separation of business associations and family involvements

REAL ESTATE INVESTMENT ANALYSIS

Presented By

Professor James A. Graaskamp, Ph.D., CRE, SREA University of Wisconsin School of Business

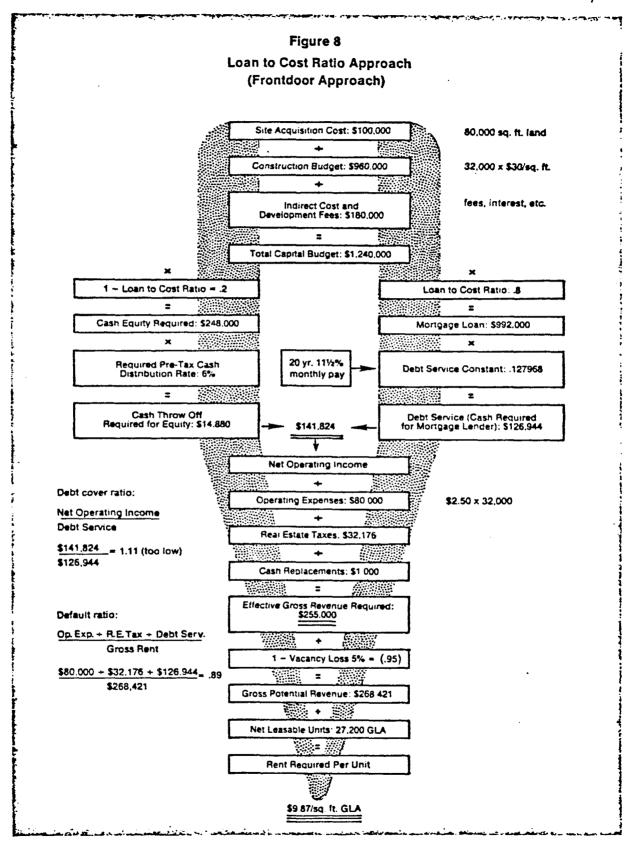
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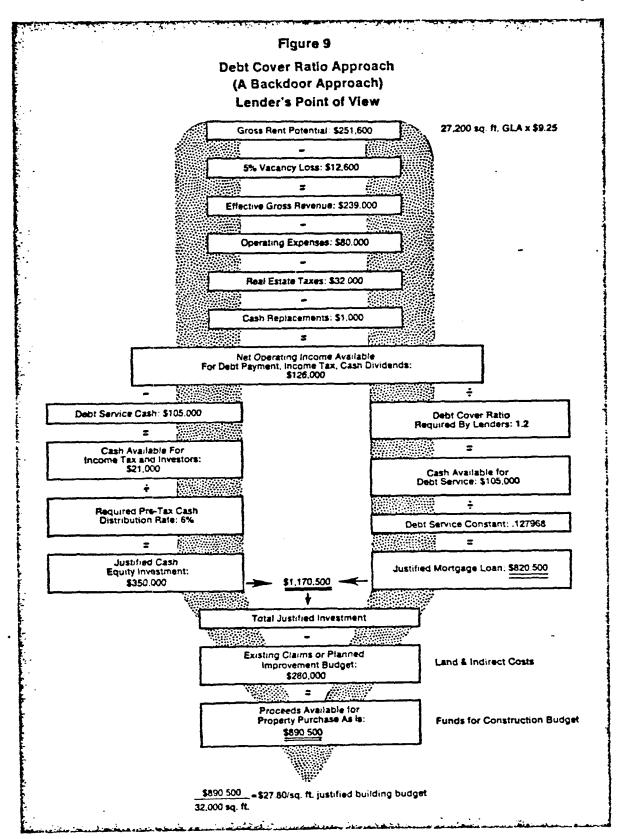
II. FINANCIAL PARAMETERS AND ANALYSIS

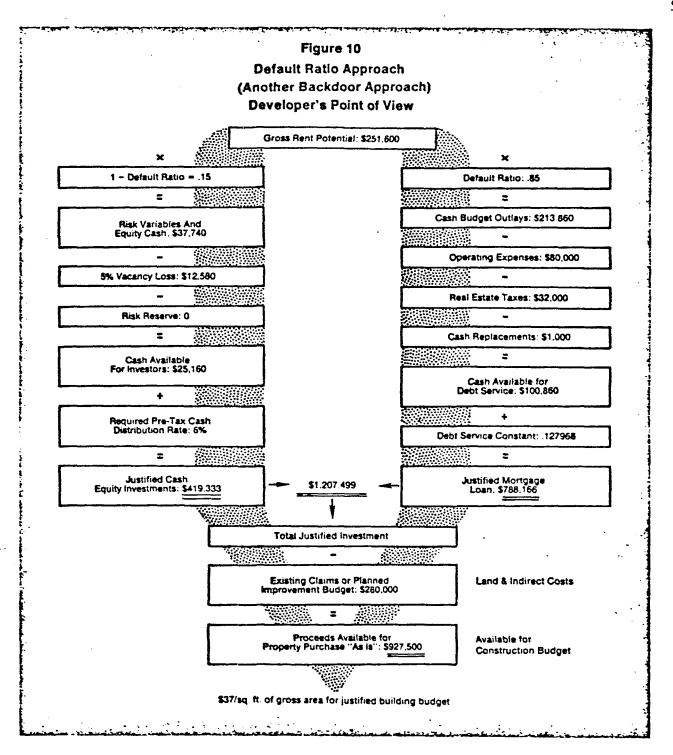
The forecasting of future money returns to a present investment is the ultimate business problem and the dynamics of these problems explains the actions of consumer, producer, and the society.

- A. An investment in a bond can be defined as to when it begins in time, when it is sold, when coupons are collectible, and total costs and total receipts under alternative outcomes. Thus, yield is easily computed and risk depends on whether you can rely on the promisor.
- B. Real estate financial forecasting seldom enjoys such a rigid set of financial specifications and therefore seldom enjoys conservative conditions of certainty. An investment in real estate really means somebody "bought" a set of assumptions.
 - 1. Risk is the potential variance between assumptions and realizations between proforma prospects and the historical balance sheet and P & L statements.
 - 2. Degree of professionalism is measured, ultimately, by the care with which assumptions are made and supported by careful research.
- C. Basic cash flow analysis depends on four essential set of assumptions:
 - Schedule of cash outlays (capital costs and expenses.)
 - Schedule of cash receipts (periodic and reversions).
 - 3. Net cash flows for each period (negative and positive).
 - 4. Devices for comparison of alternatives

- 5. However, it quickly becomes apparent when accounting for the dollars "in and out" that not all dollars are the same. Some are current expenses while others represent acquisition of assets and many are shared with local and federal government through various tax processes.
- D. A single period proforma is the first test of financial parameters.
 - 1. A given purchase price can be converted to a necessary rent level in the market (Front Door Approach, see Exhibit 1).
 - 2. A given market rent level can be converted to a justified capital budget (Back Door Approach, see Exhibit 2).
 - 3. While lenders prefer debt cover ratios for back door approach, equity investors should prefer risk orienated Default Ratio Approach (Exhibit 3).
- E. Basic elements of proforma can then be expanded over time to include the following assumptions:
 - 1. Definition of desired profit centers
 - 2. Definition of time line over which events will still take place
 - 3. Assumptions on the capital budget and sequence of source and application of funds.
 - a. Direct construction or purchase cost
 - b. Indirect and capitalized carrying cost
 - 4. Financial plan
 - a. Credit amounts and terms
 - b. Equity amounts and terms
 - c. Holding power







- 5. Profits classified as to type and tax
 - a. Cash from operations
 - b. Cash from capital gains
 - c. Cash surplus from financing
 - d. Cash from tax savings on other income
- 6. Selected measures of profitability
 - a. Definition of investment
 - b. Definition of profit
 - c. Selected ratios of profit to investment
- 7. Selected measures of risk
 - a. Payback periods
 - b. Capacity for variance
 - c. Variance controls
- E. For a rental investment property, the general format for determining after-tax cash flows for each period or year would generally be as follows:

PART I. ANNUAL (PERIODIC) RETURNS TO INVESTORS

- Estimate potential gross cash income; Cash income from space sales
- 2. Deductions from potential gross
 - a. Normal vacancy
 - b. Seasonal income loss
 - c. Collection losses
 - d. Franchise fees, deposits returned, etc.
- 3. Add "other" income from service sales
- 4. Derive <u>effective gross income</u>
- 5. Deduct <u>operating expenses</u> (on expected cash outlay without accrual reserves)
 - a. Fixed expenses
 - b. Variable expenses
 - c. Repairs and maintenance
 - d. Replacements

- 6. Derive net operating income (NOI)
- 7. Deduct annual debt service
 - a. Contract interest
 - b. Supplementary variable interest
 - c. Principal amortization
- 8. Derive cash throw-off
- 9. Add back principal payments and replacements
- 10. Deduct tax depreciation allowance
- 11. Derive taxable income
- 12. Determine <u>marginal income tax</u> on real estate income
- 13. Deduct income tax from cash throw-off (H)
- 14. Derive after-tax cash flow
- 15. Add <u>tax savings on other income</u> (if K is negative)
- 16. Add surplus from refinancing
- 17. Derive spendable after-tax cash

PART II. RESALE (REVERSION) RETURNS TO INVESTOR

- 1. Estimated resale price (end of period)
- 2. Deduct broker's commission and other transaction costs
- 3. Derive <u>effective gross proceeds</u> from sale

- 4. Deduct all credit claims outstanding (end of period)
 - a. Short and long term note balances due
 - b. Prepayment penalties
 - c. Deduct equity shares to non-owner interest
- 5. Derive <u>pre-tax reversion</u> to equity
- 6. Deduct tax claims on ownership interest
 - a. Deduct capital gains tax
 - b. Deduct income tax on disallowed accelerated depreciation
 - c. Deduct surtax on taxable preferential income
- 7. Derive <u>after-tax resale proceeds</u> to investor

(See Exhibit 4)

- G. Financial risk is the variance between proforma budgets and historical accounting of results. Since loss of assets or of income expectations from static perils can be minimized by means of insurance devices for prediction and leveling of shock losses, financial risk management then becomes a matter of shaping incentives to reduce dynamic risks and provide a cushion or tolerance for surprise in the financial parameters of the enterprise.
- H. The first level of risk analysis are gross statements of the maximum potential loss and the cushion for partial losses.
 - 1. The loan to value ratio is an inexact measure of the maximum potential loss to the lender to a presumed salvage value of an asset. One minus the LTV plus the amount of personal guarantee is the measure of the borrower's maximum potential loss.
 - 2. Financial judgment expects that the maximum potential loss would be only a fraction of net worth of either party.

EXHIBIT 4

PRO FORMA

INVESTMENT ANALYSIS OF

FOR

DENO.PROBLEM

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COMPONENT SUNHARY

TITLE		USEFUL LIFE	DEPR METHOD	COST	SCH
LAND INPROVENENTS	0.00 0.90	 • •	•	87304. 342370.	-

HORTGAGE SUMMARY

TITLE	INTR BI			TERM	ORIG Balc	PCT VALUE
FIRST MORTRAGE	0.0942	1	27	27	\$ マククフ テム	0 750

PRO FORNA

INVESTMENT ANALYSIS OF

FOR

DENO.PROBLEM

REPORT	SECTION	NUHBER	3 PAGE 1

	H FLOW ANALYSIS				
2 1 2	3323232223333	1979	1980	1981	1982
1	GROSS RENT	74368.	74368.	74368.	74368.
2	LESS VACANCY	5114.	5114.	5114.	5114.
3	LESS REAL ESTATE TAXES	5868.	5868.	5868.	5868.
4	LESS EXPENSES	4738.	4738.	4738.	4738.
5	LESS EXPENSES NET INCOME LESS DEPRECIATION	58648.	58648.	58648.	58648.
6	LESS DEPRECIATION	15562.	14855.	14180.	13535.
7	LESS INTEREST	30903.	30638.	30346.	30025.
	TAXABLE INCOHE				
9	PLUS BEPRECIATION	15562.	14855.	14180.	13535.
10	LESS PRINCIPAL PAYMENTS	2634.	2899.	3191.	3512.
11	CASH THROW-OFF	25111.	25111.	25111.	25111.
12	LESS TAXES	6091.	6578.	7061.	7544.
	LESS RESERVES AT 730.000				
14	CASH FROM OPERATIONS	18290.	17803.	17320.	16837.
15	WORKING CAPITAL LOAN(CUM B)	0.	0.	0.	0.
16	DISTRIBUTABLE CASH AFR TAX	18290.	17803.	17320.	16837.
17	TAX SAVING ON OTHER INCOME	0.	0.	0.	0.
18	SPENDABLE CASH AFTER TAXES	18290.	17803.	17320.	16837.

REPORT SECTION NUMBER 4

PAGE 1

CASH FLOW ANALYSIS				
	197 9	1980	1981	1932
MARKET VALUE				
	429674.	429674.	429674.	429674.
	27929.			
21 LESS LOAN BALANCES				
22 PLUS CUM. CASH RESERVES				
23 B/4 TAX NET WORTH	82854.	86483.	90404.	94646.
24 CAPITAL GAIN (IF SOLD)	-18591.	-9254.	83.	9421.
25 CAPITAL GAINS TAX				
26 TAX PREFERENCE TAX	0.		0.	
27 INCOME TAX ON EXCESS DEP	3112.	5871.	8292.	10391.
28 TOTAL TAX ON SALE			8309.	
29 AFTER TAX NET WORTH	81601.	01577	82095.	92370
29 AFTER TAX NET WORTH	91901.	01337.	020/0.	020/0.

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====	. = = :																	
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30	RE	TUR	NO N	NET	W O	RTI	I B	/4 TA	ìΧ	0	.0	05	1		0.3469	0.3357	0.3	247
31	CH	ANG	E IN	NET	40	RTI	H B	/4 TA	ΙX	-2	45	65			3629.	3921.	42	42.
32	CA	SH	RTN	O 40	RIG	C	ASH	EQUI	Y	0	. 2	33	8		0.2338	0.2338	0.2	338
33								AYBAC		0	.1	70	3		0.3360	0.4972	0.6	540
34				ALUE						42	06	78		4	37887.	453529.	4677	48.

PAGE 1

REPORT SECTION NUMBER 6

33344111411411111111111111111111		2722223		
YEAR OF ANALYSIS	1979	1980	1981	1982
AFTER TAX RATIO ANALYSIS				
35 RETURN ON NEW WORTH AFT TAX				
36 CHANGE IN NET WORTH AFT TAX 37 CASH RTN ON ORIG CASH EQUIY		-63. 0.1657		
38 PERCENT ORIG EQUITY PAYBACK 39 PRESENT VALUE OF PROJECT	0.1703 413317.	0.3360 421485.		0.6540 435362.
				.000025
40 NET INCOME-HARKET VALUE RTO				
41 LENDER BONUS INTEREST RATE 42 DEFAULT RATIO	0.0000 0.5936	0.0000 0.5936	0.0000 0.5936	0.0000 0.5936
				_
	NUHBE			PAGE 1
REPORT SECTION				PAGE 1
				PAGE 1
				PAGE 1
YEAR OF ANALYSIS	*********			
			1981	PAGE 1
YEAR OF ANALYSIS	1979 ANALYSIS		1981	
YEAR OF ANALYSIS HODIFIED INTERNAL RATE OF RETURN	1979 ANALYSIS		1981	
YEAR OF ANALYSIS **********************************	1979 ANALYSIS		1981	
YEAR OF ANALYSIS **********************************	1979 ANALYSIS	1980	57309.	1982 78158.
YEAR OF ANALYSIS HODIFIED INTERNAL RATE OF RETURN RETURN ANALYSIS WITHOUT SALE	1979 ANALYSIS	1980 37373. -0.4102	57309. -0.1889	78158. -0.0764
YEAR OF ANALYSIS MODIFIED INTERNAL RATE OF RETURN RETURN ANALYSIS WITHOUT SALE 11 CUM. AFT TAX SPENDABLE CASH 14 HOD. I.R.R. ON ORIG EQUITY	1979 ANALYSIS	1980 37373. -0.4102	57309. -0.1889	78158. -0.0764
YEAR OF ANALYSIS MODIFIED INTERNAL RATE OF RETURN RETURN ANALYSIS WITHOUT SALE 41 CUM. AFT TAX SPENDABLE CASH 44 MOD. I.R.R. ON ORIG EQUITY 45 MOD. I.R.R. ON CUM. EQUITY	1979 ANALYSIS	1980 37373. -0.4102	57309. -0.1889	78158. -0.0764
YEAR OF ANALYSIS HODIFIED INTERNAL RATE OF RETURN RETURN ANALYSIS WITHOUT SALE 41 CUM. AFT TAX SPENDABLE CASH 44 HOD. I.R.R. ON ORIG EQUITY 45 HOD. I.R.R. ON CUM. EQUITY RETURN ANALYSIS WITH SALE	1979 ANALYSIS 182900.8297 -0.8297	37373. -0.4102 -0.4102	57309. -0.1889 -0.1889	78158. -0.0764 -0.0764

48 NOD I.R.R. ON ORIG EQUITY -0.0701 0.0521 0.0908 0.1057 49 NOD I.R.R. ON CUN. EQUITY -0.0701 0.0521 0.0908 0.1057

REPORT SECTION

SENSITIVITY ANALYSIS

FIRST HORTGAGE

ANALYSTS	YEAR IS	2 =	1980
----------	---------	-----	------

DEFAULT RATE - NEEDED	-	0.8300	0.8300	0.8300	0.8300
DEFAULT RATE - ACTUAL		0.7979	0.7979	0.7979	0.7979
DIFFER	-	0.0321	0.0321	0.0321	0.0321
TO CHANGE THE DEFAULT					
CHANGE ANY ONE OF THE	FOLL	DNING			
CASH OUTLAYS		1979	1980	1981	1982
2222222222			-		
REAL ESTATE TAXES	BY		0.0917	0.0917	0.0917
TOTAL EXPENSES	BY	0.1135	0.1135	0.1135	0.1135
FIXED EXPENSES	BY	0.1135	0.1135	0.1135	0.1135
VARIABLE EXPENSES	BY	0.0000	0.0000	0.0000	0.0000
TOTAL INTEREST PHTS.	BY	0.0181	0.0182	0.0184	0.0186
TOTAL PRINCIPAL PHTS.	BY	0.2119	0.1926	0.1750 0.0000	0.1590
WORKING CAPITAL LOAN	BY BY	0.0000	0.0000	-0.0000	-0.0080
GROSS INCOME FIXED INCOME	BY	-0.0080	-0.0080	-0.0080	-0.0080
VARIABLE INCOME	BY	0.0000	0.0000	0.0000	0.0000
COMPONENTS					
******		1979	1980	1981	1982
INITIAL INVESTMENT	BY	0.0917	0.0917	0.0917	0.0917
LAND	BY	0.4452	0.4452	0.4452	0.4452
INPROVENENTS	BY	0.1033	0.1033	0.1033	0.1033
ENTREPRENEURIAL SKIL	BY	-0.9866	-0.9866	-0.9866	-0.9866
V007040F0					
HORTGAGES		1979	1980	1981	1982

BY 0.0166 0.0166 0.0166

0.0166

EXHIBIT 4 (Continued)

REPORT SECTION

SENSITIVITY ANALYSIS

ANALYSIS YEAR IS 2 = 1980

TO CHANGE CASH RETURN BEFORE TAXES BY 1000. CHANGE ANY ONE OF THE FOLLOWING

CASH OUTLAYS		1979	1980	1981	1982
REAL ESTATE TAXES	BY	0.0415	0.0415	0.0415	0.0415
TOTAL EXPENSES	BY	0.0514	0.0514	0.0514	0.0514
FIXED EXPENSES	BY	0.0514	0.0514	0.0514	0.0514
VARIABLE EXPENSES	BY	0.0000	0.0000	0.0000	0.0000
TOTAL INTEREST PHTS.	BY	0.0082	0.0082	0.0083	0.0084
TOTAL PRINCIPAL PHTS.	BY	0.0960	0.0872	0.0792	0.0720
WORKING CAPITAL LOAN	BY	0.0000	0.0000	0.0000	0.0000
GROSS INCOME	BY	0.0045	0.0045	0.0045	0.0045
FIXED INCOME	Βr	0.0045	0.0045	0.0045	0.0045
VARIABLE INCOME	BY	0.0000	0.0000	0.0000	0.0000
COMPONENTS					
2222222		1979	1980	1981	1982
INITIAL INVESTMENT	BY	0.0415	0.0415	0.0415	0.0415
	BY	0.2015	0.2015	0.2015	0.2015
LAND IHPROVEHENTS	BY	0.2013	0.0468	0.2013	0.0468
ENTREPRENEURIAL SKIL	BY	-0.4466	-0.4466	-0.4466	-0.4466
ENIKERKENEURIHL SKIL	Đi	-0.4400	-0.4700	-0.770	-V.7700
MUDICACCC					
MORTGAGES		1979	1980	1981	1982
FIRST MORTGAGE	BY	0.0075	0.0075	0.0075	0.0075

- 3. Conventional wisdom of the lender is that the pain of loss for the equity position will be sufficient to generate payment in almost all events or that the guarantees will be adequate to reduce minimum loss to zero.
- 4. Net income ratio:

Purchase price + additional cost - Overall rate or cap rate should reveal danger of reversed leverage

- 5. The fallacy of such first level, oversimplified regulatory ratios is that
 value is the same as cash, that paper capital
 is as significant as cash available to meet
 the monthly payment, and that investor
 incentives are found solely or primarily
 below the net income level.
- I. Second level ratios begin to analyze and measure the relationship of specific assumptions one to another and in a way which provides relative measures of incentive, importance, and contribution to financial insecurity.
 - Construction loan to marginal cash cost of the borrower is such a balance sheet test ratio. The increment in risk of maximum loss for the borrower is the increase in his maximum potential loss as a result of financing the project.
 - 2. Debt cover ratio:

Net operating income Debt service

3. Default ratio:

Operating expenses + real estate taxes + short term debt + interest + principal payments Gross rent 4. Payback ratio:

Cumulative spendable cash
Original budget - original debt
+ amount of personal guarantees

- 5. Spendable cash = distributable cash from operations + refinancing surplus + tax savings to other income + cash profits for services rendered.
- 6. All of these second level ratios assume a revenue stream called effective gross rent will simply be reallocated by the natural heirarchy of the income statement. That premise involves the major assumption of any enterprise, i.e., there are an adequate number of customers who prefer and who can afford the enterprise product.
- J. Third level risk ratios are those which link the space-time product to the money-time reflections in balance sheets and P & L statements. These ratios require some primary research.
 - 1. Building efficiency ratio:

Gross leasable area Usable area
Gross building area or Gross leasable area

or

<u>Gross leasable area</u>
Total site area or <u>Rentable area</u>
Usable area

or

<u>Building surface area</u> Gross leasable area

2. Vacancy ratio:

1-bedroom apartments x 20 x 50% turnover x 1 month lost x \$200/mo.

20 x 50% x 1 x 200 20 x 12 x 200

 $\frac{2000}{48000} = \frac{1}{24} = 4.2\%$

3. Absorption rate:

<u>Units sold or leased per period</u>
Total supply of units available
for sale or lease

4. Capture rate:

Units in specific project sold or leased per period Total competitive units sold or leased per period

- 5. Sensitivity models or tables permit measurement of a change in one variable as compared to all other variables to establish the parameters of tolerance or to identify the most useful areas for further modification of the financial structure.
- 6. A significant weakness of second level ratios is the fact that they do not deal with time or the opportunity costs of money for comparison of investments with alternative patterns of cash outlays and receipts.
- K. Third level ratios modify comparisons for the influence of time, between one period and another or for cumulative periods of time. Prospective rates of return compare one time period with another while retrospective rates are concerned

with cumulative results. Probability models display the frequency distribution over time of alternative outcomes when certain variables are permitted to vary according to some pattern and parameter.

Prospective rates

1. Return on net worth before tax:

<u>Cash throw-off + change in net worth</u>
Net worth at end of previous period

2. Return on net worth after tax:

Spendable cash + (change in net worth - change in taxes on sale or transfer)
Net worth at end of previous period - taxes on sale or transfer

3. Cash on cash before taxes:

4. Cash on cash after tax:

<u>Distributable cash + tax savings to other income</u>

Total cash budget less original debt

Retrospective rates

- 5. Internal rate of return is that rate which makes the net present value difference between the present value of outlays and the present value of receipts equal to zero.
- 6. The modified internal rate of return (weighted average portfolio return) is the internal rate of return which makes the net present value difference of the outlays discounted at the opportunity cost of money and the cumulative receipts compounded at the reinvestment rate equal to zero. (The only difference between MIRR and the financial management rate of return FMRR is that the latter uses an average cost of

capital rather than recognizing short-term financing of deficit operations.)

7. Profitability index:

Net present value of return Total cost of acquisition

- 8. Net cumulative cash after taxes less original investment with and without resale proceeds after taxes on sale or transfer.
- L. Sensitivity analysis involves fine tuning of controllable variables and testing of tolerance of project for variance or surprise. There are many computer systems which permit testing of physical plan (Exhibit 5) or tax and finance implications (Exhibit 6).
- M. New attempts to create real estate indexes of performance by property type over time are now experimental.
 - 1. Problems in accounting standardization.
 - 2. Problems in accounting/appraisal interface.
 - 3. Problems in appraisal standard practice.

SHOPPING CENTER CASE STUDY

DATE: 3/11/ 79 BLDG: 1 RUN: 1

GROSS SQUARE FEET IN BUILDING: 60242.
BUILDING EFFICIENCY: 100.0 PCT
NET LEASEABLE SQUARE FOOTAGE: 60242.

LAND AND CONSTRUCTION COST: \$ 1766571.
LOAN TO COST RATIO : 75.0 PCT
ORIGINAL LOAN ANOUNT : \$ 1324929.

EQUITY REQUIREHENT : \$ 441643.

PERMANENT INTEREST RATE : 9.625 PCT TERM OF LOAN 27. YEARS

ANNUAL DEBT SERVICE : \$ 137885.

ANNUAL DOLLARS

GROSS INCOME: 60242. SQ FT AT \$ 3.67

LESS: VACANCY OF 3.77 PCT

GROSS EFFECTIVE INCOME

212753.

OPERATING EXPENSES: 60242. SQ FT AT \$ 0.77

46386.

NET OPERATING INCOME 166367.

DEBT SERVICE (10.41 PCT CONSTANT) 137885.

PRO FORMA CASH FLOW 28482.

RETURN ON EQUITY 6.45 PERCENT

DEBT SERVICE COVERAGE: 1.207

DEFAULT RATIO: 83.35 PERCENT

PROGRAM STOP AT 17870

USED 17.97 UNITS
/COST OFF

ACCRUED CHARGES SINCE SIGNIN

3.82 COMPUTER
6.35 CONNECT
5.70 CHARACTERS

\$ 15.87 TOTAL

EFFICIENCY = 89.8

00028_09 CRU 0000.46 TCH 0041.46 KC

OFF AT 16:59CST 03/12/79

INPUT DATA LISTING

BUILDING ID 1 DATE 3 11 79

TITLES

TITLES

SHOPPING CENTER CASE STUDY

SQ FT IN TRACT 255698.00

RUN NO. 1

CONSTRUCTION-SHELL O. SQ FT AT \$ 0. \$ CONSTRUCTION-INTERIOR O. SQ FT AT \$ 0. \$ TOTAL BUILDING COST 60242. SQ FT AT \$ 19.69 \$ GRADE PARKING 654.55SQFT 275.00SPACES @ \$ 0.50

STRUCT. PKING O. SQFT O. SPACES & \$ O.

LANDSCAPING 0. FF AND E 0.

RESTAURANT 74538.00

FEES

ARCHITECTURE 0.
ENGINEERING 0.
LOAN FEES 20000.00
CLOSING COSTS 0.
TAXES AND INS 0.
OPTIONAL TITLE OPTIONAL EXPENSES
LEASING FEES 10640.00

CONSTRUCTION INTERIM RATE 10.000 PCT
CONSTRUCTION PERIOD 8 HONTHS
LAND INTERIM RATE IS 0. PCT
255698.00 SQUARE FEET AT \$ 1.30

INTERIH RATE O. PCT FOR O. HONTHS

COST PER HONTH O. FOR O. HONTHS

OTHER LAND COSTS 0.

....

CONSTRUCTION COST ESTIMATE

SHOPPING CENTER CASE STUDY

DATE: 3/11/ 79 BLDG: 1 RUN: 1 CONSTRUCTION COSTS	DOLLARS
TOTAL BUILDING COST 60242. SQ FT AT \$ 19.69 \$ GRADE PARKING 275. SPACES AT \$ 327. RESTAURANT	1186165. 90001. 74538.
SUBTOTAL CONSTRUCTION	1350704.
LOAN ORIGINATION FEES AT 1.5 PCT LEASING FEES AT 0.8 PCT	20000.
CUMULATIVE SUBTOTAL	1381344.
INTERIN INTEREST-CONSTRUCTION \$ 1381344. AT 10.0 PCT FOR 8 HONTHS COMPOUNDED	52820.
TOTAL CONSTRUCTION COSTS	1434164.
LAND COSTS	
255698. SQ FT AT \$ 1.30 Interin interest-land	332407.
TOTAL LAND COST	332407.
TOTAL LAND AND CONSTRUCTION COST	1766571.

PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

FIXED PAR	AMETERS	PAGE	1 OF 12
SITE :	255698. SQUARE FEET	DATE	3-11- 79
BUILDING :	60242. SQUARE FEET	BLDG	1
EFFICIENCY:	100.00 PCT(60242. SQ FT)		
LOAN RATIO:	75.00 PCT OF \$ 1766571.		
LOAN :	\$ 1324929.		
EQUITY :	\$ 441643.		
FINANCING :	27. YEARS 9.625 PCT		
OTR INCONE:	\$ 0. ANNUALLY	RUN	1
EXPENSES :	\$ 0.77 PER SQ FT		

ANNUAL CASH FLOWS

VACANCY ALLOWANCE

		3.77 PCT		5.00 PCT	
TAL RATES AL \$/SQ FT				******	
\$ 3.25	5641.	4134.	3683.	1726.	-232.
\$ 3.50	20250.	18626.	18142.	16033.	13925.
\$ 3.67	30184.	28482.	27973.	25762.	23551.
\$ 3.75	34859.	33119.	32600.	30341.	28081.
\$ 4.00	49467.	47612.	47058.	44648.	42238.
	BREAKEV	EN RENTAL	RATES		
		VACA	NCY ALLOWA	NCE	
		3.77 PCT		5.00 PCT	6.00 PCT
 TAL RATES AL \$/SQ FT					
	3.15	3.18	3.19	3.22	3.25

FIXED PARAMETERS

RENTAL RATES ANNUAL \$/SQ FT PAGE 2 0F 12

PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

BUI EFF LOA LOA EQU FIN	LDING : ICIENCY: N RATIO: N : ITY : ANCING :	255698. SQUAR 60242. SQUAR 100.00 PCT OF 75.00 PCT OF \$ 1324929. \$ 441643. 27. YEARS 9 3.77 PCT OF \$ 0. ANI	RE FEET 60242. SQ \$ 176657	BLDG FT) 1.		
		ANNUA	L CASH FLO	us		
		AN	NUAL EXPEN	SE RATES PE	ER SQ FT	
		\$ 0.70	\$ 0.77	\$ 0.80	\$ 0.90	\$ 1.00
	ITAL RATES IAL \$/SQ FT					~
\$	3.25	8351.	4134.	2326.	-3698.	-9722.
\$	3.50	22843.	18626.	16819.	10795.	4771.
\$	3.67	32698.	28482.	26674.	20650.	14626.
\$	3.75	37336.	33119.	31312.	25288.	19264.
\$	4.00	51829.	47612.	45805.	39780.	33756.
		BREAKEVE	N RENTAL R	RATES		
		AN	NUAL EXPEN	ISE RATES P	ER SQ FT	
		\$ 0.70		\$ 0.80		\$ 1.00

3.11 3.18

3.21

3.31

3.42

PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

FIXED PAR	AHETERS	PAGE	3 OF 12
SITE : BUILDING : EFFICIENCY: LOAN RATIO: LOAN :	255698. SQUARE FEET 60242. SQUARE FEET 100.00 PCT(60242. SQ FT) 75.00 PCT OF \$ 1766571. \$ 1324929.	DATE BLDG	3-11- 79 1
VACANCY : OTR INCOME: EXPENSES :	\$ 441643. 3.77 PCT OF LEASEABLE \$ 0. ANNUALLY \$ 0.77 PER SQ FT	RUN	1

ANNUAL CASH FLOWS

FINANCING PARAMETERS

27. YEARS 27. YEARS 27. YEARS 30. YEARS 25. YEARS 9.62 PCT 9.75 PCT 10.00 PCT 10.25 PCT 9.50 PCT

ITAL RATES IAL \$/SQ FT	******			*******		
\$ 3.25	4134.	2716.	-135.	-453.	3109.	
\$ 3.50	18626.	17208.	14358.	14039.	17601.	
\$ 3.67	28482.	27063.	24213.	23894.	27456.	
\$ 3.75	33119.	31701.	28851.	28532.	32094.	
\$ 4.00	47612.	46194.	43343.	43025.	46587.	

BREAKEVEN RENTAL RATES

FINANCING PARAMETERS

27. YEARS 27. YEARS 27. YEARS 30. YEARS 25. YEARS 9.62 PCT 9.75 PCT 10.00 PCT 10.25 PCT 9.50 PCT

RENTAL RATES

RENTAL RATES
ANNUAL \$/SQ FT

3.18 3.20 3.25 3.26 3.20

PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

	SHOPPING CENTER CASE STUDY		
FIXED PARA	AMETERS	PAGE"	4 OF 12
BUILDING: LOAN RATIO: LOAN: EQUITY: FINANCING:	255698. SQUARE FEET 60242. SQUARE FEET 75.00 PCT OF \$ 1766571. \$ 1324929. \$ 441643. 27. YEARS 9.625 PCT 3.77 PCT OF LEASEABLE	DATE BLDG	3-11- 79 1
OTR INCONE: EXPENSES :		RUN	1
	ANNUAL CASH FLOWS		
	BUILDING EFFICIENCY	(PCT OF	GROSS)
	99.60 PCT100.00 PCT102.92 P	CT106.24	PCT109.56 PCT

70.00 PCT 72.00 PCT 75.00 PCT 78.00 PCT 80.00 PCT

LOAN TO COST RATIO

TAL RATES AL \$/S@ FT					
\$ 3.25	17708.	12993.	3563.	4134.	8278.
\$ 3.50	33586.	28390.	17998.	18626.	23194.
\$ 3.67	44383.	38860.	27813.	28482.	33336.
\$ 3.75	49464.	43787.	32432.	33119.	38109.
\$ 4.00	65342.	59184.	46867.	47612.	53025.

BREAKEVEN RENTAL RATES

BUILDING EFFICIENCY (PCT OF GROSS)

99.60 PCT100.00 PCT102.92 PCT106.24 PCT109.56 PCT LOAN TO COST RATIO

70.00 PCT 72.00 PCT 75.00 PCT 78.00 PCT 80.00 PCT

RENTAL RATES
ANNUAL \$/SQ FT

2.97 3.04 3.19 3.18 3.11

PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

FIXED PAR	RAHETERS	PAGE	5 OF 12
SITE :	255698. SQUARE FEET	DATE	3-11- 79
BUILDING :	60242. SQUARE FEET	BLDG	1
EFFICIENCY:	100.00 PCT(60242. SQ FT)		
FINANCING :	27. YEARS 9.625 PCT		
VACANCY :	3.77 PCT OF LEASEABLE		
OTR INCOME:	\$ 0. ANNUALLY	RUN	1
EXPENSES :	\$ 0.77 PER SQ FT		•

ANNUAL CASH FLOWS

LOAN TO COST RATIO

	70.00 PCT	72.00 PCT	75.00 PCT	78.00 PCT	80.00 PCT
TAL RATES AL \$/SQ FT					
\$ 3.25	13326.	9649.	4134.	-1382.	-5059.
\$ 3.50	27819.	24142.	18626.	13111.	9434.
\$ 3.67	37674.	33997.	28482.	22966.	19289.
\$ 3.75	42312.	38635.	33119.	27604.	23927.
\$ 4.00	56804.	53127.	47612.	42096.	38420.

BREAKEVEN RENTAL RATES

LOAN TO COST RATIO

3.02 3.08 3.18 3.27 3.34

	70.00 PCT	72.00 PCT	75.00 PCT	78.00 PCT	80.00 PCT
RENTAL RATES ANNUAL \$/SQ FT					

SHOPPING CENTER CASE STUDY

FIXED PAR	AHETERS	PAGE	6 OF 12
	60242. SQUARE FEET	DATE BLDG	3-11- 79
LOAN RATIO:	100.00 PCT(60242. SQ FT) 75.00 PCT OF \$ 1766571. \$ 1324929.		
	\$ 441643. \$ 3.67 PER SQ FT \$ 0. ANNUALLY \$ 0.77 PER SQ FT	RUN	1

ANNUAL CASH FLOWS

FINANCING PARAMETERS

			10.00 PCT		9.50 PCT
VACANCY RATES					
3.00 PCT	30184.	28766.	25915.	25597.	29159.
3.77 PCT	28482.	27063.	24213.	23894.	27456.
4.00 PCT	27973.	26555.	23704.	23384.	26948.
5.00 PCT	25762.	24344.	21494.	21175.	24737.
6.00 PCT	23551.	22133.	19283.	18964.	22526.

BREAKEVEN RENTAL RATES

FINANCING PARAMETERS

			27. YEARS 10.00 PCT		25. YEARS 9.50 PCT
VACANCY RATES					
3.00 PCT	3.15	3.18	3.23	3.23	3.17
3.77 PCT	3.18	3.20	3.25	3.26	3.20
4.00 PCT	3.19	3.21	3.26	3.27	3.20
5.00 PCT	3.22	3.24	3.29	3.30	3.24
6.00 PET	3.25	3.28	3.33	3.34	3.27

PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

FIXED PARAMETERS	PAGE	7 OF 12
SITE : 255698. SQUARE FEET	DATE	3-11- 79
BUILDING : 60242. SQUARE FEET	BLDG	1
EFFICIENCY: 100.00 PCT(- 60242. SQ FT)		
LOAN RATIO: 75.00 PCT OF \$ 1766571.		
LOAN : \$ 1324929.		
EQUITY : \$ 441643.		
REVENUE : \$ 3.67 PER SQ FT		
VACANCY : 3.77 PCT OF LEASEABLE		
OTR INCOME: \$ 0. ANNUALLY	RUN	1

ANNUAL CASH FLOWS

FINANCING PARAMETERS

27. YEARS 27. YEARS 27. YEARS 30. YEARS 25. YEARS 9.62 PCT 9.75 PCT 10.00 PCT 10.25 PCT 9.50 PCT

 NSE RATES AL \$/SQ FT			******		
\$ 0.70	32698.	31280.	28430.	28111.	31673.
\$ 0.77	28482.	27063.	24213.	23894.	27456.
\$ 0.80	26674.	25256.	22406.	22087.	25649.
\$ 0.90	20650.	19232.	16381.	16063.	19625.
\$ 1.00	14626.	13208.	10357.	10039.	13601.

BREAKEVEN RENTAL RATES

FINANCING PARAMETERS

27. YEARS 27. YEARS 27. YEARS 30. YEARS 25. YEARS 9.62 PCT 9.75 PCT 10.00 PCT 10.25 PCT 9.50 PCT

	NSE RATES AL \$/SQ FT					
\$	0.70	3.11	3.13	3.18	3.19	3.12
\$	0.77	3.18	3.20	3.25	3.26	3.20
\$	0.80	3.21	3.23	3.28	3.29	3.23
\$	0.90	3.31	3.34	3.39	3.39	3.33
•	1.00	3.42	3.44	3.49	3.50	3.44

FRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUBY

FIXED PARA	METERS	PAGE	8 OF 12
SITE :	253698. SQUARE FEET 60242. SQUARE FEET	DATE BLDG	3-11- 79
LOAN RATIO:	75.00 PCT OF \$ 1766571.	72.7	·
EQUITY :	\$ 441643. 27. YEARS 9.625 FCT		
FINANCING: REVENUE:	\$ 3.67 PER SQ FT		
VACANCY : OTR INCOME:	3.77 PCT OF LEASEABLE 9 O. ANNUALLY	RUN	ì

ANNUAL CASH FLOWS

BUILDING EFFICIENCY (PCT OF GROSS)

99.60 PCT100.00 PCT102.92 PCT106.24 PCT109.56 PCT LOAM TO COST RATIO

		70.00 PCT	72.00 PCT	75.00 PCT	78.00 PET	80.00 PCT
	NSE RATES AL \$/SQ FT					
5	0.70	49003.	43340.	32013.	32498.	37676.
	0.77	44707	04887	22813.	28482.	33336.

ANNU	AL \$/SQ FT					
\$	0.70	49003.	43340.	32013.	32498.	37676.
\$	0.77	44383.	38860.	27813.	28482.	33336.
\$	0.80	42403.	36940.	26013.	26674.	31476.
\$	0.90	35803.	30540.	20013.	20650.	25276.
\$	1.00	29203.	24140.	14013.	14626.	19076.

BREAKEVEN RENTAL RATES

BUILDING EFFICIENCY (PCT OF GROSS)

99.60 PCT100.00 PCT102.92 PCT106.24 PCT109.56 PCT LOAN TO COST RATIO

70.00 PCT	72.00 PCT	75.00 PCT	78.00 PCT	80.90 PCT

	NSE RATES AL \$/S@ FT					
\$	0.70	2.90	2.97	3.12	3.11	3.04
\$	0.77	2.97	3.04	3.19	3.18	3.11
\$	0.80	3.00	3.07	3.22	3.21	3.14
\$	0.90	3.11	3.17	3.32	3.31	3.25
5	1.00	3.21	3.28	3.43	3.42	3.35

EXHIBIT 5 (Continued) PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

FIXED PAR	PAGE	9 OF 12	
	255698. SQUARE FEET	DATE	3-11- 79
BUILDING :	60242. SQUARE FEET	BLDG	1
EFFICIENCY:	100.00 PCT(60242. SQ FT)		
FINANCING :	27. YEARS 9.625 PCT		
	\$ 3.67 PER SQ FT		
VACANCY :	3.77 PCT OF LEASEABLE		
OTR INCOME:	\$ 0. ANNUALLY	RUN	1

ANNUAL CASH FLOWS

LOAN TO COST RATIO

	70.00 PCT	72.00 PCT	75.00 PCT	78.00 PCT	80.00 PCT
 NSE RATES AL \$/SQ FT					
\$ 0.70	41891.	38214.	32698.	27183.	23506.
\$ 0.77	37674.	33997.	28482.	22966.	19289.
\$ 0.80	35867.	32190.	26674.	21159.	17482.
\$ 0.90	29842.	26165.	20650.	15135.	11458.
\$ 1.00	23818.	20141.	14626.	9110.	5434.

BREAKEVEN RENTAL RATES

LOAN TO COST RATIO

		70.00 PCT	72.00 PCT	75.00 PCT	78.00 PCT	30.00 PCT
_	NSE RATES AL \$/SQ FT					
\$	0.70	2.95	3.01	3.11	3.20	3.26
\$	0.77	3.02	3.08	3.18	3.27	3.34
\$	0.80	3.05	3.11	3.21	3.31	3.37
\$	0.90	3.16	3.22	3.31	3.41	3.47
\$	1.00	3.26	3.32	3.42	3.51	3.58

PRO FORMA CASH FLOW TABLE

SHOPPING CENTER CASE STUDY

FIXED PAR	AMETERS	PAGE	10 OF 12
	255698. SQUARE FEET	DATE	3-11- 79
BUILDING :	60242. SQUARE FEET	BLDG	1
EFFICIENCY:	100.00 PCT(60242. SQ FT)		•
REVENUE :	\$ 3.67 PER SQ FT		
VACANCY :	3.77 PCT OF LEASEABLE		
	\$ 0. ANNUALLY	RUN	1
EXPENSES :	\$ 0.77 PER SQ FT		·

ANNUAL CASH FLOWS

LOAN TO COST RATIO

		70.00 PCT	72.00 PCT	75.00 PCT	78.00 PCT	80.00 PCT
FINA	ANCING			4845555		
27.YR	9.62PCT	37674.	33997.	28482.	22966.	19289.
27.YR	9.75PCT	36350.	32636.	27063.	21491.	17777.
27.YR	10.00PCT	33690.	29899.	24213.	18527.	14736.
30.YR	10.25PCT	33393.	29593.	23894.	18195.	14396.
25.YR	9.50PCT	36717.	33013.	27456.	21900.	18196.

BREAKEVEN RENTAL RATES

LOAN TO COST RATIO

			70.00 PCT	72.00 PCT	75.00 PCT	78.00 PCT	80.00 PCT
FIN	ANCING		٠				
27.YR	9.62	PCT	3.02	3.08	3.18	3 3.27	3.34
27.YR	9.75	PCT	3.04	3.11	3.20	3.30	3.36
27.YR	10.00	PCT	3.09	3.15	3.25	3.35	3.42
30.YR	10.25	PCT	3.09	3.16	3.26	3.36	3.42
25.YR	9.50	PCT	3.04	3.10	3.20	3.29	3.36

SHOPPING CENTER CASE STUDY

FIXED PAR	ANETERS	PAGE	11 OF 12
SITE : BUILDING : EFFICIENCY: LOAN RATIO:	255698. SQUARE FEET 60242. SQUARE FEET 100.00 PCT OF GROSS 75.00 PCT OF \$ 1766571.	DATE BLDG	3-11- 79 1
REVENUE : VACANCY :	\$ 441643. 27. YEARS 9.625 PCT \$ 3.67 PER SQ FT 3.77 PCT OF LEASEABLE	Bana	
EXPENSES : CONSTRUCTION		RUN	1

EFFECT OF SELECTED CHANGES IN PARAMETERS PARAMETER CHANGE INCREASE IN EFFECT ON CASH FLOW CONSTRUCTION

DECREASE	CONSTRUCTION COST \$ 100,000 \$	11050.	\$ -106179.
DECREASE	CONSTRUCTION \$ 1.00 PER SQ FT	6657.	-63964.
INCREASE	CONSTRUCTION PERIOD 1 HONTH	-1198.	11511.
DECREASE	CONST AND LAND INTERIN 1 PCT	590.	-5673.
DECREASE	TOTAL LAND COST BY \$ 332407.	34594.	
INCREASE	BUILDING EFFICIENCY 1 PCT	1664.	
INCREASE	RENTAL RATE \$.10 PER SQ FT	5797.	
DECREASE	VACANCY RATE 1PCT	2211.	
DECREASE	OPERATING RATE \$.10 PER SQ FT	6024.	
DECREASE	PERHANENT RATE .25PCT	2821.	
DECREASE	PERHANENT LOAN TERM BY 1 YEAR	-1136.	
DECREASE	PERHANENT LOAN TERH BY 5 YEARS	-7252.	
DECREASE	THE LOAN RATIO BY 5 PERCENT	9192.	

EQUIVALENT EFFECT TO YIELD A \$ 5000. INCREASE IN ANNUAL CASH FLOW

DECREASE	CONSTRUCTION COSTS BY	\$	45249.
DECREASE	CONSTRUCTION COST BY	\$	0.25 PER SQ FT
DECREASE	LAND COST (NO INTERIN)	BY	\$ 48045.
DECREASE	CONSTRUCTION PERIOD BY		4.2 MONTHS
DECREASE	INTERIM INTEREST BY		8.47 PCT
INCREASE	BUILDING EFFICIENCY BY		3.01 PCT
INCREASE	RENT RATE BY	\$	0.09 PER SQ FT
DECREASE	VACANCY BY		2.26 PCT
DECREASE	EXPENSE RATE BY	\$	0.08 PER SQ FT
DECREASE	PERHANENT RATE BY		0.44 PCT
INCREASE	PERHANENT LOAN TERM BY		3.4 YEARS
DECREASE	LOAN RATIO BY		2.7 PERCENT

VALTEST

A DEMONSTRATION PACKET

PREPARED BY
LANDMARK RESEARCH, INC.
MADISON, WISCONSIN

PREPARED FOR THE REAL ESTATE ANALYSTS NORTHSTAR USERS GROUP

SEPTEMBER 24 AND 25, 1982 COSTA MESA, CALIFORNIA

VALTEST

DEMONSTRATION 1

INPUT ASSUMPTIONS

- 1. ENTER PROJECT NAME ? J
- 2. ENTER PROJECTION PERIOD ? 5
- 3. DO YOU WANT TO ENTER EFFECTIVE GROSS REVENUE INSTEAD OF NOI? N
 TO REPEAT PREVIOUS YEAR'S NOI/EGR FOR BAL OF PROJECTION ENTER 0
 - N.D.I. YEAR 1? 5000
 - N.D.I. YEAR 2? 5000
 - N.O.I. YEAR 3? 6000
 - N.D.I. YEAR 47 6000
 - N.O.I. YEAR 5? 7000
- 4. ACQUISITION COST: ? 50000
- 5. DO YOU WANT TO USE STANDARD FINANCING? Y OR N?Y
 HTG. RATIO OR AMOUNT, INT., TERM, NO PAY/YR ? .8. .12, 25. 12
- 6. ENTER RATIO OF IMP #1/TOTAL VALUE, LIFE OF IMP #1? .8. 15 IS THERE A SECOND IMPROVEMENT? Y OR N? N
- 7. DEPRECIATION METHOD, IMPROVEMENT #1 ? 2
 - ENTER B.B. %: ? 175
 - IS PROPERTY SUBSIDIZED HOUSING ? Y OR N ?N
 - IS PROPERTY RESIDENTIAL? Y OR Nº Y
- 8. IS OWNER A TAXABLE CORPORATION? Y OR N ?Y

CORPORATE FEDERAL ORDINARY TAX RATE COULD BE :

- 17% 46% (1978 LAW, EFFECTIVE 1979)
- 16% 46% (1981 LAW, EFFECTIVE 1982)
- 15% 46% (1981 LAW. EFFECTIVE 1983 & THEREAFTER)

MAXINUM CORPORATE CAPITAL GAIN ALTERNATIVE TAX RATE IS 28%

(PLUS STATE RATE)

ENTER:

- 1) EFFECTIVE ORDINARY RATE 2) EFFECTIVE ORDINARY RATE (YEAR OF SALE)
- ? .46. .46
- 9. RESALE PRICE (NET OF SALE COSTS) ? 60000
- 10. IS THERE LENDER PARTICIPATION ?N
- 11. ENTER OWNER'S AFTER TAX REINVESTMENT RATE (2)? 9
- 12. ENTER OWNER'S AFTER TAX OFFORTUNITY COST OF EQUITY FUNDS (%)? 9

EXHIBIT 6 (Continued) DEMONSTRATION 1 (Cont.)

AFTER TAX CASH FLOW PROJECTION DATE 9/14/82

DATA SUNNARY ***********

ACQUISTN COST: \$50.000. MTG. AMT.: \$40,000. NOI 1ST YR: \$5.000. MTG. INT.: 127 ORG. EQUITY: \$10,000. MTG. TERM: 25. YRS CTO 1ST YEAR: \$-55. DEBT SERVICE 1ST YEAR: \$5,055. MTG. CONST.: .1263869 IMP. #1 VALUE: \$40,000. IMP. #1 LIFE: 15. INC. TX RATE: 46% SALE YR RATE: 46% DUNER: CORPORATION

DEFRECIATION IMPROVEMENT #1: 175% B.B.

RESIDENTIAL PROPERTY

LENDER PARTICIPATION: CASH THROW-OFF: NONE REVERSION: NONE

BY A CONTRIBUTION FROM EQUITY IN THAT PERIOD

\$-5999.

\$9722.

NO REPRESENTATION IS MADE THAT THE ASSUMPTIONS PROVIDED BY JEAN ARE PROPER OR THAT THE CURRENT TAX ESTIMATES USED IN THIS PROJECTION WILL BE ACCEPTABLE TO TAXING AUTHORITIES. NO ESTIMATE HAS BEEN HADE OF MINIHUM PREFERENCE TAX. CAPITAL LOSSES IN YEAR OF SALE ARE TREATED AS ORDINARY LOSSES (SECTION 1231 PROPERTY) AND ARE CREDITED AGAINST TAXES PAID AT ORDINARY RATE AT THE TIME OF SALE. FOR THE PURPOSE OF THE MODIFIED INTERNAL RATE OF RETURN (N.I.R.R.) CALCULATION, NEGATIVE CASH IN ANY ONE PERIOD IS COVERED

5.	7000.	4620.	2541.	-462.	-214.	2159.
4.	6000.	4669.	3216.	-1887.	-869.	1814.
3.	6000.	4713.	3641.	-2355.	-1084.	2029.
2.	5000.	4751.	4122.	-3874.	-1783.	1728.
1.	5000.	4785.	4667.	-4453.	-2049.	1994.
YEAR	NOI	LENDERS %	DEP	INCOME	TAX	CASH FLOU
		MTG INT &	TAX	TAXABLE	INCOME	AFTER TAX

\$29000. \$23539. \$18488. \$-13031.

DEMONSTRATION 1 (Cont.)

RESALE PRICE:	\$60,000.	151	YR B4 TAX EQ DIV:	55482
LESS MORTGAGE BALANCE:	\$38,261.		DEBT COVER RATIO:	
PROCEEDS BEFORE TAXES:	\$21,739.			
LESS LENDER'S X:	\$0.			
NET SALES PROCEEDS				
BEFORE TAXES:	\$21,739.			
RESALE PRICE:	\$60,000.			
LESS LENDER'S %:	\$0.			
NET RESALE PRICE:	\$60,000.			
LESS BASIS:	\$31,512.			
TOTAL GAIN:	\$28,483.			
EXCESS DEPRECIATION:	\$5,155.			
CAPITAL GAIN:	\$23,333.			
ORDINARY GAIN:	\$5,155.			
	222222222			
74V 0V 0557W45V 047V	40. 774			
TAX DN ORDINARY GAIN:	\$2,371.			
TAX ON CAPITAL GAIN:	\$6,533.			
PLUS MORTGAGE BAL:	\$38,261.			
TOTAL DEDUCTIONS FROM	***			
NET RESALE PRICE:	\$47,166.			
	:			
NET SALES PROCEEDS				
AFTER TAX:	\$12,834.			
	•			

IF PURCHASED AS ABOVE, HELD 5 YEARS & SOLD FOR \$60,000.
THE MODIFIED I.R.R. BEFORE TAXES IS 20.6487% AND AFTER TAXES IS 19.5605% ASSUMING AN AFTER TAX REINVESTMENT RATE OF 9%, AND OPPORTUNITY COST OF 9%

=========

DEMONSTRATION 1 (Cont.)

HORTGAGE ANALYSIS

		MORT	MORT	DEBT		HTG.
YEAR	ТОИ	INT.	AMORT	SERV	DCR	BAL.
1.	5000.	4785.	270.	5055.	.989	39730.
2.	5000.	4751.	304.	5055.	.989	39426.
3.	6000.	4713.	343.	5055.	1.187	39083.
4.	6000.	4669.	386.	5055.	1.187	38697.
5.	7000.	4620.	435.	5055.	1.385	38261.
AVG	\$5,800.				1.147	

DISTRIBUTION OF CASH THROW-OFF

J

	CASH THROW-OFF	CASH THROW-OFF	
YEAR	TOTAL	TO EQUITY	TO LENDER
1.	-55.	-55.	0.
2.	-55.	-55.	0.
3.	945.	945.	0.
4.	945.	945.	0.
5.	1945.	1945.	0.
	3723.	3723.	0.
RESALE !	PRICE:	\$60,000.	
LESS NO	RTGAGE BALANCE:	\$38,261.	
PROCEED	B BEFORE TAXES:	\$21,739.	
LESS LE	NDER'S X:	\$0.	
NET SAL	ES PROCEEDS		
BEFORE	TAXES:	\$21,739.	
		1========	

CASH THROW-DFF = 0% REVERSION = 0%

DEMONSTRATION 1 (Cont.)

DEPRECIATION SCHEDULE

J

IMPROVEMENT # 1 175% D.B. RESIDENTIAL

YEAR	TAX DEP.	S.L. DEP.	EXCESS DEP	BALANCE
1.	4666.7	2666.7	2000.0	35333.3
2.	4122.2	2666.7	1455.6	31211.1
3.	3641.3	2666.7	974.6	27569.8
4.	3216.5	2666.7	549.8	24353.3
τ.	2841.2	2666.7	174.6	21512.1

	=======	=======	=======
TOTAL	18487.9	13333.3	5154.6

EQUITY ANALYSIS

BEFORE TAX EQUITY DIVIDEND

(ETURN	CASH RE		YR END		
CUR EQ	ORG EQ C	ANOUNT	EQUITY	NOI	YR
0054	0055	\$-55.	\$10,325.	\$5,000.	1.
0052	0055	-55.	10,685.	5,000.	2.
.0856	.0945 .	945.	11,028.	•	
.0827	.0745	945.	11,414.	•	
.1641	.1945	1,945.	•	- •	
	.0945	945. 945.	•	6,000. 6,000. 7,000.	2. 3. 4. 5.

ORIGINAL EQUITY: \$ 10000

VALTEST'

DEMONSTRATION 2

INPUT ASSUMPTIONS

- 1. ENTER PROJECT NAME ? CARDINAL-2
- 2. ENTER PROJECTION PERIOD ? 5
- 3. DO YOU WANT TO ENTER EFFECTIVE GROSS REVENUE INSTEAD OF NOI? N TO REPEAT PREVIOUS YEAR'S NOI/EGR FOR BAL OF PROJECTION ENTER O

N.B.I. YEAR 17 81745

N.O.I. YEAR 2? 81920

N.O.I. YEAR 37 98910

N.O.I. YEAR 47 108800

N.O.I. YEAR 57 119680

- 4. ACQUISITION COST: ? 1007000
- 5. DO YOU WANT TO USE STANDARD FINANCING? Y OR N?Y
 HTG. RATIO OR AMOUNT, INT., TERM, NO PAY/YR ? 647000. .15236, 30, 12
- 6. ENTER RATIO OF IMP #1/TOTAL VALUE, LIFE OF IMP #1? *149, 15 IS THERE A SECOND IMPROVEMENT? Y OR N? Y ENTER RATIO OF IMP #2/TOTAL VALUE, LIFE OF IMP #2? .781, 15 ENTER REHABILITATION TAX CREDIT FOR IMP #2: 196625 IS STRUCTURE A CERTIFIED HISTORICAL LANDMARK? Y OR N?Y
- 7. DEFRECIATION METHOD, INFROVEMENT #1 ? 1
 DEPRECIATION METHOD, IMPROVEMENT #2 ? 1
 IS PROPERTY SUBSIDIZED HOUSING ? Y OR N ?N
 IS PROPERTY RESIDENTIAL? Y OR N? Y
- 8. IS DWNER A TAXABLE CORPORATION? Y OR N ?N
 THE MAXIMUM FEDERAL INDIVIDUAL ORDINARY RATE COULD BE:
 70% (PRE-1981 LAW)
 50% (1981 LAW, EFFECTIVE 1982)

(PLUS STATE RATE)

ENTER:

- 1) EFFECTIVE ORDINARY RATE 2) EFFECTIVE ORDINARY RATE (YEAR OF SALE)
- ? .5, .5
- 9. RESALE PRICE (NET OF SALE COSTS) ? 1258750
- 10. IS THERE LENDER PARTICIPATION ?N
- 11. ENTER DUNER'S AFTER TAX REINVESTMENT RATE (%)? 11
- 12. ENTER OWNER'S AFTER TAX OFFORTUNITY COST OF EQUITY FUNDS (%)? 11

DEMONSTRATION 2 (Cont.)

AFTER TAX CASH FLOW PROJECTION CARDINAL-2 DATE 9/14/82

DATA SUNNARY

ACQUISTN COST: \$1,007,000. MTG. AMT.: \$647,000. \$81,745. NOI 1ST YR: MTG. INT.: 15.236% ORG. EQUITY: \$360.000. MTG. TERM: 30. YRS DEBT SERVICE 1ST YEAR: \$99,638. CTO 1ST YEAR: \$-17,893. NTG. CONST.: .15400037 IMP. #1 VALUE: \$150,043. INP. #1 LIFE: 15. IMP. #2 VALUE: \$786.467. IMP. #2 LIFE: 15. INC. TX RATE: 50% OWNER: INDIVIDUAL SALE YR RATE: 50%

DEPRECIATION IMPROVEMENT #1 : STRAIGHT LINE
DEPRECIATION IMPROVEMENT #2 : STRAIGHT LINE
RESIDENTIAL PROPERTY
CERTIFIED HISTORICAL STRUCTURE
LENDER PARTICIPATION: CASH THROW-OFF: NONE

REVERSION: NONE

NO REPRESENTATION IS MADE THAT THE ASSUMPTIONS PROVIDED BY JEAN ARE PROPER OR THAT THE CURRENT TAX ESTIMATES USED IN THIS PROJECTION WILL BE ACCEPTABLE TO TAXING AUTHORITIES. NO ESTIMATE HAS BEEN MADE OF HINIMUM PREFERENCE TAX. CAPITAL LOSSES IN YEAR OF SALE ARE TREATED AS ORDINARY LOSSES (SECTION 1231 PROPERTY) AND ARE CREDITED AGAINST TAXES PAID AT THE ORDINARY RATE AT THE TIME OF SALE. FOR THE PURPOSE OF THE MODIFIED INTERNAL RATE OF RETURN (M.I.R.R.) CALCULATION, NEGATIVE CASH IN ANY ONE PERIOD IS COVERED BY A CONTRIBUTION FROM EQUITY IN THAT PERIOD

		HTG INT &	TAX	TAXABLE	INCOME	AFTER TAX
YEAR	NOI	LENDERS %	DEP	INCOME	TAX	CASH FLOW
1.	81745.	98500.	62434.	-79190.	-236221.	218328.
2.	81920.	98313.	62434.	-78928.	-39415.	21697.
3.	98910.	98097.	62434.	-61622.	-30812.	30084.
4.	108800.	97845.	62434.	-51480.	-25741.	34903.
5.	119680.	97552.	62434.	-40307.	-20154.	40196.
	\$491055.	\$490307.	\$312170.	\$-3:1427.	\$-352343.	\$345207.

NOTE: 1ST YEAR'S TAX REDUCED BY \$196,625. FOR TAX CREDIT (IMP #2)

-4.9703% .9857

DEMONSTRATION 2 (Cont.)

RESALE PRICE: LESS MORTGAGE BALANCE: PROCEEDS BEFORE TAXES: LESS LENDER'S %: NET SALES PROCEEDS BEFORE TAXES:	\$1,258,750. \$639,115. \$619,635. \$0.	1ST YR B4 TAX ED DIV: AVG DEBT COVER RATIO:
RESALE PRICE:	\$1,258,750.	
LESS LENDER'S X:	\$0.	
NET RESALE PRICE:	\$1,258,750. ·	
LESS BASIS:	\$694,830.	
TOTAL GAIN:	\$543,920.	
EXCESS DEPRECIATION:	\$0.	
CAFITAL GAIN:	\$563,920.	
ORDINARY GAIN:	\$0.	
•		
TAX ON ORDINARY GAIN:	\$0.	
TAX ON CAPITAL GAIN:	\$112,784.	
PLUS MORTGAGE BAL:	\$639,115.	
TOTAL DEDUCTIONS FROM		
NET RESALE PRICE:	\$751,899.	
	=======================================	
NET SALES PROCEEDS		
AFTER TAX:	\$506,851.	

IF PURCHASED AS ABOVE, HELD 5 YEARS & SOLD FOR \$1,258,750. THE MODIFIED I.R.R. BEFORE TAXES IS 10.5005% AND AFTER TAXES IS 22.2744% ASSUMING AN AFTER TAX REINVESTMENT RATE OF 11%, AND OPPORTUNITY COST OF 11%

=========

DEMONSTRATION 2 (Cont.)

DISTRIBUTION OF CASH THROW-OFF CARDINAL-2

	CASH THROW-OFF	CASH THROW-OFF	CASH BONUS
YEAR	TOTAL	TO EQUITY	TO LENDER
1.	-17893.	-17893.	0.
2.	-17718.	-17718.	0.
3.	-728.	-728.	0.
4.	9162.	9162.	0.
5.	20042.	20042.	0.
	-7136.	-7136.	0.

RESALE PRICE: \$1,258,750.
LESS 'MORTGAGE BALANCE: \$639,115.
PROCEEDS BEFORE TAXES: \$619,635.
LESS LENDER'S Z: \$0.
NET SALES PROCEEDS
BEFORE TAXES: \$619,635.

CASH THROW-DFF = 0% REVERSION = 0%

MORTGAGE ANALYSIS CARDINAL-2

		HORT	TROM	DEBT		MTG.
YEAR	NOI	INT.	AMORT	SERV	DCR	BAL.
1.	81745.	98500.	1139.	99338.	.820	645861.
2.	81920.	98313.	1325.	9963E.	.822	644537.
3.	98910.	9 8097.	1541.	99638.	.993	642995.
4.	108800.	97845.	1793.	99638.	1.092	641202.
5.	119680.	97552.	2086.	99638.	1.201	639115.
AVG	\$98,211.				.983	

EQUITY ANALYSIS CARDINAL-2

BEFORE TAX EQUITY DIVIDEND

		YR END		CASH	RETURN
YR	NOI	EQUITY	THUUMA	ORG EQ	CUS EO
1.	\$81,745.	\$379,032.	\$-17,893.	0497	0472
2.	81.920.	398.075.	-17,718.	0492	0445
3.	98,910.	400,345.	-728.	0020	0018
4.	108,800.	402,138.	9,162.	.0254	.0228
5.	119,680.	404,224.	20.042.	.0557	.0496

ORIGINAL EQUITY: \$ 360000

DEMONSTRATION 2 (Cont.)

DEPRECIATION SCHEDULE
CARDINAL-2
IMPROVEMENT # 1
STRAIGHT LINE
RESIDENTIAL

YEAR	TAX DEP.	S.L. DEP.	EXCESS DEP	BALANCE
1.	10002.9	10002.9	.0	140040.1
2.	10002.9	10002.9	.0	130037.3
3.	10002.9	10002.9	.0	120034.4
4.	10002.9	10002.9	.0	110031.5
5.	10002.9	10002.9	.0	100028.7
SUB-TOTAL	50014.3	50014.3	.0	

DEPRECIATION SCHEDULE
CARDINAL-2
IMPROVEMENT # 2
STRAIGHT LINE
RESIDENTIAL

YEAR	TAX DEP.	S.L. DEP.	EXCESS DEP	BALANCE
1.	52431.1	52431.1	.0	734035.9
2.	52431.1	52431.1	.0	681604.7
3.	52431.1	52431.1	-0	629173.6
4.	52431.1	52431.1	.0	576742.5
5.	52431.1	52431.1	.0	524311.3
SUB-TOTAL	262155.7	262155.7	.0	
	========	=======	******	
TOTAL	312170.0	312170.0		

VALTEST - DEMONSTRATION 3

INPUT ASSUMPTIONS

- 1. ENTER PROJECT NAME ? SELL AT LOSS TEST
- 2. ENTER PROJECTION PERIOD ? 5
- 3. DO YOU WANT TO ENTER EFFECTIVE GROSS REVENUE INSTEAD OF NOI? Y
 TO REPEAT PREVIOUS YEAR'S NOI/EGR FOR BAL OF PROJECTION ENTER O

EFFECTIVE GROSS REVENUE YEAR 17 13800 EFFECTIVE GROSS REVENUE YEAR 27 14210 EFFECTIVE GROSS REVENUE YEAR 37 1000 EFFECTIVE GROSS REVENUE YEAR 47 15080 EFFECTIVE GROSS REVENUE YEAR 57 15530

VAR OF EXPENSE (%) YEAR 17 6 VAR OF EXPENSE (%) YEAR 27 5 VAR OF EXPENSE (%) YEAR 37 0

FIXED OP EXPENSE YEAR 17 3700 FIXED OP EXPENSE YEAR 27 3920 FIXED OP EXFENSE YEAR 37 4160 FIXED OP EXPENSE YEAR 47 4410 FIXED OP EXPENSE YEAR 57 4670

- 4. ACQUISITION COST: ? 66000 .
- 5. DO YOU WANT TO USE STANDARD FINANCING? Y OR NAY MTG. RATIO OR AMOUNT, INT., TERM, NO PAY/YR ? 49500. .18. 25. 12
- 6. ENTER RATIO OF IMP #1/TOTAL VALUE, LIFE OF IMP #1? .25, 15 IS THERE A SECOND IMPROVEMENT? Y OR N? Y ENTER RATIO OF IMP #2/TOTAL VALUE, LIFE OF IMP #2? .55, 15 ENTER REHABILITATION TAX CREDIT FOR IMP #2: 9075 IS STRUCTURE A CERTIFIED HISTORICAL LANDMARK? Y OR N?Y *
- 7. BEPRECIATION METHOD, IMPROVEMENT #1 ? 2
 ENTER B.B. Z: ? 175 *
 DEPRECIATION METHOD, IMPROVEMENT #2 ? 2
 ENTER B.B. Z: ? 175 *
 IS PROFERTY SUBSIDIZED HOUSING ? Y OR N ?N Purposes Only
- IS PROPERTY RESIDENTIAL? Y OR N? N
 8. IS OWNER A TAXABLE CORPORATION? Y OR N ?Y
 CORPORATE FEDERAL ORDINARY TAX RATE COULD BE:

17% - 46% (1978 LAW. EFFECTIVE 1979)

16% - 45% (1981 LAW, EFFECTIVE 1982)

15% - 46% (1981 LAW, EFFECTIVE 1983 & THEREAFTER)

MAXIMUM CORPORATE CAPITAL GAIN ALTERNATIVE TAX RATE IS 28%

(PLUS STATE RATE)

ENTER:

1) EFFECTIVE ORDINARY RATE 2) EFFECTIVE ORDINARY RATE (YEAR OF SALE)

- 7 .4, .4
- 9. RESALE PRICE (NET OF SALE COSTS) 7 60000
- 10. IS THERE LENDER PARTICIPATION 3Y

ENTER CASH THROW-OFF (%). PROCEEDS BEFORE TAXES (%): 5, 5

- 11. ENTER OWNER'S AFTER TAX REINVESTMENT RATE (%)? 9
- 12. ENTER OWNER'S AFTER TAX OPPORTUNITY COST OF EQUITY FUNDS (2)? 9

DEMONSTRATION 3 (Cont.)

AFTER TAX CASH FLOW PROJECTION SELL AT LOSS TEST DATE 9/14/82

DATA SUNMARY *********

ACRUISTN COST: \$66,000. MTG. ANT.: \$49.500. ORG. EQUITY: CTD 1ST YEAR: NOI 1ST YR: \$9,272. MTG. INT.: 18% \$16,500. HTG. TERM: 25. YRS \$258. DEBT SERVICE 1ST YEAR: \$9.014. MTG. CONST.: .1820916 IMP. #1 VALUE: \$16,500. IMP. #1 LIFE: 15. IMP. #2 VALUE: \$36,300. IMP. #2 LIFE: 15. INC. TX RATE: 40% SALE YR RATE: 40% DUNER: CORPORATION

DEFRECIATION IMPROVEMENT #1 : 175% D.B. DEPRECIATION IMPROVEMENT #2 : 175% B.B.

NON-RESIDENTIAL PROPERTY

CERTIFIED HISTORICAL STRUCTURE

LENDER PARTICIPATION: CASH THROW-OFF: 5% REVERSION: 5%

NO REPRESENTATION IS MADE THAT THE ASSUMPTIONS PROVIDED BY JEAN ARE PROPER OR THAT THE CURRENT TAX ESTIMATES USED IN THIS PROJECTION WILL BE ACCEPTABLE TO TAXING AUTHORITIES. NO ESTIMATE HAS BEEN MADE OF MINIMUM PREFERENCE TAX. CAPITAL LOSSES IN YEAR OF SALE ARE TREATED AS ORDINARY LOSSES (SECTION 1231 PROPERTY) AND ARE CREDITED AGAINST TAXES PAID AT ORDINARY RATE AT THE TIME OF SALE.

FOR THE PURPOSE OF THE MODIFIED INTERNAL RATE OF RETURN (M.I.R.R.) CALCULATION, NEGATIVE CASH IN ANY ONE PERIOD IS COVERED BY A CONTRIBUTION FROM EQUITY IN THAT PERIOD

YEAR	NOI	MTG INT & LENDERS X	TAX Dep	TAXABLE INCOME	INCOME Tax	AFTER TAX CASH FLOW
1.	9272.	8914.	6160.	-5803.	-11397.	11643.
2.	9 580.	8907.	5441.	-4770.	-1909.	2447.
3.	-3210.	8853.	4807.	-16870.	-6749.	-5475.
4.	9916.	8866.	4246.	-3197.	-1280.	2137.
5.	10084.	8837.	3750.	-2505.	-1003.	2019.
	\$35641.	\$44377.	\$24404.	\$-33145.	\$-22338.	\$12771.

NOTE: 1ST YEAR S TAX REDUCED BY \$9,075. FOR TAX CHEDIT (IMP #2)

DEMONSTRATION 3 (Cont.)

RESALE PRICE:	\$60,000.	1ST	YR B4 TAX EQ BIV: 1.4881%
LESS MORTGAGE BALANCE:	\$48,670.	AVG	DEBT COVER RATIO: .7908
PROCEEDS BEFORE TAXES:	\$11,330.	AVG	DEFAULT RATIO: 1.1581
LESS LENDER'S %:	\$567.		
NET SALES PROCEEDS			
BEFORE TAXES:	\$10,764.		
RESALE PRICE:	\$60,000.		
LESS LENDER'S X:	\$567.		
NET RESALE PRICE:	\$59,433.		
LESS BASIS:	\$41,596.		
TOTAL GAIN:	\$17,838.		
TAX DEFRECIATION:	\$24,404.		
CAPITAL GAIN:	\$0.		
ORDINARY GAIN:	\$17,838.		
TAX ON ORDINARY GAIN:	\$7,135.		
TAX ON CAPITAL GAIN:	\$0.		
PLUS MORTGAGE BAL:	\$48,670.		
TOTAL DEDUCTIONS FROM			
NET RESALE PRICE:	\$55,805.		
NET SALES PROCEEDS			

IF PURCHASED AS ABOVE, HELD 5 YEARS & SOLD FOR \$60,000.
THE MODIFIED I.R.R. BEFORE TAXES IS -12.4777% AND AFTER TAXES IS 5.4951% ASSUMING AN AFTER TAX REINVESTMENT RATE OF 9%. AND OPPORTUNITY COST OF 9%

\$3,629.

AFTER TAX:

DEMONSTRATION 3 (Cont.)

DISTRIBUTION OF CASH THROW-OFF SELL AT LOSS TEST

	CASH THROW-DFF	CASH THROW-OFF	CASH BONUS
YEAR	TOTAL	TO EQUITY	TO LENDER
1.	258.	246.	13.
2.	566.	538.	28.
3.	-12224.	-12224.	0.
4.	902.	857.	45.
5.	1070.	1016.	53.
	-9427.	-9567.	140.
RESALE	PRICE:	\$60,000_	
LESS M	ORTGAGE BALANCE:	\$48,670.	
PROCEE	DS BEFORE TAXES:	\$11,330.	
LESS L	ENDER'S X:	\$567.	
NET SA	LES PROCEEDS		
BEFORE	TAXES:	\$ 10,764.	
		#========	

CASH THROW-OFF = 5% REVERSION = 5%

EQUITY ANALYSIS
SELL AT LOSS TEST

BEFORE TAX EQUITY DIVIDEND

		YR END		CASH	RETURN
YR	NOI	EQUITY	THUOHA	ORG EQ	CUR EQ
1.	\$9,272.	\$16,613.	\$246.	.0149	.0143
2.	9,580.	16,747.	538.	.0326	.0321
3.	-3,210.	29,131.	-12,224.	7408	4196
4.	9,916.	29,324.	857.	.0520	.0292
5.	10,084.	29.554.	1.016.	.0616	.0344

ORIGINAL EQUITY: \$ 16500

DEMONSTRATION 3 (Cont.)

MORTGAGE ANALYSIS SELL AT LOSS TEST

		HORT	MORT	DEBT		NTG.	DEFAULT
YEAR	NOI	INT.	AHORT	SERV	DCR	BAL.	RATIO
1.	9272.	8901.	113.	9014.	1.029	49387.	.981
2.	9580.	8879.	135.	9014.	1.063	49253.	-960
3.	-3210.	8853.	161.	9014.	356	49092.	13.224
4.	9916.	8821.	192.	9014.	1.100	48900.	-940
5.	10084.	8784.	230.	9014.	1.119	48670.	.931
AVG	\$7,128.				.791		1.158

REVENUE AND EXPENSE REPORT SELL AT LOSS TEST DATE 9/14/82

YEAR	EFF GROSS REV	% RATE	Z VAR OP.	\$ FIXED OP	ION
1.	\$13,800.	6.%	\$828.	\$3,700.	\$9,272.
2.	\$14,210.	5.%	\$711.	\$3,920.	\$9,580.
3.	\$1,000.	5.2	\$50.	\$4,160.	\$-3,210.
4.	\$15,080.	5.%	\$754.	\$4,410.	\$9,916.
5.	\$15,530.	5.%	\$777.	\$4,670.	\$10,084.
	\$59.620.		\$3.119.	\$20.860.	\$35.641.

DEMONSTRATION 3 (Cont.)

DEPRECIATION SCHEDULE SELL AT LOSS TEST IMPROVEMENT # 1 175% D.B. NON-RESIDENTIAL

YEAR	TAX DEP.	S.L. DEP.	TAX DEP	BALANCE
1.	1925.0	1100.0	1925.0	14575.0
2.	1700.4	1100.0	1700.4	12874.6
3.	1502.0	1100.0	1502.0	11372.5
4.	1326.8	1100.0	1326.8	10045.8
5.	1172.0	1100.0	1172.0	8873.7
SUB-TOTAL	7626.3	5500.0	7626.3	

DEPRECIATION SCHEDULE SELL AT LOSS TEST IMPROVEMENT # 2 175% D.B. NON-RESIDENTIAL

YEAR	TAX DEP.	S.L. DEP.	TAX DEP	BALANCE
1.	4235.0	2420.0	4235.0	32065.0
2.	3740.9	2420.0	3740.9	28324.1
3.	3304.5	2420.0	3304.5	25019.6
4.	2919.0	2420.0	2919.0	22100.7
5.	2578.4	2420.0	2578.4	19522.2
SUB-TOTAL	16777.8	12100.0	16777.8	
	=======	=======	=======	
TOTAL	24404.0	17600.0	24404.0	

ARA--INCOME PROPERTY MORTGAGE FINANCE

Presented By

Professor James A. Graaskamp, Ph.D., CRE, SREA University of Wisconsin School of Business

III. FINANCIAL RISK MANAGEMENT

Investment is a real estate enterprise, as a mortgage lender or equity investor is simply buying a set of financial assumptions about the interaction of the project to its context, of the firm to its environment. Real estate analysis is to control the variance between expectations and realization, between proforma prospects and historical balance sheets and profit and loss statements.

- A. Analysis is risk management, control of variance.
- B. There are essentially two types of risk exposures:
 - 1. Static risks (uncontrollable, or external events) are those which can only cause a loss due to surprise upset of a plan.
 - 2. Dynamic risks (partially controllable internal events) can produce profit or loss and are best controlled by the finesse of management execution of a plan.
- C. Risk evaluation or comparison grows out of the function of risk management for an enterprise.
 - 1. Risk management has two objectives:
 - a. First priority conservation of existing enterprise assets despite surprise events.
 - b. Second priority realization of budgeted expectations despite surprise events.

- 2. The process of risk management involves systematic and continuous:
 - Identification of significant exposure to
 - Estimation of potential loss frequency and b. severity
 - c. Identification of alternative methods to avoid loss
 - d. Selection of a risk management method
 - Monitoring execution of risk management e. plan
- The risk management process is both a 3. philosophy of inquiry or analysis and a checklist of management concern, which is attempting to answer systematically "WHAT IF...?" questions, to anticipate surprise and to provide for a response or adjustment in advance of the contingency.
- D. Identification of significant exposures to loss can begin by using standard business documents as reminders, such as:
 - 1. Review of balance sheet accounts

 - Review of profit and loss statement accounts Review of business organization or function 3.
 - 4. Review of elements of financial feasibility analysis
- Signficant has to do with potential loss frequency, loss severity, and degree of uncertainty.
 - 1. Very frequent and minor become expense accounts
 - Less frequent but predictable and major become 2. reserves or budget allowances.
 - Infrequent, uncertain but very severe become 3. issues of risk management.
 - 4. A 50/50 probability is the most uncertain outcome.

- F. The alternative methods of avoiding loss which everyone subconsciously uses include:
 - 1. Eliminate risk exposure
 - Reduce frequency or severity of loss (diversification or mortgage loan closing process)
 - 3. Combine risks to increase predictability (reserves for expense)
 - 4. Shift risk by contract (subcontracts or escalator clauses)
 - 5. Shift risk by combination (diversification) by contract (insurance)
 - 6. Limit maximum loss (corporate shell or limited partnership)
 - 7. Hedging (sale and leaseback, options, contingent sales)
- G. Risk management concepts leads to understanding of the true essence of a mortgage contract and an equity commitment.
 - 1. Given constant dollars and stable interest rates the mortage agreement laid off the static risks of insurance and controlled the dynamic risks by providing adequate cash throw-off for the borrower, pain through foreclosure and loss of borrower equity dollars, and a bailout based on conservative loan to economic productivity value ratio.
 - 2. Given inflation, devaluation of the dollar, and rising interest rates, the mortgage has become a risk management instrument for the borrower, particularly with common usage of the esculpatory clause and recognition of non-productive values in real estate ownership. The mortgage is a classic straddle in two commodity markets.
 - a. In the space-time commodity it is a call on appreciation, if any, and a put to the lender if appreciation or income in future markets becomes inadequate.
 - b. It is a short position in the money market which creates value should interest rates rise or dollars devalue.

- c. The confusion of real estate as a productive economic asset with real estate as a speculative commodity has permitted the distortion of appraisal values. A high loan-to-value ratio mortgage is a purchase of a commodity on margin without giving the lender the right to call for additional collateral.
- 3. The cash profit centers in real estate are no longer available to secure the mortgage loan as they take the form of outlays for expertise and material rather than classic net income.

 Moreover the tax shelter is applied to other income which is not available as collateral for the mortgage loan even though present value of those tax savings contributes to the market value on which the loan is based.
- 4. Equity ownership is the degree to which cash flow can be willfully diverted by maintaining control while avoiding risk of variance beyond acceptable levels.
- H. Long-term lenders have suddenly realized that:
 - They are selling puts in the commodity market of long-term real estate space, and in the case of construction loans, space for future delivery.
 - 2. A mortgage is a long position in an unstable market when everybody is going short.
 - 3. With rising prices, the penalties of risk are loss of credibility and loss of opportunity income due to the inability to roll invested dollars on time. There is a timing risk to income and to purchasing power in place of significant risk of loss to historical principal.

- 4. The ability of the banks to submerge losses in future income and the desires of the pension funds to submerge profits until future benefits must be paid is leading to significant rethinking of the real estate loan process and the dichotomy between credit and equity and compensation for static versus dynamic risk taking.
- 5. Emerging concepts of risk management of the dynamic risks of time, interest, and money as compared to solvency and collateral are leading to strategic shifts in real estate capital markets.
- I. Solvency risk was controlled with debt cover and default point, occupancy clauses and gap loans. Diversion of collateral was partially offset with letters of credit, escrows, and personal guarantees on construction loans, but what about commodity speculation and interest rate risk?
 - 1. Interest cost plus a loading? Variable interest in the solvency problem residential and commercial.
 - 2. Equity participation and the accounting problem of a submerged asset or killing the goose that laid the golden egg - market value accounting problems.
 - 3. Inflation versus obsolescence of location and structure due to energy and demographics enterprise or systems risks?
 - 4. Portfolio concepts are now in vogue because risk management theory has come of age.

FIFTH MODULE

REAL ESTATE INVESTMENT ANALYSIS

Presented By

Professor James A. Graaskamp, Ph.D., CRE, SREA University of Wisconsin School of Business

FOURTH HOUR

IV. TAX MATTERS FOR FOREIGN REAL ESTATE INVESTORS

Tax matters for real estate investment in the United States distort all reasonable economic considerations for both domestic and foreign investors. It is important for the real estate investor to understand the real estate tax (which takes 15 - 20% gross income) as well as personal and corporate income taxes, state and federal estate and inheritance taxes, as well as the special registration laws and trade treaties which impact foreign investors.

- A. The approach today will not bog down in detail but rather underscore current pitfalls and trends, recognizing that:
 - 1. Tax planning is always best begun at the very initial stages of the foreign investor's approach to the U.S. market.
 - 2. Tax planning is most effective when done in the context of programs, not transactions.
 - 3. Tax planning is a continuous process and all tax plans should be reviewed periodically.
 - 4. Tax planning is a detailed and complex process which should only be undertaken with the assistance of professional advice.
- B. The real estate tax may cost you more dollars and be less understood than the more publicized federal income taxes because every municipality reflects an individual assessment program and philosophy about imposition of real estate taxes.

- 1. 70 to 85% of local government spending is financed by real estate taxes and in most states the school board receives 55 to 60% of all real estate taxes.
- 2. Assessment of investment properties is a way of shifting the real estate tax burden away from residential housing and large numbers of voters so that traditional assessment formulas are changing.
- 3. Assessments are supposed to be based on fair market value assuming cash sale without creative financing and assuming current economic rents. Market value is then multiplied by local equalization rate.
 - a. Equalization would be the ratio of actual sales to actual assessed value.
 - b. In some states, the law permits different ratios for different classes of property reflecting historical political attitudes about home ownership, big business, outsiders, etc.
- 4. Many local assessors are changing from market value to nominal price, ignoring impact of financing, sales, promotions, or confusion of revenue from business and real estate, personal property versus real property (hotel, shopping center, etc.)
- 5. Practice of passing through real estate taxes to the tenants with net leases causes increased vacancies, depresses net rents at time of renegotiating, and prevents property from inflating in value.
 - a. Since tax policies differ in an urban area among political subdivisions, demand and new construction shift across political boundaries causing significant changes in property value.
 - b. Assessment appeals may be too sophisticated for court juries on appeal boards to understand.

- c. Computers have made annual reassessments very feasible based on sales inflated by syndicators and pension funds.
- 6. A real estate purchase/sale or a listing will trigger reappraisal so that many investors buy interests rather than title to avoid creating public record in a change of ownership.
 - a. Partnership interests
 - b. Corporate shares
 - c. Land trusts with beneficial interests
- 7. Investors must research both the assessment policy and local revenue needs for schools, pensions, and safety forces such as police, fire, and public health as well as local welfare obligations.
- 8. Another factor is the increasing use of special tax districts for special tax assessments which fall on benefitted property.
 - a. Special assessments for replacing infrastructure (older cities have not maintained public capital).
 - b. Tax incremental financing (TIF) of urban redevelopment (incentive to understate and then overstate tax assessment).
 - c. Special districts to finance urban activities as well as improvements to attract people downtown, etc.
- 9. Real estate taxes will be worse in older communities without vacant land for growth or new communities that are growing too fast or offer too many services.
- C. In addition to local taxes, there are a variety of state and federal taxes which reflect the duality of regulation and reporting which are behind several special laws relating to foreign investment in an ownership of United States real estate, major federal laws are:

- 1. Alien Land Act (ALA) permits only U.S. citizens and foreign investors who have formally declared intention to be come U.S. citizens, and foreign investors who have become bonafide U.S. residents to own or acquire title to real estate in U.S. territories including Puerto Rico, Virgin Islands, Guam, and other small Pacific Islands (Washington D.C. exempt).
- 2. Agricultural Foreign Investment Disclosure Act of 1978 (AFIDA) requires any foreign person who acquires or transfers any interest (other than security interest) of 5% or more in land, capable of agricultural use, to report such ownership within 90 days.
 - a. Exemption less than one (1) acre and \$1,000 produce sales.
 - b. Report requires legal description, transaction price, name, address, and relationship of investor's representative, and name, address, and country of all foreign persons or entities through third tier of ownership.
 - c. No confidentiality since forms are available ten (10) days after filing in D.C. and in county office of Agricultural Stabilization and Conservation Service, and treaty partner which requests information under mutual assistance treaty or fiscal evasion provision of a tax treaty.
 - d. Multi-tiered structuring can legally avoid or minimize reporting.
- 3. International Investment Survey Act of 1976 (IISA) is administered by the Department of Commerce requires reports on every business enterprise including Real estate investment under U.S. jurisdiction in which foreign persons have a direct or indirect interest of 10 percent or more.
 - a. Acquisitions under one million in value or two hundred acres in size are exempt.

- b. Personal residences.
- c. Limited partnership interests.
- d. Claim must be made for exception but neither location of property nor name and address of beneficial owner need be identified.
- e. Where exemption is unavailable, reports must be filed within 45 days of the acquisition, describing:
 - (1) The address to which follow-up quarterly survey reports may be mailed.
 - (2) A schedule of the "ownership chain" back to the ultimate beneficial owner who is not owned more than 50 percent by another person, giving name, percentage ownership at each level, and indicating country of ownership.
- f. Reporting merely bearer share corporate ownership or ownership through a trust or other proxy is not deemed compliance with the law, and splitting ownership among entities which act (or could be expected to act) in concert (such as members of a family or of a syndicate, or a corporation and its subsidaries) does not avoid the need to report the identity of such an "associated group" as the ultimate beneficial owner.
- g. Confidentiality of reporting forms filed under IISA is provided under the Act, which bars transmission of survey information to foreign governments and forbids disclosure under the Federal Freedom of Information Act.
- III. The Foreign Investment in Real Property Tax Act (FIRPTA) became effective June 18, 1980, removed pre-existing exemption from U.S. Taxation of any gain on sale of U.S. Real Estate previously available to foreign investors but not available to domestic investors.

- A. Tax collection based on annual reporting and identification rather than withholding.
 Withholding once again hot topic for tax reform.
- B. The United States furnishes information to its tax treaty partners, under broad exchange of information provisions contained in existing and proposed U.S. tax treaties. While investor anonymity may be preserved under IISA by naming only the investor's home country, and under AFIDA by establishing three entities between the asset and the investor, under FIRPTA confidentiality may be effected only by:
 - 1. Holding the property through an entity which is not a domestic corporation or,
 - 2. Furnishing security to the Internal Revenue Service (IRS) satisfactory to ensure payment of capital gains tax on disposition.
- C. FIRPTA requires various returns and reports designed to aid the IRS in enforcement of the tax provisions of the Act and to notify holders of interests in partnerships, trusts, estates, foreign corporations and other entities of certain information of relevance to them under the Act.
- D. Excused from FIRPTA information filing is the foreign investor who holds his (or its) investment directly and is engaged in trade or business in the U.S. during the calendar year in question. This exception is, though, justified by the fact that such an investor is otherwise required to file a U.S. income tax return.
 - 1. All other foreign investors holding an "interest" in the U.S. real estate of any type, no matter how they hold title, whether directly or indirectly, must file information returns.
 - 2. The term "interest" means:
 - a. Any interest in real property (including an interest in a mine, well, or other natural deposit) located in the United States or the Virgin Islands, including fee ownership and co-ownership of land or improvements thereon. leaseholds of land

- or improvements thereon, options to acquire land or improvements thereon, options to acquire leaseholds or improvements thereon;
- b. Associated personal property such as moveable walls, furnishings, and other personal property associated with the use of real property.
- c. Any interest in real property as defined under the United States Model Income Tax Treaty (interests determined to be real property under the law where the real property is located)
- d. Partial interests such as life estates, remainders, reversions, and rights of first refusal in real property.
- e. Any interest (other than an interest solely as a creditor) in a U.S. corporation which holds interests in U.S. real property the fair market value of which equals or exceeds 50 percent of the aggregate fair market value of its total real property and trade or business assets.
- E. FIRPTA establishes a penalty for each failure to file the reports required from a domestic corporation or noncorporate legal entity of \$25 per day per offense, up to maximum of \$25,000. Where a foreign persons owning a direct interest in U.S. real property fails to file the required report, the penalty is the lesser of \$25,000, or five percent of the fair market value of the U.S. real property interest held thereby during the year. In sufficiently serious cases criminal penalties (\$10,00 fine, one year imprisonment, or both) may also apply.
- F. The act's provisions defining which U.S. corporations are subject to the Act based on the proportion of U.S. real estate interests to other assets owned can be the focus of careful structuring of investments by foreign controlled U.S. corporations in order to avoid coverage of the Act. Carefully planned dispositions of U.S. real estate by domestic or foreign corporations can be accomplished outside the scope of FIRPTA by use of offshore stock transfers and liquidations.

Some income tax treaties may still provide relief from FIRPTA through 1984 since the new law will not affect conflicting treaty provisions until 1985.

IV. TAX STRATEGIES

- A. Desire to Postpone Taxes
 - 1. Depreciation elections
 - 2. Bookkeeping
 - 3. Exchange
- B. Desire to Reduce Progressive Rate
 - 1. Depreciation
 - 2. Structuring
- C. Desire to Convert Income Potential to Capital Gain
 - 1. Value creation and sale
 - 2. Depreciation
 - 3. Involuntary conversion
- D. Desire to Avoid Taxes
 - 1. Exemptions
 - 2. Step-up basis
 - 3. Structural shift
- E. Desire to Reduce Estate Taxes or Tax on Corporate Liquidation
 - 1. Structural shift
 - 2. 12 month and 1 month liquidations
 - 3. Estate planning

- V. DIRECT ATTACKS ON SOURCE OF FAVORITE TAX STATUS FOR REAL ESTATE INVESTING IN 1984-85
 - A. Restrictions on the timing of interest and other expense deductions of accrual method taxpayers (including partnerhips), where the expense is owed to a "related person" on the cash method.
 - B. The time value of money would be taken into account in determining an accrual method taxpayer's deductions for expenses not payable within one year. It would also be used to determine the timing of "unstated interest" on deferred payment sales. Prepaid expenses of cash method taxpayers would be allocated to the appropriate future periods.
 - C. Increase in penalties and interest on tax deficiency assessments in the tax shelter area.
 - D. Reduction of such tax benefits as ACRS (Accelerated Cost Recovery System) and rehabilitation credits on property leased to tax-exempt entities.
 - E. Several new limitations on the use of industrial development bonds.
 - F. Withholding of tax on the disposition of U.S. real property interests held by foreign persons.
 - G. Substantial narrowing of exceptions to the collapsible corporation provisions.
 - H. Special allocations of partnership items would no longer be permitted (with possible exceptions for depreciation, depletion and intangible drilling costs). The ability to shift income among partners with respect to property contributed to partnerships would be eliminated. Previously accrued income and deductions could be be allocated to persons entering cash basis partnerships. Capitalization of partnership organization and syndication costs could not be avoided by substituting income allocations for such costs.

- I. Tax-free "like-kind" exchanges of partnership interests would not be permitted. In deferred ("Starker") exchanges, it would be necessary to identify the property to be received at the outset, and the exchange would have to be completed within the first three months of the next taxable year.
- J. The ACRS recovery or write-off period for real estate would be lengthened from 15 to 20 years or more.
- K. The basis of investment credit property would be reduced by the full amount of credit.
- L. An "alternative minimum tax" would be imposed upon corporations.
- M. Publicly-held partnerships would be treated as corporations to eliminate the pass-through of losses.



November 6, 1984

Office of Associate Dean for External Relations

1155 Observatory Drive Madison, WI 53706 608/262-1550

Mm. Katie Saunders American Bankers Association 1120 Connecticut Avenue NW Washington, DC 20036

Dear Katie:

Jim Graaskamp has put together a course schedule based on his understanding of your planning session decisions a few weeks ago (see attached). He has contacted a few of the prospective faculty to obtain tentative date commitments (e.g., Johannes, Formisano, Robbins on our faculty and Robert Boisclair from the Minneapolis <u>Riverplace</u> development). He has arranged for the use of SRI films. At this point, he is anxious to receive a goahead from you or instructions with regard to how to proceed. I realize you'll be "hiring" the faculty directly, but in some instances, I assume he should make the contact to explain what's wanted and to obtain participation.

The other item of concern to him is to begin to receive payment for the development effort that will be called for during this year of substantial program revision. He's already working in that direction and expects to be completed with that by May. One possibility would be for the ABA to pay him directly (e.g., as a program consultant) at the rate of \$1,000 per month over the December, 1984 to May, 1985 period. It is really true that his major effort (aside from his actual instruction) has to come during this period. I can understand his desire to be compensated as he works.

Jim seems excited about the education opportunity presented by this School and he's already touted it to some prospective attendees (and I think sold some "sents"). The School of Business is pleased to work with you to ensure that your program develops the strength and reputation you desire.

Please let us know as soon as you can what you want from us next as well as what arrangements can be made for Jim.

Sincerely,

William A. Strang Associate Dean for External Relations

WAS: igk

Attachment



1155 Observatory Drive Madison, WI 53706 608/262-1550

August 14, 1984

Mr. Jim De Rado Educational Services American Banker's Association 1120 Connecticut Avenue, NW Washington, DC 20036

Dear Jim:

The following relates to the real estate finance program we have been discussing the past several months. The program would be called the ABA National School of Real Estate Finance at the University of Wisconsin. It would be, in other words, your program held at our facilities. We would however, provide a Campus Coordinator for the program. He/she would coordinate all logistics for you. This person would be an academic and should participate in the program planning and assist with faculty liaison. It is desirable and was assumed that ABA would promote the School and handle pre-registrations and the funds collected. If you wish our involvement in this, we would have to assume true co-sponsorship and follow the attached policies and procedures.

Now, in direct response to the questions raised:

1. Pre-Session

- a. Everything on campus would be coordinated with the one assigned faculty campus coordinator.
- b. We can print up badges on an out-of-pocket cost basis using our own Kroy lettering machine and student labor at \$4.00 per hour. We can use U.W. badges or ABA badges if you wish to provide them. The estimated cost per badge (with labor) would be \$.25.
- c. We can print notebook binders on an out-of-pocket basis.

 Printing and purchase of 2* binders for our Executive Program ran
 \$1.70 per binder.
- d. We can print the notebook contents at about \$.02 per page. We have an efficient and well equipped copy center (2 1/2 employees) located in the School. Stuffing notebooks would be done by students at \$4.00 per hour.
- e. We would set up tables for registration and hire students (\$4.00 per hour) to register people if you desire.

- f. We could assign rooms if you wish. If this is done, please be sure that enrollees are identified, as male/female. Names often don't tell the story.
- g. We can print up handouts from instructors, again at \$.02 per page.

We feel that we can provide competent and friendly logistical coordination.

2. On-Site

- a. If your attendance and basic time period are maintained, we would expect to use the same facilities each year.
- b. We would expect to provide an arrival evening reception with a cocktail hour and special meal.
- c. With our own major copy center, we are well equipped (especially August 11-16) for last minute printing.
- d. We can provide virtually all A/V needs you might have up to and including video taping services. Rooms in the School have overhead projectors and screens. The School, also has its own video tape players, color monitors and carousel slide projectors. We would not have to charge for use of the School's equipment, but would have modest charges if we have to rent through the Campus.
- e. An A/V coordinator could be provided for the week at less than \$200.
- f. As previously mentioned, we could provide assistance at registration for \$4.00 per person per hour.
- g. The campus coordinator would be with the program all week. If you desired added staff (e.g., secretarial or reception), this could be provided on an out-of-pocket basis. If students are used, this would be \$4.00-4.50 per hour. If more experienced people would be needed, the cost would be somewhat higher.
- h. Faculty and staff could stay in the dorms with charges at single room rates of \$17.50 per night. If hotel rooms were desired, we could negotiate with local hotels in the \$35-45 range.
- i. Maids replace towels and clean daily. Bed linens would be changed mid-week. Beds would be made daily.
- j. The following rental car services are available at the airport: Hertz, Avis, National. Reservations are desirable.

k. Experience indicates that food service quality is excellent. Menus can be adjusted to fit the group.

With ABA handling the expense payments, liquor can be paid for. It must be served by the campus union, which would operate either an open or cash bar at your wish.

- 1. The Elizabeth Waters dorm we're planning on is just off the largest of the city's four lakes. It has access to a delightful jogging trail and is only 2 blocks from tennis courts. Indoor recreation facilities (pools, handball, paddleball, gyms, etc.) can be made available to individuals for a \$10 one week access or #3 one day pass. Madison also has several public golf courses. Sailboats and canoes can be rented within two blocks of the dorm.
- m. Parking is available for up to 80 cars in a lot very near the dormitory we're planning on. The charge would be \$10 for a week.

3. Post-Session

- a. Yes, we could tabulate evaluations at modest cost.
- b. We have somewhat limited storage capacity, but could store a reasonable number of boxes in a locked, dry storage area.

4. Faculty

a. We have about 80 faculty, with about 12 in finance, 3 in real estate, and two in insurance and risk management. Those most relevant to you would be:

Jim Graaskamp, Professor, Chr. Real Estate Jim Johannes, Associate Professor, Finance (Banking) Michael Robbins, Assistant Professor, Real Estate

b. their resumes are enclosed. I suspect that graduates of the real estate doctoral program now at other universities would add to your potential faculty. Jim Graaskamp is widely known nationally in real estate circles. Even if he could not serve as program director, he would, I suspect, maintain an involvement.

For many years, our school has hosted these three major banking schools:

Graduate School of Banking (1200 - 1500 students)
Bank Administration Institute (1500 - 1800 students)
Credit Union National Association School (250 - 350 students)

We also have put on smaller schools for Bank Marketing and Savings and Loan Marketing.

- c. Faculty availability is expected at this point, but we would need commitments soon.
- d. We expect all could be available from year to year. Two of the three principals indicated are tenured.
- e. The person selected as campus coordinator would make faculty contacts for you.

Other

You would receive the fees and pay the bills as presented. You suggested 300-350 participants. If the number falls below 300 by much, the dormitory people would move you to another larger dormitory to share rather than open a dorm just for your group. You might even prefer the other dorm, but can decide that on your on-site visit.

There are many reasons why the August 11-16 dates are preferable over August 4-9 (although the latter is possible). Summer school will have ended. Parking will free up. The Bank Administration Institute will be over, thus freeing up classrooms and faculty time. The dormitory staff can shift to serving you from serving the summer session students. I do encourage you to settle on the 11-16 period.

Our basic overhead and campus coordinator costs are really fixed, so some terms for a fixed payment or minimum enrollment guarantee would probably need to be agreed on. Our room and board costs are competitive, I know, and our other out-of-pocket costs are reasonable because they are primarily a function of high quality, but reasonably priced student labor.

We put on about 40 programs per year in the School and have a good track record. I'm sure that we can help you to produce a high quality program at a competitive price.

Meetings

A late August meeting on campus can be arranged. You'll need to call me, however, to set up a specific date.

A larger October planning meeting sounds like an excellent idea. The October 12-13 date, however, is very bad for us as we are entertaining our Alumni Board of Directors and Board of Visitors on those days. The October 18-19 suggestion would be fine. However, that is a football weekend, so hotel space is tight. Please call me A.S.A.P. on your need for hotel reservations. The meeting space can be provided at the School or in the hotel.

MR. JIM DE RADO 8/14/84 - 5 -

I hope I've responded reasonably directly to the questions your group has raised. We would like very much to work with you and extend our financial institutions programming one step further.

Sincerely,

William A. Strang

Associate Dean for External Relations

WAS:ksq **Enclosures**

cc: E. J. Blakely
A. Graaskamp
C. O. Kroncke

CARLEY CAPITAL GROUP

1640 WISCONSIN AVE., N.W. • WASHINGTON, D.C. 20007 • (202) 965-6380

August 30, 1984

Dr. James A. Graaskamp 4610 University Avenue Suite 105 Madison, WI 53704

Dear Dr. Graaskamp:

Enclosed is the material I told Jean I would forward to you: a copy of First Chicago's general information package on hedging, a copy of a report on one specific hedge operation, and Mike Marek's card.

Mr. Marek said he'd speak before the real estate finance class. If you contact him please let me know as I'll arrange for him to meet the Carley people in Madison too.

Let me know if I may be of help.

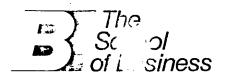
Sincerely,

James S. Kane

and I keme

Cot. 10 or 15 " - HEZGING

Not 12 or W - Yvonne Schell



September 25, 1984

1155 Observatory Drive Madison, WI 53706 608/262-1550

Ms. Katie Saunders American Bankers Association 1120 Connecticut Avenue, N.W. Washington, DC 20036

Dear Katie:

I've attached at least a first-run on a budget proposal. The items are pretty sure, but there may be some details to work out in October.

Jim Graaskamp and I have discussed the budget. He, incidentally, has agreed to serve as our program coordinator. He will be a strong asset for the program.

I'm rushing as I'm leaving the city until October 8. Hopefully this will help. Feel free to call Alice Gustafson (608/262-2545) if you have questions about logistics before I return.

We will key ourselves to make this a strong, successful program that represents our Real Estate Department, School of Business, and the A.B.A. well.

Sincerely,

William A. Strang Associate Dean for External Relations

WAS: jgk

Attachment

cc: E. J. Blakely

A. Gustafson

✓. A. Graaskamp

A Budget Proposal

We propose that American Bankers Association promote the School, take registrations, and collect fees. Either of us can assign rooms, as you wish.

Our estimates for major charges are:

1. <u>Campus Program Coordinator</u> (Jim Graaskamp)

\$6,000

He would serve as primary contact point for you in terms of program planning and logistical arrangements. He would be present during the conference and work with ABA's planning committee.

2. Student Hourly Helpers

\$400

To assist with registration and to be generally available to work with ABA.

Only to be paid if used (at \$4.50 per hour). ABA staff may suffice.

3. Rooms

Single \$17.50 per night

Double \$12.00 per night

4. Meals (Standard menu equivalent to BAI for 1984)

\$15.50 per day

5. Breaks

Coffee/juice/soda - morning

Coffee/soda - afternoon

\$1.00 per day

(includes trucking)

6. Faculty Instruction

As this is a new program for any of our faculty participating, we suggest a \$200 per presentation hour to allow for their development time. This fee could probably be held for a few years for repeaters.

7. School Overhead

For the time of the Dean, Associate Dean for External Relations, secretarial staff, space costs for administration, and general campus costs

\$5,700

8. Printing, etc. (Assume 200 notebooks at 100 pages of content and 15 tab sheets in each)

Notebooks (\$8.00 each)	\$1,600
Silkscreening to your specs (\$1.75 ea.)	350
Contents (\$.03 per page)	600
Tab sheets (\$.04 each)	120
Assembling (labor @ \$4.25)	<u>85</u>
	\$2,755

9. Classroom Equipment

The School can provide at no charge:

Overhead projectors Slide projectors Screens Flip chart easels Microphones Podium Chalk

We will provide at wholesale cost:

Transparencies
Transparency markers
Flip charts
Masking Tape
Paper cups

Water pitchers will be provided and kept full at modest cost (no exact quote yet). Lost/broken pitchers will be charged for at cost.

AMERICAN BANKERS ASSOCIATION 1120 Connecticut Avenue, N.W. Washington, D.C. 20036



EDUCATIONAL SERVICES

DIRECTOR
Charles E. Westerman, Jr.
202/467-4195

ASSISTANT DIRECTOR
Darcy Glesen Kaufmann
202/467-5401

MANAGER Barbara Payne 202/467-6648

November 28, 1984

Mr. William A. Strang Associate Dean of External Relations University of Wisconsin-Madison 1155 Observatory Dr. Madison, WI 53706

Dear Mr. Strang:

In an effort to outline our understanding of the arrangements between the University of Wisconsin and the American Bankers Association, we have drafted the enclosed "Letter of Agreement" for the 1985 ABA National School of Real Estate Finance. We feel it will be beneficial to our staff and yours to clarify our expectations in this way.

If you intend to send us a contract, this need not preclude your doing so in the future. Please sign it and return it to my attention.

Thank you for taking time from your busy schedule. If you have any questions about this "Letter of Agreement", please feel free to contact me. I look forward to working with you in the future.

Sincerely,

James DeRado

samer Dellalo

Computer Service Coordinator

Enclosure

DEC 03 1984.

Letter of Agreement Between University of Wisconsin And The American Bankers Association

This agreement provides for a cooperative arrangement between University of Wisconsin and the American Bankers Association under which an educational program will be offered and known as the National School of Real Estate Finance.

University of Wisconsin (Wisconsin) and the American Bankers Association (ABA) agree to the following general framework for sponsorship of this school. Further details will be outlined in staging guides, (individual sheets detailing the logistical requirements for each event) provided by ABA to Wisconsin approximately one month prior to each session.

The ABA will assume all administrative, promotional and financial responsibility for conducting the school. The ABA will assume responsibility for curriculum development and faculty identification/contact; however, Wisconsin will provide a faculty/curriculum coordinator to assist in the planning process should that need arise. Wisconsin agrees to provide air conditioned facilities as specified in this agreement and liaison assistance necessary for successful performance of the school as defined by the ABA. Wisconsin will also make available student aides throughout the week as communicated by ABA for support purposes at a predetermined rate agreed to by ABA and Wisconsin.

Wisconsin agrees to reserve, for the exclusive use of the ABA, all specified accommodations in Chadbourne Hall and Humanities Building. Should these facilities not be available, Wisconsin will notify ABA to negotiate other arrangements no later than four months prior to the dates listed below:

July 14 - 19, 1985

Period of School Operation

- This school is intended to be a two-year residency program. For the 1985 session date, there is an expected enrollment of approximately 125 first year students. Second year students total enrollment is anticipated to be approximately 125; first year students and second year or returning students total enrollment expected is 250.
- o Wisconsin agrees to make available to the ABA all specified accommodations for the period of 11:00 AM, Friday, July 12, 1985 until 2:00 PM, Friday, July 19, 1985. Specific needs will be communicated via staging guides at a later date.

Classrooms and Other Facilities

- O Wisconsin agrees to reserve two rooms to be used as offices with telephone hook up for the exclusive use of ABA staff from 11:00 AM, Friday, July 12, 1985, to 2:00 PM, Friday, July 19, 1985.
- o Adequate space will be made available for the school registration of approximately 250 students from 1:00 PM until 6:00 PM, on Sunday July 14, 1985.
- O A suitable air conditioned area in Chadbourne Hall or a comparable facility will be provided for use as a faculty lounge throughout the week that will include a secure storage area. Wisconsin will provide the mixers and set-ups, e.g., cups and napkins. ABA will provide the liquor and any other food.
- o Photocopying availability on an as-needed basis will be provided during the on-site session.
- o Pre-session photocopying and/or other printing needs (as decided upon at a later date) will be provided.

Wisconsin agrees to make available the following meeting room requirements:

- o Two (2) large meeting rooms to accommodate approximately 125 - 130 people each, schedule of use to be determined and transmitted at a later date.
- O At least twelve (12) break-out rooms to accommodate approximately 40 persons each, schedule of use to be determined and transmitted at a later date.
- O All classrooms are to be located within a short walking distance of the dormitory and each other.
- o All classrooms are to be air-conditioned rooms.
- O All classroom seating arrangements (set-ups) are to provide adequate table space for note-taking; proper view of teaching faculty; and good acoustics and/or sound systems.
- O Audio-visual equipment and operators as needs arise. (Exact times, dates, and type of equipment required will be determined and transmitted to Wisconsin).
- O Classrooms will be available for ABA use beginning Sunday, July 14, 1985, at 12:00 noon until 2:00 p.m. on Friday, July 19, 1985. Specific needs will be communicated via the staging guide.

Meals

- O Cafeteria style meals will be taken in Chadbourne Hall dining area beginning with breakfast on Monday, July 15, 1985, through lunch on Friday, July 19, 1985, excluding Wednesday dinner (see below).
- o Sunday, July 14, 1985, a special reception and formal sit-down dinner for students, faculty and staff will be held either on University property or at a nearby hotel. If held on school property, both alcoholic and non-alcoholic beverages will be procured and served by Wisconsin, number of bars to be determined at a later date.
- o Approximately two (2) coffee/refreshment breaks (morning/afternoon) will be provided by Wisconsin per day for approximately 250 people with the exception of Friday, July 16, 1985, when one break will be held in the morning.
- O Wednesday evening a special cookout will be held. Food preparation and logistical arrangements will be handled by Wisconsin.

Housing

- o Adequate, air conditioned, secure sleeping arrangements will be provided for approximately 250 students on a single or double occupancy basis depending on space availability in Chadbourne Hall from Sunday, July 14, 1985, to Friday morning, July 19, 1985. Single occupancy rooms are to be approved in advance by ABA.
- o Rooms are to be available for faculty and staff on single occupancy basis.
- The ABA school registrar will provide a written rooming list approximately two weeks prior to the session and will call no later than seven days prior to the session with a final count of expected students, faculty and staff. Wisconsin will assign rooms to attendees.

Expenses

O ABA will be charged the following rates for Room and Board for the program during 1985, based on a per student per day basis:

Single occupancy	\$12.00	*Cost of meals includes
Double occupancy	\$17.50	breakfast, lunch, and
Meals	\$15.50*	dinner on dates specified
TOTAL	\$45.00	above.

- o Campus Program Coordinator \$6,000.00 In addition to logistical arrangements, coordinator will provide assistance, as specified above and as needed, in coordinating curriculum and faculty.
- o School Overhead \$5,700.00 Wisconsin staff time, space costs, administrative costs, and general campus usage costs.
- o Any additional costs will be handled on an as needed basis, based on the attached budget proposal from Wisconsin. All variations to this proposal will be communicated to and agreed upon by ABA prior to implementation of said service.
- o A complete preliminary budget, based on preliminary staging guides, will be provided to ABA at a time to be determined later.
- o All expenses not addressed in this letter of agreement which may arise are to be mutually agreed upon by Wisconsin and ABA.
- o An itemized invoice for all expenses related to the session will be presented by Wisconsin to ABA no later than 60 days following the session.

General

In addition to the arrangements outlined above, the following additional arrangements are mutually agreed to:

- Wisconsin will accommodate on a limited basis, those students who must arrive early or leave late to/from the session. (Students pick up this charge on their own.) Each situation will be handled on an individual basis and the need for such special arrangements will be communicated to Wisconsin on the written housing list mentioned above. Housing for these students will be in the same or a comparable facility to the assigned housing during the session, and is not to exceed two nights before or after the specified session dates.
- o Students attending this school will be able to utilize university recreational facilities at no additional charge, except as mutually agreed upon in advance of school.
- O Wisconsin will provide a local bank with a list of students, faculty and staff for check cashing privileges.
- o Medical facilities for treatment of minor injuries or illnesses at a fee to the user as established by Wisconsin.
- o Students arriving on campus by automobile may park in a designated lot located near the dormitory at no charge.



1155 Observatory Drive Madison, WI 53706 608/262-0391

January 26, 1985

Ms. Katie B. Saunders, Program Manager American Bankers Association 1120 Connecticut Avenue, N.W. Washington, D.C. 20036

Dear Katie:

Enclosed are preliminary outlines for both the residential and income property courses. I have attempted to block out the basic subject areas of each lecture, however, I was not sure of the structure of Giovinazzo's lecture series which I left blank for you to fill in. I similarly did not know how to outline the management skills outline on Friday. On the income lending seminary, I remember we moved Merrick to 10:45 but I could not remember the exact schedule starting at 8:00 on Thursday. Look forward to receiving your revised schedule.

I have also enclosed the current outline from the mortgage banker seminar. They include a significant number of mimeographed articles which is a good idea. Perhaps we should require each speaker to provide at least one recommended reading as well as chapter references within the ABA mortgage textbook.

Sorry for the delay.

Best Regards.

James A. Graaskamp

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ABA National School of Real Estate Finance





January 31, 1985

Professor James A. Graaskamp University of Wisconsin Graduate School Of Business 1155 Observatory Drive Madison, WI 53706

Dear Professor Graaskamp:

I just wanted to drop you a note to confirm our recent confirmation. As I understand it, Howell is no longer in the spot from 8:00 to 10:30 a.m. on July 18th. Johannes is from 8:00-9:15 a.m. with "Economic Risks..." and George from 9:30-10:30 a.m. with "Trends in Public Participation...". I had sent a letter to Howell indicating he was to teach from 8:00-10:30 a.m. from your faculty list(see attached). You must have made a change very recently as we had just received your faculty list a few weeks ago.

I will be revising the schedules again based on the titles in your class abstracts. I will forward a copy to you as soon as it is completed. I may be reached at 202/467-4940 if you have any questions.

Sincerely,

Nga 'Do Thi Registrar Reprinted with permission of Wayne H. Brogelman, Esq.



(414) 765-4838

LAW DEPARTMENT

January 31, 1985

ABA National School of Real Estate Finance 1120 Connecticut Avenue, N.W. Washington, D.C. 20036

Attention:

Katie Saunders Program Manager

REFERENCE:

Your 1985 Session - July 14-19

Madison, Wisconsin

Dear Ms. Saunders:

In your letter of January 18, 1985 to me, it is indicated that my second topic will be "Preparing for Closing of Permanent Loan". Most of my loan closing experience has been in connection with construction loans. I intend that my presentation focus mainly on the closing of construction loans with some additional comments made for those situations in which there is a permanent loan take-out commitment. Please advise me if this presents a problem.

Very truly yours,

FIRST WISCONSIN CORPORATION

WHB: cj

cc: pr. James Graaskamp

University of Wisconsin 1931 West Monroe Street Madison, Wisconsin 53715 SMITH, FOWLER & MERG
ATTORNEYS AT LAW
SUITE 203
131 W. WILSON STREET
MADISON, WI 53703

RONALD R. SMITH EMILY ALBRINK FOWLER DONA J. MERG WALTER R. STEWART

OF COUNSEL ANNE W. SCHACHERL April 30, 1985

(608) 251-9001

21 NORTH MAIN STREET PO BOX 397 DEERFIELD, WI 53531 (608) 764-5121

Nga Do Thi American Bankers Association 1120 Connecticut Avenue, N.W. Washington, DC 20036

RE: Pre-session Material

Dear Mr. Thi:

Enclosed herein please find a course outline and a pre-session handout in regard to my teaching responsibilities for the ABA National School of Real Estate Finance in Madison, Wisconsin on July 16, 1985 in regard to the income property lending session from 3:00 to 4:30 p.m. I have checked with Dr. Graaskamp in regard to the outline and I believe it is in order.

Also enclosed please find the copyright warranty and audio visual requirements enclosures. The travel and parking material does not apply to me as I live locally in the Madison area.

Please don't hesitate to contact me if you have any questions.

Very truly yours,

SMITH, FOWLER & MERG

Dona J. Merg

DJM: bw

Enclosures

cc: Wr. James Graaskamp (w/enclosure)

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AMERICAN BANKERS **ASSOCIATION**

1120 Connecticut Avenue, N.W. Washington, D.C. 20036



June 3, 1985

Chairman-Real Estate and Urban Land Economics The School of Business University of Wisconsin-Madison 1155 Observatory Drive 53706 Madison, WI

Dr. James A. Graaskamp

CONSUMER FINANCIAL SERVICES GROUP

DIRECTOR Robert A. Wallgren 202/467-4020

HOUSING AND REAL ESTATE FINANCE DIVISION

CHAIRM AN Derek A. Barrett President and Chief Executive Officer Landmark Bank of Orlando 4640 South Orange Blossom Trail Orlando, Florida 32855 VICE CHAIRMAN Michael R. Buchanan Senior Vice President

The Citizens and Southern National Bank 2059 Cooledge Road

Tucker, Georgia 30084

ASSOCIATE DIRECTOR Roger A. Wentz 202/467-4222

ASSISTANT DIRECTOR Sally S. Sciacca 202/467-4173

Dear Jim:

Just a note to follow-up on a few items. They are:

- Case Studies. Since the call you had with Mike and Sally regarding the Central City case study he has been able to find another which he can use in its place. however, enclosing copies of the two other cases which need to be reviewed. The Compliance Case needs to be reviewed and suggestions for revisions, if any, made. The Peach City case definitely needs to be revised, since it was used for Course I students last year and is being used in Course II this year. I have scheduled a conference call of the members of the Board of Advisors for June 24 at 2:00 p.m. eastern time. I will plan on your being able to participate so we can discuss the cases with them. Additionally, I believe you are working on a case study for Derek Barrett's course "Analysis of Residential Land Development Financing Proposal." I would like to see this case be completed by June 21 at the latest so we will have time to schedule a call with Derek to discuss it.
- Faculty Outlines and Contact. Please provide me with a list of all faculty and courses that you will be developing outlines for. Also, have you been receiving calls from any faculty members?
- Final Examinations. How are these coming along? could possibly have them completed and to me in time to distribute to the Board members prior to the call on June 24th, then we could discuss them at that time.

Dr. James A. Graaskamp Page 2 June 3, 1985

4. On-Site Logistics. Nga has been coordinating the classroom assignments with you and will continue to do so. I just wanted to let you know, however, that we have cancelled the Sunday evening reception and dinner at the Edgewater and we will be holding it at Gordon Commons. Nga is working directly with Alice and her staff regarding the dorms and meal arrangements.

I think that's about it at this point. If you have any questions, or I have overlooked something, please don't hesitate to give me a call at 202-467-6654.

Sincerely,

Katie Saunders Program Manager

CC: Sally Sciacca

Board of Advisors

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AMERICAN BANKERS ASSOCIATION 1120 Connecticut Avenue, N.W. Washington, D.C. 20036

CONSUMER FINANCIAL SERVICES GROUP DIRECTOR Robert A. Wallgren 202/467-4020

June 4, 1985

HOUSING AND REAL ESTATE FINANCE DIVISION CHAIRMAN
Derek A. Barrett
President and Chief Executive Officer
Landmark Bank of Orlando
4640 South Orange Biossom Trail

Orlando, Florida 32855 VICE CHAIRMAN

Michael R. Buchanan Senior Vice President The Citizens and Southern National Bank 2059 Cooledge Road

2059 Cooledge Road Tucker, Georgia 30084

TO: Board of Advisors, NSREF

FR: Katie Saunders, Program Manager Kuli

RE: PROGRAM UPDATE

ASSOCIATE DIRECTOR

Roger A. Wentz 202/467-4222

ASSISTANT DIRECTOR Sally S. Sciacca 202/467-4173

I am writing to provide you with an update on the status of the school. All of the major promotional efforts have been completed, and we have had very good results. I am happy to inform you that we currently have 255 students registered . . . 134 in Course I and 121 in Course II. I feel that it is feasible to believe that by the time of the school, we could have at least 10 more students.

The faculty mailing has already been sent and the student mailing is going out today. All Course I students are receiving a copy of the AIB text, Real Estate Finance, for review prior to attending. Course II students were not sent the book, however, if they request it (those students who didn't go to Course I) we can send them a copy. The faculty members have been responding to Nga with their audio-visual and room requirements, and she's received outlines from a few of them. When she gets back next week, she'll be following up with those still outstanding. If you have not yet provided her with the information required, please do so as soon as possible!

Jim Graaskamp has been working on the final examinations and outlines and case studies for those courses which are brand new. We should be receiving this information from him around the 21st of this month.

The Peach City case, which we are using on Thursday afternoon at 1:15, needs to be revised substantially. Last year it was used in Course I and this year it has been scheduled for Course II. Please review the enclosed copy of the case and we can discuss the revisions in the conference call, which I have scheduled for June 24 at 2:00 p.m., Eastern Time. If you will be unable to participate in the call, or have an alternate number which you can be reached at, please get in touch with me immediately.

Page Two
June 4, 1985

The only other case which needs to be reviewed prior to this year's session is the Compliance Case. Bob Chamness has asked that it be reviewed by the Board members and the other faculty members teaching the Compliance Case. Both he and Peter Kravitz will participate in the first part of the call to discuss your recommended revisions.

Also included with this packet are copies of the extension problems. Please review them very carefully and when we meet at the school, we can discuss any necessary revisions. I would like to see all changes incorporated into the problems prior to sending them to the students this year.

I am enclosing a copy of the school schedule as it stands now, and as you can see, have marked where the various case studies are to be used. I look forward to speaking with all of you on June 24. If, in the meantime, you have any questions please give me a call at (202) 467-6654.

cc: Sally Sciacca Jim Graaskamp

AMERICAN BANKERS ASSOCIATION 1120 Connecticut Avenue, N.W. Washington, D.C. 20036

CONSUMER FINANCIAL SERVICES GROUP DIRECTOR
Robert A. Wallgren
202/467-4020

HOUSING AND REAL ESTATE FINANCE DIVISION

CHAIRMAN
Derek A. Barrett
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Landmark Bank of Orlando
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Orlando, Florida 32855

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Michael R. Buchanan
Senior Vice President
The Citizens and Southern National
Bank
2059 Cooledge Road
Tucker, Georgia 30084

ASSOCIATE DIRECTOR Roger A. Wentz 202/467-4222

ASSISTANT DIRECTOR Sally S. Sciacca 202/467-4173

June 3, 1985

Peter M. Kravitz Senior Attorney Federal Deposit Insurance Corporation 550 17th Street, N.W. Washington, D.C. 20429

Dear Peter:

I am enclosing a copy of the Compliance Case Study which has been used in the past for the ABA's National School of Real Estate Finance. Copies of the case have also been forwarded to Bob Chamness and the members of the Board of Advisors for their review. I would appreciate it if you could take a look at it and participate in a conference call I have scheduled on June 24 at 2:00 p.m. The purpose of the call is to discuss the case study and make any revisions recommended. I will plan on your participating in the call, but if you will be unable to make it, please let me know. My number is 467-6654.

Thank you for your support of the school.

Sincerely,

Katie Saunders Program Manager

CC: Jim Graaskamp Board of Advisors

Enclosures

AMERICAN BANKERS ASSOCIATION 1120 Connecticut Avenue, N.W. Washington, D.C. 20036

300

June 3, 1985

CONSUMER FINANCIAL SERVICES GROUP

DIRECTOR
Robert A. Wallgren
202/467-4020

HOUSING AND REAL ESTATE FINANCE DIVISION

CHAIRMAN
Derek A. Barrett
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Orlando, Florida 32855 VICE CHAIRMAN

Michael R. Buchanan Senior Vice President The Citizens and Southern National Bank 2059 Cooledge Road Tucker, Georgia 30084

ASSOCIATE DIRECTOR Roger A. Wentz 202/467-4222

ASSISTANT DIRECTOR Sally S. Sciacca 202/467-4173

Mike Marek Assistant Vice President First National Bank of Chicago One First National Plaza Chicago, IL 60670

RE: ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE

Dear Mike:

Thank you for responding to Nga's request for outlines and logistical information so promptly. There is still one area of participation which needs some attention. I am enclosing a copy of the Income Property (Peach City Bank) Case Study which is to be used for your course on Thursday, July 18, at 1:15 p.m. I am also forwarding copies to the Board of Advisors and Jim Graaskamp and have scheduled a conference call on June 24 at 2:00 p.m. eastern time to discuss the revisions necessary. The problems need to be revised substantially because they were used in Course I last year and will be used in Course II this year.

I would appreciate it if you could take a look at it and participate in the conference call to provide your input. Unless I hear differently, I will plan on your joining us on the call.

Thanks for your help, and if I can answer any questions, please don't hesitate to give me a call at 202-467-6654.

Sincerely,

Katie Saunders Program Manager

CC: Jim Graaskamp Board of Advisors



1155 Observatory Drive Madison, WI 53706 608/262-1555

July 15, 1985

Derek A. Barrett Landmark Bank of Orlando 4640 Orange Blossom Trail Orlando, FL 32855 32807

Dear Derek,

Once again I regret the confusion relative to your presentation on Thursday. There is no intent to change your very successful presentation of the past in any significant way.

Enclosed is your outline from last year and your same outline with some expansion of your topics to show how it relates to the case study material provided by Rahenkamp. I chose the Northern Tampa market because I presumed you have some general familiarity with growth in the area. Some friends of mine in Tampa are sending building statistics, demographics and other material which the students will have in their notebooks. It is a classic case because the developer did not do any market research to profile his customer or his product and would not allow his planner to do so. The relationship and openmindedness of any developer to the recommendations of his advisors should be a key factor in underwriting the developer and the development.

The scale of the project represents thirty to forty percent of the total absorption rate in the Tarpon Springs area so that the required capture rate is generally too high for a non-monopolistic position. It is a good example that high levels of building in general do not guarantee a market for a specific property. Note also that the project presumes smaller than usual lots without providing architectural guidance or prototypes necessary to make attractive use of small lots. At the same time the project marketing plan is holding the best wooded lots in reserve, selling the cheaper ones first. To create intangible value and image the marketing strategy should sell a significant portion of the best looking lots first - the large wooded lots which would also accelerate repayment of the loan by having higher release values.

In the morning before your presentation I will be emphasizing the need for very specific market segmentation and the difference between general absorption rates in a community or neighborhood and the capture rate required of a specific project to meet cash flow requirements. I will also be emphasizing the need to define the market gap to have some elements of monopoly to the product and a market window in terms of the best timing for initial sales offering.

Derek A. Barrett July 15, 1985

Your discussion outline of physical site opportunities and limitations is excellent and is well demonstrated by the case materials selected. I Xeroxed for the students only selective pages from the community document which is public information and demonstrates your points very well. (All references to Whitcomb Place and the developing corporation will be removed from the material in the student packet.) The page reference for each item is provided in the outline to give you and the students a common reference point. The site plan will demonstrate the difference between gross acreage, net usable acreage, and the use of product mix and in this case small lots, to meet certain density and dollar cost per unit objectives when so much of the land is unbuildable.

Note on page three of your outline some expansion of your topic area. For the case study the developer has to put in lift stations and a stretch of street offsite so that land cost comparisons are tricky until the banker is comparing cost per unit for land serviced for development, at least to its borders and leveled and filled to define net usable units. The case study cash flow output also demonstrates the necessity for establishing timelines and filing readjusted schedules with the lender from time to time. (Point out monthly cash planning and timeline on cash flow charts.) The timeline concept is emphasized in the financial analysis classes earlier in the week. Similarly earlier classes emphasize the need for the lender to understand the cash cycle constraints of other parties to the development process including the tenant, owner, subcontractor, and government sectors required to invest in infrastructure.

On page four of the outline I have expanded the lender analysis by reference to a supplementary reading on development appraisal techniques by Boykin, and the nonfinancial political and marketing opportunities for the bank inherent in financing development in proximity to the bank trade area.

I would expect that you would use the same disbursement AIA form and commitment letter for the Everone Bank that you have used in past years as these are most appropriate to your presentation.

I think that you will find very little departure from the program which you have developed to date and I hope that you will see the case materials as an enrichment which demonstrates that the banker must consider both the market for the finished product and the collective market represented by the community which must be sold on the fact that the property is good for all the citizens and the fiscal goals of the community.

I will ZAP you the materials and call you on Tuesday morning for any suggested ammendments you may have before we retype and Xerox the outline.

Yours truly,

James A. Graaskamp Chairman

Real Estate and Urban Land Economics



Graduate School of Business

1155 Observatory Drive Madison, WI 53706 608/262–1555

July 21, 1985

Mr. Clete Hansen State of Wisconsin Dept. of Regulation & Licensing Real Estate Examining Board 1400 East Washington Avenue P. O. Box 8936 Madison, WI 53708

Re: Approval of American Bankers Association Real Estate Finance Courses

Dear Clete:

During the past week we have conducted the first offering of the Real Estate Finance Schools for the American Bankers Association, a program formerly offered at Ohio State for the past twenty years. Registration came from throughout the United States, with perhaps 20 - 25 bankers out of 260 from Wisconsin. Not all were bankers; as there were a couple of mortgage bankers and realtors mixed in the group, since the series is open to anybody.

These folks asked me if the course could be accredited for re-licensing educational credits. The attached manuals will indicate intense, in-depth treatment of real estate finance. I regret this tardy request, but it had not occurred to us that many of the bankers would also be carrying real estate brokers' licenses.

Hopefully, the attached materials meet the requirements of Chapter 452, and with your approval, I will send along a validated enrollment list of Wisconsin residents who completed the course and passed the exam.

With appreciation

JAMES A GRAASKAMP, Chairman

Real Estate and Urban Land Economics

JAG:cpf Attachments Katie Saunders American Bankers Association 1120 Connecticut Avenue Washington, D.C. 20036

Dear Katle:

We haven't finished the loose ends from this year's seminar but we are planning for next year. I have instructed Bill Strang to reserve Chadbourne Hall for the week beginning Sunday, July 29, 1986, and Sunday, July 19, 1987.

Here are some loose ends and charges:

- 1. Please pay Landmark Research, Inc., 4610 University Avenue, Madison, Wi 53705 \$1,029.08, for copy work at Odana Press, Instiprint and Bob's Copy Shop. Copies of bills are attached.
- Please pay John Walbrun and Pat Heuring directly so that we are not assessed for social security, unemployment comp and the other indirects which characterize either the University, Landmark Research, or my personal payroll.

John Walbrun Patrick Heuring
65.50 hours at \$5.50 per hour = \$360.25 each

- 3. Bill Strang will be sending you charges for University charges such as BAVI Copy Center, etc.
- 4. Please send a list of all Wisconsin residents attending meeting or all bankers attending the meeting with annotary public signature which I can file with the State of Wisconsin Real Estate Licensing Bureau for those who need course credit for real estate Wrokerage licenses. A number of bankers asked for credit and I have prevailed on Clete Hanson to give credit accordingly.
- 5. Please establish dates for a September meeting for planning next years's session. If possible, I would like to make a one day trip of it.

 Republic Airlines can have me on your doorstep before noon and Northwest Airlines has a return trip at 7:00 P.M. A four-five hour planning session may be all that is needed in September. A Thursday or a Friday would be best.

Ratie Saunders July 30, 1985 Page Two

6. Dave Christianson or somebody borrowed my new book on <u>Secondary</u>
<u>Mortgage Market Finance</u> by Richard Garrigan and published by Dow-Jones.
Could you please locate it and return it as it sells for about \$75
retail!

Thanks for the opportunity to be of service. I have written thank you notes to the faculty that I recruited for the sessions. Do you wish me to write directly to the others as well? I presume you are administering to their travel expenses and honorariums as appropriate.

Best of everything to you, Nga and Sally,

James A. Graaskamp Chairman, Real Estate ε Urban Land Economics

JAG/db



August 20, 1985

1155 Observatory Drive Madison, WI 53706 608/262–1550

Ms. Sally Sciacca

American Bankers Association
1120 Connecticut Avenue, NW
Washington, DC 20036

Dear Sally:

I'm sorry to be late in getting you the invoice from the School. There was some difficulty getting the audio-visual bill, but it arrived this morning. I've asked for two separate checks, one for direct charges and one for indirect charges, because the deposits go through separate channels. I hope this doesn't inconvenience you too greatly.

We appreciate the involvement with ABA and look forward to a strong, long-term relationship. Hopefully, we've got the "bugs" out this first year and I'm pleased the program went so well.

Sincerely,

William A. Strang Associate Dean for External Relations

WAS: jgk

Enclosures: 2

cc: Professor James Graaskamp



August 20, 1985

1155 Observatory Drive Madison, WI 53706 608/262-0391

INVOICE FOR SERVICES PROVIDED TO AMERICAN BANKER'S ASSOCIATION SCHOOL FOR REAL ESTATE FINANCE, july 14-19, 1985

1. Copy Center Charges

\$1,903.95

2. Bureau of Audio-Visual Instruction Charges

194.50

\$2,098.45

Please make this check out to: <u>U. W.-Madison School of Business</u>

Mail to: William A. Strang, Associate Dean

UW-Madison School of Business

1155 Observatory Drive Madison, WI 53706



University of Wisconsin-Madison

August 20, 1985

1155 Observatory Drive Madison, WI 53706 608/262-0391

INVOICE FOR OVERHEAD CHARGES PROVIDED TO AMERICAN BANKER'S ASSOCIATION SCHOOL FOR REAL ESTATE FINANCE, July 14-19, 1985

Overhead as agreed in Letter of Agreement:

\$5,700

Please make this check out to: <u>U.W.-Madison School of Business</u>

Mail to: William A. Strang, Associate Dean

UW-Madison School of Business

1155 Observatory Drive Madison, WI 53706

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James L. Pappas, Ph.D.

September 11, 1985

Dr. James A. Graaskamp Chairman, Real Estate & Urban Land Economics Department University of Wisconsin-Madison 1155 Observatory Drive Madison, WI 53706

Dear Jim:

I want to thank you for all the contributions you made to the 1985 GSB program. Feedback on both your Income Property Mortgage Lending elective and the sessions you provided for our Specialized Lending course was quite good. As always, you've put together a series of winning presentations! I especially appreciate your efforts to help us out on such short notice with the presentations in the Lending course.

We will begin work on the 1986 program shortly and I hope we can prevail upon you to return once again as a speaker. I will be in contact shortly to get your ideas on how we might want to pursue the real estate lending offerings in the program.

Thanks again for your excellent efforts on behalf of the GSB program. The work that you did was a major factor in our success this year.

Sincerely,

James L. Pappas Academic Dean

JLP:amk

Graduate School of Banking, 122 West Washington Avenue, Madison, Wisconsin 53703, Telephone 608-256-7021

Course 1 -Residential Property

ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE

UNIVERSITY OF WISCONSIN MADISON, WISCONSIN

Presented in association with the HOUSING AND REAL ESTATE FINANCE DIVISION



AMERICAN BANKERS ASSOCIATION

1120 Connecticut Avenue, N.W. Washington, D.C. 20036

BOARD OF ADVISORS

THOMAS WAGASKY, Chairman
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PAUL OHMART

1986 ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE — COURSE I — RESIDENTIAL PROPERTY

SUNDAY, JULY 20	MONDAY, JULY 21	TUESDAY, JULY 22	WEDNESDAY, JULY 23	THURSDAY, JULY 24	FRIDAY, JULY 25	SATURDAY	
SUNDAT, JULI 20	8:00-9:15 Historical Evolution of Residential Lending	8:00-9:30 Single Family Home Loan Servicing	8:00-12:15 Compliance w/ Federal Regulation of Single Household Loan Programs	8:00-9:45 Housing Market Analysis	8:00-12:00 Management Skills Development	8:00-1 Appraisal Pro Residential Kle B130 Va	oblems and Workouts in
	Graes Kamp Johannes	Swan		Graaskamp		10:15-	
11:00-5:00 Registration	9:30-11:15 Competitive Banking Under Current Economic Conditions	9:45-10:45 Complications of the Alternative Rate Mortgage		10:00-12:15 Real Estate Development and Tract Financing		Examir	
	Johannes	Southwell					
	11:30-12:15 Single Family Home Loan Application Process:	11:00-12:15 Secondary Mortgage Markets					
		Waugh	Chamness	Barrett	Healey	B130 Va	n Vleck
			LUNCH			···	
	1:15-1:45 con't	1:15-2:45 Secondary Mortgage Market Arithmetic	1:15-2:15 Residential Private Guarantee Programs	1:15-3:00 Underwriting Condo Projects for PMI Insurance	1:15-2:15 Mortgage Insurance For Condos		
	See Room Listings in Notebook						
4:00-5:00 The Real Estate Process		Waugh	Hastings	Yelinek	Graaskamp		
(The New Approach to Real Estate Systems)	2:00-3:00 Single Family Home Loan Application Process: Computers	3:00-5:00 Secondary Mortgage Market CMO's	2:30-4:30 Compliance Case Studies	3:15-5:15 FHA Multi Family Mortgage Loans	2:30-3:30 Real Estate Roundtable Discussion		
Graaskamp	Young Lebowitz		See Room Listings in Notebook				
	3:15-5:30 Single Family Home Loan Application Process Case Studies				Graaskom p Ohmart- Wagasky		a.
BIO Commoras	See Room Listings in Notebook	Furer		Katz	Christianson		
BIOCommerce	IIIIAOGEDOON		DINNER				
6:00 Reception & Dinner		7:00-8:00 Concurrent Sessions 1) Measuring Profitability 2) ARM's 3) SMM		6:45-8:30 Managing Risk: Key to Bank Profits in Real Estate Finance			
				Kendall BIO Commerce			

FACULTY LIST ABA'S NATIONAL SCHOOL OF REAL ESTATE FINANCE JULY 20-26, 1986

Derek A. Barrett

Citizens & Southern Bank 4640 Orange Blossom Trail Orlando, FL 32855

Michael R. Buchanan

Citizens & Southern Natl Bank PO Box 4065 Atlanta, GA 30302

Robert Chamness

McKenna, Conner & Cuneo 1 Market Plz, Steuart St Tower 27th Floor San Francisco, CA 94105

David A. Christianson

Southeast Bank NA 6261 NW 6th Way Suite 101 Ft Lauderdale, FL 33309

Robert H. Cramer

Community Banks Inc 7448 Hubbard Avenue Middleton, WI 53562

Andrew E. Furer

Salomon Brothers Inc 1 New York Plaza New York, NY 10004

Vincent J. Giovinazzo

Georgia State University Atlanta, GA 30303

James A. Graaskamp

University of Wisconsin 1155 Observatory Drive Madison, WI 53706

Susan L. Grimley

Guaranty Bank & Trust Co 370 Main Street Worcester, MA 01608

Robert Hastings

Foremost Guaranty Corporation 131 W Wilson Street Madison, WI 53703

John R. Hayes

Federal National Mortgage Assn One South Wacker Drive Chicago, IL 60606

James H. Healey

Management & Business Svcs Inc 1085 Fishinger Road Columbus, OH 43221 Steve Jarchow

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Mark Karlan

JMB Realty Corporation John Hancock Bldg, 39th Fl 875 N. Michigan Avenue Chicago, IL 60611

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Leon T. Kendali

MGIC Corporation 270 E Kilbourn Avenue Milwaukee, WI 53703

Walter C. Klein, Jr.

Lomas & Nettleton 1600 Viceroy Drive Dallas, TX 75235

Jeffrey A. Lebowitz

Federal Natl Mortg Assn Software Systems 3139 Campus Drive Norcross, GA 30071

Brent McCoy

Louisiana National Bank PO Box 1511 Baton Rouge, LA 70821

Dona J. Merg

Smith & Merg 131 W Wilson Street Suite 203 Madison, WI 53703

Christopher J. O'Donnell Continental Illinois National

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Jame R. Parck

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Ron Smith

Smith & Merg 131 W Wilson Street Suite 203 Madison, WI 53703

Larry Southwell

Citizens Bank
One Citizens Banking Center
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THE REAL ESTATE PROCESS

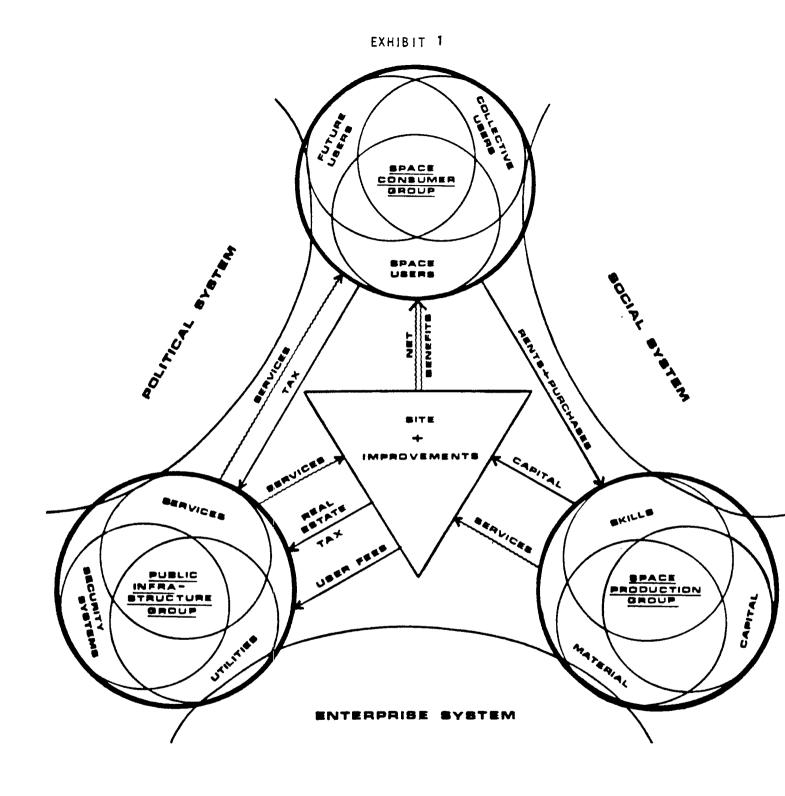
James Graaskamp

I. BASIC CONCEPTS AND DEFINITIONS

- A. Real estate is a tangible product defined as artificially delineated space with a fourth dimension of time referenced to a fixed point on the face of the earth.
 - Real estate is a space-time unit, room per night, apartment per month, square foot per year, tennis court hours, or a condominium for two weeks in January at a ski slope.
 - 2. To the space-time abstraction can be added special attributes to house and contribute some form of activity. Contribution is efficiency, security, comfort, or well-being.
 - 3. Improvements from survey market to city layouts to structures define space.
 - 4. Legal contracts and precedents define time.
 - 5. Rights of use are defined by public values, court opinions.
 - 6. Private rights to use are those which remain after the public has exercised its rights to control, to tax, or to condemn.
- B. A real estate project is a cash cycle business enterprise which combines a space-time product with certain types of management services to meet the needs of a specific user. It is the process of converting space-time needs to money-time dimensions in a cash economy.

Note: See "Real Estate Process" given at 1985 ABA School for Exhibits 3, 4, 45 (VII. C. 2. b.)

- 1. An enterprise is an organized undertaking whose form and behavior at any point in time is a concensus or synthesis of forces outside the enterprise attempting to determine its form and behavior and focus within the organization which can affect form, behavior, and sustaining energy over time.
- 2. A real estate business is any business which provides expertise necessary to relate space-time need to money-time requirements and includes architects, brokers, city planners, mortgage bankers, and all other special skills.
- 3. The true <u>profit centers</u> in real estate are in the delivery of services and cash capital.
- 4. Equity ownership is the degree to which one enterprise controls or diverts cash from another real estate enterprise.
- 5. Public ownership exists to the degree real estate taxes, user fees, and other charges take a percentage of gross revenue in excess of service cost.
- 6. A consumer must view space as one part of a total consumption system involving direct cost, surface cost, transportation cost and negative income of risk.
- C. The real estate process is the dynamic interaction of three groups, space users (consumers), space producers, and the various public agencies (infrastructures) which provide services and capital to support the consumer needs. (See Exhibit 1.)
 - 1. Each of these three decision groups represent an enterprise, an organized undertaking. All are cash cycle enterprises constrained by a need for cash solvency, both short and long term.



THE REAL ESTATE PROCESS

- 2. A desirable real estate solution occurs when the process permits maximum satisfaction to the consumer at a price that he can afford within the environmental limits of land while permitting the consumer, producer, and the government cash cycle to achieve solvency cash breakeven at a minimum, after full payment for services rendered.
- 3. <u>Solvency</u> of the total process, not value, <u>is</u> the <u>critical issue</u>.
- 4. Land is an environmental constraint and not a profit cener.
- 5. Land provides access to a real estate business opportunity and is not the opportunity itself. Real estate business wants to control land to create a captive market for services.
- D. The consumer group requires three levels of marketing sensitivity.
 - 1. The collective consumer operating through the political process must be convinced that it should provide permits, zoning, or other approvals which franchise project.
 - 2. The individual consumer who rents or buys must be convinced he will improve the activity housed in terms of convenience, efficiency, security, and well-being at a periodic cash cost which is affordable.
 - 3. <u>Future users</u> consist of undefined future tenants representing a change in use which requires flexibility of site, structure, or services to maintain market edge, and therefore presumed resale liquidity.
- E. Recognition of the fact that profit maximization must be limited by concerns for physical environment and community priorities for land use has resulted in redefinition of the most basic concept in appraisal; i.e. highest and best use, in the authorized terminology handbook sponsored by the American Insitute of Real Estate Appraisers and

the Society of Real Estate Appraisers. Compare the 1971 definition with that for 1975:

Highest and best use concept -A valuation concept that can be applied to either the land or improvements. It normally is used to mean that use of a parcel of land (without regard to any improvements upon it) that will maximize the owner's wealth by being the most profitable use of the land. The concept of highest and best use can also be applied to a property which has some improvements upon it that have a remaining economic life. In this context, highest and best use can refer to that use of the existing improvements which is not profitable to the owner. It is possible to have two different highest and best uses for the same property: one for the land ignoring the improvements; and another that recognizes the presence of the improvements. p. 57, Real Estate Appraisal Principles and Terminology, Second Edition, Society of Real Estate

"Highest and best use: That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal. Alternatively, that use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and which results in highest land value. The definition immediately above applies specifically to the highest and best use of land. It is to be recognized that in cases where a site has existing improvements on it, the highest and best use may very well be determined to be different from the existing use. The existing use will continue, however, unless and until land value in its highest and best use exceeds the total value of the property in its existing use. Implied within these definitions is recognition of the contribution of that specific use to community environment_or_to_community_development_goals_in addition to wealth maximization of individual property owners. Also implied is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best

use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use. In the context of investment value an alternative term would be most profitable use.

Real Estate Appraisal Terminology, Edited by Byrl N. Boyce, Ph.D., SRPA, Ballinger Publishing Co., Cambridge, Mass., 1975. (Emphasis added.)

- G. The purchase of a piece of real estate today involves the acceptance of a great many assumptions about the future. Those who take care to validate these assumptions in a period of transition as to public land use control tend to have the most successful investment.
 - 1. Business decisions today make explicit recognition of their assumptions and the need to act under conditions of uncertainty.
 - 2. Business risk is the difference between assumptions about the future and realizations, and the proforma budget and the end of the year income statement.
 - 3. Risk management is the control of variance between key assumptions and realizations.
 - 4. An appraisal is a set of assumptions about the future productivity of a property under selected conditions of certainty.
 - 5. A feasibility study is a test of a particular proposal under alternative sets of assumptions about the future and its tolerance for variance or priority for certainty.
- H. The concept of highest and best use of land was a commodity concept which did not consider externalities adequately. It is being replaced by concepts of most fitting use and the concept of most probable use.
 - 1. The <u>most fitting use</u> is that use which is the optimal reconciliation of effective consumer demand, the cost of production, and the fiscal and environmental impact on third parties.

- 2. Reconciliation involves financial impact analysis on "who pays" and "who benefits" -- thus the rash of debate on how to do impact studies.
- 3. The most probable use will be something less than the most fitting use depending upon topical constraints imposed by current political factors, the state of real estate technology, and short-term solvency pressures on consumer, producer, or public agency.
- 4. Most probable use means that an appraisal is first a feasibility study of alternative uses for a site in search of a user, an investor, and in need of public consent.
- I. In seeking the most fitting and most probable use, the inner city planner and private property appraiser must interact to determine how community objectives and consumer and production sector solvency can be achieved simultaneously.
 - 1. A real estate decision has only two basic forms. Either a site is in search of a use and consumer with the ability to pay, or a consumer, need or use with a defined ability to pay is seeking some combination of space-time attributes he can afford.
 - 2. The individual consumer with needs and a budget is the drive wheel.
 - 3. The public sector represents the community owned consumer service delivery system, seeking to minimize marginal cost to the consumer and average cost to the community at large.
 - 4. The production sector responds to a derivative demand for engineering and management expertise.
 - Real estate is a collective decision and a product of the political process.

- J. Critiquing the form and adequacy of a real estate solution is analogous to the artistic concept of judging the success of an art object by relating form of the solution to the context to which it was created.
 - 1. Context includes those elements which are fixed, given, or objective and to which any solution must adapt.
 - 2. Form-giving elements are those variables within the artist's control, i.e. options or alternatives at a particular time.
 - 3. A solution is judged for its correctness or success in terms of the degree of fit of the form proposed to the context.
 - 4. Feasibility analysis is concerned with the degree of fit or the extent of misfit between a proposed course of action and the context within which it must operate or fit.
 - 5. Success therefore depends on how appropriately the problem is defined; testing feasibility depends primarily upon accurate and comprehensive definition of the context.
- K. Ultimately there are only three major decision formats for real estate and land economics.
 - 1. A location (and related improvements) in search of a justified use.
 - 2. A justified use in search of the best fitting location (and related improvements).
 - 3. Money in search of an investment in location and related improvements—the conversion of space-time needs to money invested over time.

ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE

July 20-26, 1986

COURSE EVALUATION

	of Bank (Assets) ck One Box Only)		·
	[] Under \$10 million [] \$10 to \$25 million [] \$26 to \$50 million [] \$51 to \$75 mimllion [] \$76 to 100 million	[] \$101 to \$500 [] \$501 million [] Over \$1 bill [] Bank Holding [] Other	to \$1 billion
	Number of Years in I	Real Estate Finance	
at t	To aid the American Bankers B	eedback by answering th	ne following questions
Sess	ion Title: <u>Real Estate Process</u>	Instructor <u>Jam</u> (Identi	es Graaskamp fy when appropriate)
Α.	Indicate your impressions of where 5=excellent, 1=poor.	the sessions using a ra	iting scale of 5 to 1,
	Please rate the extent to which	ch:	Rating
	o the objectives of the sess o the objectives of the sess o the subject matter was well o the material presented was (i.e., in current position o the instructor retained the o the instructor effectively o the instructor's handouts, o the outline provided in the was useful o the instructor was effective o the session was effective	ion were fulfilled l organized useful to you or in a future position e interest of the class promoted class involve if any, were useful e notebook, if any,	on)
В.	Was the difficulty level appro	opriate?	
	Too Basic	About Right	Too Difficult
С.	Was the time provided sufficient presented in the session?	ent to accommodate the	amount of material
	Too much time	About Right	Too little time
Comm	ents:		

FINANCE & RISK MANAGEMENT CONCEPTS

James Graaskamp

I. FINANCIAL RISK MANAGEMENT

Investment is a real estate enterprise, as a mortgage lender or equity investor is simply buying a set of financial assumptions about the interaction of the project to its context, of the firm to its environment. Real estate analysis is to control the variance between expectations and realization, between proforma prospects and historical balance sheets and profit and loss statements.

- A. Analysis is risk management, control of variance.
- B. There are essentially two types of risk exposures:
 - 1. Static risks (uncontrollable, or external events) are those which can only cause a loss due to surprise upset of a plan.
 - 2. Dynamic risks (partially controllable internal events) can produce profit or loss and are best controlled by the finesse of management execution of a plan.
- C. Risk evaluation or comparison grows out of the function of risk management for an enterprise.
 - 1. Risk management has two objectives:
 - a. First priority conservation of existing enterprise assets despite surprise events.
 - b. Second priority realization of budgeted expectations despite surprise events.

- 2. The process of risk management involves systematic and continuous:
 - a. Identification of significant exposure to loss
 - b. Estimation of potential loss frequency and severity
 - c. Identification of alternative methods to avoid loss
 - d. Selection of a risk management method
 - e. Monitoring execution of risk management plan
- 3. The risk management process is both a philosophy of inquiry or analysis and a check-list of management concern, which is attempting to answer systematically "WHAT IF...?" questions, to anticipate surprise and to provide for a response or adjustment in advance of the contingency.
- D. Identification of significant exposures to loss can begin by using standard business documents as reminders, such as:
 - 1. Review of balance sheet accounts
 - 2. Review of profit and loss statement accounts
 - 3. Review of business organization or function
 - 4. Review of elements of financial feasibility analysis
- E. Signficant has to do with potential loss frequency, loss severity, and degree of uncertainty.
 - 1. Very frequent and minor become expense accounts
 - 2. Less frequent but predictable and major become reserves or budget allowances.
 - 3. Infrequent, uncertain but very severe become issues of risk management.
 - 4. A 50/50 probability is the most uncertain outcome.

- F. The alternative methods of avoiding loss which everyone subconsciously uses include:
 - 1. Eliminate risk exposure
 - Reduce frequency or severity of loss (diversification or mortgage loan closing process)
 - 3. Combine risks to increase predictability (reserves for expense)
 - 4. Shift risk by contract (subcontracts or escalator clauses)
 - 5. Shift risk by combination (diversification) by contract (insurance)
 - 6. Limit maximum loss (corporate shell or limited partnership)
 - 7. Hedging (sale and leaseback, options, contingent sales)
- G. Risk management concepts leads to understanding of the true essence of a mortgage contract and an equity commitment.
 - 1. Given constant dollars and stable interest rates the mortage agreement laid off the static risks of insurance and controlled the dynamic risks by providing adequate cash throw-off for the borrower, pain through foreclosure and loss of borrower equity dollars, and a bailout based on conservative loan to economic productivity value ratio.
 - 2. Given inflation, devaluation of the dollar, and rising interest rates, the mortgage has become a risk management instrument for the borrower, particularly with common usage of the esculpatory clause and recognition of non-productive values in real estate ownership. The mortgage is a classic straddle in two commodity markets.
 - a. In the space-time commodity it is a call on appreciation, if any, and a put to the lender if appreciation or income in future markets becomes inadequate.
 - b. It is a short position in the money market which creates value should interest rates rise or dollars devalue.

- c. The confusion of real estate as a productive economic asset with real estate as a speculative commodity has permitted the distortion of appraisal values. A high loan-to-value ratio mortgage is a purchase of a commodity on margin without giving the lender the right to call for additional collateral.
- 3. The cash profit centers in real estate are no longer available to secure the mortgage loan as they take the form of outlays for expertise and material rather than classic net income.

 Moreover the tax shelter is applied to other income which is not available as collateral for the mortgage loan even though present value of those tax savings contributes to the market value on which the loan is based.
- 4. Equity ownership is the degree to which cash flow can be willfully diverted by maintaining control while avoiding risk of variance beyond acceptable levels.
- H. Long-term lenders have suddenly realized that:
 - They are selling puts in the commodity market of long-term real estate space, and in the case of construction loans, space for future delivery.
 - 2. A mortgage is a long position in an unstable market when everybody is going short.
 - 3. With rising prices, the penalties of risk are loss of credibility and loss of opportunity income due to the inability to roll invested dollars on time. There is a timing risk to income and to purchasing power in place of significant risk of loss to historical principal.

- 4. The ability of the banks to submerge losses in future income and the desires of the pension funds to submerge profits until future benefits must be paid is leading to significant rethinking of the real estate loan process and the dichotomy between credit and equity and compensation for static versus dynamic risk taking.
- 5. Emerging concepts of risk management of the dynamic risks of time, interest, and money as compared to solvency and collateral are leading to strategic shifts in real estate capital markets.
- I. Solvency risk was controlled with debt cover and default point, occupancy clauses and gap loans. Diversion of collateral was partially offset with letters of credit, escrows, and personal guarantees on construction loans, but what about commodity speculation and interest rate risk?
 - 1. Interest cost plus a loading? Variable interest in the solvency problem residential and commercial.
 - Equity participation and the accounting problem of a submerged asset or killing the goose that laid the golden egg - market value accounting problems.
 - 3. Inflation versus obsolescence of location and structure due to energy and demographics enterprise or systems risks?
 - 4. Portfolio concepts are now in vogue because risk management theory has come of age.

- J. Basic strategy--pleasure, pain, and bailout
 - 1. Continuous monetary profit for the borrower
 - Contingent opportunities to apply pain in the form of money and pride.
 - 3. Consider the loan the sale of a put and price for the bailout
- K. The Harvard view
 - 1. The property
 - 2. The people
 - 3. The package
- L. The Wisconsin view of income property analysis
 - 1. Political exposure
 - 2. Market control
 - 3. Management intensiveness
 - 4. Sensitivity of tax plan
 - 6, Thoroughness of risk management plan
 - 7. Realism of estate plan of principal borrower
- M. Major misconceptions of bankers in real estate lending
 - 1. Mortgage loans are a two-party contract
 - a. See Exhibit 1 for party clusters
 - b. See Exhivit 2 for minimum list of documents
 - 2. A real estate loan is a credit loan
 - a. It is a small business loan
 - b. It is a commodity straddle
 - Capitalization rates indicate value, and loan-to-value ratios indicate security of principal
 - 4. Real estate marketing is shotgun rather than rifle
 - a. High degree of segmentation
 - b. High sensitivity to price, product, pace, and promotion
 - 5. Foreclosure losses are minimal relative to income
 - a. Mismatching of losses to income
 - Opportunity costs of concealing mistakes of auditors in terms of management time
 - c. Opportunity costs of money tied down in non-earning assets
 - d. Opportunity costs of loss reserves which diminish loanable funds, reported income per share and increased cost of new capital.

- 6. Appraisals and market studies are worthless
 - a. Regulatory CYA documents
 - b. No input to basic lending decision
 - c. No letter of engagement to specify product
- Real estate is generic so that site planning, architecture, and engineering professionals make little difference

N. Business Risks

- 1. Fall in market rents due to change in neighborhood or use
- Increase in operating expense due to latent construction defects or poor management
- Damage to collateral property or access thereto due to natural catastrophe, eminent domain, title flaw, or nearby construction
- 4. Economic cycle causing tenants to fail, retrench, or exercise cancellation provisions
- 5. Loss of public entitlements

O. Financial Risks

- Inadequacy of net income to meet debt service payments due to falling rents, increasing vacancy, or increasing expenses
- 2. Usuary charges
- Loss of creditor status due to documentation error, court action for conspiracy, beneficiary of illegal bulk sale, nature of financial arrangements, or tax law considerations.
- Loss of standing due to moratorium, bankruptcy of borrower, or financial reorganization
- 5. Inadequate collateral due to inadequate insurance non-completion of construction of accruals.

P. Monetary Risks

- Future increases in interest rates causing discount of mortgage balance at contract rate
- 2. Reappraisal in audit of balance outstanding of variable rate mortgage
- 3. Write-down on book balance and/or reserves to anticipate losses on delinquent or foreclosed loan
- 4. Loss of purchasing power due to currency devaluation
- Loss of opportunities interms of reinvestment or productive management time

Figure 8
Loan to Cost Ratio Approach
(Frontdoor Approach)

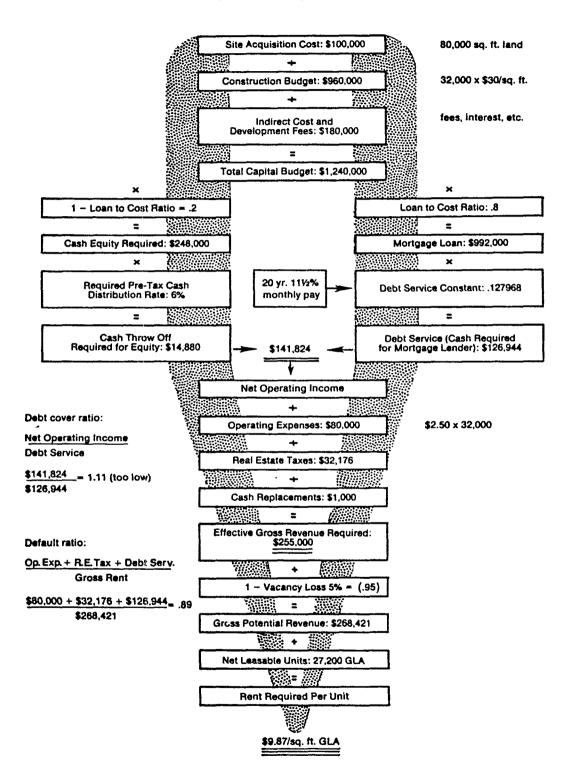


Figure 9

Debt Cover Ratio Approach
(A Backdoor Approach)
Lender's Point of View

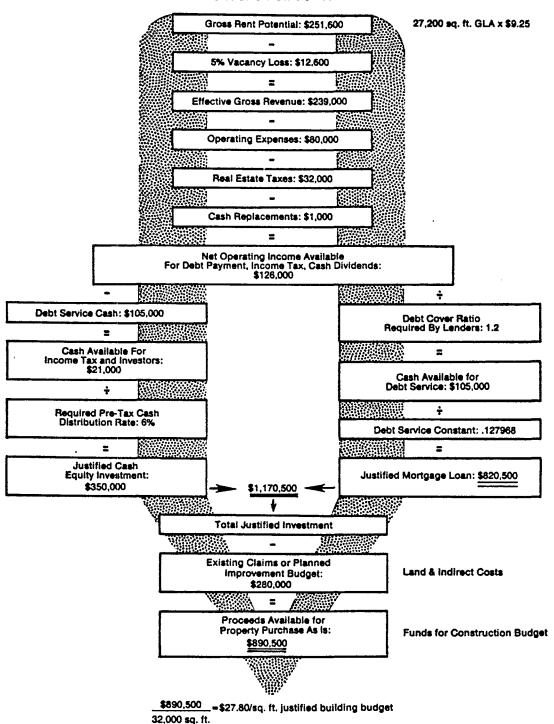
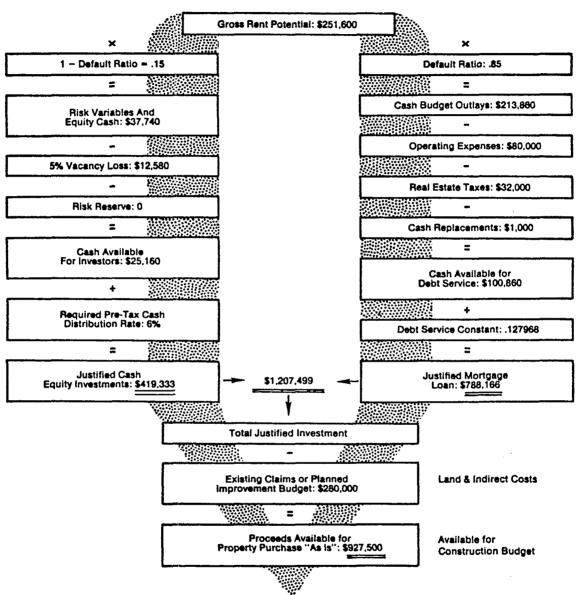


Figure 10
Default Ratio Approach
(Another Backdoor Approach)
Developer's Point of View



\$37/sq. ft. of gross area for justified building budget

Figure 11
Example of Computer Forecasting of Suburban Office Investment Cash Flows†

Pro Forma

	SECTION 1						
	GROSS RENT	\$ 267206.	*PATE OF G	ROWTH OF G	BOSS BENT		0.037
	'EXPENSES	\$ 60259.		ROWTH OF E			0.042
	*R E TAXES	\$ 31196.	'RATE OF G	ROWTH OF R	E TAXES		0.295
	"INCOME TAX RATE	0.3000		ALUE GROW			2.000
	*VACANCY RATE	0.0500		CAPITAL LOAI			0.150
	EQUITY DISCOUNT	0.1300 0.0500		INARY EXPEN JENT RATE	ISES		\$ 3000 0.060
	RESALE COST WKG CAPITAL RS	\$ 15000.		ESER INTERE	ST RATE		0.050
	INVESTOR TAX CLASS	0	OWNERSH				1
	INITIAL COST	\$ 1240000.	INITIAL EQ	JITY REQUIRE			\$ 29500
	ALL " VALUES ARE AVERAG	BE AMOUNTS	S FOR HOLDIN	IG PERIOD OF	5 YAS.		
REPORT	SECTION 2						
	•		COMPONENT				
	w.w. p	PCT.	BEGIN	USEFUL	DEPR	COCT	664
	TITLE	DEPR	USE	LIFE	METHOD	COST	SCH
	SITE	0.00	1	0. 5 0.	0 4	\$100000. \$960000.	0
	CONSTRUCTION SOFT COSTS	1.00 1.00	1	50. 10.	2	\$180000.	0
			MORTGAGE	_	_	•	·
		INTR	BEGIN	END	TERM	ORIG	PC1
	TITLE	RATE	YR.	YR.		BALC	VALL
	CONST. MORTGAGE	0.1500	1	1	1	\$96 0000.	0.77
	PERMANENT MORTGAGE	0.1150	2	21	20	\$952243 .	0.68
	2 LESS VACANCY 3 LESS REAL ESTATE TAX	XES	251600. 12580. 16000.	251600. 12580. 32000.	264160. 13209. 33920.	277389. 13869. 35955.	1450
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS		12580. 16000. 84000. 139020. 46800. 144000. -51780. 46800. 0.	12580. 32000. 60000. 147020. 45936. 108836. -7752. 45936. 13024.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44265. 16375.	1456 3811 8367 1749 4341 10350 279 4341 1830
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION		12580. 16000. 84000. 139020. 46800. 144000. -51780. 46800.	12580. 32000. 60000. 147020. 45936. 108836. -7752. 45936.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44265.	1456 3811 8367 1749 4341 10350 279 4341 1836 5300
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES		12580. 18000. 84000. 139020. 46800. 144000. -51780. 46800. 0. -4980. 0.	12580. 32000. 80000. 147020. 45936. 106836. -7752. 45936. 13024 25180. 0.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44285. 16375. 43260. 4611. 773.	1450 3811 6367 1749 4341 10350 279 4341 1830 5300 837
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION	s	12580. 18000. 84000. 139020. 45800. 144000. -51780. 45800. 0. -4960. 0.	12580. 32000. 80000. 147020. 45936. 108836. -7752. 45936. 13024. 25180. 0. 503.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44265. 16375. 43280. 4611. 773. 37896.	1450 3811 6367 1749 4341 10350 279 4341 1830 5300 837
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	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AI	S I FTER TAX	12580. 18000. 84000. 139020. 46800. 144000. -51780. 46800. 0. -4980. 0. 0.	12580. 32000. 60000. 147020. 45936. 108836. 77752. 45936. 13024. 25160. 603. 16899.	13209. 33920. 61200. 155851. 45096. 107256. 13497. 45096. 14604. 33991. 1049. 659. 32283. 0.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44265. 16375. 43250. 4611. 773. 37896.	1456 3811 6367 17491 4348 10350 2791 4348 1830 830 837
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN	S - FTER TAX INCOME	12580. 18000. 84000. 139020. 48800. -51780. 48800. 0. -4980. 0. 0.	12580. 32000. 40000. 147020. 45936. 108836. -7752. 45936. 13024. 25180. 0. 503. 16899. 0.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0.	1456 3811 8367 17491 4345 10350 2791 4346 1836 837 4467
MA	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAM 16 DISTRIBUTABLE CASH AI 17 TAX SAVINGS ON OTHER	S - FTER TAX INCOME	12580. 18000. 84000. 139020. 48800. 144000. 51780. 48800. 0. -4980. 0. 0. 0.	12580. 32000. 60000. 147020. 45936. 108836. -7752. 45936. 13024. 25180. 0. 503. 16699. 0.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0.	1456 3811 8361 1749 4344 10350 279 4344 1830 833 446
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTER	S - FTER TAX INCOME	12580. 18000. 84000. 139020. 48800. 144000. 51780. 48800. 0. -4980. 0. 0. 0.	12580. 32000. 60000. 147020. 45936. 108836. -7752. 45936. 13024. 25180. 0. 503. 16699. 0.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0.	1456 3811 8367 17491 4345 10350 2791 4346 1836 837 4467
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTER RKET VALUE & REVERSION	S FTER TAX INCOME R TAXES	12580. 18000. 84000. 139020. 48800. -51780. 48800. 0. -4980. 0. 0. 0. 0. 15534.	12580. 32000. 40000. 147020. 45936. 108836. 13024. 25180. 0. 503. 16899. 0. 16899. 2325.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44265. 16375. 43280. 4611. 773. 37896. 0. 37898.	1456 3811 8367 1749 4344 10350 2799 4341 1830 5300 5300 4467 4467
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTEI RKET VALUE & REVERSION SH FLOW ANALYSIS	S FTER TAX INCOME R TAXES	12580. 18000. 84000. 139020. 46800. 144000. -51780. 46800. 0. 0. 0. 0. 0. 0. 15534. 15534.	12580. 32000. 60000. 147020. 45936. 108836. 17752. 45936. 13024. 25160. 503. 16899. 2325. 19225.	13209. 33920. 61200. 155851. 45096. 107256. 13497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37896.	1456 3811 8361 17491 4348 10350 2799 4345 1836 5303 4467 4467
	3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AT 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTER RKET VALUE & REVERSION SH FLOW ANALYSIS 19 END OF YEAR MARKET V 20 LESS RESALE COST	S FTER TAX INCOME R TAXES	12580. 18000. 84000. 139020. 48800. 144000. 51780. 48800. 0. 0. 0. 0. 0. 0. 15534. 15534.	12580. 32000. 60000. 147020. 45936. 1088367752. 45936. 1302425160. 0. 503. 16899. 2325. 19225. 19225.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45098. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44265. 16375. 43250. 4611. 773. 37896. 0. 37896. 0. 37896.	1456 3811 8367 17491 4345 1035 2797 4346 1836 5305 837 4467 4467 17491 8749
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAM 16 DISTRIBUTABLE CASH AI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTEI RKET VALUE & REVERSION SH FLOW ANALYSIS 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES	S FTER TAX INCOME R TAXES	12580. 18000. 84000. 139020. 48800. -51780. 48800. 0. 0. 0. 0. 0. 0. 15534. 15534.	12580. 32000. 60000. 147020. 45936. 108367752. 45936. 1302425180. 0. 503. 16899. 0. 16899. 2325. 19225.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37898.	1456 3811 8367 1749 4344 10356 279 4344 1836 5303 4467 4467 17491 8749 8896
	3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTEI 18 SPENDABLE CASH AFTEI 18 SPENDABLE CASH AFTEI 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM. CASH RESI	S I I I I I I I I I I I I I I I I I I I	12580. 18000. 84000. 139020. 48800. 144000. -51780. 46800. 0. 0. 0. 0. 0. 0. 0. 15534. 15534. 15534.	12580. 32000. 80000. 147020. 45936. 108836. 17752. 45936. 13024. 25180. 503. 16899. 2325. 19225. 19225.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283. 1962. 1558510. 77926. 924615. 13061.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37898.	1456 3811 8361 1749 4341 10350 279 4341 1834 5303 4461 4461 17491 874 8874 88152
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AFTEI RKET VALUE & REVERSION SH FLOW ANALYSIS 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM. CASH RESI 23 BEFORE TAX NET WORTI	S I I I I I I I I I I I I I I I I I I I	12580. 18000. 84000. 139020. 46800. 144000. -51780. 46800. 0. 0. 0. 0. 0. 0. 15534. 15534. 15534.	12580. 32000. 60000. 147020. 45936. 1088367752. 45936. 1302425160. 603. 16899. 2325. 19225. 19225. 19225. 19225. 19225.	13209. 33920. 61200. 61200. 155851. 45096. 107256. 3497. 45098. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44265. 16375. 43250. 4611. 773. 37896. 0. 37896. 0. 37896.	1456 3811 6367 17491 4345 1035 2799 4341 1836 5300 837 4467 4467 4467 174911 8741 8898 152 7869
	3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTEI 18 SPENDABLE CASH AFTEI 18 SPENDABLE CASH AFTEI 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM. CASH RESI	S I I I I I I I I I I I I I I I I I I I	12580. 18000. 84000. 139020. 48800. 144000. -51780. 46800. 0. 0. 0. 0. 0. 0. 0. 15534. 15534. 15534.	12580. 32000. 80000. 147020. 45936. 108836. 17752. 45936. 13024. 25180. 503. 16899. 2325. 19225. 19225.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283. 1962. 1558510. 77926. 924615. 13061.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37898.	1456 3811 8367 17491 4349 10350 2791 4348 1336 8307 4467 4467 4467 19 174910 8744 88961 1521 78698 9076
	3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AFTEI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTEI 18 RKET VALUE & REVERSION SH FLOW ANALYSIS 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM. CASH RESI 23 BEFORE TAX NET WORT 24 CAPITAL GAIN (IF SOLD)	S I I I I I I I I I I I I I I I I I I I	12580. 18000. 84000. 139020. 45800. 0. 144000. -51780. 45800. 0. 0. 0. 0. 0. 0. 0. 15534. 15534. 15534.	12580. 32000. 45936. 10836. 10836. 10836. 13024. 25180. 0. 16899. 2325. 19225. 19225. 19225. 11812. 469283. 231090.	13209 33920. 61200. 155851. 45096. 107256. 3497. 45096. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37896.	1456 3811 8367 17491 4348 10350 2799 4346 1836 837 4467 4467 4467 4467 8896 152 7869 6076
	3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AFTEI 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTEI 18 RET VALUE & REVERSION SH FLOW ANALYSIS 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM. CASH RESI 23 BEFORE TAX NET WORTI 24 CAPITAL GAIN (IF SOLD) 25 CAPITAL GAIN (IF SOLD) 25 CAPITAL GAIN STAX 26 MINIMUM PREF, TAX 27 INCOME TAX ON EXCE	S INTER TAX INCOME R TAXES	12580. 18000. 84000. 139020. 46800. 14400051780. 46800. 0. 0. 0. 0. 0. 15534. 15534. 15534.	12580. 32000. 60000. 147020. 45936. 1088367752. 45936. 1302425160. 0. 503. 16899. 2325. 19225.	13209. 33920. 61200. 155851. 45096. 107256. 3497. 45098. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283. 1962 1568510. 77926. 824615. 13061. 569031. 352185. 42262. 0. 7870.	13869. 35955. 62424. 165140. 44265. 105485. 15370. 44265. 16375. 43250. 4611. 773. 37896. 0. 37896. 0. 37896. 1963 1651404. 82570. 906240. 14468. 675081. 477634. 57316. 0.	29125 1456 3811 6367 17491 4349 10350 2791 4447 4467 4467 4467 4467 199 174910 8745 88986 1521 78699 60765 729
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AFTEI RKET VALUE & REVERSION SH FLOW ANALYSIS 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM. CASH RESI 23 BEFORE TAX NET WORTI 24 CAPITAL GAIN (IF SOLD) 25 CAPITAL GAIN SIAS 26 MINIMUM PREF. TAX	S INTER TAX INCOME R TAXES	12580. 18000. 84000. 139020. 46800. 14400051780. 46800. 0. 0. 0. 0. 15534. 15534. 15534.	12580. 32000. 60000. 147020. 45936. 1088367752. 45936. 1302425180. 0. 503. 16899. 2325. 19225. 19225. 19225. 19225. 19225. 231090. 273310. 239218. 11812. 469283. 231090. 27731. 0.	13209. 33920. 61200. 61200. 155851. 45096. 107256. 107256. 14504. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37896. 1983 1651404. 82570. 906240. 14488. 675081. 477634. 57316. 0.	1456 3811 6367 17491 4344 10350 2799 4341 1834 5303 4467 4467 4467 4467 174911 8741 8896 152 7869 9076
	3 LESS REAL ESTATE TA: 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WORKING CAPITAL LOAN 15 WORKING CAPITAL LOAN 16 DISTRIBUTABLE CASH AFTEI RKET VALUE & REVERSION SH FLOW ANALYSIS 19 END OF YEAR MARKET V 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM. CASH RESI 23 BEFORE TAX NET WORTI 24 CAPITAL GAIN (IF SOLD) 25 CAPITAL GAIN SIAS 26 MINIMUM PREF. TAX	S INTER TAX INCOME R TAXES	12580. 18000. 84000. 139020. 46800. 14400051780. 46800. 0. 0. 0. 0. 15534. 15534. 15534.	12580. 32000. 60000. 147020. 45936. 1088367752. 45936. 1302425180. 0. 503. 16899. 2325. 19225. 19225. 19225. 19225. 19225. 231090. 273310. 239218. 11812. 469283. 231090. 27731. 0.	13209. 33920. 61200. 61200. 155851. 45096. 107256. 107256. 14504. 33991. 1049. 659. 32283. 0. 32283. 0. 32283.	13869. 35955. 62424. 165140. 44285. 105485. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37896. 1983 1651404. 82570. 906240. 14488. 675081. 477634. 57316. 0.	1456 3811 8361 1749 4344 10355 279 434 183 530 446 446 446 446 17491 874 874 876 876 877 876 877 877 877 877 877 877

BEFORE TAX RATIO ANALYSIS					
CASH FLOW ANALYSIS					
	1980	1961	1952	1963	196
30 RETURN ON NET WORTH B/4 TAX	0.2592	0.3102	0.2850	0.2624	0.244
31 CHANGE IN NET WORTH B/4 TAX	7646 0.	97823.	99748.	106050.	111901
32 ORIG EQUITY CASH RTNB/4 TAX	-0.0169	0.0853	0.1152	0.1467	0.179
33 ORIG EQUITY PAYBACK B/4 TAX	0.0000	0.0573	0.1667	0.2952	0.446
34 B/4 TAX PRESENT VALUE AFTER TAX RATIO ANALYSIS	1284319.	1335057.	1385464.	1431682.	1473578
CASH FLOW ANALYSIS	1960	1981	1982	1983	196
35 RETURN ON NET WORTH AFR TAX	0.2541				
36 CHANGE IN NET WORTH AFR TAX	0.2541 59433.	0.2845 &1619.	0.2640 82647.	0.2443 86871.	0.228 9441
37 ORIG EQUITY CASH RTN AFR TAX	0.0527	0.0652	0.1094	0.1285	0.151
36 ORIG EQUITY PAYBACK AFR TAX	0.0527	0.1178	0.2273	0.3557	0.507
39 AFTER TAX PRESENT VALUE	1287405.	1322538.	1363042.	1399418.	143202
CASH FLOW ANALYSIS					
	1960	1961	1982	1963	_190
40 NET INCOME-MARKET VALUE RTO	0.1000	8.1000	0.1000	0.1000	0.100
41 LENDER BONUS INTEREST RATE 42 DEFAULT RATIO	0.0000 0.9698	0.0000 0.8500	0.0000 0.8213	0.0000 0.7940	0.00 0.76
RT SECTION 5	·				
SENSITIVITY ANALYSIS	·				
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981	·				
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED -	· · · · · · · · · · · · · · · · · · ·	0.8500	0.8500	0.8500	
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL -	·	0.9696	0.8500	0.8213	0.79
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NECTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01					0.79
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1961 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING		0.9696 -0.1196	0.8500 0.0000	0.8213 0.0287	0.79 0.05
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS	BV	0.9698 ~0.1198	0.8500 0.0000	0.8213 0.0287	0.79
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NECTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES	8Y 8Y	0.9698 ~0.1198 	0.8500 0.0000 1981 0.0786	0.8213 0.0287 1982 0.0779	0.79 0.05
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS	BY	0.9696 -0.1196 -0.1573 -0.0300	0.8500 0.0000 1981 0.0786 0.0419	0.8213 0.0287 1982 0.0779 0.0432	0.79 0.05 <u>19</u> 0.07 0.04
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1961 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES		0.9698 ~0.1198 	0.8500 0.0000 1981 0.0786	0.8213 0.0287 1982 0.0779	0.79 0.05 19 0.07 0.04 0.04
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS.	BY BY BY BY	0.9696 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 -0.0175	0.8500 0.0000 1981 0.0786 0.0419 0.0419 0.0000 0.0231	0.8213 0.0287 1982 0.0779 0.0432 0.0432 0.0000 0.0246	0.79 0.05 19 0.07 0.04 0.04 0.04
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PIMTS.	8Y 8Y 8Y 8Y 8Y	0.9696 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000	0.8500 0.0000 1981 0.0786 0.0419 0.0401 0.0000 0.0231 0.1932	0.8213 0.0287 1982 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809	0.79 0.05 19 0.07 0.04 0.04 0.00 0.02 0.16
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PINCIPAL PMTS. WORKING CAPITAL LOAN	8Y 8Y 8Y 8Y 8Y	0.9696 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000 0.0000	0.8500 0.0000 1981 0.0786 0.0419 0.0419 0.0000 0.0231 0.1932 0.0000	0.8213 0.0287 1982 0.0779 0.0432 0.0432 0.0000 0.0246 0.1869 0.0000	0.79 0.05 19 0.07 0.04 0.00 0.02 0.16 0.00
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1961 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PIMTS. WORKING CAPITAL LOAN GROSS INCOME	8Y 8Y 8Y 8Y 8Y 8Y	0.9696 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000 0.0000 0.00097	0.8500 0.0000 1961 0.0786 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0065	0.8213 0.0287 1962 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0062	0.79 0.05 19 0.07 0.04 0.04 0.00 0.02 0.16 0.00 -0.00
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PINCIPAL PMTS. WORKING CAPITAL LOAN	8Y 8Y 8Y 8Y 8Y	0.9696 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000 0.0000	0.8500 0.0000 1981 0.0786 0.0419 0.0419 0.0000 0.0231 0.1932 0.0000	0.8213 0.0287 1982 0.0779 0.0432 0.0432 0.0000 0.0246 0.1869 0.0000	0.79 0.05 19 0.07 0.04 0.04 0.00 0.02 0.16 0.00 -0.00
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SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PMTS. WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT SITE CONSTRUCTION	8Y 8Y 8Y 8Y 8Y 8Y 8Y	0.9696 -0.1196 -0.1573 -0.0573 -0.0466 0.0000 -0.0175 0.0000 0.0000 0.0097 0.0000 1960 -0.1573	0.8500 0.0000 1981 0.0786 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0085 0.0000 1961 0.0786	0.8213 0.0287 1982 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0062 -0.0062 0.0000	0.79 0.05 19 0.04 0.04 0.00 0.02 0.16 0.00 -0.00 -0.00 0.00 19 0.07
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PINTS. WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT SITE CONSTRUCTION SOFT COSTS	8Y 8Y 8Y 8Y 8Y 8Y 8Y 8Y	0.9696 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000 0.00097 0.00097 0.0000 -0.1573 -1.9499	0.8500 0.0000 1981 0.0786 0.0419 0.0419 0.0231 0.1932 0.0000 -0.0085 0.0000 1981 0.0788 0.9750	0.8213 0.0287 0.0287 0.0779 0.0432 0.0403 0.0000 0.0000 -0.0062 -0.0062 0.0000 1962 0.0779 0.9658	0.855 0.79 0.05 19 0.07 0.04 0.00 0.02 0.16 0.00 -0.00 -0.00 0.00 -0.00 0.00 0.00
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SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PINTS. WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT SITE CONSTRUCTION SOFT COSTS	8Y 8Y 8Y 8Y 8Y 8Y 8Y 8Y	0.9696 -0.1196 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 0.0000 0.0000 0.0097 0.0097 0.0000 -0.1573 -1.9499 -0.2031 -1.0833	0.8500 0.0000 1981 0.0786 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0085 0.0000 1981 0.0786 0.9750 0.1016	0.8213 0.0287 0.0287 0.0779 0.0432 0.0402 0.0000 0.0000 0.0000 0.0000 1962 0.0000 19658 0.1006 0.5365 1962	0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
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This example is based on earlier Figures 8-10.

The computer output is a portion of report sections available from an educational program at the University of Wisconsin called MR CAP. MR CAP is a bearc clees tool in most rest estate courses at the University of Wisconsin in Madison and is available on many other campuses as well. MR CAP is the property of its author, Assistant Professor Michael L. Robbins, and sample output here is reproduced with his permission.

Data input file required of analyst for the five reports which follow:

1.8UBURBAN OFFICE, ULI EXAMPLE 10.1990.0.1.1.5.27200 201.1.100000.0.0 302.1.1.1.1.2 30.86.08.2.03.13.0 202.1.1.00000.0.0 302.1.1.1.1.2 30.86.08.2.03.13.0 202.1.1.0.0 300.2.00.1.5.0.1 300.2.0.0.15.0.0.1 300.2.00.0.15.0.0.0 300.2.00.0.0.15.0.0.0.15 300.2.00.0.0.15.0.0.0.15 300.2.000.0.0.15.0.0.0 300.2.000.0.0.15.0.0.0 300.2.000.0.0.15.0.0.0 300.2.000.0.0.15.0.0.15 300.2.00.0.0.15.0.0 300.2.000.0.0.15.0.0 300.2.000.0.0.0 300.2.000.0.0.0 300.2.000.0.0 300.2.000.0.0 300.2.2.12.2.2.0.0 300.2.2.0.0.0 300.2.0.0.0 300.2.0.0.0 300.2.0.0.0 300.2.0.0.0 300.2.0.0.0 300.2.0.0.0 300.0 300.0 300.0 300.0 300

EXHIBIT 27

PRO FORMA INCOME PROPERTY FORMAT

(Cash Accounting Basis)

1. Expected Receipt

Base rent (Monthly)
Index to base rent (Annual adjustment to monthly base)
Percentage rent (Quarterly estimate with fifth quarter adjustment)
Amortized tenant improvements (Monthly, fixed)
CAM (Monthly average with 14th month adjustment)
Reimburseables (Annual pass through)
Escalators with stop (Annual review)
Interest on reserves (Quarterly sweep)
Government transfer payments (Negotiated and deferred)
Total receipts

II. Loss of Potential Receipts
Vacancy losses
Rent collection losses
Reimbursement collection losses
Receivables
Concessions
Total reduction in expected receipts

- III. Actual Revenues for Operations
- IV Gross Outlays for Operations
 CAM items
 Reimburseables
 Escalator items
 Owner costs
 Refurbishment
 Renewal tenant improvements
 Renewal lease commissions
 Total operating outlays
 - V. Total Cash from Operations
- VI. Capital Charges
 Interest payments
 Principal payments
 Capital improvements
- VII. Net Cash from Operations before Taxes
 - + Transfers from cash reserves from previous period
 - + Net increases in loan balances outstanding
- VIII. Cash Available for Distribution and/or Taxes
 Less distribution and taxes
 = Net addition to cash reserves in following period

HOUSING MARKET ANALYSIS

James Graaskamp

- 1. Every real estate project is a cash cycle enterprise which depends on customers willing to spend dollars in their own self-interest. Not only is each real estate project an individual enterprise, it is also a subsystem within a network of collective interdependent enterprises, each of which must be persuaded that their own needs and goals are furthered by interfacing with certain real estate.
 - A. In the broadest sense, market research investigates any factor influencing communication, persuasion, or recognition of needs and motivations in the transactional interface of enterprises in the real estate network. This includes local political controls on entitlement to new entrants, the bargaining power of customers and suppliers, and changing land use patterns and technologies affecting land use.
 - B. In the narrower sense, market research is concerned with securing a customer's commitment to the enterprise with a high degree of predictability to control the variance in cash flows, growth in values, and other financial performance derivative of a customer.
 - C. To paraphrase Peter Drucker, once business has created a customer, everything else it does may be redundant.
 - D. In a market system, free enterprise is the art of creating one's own monopoly, at least for a moment, in the mind of the customer for partial protection against price competition and the necessity of sharing a limited market.
 - 1. For products, monopoly requires at least one element of control in terms of raw material, location, and political entitlement, relevant design, unique design, unique service, control of distribution channels, or good timing.
 - 2. For services, monopoly requires control of the customer through behavioral conditioning, or consumer inertia toward an opportunity to change habits.
 - Real estate is a combination of product and service, and therefore real estate monopoly has the greatest number of options to exploit when shaping marketing efforts of the firm.
 - 4. The long lead time required to change supply to meet demand creates unique opportunity for developing a monopoly by decision-making finesse relative to politics of location, timing of financing, and delivery and forecasting of demographic shifts and changing consumer preference.
- 11. Repayment of a loan according to its terms presumes the real estate

enterprise revenue and net income is generated on schedule as anticipated in the pro forms. Revenue and net presume a customer so that the ultimate risk management control is the ability to identify and benefit from customer behavior and commitment. The housing customer must be motivated to invest money in his self-interest.

- A. Traditional market research depended on the demographics of age, family status, income, education, and locational patterns.
- B. Market supply was defined in terms of structural category (single family detached, attached, multi-family) and further subdivided by tenure--ownership, rental, coop, or condo.
 - 1. Absorbtion rates indicate the ratio of a defined supply of existing units sold, rented, AND OCCUPIED in a given year.
 - CAPTURE RATES are the critical product of market research—the sahre of market required to sell or rent the proposed project.
- C. The housing industry has moved beyond demographics to sophisticated analysis of family values and life-styles.
 - 1. Psychographics use multi-dimensional demographic subsets as a proxy for preferences in style.
 - More recetnly, it is recognized that within age, income, education, there are significant subgroups, such as the VALs system developed by the Stanford Research Institute sociologists.
 - 3. The American housing consumer is highly programmable and far more segmented than the banking market. Bankers have discovered upscale, private, personal, family, and mass submarkets. The upscale housing market may have fifteen subcategories in a town the size of Madison.
- D. The developer must also research the collective consumer who sets the political attitude relative to political entitlements and must complete that research before any project plans are announced.
 - 1. Contiguous land ownerships
 - 2. Neighborhood associations
 - 3. Alderperson and City Council attitude
 - 4. Decision patterns of commissions with jurisdiction
 - 5. Legislative trends toward new regulations during time cycle of development

- E. There are four significant areas of specialization in customer research for housing.
 - 1. Market Research is defined as research of secondary date sources to define trends, patterns of geographic fragmentation and clusters of market segmentation which scale the size of any enterprise opportunity and provide a link between site and marketplace. Shifts in the demand/supply equilibrium of space/time units will be derivative of changes in: demographic trends; psycho/social value trends; available investment capital allocations and interest cost trends; technological trends; environmental trends; energy cost impact trends; locational preferences; income redistribution through federal fiscal budget and tax policy.
 - 2. Merchandising research is defined as primary research of specified subsets of customers and competitive supplies in order to confirm appropriate ratios for the disaggregation of aggregate data to identify location, space and amenity needs, and to specify levels of effective demand. (According to a Chicago builder, the market for two-bedroom townhouses may be subdivided among 13 different family status groups.)
 - 3. Political research is defined as primary research of specified subsets of political decision makers and their constituents in order to anticipate and influence legislative decisions, commission rulings and attitudes of specific political persons and blocs. Projects must be marketed to collective consumers to minimize the generation of political resistance to the project by inadvertently providing features or marketing themes that stimulate negative political action.
 - 4. Promotional research is defined as investigation of media channels, messages and subliminal codes that communicate and motivate the customer. In the case of real estate, the product is so big it envelops the customer as a primary media using forms, colors, textures as well as spatial layouts to communicate sensitivity to the needs of the prospect.
- III. The developer/borrower will build anything he can finance, and whatever he buids will have an impact on the community, for good or bad, for 100 years. The banker has an ethical responsibility to understand market needs, capacity, taste, and sensitivity. He must also recognize the limitations of market research models.
 - A. An example of disaggretation of demographic data
 - B. An example of housing ownership population segments
 - C. An example of housing segmentation and behavioral preference combined to scale a market

- D. An example of product research by the trade to define common housing feature preferences
- V. The marketing of existing homes must also be sensitive to the need for the product to relate to the center of the market rather than the edge of the market. It is well-known that in the Midwest an outdoor swimming pool may not add value to a house, while a nostalgic piece of architectural bric-a-brac such as a stained glass window or fireplace may add a significant premium to the rental of an apartment.
 - A. Merrill Lynch Relocation Realty requires the appraiser to value a home by deducting the cost of repainting the interior in beige, recarpeting where necessary, or repainting the exterior.
 - B. Buyers are conditioned to prejudge a housing product by the approach zone—the route through the immediate neighborhood, the road into the project, the path to the door, and the entry porch. These must be consistent with community standards (example of New York Housing Authority contemporary in Deerfield, NY).

GENERALIZED ALLOCATION OF MARKET RESEARCH METHODS

FOR REAL ESTATE ASSET MANAGEMENT

	TRUTH- NORMATIVE	BEAUTY (INTUITIVE)	CHANCE- STATISTICAL
Market	Gravitational models Input-output Shift-share Census data and planning counts Social prototypes (hierarchy of needs)	Subjective forecasts Delphi studies	Dynamic time series model for forecasting Regression analysis Cluster analysis
Merchandise	Non-systematic survey/research Competitive property inventories Standard plan selection	Focus groups Personal interview Experience logs Marketing diaries	Factor analysis Conjoing analysis Random telephone survey AID analysis Multi-dimentional scaling
Political	Flow chart of political process	Focus groups Personal interview Expert opinion	Random telephone survey Precinct voting profiles Legislative voting records
Promotion	Standard advertising channels for distribution and established building forms and textures	Focus groups Architectural models, testing of visual and tactile codes	Factor analysis Conjoint analysis Random telephone survey

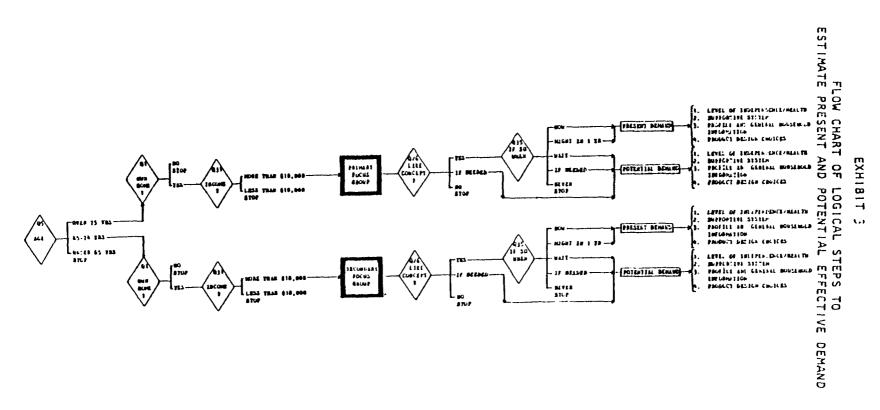
EXHIBIT 2 DEMAND FOR ELDERLY RESIDENTIAL CARE UNITS

Persons In County age 65 and over In 1970	21,914
Adjustment 1970-1974 to reflect the number of persons moving into the 65+ bracket and the application of mortality rates by age and sex	245
Estimated persons in County age 65 and over in 1974	22,159
Less persons 65+ presently in nursing and residential care facilities in County 1,792	
Less persons 65+ presently in government subsidized housing for the elderly 638	2,430
Persons age 65+ in the conventional housing market in County in 1974	19,729
Estimated number of persons financially qualified for and seriously interested in moving into the proposed residential care development	4,270
Household equivalent (+ 1.519 persons per household)	2,811
Less estimated number who will not convert serious interest into any form of action (50%)	1,406
*Less the percentage who, while seriously interested, said (before they heard the hypothesis) that their next home would probably be outside County (13.3% from survey questionnaire)	·
rLess those disqualified because their current health status necessitates care beyond the scope of services to be provided in the residential care units (5.4% (from survey)	
Elderly households in County qualified for and seriously interested in moving into the proposed development	1,142
rPlus an allowance for those elderly households coming from outside County to enter the proposed development(10%)	127
Elderly households qualified for and seriously interested in moving into the proposed development	1,269
Share of market opportunity area who stated in survey that for their next dwelling unit their first preference would be an apartment, in a highrise, midrise, or garden building:	
Highrise or midrise 28.0% Garden 49.1 77.1%	978
Less estimated numbers of households who might move into competitive developments available supply of units	270
Households that can be considered candidates for the proposed development	708
That share of households who said they would be willing to Within 1 year from now 15.6% - 110 households Within 2 years 31.2% - 220 Within 5 years 53.4% - 378 708	move:
A project of 100 units requires a capture rate of: 91% for a 1 - year absorption rate 90% for a 2 year """ 14% for a 5 year """	

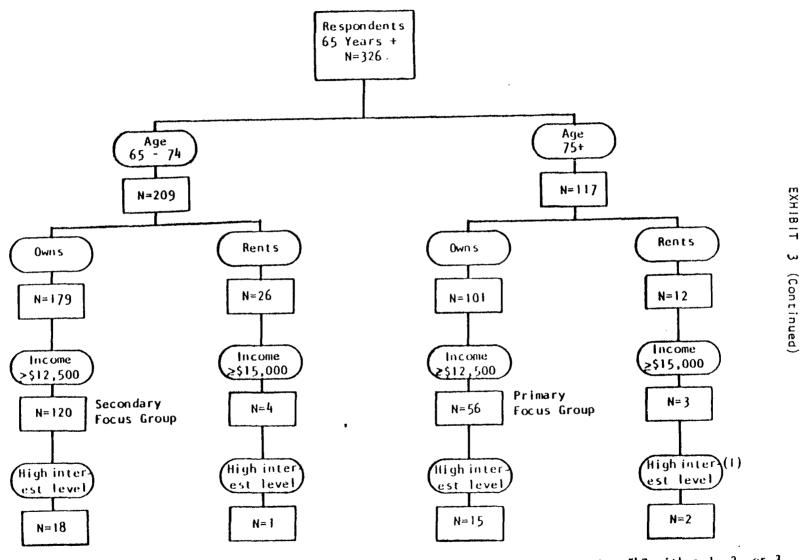
EXHIBIT 3

ILLUSTRATION No. 7 Number of Eunday This tree of logic based on evallability of date on number of Sunday Bightseera "alghtseer" automobiles in each Wisconsin county and the premise that In County extendence at similar Historic Society projects in three different counties Number of would provide a ratio of attendance to Bundey sightseers Historic Society did not expect to recepture capital but wished to generate an annual sur-Eightssors plus equal to average interest on its endowment funds. % of County within SOURCE: unpublished MS degree paper by Robert W. Richardson, Univer-Thirty-Mile sity of Wisconsin School of Business, 1969. Redius Number of Visitore Matie of Villa Louis Attendence Stonefield Old Wade House Admissions Sightmore FLOW DIAGRAM OF HISTORICAL SITE FEASIBILITY Children Admission Grees Adults Price Income Free Per Visitor TOTAL Consessions Not Income Interest CAPITAL Cost **eldallavA** JUSTIFIED for Meturn WY on Capital Thousand REVENUE ESTIMATE Personnel Costs Expenses Maintenance Other Supplies Costs Administrative Supplies

Source: James A. Graaskamp. A Guide to Feasibility Analysis, (Society of Real Estate Appraisers, 1972), p.40.



SCREENS USED TO SUBSET MOST PROBABLE USERS OF PROPOSED RETIREMENT CENTER



(1) High degree of interest in project Is defined as those who answered Question #47 with a 1, 2, or 3 response. These respondents are interpreted as having serious interest now or interest in a year or so. See questionnaire in Appendix for exact wording of the question.

POTENTIAL MARKET SEGMENTS

- I. Singles Unmarried, active, mobile, many interests, entertain informally, few financial burdens, recreation oriented. Buy basic furniture, basic kitchen equipment, cars, stereos, and vacations.
- Young Marrieds, #1 Young couple, working wife, entertain informally, amateur gardeners, planning on family. Better off financially than they will be in the "family formation" future. Buy durables cars, kitchen equipment, furniture, and vacations. Rate housing as a need for-more living space.
- III. Young Marrieds, #2 Discretionary income available, deferring family, active, entertain informally and often, some formal entertaining, independent, dual-person working household, do-it-yourself buffs, sports car. Rate housing as an investment.
- IV. Compact Family/Move Down -- Discretionary income available, interested in no maintenance, informal living, some formal entertainment. Away from home often, occasional visits from family or guests, focus on both active and passive recreation.
- V. Divorcees/With Children -- Family oriented activity, limited entertainment, informal lifestyle, limited maintenance.
- VI. Full Nest, #1 Home purchasing at its peak, even though liquid assets are low. Dissatisfied with financial position, and amount of money saved. Conscious of monthly payments, family activities. Unemployed female with numerous interests, mostly child oriented. Lifestyle is casual and informal. Interested in new products, buy washers, dryers, T.V.'s, baby food, dolls, wagons, etc.
- VII. Full Nest, #2 -- Family move-up market, as financial position gets better, some wives work. Interested in larger sized packages. The most price/size sensitive group.
- VIII. Established Family -- Making monthly payment comfortably, some discretionary income as more wives work, approaching peak of economic and social lifestyle curve, some formal entertaining, older children and teenagers, many interests.
- IX. Luxury Families -- Have arrived, tremendous discretionary income, very formal house, don't entertain often, but when they do, it's formal, dine out often, no maintenance, privacy mandatory.

- X. Empty Nester Home ownership at its peak, more satisfied with financial position. Small or no debt. Family is often away from home, occasional visits from family. Mobile in attitude, but permanent in residence, near grandchildren, many hobbies, one child in college, one or two children married, self-sufficient couple.
- XI. Active Retired Still working two or three days per week, active either socially or politically in community or church affairs, self-sufficient, many hours away from home, do not entertain often, but when they do, it's semi-formal. Winter/summer residences. Likely to sell home before retirement.
- XII. Retired Drastic cut in income, dependent, limited activities outside community. Winter/summer residences.

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Course II -Income Property

ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE

UNIVERSITY OF WISCONSIN MADISON, WISCONSIN

Presented in association with the HOUSING AND REAL ESTATE FINANCE DIVISION



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1986 ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE — COURSE II — INCOME PROPERTY

SUNDAY, JULY 20	MONDAY, JULY 21	TUESDAY, JULY 22	WEDNESDAY, JULY 23	THURSDAY, JULY 24	FRIDAY, JULY 25	SATURDAY, JULY 26
	8:00-9:15 Finance & Risk Management Concepts Graaskamp	8.00-12:15 Financial Statement Analysis	8:00-12:15 Financial Statement Analysis	8:00-9:45 Economic Risks of the Dynamic Income Property Market Johannes	8:00-9:15 Lending: Pitfalls and Opportunities with Limited Partnerships Jarchow	9:00-10:30 Facilities Property Management Karlan B102 Van Vleck
11:00-5:00 Registration	9:30-10 30 The Property Loan Proposal			10:00-12:15 Hedging and Matching	9:30-10:30 Lending: Pitfalls and Opportunities for Joint	10:45-11:45 Examination
	,				Ventures	
	Graaskamp 10:45-12:15	,			Jarchow 10:45-12:15	
	Market Analysis & the Individual Lease				Local Case Study	
	Graaskamp	Giovinazzo	Giovinazzo	Cramer	Graaskamp	B102 Van Vleck
	r		LUNCH			
4:00-5:00 The Real Estate Process	1:15-3:00 Appraisal	1:15-3:15 Commitment and Closing	1:15-3:00 Construction Lending: Administration, Cost Analysis, Control and Disbursement	1:15-2:45 Insurance Considerations for the Mortgage Lender	1:15-5:00 Troubled Real Estate Loans and REO Workouts	
(The New Approach to Real Estate Systems)	Graaskamp	Smith	Buchanan	Parck		
Tiedricale dyslama,	3:15-4:30	3:30-5:00	3:15-4:45	3:00-5:00		
Graaskamp	Various Elements of Credit Enhancements for Income Property Loans	Bankruptcy, Chapter 11 and the Income Property Loan	Construction Lending Case Study	Income Property Loan Case Study		
BIO Commerce	Graaskamp	Merg	Buchanan	See Room Listings in Notebook	Jones O'Donnell Pakravan	
DIO Commerce	1 Gradskarip	i iii	DINNER			
6:00 Reception & Dinner		6:45-8:30 Break-out Groups Financial Statement Analysis "Homework"		6:45-8:30 Managing Risk: Key to Bank Profits in Real Estate Finance		
		See Room Listings in Notebook		Kendall		
		Giovinazzo		BIO Commerce		

ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE

July 20-26, 1986

COURSE EVALUATION

	of Bank (Assets) ck One Box Only)		
	[] Under \$10 million [] \$10 to \$25 million [] \$26 to \$50 million [] \$51 to \$75 mimllion [] \$76 to 100 million	[] \$101 to \$500 [] \$501 million [] Over \$1 billi [] Bank Holding [] Other	to \$1 billion on
	Number of Years in	Real Estate Finance	
at ti	To aid the American Bankers A at, we would appreciate your f ne end of each course. (Fill ructor).	eedback by answering the	following questions
Sess [.]	ion Title: <u>Real Estate Proces</u>	Instructor Jame (Identif	es Graaskamp y when appropriate)
Α.	Indicate your impressions of where 5=excellent, 1=poor.	the sessions using a rat	ing scale of 5 to 1,
	Please rate the extent to whi	ch:	Rating
	o the objectives of the sess o the objectives of the sess o the subject matter was wel o the material presented was (i.e., in current position o the instructor retained th o the instructor effectively o the instructor's handouts, o the outline provided in th was useful o the instructor was effecti o the session was effective	ion were fulfilled l organized useful to you or in a future position e interest of the class promoted class involvem if any, were useful e notebook, if any, ve overall)
В.	Was the difficulty level appr	opriate?	
	Too Basic	About Right	Too Difficult
С.	Was the time provided suffici presented in the session?	ent to accommodate the a	mount of material
	Too much time	About Right	Too little time
Comm	ents:		

THE REAL ESTATE PROCESS

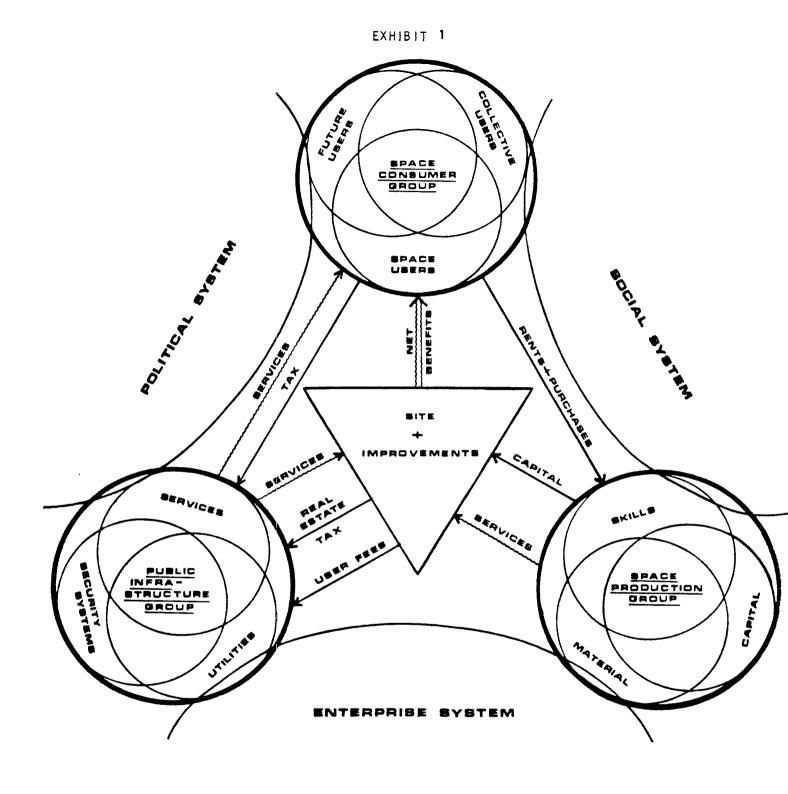
James Graaskamp

I. BASIC CONCEPTS AND DEFINITIONS

- A. Real estate is a tangible product defined as artificially delineated space with a fourth dimension of time referenced to a fixed point on the face of the earth.
 - Real estate is a space-time unit, room per night, apartment per month, square foot per year, tennis court hours, or a condominium for two weeks in January at a ski slope.
 - 2. To the space-time abstraction can be added special attributes to house and contribute some form of activity. Contribution is efficiency, security, comfort, or well-being.
 - 3. Improvements from survey market to city layouts to structures define space.
 - 4. Legal contracts and precedents define time.
 - 5. Rights of use are defined by public values, court opinions.
 - 6. Private rights to use are those which remain after the public has exercised its rights to control, to tax, or to condemn.
- B. <u>A real estate project</u> is a cash cycle business enterprise which combines a space-time product with certain types of management services to meet the needs of a specific user. It is the process of converting space-time needs to money-time dimensions in a cash economy.

Note: See "Real Estate Process" given at 1985 ABA School for Exhibits 3,4, +5 (ITT C. 2. b.)

- 1. An enterprise is an organized undertaking whose form and behavior at any point in time is a concensus or synthesis of forces outside the enterprise attempting to determine its form and behavior and focus within the organization which can affect form, behavior, and sustaining energy over time.
- 2. A real estate business is any business which provides expertise necessary to relate space-time need to money-time requirements and includes architects, brokers, city planners, mortgage bankers, and all other special skills.
- 3. The true <u>profit centers</u> in real estate are in the delivery of services and cash capital.
- 4. Equity ownership is the degree to which one enterprise controls or diverts cash from another real estate enterprise.
- 5. Public ownership exists to the degree real estate taxes, user fees, and other charges take a percentage of gross revenue in excess of service cost.
- 6. A consumer must view space as one part of a total consumption system involving direct cost, surface cost, transportation cost and negative income of risk.
- C. The real estate process is the dynamic interaction of three groups, space users (consumers), space producers, and the various public agencies (infrastructures) which provide services and capital to support the consumer needs. (See Exhibit 1.)
 - Each of these three decision groups represent an enterprise, an organized undertaking. All are cash cycle enterprises constrained by a need for cash solvency, both short and long term.



THE REAL ESTATE PROCESS

- 2. A desirable real estate solution occurs when the process permits maximum satisfaction to the consumer at a price that he can afford within the environmental limits of land while permitting the consumer, producer, and the government cash cycle to achieve solvency cash breakeven at a minimum, after full payment for services rendered.
- 3. <u>Solvency</u> of the total process, not value, <u>is</u> the <u>critical issue</u>.
- 4. Land is an environmental constraint and not a profit cener.
- 5. Land provides access to a real estate business opportunity and is not the opportunity itself. Real estate business wants to control land to create a captive market for services.
- D. The consumer group requires three levels of marketing sensitivity.
 - 1. The collective consumer operating through the political process must be convinced that it should provide permits, zoning, or other approvals which franchise project.
 - 2. The individual consumer who rents or buys must be convinced he will improve the activity housed in terms of convenience, efficiency, security, and well-being at a periodic cash cost which is affordable.
 - 3. <u>Future users</u> consist of undefined future tenants representing a change in use which requires flexibility of site, structure, or services to maintain market edge, and therefore presumed resale liquidity.
- E. Recognition of the fact that profit maximization must be limited by concerns for physical environment and community priorities for land use has resulted in redefinition of the most basic concept in appraisal; i.e. highest and best use, in the authorized terminology handbook sponsored by the American Insitute of Real Estate Appraisers and

the Society of Real Estate Appraisers. Compare the 1971 definition with that for 1975:

Highest and best use concept -A valuation concept that can be applied to either the land or improvements. It normally is used to mean that use of a parcel of land (without regard to any improvements upon it) that will maximize the owner's wealth by being the most profitable use of the land. The concept of highest and best use can also be applied to a property which has some improvements upon it that have a remaining economic life. In this context, highest and best use can refer to that use of the existing improvements which is not profitable to the owner. It is possible to have two different highest and best uses for the same property: one for the land ignoring the improvements: and another that recognizes the presence of the improvements. p. 57, Real Estate Appraisal Principles and Terminology, Second Edition, Society of Real Estate

"Highest and best use: That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal. Alternatively, that use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and which results in highest land value. The definition immediately above applies specifically to the highest and best use of land. It is to be recognized that in cases where a site has existing improvements on it, the highest and best use may very well be determined to be different from the existing use. The existing use will continue, however, unless and until land value in its highest and best use exceeds the total value of the property in its existing use. Implied within these definitions is recognition of the contribution of that specific use to community environment or to community development goals in addition to wealth maximization of individual property owners. Also implied is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best

use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use. In the context of investment value an alternative term would be most profitable use.

Real Estate Appraisal Terminology, Edited by Byrl N. Boyce, Ph.D., SRPA, Ballinger Publishing Co., Cambridge, Mass., 1975. (Emphasis added.)

- G. The purchase of a piece of real estate today involves the acceptance of a great many assumptions about the future. Those who take care to validate these assumptions in a period of transition as to public land use control tend to have the most successful investment.
 - 1. Business decisions today make explicit recognition of their assumptions and the need to act under conditions of uncertainty.
 - 2. Business risk is the difference between assumptions about the future and realizations, and the proforma budget and the end of the year income statement.
 - 3. Risk management is the control of variance between key assumptions and realizations.
 - 4. An appraisal is a set of assumptions about the future productivity of a property under selected conditions of certainty.
 - 5. A feasibility study is a test of a particular proposal under alternative sets of assumptions about the future and its tolerance for variance or priority for certainty.
- H. The concept of highest and best use of land was a commodity concept which did not consider externalities adequately. It is being replaced by concepts of most fitting use and the concept of most probable use.
 - 1. The <u>most fitting use</u> is that use which is the optimal reconciliation of effective consumer demand, the cost of production, and the fiscal and environmental impact on third parties.

- 2. Reconciliation involves financial impact analysis on "who pays" and "who benefits"-- thus the rash of debate on how to do impact studies.
- 3. The <u>most probable use</u> will be something less than the most fitting use depending upon topical constraints imposed by current political factors, the state of real estate technology, and short-term solvency pressures on consumer, producer, or public agency.
- 4. Most probable use means that an appraisal is first a feasibility study of alternative uses for a site in search of a user, an investor, and in need of public consent.
- I. In seeking the most fitting and most probable use, the inner city planner and private property appraiser must interact to determine how community objectives and consumer and production sector solvency can be achieved simultaneously.
 - 1. A real estate decision has only two basic forms. Either a site is in search of a use and consumer with the ability to pay, or a consumer, need or use with a defined ability to pay is seeking some combination of space-time attributes he can afford.
 - 2. The individual consumer with needs and a budget is the drive wheel.
 - 3. The public sector represents the community owned consumer service delivery system, seeking to minimize marginal cost to the consumer and average cost to the community at large.
 - 4. The production sector responds to a derivative demand for engineering and management expertise.
 - Real estate is a collective decision and a product of the political process.

- J. Critiquing the form and adequacy of a real estate solution is analogous to the artistic concept of judging the success of an art object by relating form of the solution to the context to which it was created.
 - 1. Context includes those elements which are fixed, given, or objective and to which any solution must adapt.
 - 2. Form-giving elements are those variables within the artist's control, i.e. options or alternatives at a particular time.
 - 3. A solution is judged for its correctness or success in terms of the degree of fit of the form proposed to the context.
 - 4. Feasibility analysis is concerned with the degree of fit or the extent of misfit between a proposed course of action and the context within which it must operate or fit.
 - 5. Success therefore depends on how appropriately the problem is defined; testing feasibility depends primarily upon accurate and comprehensive definition of the context.
- K. Ultimately there are only three major decision formats for real estate and land economics.
 - A location (and related improvements) in search of a justified use.
 - 2. A justified use in search of the best fitting location (and related improvements).
 - 3. Money in search of an investment in location and related improvements—the conversion of space-time needs to money invested over time.

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Thursday, July 24, 1986 3:00-5:00 p.m.

INCOME PROPERTY LOAN CASE STUDY

Derek Barrett David Christianson James Graaskamp V Michael Robbins

Convenience Shopping Center

ABC Appraise Company 1016 Adams Street Capitol City, Kansas Phone: 489-8748

March 21, 1985

Mr. Arnold L. Mason, Vice President XYZ Mortgage Company 1231 Washington Street Capitol City, Kansas

Dear Mr. Mason:

In accordance with your request, I have made an appraisal of the West Bend Shopping Center located at the northeast corner of Alpha Street and Sherman Avenue, in Capitol City, Kansas.

I hand you herewith my report which describes my method of approach to value and contains the supporting data gathered in my investigation.

I have appraised the property as a whole, owned in fee simple and unencumbered by any indebtedness.

I hereby certify that I have no personal interest in the subject property--past, present or contemplated--and that neither my employment nor my compensation for conducting this appraisal is contingent upon the value found.

I further certify that I have personally inspected the property, and that to the best of my knowledge and belief all statements and information contained herein are true and correct.

Based upon the findings and conditions herein contained, it is this appraiser's opinion that the fair market value of the subject property as of March 21, 1985, is:

Two Million Seven Hundred and Fifty Thousand Dollars.

\$2,750,000.00

Respectfully submitted,

Robert M. Thornton, Appraiser

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Capitol City Map - Exhibit A	6.
Map of Subject Site - Exhibit B	12.
Land Sales Comparables Map - Exhibit C	16.

Summary of Salient Points

Location: NE corner of Alpha Street and Sherman

Avenue, Capitol City, Kansas

Zoning: G-1 (Planned Commercial District)

Site: 5.875 Acres (255,698 square feet)

Improvements: Three buildings - Convenience Shopping

Center

A 43,050 square feet B 14,560 square feet Yum Yum Tree 2,632 square feet

Parking for 275 cars

Appraised Value: Land \$ 895,000

Improvements <u>1,855,000</u> Total \$2,750,000

Appraisal Date: March 21, 1985

Purpose of Appraisal

The purpose of this appraisal is to provide a supported opinion of the fair market value, in fee simple, of the property described in this report, as of March 21, 1985.

Market Value

Market Value, as used in this report, is defined as "the highest price, estimated in terms of dollars, which the property would bring (if exposed for sale for a reasonable time in the open market) to a seller willing but not compelled to sell, from a buyer willing but not compelled to buy, both parties being fully informed of all the purposes for which the property is being adapted and is capable of being used."

Legal Description

Lot One $\{1\}$, Block Four $\{4\}$, Sheraton Park Addition, in the NE 1/4, Section 33, Tier 10 North, Range 7 East of the 9th Principal Meridian, Capitol City, Kansas.

Location

NE corner of Alpha Street and Sherman Avenue in Capitol City, Kansas.

Assumptions and Limiting Conditions

The results of this appraisal report are based on the following assumptions and conditions:

- 1. The legal description, as given, is correct..
- The title to the property herein appraised is good and merchantable, in fee simple, and without encumbrances.
- The value is reported without regard to questions of title, boundaries, encroachments, or other matters of a legal nature.
- 4. Some conclusions reached in this appraisal are based on certain opinions, estimates, information and data furnished by others. These are correct to the best knowledge of the appraiser, but no responsibility for their accuracy is assumed.
- 5. The conclusion as to value was reached after examine all parts of the report, and any statement relating to the value of part of the property cannot properly be used without reference to all sections of the report.
- Maps and data included in this report are for identification only.

- 7. The use of this report does not include the right to utilize the appraisal in court or to require testimony in connection therewith.
- 8. This appraisal is based on a preliminary site plan and tentative lease agreements. The appraiser reserves the right to review this appraisal upon completion of plans and specifications and upon receipt of signed leases, and to make any changes in this report resulting from new information received.

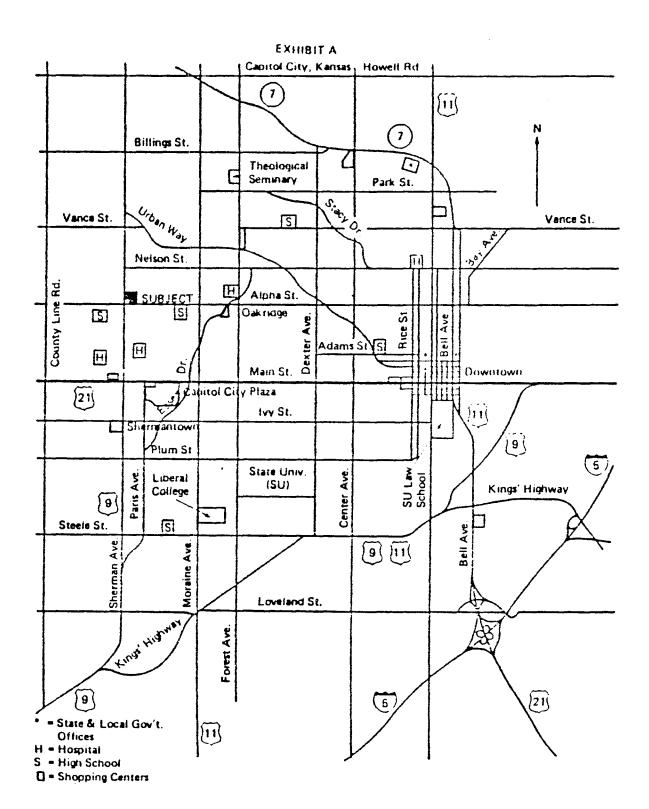
City Data

The subject property is located in Capitol City, the capitol city of Kansas (see Exhibit A).

Eased on United States Bureau of Census figures, Capitol City has exhibited the following population characteristics:

	<u>1980</u>	<u>1970</u>
Total Population % Male % Female Median Age	51.6%	128,521 48.2% 51.8% 27.6
Total Population 25 years of Age & Over % of this group educated	75,413	69,226
beyond high school Mean school years completed	34.9%	29.2%
by this group	12.6	12.4
Total Number of Households Population per household	48,608 2.85	41,108 2.98
Mean Family Income (Annual) % of total families earning \$10,000 or more	23,456	11,209
per year % of total families earning \$6,000 or more	49.4%	
per year		50.4%
Total Labor Force Unemployment	70,354 3.0%	55,355 3.4%

With a current population of approximately 155,000, Capitol City is the second largest city in Kansas. This reflects substantial growth from a population of 107,000 in 1960. The City-County Comprehensive Plan forecasts county-wide population to be approximately 176,000 at the present time. More significant are the urban area population projections prepared by the City Planning Commission which predict a



population of 185,000 for Capitol City by the end of 1986. Included in this urban area are all residents located within three miles of the city's corporate limits. Urban area projections for 1990 and 1995 are 209,000 and 231,000 respectively. It is this appraiser's cpinion that such corporate growth will be predominantly toward the west and northwest during the next decade.

Located midway between the east and west coasts on I-5, Capitol City offers a well-established network of transportation facilities. Five Class 1 railroads provide rail and piggyback service while Trans-Am Airlines, the nation's largest trunkline, and Lindburgh Airlines, the fastest growing local service carrier, give adequate air freight and passenger service. In addition, two excellent air charter facilities are also available.

Eight of the nations's largest truck lines supply Capitol City firms with nationwide, single-line motor carrier service. Over 40 regional and area truck lines offer reliable and speedy overnight delivery within 400 miles. Two transcontinental buslines plus several intrastate lines give Capitol City many schedules of bus passenger and small express service.

Complementing these facilities are three federal highways, Nos. 9, 11 and 21, plus a state highway [No.7], as well as Interstate 5.

Historically, the city's economy was based on the agricultural wealth of the surrounding area. Since World War II, a trend toward industrialization has brought several nationally-known companies to Capitol City, such as Addressograph-Multigraph Corp., American Stores Packing Co., Brunswick Corp., Control Data Corp., Cushman Motors Co. (a division of Outboard Marine Corp.), Dorsey Laboratories, Goodyear Tire and Rubber Co., National Biscuit Co., Norden Laboratories, Pegler and Co., Pepsi-Cola Bottling Co., Ralston Purina Co., and Square D Co., to name a few.

Being the capitol city of Kansas, as well as the county seat, Capitol City is "home" for many State and Federal offices and agencies. In addition Kansas' largest university, along with two private institutions of higher learning (Liberal College and Theological Seminary), contribute to Capitol City's reputation as a scholastic center. All of these schools provide four-year baccalaureate degrees and State University and Liberal College provide advanced degrees as well. Their combined fall enrollment in 1984 totalled approximately 25,000. The public elementary and secondary school system is widely recognized as one of the finest and most innovative in the country. In addition to the public school systems of 23 elementary and 15 secondary schools, the city boasts a sizeable parochial school system composed of 11 elementary and 3 secondary schools.

The city is governed by a modified manager plan consisting of a strong fulltime Mayor and seven councilmen who are elected for four-year terms on a non-partisan ballot by the voters at large. The

councilmen, as part-time officials, established policies that are administered by full-time department heads. The Mayor and councilmen have the power to pass, amend and repeal any and all city ordinances.

Capitol City owns and operates its own water and sewage facilities and electrical distribution system. In addition, natural gas is available to all sections of the city and the gas, water and power rates enjoyed by Capitol City residents are among the lowest in the country.

Sports and recreational facilities, essential for the preservation of the "great place to raise a family" image that Capitol City enjoys, consists of 48 parks with over 4,500 acres, 3 zoos, 8 golf courses, numerous indoor and outdoor swimming pools, 28 public and 9 private tennis courts (both indoor and outdoor), and 6 bowling alleys.

The climate is typically mid-continental, hot in the summer and cold in the winter, but the extremes are greatly tempered by the generally low humidity. Average annual rainfall is about 27-1/2 inches.

It is this appraiser's opinion that the broad diversification of agricultural and business activity, combined with the stabilizing influence of the state-supported governmental and educational institutions, provides a sound economic base for the city's continued crowth.

Neighborhood Data

The subject property is situated at the intersection of Alpha Street and Sherman Avenue in Capitol City, Kansas. Both Alpha Street and Sherman Avenue constitute county section lines and , as such, array vehicular traffic beyond the corporate city limits into the adjoining rural area. Sherman Avenue was at one time considered to be Capitol City's western boundary; however, residential growth now extends to County Line Road. The impetus for western growth of the city in the area immediately north of Main Street was triggered by the Estmont subdivision during the mid 1950's. Further impetus to the western growth of the city occurred with the construction of the Fellow Travelers Life and Mutual Casualty insurance buildings, Capitol City Plaza. Midstate Federal Savings and Loan and other ancillary buildings in the area surrounding the Essex Drive and Main Street intersection. During the past two decades, over 50% of the new housing units constructed have been in the land area east of Forest Avenue.

More directly affecting the immediate neighborhood is the recent opening of Capitol City's Spartan High School and the projected opening of Methodist Hospital both fronting on Sherman Avenue between Alpha Street and Main Street. Several builders have been successful in acquiring and subdividing vacant land in the quadrant lying north and west of the subject site for single family residential and multi-family developments.

In this appraiser's opinion, there is no existing zoned land that would constitute serious competition to the proposed development. Oakridge Center, located near the intersection of Essex Drive and Alpha Street, is approximately one and one-half miles directly east of the subject site. It is understood that this center had marginal acceptance during its initial phase but can now be considered as extremely successful from ownership's viewpoint. In visiting this center, this appraiser reached a conclusion that because of the density of use, the developer has created a shortage of on-site parking. Ingress and egress also must be described as extremely difficult during peak shopping periods.

Shermantown, an existing center located just south of the intersection of Sherman Avenue and Ivy Street, also might be interpreted to constitute a secondary competitive facility. However, the location two miles due south of the subject site obviates any serious competition between these two facilities.

Capitol City Plaza is a regional center comprising approximately 700,000 square feet of retail commercial buildings situated on a 50-acre site and located just west of the intersection of Essex Drive and Main Street. The concept of the convenience center as described in the following pages sets forth a basis for the development of the convenience center. In this appraiser's opinion, the existence of Capitol City Plaza approximately two miles from the subject site does not interfere with the projected economic feasibility of West-Bend, but could conceivably be an asset since the subject site is situated in an intercept location to traffic that may be attracted to the Plaza originating in an area north or west of the subject site.

Site Description

The subject site is near rectangular in shape except for a 190 foot square parcel occupying the corner of the intersection of Sherman and Alpha. The west boundary of the parcel faces Sherman Avenue, fronting 380 feet thereon, extending to an average depth of 520 feet to the west. The south boundary is 330 feet fronting on Alpha Street, extending to a depth of 570 feet. The property encompasses 255,698 square feet in all, or approximately 5.875 acres. Both Sherman Avenue and Alpha Street are four-lane, hard-surfaced arterial streets. Both street frontages have been improved with a public sidewalk. All public utilities are conveniently available to the site.

The elevation rises from a low point on the south boundary in a level plain some 20 feet greater at the north property line. An abrupt swale occurs in the extreme northwest corner where the property rises an additional 7 feet to street grade. In general, the natural lie of the land will not require any major earth movement to accommodate the proposed development but should instead constitute an ideal topography from a visual and physical standpoint.

Zoning

The property is zoned G-1 Planned Commercial District, which is a zoning classification for neighborhood commercial. It is the opinion of this appraiser that zoning regulations permit the operation of a convenience shopping center at this location.

Taxes

Within Capitol City, ad valorem real estate taxes are levied by both city and county governments.

The County Assessor has placed the assessed value of commercial property at 35% of its appraised value. The appraised value is calculated using the Marshall, Stevens Valuation Method.

City tax rates are set by the City Council and County tax rates are set by the County Treasurer. Both City and County tax rates are based on the assessed value as determined by the County Assessor. In 1984 all property within Capitol City was taxed at the following rates:

City Tax Rate \$24.500 per \$1,000 of essessed valuation
County Tax Rate 10.685 per \$1,000 of assessed valuation
School Tax Rate 47.198 per \$1,000 of assessed valuation
Other 1.770 per \$1,000 of assessed valuation
Total \$84.153 per \$1,000 of assessed valuation

Description of Improvements

The improvements will consist of two major buildings (see Site Map, Exhibit B). Building A will be a 43,050 square foot, concrete block brick veneer, one story, basementless building, designed for multi-tenant use. Building B will be a 14,560 square foot, one story building of similar construction. A 2,632 square foot Yum Yum Tree will, in addition, be designed to meet franchise specifications. The parking lot will be paved and lighted, with parking for 275 cars.

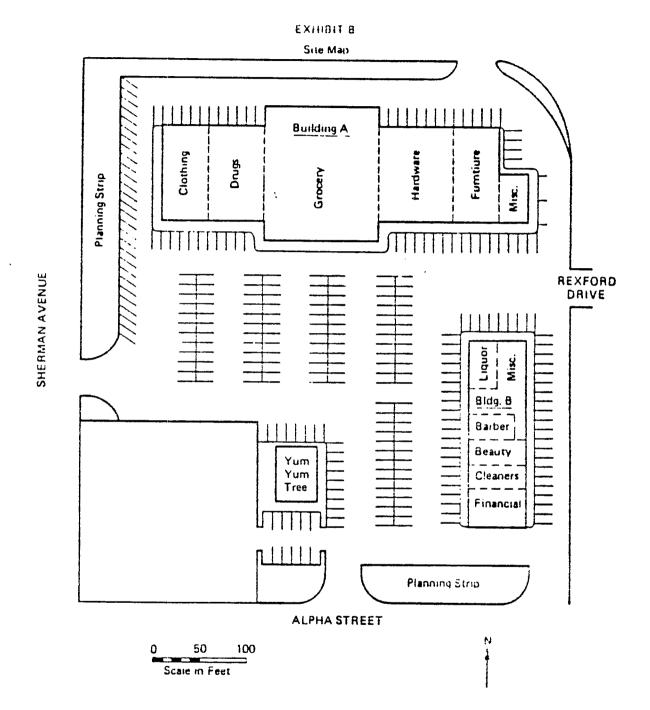
Building A, a merchandising building designed for a food super market, drug store, clothing store, hardware, furniture store, etc., will be of English Tudor design with shake shingle overhang extending over three sides of the structure. The roof is to be flat, built-up, supported by steel bar joists with steel posts and girders 24 feet to 30 feet on center. Each tenant area will contain roof-mounted heat and air conditioning units and space will be fully sprinklered. Interior decorating will be provided by individual tenants.

Building B will be of similar construction and designed primarily to accommodate professional and business services such as medical offices, accountants, beauty shop, dry cleaning, financial office, etc.

The Yum Yum Tree will meet the franchise operators new concept for merchandising incorporating seating for approximately 70 patrons.

The parking lot will be asphalt paving, well lighted, with pole-mounted arc lights, Parking stalls will be striped and approximately ten feet wide.

There will be a planning strip approximately forty feet wide on both street frontages.



The Convenience Shopping Center Concept

The Convenience Shopping Center is not a random collection of stores, but instead a merchandising entity designed to meet the day-to-day needs of the suburban household. The primary need, of course, is food, and the supermarket is invariably the biggest, single tenant in the center. The family drug store, hardware and multi-line soft goods store constitute the remaining major tenants supplemented by the beauty parlor, barber shop, dry cleaner and liquor store. Complementing the tenant mix in a well-conceived neighborhood center is a branch bank or savings and loan office as well as a limited number of professional offices, notably for doctors and dentists. Generally, business offices are inappropriate unless the tenants provide a service to residents living in the trade area.

The proximity of the center to schools, recreational facilities or a location in an intercepting position to vehicular travel will broaden the market base for the convenience center. The income level of the area resident will have an impact on the tenant mix. The higher income families will be better able to support the beauty parlor, gift shop, home furnishing center or service oriented tenants than could be expected in a similar center situated in the lower income quadrant of the city.

Convenience centers will typically range in size from 30,000 to 80.000 square feet of building area occupying four to six acres of land. The primary market will depend on the accessibility of the site to the surrounding residential area. Generally, automobile driving time is more important than distance. Residences within a three to five minute time zone can be considered prime customers depending on the location of competitive centers. This will normally cover a radius of 1-1/2 to 2 miles from the site. With customer mobility comes problems. Problems relating to accessibility to the site vehicular traffic patterns on the site and parking. Expensive land means expensive parking. The parking lct is an integral part of the center and is no less valuable than the land on which the buildings rest. A proper development requires sufficient land for customer parking, drives and walkways, as well as some "green space" to frame the picture. Less desirable stalls on "off site areas" should also be available for employee parking.

The Urban Land Institute has published studies which indicate that where there is little walk-in traffic, 5.5 parking stalls per 1,000 square feet of gross leasable area are adequate. This report also states that up to 20% of the gross leasable area could consist of office space without upsetting this ratio.

Finally, and possible most significant of all, are the design features of the various store buildings, such as architectural style, material composition, customer circulation and servicing facilities related to the day-to-day merchandising activity of the tenants.

Compatibility of the individual merchants with each other and the center's management will be reflected in the degree of the financial success of the center.

In conclusion, the successful convenience shopping center is not just a "happening" but is the result of determining the economic needs of the consumers in a given market area and satisfying those needs by providing the proper site, physical improvements, merchandise and services to insure continued customer acceptance.

Source:

Nelson, Richard L., <u>The Selection of Retail Locations</u>, F. W. Dodge Corporation, N.Y., 1958.

Lowden, James A., "Valuation of Shopping Centers," <u>The Appraisal Journal</u>, April, 1967.

"The Village Shopping Center," House and Home, October, 1968.

Highest and Best Use

Highest and best use is defined as that use which at the time of the appraisal is most likely to produce the greatest net return over a given period of time. In determining the highest and best use of raw land, it is imperative that such use meet the following tests:

- 1. The use must be legal.
- 2. The use must be within the realm of probability; that is, it must be likely, not speculative or conjectural.
- 3. There must be a demand for such use.
- 4. The use must be profitable.
- 5. The use must be such as to return to land the highest net return.
- 6. The use must be such as to deliver the return for the longest period of time.

It is this appraiser's opinion that the proposed development of a convenience shopping center meets all of the prerequisites outlined above and therefore constitutes the land's highest and best use.

Estimate of Land Value

In order to estimate the value of the subject land, the records have been checked for sales or leases of comparable land. The transactions, listed chronologically below, are designated by number on the map attached as Exhibit C.

Number 1: Lots 205 and 206 in the SE 1/4, Section 21, Tier 10 South, Range 7 West of the 3rd Principal Meridian, Capital City, Kansas. Warranty Deed dated July 27, 1980. Grantor, Lester Flowers conveying 1/2 interest to Reliable Life Insurance Company. Consideration, \$1,346,400. Size, 466,528 s.f.

Number 2: Lots 26, 27 and 28 of Addison's Subdivision, NW1/4, Section 20, T10S, R7W, Capitol City. Warranty Deed dated June 1, 1981. Grantor, Paul Graham, et al to National Savings Bank. Consideration, \$1,009,600. Size, 272,727 s.f.

Number 3: Lots 198 and 199, NW 1/4, Section 21, T10S, R7W, Capitol City. Warranty Deed dated November 5, 1981. Grantor, Joseph and Mary C. Doe to Richard D. Jones, trustee. Consideration, \$2,854,000. Size 914,760 s.f.

Number 4: Lots 70 and 71, NE 1/4, Section 22, T10S, R7W, Capitol City. Warranty Deed dated November 22, 1981. Grantor, Commercial Realty Company to Robert B. Hall and wife, Sally A. Consideration, \$538,300. Size, 130.880 s.f.

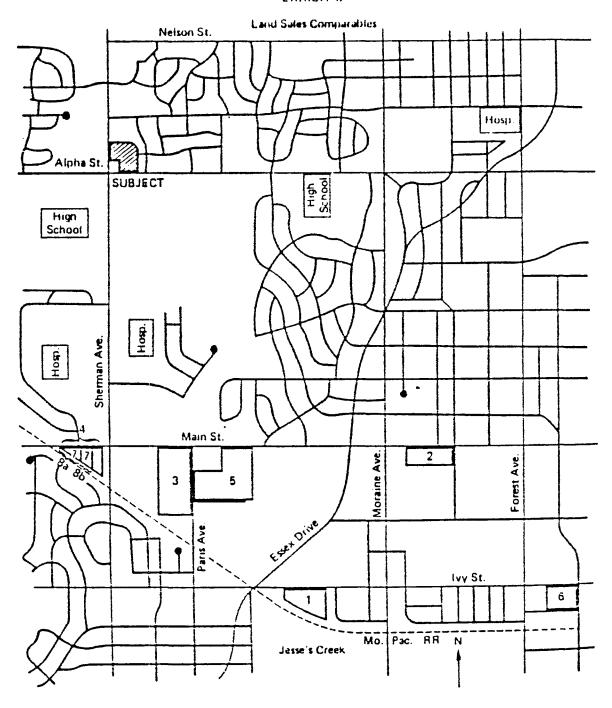
Number 5: Lot 183, Irregular Tract, NW 1/4, Section 21, T10S, R7W, Capitol City. Warranty Deed dated May 25, 1982. Grantor, Plaza Development, Inc. to Consolidated Department Stores, Inc. Consideration, \$2,019,400. Size, 871,200 s.f.

Number 6: Lot 1, Block 1, Jackson's Replat, SE 1/4, Section 20, T10S, R7W, Capitol City. Lease commencing November 1, 1983. Lessor, State Investment Company to Hypermarche, Inc. Prime term, 30 years, with two 10 year renewal options at rentals based upon the Consumer Price Index. Prime term rent, \$65,650 per year, absolutely net. The lease refers to the annual rent being equal to "8-1/2% of value". Using this as a capitalization rate, a value of \$772,400 is indicated. Size, 265,900 s.f.

Number 7: Lot 71, NE 1/4, Section 22, T10S, R7W, Capitol City. Warranty Deed dated December 10, 1983. Grantor, Robert B. Hall and wife, Sally A., to Iowa Associates, Inc. Consideration, \$379,600. Size, 81,457 s.f.

Number 8: Lot 71, NE 1/4, Section 22, T10S, R7W, Capitol City. Warranty Deeds dated (a) December 21 and (b) December 22, 1983. Grantor, Iowa Associates, Inc. to (a) Fast Foods, Inc. and (b) Conservative Financial Corporation. Considerations, (a) \$135,000 and (b) \$328,500. Size, 81,457 s.f. (a and b combined).

EXHIBIT C



Trans. Number	Date	Ind. Value	S.F.	Value /S.F.	Zoning
*1	7-27-70	\$2,692,800	466,528	\$5.77	A-2 Single Family
2	6-01-71	1,009,600	272,727	3.70	H-1 Hiway Bus.
3	11-05-71	2,854,000	914,760	3.12	G Local Bus.
4	11-22-71	538,300	130,680	4.12	G
**5	5-25-71	2,019,400	871,200	2.58	G-1 Planned Comm.
6	11-01-73	772,400	265,900	2.90	G
7	12-10-73	379,600	81,457	4.66	G
***8[a]	12-21-73	135,000	B1,457	5.69	G
(b)	12-22-73	328,500			

*Assumes that the \$1,346,400 price for a 1/2 interest reflects a value of \$2,692,800 for the whole interest.

**Value per squere foot of \$2.58 is based upon an <u>effective</u> area of only 784,080 s.f. due to zoning regulations which require a 150' buffer strip along Paris Avenue.

***Because these two Warranty Deeds were granted at about the same time by the same Grantor, I have combined them to arrive at one value per square foot that will readily compare with Transaction No. 7.

The transactions recorded above indicate a square foot value for comparable land ranging from \$2.58 to \$5.77.

Transaction 1 is zoned for single; -family dwellings and is, therefore, considered to be less comparable to the subject site than are some of the other transactions.

Transaction 2 is quite comparable to the subject site in terms of potential use, size and location along a major thoroughfare. It is situated in a more highly-developed area than is the subject site, however, and it enjoys about 900 feet of frontage along Capitol City's busiest street. Thus, it is considered to be somewhat superior to the subject site. It is currently improved with a full-service motel facility, and, with the passage of time, the value of the land has probably appreciated to at least \$2.00 per square foot.

Transaction 3 is not considered to be very comparable to the subject property because it is so much larger and enjoys a great deal more exposure with nearly 2,500 feet of street frontage, over 700 of which is on Main Street. Despite its superiority in size and exposure, however, it is somewhat inferior to the subject property in that it would need extensive site preparation before the land could be put to commercial use. In addition, prolonged controversy with respect to

whether or not this parcel is appropriately zoned has made it something of an "unknown quantity". These deficiencies are reflected in the slightly low purchase price of \$3.12 per square foot and in the fact that the land remains untouched to this day.

Transaction 4, though irregular in shape and only half the size of the subject site, is considered to be superior because of its location.

Transaction 5 is not considered to be comparable to the subject site primarily because of its size and the circumstances surrounding its sale. It was sold at a below-market price by the owners/developers of the adjacent regional shopping center in order to induce the buyer to build a major department store thereon.

Transaction 6 is comparable to the subject site in nearly every respect. Its only deficiencies are that it is located in a slightly less affluent section of town and it enjoys actual frontage on only one major thoroughfare—Ivy Street. It is, however, very close to—and visible from—Forest Avenue, another major thoroughfare which enjoys a high degree of commercial development. Its time—adjusted value would probably approximate \$3.10 per square foot.

Transactions 8(a) and 8(b) involved portions of the parcel involved in Transaction 4 and are included here to demonstrate the effects that the passage of time and further subdivision have had on land values in this area.

After studying all of the above data, it is this appraiser's opinion that the value of the subject land is approximately \$3.50 per square foot, or \$894,943, say \$895,000.

LAND AND IMPROVEMENTS - COST APPROACH

Section 13 of the <u>Marshall Valuation Service</u> lists several types of retail stores and restaurant facilities. The classifications that are most descriptive of the improvements proposed for the subject property are "Good Class C" for the retail stores and "Average Class D" for the restaurant facility. Using the <u>Marshall Valuation Service information</u> in conjunction with other data, results in the following estimate of value via the Cost Approach:

IMPROVEMENTS:

R	e	8	t	а	u	r	a	n	t	:
---	---	---	---	---	---	---	---	---	---	---

Basic Cost \$36.60/s.f.

HVAC .80

Sprinkler .92
\$37.75/s.f. x 2,632 s.f. \$ 99,304

Retail Space:

Basic Cost \$25.94/s.f.
HVAC .85
Sprinkler .64
\$27.43/s.f. x 57,610 s.f. \$1,580,396

Parking (Asphalt) \$.50/s.f. x 180,000 s.f. <u>\$ 90,000</u>

TOTAL IMPROVEMENT COST \$1,679,700

INTANGIBLES:

Leasing Fees (5% of Gross Effective Income)	\$ 16,237
Construction Interest (10% of Average Balance	
of a 75% Corstruction Loan)	50,600
Loan Fees	20,000

LAND:

255,698 s.f. @ \$1.30/s.f.		<u>894,943</u>
		\$2,751,480
	Say,	\$2,750,000

I have been advised that the proposed contractor, Jiffy Construction Company, estimates that he could build the retail space for approximately \$1,400,000. Using their figures, the following is projected:

Euildings A and B @ \$24.30/s.f.	\$1,399,980
Parking @ \$.50/s.f.	90,000
Yum Yum Tree € \$37.25/s.f.	98,042
Intangibles	81,000
	\$1,588,022
Land @ \$3.50/s.f.	<u>894,943</u>
	\$2,482,965

This estimate is approximately \$269,000 less than the estimated cost of improvements using the Marshall Valuation Service and is a fair representation of the owner's estimate of brick and mortar cost as of this date. Not reflected in the contractor's estimate is entrepreneurial profit. In my opinion, this "entrepreneurship" has a value equal to most of the difference.

ECONOMIC APPROACH

Shopping centers in the Capitol City area rent for prices ranging from \$3.00 to over \$9.00 per square foot, the lower rent being paid by larger, well-capitalized firms renting the larger spaces on long-term, substantially net leases. Higher rents are paid by the smaller tenants occupying smaller spaces for shorter periods of time.

Based upon a review of comparable properties—namely those plotted on the map attached as Exhibit A—it has been determined that the rents established by the owners of the subject property are competitive. In some cases, the leases require payment of the minimum rent or a percentage of gross income, whichever is greater. No attempt has been made by the appraiser to estimate overages in arriving at the following value by the Economic Approach.

INCOME DISTRIBUTION

	S.F.	Lease Term	Rent/ S.F.	Gross Rent	Percentage
Building A: Grocery Hardware Drugs Furniture Clothing Miscellaneous SUB-TOTAL	16,650 10,200 6,000 4,800 4,200 1,200 43,050	•	\$3.80/yr 4.25/yr 6.15/yr 5.70/yr 5.90/yr 5.70/yr	•	1.75 4.00 4.00 6.00 6.00
Building B: Financial Liquor Cleaners Beauty Shop Barber Miscellaneous SUB-TOTAL	2,688 1,344 1,000 1,000 670 7,858 14,560		\$8.25/yr 9.00/yr 7.12/yr 7.61/yr 7.41/yr 7.50/yr	7,610	3.00 7.50 8.00 8.00
Restaurant GROSS FIGURES:	2,632 60,242	15 yrs	\$8.35/yr	\$ 21,975 \$337,379	7.00

INCOME VALUATION

Gross Inco	ome	\$	337,379
25 year 15 year 10 year 5 year Miscella	lease none = \$ -0- leases 2% = 1,306 leases 3% = 2,878 leases 4% = 1,882 aneous 10% = <u>6,577</u> Gross Income	\$	12,643 324,736
Insurance Manageme Maintene Common A of ter	\$.40/s.f. \$24,097 de, \$.08/s.f. 4,819 ent, 5% of Eff. Gross 15,237 ance, \$.10/s.f. 6,024 Area Reserve in excess hant's contribution 4,800 ds Assoc. Dues 2,000 aneous 2,000	\$	<u>59,977</u> 264,759
	nd at 8-1/2% on \$894,943		76.517
Net Income	e Attributable to Improvements	Þ	188,241
\$188,24	1 capitalized at 10%	1	,882,410
Add Land			894,943
	_		,777,353
	Say	\$ 2	,780,000
*Note:	Taxes are estimated at \$.40 per squa	re	foot of
	improvements based upon the following	ig i	nformation:
	Oakridge Shopping Center 53,043 s.f. 1974 taxes = \$18,565	s	35/c f
	33,043 8.1. 1374 taxes - 410,000	٠.	55/ 8.1.
	Shermantown Shopping Center		
	40,730 s.f. 1974 taxes = \$15,870	\$.	39/s.f.
•	It is felt that the subject property	, wi	ll be
	superior to both of the above mention		
	terms of size, location and embellis		
	a slightly higher tax rate has been	pro	jected.
SUMMARY			

SUMMARY

Estimate of Value by the Cost Approach \$2,750,000 Estimate of Value by the Economic Approach \$2,780,000

CORRELATION AND CONCLUSION

The subject property is very well located in the heart of an excellent trading area. As the city continues to grow toward the North and Northwest, this area will become an even better trading zone.

The streets on which the property fronts have been recently widened to accommodate four lanes of traffic, and access to the site is very good.

The owner is experienced in this field, having spent over 20 years in the business of developing, for others, various types of commercial and residential properties on a regional basis.

The subject property is an income-producing property and, consequently, the Economic Approach is adjudged to be the best indicator of current value. This approach is based upon minimum rents with percentage leases which are typical for the industry, and while the excess rents were not capitalized into the value, the fact that there is a strong possibility of overages being paid considerable enhances the quality of the income stream.

Therefore, as a result of my investigation and my general experience, it is my opinion that the market value of the property described in this report, as of March 21, 1975, is:

TWO MILLION SEVEN HUNDRED AND FIFTY THOUSAND DOLLARS

\$2,750,000.00

Respectfully submitted,

Robert M. Thornton, Appraiser

FOLLOW-UP CORRESPONDENCE

SOUTHEASTERN LIFE INSURANCE COMPANY State and Madison Streets Chicago, Illinois

John T. Allgood Vice President

April 10, 1985

Mr. Arnold L. Mason XYZ Mortgage Company 1231 Washington Street Capitol City, Kansas

Re: Robert Johnson d/b/a West Bend Shopping Center 60,242 S.F. Convenience Shopping Center Alpha Street and Sherman Avenue Capitol City, Kansas

Dear Arnie:

Thanks for the package on the West Bend Shopping Center in Capitol City, Kansas. From our initial review, it looks like we can show a positive interest in taking this loan application to our Finance Committee, which will be meeting next Friday, April 18.

We do have some concern, however, in recommending this loan, with the less than normal parking index. Could you give me comperable parking information on the four other centers located in Capitol City which were used in your <u>Schedule of Comparable Rentals</u>.

Arnie, it would also help if some the the "tentative" leases you talk about in your letter have been finalized. Has any progress been made in this regard since the signing of the application?

I am suggesting you give me a call relative to the parking data since I would like to resolve this question before our Finance Committee meeting.

Sincerely,

John T. Allgood

JTA: Lrr

XYZ Mortgage Company 1231 Washington Street Capitol City, Kansas Phone: 464-7412

April 15, 1985

Mr. John T. Allgood Vice President Southeastern Life Insurance Company State and Madison Streets Chicago, Illinois

Re: Robert Johnson d/b/s West Bend Shopping Center 60,242 S.F. Convenience Shopping Center Alpha Street and Sherman Avenue Capitol City, Kansas

Dear John:

This will confirm our phone conversation of this morning in which I advised you of the results of our parking survey, as follows:

Cakridge Convenience Center	3.9 cars/1,000 leaseable	_
Shermantown	5.2	II .
Urban City	4.8	11
Bellfort	6.2	II .

The Oakridge Center is admittedly handicapped by its inadequate parking index. The Bellfort Center is a phase development, and the final parking index will probably be reduced to less than 5.0 per 1.000 when completed.

Our subject center, at 4.6, appears quite adequate; however, ownership, upon our suggestion, has negotiated with a church on adjacent property to provide parking for employees during the week as consideration for allowing ingress and egress to the church parking lot from the northeast corner of our Center. This concession was made by the church after realizing the benefit that the parishioners would have by having additional access to the lot for their Sunday morning services.

I am also enclosing a lease summary for the Perry's Grocery lease, which was executed last Friday. This lease is conditioned upon Robert Johnson being able to obtain financing at the 9-5/8% rate applied for. We should have, within the next few days, similar leases with National Hardware, Friendly Drugs, and U-Sav-Mor Savings and Loan, at the project rentals indicated.

Mr. John T. Allgood April 15, 1985 Page 2

Let me stress once again how strong we feel about both Mr. Johnson and his West Bend Shopping Center project. This site is an absolute natural from a real estate standpoint and Mr. Johnson has created what we feel will be an instant success. Needless to say, this loan application, as submitted, carries our full endorsement.

Please give me a call immediately following your Friday Finance Committee meeting.

Sincerely,

Arnold L. Mason

ALM: Lrr Enclosure

LEASE ANALYSIS

LESSOR:	Robert Johnson d/b/a West Bend Shopping Center
LESSEE:	Perry's Grocery
DATED:	April 11, L985 FROM: April 1, 1986 or occupancy date, whichever is earlier
	TO: 2011 TERM: 25 years
SQ. FT. AREA:	16,650
GUARANTEED RENT:	\$63,270/year [\$3.80/s.f./year]
PERCENTAGE:	1.75% of annual gross in excess of \$2,913,750
MAINTENANCE:	Lessor: Outside walls, roof, sewer, curbs, sidewalks, paving, plumbing, HVAC
	Lessee: All interior walls, flooring, ceilings, lessee improvements and fixtures
SUBORDINATION:	Full
INSURANCE:	Lessor: Fire and extended coverage on building Lessee: \$100,000/\$300,000/\$50,000 Liability plus coverage on contents
TAXES:	Lessor: Base year real estate taxes Lessee: Tax increases only
UTILITIES:	Lessee pays all
ASSIGNMENT:	Lessor's consent required
RENEWAL OPTION:	One 5-year option with a rental increase tied to the Consumer Price Index
USE CLAUSE:	Supermarket only
EMINENT DOMAIN:	If all or a substantial part is taken, lessee may cancel lease
MISCELLANEOUS: cancel lease	If repairs take longer than 150 days, lessee may
	Reviewed by

THE LOAN APPLICATION

XYZ Mortgage Company 1231 Washington Street Capitel City, Kansas Phone: 464-7412

April 2, 1985

Mr. John T. Allgood, Vice President Southeastern Life Insurance Company State and Madison Streets Chicago, Illinois

Re: Robert Johnson d/b/a West Bend Shopping Center 60,242 S.F. Convenience Shopping Center Alpha Street and Sherman Avenue Capital City, Kansas

Dear John:

Having received a mortgage loan application (Exhibit D), with deposit, on the above-referenced property, we are pleased to enclose the following for your consideration:

LOAN SUMMARY AND ANALYSIS

SECURITY: Proposed 60,242 s.f. convenience shopping center, situated on a 5.875 acre lot, and consisting of 3 buildings:

Building A - Retail Professional 43,050 s.f.
Building B - Retail/Professional 14.560 s.f.
Fast Food Franchise (National Chain) 2,632 s.f.

Parking is available for 274 cars.

LOCATION: NE corner at Alpha Street and Sherman Avenue (except corner piece measuring 190' x 190') in Capitol City, Kansas.

BORROWER: Robert Johnson d/b/a West Bend Shopping Center.

Net Worth = \$750,000. Experience - Over 20 years as a real estate developer, specializing primarily in apartments with some diversification into office buildings and small shopping centers. He generally builds for sale to other parties, but he intends, for the first time. to retain ownership of this project.

MORTGAGE LOAN APPLICATION

(All questions must be answered in order to insure prompt consideration)

Application is hereby made to XYZ Mortgage Company
for a loan of \$1,275,000,00 for a term of 25 years, 0 months, on
which spelicant(s) agree(s) to repay the sum of \$11,057,44 to apply to
interest and principal X monthly,quarterly, beginning no sooner than
the lat day of April , 19 76. Interest is to be paid at the rate
of 9-5/8% per annum monthly on the 1st day of each month.
SEE ADDITIONAL PROVISIONS
As evidence of said loan applicant(s) agree(s) to execute a mortgage or trust deed note signed by all parties in interest and to secure said note by a first mortgage or first trust deed on the following described real property in the
City of Capitol City County of Gem State of Kansas
Legal Description: Lot One (1), Block Four (4), Sheraton Park Addition,
in the NEt, Section 33, Tier 10 North, Range 7 East of the 9th Principal
Heridian, Capitol City, Kansas.
being on the <u>east</u> side of <u>Sherman Avenue</u> , and the <u>north</u>
side of Alpha Street . The lot has frontage of 380 feet
on Sherman Avenue and 330 feet on Alpha Street, with a maximum depth of
570 feet and is improved with (give brief description of buildings)
two one-story brick and block retail buildings and one one-story restaurant,
with parking.
Age of Buildings proposed years. Occupied by OWNER TENANT(S) X
\$ 212,554 (proposed) ANNUAL RENTAL

EXHIBIT D, Page 1

LOAN

REQUEST: Amount: \$2,062,500 Term: 25 years

Amortization: 25 years 27 years 27 years 27 years 27 years 27 years 27 years 28 years 27 years 28 years 29 years 20 year

Servicing: 1/8 of 1% to XYZ Mortgage Company

Net Yield 9-1/2%

Prepayment Closed 10 years.

Open at 5% premium, declining 1%

per year to minimum of 1%

LOAN

ANALYSIS: Loan to Value Ratio 75%

Loan/S.F. Bldg. Area: \$34.24

Annual Debt Service: \$214,706 (Constant - 10.41%)

Debt Service Coverage: 1.23 to 1

Breakpoint: 81%

Bal. after 25 years: \$240,975 (Land value - \$894,943)
Parking Index: \$240,975 (Land value - \$894,943)

FUNDING: Second quarter, 1986.

LCCATION

The subject property is situated on the Northeast corner of Alpha Street and Sherman Avenue in Capitol City, Kansas, diagonally across the intersection from the Spartan High School complex. This location is in the heart of the city's Northwest Growth Corridor and is surrounded by a rapidly-developing, well-maintained, upper-class residential neighborhood. Homes in the immediate vicinity are in the \$80,000 - \$125,000 range, and it would be necessary to travel at least two miles from the shopping center to find a home valued as low as \$45,000. As you can see, the income level of the nearly 16,000 residents living within this center's marketing area is sufficiently high to support a tenant mix which includes a beauty parlor, a gift shop, a furniture store, and several professional service-oriented businesses.

County Line Road, about one mile west of the subject shopping center, forms Capitol City's western boundary, beyond which more upper-class residential development is just commencing.

In addition to benefiting from the significant further growth potential of the immediate area, the center is ideally located to attract patrons from rural areas to the north and west. This is because both Alpha Street and Sherman Avenue constitute county section lines and, as such, are major carriers of vehicular traffic from beyond the corporate city limits. Ingress and egress is excellent from both of these four-lane arterials.

IMPROVEMENTS

The enclosed appraisal fully describes the physical characteristics of the improvements so I will be brief in my comments concerning them. I would merely like to point out that available parking, at 4.6 spaces per 1,000 s.f. of leaseable area, while below the Urban Land Institute's "5.5 per 1,000" standard of adequacy, should nevertheless be sufficient for the West Bend Shopping Center since very few of the businesses require long-term parking.

VALUE

The cost estimate given by Jiffy Construction Company, and mentioned in the appraisal, can be considered fairly firm as it was made in the form of a fixed-cost bid by the highly reputable local contractor, who has a great deal of experience in this type of construction. Adding a reasonable amount of entrepreneurial profit to their bid results in a cost estimate which closely approximates, and thus corroborates, that derived from the Marshall and Swift Valuation Service.

As for the project's economic value, we have conducted our own survey of comparable rents in the Capitol City area (a summary of which is attached as Exhibit B to this letter) which substantiates the validity of the tentative lease agreements reached with prospective tenants thus far. Details of these tentative leases are set forth in Exhibit A.

BORROWER

The borrower, Robert Johnson, is a life-long resident of Capitol City and is well known throughout the community. Although this project constitutes his first venture, personally, into the long-term ownership of a sizable commercial property, we feel completely confident in recommending him highly to you because of his twenty-plus years of experience in successfully developing such properties for others. We have attached his personal financial statement to this letter as Exhibit C, but we suggest that you approach this investment opportunity more from the real estate, than from the credit, angle.

SUMMARY

Based upon our underwriting criteria, we feel that this proposal contains the ingredients desired in a high quality loan offering. Our optimism stems from the following:

- The excellence of the real estate, located in a high-income neighborhood, with tremendous growth potential.
- A well-substantiated value, both from an economic and a cost standpoint, which is fully capable of supporting projected debt service and expenses.

- 3. Tentative lease agreements with good local credits which result in the property's being 85% pre-leased before construction has even begun. Letters of intent will be made available upon request.
- 4. An owner/developer who is highly experienced in the analysis and underwriting of such investments and who intends to retain his ownership interest in the property.

We therefore confidently recommend this loan for your favorable consideration, based upon a loan amount of \$2,062,500, a loan term of 25 years, with a 27-year amortization, and a gross yield of 9-5/8% with 1/8 of 1% servicing.

Thank you very much for your consideration in this matter. We look forward to receiving your commitment for permanent financing.

Sincerely,

Arnold L. Mason

Enclosures

EXHIBIT A Page 1

ANALYSIS OF TENTATIVE LEASES

MINIMUM ANNUAL RENT

Tenant	S.F.	Total	Per S.F.	% Rents	Prime Term
Perry's Grocery	16,650	\$63,270	\$3.80	1.75%	25 yrs.
National Hardware	10,200	43,350	4.25	4	15 yrs.
Friendly Drugs	6,000	36,900	6.15	4	10 yrs.
Sleepy Time Furniture	4,800	27,360	5.70	6	5 yrs.
Men's Wear, Ltd.	4,200	24,780	5.90	6	10 yrs.
Huey's Off-Sale Liquor	1,344	12,096	9.00	3	10 yrs.
Spot Check Cleaners	1,000	7,120	7.12	7.5	5 yrs.
Slyvester's Beauty Salon	1,000	7,610	7.61	8	55 yrs.
Yankee Clipper (Barber)	670	4,964	7.41	8	5 yrs.
U-Sav-Mor S & L	2,688	22,176	8.25	10	10 yrs.

EXHIBIT A Page 2

	Renewal	Lease	
Tenant	Options	Subordination	Taxes
Perry's Grocery	one 5-yr.	full	Lessor with 1st yr. stop
National Hardware	two 5-yr.	11	ii
Friendly Drugs	two 5-yr.	11	11
Sleepy Time Furniture	two 5-yr.	It	11
Men's Wear, Ltd.	one 5-yr.	II .	11
Huey's Off-Sale Liquor	one 5-yr.	ti	11
Spot Check Cleaners	two 5-yr.	11	n
Sylvester's Beauty Salon	one 5-yr.	II	11
Yankee Clipper (Barber)	one 5-yr.	II.	tt
U-Sav-Mor S & L	two 10-yr.	ii.	11

Tenant	Maintenance	Insurance	Utilities
Perry's Grocery	Lessor-Ext.	Lessee:Contents	Lessee
National Hardware	Lessee-Int.	& Liability only	11
Friendly Drugs	Ħ	11	tt
Sleepy Time Furniture	11	n	11
Men's Wear, Ltd.	tt	11	Ħ
Huey's Off-Sale Liquor	11	11	11
Spot Check Cleaners	11	tr	ŧı
Sylvester's Beauty Salon	11	11	**
Yankee Clipper (Barber)	tt .	**	11
U-Sav-Mor S & L	11	11	11

EXHIBIT B Page 1

- (3) = Urban City
 Forest Avenue and Urban Way
 Capitol City, Kansas
- (5) = Subject
 Alpha Street and Sherman Avenue
 Capitol City, Kansas

SCHEDULE OF COMPARABLE RENTALS

	Tenant Type	Prime Term	Renewal Terms	Annual Rent/SF	% Rents	Expenses Lessee	Lessor
[1]	Major: Minor:	15-20 years 5-10 years	two (+) 5 yr. 0-two, 3-5 yrs.	\$4.00 5.70- 9.87	1-2% 3-7%	Utilities Tax Incr. Contents Ins. Lieb. Ins.	All Other
(5)	Major: Minor:	20yrs. 5-10 years		\$3.80- 3.95 3.00- 9.11	1-3% 4-6%	All Exp.	None
(3)	Major: Minor:	25yrs. 5-10 years	5 yrs. very flexible	\$3.95 5.31- 9.87	1% 4-8%	Utilities Contents Ins.	All Other
(4)	Major: Minor:	20-25 years 3-10 years	two 5-yr. O-three 3-5 yrs.		1.5%	Utilities Contents Ins. Int. Maint. Tax Incr. Lieb. Ins.	All Other
(5)	Major: Minor:	15-25 years 5-10 years	5-10 years 5-10 years	\$3.80- 4.25 5.69- 9.50	1.75- 5% 4-8%	Utilities Contents Ins. Liab. Ins. Tax Incr. Int. Maint.	All Other

EXHIBIT C

ROBERT JOHNSON

Balance Sheet as of December 31, 1984

ASSETS

	Cost	Market
Cash	\$ 50,000	\$ 5D,000
Marketable Securities (Schedule 1)	80,929	74,479
Real Estate Investments (Schedule 2)	649,500	987,000
Other Assets (Schedule 3)	147,000	165,000
TOTAL ASSETS	\$927,429	\$1,276,479
LIABILITIES		
Personal Note - National Bank, due 8/86	\$127,500	\$137,500
Personal Note - C. A. Smith, due 5/87	90,000	90,000
Mortgage on Land - National Eank, due 12/91	293,425	293,425
TOTAL LIABILITIES	\$520,925	\$520,925
EQUITY	\$406, 504	\$755,554

EXHIBIT C Page 2

SCHEDULE 1

MARKETABLE SECURITIES

		Cost	<u>Market</u>
2100 Shares	Blue Chip, Inc.	\$ 33,600	\$ 29,400
6000 Warrants	Blue Chip, Inc.	24,000	21,000
300 Shares	Ozark Distillers	6,000	4,500
1500 Shares	International Airport	5,000	5,250
Bonds	Capitol City Air Authority ('94)	24,750	25,000
	New York City, N.Y. ['97]	48,500	50,000
	Chicago, Illinois ('98)	24,750	25,000
		\$166,600	\$160,150
Less Amount Du	e Broker	<u>85,671</u>	85,671
Total Marketab	le Securities	\$ 80,929	\$ 74,479

SCHEDULE 2

REAL ESTATE INVESTMENTS

	Cost	Market
Unimproved Land Alpha St. & Sherman Ave. Capitol City, Kansas	\$606,000	\$895,000
Land and Retail Building Nelson St. & Belmont Ave. Capitol City, Kansas	24,500	38,000
Residence 3310 Stacy Drive	19,000	54,000
Capitol City, Kansas	\$649,500	\$987,000
Less Mortgage on Unimproved Land	293,425	293,425
Total Real Estate Investments	\$356,075	\$693,575

EXHIBIT C Page 3

Schedule 3

OTHER ASSETS

	Cost	Market
Art - Paintings	\$ 30,000	\$ 40,000
Employee Profit Sharing Plan	50,000	75,000
Cattle	20,000	20,000
Automobiles [2]	12,000	10,000
Furniture and Other Personal Belongings	25,000	10,000
Cash Value Life Insurance	10,000	10,000
Total Other Assets	\$147,000	\$165,000

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FINAL SOLUTION TO WEST BEND SHOPPING CENTER

KATHY HANSEN CARROLL MARCUSEN 7 May 1985 Commerce Building
UW-Madison
Madison,WI

FROM: Hansen/Marcussen Evaluators

1229 Jenifer Street

Madison, WI

Dear Professor Robbins

Enclosed is a complete financial analysis of the West Bend Shopping Center. In January of this year you asked us to review this proposal in terms of its appropriateness to your required returns, unique risk aversion and tax status within the constraints of available financing. In evaluating development proposals there are three essential stages which must be analyzed in order to determine the associated risk/return tradeoff in the project. These three states of analysis are as follows:

- I. Design/Cost Analysis
- II. Minimum Equity Performance: Solvency and Yield
- III. Profit Maximization

A complete analysis of stages I and II were completed and sent to you earlier but will be summarized in this final review. With a high degree of confidence we have concluded the West Bend Shopping Center should be included in your portfolio as even under a normative scenario your return requirements have been met and surpassed. If you have any questions about the contents of this report, feel free to give us a call. I must warn you we will not answer any questions until we have received our \$25,000 payment for this analysis.

Sincerely.

I - DESIGN/COST ANALYSIS

The most glaring design problem with the original proposal was a three seperate building plan. This design was uneconomical, created parking problems and limited the interaction amoung the stores and the clientle each draws upon. By designing the retail space to fit into one building, the costs of HVAC and electrical systems plus plumbing was cut down considerably along with projected energy expenses because the buildings exposure to the weather elements was cut down.

The next problem encountered was that the center had allocated too much of the available land to parking versus building a bigger building. The original design had proposed 4.6 parking spaces per 1000 sq.ft. of GLA which was acceptable but the land area (minus building area) divided by 275 stalls meant 710 sq.ft. was allocated for parking, buffer areas and traffic lanes. 350-400 sq.ft. is the industry norm. By increasing the building size from 60,242 sq.ft. GLA to 72,766 GLA and using a reasonable amount of space for parking and open space, we converted area that wasn't generating income to area that would increase the case flow through additional rents.

Other changes that were proposed included adding loading docks, having a seperate area for truck/delivery vehicles, closing off Rexford Drive and moving the entrances to the center further away from the main intersection to avoid traffic flow problems.

We brought to your attention several legal-political concerns. The city is governed by a mayor and seven councilmen and zoning, water and sewage facilities access along with electrical distribution system are under their control. The importance of establishing a good working relationship with these eight individuals was considered a number one priority in our original report.

It was recommended the master zoning plan of the city be obtained to look for parcels that maybe zoned commercial and could be developed into competitive shopping center sites. Our concern here was to insure we created as much of a monopoly situation as possible by controlling the risk associated with potential competitors moving in on our customer base.

We examined the surrounding area and linkages in relation to West Bend Shopping Center and recommended several actions. The high schools and hospitals should influence the tenant selection to take advantage of these two groups needs. The northwest section of the city is growing rapidly so the potential market for the center will be expanding but an effort has to be made to keep this to your advantage. It was recommended purchasing or leasing the sites deemed most appropriate for new shopping centers in this area would enhance the financial success of the center.

Our original report included a cost analysis of our proposed building in terms of your investment needs. An individual equity investor who desires both cash flow and appreciation would like both low building cost for his cash flow returns and high quality building components for his appreciation return.

The basic structure of the building, foundation, superstructure, exterior walls, roofing, plumbing, HVAC and electrical system were proposed to be the components that needed high quality standards to reach your appreciation goal. The basic structure cannot be easily changed and figures heavily into an appraisal. The rest of the components were given a lower quality cost rating to drive the overall cost of the structure downwards. These considerations led to our final cost recommendation of \$3,062,362 as the price tag associated with the one building design of 85,607 sq.ft. of buildable area.

II. - MINIMUM EQUITY PERFORMANCE: SOLVENCY AND YIELD

Before judging whether the project would be cash solvent and meet your required investment return needs we felt considerable changes had to be made to the original tenant list proposed.

Under our design proposal we recommended an additional 12,245 sq.ft. of GLA be added to cut down on the space used as parking and convert that into income producing tenant space. Now not only a change in the mix of tenants had to be considered but our proposal required solicitation of more tenants.

Of the ten tenants proposed, only one, Sleepy Time Furniture, did not meet the needs of the customers for a neighborhood shopping center. We analyzed the proposed tenant list not only in terms of appropriateness to the neighborhood shopping center concept but in terms of the space éach tenant was planning on leasing. We found that the National Hardware Store and Mens Wear L.T.D. were much too big and the liquor store and grocery were too small. It is always a good idea to check the potential tenants request for a certain amount of space with some industry standard like Dollars and Cents of Shopping Centers to make sure they aren't way out of line in relation to normal space required for those paticular types of stores.

A considerable amount of thought went into our previously submitted revised tenant list. Seventeen tenants were proposed to occupy the 72,766 sq.ft. of GLA. We have attached a copy of our proposed tenant list to refresh your memory. The grocery store and drug store were chosen as the two anchor tenants. In the proposal there was no apparent consideration of the primary market including 2 high schools and hospitals. A card/gift shop and florist were included to take advantage of the hospital clientle. Records/Tapes, an arcade and deli/icecream shop were included when the high school population was taken into consideration. The other tenants proposed were chosen so they would fit the concept of a neighborhood shopping center along with this areas sales and needs potential.

A mix of national, local chain and independent stores were needed for reduction of risk. The national stores are less likely to fail but they demand a lower rent. The local chain is riskier but can be charged more rent. The two anchor tenants were chosen as national types along with shops that we felt would draw better if they had a national reputation such as Elaine Powers for the health spa and Hallmark for the card/gift shop.

Using data from Dollars and Cents of Shopping Centers we proposed space allocation and rental required for each of pur tenants. All of the figures fell within the acceptable lower and upper ranges of the industry standards. The dollars per square foot required from each tenant ranged from a high of \$19.95 for the Unisex Hair Salon to a low of \$6.03 for the grocery store. The average rental payment was \$9.50 sq.ft. which when multiplied by the GLA gave us a projected yearly rental income of \$6.71,277. This figure does not include a 20% markup to the tenants for operating expenses and real estate taxes.

We ran a sensitivity analysis using the Commermod software program to test the volatity of increasing costs of the building leading to higher amounts of required income to support the investment. Under the most pessimistic scenario when the cost of the project was \$6,248,000 in comparison to our normative estimate of \$5,278,000, the rent required per sq.ft. was \$9.50. Under the normative cost estimate the rent required was \$9.09 sq.ft. If the cost of the building comes in like we projected at \$5,278,000 the difference between 9.50 and 9.09 is a cushion aganist unexpected vacancies but more likely it will just translate into higher returns for you the investor.

The last step before considering your solvency/minimum equity yield analysis was adjustment of the default ratio. Because we proposed changes in the design layout, tenant mix and reviewed the market study it was appropriate to review these categories which contribute to the risk adjusted default ratio. This review made the risk adjusted default ratio move from .66 to .728. This was not a large jump but other factors such as the developer and lease characteristics were not yet adjusted at this point in our analysis. When these two factors were changed, the default ratio went to .81. The lower the default ratio, the more equity cash that is required so our proposed changes have reduced your investment requirements.

MRCAP computer program was used for the equity yield and cash solvency analysis. The normative cost parameter of the Commermod program was used as our cost input to MRCAP. Your cash solvency goal for years one thru three was achieved when no working capital loan existed through your additional reserve amount of \$129,516. The default ratio of .7260 in year 3 was almost exactly in line with your goal of .7280.

We achieved the minimum equity yield of .11 before tax return and even achieved a higher return of .1208. Both of your goals were achieved by inputting these critical components:

COST: \$5,278,817
EQUITY REQUIRED: \$1,967,245
DEBT REQUIRED: \$3,428,253
INCOME PROJECTION: Base income

INCOME PROJECTION: Base income of \$9.50, inflated by 20% for operating expenses and real estate taxes. This amount was raised by allowing the rents to grow at .015% per year for a total growth of .126% over the eight year holding period.

III. PROFIT MAXIMIZATION

Your minimum requirements of 11% before tax return and cash solvency in years 1-3, were met without using many implementable and feasible techniques and assumptions inherent in this proposal.

The following seven steps were taken to work out the best package in terms of your tax status, return requirements and risk aversion.

- 1.) 6% of sales over the \$23,066,212 sales base is taken each year as variable income. Sales are expected to grow at 5% per year.
- 2.) Change of depreciation method from straight line to 150% declining balance under the individual investor tax category.
 - 3.) Straight line depreciation under incorporation.
- 4.) Changing the simple growth in market value multiplier to a net income multiplier.
- 5.) Reduced the interest rate on the loan by making up the difference in payment through participation in the cash throw off.
 - 6.) Sold the land and leased it back.
- 7.) Refinanced the mortgage in year seven of the holding period.

1. Sales Overages

The tenants were paying a set lease rental amount, with step-ups of .0464 every three years, which is not enough rent when the market study for sales growth is considered.

Overages is a technique for the lessor to participate in the success of the center when sales are increasing. There are two ways this can be done:

- 1.) Raise the rent at each lease renewal period which will be justified by the increasing profitablity of occupying space in the West Bend Shopping Center. The tenants would demand the sales base on which overages are calculated be raised or in effect they would be charged twice for the increased profitability of the center.
- 2.) Keep the lease base rent the same and the sales bases for overages calculations the same. Extra income based on the increasing sales comes in as variable overage income.

It may seem safer to convert the variable income of overages into fixed income of a lease payment when the leases are renewed but it is our feeling that the tenants prefer the management have a vested interest in the level of sales being generated. From a risk stand point, increasing the base rental is preferred but from a long term relationship objective stand point we want to keep our tenants happy and in place. Our centralized accounting system will insure we get 6% of sales over the base amount.

Our marketing study indicated there is two hundred million dollars of unmet need in a four mile radius of the shopping center. Drawing just 12% of this income into the center would bring \$24,000,000 in sales, slightly over the amount required by our tenants.

Using a conservative 5% growth rate for sales we are confident that by year eight West Bend will be popular enough to draw 17% of the \$200,000,000 potential income from the area. The following amounts are based on 5% sales growth and 6% of the sales over the base sales amount coming out of the tenants pockets and into your pocket. The following describes how the overages will work:

year	vacancy	base sales	anticipated sales	overage sales	rate	variable income
1985	60Z	\$13,839,727	814,531,714	\$691,987	67	\$41,519
1986	85 %	\$19,606,280	\$21,615,924	\$2,009,644	42	\$120,570
Begin	ning of m	ormal operatio	กระ			·
1987	952	\$21,912,901	\$25,548,718	\$3,635,817	67	\$218,149
1988	95%	\$21,912,901	\$26,883,818	\$4,970,917	67	\$298,255
1989	95%	\$21,912,901	\$28,285,668	\$6,372,767	67	\$382,366
1990	952	\$21,912,901	\$29,757,618	\$7,844,717	62	\$470,683
1991	95%	\$21,912,901	\$31,303,168	\$9,390,267	67	\$563,416
1992	95%	\$21,912,901	\$32,925,985	\$11,013,083	67	\$660,785

In year eight the sales income had grown from the base of \$23,066,212 to \$34,079,300 which reflects a reasonable scenario for West Bend Shopping Center being able to attract 17% of the \$200,000,000 potential sales market.

At this point the only assumption changed from the cash solvency minimum yield scenario was an increase of incomes from the center, your returns have obviously gone up. Your average before tax return over the normalized operations period was .1208, with inclusion of overages the before tax return is now 34%. The gross potential income has gone up so the default ratio has gone down to reflect less risk associated with paying your fixed debt service, operating expenses and working capital loan.

2. Individual Investor 150% Declining Depreciation

The analysis up to this point was based on straight line depreciation for all the depreciable cost components. We will conclude after this step that the straight line depreciation method under corporate ownership form is preferable for your particular investment needs but step 2 is presented for your information and review.

Under the 150% declining balance method up to 1.5 times the straight line depreciation rate may be taken on an improvement over the economic life of the asset. Depreciation is subtracted from net income to arrive at taxable income so the more depreciation taken the less taxes paid in. An individual at a 50% tax bracket would want to reduce taxable income each year but when the building is sold any excess depreciation taken is taxed at your ordinary income rate.

Based on the following tables we concluded straight line depreciation was best.

Depreciation Amount

years

Type 1985 1986 1987 1988 1989 1990 1991 1992
Straight line \$357,024 \$357,02

In years 7 and 8 straight line has more allowable taxable depreciable expense and if tax shelter was one of your main objectives we would utilize accelerated depreciation for years 1 - 6 and switch to straight line depreciation in years 7 and 8.

Spendable Cash After Taxes

 Type
 1985
 1986
 1987
 1988
 1989
 1990
 1991
 1992

 Straight line
 \$162,791
 \$229,174
 \$317,909
 \$379,267
 \$418,392
 \$459,232
 \$527,422
 \$572,092

 1502 DBM
 \$234,022
 \$268,884
 \$346,938
 \$428,656
 \$459,999
 \$517,416
 \$517,416
 \$555,189

As a result of sheltering income through accelerated depreciation you will recieve more cash in years 1 - 6, but this benefit is offset when you consider the effects of the income tax on excess depreciation when you sell the building. The difference in these net worth figures under the two depreciation methods is illustrated in the following table:

After Tax Net Worth (If Sold)

years

Type 1985 1986 1987 1988 1989 1990 1991 1992
Straight line \$1,569,928 \$1,546,671 \$1,541,794 \$1,554,453 \$1,583,966 \$1,628,645 \$1,680,473 \$1,738,224
1502 DBM \$1,661,028 \$1,693,647 \$1,729,474 \$1,768,938 \$1.812,530 \$1,860,809 \$1,914,406 \$1,974,042

Since your objectives are both can flow and market value appreciation, straight line depreciation is the better method because your cash flow is still sheltered although to a lesser extent but this is more than made up when you sell the building and do not have to pay more taxes as a result of the excess depreciation.

3. Corporation Under Straight Line Depreciation

The tax attributes of a corporation is the main reason for changing legal entities but there are other advantages. To be considered a corporation for tax purposes three out of the four following criteria must be met:

- 1.) Immortality of the enterprise (the entity survives its founders)
- 2.) Degree of marketability (ability to market shares of stock freely)
 - 3.) Centralized Management
 - 4.) Liability (limited for the investor)

Degree of marketability is the criteria that you will not fit into, at least until you decide you may want to raise capital by selling shares in the corporation. It will cost approximately five hundred dollars to incorporate, but this will be made up easily in tax savings and the risk reduction benefits.

Incorporation was chosen as the form of ownership based on the difference in income tax rates between sole proprietership and incorporation with the project generating such large amounts of taxable income. The corporate tax rate is approximately 45% versus your present personal tax rate of 50%. The taxable income throughout the holding period is as follows:

years
Type 1985 1986 1987 1988 1989 1990 1991 1992
Taxable Income -\$325,582 -\$11,456 \$172,120 \$301,985 \$387,946 \$478,627 \$625,250 \$726,247

If taxable income would be negative for a longer period of time we would want to keep the sole proprietership form of ownership, because the negative taxable income can be applied against other taxable income at the 50% rate. This is not the case and illustrated in the income tax due account as follows:

 Years

 Type
 1985
 1986
 1987
 1988
 1989
 1990
 1991
 1992

 Individual
 \$ 0 \$ 0 \$ 86,060
 \$150,993
 \$193,973
 \$239,314
 \$312,625
 \$363,123

 Corporate
 \$ 0 \$ 0 \$ 59,925
 \$119,663
 \$159,205
 \$200,918
 \$268,365
 \$314,824

The drawback of incorporating is that the taxable income is

taxed twice. First at the corporate rate of approximately 45% and secondly at the shareholders individual rate of 50% when they receive the distributable cash through dividends.

To avoid part of this problem while still meeting your needs for income, 90% of the after tax income was not distributed to you the shareholder, instead a reserve account was established for the balance within the corporation. The money is then compounded forward at a 6.5% reserve rate. When the property is sold the accrued amount in the reserve account will be considered an asset of the corporation and therefore when the project is sold in 1992 it will be taxed at the capital gains tax rate, which is much lower than the ordinary income rate.

4. Project Growth

In determining the resale value of the project, we selected the net income multiplier. Although a simple device it reflects the relationship of remaining income after all fixed and variable expenses have been excluded. In an income producing property, this is a much better approach than others because the value of the asset is reflected in income production.

Other valuation methods such as the gross rent multiplier also would reflect value, however expenses are capitalized as part of the project, yet the expenses may grow at different rates than the gross income. Other techniques such as an appraisal approach are much more subjective, although reliable and valid it is unnecessary, because we have such a good indicator of value in terms of income.

The net income multiplier is derived from the value of the project in the 1st year of normal operations which is \$7,050,770, by dividing this figure into the net operating income of the same year which is \$867,949; this gives a capitalization rate of .1231. The inverse of the capitalization rate (1/.1231) gives the net income multiplier of 8.12348.

Multiplying 8.1234 by the net operating income gives the market value. This market value impacts on the after tax net worth, which if the project is sold would have an after tax net worth as follows:

After Tax Net Worth (If Sold)

years

1985 1986 1987 1988 1989 1990 1991 1992

Net income mult \$ -476,649 \$1,948,530 \$3,187,226 \$4,245,099 \$5,123,374 \$6,100,439 \$7,494,464 \$8,721,007

Simple 1.51 \$1,663,973 \$1,856,744 \$2,199,075 \$2,615,698 \$3,100,904 \$3,661,246 \$4,328,564 \$5,087,374

As is readily apparent, there is a large difference between the two methods. Using the net income multiplier is a good approach because it is so widely used in the industry to establish value.

The impact on the modified internal rate after sale is substantial, growing from .1894 in the first year of normal operations to .2123 at the end of the holding period. Without the net income multiplier and using a simple growth rate the figures are .0568 and .1382 respectively.

5. Participation

Lenders have become more sophisticated over the years and realized they were taking most of the financial risk but not sharing in the profit centers. Most lenders are now willing to adjust the interest rates, payments per year, or term in order to share in the following profit centers:

- A. Appreciation of Property
- B. Cash flow .
- C. Share of equity ownership
- D. Tax benefits
- E. Points

Lenders often reduce the interest rate on the loan but expect the participation benefits to give them a higher return on their investment because they are in a riskier position. The lender looks more like an equity partner and now has a vested interest in the projects success which is to your advantage.

The fixed payments the project must pay out are reduced which makes the likelihood of default on the loan more remote. For this situation to develop the lender will require a higher rate of return on the amount invested because his risk has increased as a result of expecting his returns in a more speculative fashion (participation). Since the lender has more of a vested interest the lender is more likely to lend additional funds should the project need it in the future. This technique is also helpful because it takes some of the pressure off the projects success in the first couple of years. The fixed expenses are lower than they normally would be in the first two years and then higher than they would normally would be thereafter. The charts below illustrate the reasons for the lenders willingness to reduce his returns in the first several years in return for greater returns in the future.

Default Ratios

	years							
type	1985	1986	1987	1988	1989	1970	1771	1992
Without participation	.7201	.6339	.5748	.5122	. 4802	.4502	.4078	.3843
With participation	.6166	.5901	.6213	-6076	.6013	. 5755	.5806	.5814

Interest Payments (Includes bonus interest)

	years .								
type	1985	1986	1987	1988	1989	1990	1991	1992	
Without participation	\$444,452	\$441,859	\$438,805	\$435,330	\$431,376	\$426,875	\$421,753	\$415,925	
With participation	\$341,364	\$386,564	\$473,070	\$532,116	\$568,536	\$606.543	\$671.720	\$713,125	

The lender shares in the cash throw off above a fixed base amount figure of \$216,397. After the base amount is achieved the lender will recieve 50% of the cash throw off. The Rates program was used to insure the lender received slightly above his normal return to compensate for their increased risk. Because the dollars were taken from cash throw-off your before tax rate of return has gone down but your risk has also been reduced as indicated in the following chart:

		Before	Тах	Rate of	Return	
				,	/ears	
type	1987	1988	1989	1990	1991	1992
Without participation	.2056	.2696	.3113	.3551	.4270	.4754
With participation	.1806	.2127	.2336	.2555	.2914	.3156

6. Land Sale and Leaseback

We feel that a sale leaseback would be advantageous for the project. The following reasons are given with supporting data:

1.) Reducing the cost of the project through sale of the land will lower the amount of equity capital required to finance the project from \$1,967,245 to \$1,482,245. This in turn will reduce the after tax spendable cash by \$1080 after the second year or during the period of normal operations. For this loss in spendable cash your rate of return after taxes improves during the period of normal operations as indicated in the following chart:

Cash Rate of Return After Tax

	years							
type	1985	1986	1987	1988	1989	1990	1991	1992
Without leaseback	.0193	.0131	.0158	.0175	-0185	.0195	.0213	.0225
With leaseback	.0301	.0163	.0203	.0224	-02 38	.0252	.0275	.0291

With your after tax return increasing there will also be an increase in the risk component as measured by the default ratio. following table gives the default ratios under sale-leaseback:

The

Default Ratio

				years				
type	1985	1986	1987	1988	1989	1990	1991	1992
Without leaseback	.61	.590	1 .6213	.6076	.6013	.5955	.5860	.5814
With leaseback	-66	25 .661	2 .6404	.6246	.6171	.6103	.5993	.5940

The increase reflects the greater percentage of debt that will be entering the project.

With sale-leaseback we must be cognizatant of the tax implications if the Internal Revenue Service should look upon the arrangement as a loan rather than as a rental expense. If the IRS views the lease as a mortgage the following results may occur: 1) the lessee will be allowed to only deduct the interest rather than the entire lease payment and 2) the effect on the balance sheet will be the land will be carried as an asset and the lease will be carried as a mortgage liability.

To avoid the previously described situation, it would be wise if there is a repurchase option to be based on the "higher" of either the appraised value of the land or the unamortized balance of future lease payments. This means the lessee would not receive any tax advantages from buying the land at a lower than market value, sell it, and then recognize a capital gain on the sale; while still being able to deduct the lease payments as an expense item. Lease cancellation should also be included as a privilege of the lessee. Under these terms the lessee will be able to request lease cancellation, subject to purchase by the lessee of the land for the unamortized value of the land plus a premium. The lessor should be able to refuse the cancellation, but in doing so the lease agreement terminates, thus there is no guarantee that repurchase will be possible.

7. Loan Refinancing

The seventh year was decided upon for refinancing because the leases have been renewed twice during the life of the project. This will reduce the uncertainty about the future income because the new leases will have three years to run.

Spendable cash in year 1991 of \$5,415,766 comes from 2 sources. Refinancing and after tax cash from the rental income, these are \$5,401,266 and \$15,540 respectively. Refinancing the project in the seventh year gives us tax free use of money for 1 year at which time the plan is to sell.

The higher mortgage amount is a reflection of the increased value of the project because of the increased rent and gross sales overages. Since the normal debt service coverage ratio is 1.2, for our project we are a little under this with a 1.16 ratio after the refinancing. We feel this is still close enough to enable a new mortgage to be obtained.

Another reason refinancing is viable, is that it benefits the lender. The amount of interest paid to the lender is reduced as the mortgage balance is paid off. The lender will benefit in terms of rates of return on their money if it is refinanced. However, in our case the original lender may be reluctant to do so because the participation in the project will lead to interest rates of 18% if our projections prove correct.

SENSITIVITY ANALYSIS

Profit maximization is all based on speculative assumptions about the future success of the project. We believe all seven steps taken in profit maximization are feasible and the returns are attainable but in a pessimistic light we will illustrate what would happen if the following 3 situations occured.

1. Total Cost of the Project Increased by 10%.

If the cost of the project went up and the loan amount was already negotiated that would leave you as the equity investor the source of these additional required funds.

The increased costs and increased investment are illustrated below:

STABLE COST	<u>COST</u> 4,793,817	EDUITY \$' 1,482,245
10% Increase	5,273,199	1,961,627

Cash throw off does not change in this scenario but your before tax rate of return goes down because you have contributed more money as shown below:

Before Tax Rate of Return

YEARS	<u>3</u>	4	5	<u>6</u>	7	<u>8</u>
Stable Cost	.2262	.2688	. 2965	.3255	.1200	.1651
10% Increase	- 1709	- 2031	. 2240	. 2460	. 0907	. 1392

All of your return measures, MIRR on equity, cash return before and after taxes, return on net worth before and after tax have gone down because you would be forced to throw more money into the project. Since the costs have gone up, allowable depreciation has increased and spendable cash after taxes has increased.

Spendable Cash After Taxes

YEARS	<u>3</u>	<u>4</u>	5	<u> </u>	Ζ .	8
Stable Cost	30129	33251	35254	37348	5,415,766	21996
10% Increase	31164	34433	3643 6	38530	5,082,670	26244

The after tax present value of the project goes up as a result of the spendable cash after taxes being increased. Although your returns have been lowered, when the costs were increased 10% your two biggest concerns would not be adversely affected. The cash flow actually increases and the market value does not change because it is calculated on the net income.

2. No Sales Overages

We will be recieving 6% of the gross sales above the base amount. If the center was not able to generate these overages there would be a dramatic impact on our gross income as indicated in the following table:

 YEARS
 1
 2
 3
 4
 5
 6
 7
 8

 Overages
 \$871,051
 \$950,111
 \$1,047,661
 \$1,178,690
 \$1,262,801
 \$1,351,118
 \$1,497,469
 \$1,594,838

 No Overages
 \$829,532
 \$829,532
 \$829,532
 \$880,435
 \$880,435
 \$880,435
 \$934,053

Obviously there can be nothing that would cause this to have a positive effect on the project as is reflected in the following tables:

Cash Throw Off

YEARS	1	2	3	4	<u>5</u>	é	7	8
Overages	\$-37,860	\$244,990	\$335,252	\$398,447	\$439,450	\$482,540	\$177,918	\$244,741
No Overages							·	\$91,104

Before Tax Rate of Return

YEARS	3	4	<u>5</u>	<u>6</u>	<u>7</u>	8
Overages No overages			.2240			

Market Value

<u>YEARS</u>	Ž	<u>4</u>	5	<u> 6</u>	I	8
Overages	\$6,725,725	\$7,752,452	\$9,418,626	\$9,118,712	\$10,268,197	\$11,041,292
No Overages	\$4,953,596	\$5,329,583	\$5,312,484	\$5,295,128	\$5,671,299	\$5,673,418

MIRR With Sale

YEARS	3	4	5	٤	Z	<u>8</u>
Overages No overages	.1670 0298			.2005		

The default ratio increases because the Gross Potential Income is lower so there is less money available to fund the fixed expenses. The average default ratio over the holding period changed from .679 with overages to .7181 without overages a clear sign that the project is more risky if we do not achieve the overage amounts.

With both pessimistic scenarios implemented in the analysis, the project is still cash solvent. After the cost increase you were still getting an average .1765 before tax return but after the overages were removed your before tax return from years 3 - B dropped to an average .078.

3. Refinancing Mortgage Lower than Expected

In the seventh step of profit maximization we were able to hypothesize a situation where we could refinance the original mortgage based on a 85% default ratio. Because the project was doing so well the lender was willing to give a bigger loan in relation to the gross potential income. If the cost increases and the overages were no longer included, the project is not as successful and there is more hesitancy on the part of the lender to make a loan in which the debt service payment is such a high percentage of the gross potential income. With a higher project cost and no overages we would expect the lender to use a .75 default ratio when calculating an exceptable debt service payment and hence a lower total amount when refinancing the project. This amount changes from \$4,609,121 to \$3,894,002.

Other results of a lower default ratio would be the negative taxable income is higher under the .85 default ratio because the interest payments are higher from the larger loan. The following table indicates this clearly:

Taxable Income

Years			7	8
.85	Default	ratio	\$ -157,368	\$~155,575
.75	Default	ratio	\$-68,878	\$-67,999

The effects on the cash throw-off with a lowered default ratio:

Cash Throwoff

Years	7	8
.85 Default ratio	\$ 93,405	\$91,204
.75 Default ratio	\$186,811	\$184,610

The above tables indicate a .75 default ratio is working for you but when we look at spendable cash after taxes and your after tax returns it is clear the higher the refinancing loan amount in relation to the value of the project the better off you are. The following tables reflect what could occur with a lower default ratio:

After Tax Return

Years	フ	8
.85 Default ratio	.7459	.0181
.75 Default ratio	.3821	.0153

After Tax Present Value

Years	7	8
.85 Default ratio	\$5,641,713	\$5,607,128
.75 Default ratio	\$4,952,857	\$4,902,072

The above sensitivity analysis is given to make you aware of what could happen if factors beyond your control result. We assume that every reasonable effort will be made to control those items such as cost of the project and quality of the market study so that the above situation can be avoided.

Sorry! Original not legible!!

THE REPORT LIST USING SEQUIFIED INCOME

Teosint.	G LA	sales /sq.fl.	Total Sales	Percentage Rent	Total Rent >
Super Market	26,657	:562.05	\$15 515,70/	\$1.50	12:10,241.50
Brig Store	9,056	210.53	1.696,000	3.50	76, 930,00
Unises Hair 5 Lon	1,589	288.86	458,979	id. · · · i	15, 195.50
Ar made	3,869	23.95	93,180	12.00	± 9+ -11
Redunds I Papes	2.600	293.6	, 71,100	· 	w received
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SUMMARY

We are very confident that your investment in the West Bend Shopping Center will be a good one. You must remember that inherent in all the excellent returns that we will illustrate for you is the assumption that the building design will be changed as we specified in part one of this report.

The following chart illustrates what your investment will produce under the scenarios of profit maximization and no profit maximization:

	No P/M	<u>Profit Max</u>
Before Tax RDR	.1208	.2450
After Tax ROR	.1124	.5080
MIRR W/Sale,Yr 8	.0711	. 2 307
After Tax NPV, Yr 8	5,012,786	10,508,634
Average Default Ratio	.72	.798
Equity Payback, Yr 8	.8324	3.5813
Equity \$ Required	1,967,245	1,482,245

MRCAP output with all seven profit maximization techniques is attached for your review. As we said in our letter, if you have any questions about these figures, feel free to give us a call.

منت المنت والمنا منت المنت الم	TRANSAC	TIUN	SUMMARY	
1-1-1985 1-1-1986 1-1-1987 1-1-1988 1-1-1989	-#3,428,253 #373,830 #422,430 #512,692 #575,887	;	1-1-1990 1-1-1991 1-1-1992 1-1-1993	≉616,890 ≉659,980 ≉730,731 ≉4,206,568
	RATE	s ou	TPUT	

Feriod of 8 years, 0 months, 1 day From 1-1-1985 to 1-1-1993

Total outlays: Total receipts:	\$3,428,253 \$8,099,008
Discount rate (for outlays):	18.0000 percent
Safe rate (for receipts):	6.5000 percent
Internal rate of return:	14.7191 percent
Modified internal rate of return:	12.3397 percent
Net present value at 0.18 percent:	-≱543,269

I. INTRODUCTION

The purpose of this study is to analyze the proposed design of the West Bend Shopping Center, located off of the Monona South Beltline Highway, and to modify it to achieve a sound investment opportunity for a persion fund client.

This report is comprised of our client's objectives; our assessment of the risk factors associated with the proposed development; analysis of the market area; recommendations for modification of the proposed development; a modified building envelope based on the recommendations, determination of costs, expenses, and income of the modified design; assessment of the risk factors associated with the modified development; a financial analysis of the center's investment performance; and recommendations which will achieve the client's goals, given a reasonable level of risk.

The analysis of this report is based on three essential stages which must be analyzed in order to determine the development's associated risk. These three stages, as presented in "Fundamentals of Real Estate Development" are:

Stage 1 Cash Solvency - a static analysis, in which the project must achieve a positive cash throw off in its first year of normal operations, with no working capital loan, while maintaining an acceptable level of risk as defined by the default ratio (a measure of variance in cash flows which the project can withstand without becoming insolvent). Cash solvency is a conservative,

- pessimistic posture with which to evaluate a real estate project.
- Stage 2 Minimum Equity Yield time is introduced into the analysis with respect to the additional equity contribution required in the startup period, before the project's first year of normal operations. Keeping the project at solvency, financial tests are performed to measure the center's ability to achieve its desired before-tax equity yield rate of 11.0 percent. Throughout this stage, the project must remain within an acceptable level of risk as defined by the default ratio, and remain solvent.
- creativity is required in order to structure debt and equity to achieve the desired **after**-tex* yield of 18.0 percent. In this section, we considered a sale-leaseback, step-up-leases, average rents, and debt refinancing. An acceptable risk measure must be met through this final stage of this process.

II. CLIENT OBJECTIVES

Our client, being a pension fund, seeks appreciation in the future resale value of the project. This expectation defines the context in which the center must operate. Therefore, the tenant mix must be well-rounded, and construction quality must be superior to insure excellent design and image, which in turn, insures economic, efficient future operation of the center, which will secure long-term project strength and resulting project appreciation.

Pension fund investors have a fiduciary responsibility.

Being required by the Employee Retirement Income Security Act

(ERISA) to act prudently and knowledgeably when investing pension

funds, these pension fund managers must minimize the variance of

the returns. Our client seeks the following returns:

- A. Cash on cash return of 11 percent.*
- B. Equity yield over the holding period of 18 percent.*

Pension funds are not taxed, so these returns are before tax measures.

III. RISK ASSESSMENT OF PROPOSED CENTER-DEFAULT RATIO

Real estate investment involves the assessment of various cost/benefit tradeoffs in order to determine the attractiveness of certain investment opportunities. In analyzing the client's investment in the West Bend Shopping Center, the balance of returns and risks must be considered. The proposed center will be examined and modified to minimize the risk associated with the uncertainty between present expectations and the actual outcomes in the future.

A default ratio must be established in order to identify the investment's risk. A model that derives a default ratio by converting the investment's implicit assumptions to explicit assumptions was used (The Default Ratio As A Measure Of Risk, Risk Group). This model, which results in a single-dimension, dynamic measure of risk, categorizes and weights the project's major characteristics, for example, developer characteristics, lease characteristics, tenant characteristics, development characteristics, and the financial package, which enables the analysts to identify, examine, and modify the project's weaknesses, and to propose a potentially more successful shopping center.

The default ratio derived using this model is .54 (Exhibit 1), which illustrates the extreme unbalance of the risks to the returns of the proposed investment. A brief description of the concerns about the project's major characteristics, upon which this default ratio is based, is given as follows:

Developer Characteristics

- The proposed developer has minimal development experience, and none in this type of project.
- This developer also has an unstable financial background.

Lease Characteristics

- The leases of the proposed center have lower-than-average rents.
- The proposed tenant mix is poor.
- Fifteen percent of the proposed center's space is unleased.

Degree of Channelized Demand

- The center is not unique. The proposed center has minimal potential monopoly power because of its poor design characteristics, suboptimal tenant mix, insufficient market studies, and unsatisfactory customer convenience.

Tenant Characteristics

- Only local, independent tenants occupy the tenant space.
- No national tenants are leased into the center.
- The tenant mix is unacceptable because of the lack of of variety and potential interplay among complementary tenants.

Project Type

- The project type, a shopping center, is acceptable from a risk minimization perspective.

Development Characteristics*

- The design is unconventional and therefore, unacceptable.
- Because of the three building design, the spatial distribution and construction efficiency are not maximized.
- The parking is inadequate in the proposed center, due to its layout and inefficient traffic pattern.

Financial Package

- The project's financial package includes 77 percent debt financing at 9.58 percent annual interest for a 25-year term. This assumption is unrealistic given the previouslymentioned risks.

A detailed critique of the proposed design is presented on pages 14 through 17.

State of The Economy

- This is considered beyond the control of the developer.

Quality of Market Study

- The market study is critical to the development of a successful retail center. There is no adequate analysis of customer demand, existing and potential supply, or market penetration.

In sum, the project's relevant characteristics yield a default ratio of .54. Therefore, the development proposal should not continue without substantial modification.

EXHIBIT 3

Center's Sales Potential

	Total Population in Trade Area	22,977
	Population per Household	1.43
	Number of Households $\frac{(22,977)}{1.43}$	16,017
	Retail Sales per Household (56 percent of Household Income \$25,000)	\$14,000
	Total Potential Sales (16,017 X \$14,000)	\$224,238,000
LESS:	Competition's Share of Sales	\$13,544,000
	Remaining Potential Sales	\$210,694,000
	Expected Capture Rate	10%
	Potential Center Sales (approximately) (\$210,694,000 x .10)	\$21,000,000

V. RECOMMENDATIONS FOR MODIFICATION OF THE PROPOSED CENTER

A. Critique of The Proposed Design

A successful shopping center must enhance the customer's self-esteem and minimize the cost of friction, anxiety, and inefficient space layout in order to minimize the variance between objectives and expectations. An in-depth analysis of the proposed design for the West Bend Shopping Center reveals many potential problems. These problems and the possible solutions are outlined below.

- (1) Problem: The use of three buildings and stores at the rear of building two, create inefficiency from a construction cost, parking, and marketing standpoint.

 Recommendation: A single building minimizes construction costs and parking problems, while maximizing tenant synergy and impulse buying which maximizes project revenues. Exposure of all individual stores in a shopping center is the best assurance of a high sales volume.
- (2) Problem: The access points are too close to the intersection.

 Ingress and egress points are unacceptable assuming high
 speed and high volume traffic on Sherman Avenue and Alpha
 Street.⁵

Recommendation: The curb cuts should be moved further away from the intersection, in order to allow for a longer queing time for the surrounding road pattern, which will insure full utilization of business potential.

(3) Problem: The 190 X 190 plot of vacant land on the corner could cause future problems. Incompatible future development

could decrease the sales potential of the center.

Recommendation: Surrounding land uses should enhance the image and operation of the shopping center; 6 therefore, the owner and his future plans for this plot, along with all other contiguous property owners and their objectives, must be determined.

- (4) Problem: Parking is inadequate in the proposed center primarily as a result of the layout and the way in which it affects traffic.
 - (A) Storefront parking creates traffic conflict, poor automobile circulation, and lack of parking for police and fire department vehicles, and emergency medical service vehicles. Storefront parking also creates a certain amount of danger, noise, fumes, and confusion which distract the shopper and diminish shopping enjoyment which decreases project revenues. 7
 - (b) The proposed center does not provide for employee parking, grocery pickup, or space for grocery carts temporarily left on the parking lot.
 - (C) Having customer parking on both sides of the buildings requires tenants to provide two entrances which is inefficient from an inventory storage, interior layout, and security standpoint.

Recommendation: Parking must be provided which separates the pedestrian from auto space, supplies employee parking, grocery pickup, and controls customer movement.

(5) Problem: There is no separate service entrance or area for loading and unloading of store merchandise or garbage collection.

Recommendation: To avoid interference of these services with customers and the shopping area, an exclusive entrance and area should be provided for behind the center which provides for truck traffic, loading docks, garbage collection, and utility company operations. 10

- (6) Problem: The grocery being in the middle of building one, creates problems with traffic flow because of the parcel pickup. Also, synergy between tenants is not maximized.

 Recommendation: The best layout in a small center would be a supermarket at one end with a discount or general merchandise store at the other. If the anchor tenants were to be placed twoard the middle, the arrangement would seriously affect the pedestrian traffic flow and a little guy at the end would suffer. 11
- (7) Problem: A major street flows through the center. The existence of many sideroads interferes with good traffic flow. 12

Recommendation: All proposed entrances to the site except for the Sherman Avenue and Alpha Street entrances must be closed off.

(8) **Problem:** The exterior architecture of the franchised restaurant does not blend with the english tutor architecture of buildings one and two.

Recommendation: Exteriors must be compatible. The center must have a unified architectural treatment because "a shopping center is not a miscellaneous assemblage of individual tenants."

(9) **Problem:** There is no provision for access to the community's public transportation system.

Recommendation: The center's traffic network should provide an adequate road system and terminals to serve the community's bus system. 14

- (10) Problem: There is not buffer behind the center to insulate against any adverse effect on adjacent land uses. 15

 Recommendation: A headwall should be constructed behind the center.
- (11) Problem: There is no provision for signage for the center.

 Recommendation: Exterior signs should be placed at all points of ingress and egress. Also, there should be some form of sign control for the individual tenants.

B. Design Modification

Modifications to the center's proposed design have been made to improve the center's potential revenues while minimizing the uncertainty associated with cash flow. To insure consumer acceptance and thus increase reliability in cash flow projection, the new project design reduces the friction between the consumer and the environment associated with the proposed design. Graphic illustrations of the modified design is shown in Exhibit 4.

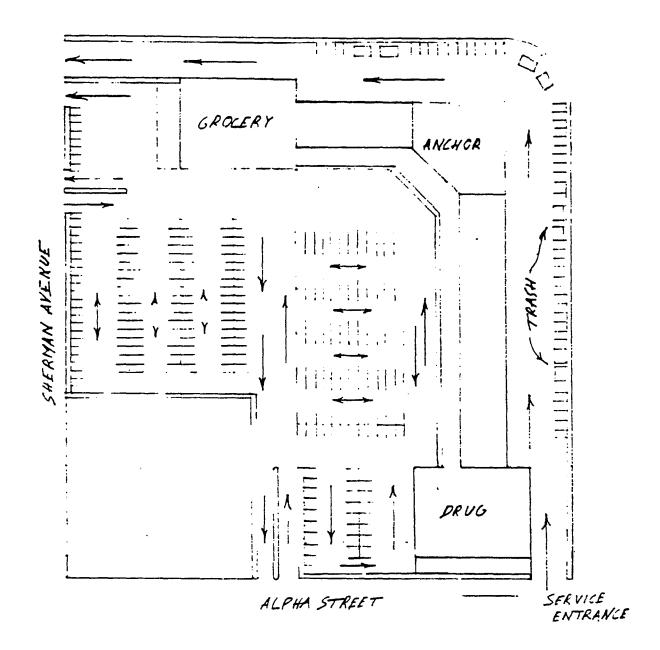
The new center is designed in a more conventional manner. A single "L" shaped building with the anchor stores at the ends and at the crux insure maximum tenant synergy. The center will also be enclosed to create a more pleasant shopping environment and to increase customer impulse buying. Although a mall is less efficient from construction and maintenance cost aspects, the mall is superior from a marketing standpoint.

The new center also provides easy customer ingress and egress from Sherman Avenue and Alpha Street. Parking is ample and is arranged so the pedestrian is separated from vehicular traffic and so traffic flows smoothly within the around the center. Both fire lanes and an exclusive area for grocery parcel pickup, which does not interfere with regular traffic flow, are provided.

Finally, a separate service entrance and exit, and service area for truck traffic, loading docks, and garbage collection are provided behind the center along with an exclusive parking area for the employees.

EXHIBIT 4

DESIGN MODIFICATION



C. Building Envelope

The earning power of the shopping center is based on the relationship of the proposed physical units and their respective revenue generation. To measure the earning power, a building envelope must be calculated to determine the maximum gross building area that can be constructed on the site, given the constraints such as zoning codes, type of center, parking requirements, and client objectives.

Constraints

- A. Lot size is 255,698 square feet.
- B. No setback requirements.
- C. Parking ratio of 4.6 stalls per thousand square feet of GLA. 17
- D. Three hundred fifty square feet per parking stall which includes landscaping and lighting. 18
- E. Building efficiency ratio of 80 percent.

Building Envelope Calculations*

Net Rentable Area = $\frac{ELF}{1+.001(CAFE)}$

Where: E = Efficiency Ratio = .80

L = Lot Size = 255,698 square feet

F = Number of Floors = 1

C = Parking Stalls per 1000 = 4.6

A = Square Feet Per Stall = 350

A. Net Rentable Area = $\frac{.80(255,698)(1)}{1+.001[(4.6)(350)(1)(.80)]}$ = 89,405 square feet

The building envelope calculations are based on the article "Developing a Suburban Office Building" by Thomas A. Gauldin, published in Mortgage Banker; November 1979, pp. 43-47.

- B. Gross Building Area = $\frac{89,405}{.80}$ = 111,756 square feet
- C. Number of Parking Stalls = 89,405(4.6) = 411 stalls 1,000
- D. Area for Parking = 411 X 350 = 143,850 square feet and Landscaping.
- E. Common Area = 111,756 89,405 = 22,351 square feet

D. Modification of Existing Space Allocation

The West Bend Shopping Center's proposed gross leaseable area for its current tenant mix falls short of an optimal area, based on the revised building envelope parameters which reflect the new design modification. It is necessary to modify existing square footages of the desired proposed tenants, to eliminate undesireable proposed tenants (i.e. furniture store and savings and loan) and to define tenants for the center's "miscellaneous space" in order to provide a sound tenant mix for the center. The recommended changes in gross leaseable area for the center's unabridged tenant mix were obtained from Dollars and Cents of Shopping Centers and are shown in Exhibit 5.

E. Revision of Tenant Mix

The modified tenant mix, shown in Exhibit 6, is based on the center's desired image and on the local customer profile previously defined in the market analysis section. The modified tenant mix contains eight national tenants, two independents, the remainder being strong local chains. Two more anchor tenants were added to the center. A national drug store was added to provide additional merchandise to satisfy the needs of more specialized tenants and allow comparison shopping within the center. The hardware store was added as a national anchor to further increase the synergy of the existing tenants, and increase the reliability of the center's cash flow projections.

EXHIBIT 5

Modification of Existing Space of Desired, Proposed Tenants

	Proposed GLA	Modified GLA*
Grocery	16,650	26,700
Hardware	10,200	7,400
Drug Store	6,000	12,000
Clothing	4,200	2,400
Liquor	1,344	2,450
Cleaners	1,000	1,260
Beauty Salon	1,000	1,200
Barber Shop	670	600
Restaurant	2,632	4,350
Total	43,696	54,560
Total GLA of Modified Cent	er 89 405	

Total GLA of Modified Center 89,405
- Modified GLA of Proposed Tenants 54,560
Space Available for New Tenants 34,845

^{*}Modified GLA figures were obtained from Dollars and Cents of Shopping Centers.

EXHIBIT 6

Modified Tenant List For West Bend Shopping Center

Tenant	Type Tenant
IGA Foodliner	National
Ace Hardware	National
Walgreens Drugs	National
Close Menswear	Local
Hill's Liquor	Local
Fry's Cleaners	Local
Barb's Beauty Salon	Local
Svend's Barber Shop	Local
"Wendy's" Fast Food	National
Candy Store	Independent
"Friday's" Restaurant (with liquor)	National
Jewelry Store	Local
Familywear	Local
County Seat (jeans)	National
Ladies Clothes	Local
Kinney Shoes	National
Hallmark Cards and Gifts	National
Baskin-Robbins Ice Cream	National
Ladies Shoe Store	Local
Joe's Sport Shop	Local
University Bookstore	Local
Fabric Store	Local
For Eyes Optical	Local
Ladies Specialty Shop (clothes)	Local
Cats Records and Tapes	Local

Other tenant choices which increase the marketability of the shopping center include the addition of two shoe stores, a variety of clothing stores, and two restaurants. Two shoe stores were added to the center because shoes are a comparison good. The proposed clothing stores will meet the many needs of the whole family, but remain as separate entities to increase association with the different family members. Finally, two restaurants will keep customers in the center for longer periods of time.

Given the potential sales estimate of \$21,000,000, based on the market analysis, the level of risk associated with the modified center's sales can be assessed. Exhibit 7 displays West Bend Shopping Center's expected sales volume.

According to tenant space allocation and average sales per square foot from Dollars and Cents of Shopping Centers, the center should generate \$16,876,240 in sales, as compared to the center's potential sales of \$21,000,000, based on market capture calculations. The relationship between the two estimates is acceptable from a risk viewpoint, with a 19.5 percent margin available for variance from potential sales. Therefore, West Bend Shopping Center should attain the expected sales without any additional risk.

EXHIBIT 7
Sales Distribution of West Bend Center

Tenant	GLA	Sales Per Square Foot	Sales Distribution
IGA Foodliner	26,700	281.25	7,509,375
Ace Hardware	7,400	66.28	490,472
Walgreens Drugs	12,000	115.87	1,390,440
Menswear	2,400	100.13	2,403,120
Liquor	2,450	155.26	380,387
Cleaners	1,260	90.69	114,269
Beauty Salon	1,200	80.28	96,336
Barber Shop	600	110.47	66,282
Wendy's	4,350	175.84	764,904
Candy Store	560	55.21	30,918
Friday's	4,000	169.88	679,520
Jewelry Store	1,000	330.80	330,800
Familywear	1,600	120.91	193,456
County Seat	2,000	93.39	186,780
Ladies Clothes	1,600	100.37	160,592
Kinney Shoes	3,350	65.19	218,387
Hallmark Cards	2,400	54.53	130,872
Baskin-Robbins	1,100	142.57	156,827
Ladies Shoes	2,200	81.39	179,058
Joe's Sports	2,600	105.69	274,794
University Bookstore	1,700	142.72	242,624
Fabric Store	1,700	82.75	140,675
Optical	1,154	142.51	164,457
Ladies Specialty	2,000	96.18	192,360
Cat's Records	1,780	212.66	378,535
Total	89,104	3,172.82	16,876,240

GLA and Sales Per Square Foot were obtained from <u>Dollars</u> and <u>Cents</u> of Shopping Centers.

VI. RISK ASSESSMENT OF THE MODIFIED CENTER-DEFAULT RATIO

Various modifications to the originally proposed shopping center development are suggested in order to achieve the desired investment performance at an acceptable level of risk. The recommended changes focus on the development characteristics assessed in the original default ratio section, and attempt to improve the center's potential revenues while minimizing the uncertainty associated with this income flow. Given the modifications, the revised default ratio is .77 (see Exhibit 8).

Developer Characteristics

A financially sound developer with greater experience in shopping center development must replace Mr. Johnson.

Lease Characteristics

Proposed changes are to structure the leases as triple net base plus percentage of sales having a maximum frequency in rollover and rent "step-ups" occurring every three years. A portion of the Common Area Maintenance charges will be paid by the developer/owner to help improve resale potential and meet the long-term appreciation requirements of the pension fund investor.*

Gross rents for the individual tenants for the development will be very market competitive, and pre-leasing negotiations for the tenants will be substantially complete upon the date of construction completion to prevent the need for gap financing,

^{*}From a lecture in Business 555, Dr. Michael Robbins, University of Wisconsin-Madison, Spring 1985.

C. Establishment of Total Project Cost

Total project costs for the modified design of the West Bend Shopping Center were derived from the "555 COMERMOD" computer program developed by Dr. Michael Robbins, University of Wisconsin-Madison. Optimistic, normative, and pessimistic total project cost estimates were established using this program, based on given data. The cost input data for these scenarios is in the Appendix. The "ellwood Valuation Model" was then used to determine the required base rents per square foot to cover each of the cost scenarios, given each of the following income scenarios:

- No change in income over the holding period.
- 1.5 percent appreciation per year.

annual growth in income and appreciation.

3. 1.5 percent growth in income and appreciation.

As shown in Exhibit 9, the required base rents for the optimistic cost scenario ranged from \$7.52 per square foot, assuming a

1.5 percent growth in income and appreciation per year to \$7.65

per square foot, assuming no change in income. The normative cost scenario required higher rents which ranged from \$8.95 per square foot, given a 1.5 percent annual growth in income and appreciation, to \$9.10 per square foot, based on a stable income. The minimum base rent per square foot cannot exceed a \$9.50 average throughout the analysis; thus, the pessimistic cost estimate can only be adequately covered by reducing the equity yield. The equity yield must be lowered from the standard 11 percent to 4.2 percent to cover the pessimistic cost estimate, assuming a stable income.

The yield must only be reduced to 5.26 percent given a 1.5 percent

EXHIBIT 9

Required Average Income Per Square Foot
For Different Total Cost Scenarios*

	Optimistic	Normative	Pessimistic
Total Cost	\$5,465,660	\$6,504,862	\$7,692,951
No Change in Income	\$7.65/S.F. = \$5,460,790 value	\$9.10/S.F. = \$6,495,848 value	\$9.50/S.F. = \$7,703,807 value with a 4.2% equity yield
1.5% appreciation per year	\$7.58/S.F. = \$5,466,024 value	\$9.00/S.F. = \$6,490,001 value	\$9.50/S.F. = \$7,689,160 value with a 5% equity yield
1.5% growth in income per year	\$7.52/S.F. = \$5,463,496 value	\$8.95/S.F. = \$6,495,102 value	\$9.50/S.F. = \$7,704,901 value with a 5.26% equity yield

^{*}These required average incomes were derived using the "555 COMERMOD" Commercial Real Estate Model Computer Program developed by Dr. Michael Robbins, University of Wisconsin-Madison. The input data for these scenarios is shown in the Appendix of this report.

D. Determination of Required Individual Tenant Base Rents

The required individual tenant base rents per square foot were determined using Dollars and Cents of Shopping Centers, given that an average base rent of \$9.10 per square foot is required (assuming no growth in income over the eight year holding period) to cover the normative total project cost estimate of \$6,504,862, established in the previous section. A list of the modified tenant mix and the individual tenants' GLA, base rent per square foot and gross rental income are shown in Exhibit 10.

EXHIBIT 10

GLA, Base Rents per Square Foot, and Gross Rental

Income of The Revised Tenant Mix

Tenant	GLA		Rent Per Square Foot		Gross Rental Income
IGA Foodliner	26,700	X	\$ 6.65	=	\$177,555
Ace Hardware	7,400	X	6.60	=	48,840
Walgreens Drugs	12,000	X	6.65	=	79,800
Close Menswear	2,400	X	10.00	£	24,000
Hill's Liquor	2,450	X	12.00	=	29,400
Fry Cleaners	1,260	X	12.00	=	15,120
Barb's Beauty Salon	1,200	X	10.00	=	12,000
Svend's Barber Shop	600	X	9.00	*	5,400
Wendy's Restaurant (fast food)	4,350	X	18.25	=	79,388
Candy Store	560	X	10.13	=	5,673
Friday's Restaurant (with liquor)	4,000	X	16.00	2	64,000
Jewlery	1,000	X	10.50	=	10,500
Familywear	1,600	X	10.20	=	16,320
County Seat	2,000	X	10.00	3	20,000
Ladies Clothes	1,600	X	13.20	=	21,120
Kinney Shoes	3,350	X	9.00	z	30,150
Hallmark Cards & Gift Shop	2,400	X	10.00	2	24,000
Baskin-Robbins Ice Cream	1,100	X	12.40	=	13,640
Ladies Shoe Store	2,200	X	8.00	=	17,600
Joe's Sport Shop	2,600	X	11.40	=	29,640
University Bookstore	1,700	X	11.38	=	19,346
Fabric Center	1,700	X	8.00	=	16,170
Ladies Specialty Shop	2,000	X	11.65	=	23,300
Cat's Records	1,780	X	. 8.00	5	14,240
Total	89,405				\$813,201

EXHIBIT 10 (Continued)

Total Gross Rental Income for the Center	\$813,201
divided by GLA of the Center	89,405
Equals the Average Base Rent Requirement	
per Square Foot	\$9.10

A. BASIC CASH SOLVENCY

"Cash solvency is the pivotal issue of survival." * To achieve solvency, the two requirements below must be accomplished, while remaining within the cost, expense, and income levels determined in the previous sections of this report.

- A. Cash from operations must be positive throughout the holding period, including year one.
- B. The default ratio must be equal to or greater than the targeted default ratio of .77, from year three, the first year of normal operations, until year eight.

B. MINIMUM YIELD

Minimum yield involves the achievement of the client's required before tax cash-on-cash return of 11% from year three, the first year of normal operations, until the end of the holding period.

ACHIEVING CASH SOLVENCY AND MINIMUM TIELD

The computer model used in this analysis was MRCAP. The initial inputs into the model included:

- A. NOI = \$9.50/square feet of GLA
- B. MORTGAGE AMOUNT = \$4,878,646 (75% LTV)
- C. IMPROVEMENTS COST = \$6,019,862 (normative cost)
- D. LAND COST = \$485,000 (normative cost)
- E. GROWTH IN INCOME AND APPRECIATION PER YEAR = 1.5%
- F. GROWTH IN OPERATING EXPENSES PER YEAR = 1.5%

These initial inputs produced a working capital loan of \$234,260 in the first year. In order to achieve solvency, initial equity reserves of \$234,260 were required both to eliminate the high interest working capital loan and to bring the "cash from operations" to zero in the first year.

The inputs above and the additional equity reserves produced a default ratio greater than the targeted default ratio of .77 and a before tax cash-on-cash return of less than 11%. Decreasing the growth in income and appreciation from 1.5% per year to 1.3% per year enabled the 11% required before tax cash-on-cash return, the default ratio of .77, and solvency to be achieved.

A summary of the results of the final MRCAP analysis is presented below. The actual MRCAP output is in the appendix of this report.

	1	3	5	8
CASH FROM OPERATIONS	0	177,736	198,777	231,325
WORKING CAPITAL LOAN	0	0	0	0
DEFAULT RATIO	.8229	.8069	.7923	.7710
B/4 TX C on C RETURN	1273	.0955	.1068	.1243

^{*}Dr. James A. Graaskamp, <u>Fundamentals of Real Estate</u>

<u>Development</u>, Washington: <u>Urban Land Institute</u>, 1981, pp. 3-7.

PROFIT MAXIMIZATION

The objective in profit maximization is to move from the previously defined minimum yield to a modified internal rate of return of 18% in the year of sale. In order to attain the desired MIRR, several financial strategies must be implemented. The various strategies utilized and a brief discussion of each is presented below. The computer output justifying the returns for each of these strategies is presented in appendix B of this report and a summary of the various returns is shown in exhibit 11.

I. LAND SALE AND LEASEBACK

The land was sold for \$485,000 and leased back at 11% of value, producing an MIRR in the year of sale of 10.08%. Even though the increase in fixed expense (due to the land lease payments) decreases NOI, the MIRR increases because the amount of equity required is reduced by the selling price of the land, while the mortgage amount remains the same. Coupled with this increase in MIRR is an increase in the loan-to-value ratio from .75 to .80, due to the reduction in total project value when the land was sold.

II. OVERAGES

The equity investor can realize a substantial increase in the MIRR by receiving a percentage of sales revenue over the total base rents of the center's tenants. A growth rate in income of 6% per year is expected in Monona; therefore, the conservative growth rate in total sales of the shopping center was also assumed to be 6%. Leases were then structured to allow the equity investor to receive 6% of the total sales revenue above the base revenue of the center. These overage rents increase cash from operations; which ultimately increase the spendable cash, thus increasing the MIRR from 10.08% without overage participation to an MIRR of 12.88%.

III. NET INCOME MULTIPLIER

Value is a function of the income stream that the project produces. Because the resale assumption is of primary importance in determining market value and the yield to be realized when the project is sold, net operating income and market value should move together. Therefore, in order to stabilize the net income to market value ratio, a net income multiplier of 8.08 was computed for years 1-8 to replace the 1.5% yearly project growth

rate. By establishing this constant relationship between these two variables, the MIRR increased further to 16.31%.

IV. CREATIVE FINANCING

The initial fully amortizing loan was comprised of these terms:

INTEREST RATE 13%

TERM 25 years

PAYMENTS PER YEAR 12

To achieve the desired yield of 18% for the equity investor, the debt structure was altered. The lender was allowed to receive 5% of the cash throw off above a \$100,000 base each year. In addition, the term of the loan was reduced to 20 years. Both of these strategies take down the outstanding loan balance faster than the initial debt structure because the payments are higher and the amount of money the lender receives from cash throw-off is applied to the outstanding balance annually. The reduction in the outstanding balance, which creates more cash flow at resale, coupled with the increase in spendable cash due to the higher loan payments, increases the MIRR 2.26% above the MIRR had not creative financing been undertaken. To be fair to the equity investor, the lender should receive the

EXHIBIT 11

	MIRR
LAND SALE AND LEASEBACK	10.082
OVERAGE PARTICIPATION	12.132
NET INCOME MULTIPLIER STABILIZED	16.31%
CREATIVE FINANCING	18.57%
CREATIVE FINANCING	18.57%

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X. APPENDIX

OPTIMISTIC COST INPUT DATA

Land	\$450,000
Building Cost per Square Foot	31.00
Street Cost per Square Foot	4.50
Landscape Cost per Square Foot	2.00
Parking Cost per Square Foot	2.50
Contingency	.06%
Architect	.04%
Engineering	02%
Loan Origination	.015%
Legal and Closing	.02%
Tax and Insurance	.015%
Construction Loan:	
LTC	95%
Interest	18%
Term	.8 year
Number of Draws	14
Permanent Loan:	
LTC	80%
Interest	13%
Term	25 years
Number of Payments per Year	12
Hard Costs	\$4,352,526
Soft Costs:	739,929
Interest Costs:	373,204
Total	\$5,465,660
Per Square Foot	\$4 8.91

NORMATIVE COST INPUT DATA

Land	\$485,000
Building Cost per Square Foot	33.50
Street Cost per Square Foot	5.25
Landscape Cost per Square Foot	3.00
Parking Cost per Square Foot	3.00
Contingency	.075%
Architect	.05%
Engineering	.03%
Loan Origination	.0225%
Legal and Closing	.025%
Tax and Insurance	.0225%
Construction Loan:	
ŁTC	90%
Interest	19.5%
Term	1.28 years
Number of Draws	10
Permanent Loan:	
LTC	80%
Interest	13%
Term	25 years
Number of Payments per Year	12
Hard Costs	34,726,165
Soft Costs	1,063,387
Interest Costs	715,310
Total	6,504,862
Per Square Foot	\$58.21

PESSIMISTIC COST INPUT DATA

Land	\$520,000
Building Cost per Square Foot	36.00
Street Cost per Square Foot	6.00
Landscape Cost per Square Foot	4.00
Parking Cost per Square Foot	3.50
Contingency	9%
Architect	6 %
Engineering	4%
Loan Origination	3%
Legal and Closing	3%
Tax and Insurance	3 %
Construction Loan:	
LTC	85%
Interest	21%
Term	1.75 YEST.
Number of Draws	7
Permanent Loan:	
LTC	80 %
Interest	13%
Term	25 year,
Number of Payments per Year	12
Hard Costs	\$5,099,803
Soft Costs	1,427,945
Interest Costs	116,203
Total	\$7,692,951
Cost per Square Foot	\$68.84

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APPENDIX B

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FEFORT SECTION NUMBER 9 FAGE 1

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FEFORT SECTION NUMBER 8 PAGE 1

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                                                      6.0000
   * INCOME TAX RATE
                    0.0000
                           FROJECT VALUE GROWTH TYPE
                                                      0.1900
   * VACANCY RATE
                    0.0912
                          ... WORKING CAPITAL LOAN RATE
                    0.1800
                            EXTRAORDINARY EXPENSES ...
                                                      10000.
     FAULTY DISCOUNT
     RESALE COST
                    0.0600
                            REINVESTHENT RATE
                                                      0.0650
     WKG CAPITAL RS$ 234260.
                            CAPITAL RESER INTEREST RATE
                                                      0.0650
                            OWNERSHIF FORM
     INVESTOR TAX CLASS 0
                                                      1
                            INITIAL EQUITY REQUIRED $ 1375475.
     INITIAL COST $ 6019862.
     ALL 'A' VALUES ARE AVERAGE AMOUNTS FOR HOLDING FERIOD. OF 8 YRS.
RUN NUMBER
                        PRO FORMA
                        FRD FORMA
                      INVESTMENT ANALYSIS OF
                        WEST BEND CENTER
                              FOR
                      ST
 REPORT SECTION NUMBER
                                          2
                                                       PAGE 1
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31460. 4819505.

660277. 628796.

0-

0-

COMPONENT SUMMARY

TITLE FCT. REGIN USEFUL DEFR HETHOD COST SCH

LAND 0.00 1 40. 0 \$ 0. 1

IMP 1.00 1 18. 2 \$ 6017862. 0

HORTGAGE SUNHARY

TITLE INTR BEGIN END TERM DRIG FCT RATE YR. YR. BALC VALUE

LOAN 0.1300 1 25 25 \$ 4878647. 0.810

RUN NUMBER 0

FRO FORMA

INVESTMENT ANALYSIS OF

WEST BEND CENTER

FOR

ST

OREPORT SECTION NUMBER 3 FAGE 1

CASH FLOW ANALYSIS 0 3 t presuntamenterinant c. 1062131. 1078063. 1094234. 1110648. 1127307. 1144217. 1161380. 1178801. 1 GROSS RENT 0. 35364. 33819. 34327. 34841. 424852. 161709. 32827. 33319. LESS VACANCY 0. ٥. 1. 1. 1. 1. 1. 1. ·1. LESS REAL ESTAE TAXES С. 266133. ٥. 266133. 266133. 266133. 266133. 266133. 266133. 266133. LESS EXFENSES 0. 877303. 843756. B27354. 361145. 650220. 795273. 811194. 5 NET INCOME 0. 334437. 334437, 334437, 334437, 334437, 334437, 334437. LESS DEFRECIATION ٥. 591891. ٥. 632614. 628796. 624451. 619506. 613878. 607474. 600185. LESS INTEREST FITS С. -605907, -313014, -163615, -142749, -120961, -98154, -74217, -49024. ٥. TAXABLE INCOME 0. 0. 334437. 334437. 334437. 334437. 334437. 334437. 334437. FLUS DEPRECIATION 9 0. 68386. 52803. 60091. 46398. 40771. 27662. 31480. 35826. LESS PRINCIPAL PHTS 10

AA SIAN ENERN REE										
11 CASH THROW-OFF	-299132.	-10057.			167077.	183480.	200128.	217026.	٥.	0
12 LESS INCOME TAXES 13 LESS RESERVES	0.	0.	0.	0.	0.	0.	0.	0.	0.	0
14 CASH FROM OPERATIONS	• •	-10057.		0.	0.	0.	0.	0.	٥.	0
	-49645.		134996.	150918.	167077.	183480.	200120.	217026.	ο.	0
15 WORKING CAPITAL LOAN	49645.	69135.	0.	0.	0.	0.	0.	0.	0.	0
16 PISTRIBUTABLE CASH AFTER TAX	0.	0.	52726.	150918.	167077.	183480.	200128.	217026.	٥.	0
17 TAX SAVINGS ON OTHER INCOME	0.	0.	0.	0.	0.	0.	0.	0.	0.	0
10 SEENDABLE CASH AFTER TAXES	0.	0.	52726.	150918.	167077.	183480.	200128.	217026.	٥.	0
MARKET VALUE & REVERSION										
CASH FLOW ANALYSIS										
1. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	1	2	3		5	6	7	a	0	
17 END OF YEAR MARKET VALUE			6294840.	AZROZAZ.						0
CO LESS RESALE COST	366610.	372109	377690.	383354	389104	394947	400847	406880.	0.	0
TI LESS LOAN BALANCES			4783679.						0.	0
22 FLUS CUM. CASH RESERVES	0.	0.	0.	0.	0.	0.	0.	73132271	0.	0
13 ZEFORE TAX NET WORTH	842920.		1133470.					• •	0.	
4 CAPITAL GAIN (IF SOLD)	58126.	478716					2601442.		-	Ō
.5 CAPITAL GAINS TAX	6.	0.	0.	1323/721	0.	21/4174.	2001772.		0.	0
6 MINIHUM FREF. TAX	č.	ŏ.	0.	0.	ŏ.	0.	ŏ.	o. o.	o.	0
THOOHE TAX OH EXCESS DEF.	ŏ.	ŏ.	0.	0.	0.	0.	0.	0.	0.	0
TO TOTAL TAX ON SALE	Ö,	0.	o.	o.	0.	ŏ.	0.	0.	0.	o
27 AFTER TAX NET WORTH	842920		1133470.						0.	
		, , , ,	22001701	1202//(/•	13//4001	1343/201	10700311	16372211	0.	O
FEFGRE TAX RATIO ANALYSIS										
CASH FLOW ANALYSIS		_	_							
	1	2	3	4	5	6	7	8	0	0
TO RETURN ON NET WORTH B/4 TAX	-0.3872		0.3479	0.2474	0.2404	0.2342	0.2287	0.2237	0.0000	0.000
IL THANGE IN NET WORTH R/4 TAX	-532555.	98144.	192405.	129528.	136487.	144243.	152903.	162590.	ο.	0
D. URIG EQUITY CASH RINE/4 TAX	-0.2175			0.1097	0.1215			0.1579	0.0000	0.000
I TRIG EQUITY PAYBACK B/4 TAX	-0.2536			-0.1033				0.4549	0.0000	0.000
31 574 TAX PRESENT VALUE	5339480.	5293781.	5389950.	5429368.	5462686.	5490771.	5514365.	5534110.	0.	C
FILE TAX RATIO ANALYSIS										
FAIR FLOW ANALYSIS										
1 "点头水面上特征需要以来用于工工工	1	2	3	4	5	6	7	8	0	0
TO BETURN ON NET WORTH AFR TAX	-0.3872		0.2605	0.2474	0.2404	0.2342		0.2237	0.0000	0.000
33 CHANGE IN NET WORTH AFR TAX	-532555.	98144.	192405.	129528.	136487.	144243.	152903.	162590.	0.000	0.000
ORIG EDUTTY CASH ETHAFE TAX	0.0067	0.0000	0.0383		0.1215	0.1334		0.1578	0.0000	0.000
33 GRIG ERUITY FAYBACK AFR TAX	0.0000			0.1481	0.2695	0.4029	0.5484	0.7062	0.0000	0.000
37 AFTER TAX FRESENT VALUE			5600603.						0.	0.000
CACH FLOW ANALYSIS										
FFT TENERMARKERE	1	5	3	4	5	6	7	8	0	c
77 FET INCOME-MARKET VALUE RTO	0.0591	0.1048	0.1263	0.1270		0.1282		0.1294	0.0000	0.000
L LENDER BONUS INTEREST RATE	0.0000		0.0000	0.0000	0.0000					
12 DEFAULT RATIO						0.0000	0.0000	0.0000	0.0000	0.000
1. PET MILL RMITU	0.6816	0.9054	0.9098	0.8341	0.8218	0.8098	0.7977	0.7859	0.0000	0.000

HOSTIEU INTERNAL RATE OF RETURN ANALYSIS

10.11 AR ARGUIDES WITHOUT BALE

CASH FLOW ANALYSIS 1. THE LEGISLE CASH 1. CHA AFR TAX SPENDAME CASH 1. R.R. ON ORIG EQUITY 1. HOD. I.R.R. ON CUM. EQUITY FETUEN ANALYSIS WITH SALE	0. 0.0000 0.0000	0. 0.0000 0.0000	3 52726. -0.6628 -0.6628	207071. -0.3771 -0.3771	5 387608, -0.2238 -0.2238	596292. -0.1300 -0.1300	-0.0688	 0 0. 0.0000 0.0000	0 0, 0.0000 0.0000
CASH FLOW ANALYSIS TO CHA. CASH LESS ORIO EQUITY TO CUM. CASH LESS CUM. EQUITY TO CHA. CASH LESS CUM. EQUITY TO HOD. I.R.R. ON CUM. EQUITY TO HOD. I.R.R. ON CUM. EQUITY				4 94594. 94594. 0.0168 0.0168	5 411618. 411619. 0.0538 0.0538		7 1136325. 1156325. 0.0911	0 0. 0. 0.0000	0 0. 0. 0.0000

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   DEFRECIATION SCHEDULE FOR IMP
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                   PERCENT DEFRECIABLE 1.000
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   CHEFUL LIFE
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   4 334430.
           1337747.
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           1672184.
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    6 33443; .
           2006621.
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    2 334437.
           2341058.
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    3 334437.
           2675494.
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. FORTGAGE AMORTIZATION SCHEDULE FOR LOAN

GRUMAL INTEREST FRINCIPAL BONUS INT REPORT FORMENT FAMILIANCE FAMILIA 1 680277. 632614. 27662. 4850985. 0.

2 660277, 628796, 31480. 4819505. 0. 660277. 624451. 35826, 4783679. 0. 660277. 619506. 40771. 4742908. 0. 860277. 613878. 46398. 4696510. 0. 660277. 607474. 52803, 4643707. 0. 660277, 600185. 60091. 4583615. ٥. B 660277. 591891. 68386. 4515229. 0.

FULL HUMBER 0

PRO FORMA

INVESTMENT ANALYSIS OF

HEST BEND CENTER

FOR

5T

J -REPORT SECTION NUHBER PAGE 1 * GROSS RENT * 1187168. * RATE OF BROWTH OF BROSS RENT 0.0261 * EXPENSES \$ 266133. * RATE OF GROWTH OF EXPENSES 0.0000 1. * RATE OF GROWTH OF R E TAXES * R E TAKES \$ 0.0000 * THEOME TAX RATE 0.0000 PROJECT VALUE GROWTH TYPE 4.0000 * VACANCY RATE 0.0887 WORKING CAPITAL LOAN RATE 0.1900 FOUITY DISCOUNT 0.1860 10000. RESALE COST 0.0600 FEINVESTHENT RATE 0.0650 WAS CAPITAL RS\$ 234260. CAFITAL RESER INTEREST RATE 0.0650 INVESTOR TAX CLASS **OWNERSHIP** FORM 1 INITIAL COST \$ 6019862. INITIAL EQUITY REQUIRED \$ 1375475.

TILL '*' VALUES ARE AVERAGE AMOUNTS FOR HOLDING FERIOD. OF 8 YRS.

1 DH PUMBER 0

FRO FORMA

INVESTMENT ANALYSIS OF

WEST BEND CENTER

FOR

:3T

REPORT SECTION NUMBER 2

FAGE 1

COMPONENT SUMMARY

TITLE FCT. BEBIN USEFUL DEFR DEFR USE LIFE METHOD COST SCH 0.00 40. LAND 0. 1 2 6019862. 0 1.00 1 18. 11.F

HORTBAGE SUMMARY

TITLE JATE REGIN END TERM ORIG FCT
RATE YR. YR. BALC VALUE

1000 0.1300 1 25 25 \$ 4878647. 0.810

ROSE SE MEER 0

FRO FORMA

INVESTMENT ANALYSIS OF

HEST BEND CENTER

FOR

SIT

REPORT SECTION NUMBER 3 PAGE 1

COLFEDW ANALYSIS 0 i ...itanunemenniniku GROSS RENT 1062132, 1142463, 1162498, 1183008, 1204008, 1225520, 1247561, 1270153, 0. 424852. 161709. 32827. 33819. 34327. 34841. 0. LEES VACANCY 33319. ٥. LESS REAL ESTAE TAXES 1. 1. 1. 1. 1. ٥. 1. 1. LESS EXFENSES 266133. 266133. 266133. 266133. 266133. 266133. 266133. 266133. 0. 0. HET INCOME 361146. 714620. 863537. 883554. 904055. 925059. 946586. 968655. 0. ٥. 334437. 334437. LESS PEFFECIATION 334437. 334437. 334437. 334437. 334437. 0. 591891. LLES INTEREST PHITS 632614. 628776. 624451. 619506. 613878. 607474. 600185. О. 0. TAXABLE INCOME -605906. -248614. -95351. -70389. -44260. -16851. 42328. ٥. 0. 11964. 334437. FLUS DEFFECTATION 334437. 334437. 334437. 334437. 334437. 334437. 334437. 0. ٥. 1: LESS PRINCIPAL PHIS 27662. 31480. 35826. 40771. 46378. 52803. 60091. 68386. ٥.

11 CASH 1HROW-OFF	-299131.	54343.	203260.	223270.	243778.	264783.	206309.	308378.	0.	0
12 LESS INCOME TAXES	0.	٥.	٥.	0.	0.	٥.	٥.	٥.	0.	0
13 LESS RESERVES	0.	0.	0.	(1,	0.	0.	0.	0,	0.	Q
14 CASH FROM OFERATIONS	-49644.	54343.	203260.	223270.	243778.	264783.	286309.	308378.	0.	C
15 HORKING CAPITAL LOAN	496441	4734.	0.	0.	0.	0.	0.	0.	٥.	•
16 ISTRIBUTABLE CASH AFTER TAX		0.	197628.	223278.	243778.	264783.	286309.	308378.	0.	(
17 TAX SAVINGS ON OTHER INCOME	0.	0.	0.	0.	0.	0.	0.	0.	٥.	•
18 SPENDAPLE CASH AFTER TAXES	0.	0.	197628.	223278.	243778.	264783.	286309.	308378.	٥.	
MARKET VALUE & REVERSION										
CASH FLOW ANALYSIS										
12 つちに当知は選挙を実際を募集機	1	2	3	4	5	6	7	9	0	
19 END OF YEAR MARKET VALUE	6110160.	6201813.	6294840.	6389262.	6485101.	6582378.	6681113.	6781330.	0.	
TO LESS RESALE COST	366610.				389106.				0.	
21 LESS LOAN BALANCES	4850985.	4819505.	4783679.		4696510.			4515229.	٥.	•
22 FLUS CUH, CASH RESERVES	0.	0.	0.	c.	0.	0.	0.	0.	0.	
23 TEFORE TAX NET WORTH	B42921.				1399486.				о.	
C) GAPITAL GAIN (IF SOLD)	56126.	478716.			1748317				ο.	
. 7 CAFITAL GAINS TAX	0.	0.	٥.	0.	٥.	0.	٥.	0.	o.	
75 MINIMUM PREF. TAX	0.	o.	٥.	٥.	0.	0.	ō.	0.	٥.	
IT INCOME TAX OM EXCESS DEP.	0.	٥.	0.	0.	0.	0.	0.	0.	0.	
7) TOTAL TAX ON SALE	٥.	0.	٥.	0.	٥.	0.	0.	0.	0.	
27 AFTER TAX NET WORTH	842921.	1005466.	1133470.	1262998.	1399486.	1543720.	1696631.	1859221.	٥.	
EF 'E TAX RATIO ANALYSIS		٠								
CAS I FLOW ANALYSIS	1	. 2	3	4 - 14	5	6 2007	7	9	0	
CAS F FLOW ANALYSIS FOR FREEDRICHERS FOR FREEDRICHERS FOR FERNOON NET WORTH B/4 TAX	-0.3872		0.3295	0.3113	0.3011	0.2923	0.2845	8 0.2776	0.0020	0.00
CAS FELOW ANALYSIS TO SETURN ON NET WORTH B/4 TAX TO SHENGE IN NET WORTH B/4 TAX	-0.3872 -532554.	162544.	0.3295 128004.	0.3113 129526	0.3011 136487.	0.2923 144243.	0.2845 152903.	162590.	0.	
CAS FROM ANALYSIS COS FROM ANALYSIS CO CETURN ON NET WORTH B/4 TAX SI CHANGE IN NET WORTH R/4 TAX SC CLIC EQUITY CASH RINB/4 TAX	-0.3872 -532554. -0.2175	162544. 0.0395	0.3295 128004. 0.1478	0.3113 129526. 0.1623	0.3011 136487. 0.1772	0.2923 144243. 0.1925	0.2845 152903. 0.2082	162590. 0.2242	0.0000	0.0
CAS I FLOW ANALYSIS CAS I FLOW ANALYSIS CAS I FRANCH ON HET WORTH B/A TAX SI CHANGE IN HET WORTH R/A TAX CAS ICLIG EQUITY CASH RINB/A TAX CAS ICLIG EQUITY CASH RINB/A TAX CAS ICLIG EQUITY PAYRACK B/A TAX	-0.3872 -532554. -0.2175 -0.2536	162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526 0.1623 0.0926	0.3011 136487. 0.1772 0.2698	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2082 0.6705	162590. 0.2242 0.8947	0. 0.0000 0.0000	0.0
CAST FLOW ANALYSIS CAST FLOW ANALYSIS CAST FROM THE HORTH BASTAX STOCHENGE IN NET WORTH BASTAX CHANGE IN NET WORTH BASTAX CONTROL TO THE HORTH BASTAX CONTR	-0.3872 -532554. -0.2175 -0.2536	162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526 0.1623 0.0926	0.3011 136487. 0.1772	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2082 0.6705	162590. 0.2242 0.8947	0.0000	0.0
CAST FLOW ANALYSIS CAST FLOW ANALYSIS CAST FROM THE HORTH BASTAX STOCHENGE IN NET WORTH BASTAX CHANGE IN NET WORTH BASTAX CONTROL TO THE HORTH BASTAX CONTR	-0.3872 -532554. -0.2175 -0.2536	162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526 0.1623 0.0926	0.3011 136487. 0.1772 0.2698	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2082 0.6705	162590. 0.2242 0.8947	0. 0.0000 0.0000	0.0
CASE FLOW ANALYSIS TO PETURN ON NET WORTH BYA TAXIBLE CONTROL OF THE PARTY TO A TAXIBLE CONTROL OF THE PARTY TO A TAXIBLE CASE FLOW ANALYSIS CASE FLOW ANALYSIS	-0.3872 -532554. -0.2175 -0.2536 5339486.	162544. 0.0395 -0.2175 5386284.	0.3295 128004. 0.1478 -0.0697 5477750.	0.3113 129526 0.1623 0.0926	0.3011 136487. 0.1772 0.2698 5621335.	0.2923 144243. 0.1975 0.4623 5679536.	0.2845 152903. 0.2082 0.6705 5730185.	162590. 0.2242 0.8947 5774234.	0.0000	0.0
CASE FLOW ANALYSIS TO CETURN ON NET WORTH BAA TAX TO CETURN ON NET WORTH BAA TAX TO CHOOSE IN NET WORTH BAA TAX TO CHOOSE	-0.3872 -532554. -0.2175 -0.2536 5339486.	162544. 0.0395 -0.2175 5386284.	0.3295 128004. 0.1478 -0.0697 5477750.	0.3113 129526. 0.1623 0.0926 5554490.	0.3011 136487. 0.1772 0.2698 5621335.	0.2923 144243. 0.1975 0.4623 5679536.	0.2845 152903. 0.2082 0.6705 5730185.	162590. 0.2242 0.8947 5774234.	0.0000	0.00
CASE FLOW ANALYSIS CONTROL OF THE TAX	-0.3872 -532554. -0.2175 -0.2536 5339486.	162544. 0.0395 -0.2175 5386284.	0.3295 128004. 0.1478 -0.0697 5477750.	0.3113 129526. 0.1623 0.0926 5554490.	0.3011 136487. 0.1772 0.2698 5621335.	0.2923 144243. 0.1925 0.4623 5679536.	0.2845 152903. 0.2082 0.6705 5730185.	162590. 0.2242 0.8947 5774234.	0.0000	0.00
CASE FLOW ANALYSIS TO PETURN ON NET WORTH BYA TAX TO PETURN ON NET WORTH BYA TAX TO PETURN ON NET WORTH BYA TAX TO PARTIE FLOW THAT TAX TO PARTIE FLOW ANALYSIS TO PETURN ON NET WORTH AFR TAX TO PARTIE FLOW ANALYSIS TO PETURN ON NET WORTH AFR TAX TO CHANGE IN PET WORTH AFR TAX	-0.3872 -532554. -0.2175 -0.2536 5339486. 1 -0.3872 -532534.	162544. 0.0395 -0.2175 5386284. 2 0.1928 162544.	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004.	0.3113 129526. 0.1623 0.0926 5554490.	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487.	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243.	0.2845 152903. 0.2082 0.6705 5730185. 7 0.2845 152903.	162590. 0.2242 0.8947 5774234. 8 0.2776 162590.	0. 0.0000 0.0000 0.	0.00
CASE FLOW ANALYSIS COSE FLOW ANALYSIS COSE FLOW ANALYSIS COSE FLOW ON NET WORTH B/A TAX CHANGE IN NET WORTH B/A TAX COSE FLOW ON NET WORTH B/A TAX COSE FLOW ANALYSIS COSE FLOW ANA	-0.3872 -532554. -0.2175 -0.2536 5339486. 1 -0.3872 -532554. 0.0000	162544. 0.0395 -0.2175 5386284. 2 0.1928 162544. 0.0000	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437	0.3113 129526. 0.1623 0.0926 5554490.	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487. 0.1772	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1925	0.2845 152903. 0.2082 0.6705 5730185. 7 0.2845 152903. 0.2082	162590. 0.2242 0.8947 5774234. 8 0.2776 162590. 0.2242	0. 0.0000 0.0000 0.0000 0.0000	0.00
CASE FLOW ANALYSIS TO PETURN ON NET WORTH BYA TAX TO PETURN ON NET WORTH BYA TAX TO PETURN ON NET WORTH BYA TAX TO PARTIE FLOW THAT TAX TO PARTIE FLOW ANALYSIS TO PETURN ON NET WORTH AFR TAX TO PARTIE FLOW ANALYSIS TO PETURN ON NET WORTH AFR TAX TO CHANGE IN PET WORTH AFR TAX	-0.3872 -532554. -0.2175 -0.2536 5339486. 1 -0.3872 -532534. 0.0000	162544. 0.0395 -0.2175 5386284. 2 0.1928 162544. 0.0000 0.0000	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437	0.3113 129526. 0.1623 0.0926 5554490. 4 0.3113 129528. 0.1623 0.3060	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487. 0.1772	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1925 0.6757	0.2845 152903. 0.2082 0.6705 5730185. 7 0.2845 152903. 0.2082 0.8839	162590. 0.2242 0.8947 5774234. 9 0.2776 162590. 0.2242 1.1081	0. 0.0000 0.0000 0.	0.00
CAST FLOW ANALYSIS TO PETURN ON NET WORTH BYA TAX TO LHANGE IN NET WORTH BYA TAX TO LIG EQUITY CASH RYNBYA TAX TO LIG EQUITY PAYBACK BYA TAX TO CHANGE IN PET WORTH AFR TAX TO CHANGE EQUITY CASH RINAFR TAX TO CHANGE EQUITY CASH RINAFR TAX	-0.3872 -532554. -0.2175 -0.2536 5339486. 1 -0.3872 -532534. 0.0000	162544. 0.0395 -0.2175 5386284. 2 0.1928 162544. 0.0000 0.0000	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437	0.3113 129526. 0.1623 0.0926 5554490. 4 0.3113 129528. 0.1623 0.3060	0.3011 136487. 0.1772 0.2678 5621335. 5 0.3011 136487. 0.1772 0.4832	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1925 0.6757	0.2845 152903. 0.2082 0.6705 5730185. 7 0.2845 152903. 0.2082 0.8839	162590. 0.2242 0.8947 5774234. 9 0.2776 162590. 0.2242 1.1081	0. 0.0000 0.0000 0.0000 0.0000 0.0000	0.00
CASE FLOW ANALYSIS TO PETURN ON NET WORTH BYA TAX TO PETURN ON NET WORTH AFR TAX TO PETURN	-0.3872 -532554. -0.2175 -0.2536 5339486. 1 -0.3872 -532534. 0.0000	162544. 0.0395 -0.2175 5386284. 2 0.1928 162544. 0.0000 0.0000	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437	0.3113 129526. 0.1623 0.0926 5554490. 4 0.3113 129528. 0.1623 0.3060	0.3011 136487. 0.1772 0.2678 5621335. 5 0.3011 136487. 0.1772 0.4832	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1925 0.6757	0.2845 152903. 0.2082 0.6705 5730185. 7 0.2845 152903. 0.2082 0.8839	162590. 0.2242 0.8947 5774234. 9 0.2776 162590. 0.2242 1.1081	0. 0.0000 0.0000 0.0000 0.0000 0.0000	0.00
CASE FLOW ANALYSIS CONTINUE TO THE TOTAL BY TAX TO CETURN ON HET WORTH BY TAX TO CHANGE IN NET WORTH BY TAX TO CHOOSE FROM TAX TO CHANGE IN NET WORTH BY TAX TO CHANGE IN HET WORTH AFR TAX TO CHANGE TAX FRESENT VALUE COSH FLOW ANALYSIS	-0.3872 -532554. -0.2175 -0.2536 5339486. 1 -0.3872 -532554. 0.0000 0.0000 5592587.	2 0.1928 162544. 0.0000 0.0000 5600757.	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437 0.1437 5688794.	0.3113 129526. 0.1623 0.0926 5554490. 4 0.3113 129528. 0.1623 0.3060 5765534.	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487. 0.1772 0.4832 5832379.	0.2923 144243. 0.1925 0.4623 5679536. 6 0.2923 144243. 0.1925 0.6757 5890581.	0.2845 152903. 0.2082 0.6705 5730185. 7 0.2845 152903. 0.2082 0.8839 5941229.	8 0.2742 162590. 0.2776 162590. 0.2242 1.1081 5985278.	0.0000 0.0000 0.0000 0.0000 0.0000	0.00
CASE FLOW ANALYSIS TO PETURN ON NET WORTH BYA TAX TO PETURN ON NET WORTH BYA TAX TO CHIO EQUITY CASH RINBYA TAX TO CHIO EQUITY PAYBACK BYA TAX TO LYA TAX PRESENT VALUE THE TAX RATIO ANALYSIS LASE FLOW ANALYSIS TO FETURN ON NET WORTH AFR TAX TO CHANGE IN PET WORTH AFR TAX TO CHANGE TAX PRESENT VALUE COSH FLOW ANALYSIS	-0.3872 -532554. -0.2175 -0.2536 5339486. 1 -0.3872 -532554. 0.0000 0.0000 5592587.	2 0.1928 162544. 0.0000 0.0000 5600757.	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437 0.1437 5688794.	0.3113 129526. 0.1623 0.0926 5554490. 4 0.3113 129528. 0.1623 0.3060 5765534.	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487. 0.1772 0.4832 5832379.	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1975 0.6757 5890581.	0.2845 152903. 0.2082 0.6705 5730185. 7 0.2845 152903. 0.2082 0.8839 5941229.	162590. 0.2242 0.8947 5774234. 8 0.2776 162590. 0.2242 1.1081 5985278.	0. 0.0000 0.0000 0.0000 0.0000 0.0000	0.00

TOTAL INTERNAL RATE OF RETURN ANALYSIS

TORGET ANALYSIS WITHOUT SALE

CASH FLOW ANALYSIS 13 CUH, AFR TAX SFENDABLE CASH 44 HOD, I.R.R. ON ORIG EQUITY 45 MOD, I.R.R. ON CUH, EQUITY FETURN CHALYSIS WITH SALE	0.0000 0.0000	2 0. 0.0000 0.0000	3 197628, -0.4762 -0.4762		5 705723. -0.1249 -0.1249	-0.0492		0.0317	0 0. 0.0000 0.0000	0 0. 0.0000 0.0000
CASH FLOW ANALYSIS										
24 CUM. CASH LESS ORIG EQUITY 47 CUM. CASH LESS CUM. EQUITY 43 MOD. I.R.R. ON ORIG EQUITY 47 MOD. I.R.R. ON CUM. EQUITY	1 -532554, -532554, -0.3872 -0.3872	-370009. -0.1450	3 -44377. -44377. -0.0109	4 321274, 321274, 0.0539 0.0539			7 1689908. 1689908. 0.1213 0.1213	2249845. 0.1288	0 0. 0. 0.0000	0 0. 0. 0.0000

11 12 13 14 15 16 17	CASH THROW-OFF LESS INCOME TAXES LESS RESERVES CASH FROM OPERATIONS UDERLING CAPITAL LOAN HISTRIBUTABLE CASH AFTER TAX TAX SAVINGS ON OTHER INCOME STENDABLE CASH AFTER TAXES	-299131. 0. 0. -49844. 49844. 0. 0.	54343. 0. 0. 54343. 4734. 0. 0.	203260. 0. 0. 203260. 0. 197628.	22327f. 0. (°. 22327f. 0. 22327f. 0. 22327f.	243778. 0. 0. 243778. 0. 243778.	264783. 0. 0. 264783. 0. 264783. 0. 264783.	286309. 0. 0. 286309. 0. 286309.	308378. 0. 308378. 0. 308378. 0. 308378.	0. 0. 0. 0. 0.	o. o. o. o.
	FFF VALUE & REVERSION										
	H FLOW ANALYSIS		_	_		_		_	_	_	_
	·····································	1 1 1 1 1 1 1 1	4201917	4294940	4	5 6485101.	4592770	7	4701770	o.	o 0.
19 70	END OF YEAR MARKET VALUE LESS RESALE COST	366610.		377690.		389106.				0.	ŏ.
21	LESS LOAN BALANCES					4696510.				0.	0.
2:2	FLUS CUH. CASH RESERVES	0.	0.	0.	٠.	0.	0.	0.	0.	0.	ο.
23	TEFORE TAX NET WORTH					1399486.				ο.	٥.
2.1	GAFITAL GAIN (IF SOLE)	56126.	478716.			17483174				٥.	٥.
. 7	CAFITAL GAINS TAX	0.	0.	0.	0.	0.	0.	0.	٥.	٥.	Ö.
د :	HINIHUM PREF. TAX	0.	٥.	0.	0.	0.	0.	0.	0.	o.	o. o.
	INCOME TAX OM EXCESS DEP.	0.	0.	0.	0.	0.	0.	0.	0.	0.	ŏ.
23 22	AFTER TAX NET WORTH					1399486.				٥.	0.
~ /	PETER THA HET WORTH	0.427211	1000.000	1100 // 01	1202,707	10///000	10 (4) 20		100,722,7		
EEF	FE TAX RATIO ANALYSIS										
-A #	2.过到户股份或是证据收款宣传机保证产品在										
-A W	3. 比如中部以此思想如果实验的存代等语句严重性										
-A W		. 1	2	3	4	5	6	7	8	0	0
-A W	F FLOW ANALYSIS	1 ~0.3872	2 0.2573	_	4 0.3113	-	0.2923	7 0.2845	0.2776	o 0.0000	0.0000
0.15 0.15	F FLOW ANALYSIS TETURN ON NET WORTH B/4 TAX CHANGE IN NET WORTH B/4 TAX	-0.3872 -532554.	0.2573 162544.	0.3295 126004.	0.3113 129526	0.3011 136487.	0.2923 144243.	0.2845 152903.	0.2776 162590.	0.0000	0.
0.48 0.48 0.48 0.09 0.31 0.32	FILOW ANALYSIS CETURN ON NET WORTH B/4 TAX CHANGE IN NET WORTH R/4 TAX ILIO EQUITY CASH RINB/4 TAX	-0.3872 -532554. -0.2175	0.2573 162544. 0.0395	0.3295 128004. 0.1478	0.3113 129526. 0.1623	0.3011 136487. 0.1772	0.2923 144243. 0.1925	0.2845 152903. 0.2082	0.2776 162590. 0.2242	0.0000 0. 0.000	0.0000
015 015 015 70 31 30 73	FILOW ANALYSIS THE	~0.3872 ~532554. ~0.2175 ~0.2536	0.2573 162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526. 0.1623 0.0926	0.3011 136487. 0.1772 0.2698	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2062 0.6705	0.2776 162590. 0.2242 0.8947	0.0000 0. 0.0000 0.0000	0. 0.0000 0.0000
0.48 0.48 0.48 0.09 0.31 0.32	FILOW ANALYSIS CETURN ON NET WORTH B/4 TAX CHANGE IN NET WORTH R/4 TAX ILIO EQUITY CASH RINB/4 TAX	~0.3872 ~532554. ~0.2175 ~0.2536	0.2573 162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526. 0.1623 0.0926	0.3011 136487. 0.1772	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2062 0.6705	0.2776 162590. 0.2242 0.8947	0.0000 0. 0.000	0.0000
618 70 31 30 73 71	FILOW ANALYSIS THE	~0.3872 ~532554. ~0.2175 ~0.2536	0.2573 162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526. 0.1623 0.0926	0.3011 136487. 0.1772 0.2698	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2062 0.6705	0.2776 162590. 0.2242 0.8947	0.0000 0. 0.0000 0.0000	0. 0.0000 0.0000
018 018 019 31 30 73 31	F FLOW ANALYSIS TO THE CONTROL OF THE PARTY OF THE CONTROL OF THE PARTY OF THE PAR	~0.3872 ~532554. ~0.2175 ~0.2536	0.2573 162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526. 0.1623 0.0926	0.3011 136487. 0.1772 0.2698	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2062 0.6705	0.2776 162590. 0.2242 0.8947	0.0000 0. 0.0000 0.0000	0. 0.0000 0.0000
018 018 019 31 30 73 31	F FLOW ANALYSIS ETURN ON NET WORTH B/4 TAX CHANGE IN NET WORTH B/4 TAX IT IO EQUITY CASH RINB/4 TAX ORIG EQUITY PAYBACK B/4 TAX E/4 TAX PRESENT VALUE IR TAX RATIO ANALYSIS	~0.3872 ~532554. ~0.2175 ~0.2536	0.2573 162544. 0.0395 -0.2175	0.3295 128004. 0.1478 -0.0697	0.3113 129526. 0.1623 0.0926	0.3011 136487. 0.1772 0.2698	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2062 0.6705	0.2776 162590. 0.2242 0.8947	0.0000 0. 0.0000 0.0000	0. 0.0000 0.0000
018 018 019 31 30 73 31	FLOW ANALYSIS THE CURRENT WARTH B/4 TAX CHANGE IN NET WORTH B/4 TAX THE EQUITY CASH RTNB/4 TAX ORIG EQUITY PAYBACK B/4 TAX E/4 TAX PRESENT VALUE TO TAX RATIO ANALYSIS FLOW ANALYSIS	~0.3872 ~532554, ~0.2175 ~0.2536 5339486,	0.2573 162544. 0.0395 -0.2175 5386284.	0.3295 128004. 0.1478 -0.0697 5477750.	0.3113 129526. 0.1623 0.0926 5554490.	0.3011 136487. 0.1772 0.2698 5621335.	0.2923 144243. 0.1925 0.4623	0.2845 152903. 0.2062 0.6705 5730185.	0.2776 162590. 0.2242 0.8947 5774234.	0.0000	0. 0.0000 0.0000
0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18	FLOW ANALYSIS CTURN ON NET WORTH B/4 TAX CHANGE IN NET WORTH B/4 TAX ORIG EQUITY CASH RTNB/4 TAX ORIG EQUITY PAYBACK B/4 TAX E/4 TAX PRESENT VALUE FLOW ANALYSIS	~0.3872 ~532554, ~0.2175 ~0.2536 5339486.	0.2573 162544. 0.0395 -0.2175 5386284. 2 0.1928 162544.	0.3295 128004. 0.1478 -0.0697 5477750.	0.3113 129526. 0.1623 0.0926 5554490.	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487.	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243.	0.2845 152903. 0.2062 0.6705 5730185. 7 0.2845 152903.	0.2776 162590. 0.2242 0.8947 5774234. 8 0.2776 162590.	0.0000 0.0000 0.0000 0.0000	0. 0.0000 0.0000 0.
0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	FLOW ANALYSIS CHANGE IN NET WORTH B/4 TAX CHANGE IN NET WORTH R/4 TAX CHIG EQUITY CASH RINB/4 TAX CHIG EQUITY PAYRACK B/4 TAX E/4 TAX PRESENT VALUE FLOW ANALYSIS FETURN ON NET WORTH AFR TAX CHANGE IN NET WORTH AFR TAX CHANGE EQUITY CASH RINGER TAX	~0.3872 ~532554, ~0.2175 ~0.2536 5339486. 1 ~0.3872 ~532554, 0.0000	0.2573 162544. 0.0395 -0.2175 5386284. 2 0.1928 162544. 0.0000	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437	0.3113 129526. 0.1623 0.0926 5554490. 4 0.3113 129528. 0.1623	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487. 0.1772	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1975	0.2845 152903. 0.2062 0.6705 5730185. 7 0.2845 152903. 0.2082	0.2778 162590. 0.2242 0.8947 5774234. 8 0.2776 162590. 0.2242	0.0000 0.0000 0.0000 0.0000 0.0000	0. 0.0000 0.0000 0.
0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	FLOW ANALYSIS CHANGE IN NET WORTH B/A TAX CHANGE IN NET WORTH B/A TAX CHIG EQUITY CASH RTNB/A TAX CHA TAX PRESENT VALUE FROM ANALYSIS FETURN ON NET WORTH AFR TAX CHANGE IN PET WORTH AFR TAX CHANGE IN PET WORTH AFR TAX ANG EQUITY CASH RTNAFR TAX CHANGE EQUITY CASH RTNAFR TAX CRIS EQUITY PAYBOCK AFR TAX	-0.3872 -532554, -0.2175 -0.2536 5339486, 1 -0.3872 -532554, 0.0000 0.0000	0.2573 162544. 0.0395 -0.2175 5386284. 2 0.1928 162544. 0.0000 0.0000	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437 0.1437	0.3113 129526. 0.1623 0.0926 555449C. 4 0.3113 129528. 0.1623 0.3060	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487. 0.1772 0.4832	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1925 0.6757	0.2845 152903. 0.2062 0.6705 5730185. 7 0.2845 152903. 0.2082 0.8839	0.2778 162590. 0.2242 0.8947 5774234. 9 0.2776 162590. 0.2242 1.1081	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	0. 0.0000 0.0000 0.
0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.05	FLOW ANALYSIS CHANGE IN NET WORTH B/4 TAX CHANGE IN NET WORTH R/4 TAX CHIG EQUITY CASH RINB/4 TAX CHIG EQUITY PAYRACK B/4 TAX E/4 TAX PRESENT VALUE FLOW ANALYSIS FETURN ON NET WORTH AFR TAX CHANGE IN NET WORTH AFR TAX CHANGE EQUITY CASH RINGER TAX	-0.3872 -532554, -0.2175 -0.2536 5339486, 1 -0.3872 -532554, 0.0000 0.0000	0.2573 162544. 0.0395 -0.2175 5386284. 2 0.1928 162544. 0.0000 0.0000	0.3295 128004. 0.1478 -0.0697 5477750. 3 0.3239 128004. 0.1437 0.1437	0.3113 129526. 0.1623 0.0926 555449C. 4 0.3113 129528. 0.1623 0.3060	0.3011 136487. 0.1772 0.2698 5621335. 5 0.3011 136487. 0.1772	0.2923 144243. 0.1975 0.4623 5679536. 6 0.2923 144243. 0.1925 0.6757	0.2845 152903. 0.2062 0.6705 5730185. 7 0.2845 152903. 0.2082 0.8839	0.2778 162590. 0.2242 0.8947 5774234. 9 0.2776 162590. 0.2242 1.1081	0.0000 0.0000 0.0000 0.0000 0.0000	0. 0.0000 0.0000 0.
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AMERICAN BANKERS ASSOCIATION 1120 Connecticut Avenue, N.W. Washington, D.C. 20036



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September 6, 1985

Professor James A. Graaskamp Graduate School of Business University of Wisconsin - Madison 1155 Observatory Drive Madison, WI 53706

Dear Jim:

The planning committee meeting for the 1986 session of the National School of Real Estate Finance has been scheduled for Wednesday, October 30th and Thursday, October 31st. We would like you to attend the full session on the 31st which has been scheduled from 8:30 a.m. - 3:00 p.m.

Wednesday's session will begin at 3:00 p.m., adjourning at 6 p.m. for cocktails and dinner. If you arrive in time for dinner on Wednesday night, we would be delighted to have you join us.

The meeting will be held at the Vista International Hotel on 1400 M Street in Washington, D. C. Sue Richter, Program Manager for the school, will be coordinating the hotel accommodations and should be contacted for specific requests. Sue can be reached at (202) 467-4029.

Thursday, the meeting will be devoted to curriculum development. We will have the student evaluations from the 1985 session with which to work and would also like to explore the possibility of adding a computer component to the 1986 program.

Jim, you may recall that I had asked you for your thoughts regarding another ABA activity I manage - a construction lending workshop.

This year, the Workshop will be held in Denver from February 19-21, 1986; and although many of the program topics have remained the same during the last few years, it is probably time to review what we have been teaching as fundamentals in light of recent changes in the industry.

I have attached a copy of the 1985 program for your comments and would appreciate any ideas you may have on the subject.

The Division is also interested in having you as a speaker at the Workshop and/or the National Conference on Real Estate Finance in Dallas on April 6-9, 1986. At either event, we would like to have you as a general session speaker due to your proven ability (i.e. the 1985 school!) to captivate an audience.

Please call me at your convenience. If I don't hear from you, I'll try and touch base with you before September 13.

Sincerely,

Sally Sciacca

Sally

· cc: Roger A. Wentz Sue Richter

First Savings Corporation

Perry Pakravan Vice President

A Subsidiary of Citicorp Savings of Illinois A Federal Savings and Loan Association

One South Dearborn Street P.O. Box 4444 Chicago, Illinois 60680 (1 312) 977-5894

June 10, 1986

Professor James Graaskamp Room 118 School of Business Adm. University of Wisconsin 1155 Observatory Drive Madison, Wisconsin 53706

Ms. Angela R. Taylor Project Manager American Bankers Assoc. 1120 Connecticut Ave., N.W. Washington, D.C. 20036

RK: ABA Real Estate Seminar

Dear Prof. Graaskamp and Ms. Taylor:

I owe you an apology for the delay in getting the enclosed material to you on time. While offering you my apologies, I also wish to thank you for extending the invitation to me as a lecturer in the real estate work-out session.

The enclosed material is about a live project with very favorable initial response to our first phase of marketing effort. Given the size of the class, I think a more lecture-oriented presentation will be more effective in high-lighting the risks of a condo conversion and deducting certain guidelines in underwriting a new deal.

Part A of the presentation should be distributed in advance of the session for the participants to read and reflect on. Part B will be distributed at the session and serves as a check list and the outline of the presentation. I will limit my presentation to one hour in accordance with the following shedule:

•	Case Introduction; discussion of deal's structure	10 minutes
•	Review of the questions listed in Part A	10 minutes
•	Review of Part B checklist	30 minutes
•	Questions from the participants	10 minutes

I would like to request to start the session before Mr. Chris O'Donnell's presentation, as I expect that with group formation, group discussions and the breaks in between, the chances are that Chris' presentation will go overtime.

Professor James Graaskamp Ms. Angela R. Taylor June 10, 1986 Page 2

Pay fall ra

Please kindly advise whether the case and the above mentioned schedule is in accordance with your thoughts and plans. Again, thank you for the invitation and I look forward to hearing from you.

Sincerely,

Enclosures PP/af:d#1





Graduate School of Business

1155 Observatory Drive Madison, WI 53706 608/262-0391

October 9, 1986

Walter C. Klein, Jr. Senior Vice President Lomas & Nettleton Company 1600 Viceroy Drive Dallas, Texas 75235

Dear Walter:

A copy of your August letter to Michael Scheuer has been forwarded to me, and I wanted to comment and express my understanding of your dissatisfactions.

First, I concur that the Saturday morning session doesn't work. The Committee believed that they wanted a full five day of classes for the student but feared the students would break ranks if they had to stay over to Saturday only for the exam. Your criticisms of that experiment are right on point, and I expect that when the Committee meets next week we will conclude the 1987 course late Friday.

The second problem relative to the conflict of title and content of your presentation reflected a series of miscommunications between the Committee, the staff, and myself as to where the subject of appraisal and workout should occur. For that I take responsibility and apologize for the confusion which grew out of an original course concept and did not reflect the final schedule of speakers.

I failed to forward the hard copy of your presentation which led to additional requests but then the staff members changed several times during the winter months to compound the problem. Everybody is late with examination questions so the reminders go out early and repeat often.

No slight was intended when we had you introduce yourself. I was there as you started and asked if you would like me to introduce you and you indicated that with the biographical material in the student binder and the time constraints on the presentation, that you would introduce yourself.

Your presentation was most thorough, relevant to the seminar and professionally done and I hope that you might at least consider participating again with the ABA School.

I regret any discomfort and frustration our lack of precise administration may have caused.

Sincerely,

James A. Graaskamp Chairman, ABA School of Finance

JAG/db



July 28, 1986

James A. Graaskamp, Ph.D. Landmark Research, Inc. 202A Breese Terrace Madison, WI 53705

Dear Professor Graaskamp:

I greatly enjoyed meeting you this past Saturday after my lecture. I have enclosed a copy of the principle overhead used in my presentation showing the accounting and cash flow effects of various deal structures. I hope you find it interesting.

Please do not hesitate to call. I enjoyed participating in the ABA's National School of Real Estate Finance program and would enjoy the opportunity to lecture again.

Mark S. Karlan

MSK/bw enclosure



1155 Observatory Drive Madison, WI 53706 608/262-1550

August 20, 1986

Ms. Nga Do Thi Program Assistant American Bankers Association 1120 Connecticut Avenue, NW Washington, DC 20036

Dear Nga:

I've enclosed the invoice for school overhead related to the 1986 Real Estate Finance School. Jim Graaskamp tells me that he sent invoices for (1) copying charges and (2) audio-visual charges.

We appreciate the involvement with ABA and hope for a highly satisfactory long-term relationship. To that end, please provide us with feedback on the various aspects of our performance. We must note to do a better job on rooms (Human Resources) and parking (Real Estate Finance) next year.

I'm sorry that my involvement with the Credit Union School prevented me from personally spending time with your program last month.

Sincerely,

William A. Strang Associate Dean for External Relations

WAS/jgk

Enclosure

cc: Professor James Graaskamp



1155 Observatory Drive Madison, WI 53706 608/262–1550

August 20, 1986

INVOICE FOR OVERHEAD CHARGES PROVIDED TO AMERICAN BANKER'S ASSOCIATION SCHOOL FOR REAL ESTATE FINANCE, July 20-25, 1986

Overhead as agreed in Letter of Agreement:

\$5,700

Please make this check out to: U.W.-Madison School of Business

Mail to: William A. Strang, Associate Dean

UW-Madison School of Business

1155 Observatory Drive Madison, WI 53706



December 26, 1985

1155 Observatory Drive Madison, WI 53706 608/262-0391

Keith Yelinek VEREX 150 E. Gilman Street Madison, Wisconsin 53703

Re: American Banking Real Estate Finance School

Dear Keith:

Since we last talked, the ABA School of Real Estate Finance has been moved back to the week of July 20-26, 1986. Consequently your presentation on underwriting condominium projects for PMI insurance has also been moved back to Thursday, July 25.

You and I and any other individual you may wish are scheduled to talk about financing of condominium projects from 2:30-3:15. Hopefully, this schedule will not result in some conflict and you will be able to confirm with Sue Richter at the American Bankers Association by calling her at (202) 467-6654.

Looking forward to working with you, have a happy holiday season.

James A. Graaskamp

Chairman, Real Estate & Urban Land Economics

JAG/db

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Course I -Residential Property

ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE

UNIVERSITY OF WISCONSIN MADISON, WISCONSIN

Presented in association with the HOUSING AND REAL ESTATE FINANCE CENTER



AMERICAN BANKERS ASSOCIATION

1120 Connecticut Avenue, N.W. Washington, D.C. 20036

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Larry Waugh Sears Mortgage Securities Corp 333 Knightsbridge Parkway Lincolnshire, IL 60069

Kelth Yellnek Yelinek & Company 22 N Carroll Street Madison, WI 53705

John C. Yingling First Wisconsin Bank 777 E Wisconsin Street 18th Floor Milwaukee, WI 53202

Andrew Young Centar Federal Savings Bank CN 5228 100 Nassau Park Blvd Princeton, NJ 08543

1987 ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE - COURSE I - RESIDENTIAL PROPERTY

SUNDAY, JULY 19	MONDAY, JULY 20	TUESDAY, JULY 21	WEDNESDAY, JULY 22	THURSDAY, JULY 23	FRIDAY, JULY 24
	8:15 - 9:15 Historical Evolution of Residential Lending Johannes	8:00 - 9:30 Single Family Home Loan Servicing Swan	8:00 - 12:15 Compliance w/Federal Regulation of Single Household Loan Programs	8:00 · 9:45 Housing Market Analysis Graaskamp	8:00 - 12:00 Management Development
12:00 - 5:00 Registration	9:30 - 11:15 Competitive Banking Under Current Economic Conditions	9.45 - 10:45 Complications of the Alternative Rate Mortgage		10:00 - 12:15 Real Estate Development and Tract Financing	
:	Johannes 11:30 - 12:15 Single Family Home Loan Applications Process & Appraisals	Southwell 11:00 - 12:15 Secondary Mortgage Markets			
		Waugh	Chamness	Barrett	Siefried
		LUNCH	12:00 · 1:00		
4:00 - 5:00 Real Estate Process (The New Approach to	1:15 - 2:30 cont'd	1:15 - 2:45 Secondary Mortgage Market Arithmetic	1:15 - 3:00 Compliance Case Studies	1:15 - 3:00 Underwriting Condos for SMM	1:15 - 2:30 Managing Risks: Key to Bank Profits In
Real Estate Systems)		Waugh	See Room Listings in Notebook		Real Estate Finance
	See Room Listings in Notebook	3:00 - 3:45 Secondary Mortgage Market CMO's	3:15 - 4:15 Equity Lines of Credit	Yelinek	Kendali BIO Commerce
	2:45 - 5:00 Single Family Home Loan Application	Waugh	Kirkpatrick	3:15 - 5:00 FHA/VA Single Family Mortgage Loan	2:45 - 4:00 Ex a m
	Process Case Studies	4:00 - 5:00 Concurrent Sessions 1) Measuring Prof. 2) ARM's 3) SMM	4:30 - 5:30 Residential Private Guarantee Programs	Processing	
Graaskamp BIO Commerce	See Room Listings in Notebook	See Room Listings in Notebook	Avren	Currid	
		DINNER	5:15 · 6:15		
6:00 Reception/Dinner	7:00 - 8:00 Computer Processing of Mortgages	7:00 - 8:00 Bi-weekly Mortgages			
	Young		Cookout		
Gordon Commons	BIO Commerce	Richardson			

THE REAL ESTATE PROCESS

James Graaskamp

FIRST MODULE

THE NEW URBAN LAND ECONOMICS

Presented By

Professor James A. Graaskamp, Ph.D., CRE, SREA University of Wisconsin School of Business

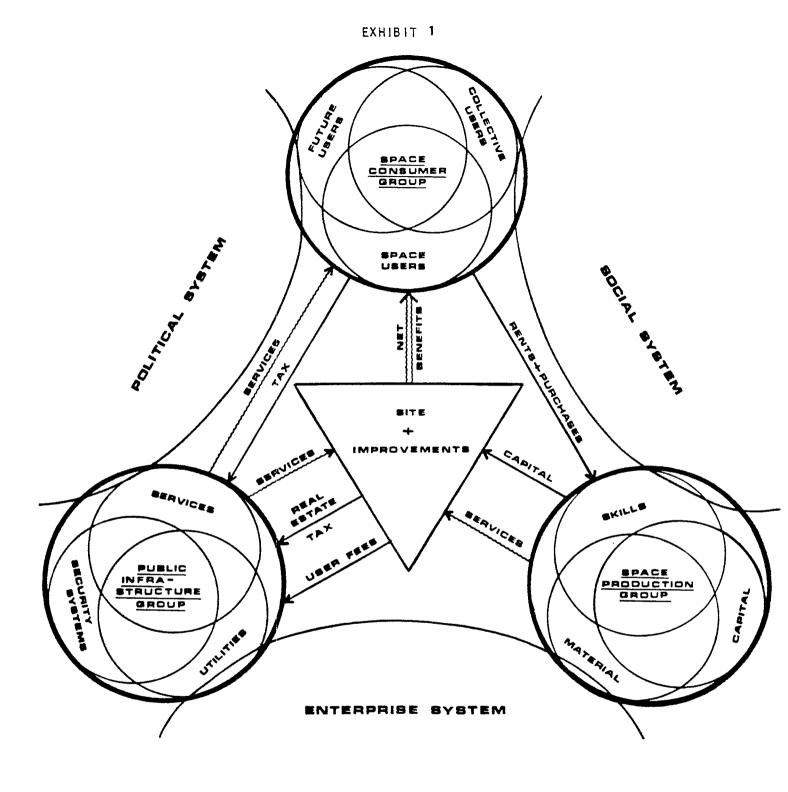
FIRST HOUR

I. BASIC CONCEPTS AND DEFINITIONS

- A. Real estate is a tangible product defined as artificially delineated space with a fourth dimension of time referenced to a fixed point on the face of the earth.
 - Real estate is a space-time unit, room per night, apartment per month, square foot per year, tennis court hours, or a condominium for two weeks in January at a ski slope.
 - To the space-time abstraction can be added special attributes to house and contribute some form of activity. Contribution is efficiency, security, comfort, or well-being.
 - 3. Improvements from survey market to city layouts to structures define space.
 - 4. Legal contracts and precedents define time.
 - 5. Rights of use are defined by public values, court opinions.
 - 6. Private rights to use are those which remain after the public has exercised its rights to control, to tax, or to condemn.
- B. A real estate project is a cash cycle business enterprise which combines a space-time product with certain types of management services to meet the needs of a specific user. It is the process of converting space-time needs to money-time dimensions in a cash economy.

Note: See "Real Estate Process" given at 1985 ABA School for Exhibits 3, 4, and 5 (VII. C. 2. 6.)

- 1. An enterprise is an organized undertaking whose form and behavior at any point in time is a concensus or synthesis of forces outside the enterprise attempting to determine its form and behavior and focus within the organization which can affect form, behavior, and sustaining energy over time.
- 2. A real estate business is any business which provides expertise necessary to relate space-time need to money-time requirements and includes architects, brokers, city planners, mortgage bankers, and all other special skills.
- 3. The true <u>profit centers</u> in real estate are in the delivery of services and cash capital.
- 4. Equity ownership is the degree to which one enterprise controls or diverts cash from another real estate enterprise.
- 5. Public ownership exists to the degree real estate taxes, user fees, and other charges take a percentage of gross revenue in excess of service cost.
- 6. A consumer must view space as one part of a total consumption system involving direct cost, surface cost, transportation cost and negative income of risk.
- C. The real estate process is the dynamic interaction of three groups, space users (consumers), space producers, and the various public agencies (infrastructures) which provide services and capital to support the consumer needs. (See Exhibit 1.)
 - 1. Each of these three decision groups represent an enterprise, an organized undertaking. All are cash cycle enterprises constrained by a need for cash solvency, both short and long term.



THE REAL ESTATE PROCESS

- 2. A desirable real estate solution occurs when the process permits maximum satisfaction to the consumer at a price that he can afford within the environmental limits of land while permitting the consumer, producer, and the government cash cycle to achieve solvency cash breakeven at a minimum, after full payment for services rendered.
- Solvency of the total process, not value, is the critical issue.
- 4. Land is an environmental constraint and not a profit cener.
- 5. Land provides access to a real estate business opportunity and is not the opportunity itself. Real estate business wants to control land to create a captive market for services.
- D. The consumer group requires three levels of marketing sensitivity.
 - 1. The collective consumer operating through the political process must be convinced that it should provide permits, zoning, or other approvals which franchise project.
 - 2. The individual consumer who rents or buys must be convinced he will improve the activity housed in terms of convenience, efficiency, security, and well-being at a periodic cash cost which is affordable.
 - 3. <u>Future users</u> consist of undefined future tenants representing a change in use which requires flexibility of site, structure, or services to maintain market edge, and therefore presumed resale liquidity.
- E. Recognition of the fact that profit maximization must be limited by concerns for physical environment and community priorities for land use has resulted in redefinition of the most basic concept in appraisal; i.e. highest and best use, in the authorized terminology handbook sponsored by the American Insitute of Real Estate Appraisers and

the Society of Real Estate Appraisers. Compare the 1971 definition with that for 1975:

Highest and best use concept -A valuation concept that can be applied to either the land or improvements. It normally is used to mean that use of a parcel of land (without regard to any improvements upon it) that will maximize the owner's wealth by being the most profitable use of the land. The concept of highest and best use can also be applied to a property which has some improvements upon it that have a remaining economic life. In this context, highest and best use can refer to that use of the existing improvements which is not profitable to the owner. It is possible to have two different highest and best uses for the same property: one for the land ignoring the improvements; and another that recognizes the presence of the improvements. p. 57, Real Estate Appraisal Principles and Terminology, Second Edition, Society of Real Estate

"Highest and best use: That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal. Alternatively, that use, from among reasonably probable and legal alternative uses, found to be physically possible, appropriately supported, financially feasible, and which results in highest land value. The definition immediately above applies specifically to the highest and best use of land. It is to be recognized that in cases where a site has existing improvements on it, the highest and best use may very well be determined to be different from the existing use. The existing use will continue, however, unless and until land value in its highest and best use exceeds the total value of the property in its existing use. Implied within these definitions is recognition of the contribution of that specific use to community environment or to community development goals in addition to wealth maximization of individual property owners. Also implied is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best

use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use. In the context of investment value an alternative term would be most profitable use.

Real Estate Appraisal Terminology, Edited by Byrl N. Boyce, Ph.D., SRPA, Ballinger Publishing Co., Cambridge, Mass., 1975. (Emphasis added.)

- G. The purchase of a piece of real estate today involves the acceptance of a great many assumptions about the future. Those who take care to validate these assumptions in a period of transition as to public land use control tend to have the most successful investment.
 - 1. Business decisions today make explicit recognition of their assumptions and the need to act under conditions of uncertainty.
 - 2. Business risk is the difference between assumptions about the future and realizations, and the proforma budget and the end of the year income statement.
 - 3. Risk management is the control of variance between key assumptions and realizations.
 - 4. An appraisal is a set of assumptions about the future productivity of a property under selected conditions of certainty.
 - 5. A feasibility study is a test of a particular proposal under alternative sets of assumptions about the future and its tolerance for variance or priority for certainty.
- H. The concept of highest and best use of land was a commodity concept which did not consider externalities adequately. It is being replaced by concepts of most fitting use and the concept of most probable use.
 - 1. The <u>most fitting use</u> is that use which is the optimal reconciliation of effective consumer demand, the cost of production, and the fiscal and environmental impact on third parties.

- 2. Reconciliation involves financial impact analysis on "who pays" and "who benefits"-thus the rash of debate on how to do impact studies.
- 3. The <u>most probable use</u> will be something less than the most fitting use depending upon topical constraints imposed by current political factors, the state of real estate technology, and short-term solvency pressures on consumer, producer, or public agency.
- 4. Most probable use means that an appraisal is first a feasibility study of alternative uses for a site in search of a user, an investor, and in need of public consent.
- I. In seeking the most fitting and most probable use, the inner city planner and private property appraiser must interact to determine how community objectives and consumer and production sector solvency can be achieved simultaneously.
 - 1. A real estate decision has only two basic forms. Either a site is in search of a use and consumer with the ability to pay, or a consumer, need or use with a defined ability to pay is seeking some combination of space-time attributes he can afford.
 - 2. The individual consumer with needs and a budget is the drive wheel.
 - 3. The public sector represents the community owned consumer service delivery system, seeking to minimize marginal cost to the consumer and average cost to the community at large.
 - 4. The production sector responds to a derivative demand for engineering and management expertise.
 - 5. Real estate is a collective decision and a product of the political process.

- J. Critiquing the form and adequacy of a real estate solution is analogous to the artistic concept of judging the success of an art object by relating form of the solution to the context to which it was created.
 - 1. Context includes those elements which are fixed, given, or objective and to which any solution must adapt.
 - 2. Form-giving elements are those variables within the artist's control, i.e. options or alternatives at a particular time.
 - 3. A solution is judged for its correctness or success in terms of the degree of fit of the form proposed to the context.
 - 4. Feasibility analysis is concerned with the degree of fit or the extent of misfit between a proposed course of action and the context within which it must operate or fit.
 - 5. Success therefore depends on how appropriately the problem is defined; testing feasibility depends primarily upon accurate and comprehensive definition of the context.
- K. Ultimately there are only three major decision formats for real estate and land economics.
 - A location (and related improvements) in search of a justified use.
 - 2. A justified use in search of the best fitting location (and related improvements).
 - 3. Money in search of an investment in location and related improvements—the conversion of space-time needs to money invested over time.

THE REAL ESTATE PROCESS

BACKGROUND READINGS



Fundamentals of Real Estate Development

by James A. Graaskamp

The real estate development process involves three major groups-a consumer group, a production group, and a public infrastructure group. Each group benefits from cooperation and a full understanding of the values, short- and long-term objectives, and major limitations controlling the other two groups. A major limitation shared by all groups is the fact that each is a cash cycle enterprise which must remain solvent to survive and which must create a surplus over time to maintain credibility with others. Cash cycle enterprises must continually make assumptions about future social norms, technologies, and the direction of complex changes in personal, natural, and political conditions. The degree of error between assumptions and realizations is what is termed risk, and in an enterprise economy most parties are attempting to shift a disproportionate share of the risk to others while retaining a larger share of the benefits. Unlike many mass production industries, each real estate project is unique and the development process is so much a creature of the political process that society has a new opportunity with each major project to negotiate, debate, and reconsider the basic issues of an enterprise economy, i.e., who pays, who benefits, who risks, and who has standing to participate in the decision process. Thus the development process remains a high silhouette topic for an articulate and politically sophisticated society. The best risk management device for the producer group, which is usually the lead group in the initiation of a project, is thorough research so that the development product fits as closely as possible the needs of the tenant or purchaser, the values of the politically active collective consumers, and the land use ethic of the society.

Basic Concepts

Introduction

Someone rolled a rock to the entrance of a cave and created an enclosed space for his family—a warmer, more defensible shelter, distinct from the surrounding environment. This can be called the first real estate development. Since then real estate activity has evolved and taken many forms to meet the needs of man and his society. Once based on need and custom, real estate is now based on social economics and statute.

Real estate can be defined generally as space delineated by man, relative to a fixed geography, intended to contain an activity for a specific period of time. To the three dimensions of space (length, width, and height), then, real estate has a fourth dimension—time for possession and benefit. This can be referred to as a space-time characteristic. The space-time concept is illustrated by the terms apartment per month, motel rooms per night, square footage per year, and tennis courts per hour. A fundamental element in real estate is that any space-time unit has a corresponding monetary value. While many of the value judgments and debates about real estate projects relate to elusive criteria of what is good and beautiful, in a money economy the ultimate criterion is cash.

The creation and management of space-time units is termed real estate development. Real estate developments range from a simple cave to the complex technology of the Park Avenue skyscraper. Like a manufactured product, a real estate project is part of a larger physical system programmed to achieve long-term objectives, but each real estate project is

The Development Component Series (DCS) is a file of monographs on land use planning and development practices and cases published by ULI—the Urban Land Institute. Authors are practitioners or educators expenienced in the component topic. The monographs incorporate the insights and auggestions of a review group comprised of seasoned practitioners on the aubject.

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About ULI

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ULI is an independent, nonprofit educational and research organization dedicated to improving the quality of land use planning and development. From its incorporation in 1936, ULI has been interested in resolving the problems surrounding development by establishing, through research, a creditable information base for action and by using the educational process to communicate this information to the various actors in land use development. Based on its experience, ULI strongly believes that research and education, presented objectively, can make a difference and that in most instances reasonable approaches to problem solving will prevail.

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also a small business enterprise of its own. Thus, the development process is a continuum of construction technology, financing, marketing skills, administrative controls, and rehabilitation required to operate the real estate enterprise over many years.

Real estate development also is a complex, collective process, not only accommodating an activity within the parcel, but also adapting to the context of a specific surrounding environment, involving different personalities and interest groups, as well as limited resources. The political and social process to produce a real estate product must consider a diversity of impacts to find equitable reconciliation between who pays and who benefits.

Basic Real Estate Relationships

The real estate process presented in Figure 1 is the constant interaction of three groups—space users (consumers), space producers (those with site specific expertise), and public infrastructures (offsite services and facilities).

The space consumer group includes individual space users attempting to rent or buy real estate space to house their specific needs. This group operates individually in the marketplace. The individuals' goals are to survive and to improve their sense of satisfaction and security, using their own funds. In order to achieve the unique combination of attributes each desires, there are trade offs, such as location, space, and operating cost, that must be made and which influence real estate decisions. Collective users generally pursue their interests in real estate activity through the political systems that purchase open space, provide for public infrastructures, or regulate space production with pooled funds from taxes, bonding, etc. Future users are typically represented by proxy, either by developers who anticipate the need to change the use of a building in the future or by the judiciary or special interest groups, who perceive some trusteeship of the land for future generations. Provision for future users is a hidden charge to present consumers.

The space production group includes all forms of expertise necessary to convert from space-time requirements to money-time. The system includes those who assemble the capital and those who prepare materials as well as those who contribute to the assembly of these on site. Architect and

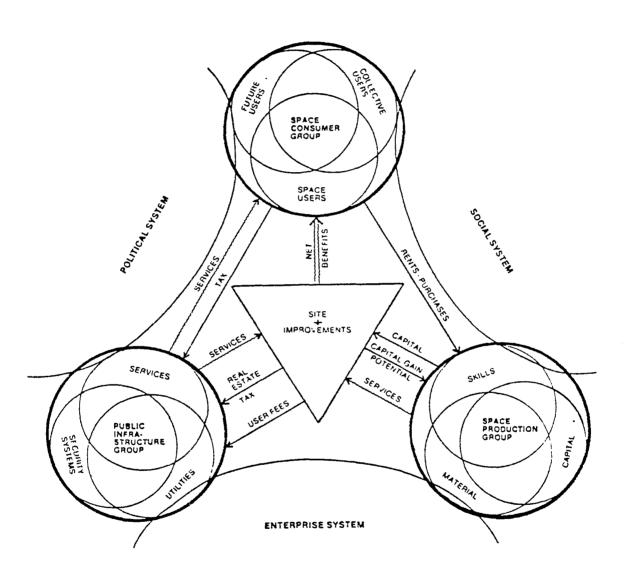
mortgage banker, lumberman and lawyer, city planner and hotel manager are all in the real estate business. The real estate business includes any person with expertise in creating and maintaining spaces to house activities of space users in the marketplace.

The public infrastructure group includes all those enterprises that provide a network of tangible and intangible off-site systems for the individual space user, including physical networks of street and sewer and other utilities, services like education. police and fire, and operational systems for deed registration, governmental regulation, adjudication, and all forms of economic activity with efficiencies of scale that suggest collective off-site action. Note that the difference between space production and public infrastructure has nothing to do with private or public ownership since private companies may provide utilities and public agencies may develop real estate. A necessary service, like sewer and water, schools and libraries, becomes an element of infrastructure when there are economies of scale to be enjoyed through collective action of many parcels, leading to off-site centralization.

Cash Solvency—The Critical Common Concern

Each of these three functional groups, and any subgroup therein, represents an organized, rational undertaking, called an enterprise in the language of systems (see Beckett). In an industrial society each enterprise is a cash cycle operation. Each begins with certain cash resources with which to purchase raw materials and services, to add value through expertise, and to exchange finished inventory for accounts receivable and back to cash. Most such enterprises, be it a hospital, a city, a household, a university, or a single student, are not attempting to make a profit, but each and every enterprise is constrained by the need to maintain cash solvency, both in the short and the long term, or become bankrupt. Cash solvency of each enterprise in the total process, not maximization of value, is the pivotal issue of survival and the one measure of self-interest that all these conflicting entities have in common. Only a few enterprises are intended to be profit-oriented. Cities, school districts, and home

Figure 1
The Real Estate Process



builders are all cash cycle enterprises. Of course, solvency plus a surplus at the end of a year can mean the city manager, the hospital director, and the home builder will enjoy praise, trust, and greater latitude to try new things from their city council, hospital board, or bank loan committee. Cash solvency is a continuing test of management, and cash surplus the measure of survival risk.

Therefore, a basic axiom for determinining real estate actions is that a desirable real estate program permits maximum satisfaction of the consumer within an affordable structure, while respecting environmental limits of the natural resources and permitting the public infrastructure and space production groups to achieve cash solvency, termed a cash break-even or default point in financial planning. Several important implications of this view of the real estate process are:

- The true profit centers in the real estate development process are in cash revenues created by the developers' expertise in producing space-time units.
- Equity ownership is the degree to which any one enterprise can control or divert cash flows from a real estate project to compensate for its contribution of land, materials, money, and/or expertise.
- Since the public has constitutional rights to divert cash productivity of the property via the real estate tax and user fees, the public has direct ownership of every taxable parcel to some degree, is a preferred partner in the ownership structure, and possesses real assets in terms of taxes, net service costs, and user fees (see Caro).
- Site selection represents a consensus of cash cycle forces, with the cost of site preparation acceptable within solvency limits, which are determined by rent levels, real estate taxes, and an infinite number of factors reflecting the economic characteristics of the user, the producer, and the cost of infrastructure services at alternative sites.
- Control of land through ownership, option, or alliance can indicate who in a real estate project will be hired, what materials will be purchased, and where all the cash flows generated by development and management can be directed. That is why architects, mortgage bankers, public authorities, and cities become developers—to capture some small percentage of the cash flow benefits to their enterprises.

Land Versus Location

Land is not location, property rights, or the most important aspect of a project site; instead, land is a natural resource upon which real estate decisions come to bear. It is that which can be brought under the control of man to bear his structures. It is a finite resource that can be exhausted by extractive industries, destroyed by seismic and ocean upheaval, or wasted by ignorance of its processes. It is a limiting factor in development and both a reference and a bearing point for space-time units.

The physical land attributes with legal-political constraints, linkage attributes that define location, dynamic attributes that exist in the eye of the beholder (such as prestige, anxiety, and claustrophobia), and attributes of a larger environmental system create a site.

Location is often identified as the critical factor in a site, but it is seldom understood that location value is related to the functional needs of the activity and not the site. The family unit is a common example of multiple functions involving employment, school, shopping, and recreation. The family chooses a home site that balances convenience against the cost of inconvenience. Each relationship between a household and another point requires movement of persons, goods, or messages. This is termed a linkage, and the time, stress, and dollar costs involved are referred to as the costs of friction. Each establishment seeks a location defined as a set of linkages that will minimize these costs. As the costs of energy, congestion, and time have risen for commuters and the need for suburban school linkages has diminished, the opportunity for reducing costs of friction by trading the house in the suburbs for a condominium downtown has been transferred into rent or the price of a condominium. Rent differentials for location reflect market recognition of perceived costs of friction to desired amenities. Therefore, locational value is in the mind of the space user rather than inherent in the land, and demand pressures on land shift as his perceptions of convenience shift. Of course, movements of goods and services and people often employ networks of pipes, paving, and wires directly to the site so that some linkages become physically set due to economies of scale in reducing the costs of friction. Some communities have expanded the web of physical linkages to include pneumatic-tube garbage collection, centralized heating and cooling. cable TV, skyway systems, and pedestrian tunnels. However, most linkage relationships are subtle,

Figure 2 Industrial Site Alternatives

	Site A Northern City		Site B Southern Town	
	Northe	rn City	Souther	n Iown
Revenues:				
Unit Sales	11,000		10,000	
x Price/Unit	\$ 110		S 110	
= Dollar Sales	—	\$1,210,000		\$1,100,000
- Expenses:				
Raw Materials		\$ 110,000		\$ 100,000
Transportation: Raw Materials		11,000		5,000
Finished Goods		55,000		110,000
Labor: Productive Labor Hours/Unit	10.0		10.0	
+ Productive Hours as Per				
cent of Clock Time	0.8		0.95	
	12.5		10.5	
Direct Labor Cost/Unit/Hr	\$ 4.00		\$ 4.00	
+ Indirect Labor Cost/Unit/Hr	\$ 1.00		\$ 0.50	
x = Total Labor Cost/Unit/Hour	\$ 5.00		\$ 4.50	
= Total Labor Cost/Unit	\$62.50		\$47.25	
Total Labor Costs		687,500		472,500
Administrative Salaries		90,000		150.000
Real Estate Taxes		60,000		20,000
Utilities: Heat, Light, Power		75,000		60,000
Total Expenses:		1,088,500		917,500
= Net Profit Before Taxes:		\$ 121,500		\$ 182,500
Capital Costs:				
Land		50,000		20,000
Building and Machinery		400,000		250,000
Cost of Relocation		0		100.000
Net Capital Employed:		\$ 450,000		\$ 370,000
Rate of Return on Capital:		0.27		0.49
Number of Years for Payback of	45	0,000-370,000	_ 80.000	_ = 1.3 years
Relocation Cost:		2,500-121,500	61,000	1.3 years
	10	2,300-121,300	01,000	

systematic, behavioral patterns that require a thorough understanding of particular establishments and are the basis for marketing.

Linkages, Location, and Cash Cycles

Location as an attribute of the establishment rather than a physical site can be understood by a look at simple financial plans of hypothetical industrial, retail, and household establishments. In Figure 2 the relative revenues and expenses of two alternative plant locations are presented. Notice that the linkages in each community to customers provide different sales estimates, while expenses are also altered by the proximity of each site to raw materials, distribution points, and the availability of labor pools with different expectations of hourly wages,

Figure 3 Retail Store Cash Cycle

i. Determination of Optimum Store Rent:

Number of families in area	5,000
x the store's capture rate	.20
= Number of families visiting the sto	re 1,000
x Average family income in area	\$20,000
x % of family income spent in	
s upermarkets	.12
= Total potential sales for the store	\$24,000,000
x Leakage of food purchases to othe	r
sources	.50
= Expected potential sales for	
the store	\$12,000,000
+ Sales/(sq. ft. of sales floor area)/ye	ar \$400
■ Sq. ft. optimum building size	30,000
Expected potential sales for the	

store	\$12,000.000
x % of sales allocated to rent expense	.075
■ Net rent allowed per year	\$90,000
+ Optimum building size	30,000
= Optimum net rent/sq. ft.	\$3.00

II. Determination of Optimum Building Cost:

•	
Parking stalls required/300 sq. ft. GLA	1
100 stalls x 300 sq. ft. each	30,000
+ Gross building coverage	34,000
= Minimum site area	64,000
x Price of land/sq. ft. of \$2.00	
(approx. \$85,000/acre)	\$128,000
x 10% interest on land	12,800
=Annual budget for improvements	77,200
+ Capitalization rate of 11.5%	.115
■Total budget for building and site	671,300
÷ 34,000 gross feet	\$19.75/sq. ft.*

^{*} This budget is too low for 1980 building costs: developer must reduce size of store and cost of site or capture more of potential market of grocery sales.

vacation time, and benefits. Indeed, benefit costs may be lower because the average age of the population in site B is much younger than in site A, reducing hospital costs, pension costs, and the prerogatives of long-time seniority. On the other hand, administrative salaries are higher in order to compensate executives for doing without certain amenities not available in a small town, such as a country club, a parish school, or diverse medical services. Real estate taxes may be minimal because government services are much less comprehensive

and fire insurance may be higher due to a remote fire station. Utilities may be lower because of linkages to hydroelectric power rather than coal-fired plants for site A. Even the capital costs are modified by the intensity of nearby land development and the willingness of state governments to subsidize the costs of relocation. All these factors are linkages for an industrial establishment which alters its cash flow, business and financial risks, and profitability. In theory it could pay more for site B because of the increment in the efficiency of its operations.

The retail store location example in Figure 3 depends on its linkages to families in the trade area which have both the income and inclination to visit a particular store or supermarket. The relationship of the store to other nearby retail establishments may generate traffic volume and attract customers or may intercept customers from the potential trade area. A potential linkage to a flow of passing customers can be subtly strengthened by a stop light or a right hand turn lane or devastated by a median strip which cuts off the linkage of a particular store site to traffic lanes going by. A great number of linkage relationships will affect potential sales for the store and that in turn controls the acceptable rent levels, capital budgets, and store sites in the real estate process. Notice that any particular retail store can pay a premium for a site where the linkages are expected to produce more than average penetration into a potential consumer group passing by or living in the vicinity. Some retail establishments need multi-state linkages by interstate or airline, such as Disney World or ski resorts in Colorado. In Vancouver a development company owned the north shore of Howe Sound but the only linkage was a ferry boat, so the property was relatively worthless despite its views and southern exposure. A suspension bridge two-thirds the size of the Golden Gate was built, and Lion's Gate Bridge became the critical linkage to create land of immense value for homes and business.

Many of the most subtle linkages are involved in selecting a housing unit for the family household. Linkages of the home site in terms of density per acre and a prestigious location must be traded off with neighborhoods which have homes of different sizes and quality in order to arrive at a monthly housing cost which is acceptable within cash limits of the household. The family is tempted to strain the cash budget because the house purchase is perceived as a major investment opportunity that may provide significant capital appreciation. This capital

gain is thought to reduce their net housing cost below that of rental alternatives in the long term. Combine net housing costs with costs of transportation to work, play, and shopping, and with possible costs of poor schools or exposure to natural disaster, and the choice of a house becomes a problem.

Cash Cycle of the User Versus Cash Cycle of the Collective Consumer

Public decision groups, like city councils, school boards, and county governments, often fail to recognize the relationship between the cost of their decisions and the true cost of land since the land cost is out of one pocketbook while the costs of friction are shifted to others who may not vote in their district. Consider the community college district which purchases a cheap rural site rather than assembling a more expensive urban campus because the five rural counties in the district can outvote the single urban center county. While capital cost to the community college funds are reduced, there is a significant increase in the total ongoing cost to students who must commute long distances. to school and part-time jobs, to the urban community in terms of underutilized residential land, and to retail real estate near the abandoned old campus.

More recently, with population pressures, depletion, and occasional misuse in the past, natural resources are becoming scarcer. Mindful of this, Congress passed the National Environmental Policy Act in 1969. Its purpose was to prevent or minimize damage to the environment by new industrial and residential development for the benefit of all present and future consumers. To implement this act, most state and local governments now require an Environmental impact Statement (EIS) for all proposed large developments. A carefully researched EIS may sometimes be of help to both the developer and the city planner by pinpointing major problem areas and suggesting alternative courses of action. An inadequately researched statement can waste everyone's time and money, either during the planning stage or later during the project's use. Generally a shorter environmental impact evaluation of critical issues is the most cost effective.

Recently, many planning departments and conservationists have used the EIS and other provisions of the 1969 Act to thwart growth in their cities and towns, which was not the original intent of the Act (see Frieden), MIT professor, Bernard Frieden, in his book. The Environmental Protection Hustle, warns that a new "exclusionism" is surfacing across the country. Where the old exclusionism attempted to exclude only low-cost housing in an effort to keep out minorities and the poor, this new exclusionism attempts to keep out everyone-rich, poor, and middle-class alike. This restriction on growth, especially in the suburbs and in-fill areas of the cities. Frieden claims, results in higher prices for housing. reduced choice of housing location, and longer commuting distances, and it discourages carefully planned developments by the large developers. In the same vein, political use of infrastructure systems has become an oblique and debatable extension of land use control law for exclusionary purposes.

The collective consumers are moralistic in public statements but are generally motivated to enchance their own cash positions. For example, in a city south of San Francisco, Palo Alto, further residential growth would require present homeowners to share the subsidy of residential services from the industrial tax base with new residents. Thus they voted to commit 7,000 acres of development land to open space, estates, and some new industrial parks. in the name of environmental quality. The monopoly created by growth management causes home prices. to skyrocket to the advantage of existing residents. while exclusionary zoning may make it unnecessary to finance expansion of sewer and water facilities by raising everyone's water service fees. Those who benefit as existing residents control local votes and those who must ultimately pay monopoly prices have no standing to vote. Thus the collective consumer will operate to block or imbalance development to protect his short-term cash interest; by the same token, the collective consumer as a builder of public facilities often thinks of only its own budget and not of the shift of hidden costs to consumers and taxpayers.

The Cash Cycle of Infrastructure

Every real estate development creates a new customer for the public infrastructure which surrounds the development site. Each home constructed creates a new customer for the water service, the school system, and the fire department, and generates revenue in the form of meter charges for utilities, real estate taxes, and other receipts such as a share of gasoline taxes for street maintenance and state aid for education based on a per student formula. There are secondary revenues, albeit indirect, in terms of increased retail sales levels, commercial land values and assessments, and, therefore, real estate taxes on ancillary uses. There is no aspect of cash forecasting more difficult than fiscal planning for the impact on revenues and service expenses of alternative land use plans, but much has been learned in recent years about the techniques of forecasting cash cycle implications of alternative development (see Vollman). In the past there was a tendency to oversimplify revenue/cost implications with broad generalizations: mobile home parks presumably had low assessed value but high educational cost burdens and high service cost implications for welfare and security; everybody knew that industrial plants produced far more tax revenue than required for service costs since there were no children to educate or streets to plow in winter. On the other hand, industrial plants attracted the workers at wage scales which could only finance mobile home housing and contributed to highway congestion which led to street widening programs. The combination of new residents and new jobs was the final burden on the sewer and water systems which required expanding the processing plant and well system to anticipate growth for the next 10 years. How does one allocate the current costs for expanding the water system and the street capacity between residential and industrial users and further subdivide the burden between present users and future users still to come? Fiscal zoning of land use mix within a community requires open-minded flexibility to balance cash revenues and cash expenses with mixed-use land planning concepts and multiple development proposals spanning different development time frames (see Burchell and Listokin). A new industrial plant may create a tax surplus which will be consumed in providing services for new residents hoping to work at the plant. But these new residents in turn will prompt commercial development which will further expand the tax base and may restore some real estate tax surplus 5 to 7 years after construction of the first new plant. The interplay over time between cash cycles of users, collective users, and the infrastructure system is the base for the interface between economics and property rights.

The Concept of Property Rights

Individual and collective use of space-time resources and land has always been regulated by society, in part through law and in the larger part through political administration of the laws so that it is always necessary to speak of the legal-political attributes of a site. The rights to use or abuse, to provide expertise or choose contractors, the rights to prohibit or to condition use in certain ways, or to transfer rights from one person to another are defined as property rights. Society creates and continually modifies the allocation of property rights among private ownership, public institutional ownership, and common ownership indivisible among all members of society. A primary function of property rights is to provide incentives for specific parties to take responsibility for development as well as conservation of the resource. The market system rewards those, in terms of consumer satisfaction, who produce the best buildings for the lowest cost of construction and operation.

Until the early 1700s in England, each community had common lands available for everyone to graze their livestock. No one had a vested interest in maintaining some grass for tomorrow or the right to exclude animals to permit regeneration of the grasses, and the resource was crushed by overgrazing. The commons were abruptly fenced to permit controlled grazing by the rich, to the great discomfort of the poor.

Similarly, better information about economic and environmental cause and effect leads to more sensitive, refined allocation of rights. Property rights

attempt to incorporate responsibility and its corresponding cost with land use decisions that are fairer to all members of a society. Therefore, cash flow revenues and outlays provide one way to measure the relative burden on interacting parties and to refine allocations of rights and responsibilities, that is, benefits and costs.

Information techniques, property rights, and economics continually interact. The supply and demand for rights to be bought, sold, leased, or otherwise exchanged depends on the benefit and cost of those rights to someone at a certain point in time and the scope of those rights as defined by law. The ownership of a car becomes less attractive as a commodity when the increasing gasoline prices, transportation taxes, insurance costs for injury caused by the auto, and emission control costs are included. Society may further restrict the hours. speed, purpose, or locations for which an auto may be used—the scope of property rights in an auto. Dramatic changes in gasoline prices produce rapid price reduction in large, gas-hogging automobiles. As long as the interaction of law and economics is gradual, almost unnoticed, there is some degree of certainty about future assumptions. Should rightsto-use change abruptly, the interface between the law and economics is marked by fissure, failures, and disturbances not unlike those caused by faults in the earth's crust itself, and new social problems appear. Big cars are expected to depreciate in a few years under the best assumptions, and the owners can minimize the losses by paying more for gasoline, reducing their mileage, and postponing sale for a few years. But the large capital investments in land development, buildings, machinery, or ships are depreciated instantly when laws like downzoning, rent control, pollution controls, or territorial fishing limits change their anticipated income sources or costs of operation. Unlike the carownership which involves a 3- to 7-year cash cycle, larger capital enterprises with major debt structures anticipate useful lives of 25 years or more; with an intensive fixed cost of operation they are quickly rendered insolvent by unexpected changes in the legal environment. Such allocations generally involve conflict between equally valid points of view and rights of survival and may transfer great wealth in the form of capitalized cash flows from landlord to tenant or collective consumer.

Although the language of real estate seems static, it is not. Many terms used today, such as fee simple ownership, had their origins in medieval England. Their current meanings, however, are quite different from their medieval definition. Property rights do change and exist in a certain form only as long as society achieves its objectives in terms of encouraging development and husbandry. Nevertheless, change in property rights must be implemented at a rate which each enterprise can tolerate in terms of its cash cycle and the threshold of insolvency or there could be a taking of property without due process.

Most Fitting and Most Probable Use

Until recently the economic theory of real estate decision making was built on the premise that the system was committed to finding that private use of a parcel of land that would maximize the owner's wealth by being the most profitable use of the site linkages or physical land. Presumably, the only criterion was profit, hence the cryptic term "highest," and as an inheritance from Adam Smith, there was the further presumption that maximum profit was "best" for society. Actually, the allocation of land to those who would pay the most or develop it most intensively was characteristic of nineteenth century America, when society needed to reward those who would modify the frontier to accommodate a rush of immigrants. At the same time, society had not melded to a point where it could find a consensus on land use priorities and social objectives. However, it was only as recently as 1975 that the fundamental economic premise of "highest and best use" was redefined as that use on a given date that could be selected as most profitable from reasonable and probable alternatives that were physically possible. legally permissible, and financially viable, given a specific level of effective demand and costs of production (Boyce, pp. 107-108). The official definition further made it explicit that wealth maximization was to be qualified by recognition of how a specific use would contribute to community environment. and community development goals. Thus, it has been recognized that the development of each parcel must be considered within a larger system and pattern of land uses and the frequent use of the words "reasonable and probable" reveals a recognition of many of the uncertainties that attend assumptions required in the decision to use and develop a parcel. At best, however, the term "highest

and best use" is an anachronism from laissez-faire attitudes of the nineteenth century that have undergone an evolution in meaning like the concept of fee simple title. At worst, it implies certainty of one man's judgment, a one-dimensional measure of the adequacy of a development concept and cash for the landowner even when it is apparent that there are many vested interests in the cash flows that are affected by a given land use decision. Therefore, it is useful to replace this terminology with the terminology of most fitting use and of most probable use.

Any decision process requires identification of alternative courses of action and their consequences. and the consequences must then be evaluated and ranked in terms of their acceptability and probability to choose the appropriate plan of action. Typically, a set of consequences is compared to some set of standards which defines the acceptable, the undesirable, and the unthinkable. These standards can be somewhat altruistic, or what might be defined as the norms to which a society is striving. The concept of most fitting use is normative, that is, the optimal reconcilliation of affected consumer demands. the cost of production, the cost of infrastructure services, and the fiscal and environmental impact on third parties. Reconciliation involves financial impact analysis of who pays and who benefits in cash terms as well as compatibility analysis of the collective consumer's perception of environmental quality and impact on the good life-elusive standards at best. The concept of most fitting use assumes the goals and limitations have been well defined and that misfits between proposed solution and standards can be recognized.

Experience tells us that most plans, development or otherwise, fall short of the ideal. This tendency is implied by the concept of most probable use. Most probable use is that alternative course of action which is closest to being the most fitting use while recognizing strong constraints imposed by current political factors, real estate technology, the personalities and talents responsible, the money market, and short-term solvency pressures on consumer, producer, and public infrastructure.

Any enterprise is a compromise because the form it takes, in terms of both its configuration and its behavior, reflects a negotiated consensus between two general sources of power—the power of its environment to dictate form and the power of the organization itself to decide what its characteristics and behavior will be (see Beckett). In the process of development the elements of law, public infrastructure, and consumer preference are the external forces affecting behavior, and the ability to respond from within the organization is a function of talent, money, and political skills.

Risk Management in Development Conditions of Uncertainty in Development

All parties in the development process must accept significant levels of uncertainty about their cash budgets and other expectations as each enters the development process with a set of assumptions about the future in a society that has been changing at an accelerating rate. The amount of uncertainty for an enterprise varies according to its needs and income. The homebuyer expects to have the same job and the same family needs and disposable income for at least several years, but must organize family finances through insurance and savings to anticipate unemployment, illness, and even death. The pushcart vendor can change his location, his prices, his product mix of flowers and bouquets almost hourly and clean out his inventory by evening. Should he be unsatisfied with his business, he can convert from flowers to scrap collection or popcorn sales the very next day, unless frustrated by municipal permits. The retailer needs 6 months to reform his inventory to changing consumer tastes. and the manufacturer needs 5 years to research and develop a new product line or relocate his plant. But the real estate developer is locked into a specific location with an immovable inventory of room nights, apartment months, or square feet of leasable area that must be priced and sold many times, for as long as 25 years, before the total capital investment is recovered. That is a unique risk management assignment, and the developer who succeeds most often is the one who takes most care to validate the assumptions over which he has some control and to cushion the enterprise with tolerance for surprise and those changing conditions over which there is little control. The real estate process

is concerned with identifying the explicit and implicit assumptions on which each consumer group, each infrastructure, and each production element of expertise is operating in order to allocate risks among those who benefit and those who pay each development alternative.

Control of this variance is called risk management. There is a continual refining of assumptions to convert as much speculation to fact as is possible and to provide tolerance for the uncontrollable surprises. Risk management is not only a philosophy of inquiry and problem solving, but also a primary objective of market research, of contract negotiation, and of strategic positioning of any enterprise or investment selection pattern.

Basic Risk Management Techniques

Aside from the outright avoidance or acceptance of the unknown, the business risk situation can be improved through application of one of the following techniques:

- 1. Improving forecasts through statistical research of the critical facts. For example, the reliability of a forecast is improved by increasing the sample size (the standard error of the estimate is reduced by the square root of the expansion in the sample size). While not all real estate research is statistical research, nevertheless, the general principle is that the exposure to surprise can be reduced by knowing more about the problem in a systematic fashion. Survey research of the consumer, soil testing, and quality control of materials are all elements of risk reduction through research and information processing.
- Combining risks by pooling resources, by diversifying investments, and by improving forecasting through scale of operations. A 4-unit apartment with a single vacancy has lost 25 percent of its income while a 100-unit building with 10 vacancies has a 10 percent vacancy loss to gross income, a far more stable situation.
- 3. Shifting risks by insurance contract, accepting the small certain loss of an insurance premium rather than the unpredictable loss of unknown frequency and severity of some insurable catastrophe like fire, collapse, death, or disability. Most static risks, contingencies which are sudden, external, random, and unpredictable as to time, are insurable.

- 4. Shifting the risk by two-party contract. The escalator clause in leases is a classic example of shifting the variance in rising operating expenses or real estate taxes to the tenant; the construction contract shifts some of the risk of rising material and labor prices to the general contractor, but in recent years there has been hard bargaining so that developer and contractor each share a part of the risk. Careful study of development ventures between private and public agencies will show that the majority of the contract is allocating responsibility for political administration or construction according to the expertise of each. For the dynamic risks of management, the best controls are the pains of penalties for the failure to perform and the profits that go with expertise in the execution of a plan.
- 5. Limiting liability for losses through the form of ownership as a corporation or limited partnership or esculpatory clauses (which says the lender can only take the property in case of foreclosure) with which one party releases a second from an obligation to perform or for damages as a result of failure to perform.
- 6. Hedging is a term which covers a wide variety of devices for protecting oneself against future price fluctuations or other future contingencies. For example, a buyer can make an offer to purchase, contingent on future realization of political approvals, financing, or other requirements. An option to buy, an option to repurchase, or a variable interest rate mortgage are forms of hedges. The classic hedge in real estate is a mortgage loan for nearly 100 percent of the development cost without personal endorsements. If the project succeeds, the borrower can call out the equity profits by selling the property and paying the loan from the proceeds. On the other hand, should cash flows and appreciation prove inadequate, the borrower can default on the mortgage and give up the property to the lender through foreclosure or voluntary conveyance of deed in lieu of foreclosure. Business censure for mortgage default, while still damaging to the developer, has weakened significantly in recent years.

Not only do the parties to the development process seek to arrange the best possible solution to their problems, but also they must anticipate the many less favorable alternative outcomes to a given set of assumptions in order to survive an upset of their plans.

Time as a Critical Risk Element

The passing of time is the most critical risk in the development process. Time permits the power of compound interest to erode the developer's resources, and it allows the conditions of competition and consumer needs which were true when the project started to change significantly. Perhaps it is the impact of compound interest which is least understood by most government regulators and most often used for extortion by those few who do understand it. Remember that a project with \$1,000,000 invested at a nominal construction interest rate as low as 12 percent per annum is costing \$10,000 interest for the first month, \$333 a day, and then \$11,200 the second month, etc. If the developer had hoped for a net profit of \$50,000, a total delay of 4 months in completing the project will not only cause the loss of that profit in additional interest charges, but also may give the tenant the right to break his lease, the owner the right to invoke a loss of use penalty, the morgage lender the right to renegotiate more expensive terms than those in the original commitment, and a competitor the opportunity to finish first and capture the market.

As money and time are expended on the project. time becomes of the essence in achieving expected revenues from sales and rentals. Thus, it is not uncommon to see tall buildings where the top floors are still being structured while the bottom floors are already receiving tenants, In a slow office market it may be cheaper to build three 100,000-square-foot buildings, one after the other, rather than a single large 300,000-square-foot building where the economies of scale can be quickly lost to the cost of carrying a vacant inventory of space for even a relatively few number of months or years. The cost of carrying a vacant inventory of space can sometimes be controlled and often significantly reduced by an investment in market and merchandising research. It is a customer and the rate at which customers absorb space that drives the cash cycle development process. A careful study of each market segment for demographic characteristics, the needs and motivation of the consumer, his priorities in terms of a finished product, and the price he would be willing to pay is merchandising research. American developers have tended to neglect marketing research in risk management in favor of faster construction methods and more elaborate contract allocations of risk among money partners and government agencies. Nevertheless, cash from rapid occupancy or sales turnover of inventory as a result of careful research is the best method for reducing the relentless pressure of compound interest.

Preliminary Budget Concerns—Producer Group

Feasibility Analysis

Feasibility analysis is a generic term which groups a variety of predevelopment studies by generalists and specialists in a systematic philosophy of inquiry to determine facts that are reliable, assumptions about the future that are consistent with past experience, and tactics which will minimize the variance between objectives and realizations (see Graaskamp; also see Messner, Boyce, Trimble, and Ward). A real estate consultant would categorize various report types as suggested in Figure 4. A developer builds only what he can finance, and lenders should finance only those projects for which there is a defined consumer group representing effective demand in a specified period of time. Seldom can one individual or firm deal with all of the feasibility topics and report types equally well due to the necessity of specialization, the bias of a single viewpoint, and the gaps in professional education.

The sequencing of analysis depends on the problem, and ultimately there are only three types of real estate feasibility problems:

- The search for the most fitting site for a use(s). (Figure 5)
- 2. The search for the most fitting use(s) for a specific site. (Figure 6)
- The search for the most suitable investment by investors. (Figure 7)

The most common situation is the site in search of a program for use by the speculative developer. The

Figure 4 Report Type Categories within General Category of Feasibility Analysis*

Strategy study: selection of objectives, tactics, and decision criteria.

Market study: economic base studies or other related aggregate data review.

Merchandising studies: consumer surveys, competitive property analysis, marketability evaluation, etc.

Legal studies: opinion on potential legal constraints, model contracts or forms of organization, and political briefs.

Physical design studies: engineering, land planning, and architectural studies.

Compatability studies: impact analysis of project on community planning, environmental quality, fiscal solvency, or other public policies.

Financial studies: economic modeling, capital budgets, present value and discounted cash flow forecasts, rate of return analysis, financial packages.

*Modified from work of J. A. Graaskamp, Guide to Feasibility Analysis, Third Edition. (Chicago: Society of Real Estate Appraisers, 1980).

use in search of a site, such as the occupant seeking new housing for his activities, is generally in a more flexible position of first specifying a program and then searching for the most fitting site. The development process is most successful when the developer first researches a program in terms of a marketing target and investment criteria and then acquires land most likely to advance that program.

Approaches to Determining Feasibility

The revenues of a development come from either rental income or sale of space-time unit, and the

real estate development intended for rental purposes provides the clearest and simplest demonstration of how a space-time unit and a corresponding monetary value are irrevocably linked together. If the total capital budget has been set by a completed architectural program, it is then possible to determine the rent required per unit—a "front door" approach; more realistically, the developer should determine the market rents and additional supply of space required in a given sector and then work backwards to establish the capital budget justified by revenues and control of the design. Too often the design specifications are set so that the rents required to justify the project are out of reach of prospects in the marketplace.

Consider the example in Figure 8 involving a small, two-story suburban office building on an 80,000square-foot site, costing \$100,000. With 16,000 square feet per floor, it provides 20 percent ground cover and very adequate landscaped surface parking. Assuming a basic construction cost at an economical \$30/square foot with fees, construction interest (\$100,000), and indirect costs (legal and design fees, permits, etc.) of \$180,000, the total capital budget is expected to be \$1,240,000. It is hoped that lenders would provide 80 percent of the required funds for permanent financing (or \$992,000) on a 20-year term, 11½ percent annual interest, monthly payment mortgage, which means total interest and principal payments annually will be \$127.97 for each \$1,000 borrowed, resulting in a debt service constant of .127968. Therefore, the project must generate cash of \$126,944 a year for the mortgage lender. The balance of the money required, at least \$248,000 of it, assuming no working capital and no cost overruns, would be provided by a partnership of equity investors. They require only a 6 percent cash dividend on their investment each year since they expect additional return from gradual amortization of the mortgage and appreciation in the resale price over the next 10 years. Experience has shown that operating expenses for this multi-tenant building will approximate \$2.50 per square foot of gross area while real estate taxes are running about \$1 a square foot for comparable properties in the

Figure 5

Analysis Process: The Search For a Site For a Use(s)

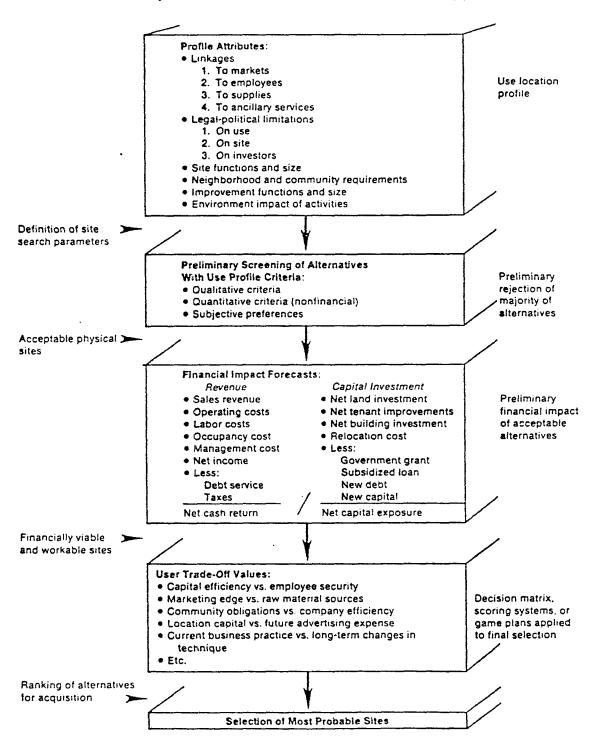


Figure 6
Analysis Process: In Search of a Use(s) For a Site

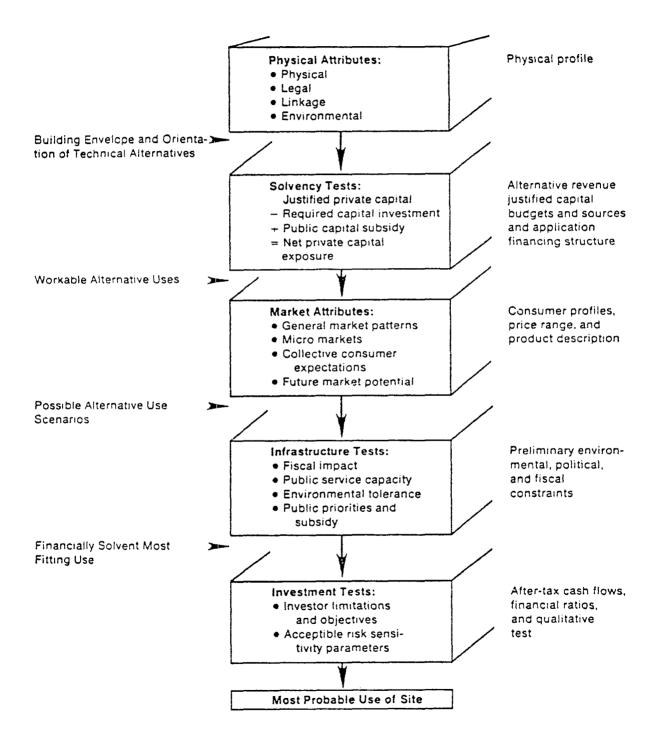


Figure 7
Process for Investor Selection of Real Estate

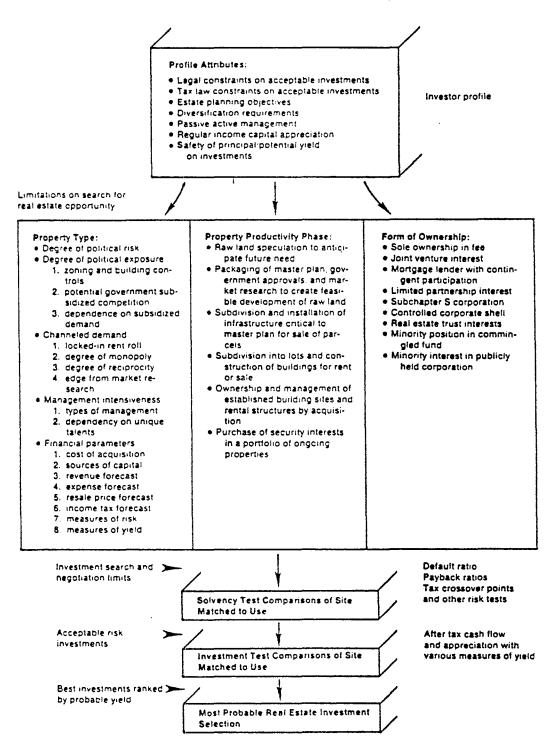
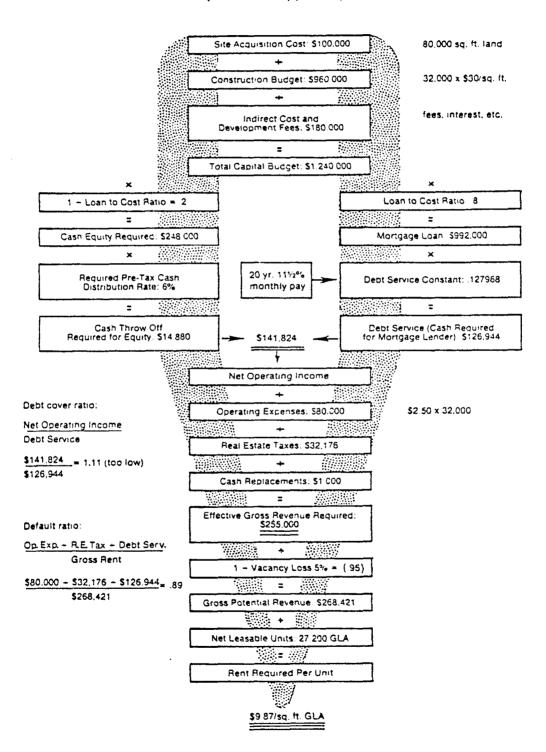


Figure 8

Loan to Cost Ratio Approach
(Frontdoor Approach)



area. Property management indicates cash replacement costs of \$1,000 a year for carpeting. paving, and vandalism loss so that total cost reguired annually is about \$250,000. Assuming a vacancy of 5 percent, this effective gross revenue requirement must be generated from 95 percent of gross leasable area (GLA) of 27,200 square feet. since 15 percent of the 32,000-square-foot building area is committed to corridors, stairways, and utility areas. The balance is included in the leasable area charged to tenants. The result is that the building must rent for at least \$9.87 per square foot of GLA if all claims are to be satisfied. Unfortunately, the maximum rent found in the market for 2 years in the future is \$9.25 a square foot so the building is not competitive. An owner-occupant must question the cost of a building which exceeds rental value of equally suitable space, and a tenant will choose the cheaper space if both buildings are equal in quality and location.

As serious as the marketing problem may be to the developer, the key financial ratios of debt cover and default ratios would be unacceptable to any mortgage lender. The debt cover ratio is the relationship of net income to debt service; and for office buildings, institutional lenders demand that the pro forma ratio fall between 1.2 and 1.3, a parameter which has been relatively constant for many years (ratios available from the American Life Insurance Institute, Washington, D.C.). The solvency test is the cash breakeven point of the building as a business. often termed the default ratio. Lenders and equity investors may agree that for the small suburban office building with multi-tenants with 3- to 5-year leases, they would like to see a cushion of 15-20 percent between gross rents and all operating expenses and debt service commitments. The sum of operating expenses, real estate taxes, interest, and principal payments divided by gross rents indicates the breakeven point is too high at .89, even without allowance for cash replacements and improvements to the property. A cash breakeven or default ratio of .85 would mean a developer could survive a 15 percent vacancy or an increase in operating expenses and real estate taxes of 19 percent ((268,421 x .10) + 112.176 = .239 or 24 percent less 5 percent vacancy]. At this point, the project would have to be scrapped, postponed, or sent back for redesign. It would make more sense to begin with market rent and solve for the total capital budget that would be justified, and this is what has been done in Figures 9 and 10. In Figure 9 the emphasis is placed on meeting the debt cover ratio required by lenders

while Figure 10 uses the enterprise approach of structuring the business to achieve an acceptable risk in terms of cash breakeven point or default ratio. Moving from rent to budget is sometimes called the "backdoor" approach but is the essence of many feasibility studies, and required on the FHA 2013 form for all multifamily FHA insured rental projects, and most state housing finance agency forms. The justified building budget, once determined, becomes part of the program but may be modified by adjustments for the discounted value of other investment objectives such as inflation gains, income tax benefits, or advertising value and other benefits to the owner/occupant.

Figure 10 provides an alternative backdoor approach which is more useful in analyzing enterprise solvency and relative risk contributions of various claims on gross rent potential. Note that in Figure 10, the objective of holding the default ratio to 85 percent of gross potential rent reduces the cash available for debt service and therefore the justified mortgage loan from a maximum of \$992,000 to a maximum of \$788,000. The result is to increase the budget because the equity investor is willing to accept only 6 percent cash return as compared to the lender's claim of .127968, a cash payment which includes 111/2 percent interest and repayment of the loan over 20 years. The lender will not benefit from inflation and will suffer loss of purchasing power which explains his higher interest rate. The equity investor is willing to forego immediate cash income in favor of inflationary increases in future rents and property values. Because the equity investor capitalizes his share of income at a lower rate, the equity position provides considerably more cash. This example is an excellent demonstration that the principle of leverage requires that the cost of funds be less than the return on investment, which in this case would be \$126,000 net income divided by \$1,207,000 total investment or .10, A 10 percent return is lower than either the interest rate of 111/2 percent or the constant of .127968 so that reverse leverage is the result. The more funds that are borrowed, the more risky the investment, and the lower the justified capital investment. Note that a small drop in borrowed funds permitted a large increase in cash equity, improving the solvency position as well as the budget to a more realistic \$37/square feet of gross building area. During the decade of the

Figure 9

Debt Cover Ratio Approach
(A Backdoor Approach)
Lender's Point of View

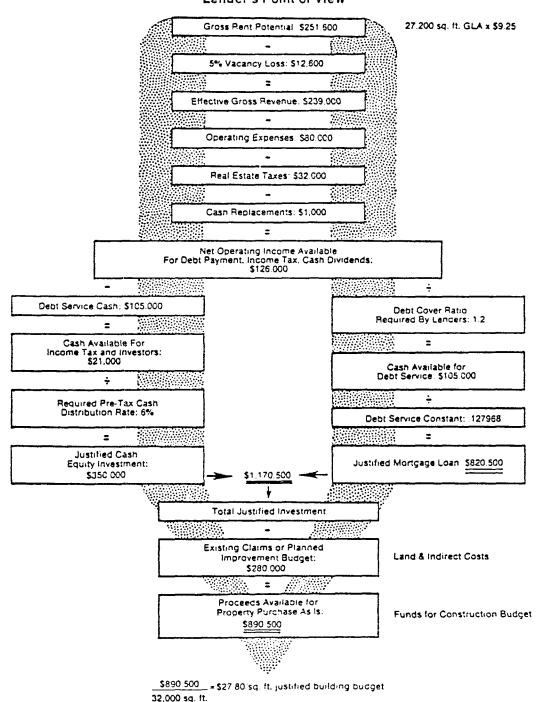
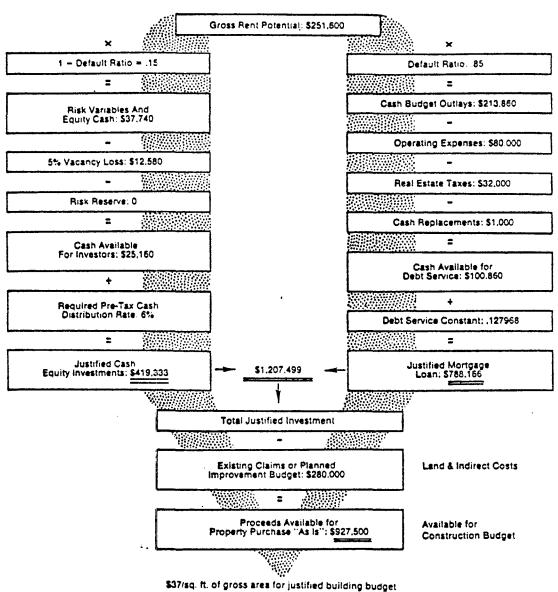


Figure 10
Default Ratio Approach
(Another Backdoor Approach)
Developer's Point of View



1980s, interest rates are forecast to remain above 10 percent and more equity money will be provided for most projects, often raised through group investments such as partnerships and corporations. The loss of cheap money has made it almost impossible to finance 100 percent of a real estate project or to depend on leverage as the primary investment advantage of real estate. If equity investors must risk more of their own money, extending the payback period significantly, they can be expected to be more selective in regard to their investments and those whom they hire for their expertise in design and construction (see Messner, Schreiber, and Lyon).

Regulation of Capital

There was a time when the real estate development process involved individual small firms specializing in just one step of the total development procedure. One firm would subdivide lots, another would build the houses, a third would build the retail buildings, and a fourth would specialize in office and industrial facilities. The latter were typically built primarily by users who rented their surplus space to the general public. Projects were small, prices were lower, and risk capital was local, although commercial property loans were available from national insurance companies. Today the larger development firms have integrated the entire development process from the conversion of raw land to building sites through the construction, marketing, and management of the total neighborhood. Not only has the scale and required capital expanded significantly from small developments to large mixed-use developments, but also the variety of expertise and therefore profit centers retained by a single firm has expanded in a corresponding fashion. The development firm is attempting to control as many profit centers in the development process as possible in order to increase its share of the cash flows that are generated by the development and operations process. However, larger scale projects in an

economy of generally rising and inflationary costs require very large amounts of capital. Therefore, the development process is a partnership between those with the expertise to produce the product and manage the development business, and those with capital, typically more passive institutions and investor groups. A shortage of high-quality buildings and changes in tax laws should reduce turnover and lengthen holding periods to span significant changes in future use. A general trend in the real estate development process toward selective investment by groups of individuals, institutions, or consortiums of public agencies and private real estate investors is leading toward more regulation of real estate financial instruments, similar to the regulation of securities by the SEC. The Internal Revenue Service is concerned with the various tax attributes of each financial format and of the participating members in the investment.

Since pension funds may provide large amounts of equity for real estate in the future, the investment standards of ERISA (Employees Retirement Insurance and Security Act) will influence real estate development. Federal levels of regulation of real estate investment may be expanded if efforts to control inflation shift towards selective credit control rather than general monetary and fiscal controls. In short, the public controls on land use and consumer protection which have so complicated development are being matched by progressively more complex federal, state, and trade association rules on capital investment in real estate (see Roulac).

Capital investment by municipal government and infrastructure agencies may be more regulated than capital in the private sector. Referendums are required for municipal bond issues. The Internal Revenue Service closely reviews economic development bonds and state and municipal charters. Also, Congress is reconsidering the proper uses of taxexempt bonding because voters and legislators at all levels are more nervous about capital risk than are private investors.

Investment Purchase of After-Tax Cash Flow

Money managers for long-term investment funds are purchasing a stream of cash payments over many periods of investment which are generated by real estate. Cash payments may result from rental operations (subject to the income tax), occasional refinancing of the rental project (generally not subject to tax), net profits from resale (generally subject to capital gains tax), or tax savings to other income

of the investor due to temporary deductions for accelerated depreciation, investment tax credits, or other tax incentives. It is this stream of cash which is termed cash throw-off before taxes or cash flow after taxes. When this cash flow is increased by a tax shelter of other income or occasional surpluses from refinancing, it is termed spendable after tax cash. Once the basic financial parameters of a proiect have been estimated using the frontdoor and the backdoor approach and studies discussed earlier. then the financial analysts convert these facts and assumptions to cash flow projections over 5 to 10 years' time using annual, semi-annual, or sometimes quarterly projections. Those who regulate real estate investment are providing administrative rules and parameters on cash flow projections so that financial analysis must move on from the simple basic frontdoor-backdoor approaches outlined in this monograph.

A sample cash flow program and its basic assumptions are provided in Figure 11. In the Report Section Number 3, note that Line 11 of the output shows cash throw-off before taxes. Line 16 shows cash flow after tax and Line 18 shows spendable after tax cash. Lines 30-34 give the before-tax ratios necessary for evaluating project performances. Observe that return on net worth. Line 30, decreases over time and that the default ratio. Line 42, improves with time, indicating that while the project is less susceptible to failure, it may not be leveraged enough. Line 34 reports the present value of the project if operated and then sold at the end of each year and this present value must exceed the original acquisition cost of the project or the cost/benefit ratio is negative. These types of forecasts are generally made with the assistance of small computer systems available from sophisticated mortgage lenders, appraisers, and consultants. The student of development should be aware of the gap between the basic methods of the frontdoor/backdoor approach in defining the financial parameters of physical planning and the detailed procedures of systematic capital investment.

Different investors may participate in the real estate project simultaneously by means of a variety of financial instruments, depending on their investment profile perceptions for income, capital gain, safety, management ability, etc. One investor may own the land and lease it to the real estate venture for a steady rate of return over a 40-year time span, expecting some protection from inflation because at the end of 40 years he will own the land and building. The second investor may prefer to be in the position of mortgage lender, gradually recovering his investment from amortization and possibly protecting his dollars from inflation by participating in a share of the increases in gross rent or net income. A third investor might be willing to accept a small cash dividend and be entitled to use all of the income tax benefits available to the equity owner of the project, while still a fourth investor would pay hard dollars up front for the right to manage the property for a certain percentage of the gross rent and the cash throw-off. The supply of capital from a variety of sources, contract instruments, and rate of return viewpoints is called tiering and requires a thorough knowledge of cash flow planning and financial ratio analysis as well as the present value concept of money. In recent years, tiering of capital for real estate has generally included public capital.

Marketing—The Key to Development Market Research

The revenue flow, on which all assumptions for raising capital to build the real estate rest, begins with a customer. Selling is a method of persuading the customer to accept what is being sold, while marketing helps shape the product and the service to the needs of the user (see Roca). Marketing must serve three ultimate user groups: the individual purchaser or tenant, the collective users operating through the political process to approve or disapprove a project proposal, and future users who can be expected to convert a structure to changing lifestyles and needs at some point in the future.

Figure 11
Example of Computer Forecasting of Suburban Office Investment Cash Flows†

REPORT SECTION 1						
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		MORTGAGE	SUMMARY			
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1 GRCSS RENT 2 LESS VACANCY 3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION: 15 WORKING CAPITAL LCAN	s	251600. 12580. 16000 84000 139020. 45800 144000 -51780 46800 0 -4980 0. 0	251600 12580. 32000. 80000 147020. 45936. 108836 -7752. 45936. 13024 25160. 0 503. 16899 0.	254180 13209 33920. 61200, 155851. 45098. 107256 3497 45098. 14604. 33991 1049 659. 32283	277389 13889 35355 62424 155140. 44285. 105485 15370. 44285. 16375. 43280. 4611 773. 37896	291258 14563 38113. 53672. 174911 43496 103500 27914 43496 18350 53051 3374 04676
1 GRCSS RENT 2 LESS YACANCY 3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATIONS	S TER TAX	251800. 12580. 16000 84000 139020. 45800 144000 -51780 46800 0 -4980 0	251600 12580, 32000, 80000 147020, 45936, 108836 -7752, 45936, 13024 25160, 0 503, 16899	264180 13209. 33920. 61200. 155851. 45098. 107256 3497. 45098. 14604. 33991. 10-9. 659. 32283	277389 13889 35355 62424 155140. 44285 15370. 44285 15370. 44285 16375. 43290. 4611 773. 37896	291258 14563 38113. 53672. 174911 43496 103500 27914 43496 18350 53051 6374 0 44676
1 GRCSS RENT 2 LESS YACANCY 3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION: 15 WORKING CAPITAL LCAN 16 DISTRIBUTABLE CASH AFTER 18 SPENOABLE CASH AFTER	S TER TAX NCOME	251600. 12580. 16000 84000 139020. 46800 144000 -51780 46800 0 -4980 0. 0	251600 12580. 32000. 80000 147020. 45936. 108836 -7752. 45936. 13024 25160. 0 503. 16899.	264 80 13209 33920. 61200. 155851. 45098. 107256 3497 45098. 14604. 33991 1039 659. 32283	277389 13869 35355 62424 155140. 44285 15370. 44285 16375. 43290. 4611 773. 37896	291258 14563 38113. 53872. 174911 43496 103500 27914. 43496 18350 52051 6274 0 44676 0
1 GRCSS RENT 2 LESS VACANCY 3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS OEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION: 15 WORKING CAPITAL LCAN 16 DISTRIBUTABLE CASH AF 17 TAX SAVINGS ON OTHER 18 SPENOABLE CASH AFTER	S TER TAX NCOME	251800. 12580. 16000 84000 139020. 45800 144000 -51780 46800 0. -4980 0. 0. 0. 0. 0.	251600 12580, 32000, 80000 147020, 45936, 108836 -7752, 45936, 0 0 503, 16899 0, 16899, 2325,	264180 13209. 33920. 61200. 155851. 45098. 107256 3497. 45098. 14604. 33991. 10-9. 659. 32283. 0.	277389 13889 35355 62424 155143. 44285. 15370. 44285. 15370. 44285. 4611 773. 37896 0	291258 14563 38113, 53872 174911 43496 103500 27914 43496 18350 53051 6374 0 44676 0
1 GRCSS RENT 2 LESS YACANCY 3 LESS REAL ESTATE TAX 4 LESS EXPENSES 5 NET INCOME 6 LESS DEPRECIATION 7 LESS INTEREST PMTS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PMTS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION: 15 WORKING CAPITAL LCAN 16 DISTRIBUTABLE CASH AFTER 18 SPENOABLE CASH AFTER	S TER TAX NCOME	251600. 12580. 16000 84000 139020. 45400 144000 -51780 46800 0 -4980 0. 0 0 0 0 15534 15534	251600 12580. 32000. 80000 147020. 45936. 108836 -7752. 45936. 13024 25160. 0 503. 16899. 2325. 19225.	254180 13209 33920. 61200. 155851. 45098. 107256 3497 45098. 14604. 33991 1049 659. 32283 0. 32283 0. 32283	277389 13869 35355 62424 155143, 4285, 16375, 43280, 4611 773, 37896 0 37896,	291258 14563 38113. 53672. 174911 43496 10350 27914 43496 18350 53051 0 44676 0 44676
1 GRCSS RENT 2 LESS VACANCY 3 LESS REAL ESTATE TAX 4 LESS ERPENSES 5 NET INCOME 6 LESS OEPRECIATION 7 LESS INTEREST PATS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PATS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION: 15 WORKING CAPITAL LCAN 16 DISTRIBUTABLE CASH AF 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTER MARKET VALUE & REVERSION CASH FLOW ANALYSIS 19 END OF YEAR MARKET V. 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM CASH RESE 23 BEFORE TAX NET NORTH 24 CAPITAL GAINS TAX	S FTER TAX INCOME R TAXES ALUE ERVES	251600. 12580. 16000 84000 139020. 46400 144000 -51780 46800 0 -4980 0 0 0 0 0 0 15534 15534 15534 15534 1780 1770 271460 117790 117790 117790	251600 12580. 32000. 80000 147020. 45936. 13024 25160. 0 503. 16899. 0. 16899. 2325. 19225.	254180 13209 33920. 61200, 155851. 45098. 145098. 14604. 33991 1049 659. 32283 0. 32283 0. 32283 1556510 77926 924615. 13061 559031 352185	277389 13869 13869 35355 62424 155140, 44285 16575, 43280, 4611 773, 37896 0 37896 0 37896 1551404 82570, 908240 14438 675081 477634 577316	291258 14563 38113. 53672 174911 43496 103500 27914 43496 18350 53C51 6374 0 44676 0 44676 1749106 87455 88988 55212 786982 607655 72918
1 GRCSS RENT 2 LESS VACANCY 3 LESS REAL ESTATE TAX 4 LESS ERPENSES 5 NET INCOME 6 LESS OEPRECIATION 7 LESS INTEREST PATS 8 TAXABLE INCOME 9 PLUS DEPRECIATION 10 LESS PRINCIPAL PATS 11 CASH THROW-OFF 12 LESS INCOME TAXES 13 LESS RESERVES 14 CASH FROM OPERATION 15 WOPKING CAPITAL LCAN 16 DISTRIBUTABLE CASH AF 17 TAX SAVINGS ON OTHER 18 SPENDABLE CASH AFTER MARKET VALUE & REVERSION CASH FLOW ANALYSIS 19 END OF YEAR MARKET V. 20 LESS RESALE COST 21 LESS LOAN BALANCES 22 PLUS CUM CASH RESE 23 BEFORE TAX NET WORTH 24 CAPITAL GAIN HE SOLOI	S FTER TAX FINCOME R TAXES FINES FINES FINES FINES	251600. 12580. 12580. 16000 84000 84000 139020. 45800 0 -4980 0 0 0 15534 15534 15534 1390200 69510 960000 10770 371460 117390	251600 12580, 32000, 80000 147020, 45936, 13024 25160, 0 503, 16899, 0, 16899, 2325, 19225, 19225,	264 180 13209 33920, 61200, 155851, 45098, 107256 3497 45098, 14604 33991 1049 659, 32283 0, 32283 0, 32283 1558510 77926 924615, 13061 569031 33021 569031 352125	277389 13889 13889 35955 62424 155140. 44285. 165140. 44285. 15370. 44285 16375. 43280. 4611 773. 37896 0 37896. 0 37896.	291258 14563 38113. 53872. 174911 43496 103500 27914. 43496 18350 52051 6274 0 44676 0

BEFORE TAX BATIO ANALYSIS					
CASH FLOW ANALYSIS					
	1980	1981	1982	1983	198
30 RETURN ON NET WORTH BI4 TAX	0.2592	0 3102	0.2850	0 2624	0 244
31 CHANGE IN NET WORTH B 4 TAX	76460	97823	99748	106050	111901
32 ORIG EQUITY CASH RTNB 4 TAX	-0.0169	0.0853	0.1152	0.1467	0.179
33 ORIG EQUITY PAYBACK B 4 TAX	0 0000	0 0573	0 1667	0 2952	0 446
34 B4 TAX PRESENT VALUE	1284319	1335057	1385464.	1431682	1473578
AFTER TAX RATIO ANALYSIS					
CASH FLOW ANALYSIS	198C	1981	.002	1983	100
			1982	1963	196
35 RETURN ON NET WORTH AFR TAX	0.2541	0.2845	0.2640	0 2443	0.225
36 CHANGE IN NET WORTH AFR TAX	55433	81619	82847.	88871	94410
37 ORIG EQUITY CASH RTN AFR TAX	0 0527	0 0652	0 1094	0.1285	0.151
38 ORIG EQUITY PAYBACK AFR TAX 39 AFTER TAX PRESENT VALUE	0.0527	0.1178	0.2273	0 3557	0.507
CASH FLOW ANALYSIS	1287405.	1322538	1363042.	1399418.	1432025
ENSIT FEOR BROCE SIS	1960	1981	1982	1983	198
40 NET INCOME-MARKET VALUE RTO	0.1000				
41 LENDER BONUS INTEREST RATE	0.0000	0.1000 0.0000	0.1000 0.0000	0.1000 0.0000	0 100 0.000
42 DEFAULT RATIO	0.9698	0.8500	0.8213	0.7940	0.76
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981					
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED -		0.8500	0.8500	0.8500	0.850
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL -		9698.0	0 8500	0.8213	0.794
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER -					0.850 0.794 0.056
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL -		9698.0	0 8500	0.8213	0.794
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1951 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01	,	9698.0	0 8500	0.8213	0.794 0.056
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING	BY	0.9698 -0.1198	0 8500 0.0000	0.8213 0.0287 1982	0.794 0.056
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH OUTLAYS	BY BY	0.9698 -0.1198	0 8500 0.0000 1981	0.8213 0.0287	0.794 0.056
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH DUTLAYS REAL ESTATE TAXES		0.9698 -0.1198 -1980 -0.1573	0.8500 0.0000 1981 0.0786	0.8213 0.0287 1982 0.0779	0.794 0.056 <u>194</u> 0.071 0.044
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES	BY	0.9698 -0.1198 -0.1196 -0.1573 -0.0300	0.8500 0.0000 1981 0.0786 0.0419	0.8213 0.0287 1982 0.0779 0.0432	0.794 0.056 199 0.077 0.044 0.044
DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS	BY BY	0.9698 -0.1198 -0.1198 -0.1573 -0.0300 -0.0466	0.8500 0.0000 1981 0.0786 0.0419 0.0419	0.8213 0.0287 	0.794 0.056 194 0.071 0.044 0.004
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS	8 Y 8 Y 8 Y 8 Y 8 Y	0.9698 -0.1198 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000	0.8500 0.0000 1981 0.0786 0.0419 0.0419 0.0000	0.8213 0.0287 	0.794 0.056 199 0.071 0.044 0.000 0.026
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN	8 Y 8 Y 8 Y 8 Y 8 Y 8 Y	0.9698 -0.1198 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000 0.0000	0 8500 0.0000 1981 0.0786 0 0419 0 0000 0.0231 0.1932 0 0000	0.8213 0.0287 1982 0.0779 0.0432 0.0432 0.0000 0.0246	0.794 0.056 199 0.071 0.044 0.000 0.026 0.166
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH DUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME	BY BY BY BY BY BY	0.9698 -0.1198 -0.1573 -0.0300 -0.0465 0.0000 -0.0175 0.0000 0.0097	1981 0.0786 0.0419 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0085	0.8213 0.0287 0.0287 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0002	0.794 0.056 0.071 0.044 0.000 0.000 0.021 0.000
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME	BY BY BY BY BY BY BY	0.9698 -0.1198 -0.1198 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000 0.0000 0.0007 0.0097	0.8500 0.0000 1981 0.0786 0.0419 0.0000 0.0021 0.1932 0.0000 -0.0085	0.8213 0.0287 0.0287 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809 0.0000	0.794 0.056 0.077 0.044 0.000 0.026 0.166 0.000 -0.007
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH DUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME	BY BY BY BY BY BY	0.9698 -0.1198 -0.1573 -0.0300 -0.0465 0.0000 -0.0175 0.0000 0.0000 0.0000 0.00097 0.0000	0.8500 0.0000 1981 0.0785 0.0419 0.0419 0.0000 0.0221 0.1932 0.0000 -0.0085 -0.0085 0.0000	0.8213 0.0287 0.0287 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0002	0.794 0.056 0.077 0.044 0.000 0.026 0.166 0.000 -0.007
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS	8 Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	0.9698 -0.1198 -0.1573 -0.0300 -0.0456 0.0000 -0.0175 0.0000 0.0097 0.0097 0.0000 1960	1981 0,0785 0,0419 0,0419 0,0419 0,0000 0,0221 0,1932 0,0000 -0,0085 -0,0085 0,0000	0.8213 0.0287 0.0287 0.0779 0.0432 0.0032 0.00246 0.1809 0.00062 -0.0062 -0.0062 0.0000	0.794 0.056 0.056 0.077 0.044 0.004 0.002 0.102 0.1000 0.000 0.000
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT	BY BY BY BY BY BY BY	0.9698 -0.1198 -0.1573 -0.0300 -0.0456 0.0000 -0.0175 0.0000 0.0000 0.0007 0.0007 0.0000 -0.0000 -0.1573	0 8500 0.0000 1981 0.0785 0 0419 0 0419 0 0000 0.0221 0.1932 0 0000 -0.0085 -0.0085 0.0000	0.8213 0.0287 0.0287 0.0779 0.0432 0.0032 0.0020 0.0246 0.1809 0.0000 -0.0062 -0.0062 -0.0062 0.0000	0.794 0.056 0.056 0.077 0.044 0.004 0.002 0.102 0.1000 0.000 0.000
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT SITE	BY BY BY BY BY BY BY BY BY	0.9698 -0.1198 -0.1198 -0.1573 -0.0300 -0.0465 0.0000 -0.0175 0.0000 0.0000 0.00097 0.00097 0.0000 -0.1573 -1.9499	0 8500 0,0000 1981 0,0786 0 0419 0 0419 0,0000 0,0221 0,1932 0,0000 -0,0085 -0,0085 0,0000 1981 0,0786 0,9750	0.8213 0.0287 0.0287 0.0779 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0062 -0.0062 0.0000 1962 0.0779	0.794 0.056 0.056 0.077 0.044 0.002 0.169 0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.000 -0.0000 -0.000 -
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT SITE CONSTRUCTION	8 Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y 8 Y Y Y 8 Y Y Y 8 Y Y Y 8 Y Y Y 8 Y Y Y 8 Y Y Y Y 8 Y Y Y Y 8 Y Y Y Y 8 Y	0.9698 -0.1198 -0.1573 -0.0300 -0.0465 0.0000 -0.0175 0.0000 0.0000 0.0000 -0.0097 0.0097 0.0090 -0.1573 -1.9499 -0.2031	1981 0.0786 0.0419 0.0419 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0085 -0.0085 0.0000 1981 0.0786 0.9750 0.1016	0.8213 0.0287 0.0287 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0062 -0.0062 0.0000 1982 0.0779 0.9658 0.1006	0.794 0.056 0.077 0.044 0.007 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY DNE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT SITE CONSTRUCTION SOFT COSTS	BY BY BY BY BY BY BY BY BY	0.9698 -0.1198 -0.1573 -0.0300 -0.0465 0.0000 -0.0000 0.0000 0.0000 -0.0097 0.0000 -0.1573 -1.9499 -0.2031 -1.0833	1981 0.0786 0.0419 0.0419 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0085 -0.0065 0.0000 1981 0.0786 0.9750 0.1016	1982 0.0287 0.0287 0.0779 0.0432 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0062 -0.0062 0.0000 1982 0.0779 0.9658 0.1006 0.5365	0.794
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS TOTAL PRINCIPAL PMTS WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME VARIABLE INCOME COMPONENTS INITIAL INVESTMENT SITE CONSTRUCTION SOFT COSTS MORTGAGES	8 Y Y Y Y Y Y B Y Y B Y Y B Y Y B Y Y Y Y Y B Y Y B Y Y Y Y B Y Y B Y Y B Y Y B Y B Y B Y B Y B Y B Y B Y B Y B Y B Y B Y B Y	0.9698 -0.1198 -0.1573 -0.0300 -0.0465 0.0000 -0.0000 0.0000 0.0000 -0.0000 -0.1573 -1.9499 -0.2031 -1.0633	1981 0.0786 0.0419 0.0419 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0085 -0.0065 0.0000 1981 0.0786 0.9750 0.1016 0.5416	0.8213 0.0287 0.0287 0.0779 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0062 0.0000 1962 0.0779 0.9658 0.1006 0.5365 1982	0.794 0.056 0.077 0.044 0.007 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
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This example is based on earlier Figures 8-10.

The computer output is a portion of report sections available from an educational program at the University of Wisconsin cared MR CAP MR CAP is a basic class toor in most rear estate bourses at the University of Wisconsin on MB3 osn and is available on many other campuses as well MR CAP is the proceding or its author. Assistant Professor Michael L. Robbins, and sample output here is reproduced with his permission.

Data input file required of analyst for the five reports which follow

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Marketing is also intended to protect the developer from the uncertainty of competitive pricing. Free enterprise includes the art of creating a monopoly, if only for a moment, so that as a developer one is not forced to use price cutting as a primary device to acquire business. Profit margins typically are not adequate to provide for price cutting. As one analyst once stated, "If you compete on price, there is always someone who can build for less, and by the time he learns his true costs, all of us will be broke." Therefore, marketing is intended to create a product which is unique, in terms of sensitivity to the needs of the consumer, and which reduces the other costs of the consumer to a point where the intended buyer or tenant will pay full price.

A strong marketing position requires careful research of the needs and budget limits of the prospective user. No American industry spends less on legitimate consumer research and product development than does the real estate industry. This failure to spend even 1 percent of project budgets. on primary research about the intended consumer is one explanation for many business failures of real estate projects across the land. Developers simply misjudge the number of consumers in the market, the needs as those consumers perceive them, and the rate at which new units can be absorbed in the marketplace. There is great irony in the fact that mortgage lenders expect insurance premiums to be paid in advance in case the project should burn down but typically require nothing in the way of original research to discover whether the project will rent up. Nevertheless, real security for their loan is a customer, not a fire. Lenders assume that a developer with "a track record" knows his market from past projects, but past success is no quarantee. that any demand remains unsatisfied or that market action has not shifted its location and product preferences. Design serves society best when it serves the intended user rather than the normative standards of the designer or developer or yesterday's market.

Market Data Versus Merchandising Data

Market data is typically aggregate data describing population by age group, income category, business activity, location of residence, average price of home, and other statistical information typically collected by planning offices, census data, and other public sources. Market data will assist in scaling the project so that 800 housing units are not planned for a community that will only need 600 in the foreseeable future. It may measure the expected rate of absorption for broad categories of space, say 500,000 square feet of class A office space, 200 condominium units, or 600 single-family lots per year. More to the point, however, is how much of that potential market can be captured for a specific project and this capture rate is related to merchandising data.

Merchandising data is typically collected with a specific project in mind and involves primary research by the analyst with the objective of determining the competitive standard of project attributes and discovering the unmet needs in the market which could provide the competitive edge. In some markets, the competitive standard becomes a very precise and well-known set of specifications. The competitive standard in apartments in the Southwest reveals consistent standards for the number of inches of counter space, cabinet fronts. the weight of carpeting, the cost of the dining room fixtures, and the basic size of rooms. The consumer has taken these for granted and competitive developers have studied each other carefully to measure what the consumer expects as a basic minimum. Everyone expects a bathroom; however, the bathroom may have a variety of layouts which are more convenient, private, spacious, etc. Office buildings also may have a basic competitive standard of one parking stall for every 300 square feet of gross leasable area. Ceiling and lighting systems may be standard, and wall systems may be standard.

A competitive edge depends on finding a true unmet need of a particular consumer group. It is not an edge obtained through gimmicks and cleverness on the part of the designer or the developer. The competitive edge typically is created by finding

methods to enhance user self-esteem or to reduce the cost of friction, of anxiety, or of inefficient space layouts housing the user's activity. Medical office layouts can be more efficient with structural column systems which may not fit general office use with the same net product of useable space. Customers may be attracted to a store with better access to parking, wider parking stalls, or better linkages to work and home. An alternative is to reduce the level of anxiety of the user in terms of security of property and person or as to future adjacent development or control of other tenants in the project. A third method of creating a competitive edge is to enhance the consumer's sense of well-being by selling him on the more comfortable romantic lifestyle of a particular project, or the prestige which is to be transferred and contributed to the consumer for locating in a specific project. Another method of building a competitive edge is to shift the balance of who typically pays and who typically benefits in the marketplace. For example, the apartment project located on the site adjacent to a major park provides all the benefits of open space, control of neighboring properties, and convenience of recreational alternatives without necessarily requiring the tenant to pay the true cost. Of course, it may be that the site is more valuable because of its proximity to publicly maintained and operated amenities. Nevertheless, over the long run, there is a significant cash cost benefit shift from those who live closest and enjoy the park most to those who are expected to pay real estate taxes in general to support parks in other parts of town from where they themselves live.

Finally, the competitive edge may be created by shifting or reducing the risk of change. For example, a primary advantage of a shopping center development where the developer has achieved an operating agreement with three or four major department stores is that he can now promise the smaller retailers who locate within that shopping center control of the total shopping environment by a single landlord. In addition, the operating agreement guarantees joint marketing and promotion of the center by major department stores who have committed themselves to operate under their own brand names for at least 25 years in the future. The developer will maintain certain tenant mixes, park-

ing ratios, and housekeeping standards for long periods of time. Thus, the small retail tenant is willing to pay a premium rent to be in a shopping center as opposed to locating in a commercial strip where there is no assurance that those department stores on which he may depend for primary draw, the parking on which he may depend for convenience, and the tenant mix and marketing efforts in his symbiotic relationships can be sustained over long periods of time without drastic and critical changes detrimental to his business.

There is little monopoly to be gained by providing the identically same product as those already in the marketplace. Monopoly is achieved when you can find a group unserved adequately by present offers, a gap, if you will, of unmet needs within an array of small micro-markets that in total create that vague and nonexistent phenomenon called the real estate market. Consider that a 25-unit apartment project today may require as much as \$1,000,000 in capital and \$240,000 of annual rents (sales), which is more capital and more sales than is characteristic of 65 percent of all American enterprises. Nevertheless, this big business needs only 25 customers who find it unique because of its sensitivity to their needs.

Marketing Research and the Collective Consumer

Recently, marketing research survey techniques have been used advantageously to control political risks which are inherent in a regulated process like development. Before spokesmen for neighborhoods or trade associations or other collective segments of the community can render public opinions which are difficult to retract, it is useful to discover whether expressions of concern about traffic congestion, environment, or fiscal impacts are only good reasons for the tendency of people to fear change in the physical status quo of their lives. These fears can be recognized and resolved in preliminary plans to defuse negative political action. Indeed, some political polister firms can be found doing housing, downtown mall, and redevelopment attitude studies in advance of public and private planning efforts.

For example, a developer acquired a three-block area of a downtown, single-family residential area with the intent to upzone the land for garden apartments. The plot had been vacant for many years, and there was now a scattered stand of walnut and maple trees. A political survey by mail of residents within half a mile of the site generated a high rate of response so that the developer was able to defuse latent fears before any preliminary plan galvanized the neighborhood into an unnecessary political confrontation. The plan showed that two dead-end streets were cul-de-saced and flanked with singlefamily townhouses compatible with existing homes. Favorite neighborhood pathways were maintained in the site plan, paved, and lighted. Resident parking was placed below the proposed structures; trees were mapped and virtually all were saved in the placement of structures. Guest parking was bermed and driveway outlets carefully placed to avoid conflict with a neighboring church, arterial, and bus stops. The architectural styling required use of old brick, shingles, and the wood detailing of the early Victorian and midwest farm styles which characterized the neighborhood. Finally, a Victorian gazebo was placed at the key intersection as a bus stop and as the logo for the development.

The neighborhood ad hoc committee not only approved the architectural program, but also secured the approvals of the City Planning Commision, which issued a commendation. Research prevented inadvertent detailing of preliminary plans which might have triggered bitter political resistance leading to a hardening of positions to avoid personal embarrassment. Egos in place of facts ultimately leads to unreasonable and noncommunicative negotiations of all parties in the real estate development permit process.

Another primary problem in marketing research is determining whether the collective consumer truly understands the fiscal impacts of broad value judgments which are often the grist for newspaper and political debates. Growth management may need to be redefined in terms of long-term fiscal impacts, as has been done for a number of communities in California (i.e., San Jose) and elsewhere recently (see Roca; also see Gruen Gruen + Associates). The residents may be working against their better interest by blocking further development of a tax base which can share in the costs of providing adequate water treatment, expanded sewer facilities, and other services desired by the community.

The Prearchitectural Marketing Program

Careful consumer marketing research through a telephone survey, mail questionnaire, and personal interview permits development of a prearchitectural marketing program for each project proposal. First, it is necessary to define a particular market segment or micro-market toward which the project is directed. One developer in the Chicago market has identified 13 single-family home purchase groups ranging from the young family with children to the unmarried, single individuals seeking some tax shelter for his professional income. Each group is surprisingly predictable in terms of needs, budgets, season of the year for purchase, and style preferences. Another award-winning builder in Denver summarized the personality of single-family homebuyer segments at the upper end of the market by stating his firm catered to the French cuff and study set, competitor A reached the buttondown collar boys, while competitor B focused on the Pendleton plaid woolen shirt crowd. Similarly, office building users can be segmented by those whose customers come to them versus those who go out to meet the customer on his turf, those linked to the courthouse or the financial district and those linked to the suburban service base, those linked to production facilities and those closely linked to merchandising areas, and so on. Each will rank style, convenient access of parking, special linkages, monthly costs, and peer group proximity quite differently.

A significant part of the merchandising strategy is anticipation in the design program and product perception by means of the sales themes, logos, and competitive sales points to be advanced by the project. Moreover, the designer needs to consider what will be used as an initial sales area, which units may serve as models, and whether the approach zone to the project is a positive reinforcement of project image. The approach zone, of course, will consider signs, entrances, paving, site development, and the visibility of positive project amenities to the prospects arriving on site by foot or by car. Too often the architect treats the merchandising campaign of the developer's marketing force as an area of discipline remote and unrelated to the design process. The result will be projects like those designed for the New York Housing and Urban Development Authority, which placed chic, cubist, early Marekesh, epoxy apartments in small New York communities which favored the New England colonial and early American styles of architecture. Neither logo, project title, nor furnishings related to the preferences and patterns of the community, and the initial fears of subsidized housing were simply aggravated by providing no sense of architectural

identification with the community. Marketing is not a distinct discipline from design but is in fact a significant portion of the prearchitectural program.

Anticipating the Future User

Most structures outlive the lifestyle, cultural, and business needs for which they were originally intended. Recently, development emphasis has been placed on the recycling of older buildings to new and unintended uses as compared to their original function. These adaptive use efforts have been most successful where floor load capacity in the old structures was generous, ceiling heights were adequate, and column spacing was modular and flexible. Long-term investors now recognize the probability that many buildings will change uses during the time of ownership so that investment safety is linked to project designs which anticipate convertibility of space-time units from one function to another.

The alternative to recycling is a high profit margin and high rate of return on capital which permits rapid recovery of investment and junking of improvements at the end of their useful life. A multistory parking garage might be better designed so the floors are flat rather than sloped and have a higher floor load capacity than required for American over-sized automobiles. In the foreseeable future smaller cars will mean a higher concentration of weight loads, and in the longer term it may be desirable to convert parking garages to office space or warehouses. The added cost might be offset by parking fees, higher salvage costs in the structure, or lower interest rates on capital provided.

For many years, rental office buildings have used utility grid systems, modular ceiling units, and *HVAC systems which anticipate continual rearrangement of office layouts and equipment. This anticipation of future users must be extended to other forms of real estate and the added capital cost incorporated in the capital budget and rent structure. Computer cash flow models have made it possible to compare cost/benefits of alternative building concepts in terms of maximizing the present value of spendable cash for private investors or minimizing the present value of building life cycle cost outlays on public buildings. It is imperative that

all parties in the development process learn present value methods of money management reflecting compound interest over time (see Grant and Ireson). Although future needs and lifestyles cannot be anticipated with great accuracy, there is growing recognition that the undefined future user must be considered explicitly in the initial investment formula and design program, Institutional investors need long-term productive investments with protection against the reverses of a fast changing society; society needs structures which can be recycled in order to conserve the energy required of new development and to speed the response of the urban fabric to changing conditions, thus avoiding the wholesale obsolescence of neighborhoods, the glacial pace of land use succession, and the intolerable cost of past urban renewal programs.

Foreseeable future trends have many subtle impacts on real estate development. Conservation of prime agricultural lands for future food supplies may shift residential development into the hills or into higher density condominiums in formally exclusive, detached single-family home areas. Subdivision layouts will recognize the need for better solar orientation of structures, to anticipate improved technology and changing cost effectiveness ratios for solar energy, and home design will invest in features which reduce heat gains and losses, not only to reduce current energy consumption, but also to attract even more energy conscious buyers at the time of resale, thus protecting investment value. As these added costs modify the pricing structure and trade-off issues for the real estate consumer, the defined competitive standard will begin to shift. For example, in California the basic 1.500-square-foot house has shrunk recently to perhaps 1,300 square feet in order to maintain price, to reduce the space that must be heated and cooled, and to hold total monthly housing costs within income limitations of the consumer. Notice that the ability to internalize these requirements in the capital cost/monthly payments and therefore the cash cycle of the user begins to provide an infinite number of trade-off decisions for the developer, the consumer, and the public agencies regulating the development process. Overregulation can adversely influence capital cost and monthly cash payments (see U.S. General Accounting Office). Sensitivity to the cash cycle and therefore the rent or purchase price that is within the means of the consumer permits a gradual and economically smoother transition to a modified view of the marketing and development process.

The Ethics of Fit and Monopoly

The concept of monopoly or design to channel demand insulated from direct price competition to a project is often regarded as suspect with respect to the free enterprise system, but just the opposite has been demonstrated here. There is a direct relationship between the ethics of fitting a project to the environmental constraints of a site, to the needs and budget of the eventual user, and to the concerns and fears of the collective consumer, and the uniqueness of a project which creates a monopolistic dimension in its pricing. A full price willingly paid by the individual user measures satisfaction and maximizes investment value by stabilizing many of the critical risks of the development process for the investor. Feasibility was defined as measuring the fit of the project to its physical context, to its intended users, to the objectives of the investor, and to the limited resources of the developer and the community. While fit of a project design to soil profiles and topography maps is taken for granted, lest the structure collapse or sag, it is not generally accepted that the project will financially collapse if it is not sensitive to customer profiles and cash cycle topology. These steps will greatly reduce both the variance between expected revenues and those which are achieved and the variance in cost from budgets to those which are actually incurred, as well as reduce the risk of upset due to political resistance, rejection by the financial markets, or inflexibility to changing conditions and market needs. Sensitivity is the source of monopoly pricing, and strong demand with stability of the pricing structure is the primary concern of the financial manager, the marketing director, and the physical planner. In the past, prearchitectural or design programs were primarily concerned with product specification and site characteristics. However, modern design philosophy has been proadened to recognize that the product and the site contribute significantly to revenues and expenses of the enterprise. Because the financial flows of the project are intimately and inseparably related to the design product, it is necessary to recognize the cash cycle criteria of the users, the selection criteria of capital investors, and the mechanisms of risk management with which capital budgeting decisions are made in the development process.

Summary

Each new development, large or small, is an enterprise and a subsystem within a larger environment. The form and behavior of that enterprise will be a consensus or equilibrium between external forces of interest and the force of talents, energies, and resources internal to the development enterprise. Such an equilibrium is reached more efficiently through an appreciation of joint objectives of development participants rather than through confrontation and desperate pursuit of total victory in a contest of wills. All of the development groups-the consumer group, the production group, and the public infrastructure group—are limited by their cash receipts and the need for solvency as well as dependent upon one another for their cash income; each has a financial interest in the survival of the others. Thus, solutions to business and political problems are most productive in a cooperative environment (see McDonald).

The development process is a loop system involving many subsystems or cash cycles. Today's buyer of a development product is tomorrow's customer for services from the public infrastructure. Without new customers the infrastructure may not operate at its most efficient scale, thus overcharging consumers or deferring charges to future users.

The development process is the interaction of the three major groups to produce land use plans and building specifications where the present value of the benefits to each group exceeds the present value of all expenditures that will be required of each group over the life of the development. More specifically, it is a cash cycle investment which requires: 1) present value of the benefits to equal or exceed present value of the cash outlays and 2) cash receipts from all sources including borrowing and ownership interest to equal or exceed net cash outlays, including repayment of debt and dividends on ownership capital, in each accounting period in order to survive as a justified economic project. Public buildings should be designed to minimize the present value of all cash outlays, direct and indirect, over the life of the facility, and private development should maximize the present value of spendable cash dollars after all expenditures, including taxes.

Real estate development, whether public or private, is constrained by solvency and uncertainty. Because cash projections depend on an infinite number of

assumptions, explicit and implicit, about the future, all parties to the development process must tolerate variance in their cash planning and negotiate a risk management plan which is equitable. Rish should be reduced through merchandising research, tight control of development plans, and incentive rewards and penalties for managerial operation. Risks must be allocated to match expertise and responsibility for execution of a plan or responsibility for time delay. Changes to cash plans must occur within cash tolerances of all parties with a vested interest.

The development process historically has been viewed in terms of individual benefit (highest and best use) and has only recently accommodated political interests (most probable use); the search is now on for the law and technology in which real estate development can reflect the needs of society as a cluster of groups (most fitting use). The development process is our most challenging manufacturing process because its subsystems are complex and because it is the instrument of change which affects all of a community and a society.

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COURSE/INSTRUCTOR EVALUATION

Using a scale of 1 - 5, where 1 = lowest and 5 = highest, please rate the extent to which:

Graaskamp

1.	the objectives of the session were stated clearly				
2.	the course objectives were fulfilled				
3.	the instructor knew the subject thoroughly				
4.	the session was well-organized				
5.	the material was presented in an interesting manner				
6.	you were encouraged to ask questions/express opinions				
7.	questions were answered to your satisfaction				
8.	what is your overall opinion of the course content/session? (5 = excellent; 1 = poor)				
9.	what is your overall opinion of the instructor? (5 = excellent; 1 = poor)				
10. Additional Comments: (please specify which course/instructor):					
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HOUSING MARKET ANALYSIS

James Graaskamp

- I. Every real estate project is a cash cycle enterprise which depends on customers willing to spend dollars in their own self-interest. Not only is each real estate project an individual enterprise, it is also a subsystem within a network of collective interdependent enterprises, each of which must be persuaded that their own needs and goals are furthered by interfacing with certain real estate.
 - A. In the broadest sense, market research investigates any factor influencing communication, persuasion, or recognition of needs and motivations in the transactional interface of enterprises in the real estate network. This includes local political controls on entitlement to new entrants, the bargaining power of customers and suppliers, and changing land use patterns and technologies affecting land use.
 - B. In the narrower sense, market research is concerned with securing a customer's commitment to the enterprise with a high degree of predictability to control the variance in cash flows, growth in values, and other financial performance derivative of a customer.
 - C. To paraphrase Peter Drucker, once business has created a customer, everything else it does may be redundant.
 - D. In a market system, free enterprise is the art of creating one's own monopoly, at least for a moment, in the mind of the customer for partial protection against price competition and the necessity of sharing a limited market.
 - 1. For products. monopoly requires at least one element of control in terms of raw material, location, and political entitlement, relevant design, unique design, unique service, control of distribution channels, or good timing.
 - 2. For services, monopoly requires control of the customer through behavioral conditioning, or consumer inertia toward an opportunity to change habits.
 - Real estate is a combination of product and service, and therefore real estate monopoly has the greatest number of options to exploit when shaping marketing efforts of the firm.
 - 4. The long lead time required to change supply to meet demand creates unique opportunity for developing a monopoly by decision-making finesse relative to politics of location, timing of financing, and delivery and forecasting of demographic shifts and changing consumer preference.
- II. Repayment of a loan according to its terms presumes the real estate

enterprise revenue and net income is generated on schedule as anticipated in the pro forms. Revenue and net presume a customer so that the ultimate risk management control is the ability to identify and benefit from customer behavior and commitment. The housing customer must be motivated to invest money in his self-interest.

- A. Traditional market research depended on the demographics of age, family status, income, education, and locational patterns.
- B. Market supply was defined in terms of structural category (single family detached, attached, multi-family) and further subdivided by tenure--ownership, rental, coop, or condo.
 - 1. Absorbtion rates indicate the ratio of a defined supply of existing units sold, rented, AND OCCUPIED in a given year.
 - CAPTURE RATES are the critical product of market research—the sahre of market required to sell or rent the proposed project.
- C. The housing industry has moved beyond demographics to sophisticated analysis of family values and life-styles.
 - 1. Psychographics use multi-dimensional demographic subsets as a proxy for preferences in style.
 - More recetnly, it is recognized that within age, income, education, there are significant subgroups, such as the VALs system developed by the Stanford Research Institute sociologists.
 - 3. The American housing consumer is highly programmable and far more segmented than the banking market. Bankers have discovered upscale, private, personal, family, and mass submarkets. The upscale housing market may have fifteen subcategories in a town the size of Madison.
- D. The developer must also research the collective consumer who sets the political attitude relative to political entitlements and must complete that research before any project plans are announced.
 - 1. Contiguous land ownerships
 - 2. Neighborhood associations
 - 3. Alderperson and City Council attitude
 - 4. Decision patterns of commissions with jurisdiction
 - 5. Legislative trends toward new regulations during time cycle of development

- E. There are four significant areas of specialization in customer research for housing.
 - I. Market Research is defined as research of secondary date sources to define trends, patterns of geographic fragmentation and clusters of market segmentation which scale the size of any enterprise opportunity and provide a link between site and marketplace. Shifts in the demand/ supply equilibrium of space/time units will be derivative of changes in: demographic trends; psycho/social value trends; available investment capital allocations and interest cost trends; technological trends; environmental trends; energy cost impact trends; locational preferences; income redistribution through federal fiscal budget and tax policy.
 - 2. Merchandising research is defined as primary research of specified subsets of customers and competitive supplies in order to confirm appropriate ratios for the disaggregation of aggregate data to identify location, space and amenity needs, and to specify levels of effective demand. (According to a Chicago builder, the market for two-bedroom townhouses may be subdivided among 13 different family status groups.)
 - 3. Political research is defined as primary research of specified subsets of political decision makers and their constituents in order to anticipate and influence legislative decisions, commission rulings and attitudes of specific political persons and blocs. Projects must be marketed to collective consumers to minimize the generation of political resistance to the project by inadvertently providing features or marketing themes that stimulate negative political action.
 - 4. Promotional research is defined as investigation of media channels, messages and subliminal codes that communicate and motivate the customer. In the case of real estate, the product is so big it envelops the customer as a primary media using forms, colors, textures as well as spatial layouts to communicate sensitivity to the needs of the prospect.
- III. The developer/borrower will build anything he can finance, and whatever he buids will have an impact on the community, for good or bad, for 100 years. The banker has an ethical responsibility to understand market needs, capacity, taste, and sensitivity. He must also recognize the limitations of market research models.
 - A. An example of disaggretation of demographic data
 - B. An example of housing ownership population segments
 - C. An example of housing segmentation and behavioral preference combined to scale a market

- D. An example of product research by the trade to define common housing feature preferences
- IV. The marketing of existing homes must also be sensitive to the need for the product to relate to the center of the market rather than the edge of the market. It is well-known that in the Midwest an outdoor swimming pool may not add value to a house, while a nostalgic piece of architectural bric-a-brac such as a stained glass window or fireplace may add a significant premium to the rental of an apartment.
 - A. Merrill Lynch Relocation Realty requires the appraiser to value a home by deducting the cost of repainting the interior in beige, recarpeting where necessary, or repainting the exterior.
 - B. Buyers are conditioned to prejudge a housing product by the approach zone--the route through the immediate neighborhood, the road into the project, the path to the door, and the entry porch. These must be consistent with community standards (example of New York Housing Authority contemporary in Deerfield, NY).

GENERALIZED ALLOCATION OF MARKET RESEARCH METHODS

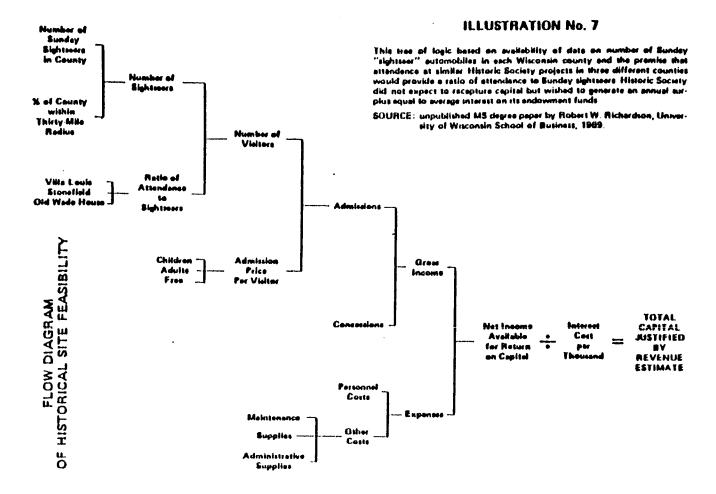
FOR REAL ESTATE ASSET MANAGEMENT

	TRUTH- NORMATIVE	BEAUTY (INTUITIVE)	CHANCE- STATISTICAL	
Market Gravitational models Input-output Shift-share Census data and planning counts Social prototypes (hierarchy of needs)		Subjective forecasts Delphi studies	Dynamic time series model for forecasting Regression analysis Cluster analysis	
Merchandise	Non-systematic survey/research Competitive property inventories Standard plan selection	Focus groups Personal interview Experience logs Marketing diaries	Factor analysis Conjoing analysis Random telephone survey AID analysis Multi-dimentional scaling	
Political	Flow chart of political process	Focus groups Personal interview Expert opinion	Random telephone survey Precinct voting profiles Legislative voting records	
Promotion	Standard advertising channels for distribution and established building forms and textures	Focus groups Architectural models, testing of visual and tactile codes	Factor analysis Conjoint analysis Random telephone survey	

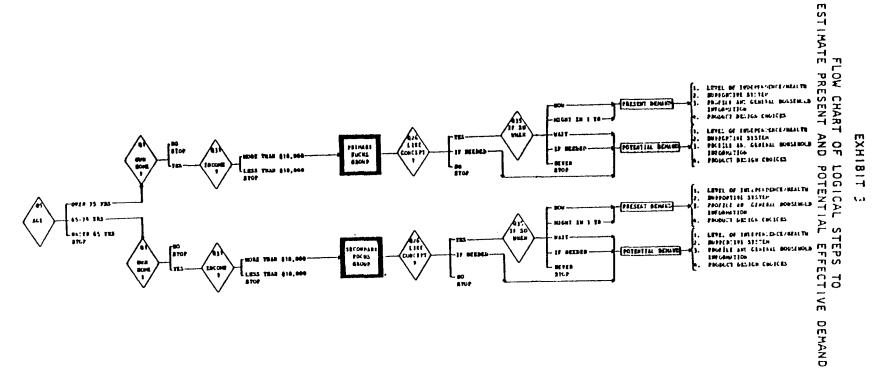
EXHIBIT 2 DEMAND FOR ELDERLY RESIDENTIAL CARE UNITS

Persons in County age 65 and over in 1970	21,914
Adjustment 1970-1974 to reflect the number of persons moving into the 65+ bracket and the application of mortality rates by age and sex	245
Estimated persons in County age 65 and over in 1974	22,159
Less persons 65+ presently in nursing and residential care facilities in County 1,792	
Less persons 65+ presently in government subsidized housing for the elderly 638	2,430
Persons age 65+ in the conventional housing market in County in 1974	19,729
Estimated number of persons financially qualified for and sariously interested in moving into the proposed residential care development	4,270
Household equivalent (+ 1.519 persons per household)	2,811
*Less estimated number who will not convert serious interest into any form of action (50%)	1,406
"Less the percentage who, while seriously interested, said (before they heard the hypothesis) that their next home would probably be outside County (13.3% from survey questionnaire) 187	
Less those disqualified because their current health status necessitates care beyond the scope of services to be provided in the residential care units (5.42 (from survey)	242
Elderly households in County qualified for and seriously interested in moving into the proposed development	263 1,142
<pre>#Plus an allowance for those elderly households coming from outside County to enter the proposed development(10%)</pre>	127
Elderly households qualified for and seriously interested in moving into the proposed development	1,269
Share of market opportunity area who stated in survey that for their next dwelling unit their first preference would be an apartment, in a highrise, midrise, or garden building:	
Highrise or midrise 28.0% Garden 49.1 77.1%	978
Less estimated numbers of households who might move into competitive developments available supply of units	270
Households that can be considered candidates for the proposed development	708
That share of households who said they would be willing to Within 1 year from now 15.6% - 110 households . Within 2 years 31.2% - 220 " Within 5 years 53.4% - 378 " 708	move:
A project of 100 units requires a capture rate of: 912 for a 1 - year absorption rate 902 for a 2 year """ 142 for a 5 year """	

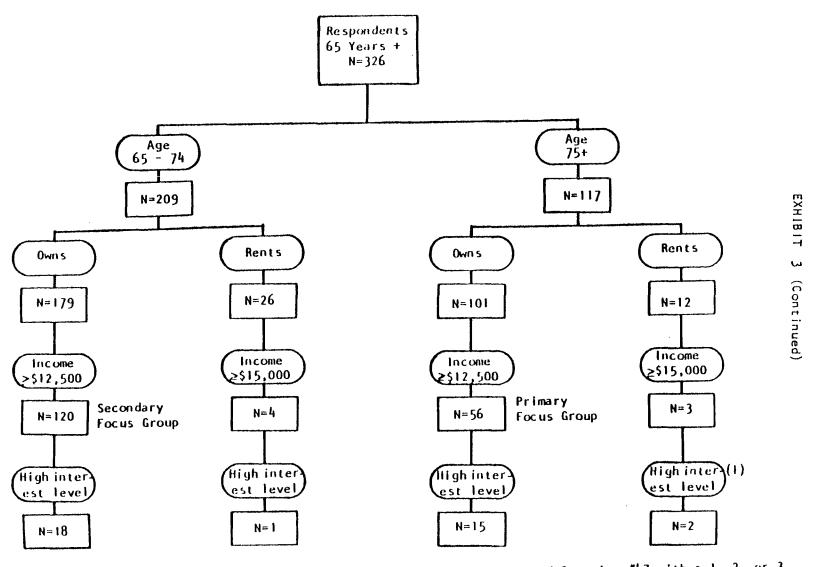
EXHIBIT 3



Source: James A. Graaskamp. A Gulde to Feasibility Analysis, (Society of Real Estate Appraisers, 1972), p. 40.



SCREENS USED TO SUBSET MOST PROBABLE USERS OF PROPOSED RETIREMENT CENTER



(1) High degree of interest in project Is defined as those who answered Question #47 with a 1, 2, or 3 response. These respondents are interpreted as having serious interest now or interest in a year or so. See questionnaire in Appendix for exact wording of the question.

POTENTIAL MARKET SEGMENTS

- I. Singles Unmarried, active, mobile, many interests, entertain informally, few financial burdens, recreation oriented. Buy basic furniture, basic kitchen equipment, cars, stereos, and vacations.
- Young Marrieds, #1 Young couple, working wife, entertain informally, amateur gardeners, planning on family. Better off financially than they will be in the "family formation" future. Buy durables cars, kitchen equipment, furniture, and vacations. Rate housing as a need for-more living space.
- III. Young Marrieds, #2 Discretionary income available, deferring family, active, entertain informally and often, some formal entertaining, independent, dual-person working household, do-it-yourself buffs, sports car. Rate housing as an investment.
- IV. Compact Family/Move Down Discretionary income available, interested in no maintenance, informal living, some formal entertainment. Away from home often, occasional visits from family or guests, focus on both active and passive recreation.
- V. Divorcees/With Children Family oriented activity, limited entertainment, informal lifestyle, limited maintenance.
- VI. Full Nest, #1 Home purchasing at its peak, even though liquid assets are low. Dissatisfied with financial position, and amount of money saved. Conscious of monthly payments, family activities. Unemployed female with numerous interests, mostly child oriented. Lifestyle is casual and informal. Interested in new products, buy washers, dryers, T.V.'s, baby food, dolls, wagons, etc.
- VII. Full Nest, #2 -- Family move-up market, as financial position gets better, some wives work. Interested in larger sized packages. The most price/size sensitive group.
- VIII. Established Family -- Making monthly payment comfortably, some discretionary income as more wives work, approaching peak of economic and social lifestyle curve, some formal entertaining, older children and teenagers, many interests.
- IX. Luxury Families Have arrived, tremendous discretionary income, very formal house, don't entertain often, but when they do, it's formal, dine out often, no maintenance, privacy mandatory.

- X. Empty Nester Home ownership at its peak, more satisfied with financial position. Small or no debt. Family is often away from home, occasional visits from family. Mobile in attitude, but permanent in residence, near grandchildren, many hobbies, one child in college, one or two children married, selfsufficient couple.
- XI. Active Retired Still working two or three days per week, active either socially or politically in community or church affairs, self-sufficient, many hours away from home, do not entertain often, but when they do, it's semi-formal. Winter/summer residences. Likely to sell home before retirement.
- XII. Retired Drastic cut in income, dependent, limited activities outside community. Winter/summer residences.

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Coarse II
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Property

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1987 ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE — COURSE II — INCOME PROPERTY

	1		T T T T T T T T T T T T T T T T T T T		
SUNDAY, JULY 19	MONDAY, JULY 20	TUESDAY, JULY 21	WEDNESDAY, JULY 22	THURSDAY, JULY 23	FRIDAY, JULY 24
	8:00 - 9:15 Finance & Risk Management Concepts	8:00 - 12:15 Financial Statement Analysis	8:00 - 10:30 Commitment, Closing & Lender Liability	8:00 - 9:45 Economic Risks of the Dynamic Income Property Market	8:00 - 10:00 Appraisal Standards and Procurement
	Graaskamp		Courtnell	Johannes	Graaskamp
12:00 - 5:00	9.30 - 10:30		10:45 - 11:45	10:00 - 12:15	10:15 - 12:00
Registration	Property Loan Proposal		Bankruptcy	Troubled Real Estate Loan Workouts and REO Techniques	Economic Development Loans
	Graaskamp			, , , , , , , , , , , , , , , , , , ,	
	10:45 - 12:15 Market Analysis & the Individual Lease				
	Graaskamp	Giovinazzo	Courtnell	O'Donnell	Yingling
		LUNCH	12:00 - 1:00		
4:00 - 5:00 Real Estate Process (The New Approach to Real Estate Systems)	1:15 - 5:00 Financial Statement Analysis	1:15 - 3:15 Property Risks	1:15 - 3:00 Construction Lending: Administration, Cost Analysis, Control and Disbursement	1:15 - 2:15 Insurance Considerations for the Mortgage Lender	1:15 - 2:30 Managing Risks: Key to Bank Profits in Real Estate Finance
		Graaskamp	Buchanan	Parck	Kendali
		3:30 - 5:00 Various Elements of Credit Enhancements for Income Property Loans	3:15 - 4:45 Construction Lending Case Study	2:30 - 5:00 Income Property Loan Case Study	2:45 - 4:00 Exam
Graaskamp	Giovinazzo	Graaskamp	Buchanan	See Room Listings in Notebook	
		DINNER	5:15 - 6:15	The second secon	
6:00 Reception/Dinner	7:00 - 8:30 Breakout Groups Financial Statement Analysis		Cookout	7:00 - 8:30 Local Case Study	
Gordon Commons	See Room Listings in Notebook			Graaskamp	

*ALL CLASSES WILL BE HELD BIO COMMERCE UNLESS OTHERWISE INDICATED

Sunday, July 19 1987 4:00-5:00 p.m.

THE REAL ESTATE PROCESS

James Graaskamp

FIRST MODULE

THE NEW URBAN LAND ECONOMICS

Presented By

Professor James A. Graaskamp, Ph.D., CRE, SREA University of Wisconsin School of Business

FIRST HOUR

I. BASIC CONCEPTS AND DEFINITIONS

- A. Real estate is a tangible product defined as artificially delineated space with a fourth dimension of time referenced to a fixed point on the face of the earth.
 - Real estate is a space-time unit, room per night, apartment per month, square foot per year, tennis court hours, or a condominium for two weeks in January at a ski slope.
 - 2. To the space-time abstraction can be added special attributes to house and contribute some form of activity. Contribution is efficiency, security, comfort, or well-being.
 - 3. Improvements from survey market to city layouts to structures define space.
 - 4. Legal contracts and precedents define time.
 - 5. Rights of use are defined by public values, court opinions.
 - 6. Private rights to use are those which remain after the public has exercised its rights to control, to tax, or to condemn.
- B. A real estate project is a cash cycle business enterprise which combines a space-time product with certain types of management services to meet the needs of a specific user. It is the process of converting space-time needs to money-time dimensions in a cash economy.

- 1. An enterprise is an organized undertaking whose form and behavior at any point in time is a concensus or synthesis of forces outside the enterprise attempting to determine its form and behavior and focus within the organization which can affect form, behavior, and sustaining energy over time.
- 2. A real estate business is any business which provides expertise necessary to relate space-time need to money-time requirements and includes architects, brokers, city planners, mortgage bankers, and all other special skills.
- 3. The true <u>profit centers</u> in real estate are in the delivery of services and cash capital.
- 4. Equity ownership is the degree to which one enterprise controls or diverts cash from another real estate enterprise.
- 5. Public ownership exists to the degree real estate taxes, user fees, and other charges take a percentage of gross revenue in excess of service cost.
- 6. A consumer must view space as one part of a total consumption system involving direct cost, surface cost, transportation cost and negative income of risk.
- C. The real estate process is the dynamic interaction of three groups, space users (consumers), space producers, and the various public agencies (infrastructures) which provide services and capital to support the consumer needs. (See Exhibit 1.)
 - Each of these three decision groups represent an enterprise, an organized undertaking. All are cash cycle enterprises constrained by a need for cash solvency, both short and long term.

THE REAL ESTATE PROCESS

- 2. A desirable real estate solution occurs when the process permits maximum satisfaction to the consumer at a price that he can afford within the environmental limits of land while permitting the consumer, producer, and the government cash cycle to achieve solvency cash breakeven at a minimum, after full payment for services rendered.
- 3. Solvency of the total process, not value, is the critical issue.
- 4. Land is an environmental constraint and not a profit cener.
- 5. Land provides access to a real estate business opportunity and is not the opportunity itself. Real estate business wants to control land to create a captive market for services.
- D. The consumer group requires three levels of marketing sensitivity.
 - 1. The collective consumer operating through the political process must be convinced that it should provide permits, zoning, or other approvals which franchise project.
 - 2. The individual consumer who rents or buys must be convinced he will improve the activity housed in terms of convenience, efficiency, security, and well-being at a periodic cash cost which is affordable.
 - 3. <u>Future users</u> consist of undefined future tenants representing a change in use which requires flexibility of site, structure, or services to maintain market edge, and therefore presumed resale liquidity.
- E. Recognition of the fact that profit maximization must be limited by concerns for physical environment and community priorities for land use has resulted in redefinition of the most basic concept in appraisal; i.e. highest and best use, in the authorized terminology handbook sponsored by the American Insitute of Real Estate Appraisers and

the Society of Real Estate Appraisers. Compare the 1971 definition with that for 1975:

Highest and best use concept -A valuation concept that can be applied to either the land or improvements. It normally is used to mean that use of a parcel of land (without regard to any improvements upon it) that will maximize the owner's wealth by being the most profitable use of the land. The concept of highest and best use can also be applied to a property which has some improvements upon it that have a remaining economic life. In this context, highest and best use can refer to that use of the existing improvements which is not profitable to the owner. It is possible to have two different highest and best uses for the same property: one for the land ignoring the improvements; and another that recognizes the presence of the improvements. p. 57, Real Estate Appraisal Principles and Terminology, Second Edition, Society of Real Estate

"Highest and best use: That reasonable and probable use that will support the highest present value, as defined, as of the effective date of the appraisal. Alternatively, that use, from among reasonably probable and legal alternative uses. found to be physically possible, appropriately supported, financially feasible, and which results in highest land value. The definition immediately above applies specifically to the highest and best use of land. It is to be recognized that in cases where a site has existing improvements on it, the highest and best use may very well be determined to be different from the existing use. The existing use will continue, however, unless and until land value in its highest and best use exceeds the total value of the property in its existing use. Implied within these definitions is recognition of the contribution of that specific use to community environment or to community development goals in addition to wealth maximization of individual property owners. Also implied is that the determination of highest and best use results from the appraiser's judgment and analytical skill, i.e., that the use determined from analysis represents an opinion, not a fact to be found. In appraisal practice, the concept of highest and best use represents the premise upon which value is based. In the context of most probable selling price (market value) another appropriate term to reflect highest and best use would be most probable use. In the context of investment value an alternative term would be most profitable use.

Real Estate Appraisal Terminology, Edited by Byrl N. Boyce, Ph.D., SRPA, Ballinger Publishing Co., Cambridge, Mass., 1975. (Emphasis added.)

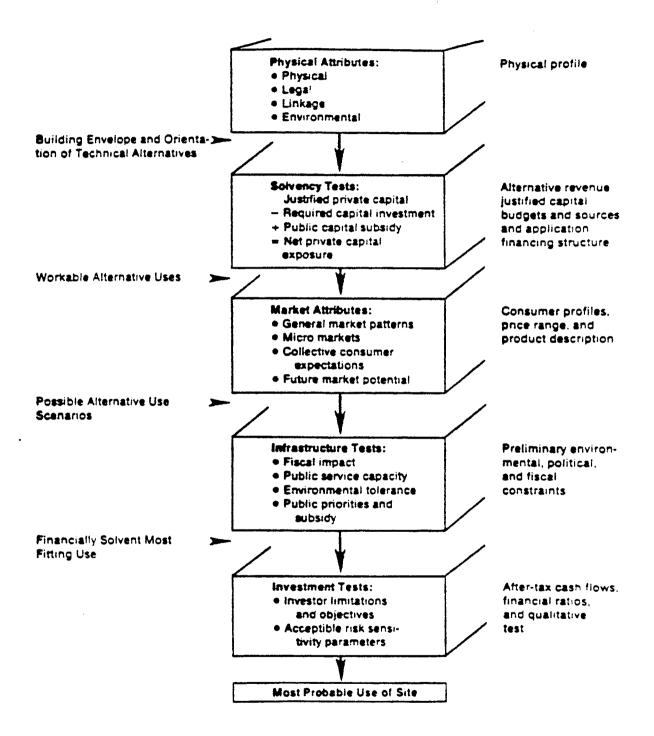
- G. The purchase of a piece of real estate today involves the acceptance of a great many assumptions about the future. Those who take care to validate these assumptions in a period of transition as to public land use control tend to have the most successful investment.
 - 1. Business decisions today make explicit recognition of their assumptions and the need to act under conditions of uncertainty.
 - 2. Business risk is the difference between assumptions about the future and realizations, and the proforma budget and the end of the year income statement.
 - 3. Risk management is the control of variance between key assumptions and realizations.
 - 4. An appraisal is a set of assumptions about the future productivity of a property under selected conditions of certainty.
 - 5. A feasibility study is a test of a particular proposal under alternative sets of assumptions about the future and its tolerance for variance or priority for certainty.
- H. The concept of highest and best use of land was a commodity concept which did not consider externalities adequately. It is being replaced by concepts of most fitting use and the concept of most probable use.
 - 1. The <u>most fitting use</u> is that use which is the optimal reconciliation of effective consumer demand, the cost of production, and the fiscal and environmental impact on third parties.

- 2. Reconciliation involves financial impact analysis on "who pays" and "who benefits"-- thus the rash of debate on how to do impact studies.
- 3. The <u>most probable use</u> will be something less than the most fitting use depending upon topical constraints imposed by current political factors, the state of real estate technology, and short-term solvency pressures on consumer, producer, or public agency.
- 4. Most probable use means that an appraisal is first a feasibility study of alternative uses for a site in search of a user, an investor, and in need of public consent.
- I. In seeking the most fitting and most probable use, the inner city planner and private property appraiser must interact to determine how community objectives and consumer and production sector solvency can be achieved simultaneously.
 - 1. A real estate decision has only two basic forms. Either a site is in search of a use and consumer with the ability to pay, or a consumer, need or use with a defined ability to pay is seeking some combination of space-time attributes he can afford.
 - 2. The individual consumer with needs and a budget is the drive wheel.
 - 3. The public sector represents the community owned consumer service delivery system, seeking to minimize marginal cost to the consumer and average cost to the community at large.
 - 4. The production sector responds to a derivative demand for engineering and management expertise.
 - 5. Real estate is a collective decision and a product of the political process.

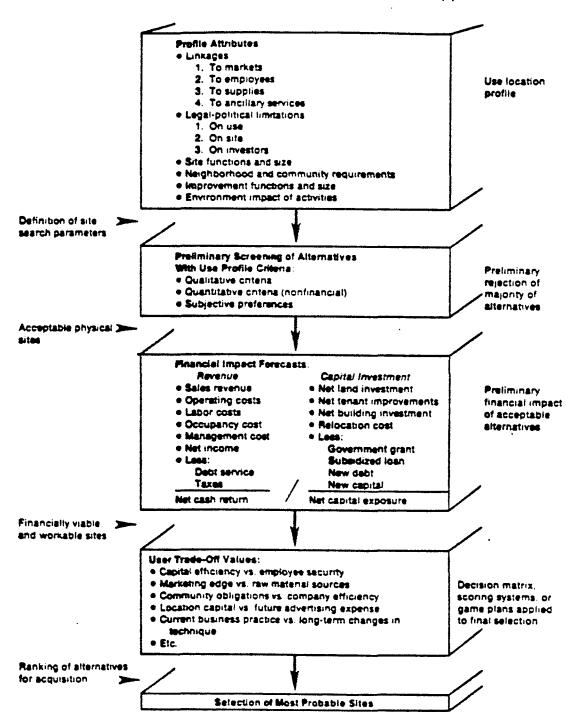
- J. Critiquing the form and adequacy of a real estate solution is analogous to the artistic concept of judging the success of an art object by relating form of the solution to the context to which it was created.
 - 1. Context includes those elements which are fixed, given, or objective and to which any solution must adapt.
 - 2. Form-giving elements are those variables within the artist's control, i.e. options or alternatives at a particular time.
 - 3. A solution is judged for its correctness or success in terms of the degree of fit of the form proposed to the context.
 - 4. Feasibility analysis is concerned with the degree of fit or the extent of misfit between a proposed course of action and the context within which it must operate or fit.
 - 5. Success therefore depends on how appropriately the problem is defined; testing feasibility depends primarily upon accurate and comprehensive definition of the context.
- K. Ultimately there are only three major decision formats for real estate and land economics.
 - 1. A location (and related improvements) in search of a justified use.
 - 2. A justified use in search of the best fitting location (and related improvements).
 - 3. Money in search of an investment in location and related improvements—the conversion of space-time needs to money invested over time.

EXHIBIT 3

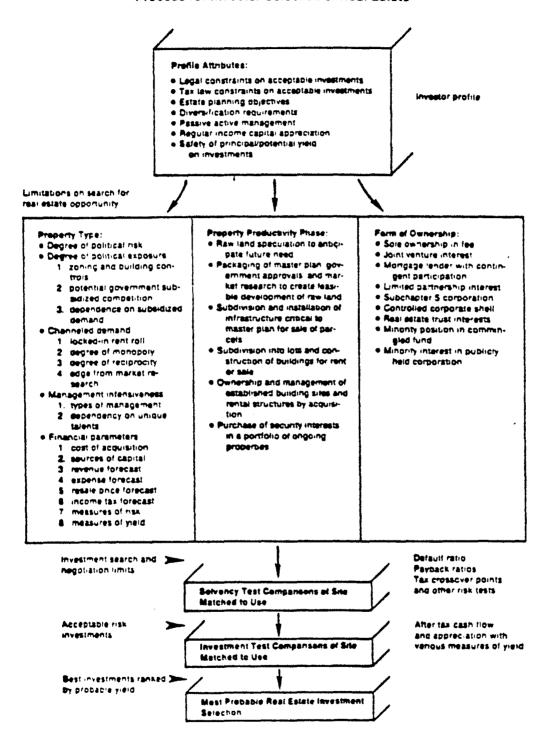
Analysis Process: In Search of a Use(s) For a Site



Analysis Process: The Search For a Site For a Use(s)



Process for Investor Selection of Real Estate



THE REAL ESTATE PROCESS

BACKGROUND READINGS



Fundamentals of Real Estate Development

by James A. Graaskamp

The real estate development process involves three major groups-a consumer group, a production group, and a public infrastructure group. Each group benefits from cooperation and a full understanding of the values, short- and long-term objectives, and major limitations controlling the other two groups. A major limitation shared by all groups is the fact that each is a cash cycle enterprise which must remain solvent to survive and which must create a surplus over time to maintain credibility with others. Cash cycle enterprises must continually make assumptions about future social norms. technologies, and the direction of complex changes in personal, natural, and political conditions. The degree of error between assumptions and realizations is what is termed risk, and in an enterprise economy most parties are attempting to shift a disproportionate share of the risk to others while retaining a larger share of the benefits. Unlike many mass production industries, each real estate project is unique and the development process is so much a creature of the political process that society has a new opportunity with each major project to negotiate, debate, and reconsider the basic issues of an enterprise economy, i.e., who pays, who benefits, who risks, and who has standing to participate in the decision process. Thus the development process remains a high silhouette topic for an articulate and politically sophisticated society. The best risk management device for the producer group, which is usually the lead group in the initiation of a project, is thorough research so that the development product fits as closely as possible the needs of the tenant or purchaser, the values of the politically active collective consumers, and the land use ethic of the society.

Basic Concepts

Introduction

Someone rolled a rock to the entrance of a cave and created an enclosed space for his family—a warmer, more defensible shelter, distinct from the surrounding environment. This can be called the first real estate development. Since then real estate activity has evolved and taken many forms to meet the needs of man and his society. Once based on need and custom, real estate is now based on social economics and statute.

Real estate can be defined generally as space delineated by man, relative to a fixed geography, intended to contain an activity for a specific period of time. To the three dimensions of space (length, width, and height), then, real estate has a fourth dimension—time for possession and benefit. This can be referred to as a space-time characteristic. The space-time concept is illustrated by the terms apartment per month, motel rooms per night, square footage per year, and tennis courts per hour. A fundamental element in real estate is that any space-time unit has a corresponding monetary value. While many of the value judgments and debates about real estate projects relate to elusive criteria of what is good and beautiful, in a money economy the ultimate criterion is cash.

The creation and management of space-time units is termed real estate development. Real estate developments range from a simple cave to the complex technology of the Park Avenue skyscraper. Like a manufactured product, a real estate project is part of a larger physical system programmed to achieve long-term objectives, but each real estate project is

The Development Component Series (DCS) is a file of monographs on land use planning and development practices and cases published by ULI-the Urban Land Institute. Authors are practitioners or educations expendenced in the component topic. The monographs incorporate the insights and suggestions of a review group composed of seasoned practitioners on the subject.

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Professor James A. Graaskamp, Ph.D., SREA, and CRE, has a double career as educator and real estate consultant. He is presently chairman of the Department of Real Estate & Urban Land Economics at the University of Wisconsin-Madison and president of Landmark Research, Inc., established in 1968, a consulting firm specializing in courtroom appraisals, feasibility, and institutional investment. He has a background in home building and land development, and is well known for his work in feasibility analysis and small computer applications to real estate analysis. He is a member of the Board of Directors of the Wisconsin Housing Finance Authority, a ULI Research Fellow, and a member of the ULI Education Committee.

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also a small business enterprise of its own. Thus, the development process is a continuum of construction technology, financing, marketing skills, administrative controls, and rehabilitation required to operate the real estate enterprise over many years.

Real estate development also is a complex, collective process, not only accommodating an activity within the parcel, but also adapting to the context of a specific surrounding environment, involving different personalities and interest groups, as well as limited resources. The political and social process to produce a real estate product must consider a diversity of impacts to find equitable reconciliation between who pays and who benefits.

Basic Real Estate Relationships

The real estate process presented in Figure 1 is the constant interaction of three groups—space users (consumers), space producers (those with site specific expertise), and public infrastructures (off-site services and facilities).

The space consumer group includes individual space users attempting to rent or buy real estate space to house their specific needs. This group operates individually in the marketplace. The individuals' goals are to survive and to improve their sense of satisfaction and security, using their own funds. In order to achieve the unique combination of attributes each desires, there are trade offs, such as location, space, and operating cost, that must be made and which influence real estate decisions. Collective users generally pursue their interests in real estate activity through the political systems that purchase open space, provide for public infrastructures, or regulate space production with pooled funds from taxes, bonding, etc. Future users are typically represented by proxy, either by developers who anticipate the need to change the use of a building in the future or by the judiciary or special interest groups, who perceive some trusteeship of the land for future generations. Provision for future users is a hidden charge to present consumers.

The space production group includes all forms of expertise necessary to convert from space-time requirements to money-time. The system includes those who assemble the capital and those who prepare materials as well as those who contribute to the assembly of these on site. Architect and

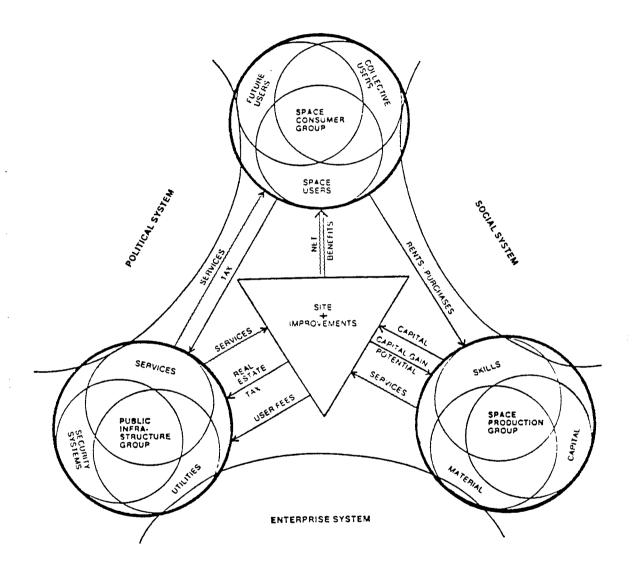
mortgage banker, lumberman and lawyer, city planner and hotel manager are all in the real estate business. The real estate business includes any person with expertise in creating and maintaining spaces to house activities of space users in the marketplace.

The public infrastructure group includes all those enterprises that provide a network of tangible and intangible off-site systems for the individual space user, including physical networks of street and sewer and other utilities, services like education. police and fire, and operational systems for deed registration, governmental regulation, adjudication, and all forms of economic activity with efficiencies of scale that suggest collective off-site action. Note that the difference between space production and public infrastructure has nothing to do with private or public ownership since private companies may provide utilities and public agencies may develop real estate. A necessary service, like sewer and water, schools and libraries, becomes an element of infrastructure when there are economies of scale to be enjoyed through collective action of many parcels, leading to off-site centralization.

Cash Solvency—The Critical Common Concern

Each of these three functional groups, and any subgroup therein, represents an organized, rational undertaking, called an enterprise in the language of systems (see Beckett). In an industrial society each enterprise is a cash cycle operation. Each begins with certain cash resources with which to purchase raw materials and services, to add value through expertise, and to exchange finished inventory for accounts receivable and back to cash. Most such enterprises, be it a hospital, a city, a household, a university, or a single student, are not attempting to make a profit, but each and every enterprise is constrained by the need to maintain cash solvency, both in the short and the long term, or become bankrupt. Cash solvency of each enterprise in the total process, not maximization of value, is the pivotal issue of survival and the one measure of self-interest that all these conflicting entities have in common. Only a few enterprises are intended to be profit-oriented. Cities, school districts, and home

Figure 1
The Real Estate Process



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builders are all cash cycle enterprises. Of course, solvency plus a surplus at the end of a year can mean the city manager, the hospital director, and the home builder will enjoy praise, trust, and greater latitude to try new things from their city council, hospital board, or bank loan committee. Cash solvency is a continuing test of management, and cash surplus the measure of survival risk.

Therefore, a basic axiom for determinining real estate actions is that a desirable real estate program permits maximum satisfaction of the consumer within an affordable structure, while respecting environmental limits of the natural resources and permitting the public infrastructure and space production groups to achieve cash solvency, termed a cash break-even or default point in financial planning. Several important implications of this view of the real estate process are:

- The true profit centers in the real estate development process are in cash revenues created by the developers' expertise in producing space-time units
- Equity ownership is the degree to which any one enterprise can control or divert cash flows from a real estate project to compensate for its contribution of land, materials, money, and/or expertise.
- Since the public has constitutional rights to divert cash productivity of the property via the real estate tax and user fees, the public has direct ownership of every taxable parcel to some degree, is a preferred partner in the ownership structure, and possesses real assets in terms of taxes, net service costs, and user fees (see Caro).
- Site selection represents a consensus of cash cycle forces, with the cost of site preparation acceptable within solvency limits, which are determined by rent levels, real estate taxes, and an infinite number of factors reflecting the economic characteristics of the user, the producer, and the cost of infrastructure services at alternative sites.
- Control of land through ownership, option, or alliance can indicate who in a real estate project will be hired, what materials will be purchased, and where all the cash flows generated by development and management can be directed. That is why architects, mortgage bankers, public authorities, and cities become developers—to capture some small percentage of the cash flow benefits to their enterprises.

Land Versus Location

Land is not location, property rights, or the most important aspect of a project site; instead, land is a natural resource upon which real estate decisions come to bear. It is that which can be brought under the control of man to bear his structures. It is a finite resource that can be exhausted by extractive industries, destroyed by seismic and ocean upheaval, or wasted by ignorance of its processes. It is a limiting factor in development and both a reference and a bearing point for space-time units.

The physical land attributes with legal-political constraints, linkage attributes that define location, dynamic attributes that exist in the eye of the beholder (such as prestige, anxiety, and claustrophobia), and attributes of a larger environmental system create a site.

Location is often identified as the critical factor in a site, but it is seldom understood that location value. is related to the functional needs of the activity and not the site. The family unit is a common example of multiple functions involving employment, school, shopping, and recreation. The family chooses a home site that balances convenience against the cost of inconvenience. Each relationship between a household and another point requires movement of persons, goods, or messages. This is termed a linkage, and the time, stress, and dollar costs involved are referred to as the costs of friction. Each establishment seeks a location defined as a set of linkages that will minimize these costs. As the costs of energy, congestion, and time have risen for commuters and the need for suburban school linkages has diminished, the opportunity for reducing costs of friction by trading the house in the suburbs for a condominium downtown has been transferred into rent or the price of a condominium. Rent differentials for location reflect market recognition of perceived costs of friction to desired amenities. Therefore, locational value is in the mind of the space user rather than inherent in the land, and demand pressures on land shift as his perceptions of convenience shift. Of course, movements of goods and services and people often employ networks of pipes, paving, and wires directly to the site so that some linkages become physically set due to economies of scale in reducing the costs of friction. Some communities have expanded the web of physical linkages to include pneumatic-tube garbage collection, centralized heating and cooling. cable TV, skyway systems, and pedestrian tunnels. However, most linkage relationships are subtle,

Figure 2 Industrial Site Alternatives

	Site A		Site B	
_	Northern City		Southern Town	
Revenues:				
Unit Sales	11,000		10,000	
x Price/Unit	\$ 110		\$ 110	
= Dollar Sales		\$1,210,000		\$1,100,000
- Expenses:				
Raw Materials		\$ 110,000		\$ 100,000
Transportation: Raw Materials		11,000		5,000
Finished Goods		55,000		110,000
Labor: Productive Labor Hours/Unit + Productive Hours as Per	10.0		10.0	
cent of Clock Time	0.8		0.95	
= Total Hours on Wage Bill	12.5		10.5	
Direct Labor Cost/Unit/Hr	\$ 4.00		\$ 4.00	
+ Indirect Labor Cost/Unit/Hr	\$ 1.00		\$ 0.50	
x = Total Labor Cost/Unit/Hour	\$ 5.00		\$ 4.50	
= Total Labor Cost/Unit	\$62.50		\$47.25	
Total Labor Costs		687,500		472,500
Administrative Salaries		90,000		150,000
Real Estate Taxes		60,000		20.000
Utilities: Heat, Light, Power		75,000		60,000
Total Expenses:		1,088,500		917,500
= Net Profit Before Taxes:		\$ 121,500		\$ 182,500
Capital Costs:				
Land `		50,000		20.000
Building and Machinery		400,000		250,000
Cost of Relocation		0		100.000
Net Capital Employed:		\$ 450,000		\$ 370,000
Rate of Return on Capital:		0.27		0.49
Number of Years for Payback of	450	0.000-370,000	_ 80.000	= 1.3 years
Relocation Cost:		2,500 -121,500	61,000	- 7.0 years

systematic, behavioral patterns that require a thorough understanding of particular establishments and are the basis for marketing.

Linkages, Location, and Cash Cycles

Location as an attribute of the establishment rather than a physical site can be understood by a look at simple financial plans of hypothetical industrial, retail, and household establishments. In Figure 2 the relative revenues and expenses of two alternative plant locations are presented. Notice that the linkages in each community to customers provide different sales estimates, while expenses are also altered by the proximity of each site to raw materials, distribution points, and the availability of labor pools with different expectations of hourly wages,

Figure 3 Retail Store Cash Cycle

5,000

\$90,000

30,000

\$3.00

I. Determination of Optimum Store Rent:

Number of families in area

x the store's capture rate	.20
= Number of families visiting the stor	e 1,000
x Average family income in area	\$20,000
x % of family income spent in	
supermarkets	.12
= Total potential sales for the store	\$24,000,000
x Leakage of food purchases to other	
sources	.50
= Expected potential sales for	
the store	\$12,000,000
+ Sales/(sq. ft. of sales floor area)/yea	ar \$400
= Sq. ft. optimum building size	30,000
Expected potential sales for the	
	\$12,000,000
x % of sales allocated to rent expense	.075

II. Determination of Optimum Building Cost:

= Net rent allowed per year

+ Optimum building size

= Optimum net rent/sq. ft.

Parking stalls required/300 sq. ft. GLA	1
100 stalls x 300 sq. ft. each	30,000
+ Gross building coverage	34,000
= Minimum site area	64,000
x Price of land/sq. ft. of \$2.00	
(approx. \$86,000/acre)	\$128,000
x 10% interest on land	12,800
=Annual budget for improvements	77,200
→ Capitalization rate of 11.5%	.115
=Total budget for building and site	671,300
÷ 34,000 gross feet	\$19.75/sq. ft.*

^{*} This budget is too low for 1980 building costs: developer must reduce size of store and cost of site or capture more of potential market of grocery sales.

vacation time, and benefits. Indeed, benefit costs may be lower because the average age of the population in site B is much younger than in site A, reducing hospital costs, pension costs, and the prerogatives of long-time seniority. On the other hand, administrative salaries are higher in order to compensate executives for doing without certain amenities not available in a small town, such as a country club, a parish school, or diverse medical services. Real estate taxes may be minimal because government services are much less comprehensive

and fire insurance may be higher due to a remote fire station. Utilities may be lower because of linkages to hydroelectric power rather than coal-fired plants for site A. Even the capital costs are modified by the intensity of nearby land development and the willingness of state governments to subsidize the costs of relocation. All these factors are linkages for an industrial establishment which alters its cash flow, business and financial risks, and profitability. In theory it could pay more for site B because of the increment in the efficiency of its operations.

The retail store location example in Figure 3 depends on its linkages to families in the trade area which have both the income and inclination to visit a particular store or supermarket. The relationship of the store to other nearby retail establishments may generate traffic volume and attract customers or may intercept customers from the potential trade area. A potential linkage to a flow of passing customers can be subtly strengthened by a stop light or a right hand turn lane or devastated by a median strip which cuts off the linkage of a particular store site to traffic lanes going by. A great number of linkage relationships will affect potential sales for the store and that in turn controls the acceptable rent levels, capital budgets, and store sites in the real estate process. Notice that any particular retail store can pay a premium for a site where the linkages are expected to produce more than average penetration into a potential consumer group passing by or living in the vicinity. Some retail establishments need multi-state linkages by interstate or airline, such as Disney World or ski resorts in Colorado. In Vancouver a development company owned the north shore of Howe Sound but the only linkage was a ferry boat, so the property was relatively worthless despite its views and southern exposure. A suspension bridge two-thirds the size of the Golden Gate was built, and Lion's Gate Bridge became the critical linkage to create land of immense value for homes and business.

Many of the most subtle linkages are involved in selecting a housing unit for the family household. Linkages of the home site in terms of density per acre and a prestigious location must be traded off with neighborhoods which have homes of different sizes and quality in order to arrive at a monthly housing cost which is acceptable within cash limits of the household. The family is tempted to strain the cash budget because the house purchase is perceived as a major investment opportunity that may provide significant capital appreciation. This capital

gain is thought to reduce their net housing cost below that of rental alternatives in the long term. Combine net housing costs with costs of transportation to work, play, and shopping, and with possible costs of poor schools or exposure to natural disaster, and the choice of a house becomes a problem.

Cash Cycle of the User Versus Cash Cycle of the Collective Consumer

Public decision groups, like city councils, school boards, and county governments, often fail to recognize the relationship between the cost of their decisions and the true cost of land since the land cost is out of one pocketbook while the costs of friction are shifted to others who may not vote in their district. Consider the community college district which purchases a cheap rural site rather than assembling a more expensive urban campus because the five rural counties in the district can outvote the single urban center county. While capital cost to the community college funds are reduced. there is a significant increase in the total ongoing cost to students who must commute long distances to school and part-time jobs, to the urban community in terms of underutilized residential land, and to retail real estate near the abandoned old campus.

More recently, with population pressures, depletion, and occasional misuse in the past, natural resources are becoming scarcer. Mindful of this, Congress passed the National Environmental Policy Act in 1969. Its purpose was to prevent or minimize damage to the environment by new industrial and residential development for the benefit of all present and future consumers. To implement this act, most state and local governments now require an Environmental Impact Statement (EIS) for all proposed large developments. A carefully researched EIS may sometimes be of help to both the developer and the city planner by pinpointing major problem areas and suggesting alternative courses of action. An inadequately researched statement can waste everyone's time and money, either during the planning stage or later during the project's use. Generally a shorter environmental impact evaluation of critical issues is the most cost effective.

Recently, many planning departments and conservationists have used the EIS and other provisions of the 1969 Act to thwart growth in their cities and towns, which was not the original intent of the Act (see Frieden). MIT professor, Bernard Frieden, in his book, The Environmental Protection Hustle, warns that a new "exclusionism" is surfacing across the country. Where the old exclusionism attempted to exclude only low-cost housing in an effort to keep out minorities and the poor, this new exclusionism attempts to keep out everyone-rich, poor, and middle-class alike. This restriction on growth, especially in the suburbs and in-fill areas of the cities. Frieden claims, results in higher prices for housing. reduced choice of housing location, and longer commuting distances, and it discourages carefully planned developments by the large developers. In the same vein, political use of infrastructure systems has become an oblique and debatable extension of land use control law for exclusionary pur-

The collective consumers are moralistic in public statements but are generally motivated to enchance their own cash positions. For example, in a city south of San Francisco, Palo Alto, further residential growth would require present homeowners to share the subsidy of residential services from the industrial tax base with new residents. Thus they voted to commit 7,000 acres of development land to open space, estates, and some new industrial parks in the name of environmental quality. The monopoly created by growth management causes home prices to skyrocket to the advantage of existing residents. while exclusionary zoning may make it unnecessary to finance expansion of sewer and water facilities by raising everyone's water service fees. Those who benefit as existing residents control local votes and those who must ultimately pay monopoly prices have no standing to vote. Thus the collective consumer will operate to block or imbalance development to protect his short-term cash interest; by the same token, the collective consumer as a builder of public facilities often thinks of only its own budget and not of the shift of hidden costs to consumers and taxpayers.

The Cash Cycle of Infrastructure

Every real estate development creates a new customer for the public infrastructure which surrounds the development site. Each home constructed creates a new customer for the water service, the school system, and the fire department, and generates revenue in the form of meter charges for utilities, real estate taxes, and other receipts such as a share of gasoline taxes for street maintenance and state aid for education based on a per student formula. There are secondary revenues, albeit indirect, in terms of increased retail sales levels, commercial land values and assessments, and, therefore, real estate taxes on ancillary uses. There is no aspect of cash forecasting more difficult than fiscal planning for the impact on revenues and service expenses of alternative land use plans, but much has been learned in recent years about the techniques of forecasting cash cycle implications of alternative development (see Vollman). In the past there was a tendency to oversimplify revenue/cost implications with broad generalizations: mobile home parks presumably had low assessed value but high educational cost burdens and high service cost implications for welfare and security; everybody knew that industrial plants produced far more tax revenue than required for service costs since there were no children to educate or streets to plow in winter. On the other hand, industrial plants attracted the workers at wage scales which could only finance mobile home housing and contributed to highway congestion which led to street widening programs. The combination of new residents and new jobs was the final burden on the sewer and water systems which required expanding the processing plant and well system to anticipate growth for the next 10 years. How does one allocate the current costs for expanding the water system and the street capacity between residential and industrial users and further subdivide the burden between present users and future users still to come? Fiscal zoning of land use mix within a community requires open-minded flexibility to balance cash revenues and cash expenses with mixed-use land planning concepts and multiple development proposals spanning different development time frames (see Burchell and Listokin). A new industrial plant may create a tax surplus which will be consumed in providing services for new residents hoping to work at the plant. But these new residents in turn will prompt commercial development which will further expand the tax base and may restore some real estate tax surplus 5 to 7 years after construction of the first new plant. The interplay over time between cash cycles of users, collective users, and the infrastructure system is the base for the interface between economics and property rights.

The Concept of Property Rights

Individual and collective use of space-time resources and land has always been regulated by society, in part through law and in the larger part through political administration of the laws so that it is always necessary to speak of the legal-political attributes of a site. The rights to use or abuse, to provide expertise or choose contractors, the rights to prohibit or to condition use in certain ways, or to transfer rights from one person to another are defined as property rights. Society creates and continually modifies the allocation of property rights among private ownership, public institutional ownership, and common ownership indivisible among all members of society. A primary function of property rights is to provide incentives for specific parties to take responsibility for development as well as conservation of the resource. The market system rewards those, in terms of consumer satisfaction, who produce the best buildings for the lowest cost of construction and operation.

Until the early 1700s in England, each community had common lands available for everyone to graze their livestock. No one had a vested interest in maintaining some grass for tomorrow or the right to exclude animals to permit regeneration of the grasses, and the resource was crushed by overgrazing. The commons were abruptly fenced to permit controlled grazing by the rich, to the great discomfort of the poor.

Similarly, better information about economic and environmental cause and effect leads to more sensitive, refined allocation of rights. Property rights

attempt to incorporate responsibility and its corresponding cost with land use decisions that are fairer to all members of a society. Therefore, cash flow revenues and outlays provide one way to measure the relative burden on interacting parties and to refine allocations of rights and responsibilities, that is, benefits and costs.

Information techniques, property rights, and economics continually interact. The supply and demand for rights to be bought, sold, leased, or otherwise exchanged depends on the benefit and cost of those rights to someone at a certain point in time and the scope of those rights as defined by law. The ownership of a car becomes less attractive as a commodity when the increasing gasoline prices, transportation taxes, insurance costs for injury caused by the auto, and emission control costs are included. Society may further restrict the hours, speed, purpose, or locations for which an auto may be used—the scope of property rights in an auto. Dramatic changes in gasoline prices produce rapid price reduction in large, gas-hogging automobiles. As long as the interaction of law and economics is gradual, almost unnoticed, there is some degree of certainty about future assumptions. Should rightsto-use change abruptly, the interface between the law and economics is marked by fissure, failures, and disturbances not unlike those caused by faults in the earth's crust itself, and new social problems appear. Big cars are expected to depreciate in a few years under the best assumptions, and the owners can minimize the losses by paying more for gasoline, reducing their mileage, and postponing sale for a few years. But the large capital investments in land development, buildings, machinery, or ships are depreciated instantly when laws like downzoning, rent control, pollution controls, or territorial fishing limits change their anticipated income sources or costs of operation. Unlike the carownership which involves a 3- to 7-year cash cycle, larger capital enterprises with major debt structures anticipate useful lives of 25 years or more; with an intensive fixed cost of operation they are quickly rendered insolvent by unexpected changes in the legal environment. Such allocations generally involve conflict between equally valid points of view and rights of survival and may transfer great wealth in the form of capitalized cash flows from landlord to tenant or collective consumer.

Although the language of real estate seems static, it is not. Many terms used today, such as fee simple ownership, had their origins in medieval England. Their current meanings, however, are quite different from their medieval definition. Property rights do change and exist in a certain form only as long as society achieves its objectives in terms of encouraging development and husbandry. Nevertheless, change in property rights must be implemented at a rate which each enterprise can tolerate in terms of its cash cycle and the threshold of insolvency or there could be a taking of property without due process.

Most Fitting and Most Probable Use

Until recently the economic theory of real estate decision making was built on the premise that the system was committed to finding that private use of a parcel of land that would maximize the owner's wealth by being the most profitable use of the site linkages or physical land. Presumably, the only criterion was profit, hence the cryptic term "highest," and as an inheritance from Adam Smith, there was the further presumption that maximum profit was "best" for society. Actually, the allocation of land to those who would pay the most or develop it most intensively was characteristic of nineteenth century America, when society needed to reward those who would modify the frontier to accommodate a rush of immigrants. At the same time, society had not melded to a point where it could find a consensus on land use priorities and social objectives. However, it was only as recently as 1975 that the fundamental economic premise of "highest and best use" was redefined as that use on a given date that could be selected as most profitable from reasonable and probable alternatives that were physically possible. legally permissible, and financially viable, given a specific level of effective demand and costs of production (Boyce, pp. 107-108). The official definition further made it explicit that wealth maximization was to be qualified by recognition of how a specific use would contribute to community environment and community development goals. Thus, it has been recognized that the development of each parcel must be considered within a larger system and pattern of land uses and the frequent use of the words "reasonable and probable" reveals a recognition of many of the uncertainties that attend assumptions required in the decision to use and develop a parcel. At best, however, the term "highest

and best use" is an anachronism from laissez-faire attitudes of the nineteenth century that have undergone an evolution in meaning like the concept of fee simple title. At worst, it implies certainty of one man's judgment, a one-dimensional measure of the adequacy of a development concept and cash for the landowner even when it is apparent that there are many vested interests in the cash flows that are affected by a given land use decision. Therefore, it is useful to replace this terminology with the terminology of most fitting use and of most probable use.

Any decision process requires identification of alternative courses of action and their consequences. and the consequences must then be evaluated and ranked in terms of their acceptability and probability to choose the appropriate plan of action. Typically, a set of consequences is compared to some set of standards which defines the acceptable, the undesirable, and the unthinkable. These standards can be somewhat altruistic, or what might be defined as the norms to which a society is striving. The concept of most fitting use is normative, that is, the optimal reconcilliation of affected consumer demands. the cost of production, the cost of infrastructure services, and the fiscal and environmental impact on third parties. Reconciliation involves financial impact analysis of who pays and who benefits in cash terms as well as compatibility analysis of the collective consumer's perception of environmental quality and impact on the good life -elusive standards at best. The concept of most fitting use assumes the goals and limitations have been well defined and that misfits between proposed solution and standards can be recognized.

Experience tells us that most plans, development or otherwise, fall short of the ideal. This tendency is implied by the concept of most probable use. Most probable use is that alternative course of action which is closest to being the most fitting use while recognizing strong constraints imposed by current political factors, real estate technology, the personalities and talents responsible, the money market, and short-term solvency pressures on consumer, producer, and public infrastructure.

Any enterprise is a compromise because the form it takes, in terms of both its configuration and its behavior, reflects a negotiated consensus between two general sources of power—the power of its environment to dictate form and the power of the organization itself to decide what its characteristics and behavior will be (see Beckett). In the process of development the elements of law, public infrastructure, and consumer preference are the external forces affecting behavior, and the ability to respond from within the organization is a function of talent, money, and political skills.

Risk Management in Development Conditions of Uncertainty in Development

All parties in the development process must accept significant levels of uncertainty about their cash budgets and other expectations as each enters the development process with a set of assumptions about the future in a society that has been changing at an accelerating rate. The amount of uncertainty for an enterprise varies according to its needs and income. The homebuver expects to have the same iob and the same family needs and disposable income for at least several years, but must organize family finances through insurance and savings to anticipate unemployment, illness, and even death. The pushcart vendor can change his location, his prices, his product mix of flowers and bouquets almost hourly and clean out his inventory by evening. Should he be unsatisfied with his business, he can convert from flowers to scrap collection or popcorn sales the very next day, unless frustrated by municipal permits. The retailer needs 6 months to reform his inventory to changing consumer tastes, and the manufacturer needs 5 years to research and develop a new product line or relocate his plant. But the real estate developer is locked into a specific location with an immovable inventory of room nights, apartment months, or square feet of leasable area that must be priced and sold many times, for as long as 25 years, before the total capital investment is recovered. That is a unique risk management assignment, and the developer who succeeds most often is the one who takes most care to validate the assumptions over which he has some control and to cushion the enterprise with tolerance for surprise and those changing conditions over which there is little control. The real estate process

is concerned with identifying the explicit and implicit assumptions on which each consumer group, each infrastructure, and each production element of expertise is operating in order to allocate risks among those who benefit and those who pay each development alternative.

Control of this variance is called risk management. There is a continual refining of assumptions to convert as much speculation to fact as is possible and to provide tolerance for the uncontrollable surprises. Risk management is not only a philosophy of inquiry and problem solving, but also a primary objective of market research, of contract negotiation, and of strategic positioning of any enterprise or investment selection pattern.

Basic Risk Management Techniques

Aside from the outright avoidance or acceptance of the unknown, the business risk situation can be improved through application of one of the following techniques:

- Improving forecasts through statistical research
 of the critical facts. For example, the reliability of
 a forecast is improved by increasing the sample
 size (the standard error of the estimate is reduced by the square root of the expansion in the
 sample size). While not all real estate research is
 statistical research, nevertheless, the general
 principle is that the exposure to surprise can be
 reduced by knowing more about the problem in
 a systematic fashion. Survey research of the
 consumer, soil testing, and quality control of
 materials are all elements of risk reduction
 through research and information processing.
- 2. Combining risks by pooling resources, by diversifying investments, and by improving forecasting through scale of operations. A 4-unit apartment with a single vacancy has lost 25 percent of its income while a 100-unit building with 10 vacancies has a 10 percent vacancy loss to gross income, a far more stable situation.
- Shifting risks by insurance contract, accepting
 the small certain loss of an insurance premium
 rather than the unpredictable loss of unknown
 frequency and severity of some insurable catastrophe like fire, collapse, death, or disability.
 Most static risks, contingencies which are sudden, external, random, and unpredictable as to
 time, are insurable.

- 4. Shifting the risk by two-party contract. The escalator clause in leases is a classic example of shifting the variance in rising operating expenses or real estate taxes to the tenant; the construction contract shifts some of the risk of rising material and labor prices to the general contractor, but in recent years there has been hard bargaining so that developer and contractor each share a part of the risk. Careful study of development ventures between private and public agencies will show that the majority of the contract is allocating responsibility for political administration or construction according to the expertise of each. For the dynamic risks of management, the best controls are the pains of penalties for the failure to perform and the profits that go with expertise in the execution of a
- 5. Limiting liability for losses through the form of ownership as a corporation or limited partnership or esculpatory clauses (which says the lender can only take the property in case of foreclosure) with which one party releases a second from an obligation to perform or for damages as a result of failure to perform.
- 6. Hedging is a term which covers a wide variety of devices for protecting oneself against future price fluctuations or other future contingencies. For example, a buyer can make an offer to purchase, contingent on future realization of political approvals, financing, or other requirements. An option to buy, an option to repurchase, or a variable interest rate mortgage are forms of hedges. The classic hedge in real estate is a mortgage loan for nearly 100 percent of the development cost without personal endorsements. If the project succeeds, the borrower can call out the equity profits by selling the property and paying the loan from the proceeds. On the other hand, should cash flows and appreciation prove inadequate, the borrower can default on the mortgage and give up the property to the lender through foreclosure or voluntary conveyance of deed in lieu of foreclosure. Business censure for mortgage default, while still damaging to the developer, has weakened significantly in recent years.

Not only do the parties to the development process seek to arrange the best possible solution to their problems, but also they must anticipate the many less favorable alternative outcomes to a given set of assumptions in order to survive an upset of their plans.

Time as a Critical Risk Element

The passing of time is the most critical risk in the development process. Time permits the power of compound interest to erode the developer's resources, and it allows the conditions of competition and consumer needs which were true when the project started to change significantly. Perhaps it is the impact of compound interest which is least understood by most government regulators and most often used for extortion by those few who do understand it. Remember that a project with \$1,000,000 invested at a nominal construction interest rate as low as 12 percent per annum is costing \$10,000 interest for the first month, \$333 a day, and then \$11,200 the second month, etc. If the developer had hoped for a net profit of \$50,000, a total delay of 4 months in completing the project will not only cause the loss of that profit in additional interest charges, but also may give the tenant the right to break his lease, the owner the right to invoke a loss of use penalty, the morgage lender the right to renegotiate more expensive terms than those in the original commitment, and a competitor the opportunity to finish first and capture the market.

As money and time are expended on the project. time becomes of the essence in achieving expected revenues from sales and rentals. Thus, it is not uncommon to see tall buildings where the top floors are still being structured while the bottom floors are already receiving tenants. In a slow office market it may be cheaper to build three 100,000-square-foot buildings, one after the other, rather than a single large 300,000-square-foot building where the economies of scale can be quickly lost to the cost of carrying a vacant inventory of space for even a relatively few number of months or years. The cost of carrying a vacant inventory of space can sometimes be controlled and often significantly reduced by an investment in market and merchandising research. It is a customer and the rate at which customers absorb space that drives the cash cycle development process. A careful study of each market segment for demographic characteristics, the needs and motivation of the consumer, his priorities in terms of a finished product, and the price he would be willing to pay is merchandising research. American developers have tended to neglect marketing research in risk management in favor of faster construction methods and more elaborate contract allocations of risk among money partners and government agencies. Nevertheless, cash from rapid occupancy or sales turnover of inventory as a result of careful research is the best method for reducing the relentless pressure of compound interest.

Preliminary Budget Concerns—Producer Group

Feasibility Analysis

Feasibility analysis is a generic term which groups a variety of predevelopment studies by generalists and specialists in a systematic philosophy of inquiry to determine facts that are reliable, assumptions about the future that are consistent with past experience, and tactics which will minimize the variance between objectives and realizations (see Graaskamp; also see Messner, Boyce, Trimble, and Ward). A real estate consultant would categorize various report types as suggested in Figure 4. A developer builds only what he can finance, and lenders should finance only those projects for which there is a defined consumer group representing effective demand in a specified period of time. Seldom can one individual or firm deal with all of the feasibility topics and report types equally well due to the necessity of specialization, the bias of a single viewpoint. and the gaps in professional education.

The sequencing of analysis depends on the problem, and ultimately there are only three types of real estate feasibility problems:

- The search for the most fitting site for a use(s). (Figure 5)
- The search for the most fitting use(s) for a specific site. (Figure 6)
- The search for the most suitable investment by investors. (Figure 7)

The most common situation is the site in search of a program for use by the speculative developer. The

Figure 4 Report Type Categories within General Category of Feasibility Analysis*

Strategy study: selection of objectives, tactics, and decision criteria.

Market study: economic base studies or other related aggregate data review.

Merchandising studies: consumer surveys, competitive property analysis, marketability evaluation, etc.

Legal studies: opinion on potential legal constraints, model contracts or forms of organization, and political briefs.

Physical design studies: engineering, land planning, and architectural studies.

Compatability studies: impact analysis of project on community planning, environmental quality, fiscal solvency, or other public policies.

Financial studies: economic modeling, capital budgets, present value and discounted cash flow forecasts, rate of return analysis, financial packages.

*Modified from work of J. A. Graaskamp, Guide to Feasibility Analysis, Third Edition. (Chicago: Society of Real Estate Appraisers, 1980).

use in search of a site, such as the occupant seeking new housing for his activities, is generally in a more flexible position of first specifying a program and then searching for the most fitting site. The development process is most successful when the developer first researches a program in terms of a marketing target and investment criteria and then acquires land most likely to advance that program.

Approaches to Determining Feasibility

The revenues of a development come from either rental income or sale of space-time unit, and the

real estate development intended for rental purposes provides the clearest and simplest demonstration of how a space-time unit and a corresponding monetary value are irrevocably linked together. If the total capital budget has been set by a completed architectural program, it is then possible to determine the rent required per unit—a "front door" approach; more realistically, the developer should determine the market rents and additional supply of space required in a given sector and then work backwards to establish the capital budget justified by revenues and control of the design. Too often the design specifications are set so that the rents required to justify the project are out of reach of prospects in the marketplace.

Consider the example in Figure 8 involving a small, two-story suburban office building on an 80,000square-foot site, costing \$100,000. With 16,000 square feet per floor, it provides 20 percent ground cover and very adequate landscaped surface parking. Assuming a basic construction cost at an economical \$30/square foot with fees, construction interest (\$100,000), and indirect costs (legal and design fees, permits, etc.) of \$180,000, the total capital budget is expected to be \$1,240,000. It is hoped that lenders would provide 80 percent of the required funds for permanent financing (or \$992,000) on a 20-year term, 111/2 percent annual interest, monthly payment mortgage, which means total interest and principal payments annually will be \$127.97 for each \$1,000 borrowed, resulting in a debt service constant of .127968. Therefore, the project must generate cash of \$126,944 a year for the mortgage lender. The balance of the money required, at least \$248,000 of it, assuming no working capital and no cost overruns, would be provided by a partnership of equity investors. They require only a 6 percent cash dividend on their investment each year since they expect additional return from gradual amortization of the mortgage and appreciation in the resale price over the next 10 years. Experience has shown that operating expenses for this multi-tenant building will approximate \$2.50 per square foot of gross area while real estate taxes are running about \$1 a square foot for comparable properties in the

Figure 5

Analysis Process: The Search For a Site For a Use(s)

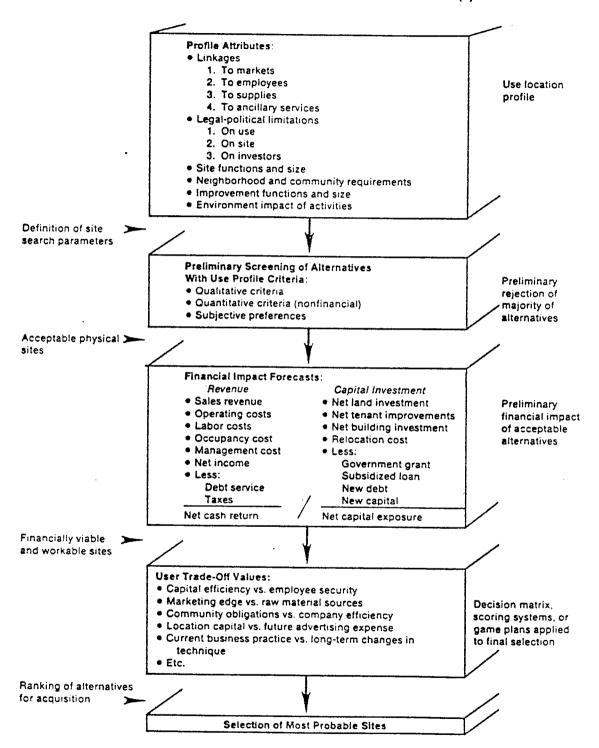


Figure 6
Analysis Process: In Search of a Use(s) For a Site

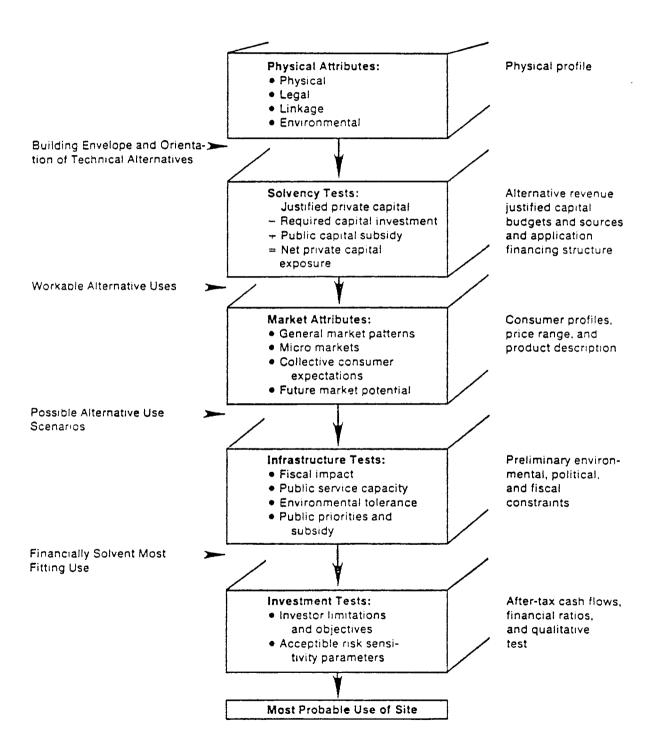


Figure 7
Process for Investor Selection of Real Estate

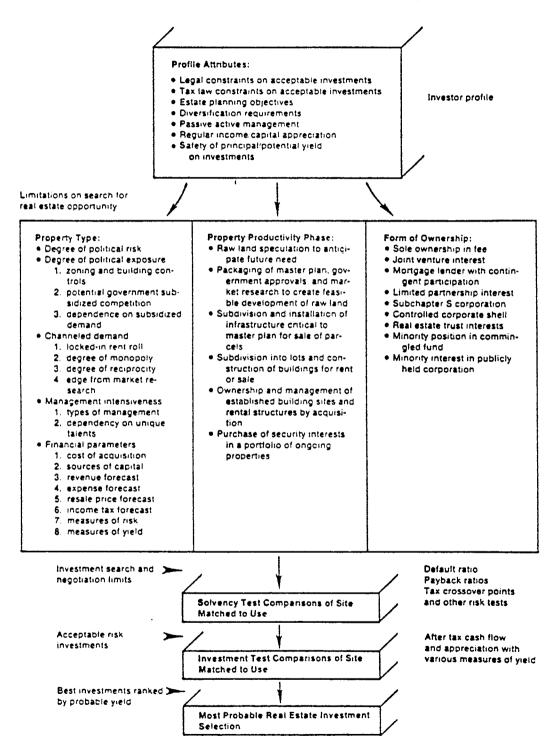
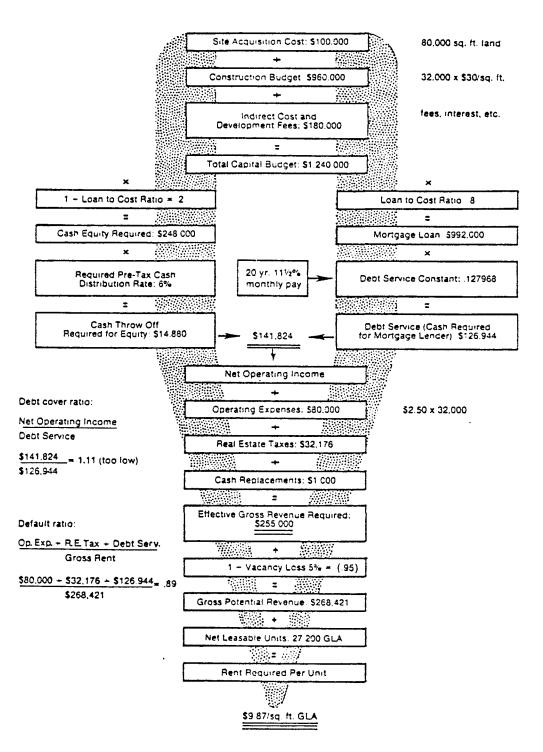


Figure 8
Loan to Cost Ratio Approach
(Frontdoor Approach)



area. Property management indicates cash replacement costs of \$1,000 a year for carpeting, paving, and vandalism loss so that total cost required annually is about \$250,000. Assuming a vacancy of 5 percent, this effective gross revenue requirement must be generated from 95 percent of gross leasable area (GLA) of 27,200 square feet. since 15 percent of the 32,000-square-foot building area is committed to corridors, stairways, and utility areas. The balance is included in the leasable area charged to tenants. The result is that the building must rent for at least \$9.87 per square foot of GLA if all claims are to be satisfied. Unfortunately, the maximum rent found in the market for 2 years in the future is \$9.25 a square foot so the building is not competitive. An owner-occupant must question the cost of a building which exceeds rental value of equally suitable space, and a tenant will choose the cheaper space if both buildings are equal in quality and location.

As serious as the marketing problem may be to the developer, the key financial ratios of debt cover and default ratios would be unacceptable to any mortgage lender. The debt cover ratio is the relationship of net income to debt service; and for office buildings, institutional lenders demand that the pro forma ratio fall between 1.2 and 1.3, a parameter which has been relatively constant for many years (ratios available from the American Life Insurance Institute, Washington, D.C.). The solvency test is the cash breakeven point of the building as a business, often termed the default ratio. Lenders and equity investors may agree that for the small suburban office building with multi-tenants with 3- to 5-year leases, they would like to see a cushion of 15-20 percent between gross rents and all operating expenses and debt service commitments. The sum of operating expenses, real estate taxes, interest, and principal payments divided by gross rents indicates the breakeven point is too high at .89, even without allowance for cash replacements and improvements to the property. A cash breakeven or default ratio of .85 would mean a developer could survive a 15 percent vacancy or an increase in operating expenses and real estate taxes of 19 percent [(268,421 x .10) ÷ 112,176 = .239 or 24 percent less 5 percent vacancy]. At this point, the project would have to be scrapped, postponed, or sent back for redesign. It would make more sense to begin with market rent and solve for the total capital budget that would be justified, and this is what has been done in Figures 9 and 10. In Figure 9 the emphasis is placed on meeting the debt cover ratio required by lenders

while Figure 10 uses the enterprise approach of structuring the business to achieve an acceptable risk in terms of cash breakeven point or default ratio. Moving from rent to budget is sometimes called the "backdoor" approach but is the essence of many feasibility studies, and required on the FHA 2013 form for all multifamily FHA insured rental projects, and most state housing finance agency forms. The justified building budget, once determined, becomes part of the program but may be modified by adjustments for the discounted value of other investment objectives such as inflation gains, income tax benefits, or advertising value and other benefits to the owner/occupant.

Figure 10 provides an alternative backdoor approach which is more useful in analyzing enterprise solvency and relative risk contributions of various claims on gross rent potential. Note that in Figure 10, the objective of holding the default ratio to 85 percent of gross potential rent reduces the cash available for debt service and therefore the justified mortgage loan from a maximum of \$992,000 to a maximum of \$788,000. The result is to increase the budget because the equity investor is willing to accept only 6 percent cash return as compared to the lender's claim of .127968, a cash payment which includes 111/2 percent interest and repayment of the loan over 20 years. The lender will not benefit from inflation and will suffer loss of purchasing power which explains his higher interest rate. The equity investor is willing to forego immediate cash income in favor of inflationary increases in future rents and property values. Because the equity investor capitalizes his share of income at a lower rate, the equity position provides considerably more cash. This example is an excellent demonstration that the principle of leverage requires that the cost of funds be less than the return on investment, which in this case would be \$126,000 net income divided by \$1,207,000 total investment or .10. A 10 percent return is lower than either the interest rate of 111/2 percent or the constant of .127968 so that reverse leverage is the result. The more funds that are borrowed, the more risky the investment, and the lower the justified capital investment. Note that a small drop in borrowed funds permitted a large increase in cash equity, improving the solvency position as well as the budget to a more realistic \$37/square feet of gross building area. During the decade of the

Figure 9

Debt Cover Ratio Approach
(A Backdoor Approach)
Lender's Point of View

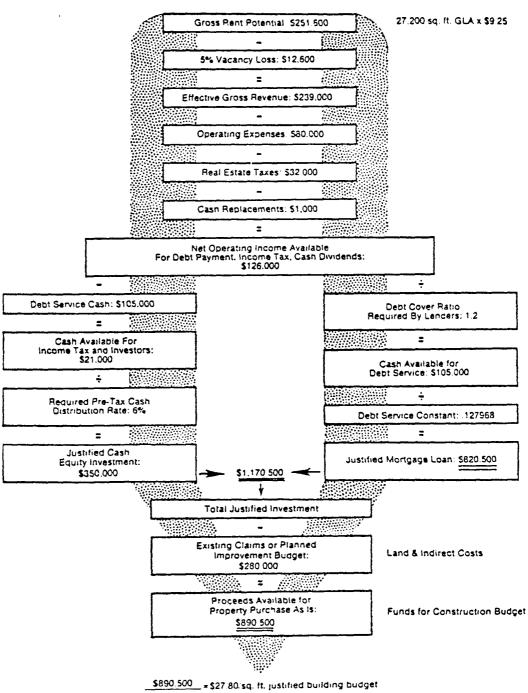
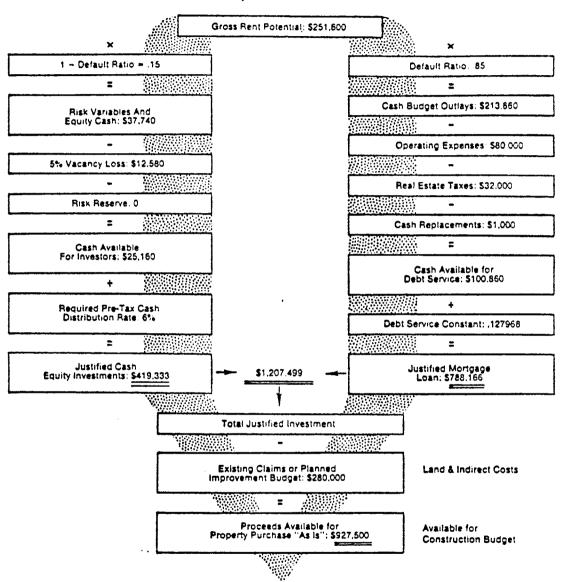


Figure 10

Default Ratio Approach

(Another Backdoor Approach)

Developer's Point of View



\$37/sq. ft. of gross area for justified building budget

1980s, interest rates are forecast to remain above 10 percent and more equity money will be provided for most projects, often raised through group investments such as partnerships and corporations. The loss of cheap money has made it almost impossible to finance 100 percent of a real estate project or to depend on leverage as the primary investment advantage of real estate. If equity investors must risk more of their own money, extending the payback period significantly, they can be expected to be more selective in regard to their investments and those whom they hire for their expertise in design and construction (see Messner, Schreiber, and Lyon).

Regulation of Capital

There was a time when the real estate development process involved individual small firms specializing in just one step of the total development procedure. One firm would subdivide lots, another would build the houses, a third would build the retail buildings, and a fourth would specialize in office and industrial facilities. The latter were typically built primarily by users who rented their surplus space to the general public. Projects were small, prices were lower, and risk capital was local, although commercial property loans were available from national insurance companies. Today the larger development firms have integrated the entire development process from the conversion of raw land to building sites through the construction, marketing, and management of the total neighborhood. Not only has the scale and required capital expanded significantly from small developments to large mixed-use developments, but also the variety of expertise and therefore profit centers retained by a single firm has expanded in a corresponding fashion. The development firm is attempting to control as many profit centers in the development process as possible in order to increase its share of the cash flows that are generated by the development and operations process. However, larger scale projects in an

economy of generally rising and inflationary costs require very large amounts of capital. Therefore, the development process is a partnership between those with the expertise to produce the product and manage the development business, and those with capital, typically more passive institutions and investor groups. A shortage of high-quality buildings and changes in tax laws should reduce turnover and lengthen holding periods to span significant changes in future use. A general trend in the real estate development process toward selective investment by groups of individuals, institutions, or consortiums of public agencies and private real estate investors is leading toward more regulation of real estate financial instruments, similar to the regulation of securities by the SEC. The Internal Revenue Service is concerned with the various tax attributes of each financial format and of the participating members in the investment.

Since pension funds may provide large amounts of equity for real estate in the future, the investment standards of ERISA (Employees Retirement Insurance and Security Act) will influence real estate development. Federal levels of regulation of real estate investment may be expanded if efforts to control inflation shift towards selective credit control rather than general monetary and fiscal controls. In short, the public controls on land use and consumer protection which have so complicated development are being matched by progressively more complex federal, state, and trade association rules on capital investment in real estate (see Roulac).

Capital investment by municipal government and infrastructure agencies may be more regulated than capital in the private sector. Referendums are required for municipal bond issues. The Internal Revenue Service closely reviews economic development bonds and state and municipal charters. Also, Congress is reconsidering the proper uses of taxexempt bonding because voters and legislators at all levels are more nervous about capital risk than are private investors.

Investment Purchase of After-Tax Cash Flow

Money managers for long-term investment funds are purchasing a stream of cash payments over many periods of investment which are generated by real estate. Cash payments may result from rental operations (subject to the income tax), occasional refinancing of the rental project (generally not subject to tax), net profits from resale (generally subject to capital gains tax), or tax savings to other income

of the investor due to temporary deductions for accelerated depreciation, investment tax credits, or other tax incentives. It is this stream of cash which is termed cash throw-off before taxes or cash flow after taxes. When this cash flow is increased by a tax shelter of other income or occasional surpluses. from refinancing, it is termed spendable after tax cash. Once the basic financial parameters of a project have been estimated using the frontdoor and the backdoor approach and studies discussed earlier. then the financial analysts convert these facts and assumptions to cash flow projections over 5 to 10 years' time using annual, semi-annual, or sometimes quarterly projections. Those who regulate real estate investment are providing administrative rules. and parameters on cash flow projections so that financial analysis must move on from the simple basic frontdoor-backdoor approaches outlined in this monograph.

A sample cash flow program and its basic assumptions are provided in Figure 11. In the Report Section Number 3, note that Line 11 of the output shows cash throw-off before taxes. Line 16 shows cash flow after tax and Line 18 shows spendable after tax cash. Lines 30-34 give the before-tax ratios necessary for evaluating project performances. Observe that return on net worth, Line 30, decreases over time and that the default ratio, Line 42, improves with time, indicating that while the project is less susceptible to failure, it may not be leveraged enough. Line 34 reports the present value of the project if operated and then sold at the end of each year and this present value must exceed the original acquisition cost of the project or the cost/benefit ratio is negative. These types of forecasts are generally made with the assistance of small computer systems available from sophisticated mortgage lenders, appraisers, and consultants. The student of development should be aware of the gap between the basic methods of the frontdoor/backdoor approach in defining the financial parameters of physical planning and the detailed procedures of systematic capital investment.

Different investors may participate in the real estate project simultaneously by means of a variety of financial instruments, depending on their investment profile perceptions for income, capital gain, safety, management ability, etc. One investor may own the land and lease it to the real estate venture for a steady rate of return over a 40-year time span, expecting some protection from inflation because at the end of 40 years he will own the land and building. The second investor may prefer to be in the position of mortgage lender, gradually recovering his investment from amortization and possibly protecting his dollars from inflation by participating in a share of the increases in gross rent or net income. A third investor might be willing to accept a small cash dividend and be entitled to use all of the income tax benefits available to the equity owner of the project, while still a fourth investor would pay hard dollars up front for the right to manage the property for a certain percentage of the gross rent and the cash throw-off. The supply of capital from a variety of sources, contract instruments, and rate of return viewpoints is called tiering and requires a thorough knowledge of cash flow planning and financial ratio analysis as well as the present value concept of money. In recent years, tiering of capital for real estate has generally included public capital.

Marketing—The Key to Development Market Research

The revenue flow, on which all assumptions for raising capital to build the real estate rest, begins with a customer. Selling is a method of persuading the customer to accept what is being sold, while marketing helps shape the product and the service to the needs of the user (see Roca). Marketing must serve three ultimate user groups: the individual purchaser or tenant, the collective users operating through the political process to approve or disapprove a project proposal, and future users who can be expected to convert a structure to changing lifestyles and needs at some point in the future.

Figure 11 Example of Computer Forecasting of Suburban Office Investment Cash Flows†

Forme							
estment Analysi	s of Suburban Office						
REPORT SECTION	<u>+ 1</u>	 -					
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	."" VALUES ARE AVERA						* 2330
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			COMPONENT	SUMMARY			
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TITL	.E	DEPR	USE	LIFE	METHOD	COST	sc
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	STRUCTION	1 00	1	50.	4	\$960000	o
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			MORTGAGE	SUMMARY			
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		<u>.</u>					
CASH FLOW							
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CASH FLOW	ANALYSIS ROSS RENT LESS VACANCY	×ES	251600. 12580	251600 12580.	264180 13209.	277389 13869	2912 145
CASH FLOW	ANALYSIS ROSS RENT	×ES	251600.	251600	264180	277389	2912 145 381
CASH FLOW 1 G 2 3 4 5 N	ANALYSIS ROSS RENT LESS VACANCY LESS REAL ESTATE TA: LESS EXPENSES ET INCOME	×ES	251600. 12580 16000. 84000 139020.	251600 12580. 32000.	264180 13209. 33920.	277389 13869 35955.	2912 145 381 636
CASH FLOW 1 G 2 3 4 5 N	ANALYSIS ROSS RENT LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION	×ES	251600. 12580 16000. 84000 139020. 46800	251600 12580, 32000, 60000 147020, 45936.	264180 13209. 33920. 61200. 155851. 45098.	277389 13869 35955. 62424 165140. 44285	2912: 145: 381: 636: 1749: 434:
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CASH FLOW 1 G 2 3 4 5 N 6	ROSS PENT LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME	×ES	251600. 12580 16000. 84000 139020. 46800 144000 -51780.	251600 12580. 32000. 60000 147020. 45936. 108836. -7752.	264180 13209. 33920. 61200. 155851. 45098. 107256. 3497	277389 13869 35955. 62424 165140. 44285 105485 15370.	2912: 145: 381: 636: 1749: 434: 1035: 279
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T 9	ROSS RENT LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS		251600. 12580 16000 84000 139020. 46800 144000	251600 12580, 32000, 60000 147020, 45936, 108836,	264180 13209 33920 51200 155851 45098 107256	277389 13869 35955. 62424 165140. 44285 105485	2912 145 381 636 1749 434 1035 279 434
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T 9 10 11 C	ROSS PENT LESS VACANCY LESS EAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF		251600. 12580 16000 84000 139020. 46800 144000 -51780. 46800. 0	251600 12580. 32000. 60000 147020. 45936. 108836. -7752. 45936. 13024 25160.	264180 13209 33920, 61200 155851, 45098, 107256, 3497 45098	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285.	2912 145 381 636 1749 434 1035 279 434 183
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T 9 10 11 C	ROSS PENT LESS VACANCY LESS REAL ESTATE TAX LESS EXPENSES ET INCOME LESS OEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASM THROW-OFF LESS INCOME TAXES		251600. 12580 16000 84000 139020. 46300 144000 -51780. 46800. 0	251600 12580. 32000. 60000 147020. 45936. 108836. -7752. 45936. 13024 25160. 0	264180 13209 33920 51200 155851 45098 107256 3497 45098 14604 33991 1049	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 16375. 43280. 4611.	2912 145 381 636 1749 434 1035 279 434 183 530
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T/ 9 10 11 C. 12	ROSS RENT LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS OEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASM THROW-OFF LESS INCOME TAXES LESS INCOME TAXES LESS RESERVES		251600, 12580 16000, 84000 139020, 46800 144000 -51780, 46800, 0 -4980	251600 12580, 32000, 60000 147020, 45936, 108836, -7752, 45936, 13024 25160, 0 503,	264180 13209 33920 61200 155851 45098 107256 3497 45098 14604 33991 1049 659	277389 13869 35955. 62424 165140. 44285 165485 15370. 44285. 16375. 43280. 4611. 773.	2912 145 381 636 1749 434 1035 279 434 183 530 83
CASH FLOW 1 G 2 3 3 4 5 N 6 7 8 T/ 9 10 11 C. 12 13 14 C.	ROSS PENT LESS VACANCY LESS REAL ESTATE TAX LESS EXPENSES ET INCOME LESS OEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASM THROW-OFF LESS INCOME TAXES	s	251600. 12580 16000 84000 139020. 46300 144000 -51780. 46800. 0	251600 12580. 32000. 60000 147020. 45936. 108836. -7752. 45936. 13024 25160. 0	264180 13209 33920 51200 155851 45098 107256 3497 45098 14604 33991 1049	277389 13869 35955. 62424 165140. 44285 15370. 44285. 15370. 44285. 4611. 773. 37896	2912 145 381 636 1749 434 1035 279 434 183 530 83
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T/ 9 10 11 C 12 13 14 C 15 W	ROSS RENT LESS VACANCY LESS REAL ESTATE TAJ LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PAINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION	s	251600. 12580 16000. 84000 139020. 46300 144200 -51780. 46800. 0 -4980	251600 12580. 32000. 650000 147020. 45936. 108836. -7752. 45936. 0 0 503. 16899	264 180 13209 33920. 61200. 155851. 45098. 107256 3497 45098 14604. 33991. 1049 659 32283	277389 13869 35955. 62424 165140. 44285 165485 15370. 44285. 16375. 43280. 4611. 773.	2912: 1451 381: 636 1749 434: 1035(279 434: 183: 536: 63
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T/ 9 10 11 C 12 13 14 C 15 W 16 D 17 T/	ROSS RENT LESS VACANCY LESS REAL ESTATE TAJ LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION: OFIXING CAPITAL LCAN EXTRIBUTABLE CASH AF AX SAVINGS ON OTHER	S TER TAX INCOME	251600. 12580 16000. 84000 139020. 46300 144000 -51780. 46800. 0 -4980 0 0 0 15534	251600 12580. 32000. 63000 147020. 45936. 108836. -7752. 45936. 13024 25160. 0 503. 16899 0.	264 180 13209 33920. 61200. 155851. 45098. 107256. 3497. 45098. 14604. 33991. 1049. 659. 32283.	277389 13869 35955. 62424 165140. 44285 10545 15370. 44285. 18375. 43280. 4611. 773. 37896 0.	2912 1455 381 636 1749 434 1035 279 434 183 530 83
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T/ 9 10 11 C 12 13 14 C 15 W 16 D 17 T/ 18 S	ROSS RENT LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION: ORKING CAPITAL LOAN EXTRIBUTABLE CASH AFTER PENDABLE CASH AFTER	S TER TAX INCOME	251600. 12580 15000. 84000. 139020. 46300. 144000. -51780. 46800. 0. -4980. 0. 0.	251600 12580, 32000, 60000 147020, 45936, 108836, -7752, 45936, 13024 25160, 0 503, 16899,	264 180 13209 33920. 61200. 155851. 45098. 107256. 3497 45098. 14604. 33991. 1049 659 32283.	277389 13869 35955. 62424 165140. 44285 16545 15370. 44285. 16375. 43280. 4611. 773. 37896	2912 145 381 636 1749 434 1035 434 183 530 83
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T/ 9 10 11 C 12 13 14 C. 15 W 16 D 17 T/ 18 SI	ROSS RENT LESS VACANCY LESS REAL ESTATE TAY LESS EXPENSES ET INCOME LESS OPPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION ISTRIBUTABLE CASH AF AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION	S TER TAX INCOME	251600. 12580 16000. 84000 139020. 46300 144000 -51780. 46800. 0 -4980 0 0 0 15534	251600 12580, 32000, 50000 147020, 45936, 108836, -7752, 45936, 13024 25160, 0 503, 16899, 0, 16899, 2325,	264 180 13209 33920. 61200. 155851. 45098. 107258 3497 45098 14604. 33991. 1049 659 32283 0.	277389 13869 35955. 62424 165140. 44285 15370. 44285. 15370. 44285. 16375. 43290. 4611. 773. 37896 0.	2912 145 381 636 1749 434 1035 434 183 530 83
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T/ 9 10 11 C 12 13 14 C 15 W 16 D 17 T/ 18 S	ROSS RENT LESS VACANCY LESS REAL ESTATE TAY LESS EXPENSES ET INCOME LESS OPPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION ISTRIBUTABLE CASH AF AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION	S TER TAX INCOME	251600. 12580 16000. 84000 139020. 46300 144000 -51780. 46800. 0 -4980 0 0 0 15534	251600 12580, 32000, 50000 147020, 45936, 108836, -7752, 45936, 13024 25160, 0 503, 16899, 0, 16899, 2325,	264 180 13209 33920. 61200. 155851. 45098. 107258 3497 45098 14604. 33991. 1049 659 32283 0.	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 16375. 43280. 4611. 773. 37896 0. 37896.	2912 145: 381 636 1749 434: 1035: 279 434 183: 530 83 446
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T/ 9 10 11 C 12 13 14 C 15 W 16 D 17 T/ 18 S/ MARKET VAL	ROSS RENT LESS VACANCY LESS REAL ESTATE TA: LESS EXPENSES ET INCOME LESS OPPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS OEPRECIATION LESS PRINCIPAL PMTS ASM THROW-OFF LESS INCOME TAXES LESS RESERVES ASM FROM OPERATION: OFKING CAPITAL LOAN ISTRIBUTABLE CASH AF AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION ANALYSIS	S TER TAX INCOME I TAXES	251600. 12580 15000. 84000 139020. 46300 144000 -51780. 46800. 0 -4980 0. 0 0 15534 15534	251600 12580. 32000. 63000 147020. 45936. 13024 25160. 0 503. 16899. 2325.	264 180 13209 33920. 61200. 155851. 45098. 107256. 3497 45098. 14604. 33991. 1049. 659. 32283. 0. 32283.	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 18375. 43280. 4611. 773. 37896 0. 37896.	2912 145 381 636 1749 434 1035 279 434 183 530 63 446 446
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T 9 10 11 C 12 13 14 C 15 W 16 D 17 T 18 S MARKET VAL CASH FLOW	ROSS RENT LESS VACANCY LESS REAL ESTATE TAY LESS EXPENSES ET INCOME LESS OPPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION ISTRIBUTABLE CASH AF AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION	S TER TAX INCOME I TAXES	251600, 12580 15000, 84000, 139020, 46300, 144000, -51780, 46800, 0, 0, 0, 0, 0, 0, 15534, 15534	251600 12580. 32000. 650000 147020. 45936. 108836. -7752. 45936. 0 0 503. 16899 0. 16899. 2325. 19225.	264 180 13209 33920. 61200. 155851. 45098. 107256. 3497 45098. 14604. 33991. 1049 659 32283 0. 32283	277389 13869 35955. 62424 165140. 44285 165475. 44285. 16375. 43280. 4611. 773. 37896 0. 37896.	2912 145 381 638 1749 434 1035 279 434 183 530 63 446 446
CASH FLOW 1 G 2 3 3 4 5 N 6 7 8 T/ 9 10 11 C. 12 13 14 C. 15 W 16 DO 17 T/ 18 SI MARKET VAL CASH FLOW	ROSS RENT LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION: CRKING CAPITAL LCAN AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION ANALYSIS	S TER TAX INCOME I TAXES	251600. 12580 16000 84000 139020. 46300 144000 -51780. 46800. 0 -4980 0 0 0 15534 15534	251600 12580. 32000. 63000 147020. 45936. 13024 25160. 0 503. 16899. 2325.	264 180 13209 33920. 61200. 155851. 45098. 107258 3497 45098. 14604. 33991. 1049 659 32283 0. 32283 0. 32283	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 18375. 43280. 4611. 773. 37896 0. 37896.	2912 145 381 636 1749 434 1035 530 83 446 446
CASH FLOW 1 G 2 3 4 5 N 6 7 8 T 9 10 11 C 12 13 14 C 15 W 16 D 17 T 18 S MARKET VAL CASH FLOW 19 EF 20 21 22	ROSS RENT LESS VACANCY LESS REAL ESTATE TAY LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASM THROW-OFF LESS INCOME TAXES LESS RESERVES ASM FROM OPERATION: CORKING CAPITAL LCAN AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION ANALYSIS NO OF YEAR MARKET VY LESS RESALE COST LESS LOAN BALANCES PLUS CUM CASH RESE	S FTER TAX INCOME I TAXES	251600. 12580 15000. 84000. 139020. 46300. 144000. -51780. 46800. 0. 0. 0. 0. 0. 0. 0. 15534. 15534. 15534.	251600 12580. 32000. 60000 147020. 45936. 13024 25160. 0 503. 16899. 2325. 19225.	264 180 13209 33920. 61200. 155851. 45098. 107258. 3497 45098. 1049. 6599. 32283. 0. 32283. 0. 32283.	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 16375. 43280. 4611. 773. 37896 0. 37896.	2912 145 3811 635 635 1749 434 1035 279 434 183 530 63 446 446
CASH FLOW 1 G 2 3 3 4 5 N 6 7 7 8 T/ 9 10 11 C 12 13 14 C 15 W 16 D 17 T/ 18 S MARKET VAL CASH FLOW	ROSS RENT LESS VACANCY LESS REAL ESTATE TAJ LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION: ORKING CAPITAL LCAN AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION ANALYSIS NO OF YEAR MARKET VI LESS RESALE COST LESS CAN BALANCES PLUS CUM CASH RESE EFORE TAX NET WORTH	S FTER TAX INCOME I TAXES	251600. 12580 16000. 84000 139020. 46800 144000 -51780. 46800. 0 0 0 0 15534 15534 15534	251600 12580, 32000, 65000 147020, 45936, 108836, -7752, 45936, 13024 25160, 0 503, 16899, 0, 16899, 2325, 19225,	264 180 13209 33920. 61200. 155851. 45098. 107256 3497 45098 14604. 33991. 1049 659 32283 0. 32283 0. 32283	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 14375. 43280. 4611. 773. 37896 0. 37896. 0. 37896.	2912 145: 381 636 61749 434: 1035: 530 83 446 446 446 17391 874: 8898: 152 7869
CASH FLOW 1 G 2 G 3 G 4 G 5 N 6 G 7 G 8 T) 9 10 11 C 12 G 13 G 14 C 15 W 16 D 17 T 18 S MARKET VAL CASH FLOW 19 E7 20 21 22 23 B 24 C	ROSS RENT LESS VACANCY LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION: OFIXING CAPITAL LCAN ISTRIBUTABLE CASH AFTER PENDABLE CASH AFTER LUE & REVERSION ANALYSIS NO OF YEAR MARKET VI LESS RESALE COST LESS LOAN BALANCES PLUS CUM CASH RESE EFORE TAX NET WORTH APITAL GAIN OF SOLDI	S FTER TAX INCOME I TAXES	251600. 12580 15000. 84000 139020. 46800 144000 -51780. 46800, 0 -4980 0 0 0 15534 15534 1980 1390200 69510 960000 10770. 371460 117890	251600 12580. 32000. 63000 147020. 45936. 108836. -7752. 45936. 13024 25160. 0 503. 16899. 0. 16899. 2325. 19225.	264 180 13209 33920. 61200. 155851. 45098. 107258. 3497 45098. 14604. 33991. 1049. 659. 32283. 0. 32283. 0. 32283. 1558510. 77926. 924615. 13061. 569031. 352185.	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 15370. 44285. 16375. 43280. 4611. 773. 37896. 0. 37896. 0. 37896.	2912: 1456 3811 6365 1749 4344 10356 83 4446 446 446 152 7896 6076 6076
CASH FLOW 1 G 2 3 3 4 5 N 6 7 8 T/ 9 10 11 C 12 13 14 C. 15 W 16 D 17 T/ 18 SJ MARKET VAL CASH FLOW 19 EF 20 21 22 23 B 24 25 C	ROSS RENT LESS VACANCY LESS REAL ESTATE TAY LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS INCOME TAXES LESS RESERVES ASH FROM OPERATIONS IOTRING CAPITAL LOAN ISTRIBUTABLE CASH AFTER LUE & REVERSION ANALYSIS NO OF YEAR MARKET VY LESS RESALE COST LESS LOAN BALANCES PLUS CUM CASH RESE EFORE TAX NET WORTH APITAL GAINS TAX	S FTER TAX INCOME I TAXES	251600. 12580 15000. 84000 139020. 46800. 0 14900 -51780. 46800. 0 0 0 0 0 0 15534 15534 1980 1390230 69510 960000 10770. 371460 117890 14147	251600 12580. 32000. 63000. 147020. 45936. 13024 25160. 0 503. 16899. 0. 16899. 2325. 19225.	264 180 13209 33920. 61200. 155851. 45098. 107256. 3497 45098. 14604. 33991. 1049 659 32283 0. 32283 0. 32283 1558510 77926 924615. 13061 5690313 5690313 5690313 5690313	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 18375. 43280. 4611. 773. 37896 0. 37896 0. 37896. 1953 1651404 62570. 906240 14488 675081 477634 57316	
CASH FLOW 1 G 2 G 3 G 4 G 5 N 6 7 7 8 T/ 9 10 11 C 12 13 14 C 15 W 16 D 17 T/ 18 S 18 S MARKET VAL CASH FLOW 19 EF 20 21 22 23 B 24 C 25 26	ROSS RENT LESS VACANCY LESS VACANCY LESS REAL ESTATE TAI LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION: OFIXING CAPITAL LCAN ISTRIBUTABLE CASH AFTER PENDABLE CASH AFTER LUE & REVERSION ANALYSIS NO OF YEAR MARKET VI LESS RESALE COST LESS LOAN BALANCES PLUS CUM CASH RESE EFORE TAX NET WORTH APITAL GAIN OF SOLDI	STER TAX INCOME I TAXES ALUE RVES	251600. 12580 15000. 84000 139020. 46800 144000 -51780. 46800, 0 -4980 0 0 0 15534 15534 1980 1390200 69510 960000 10770. 371460 117890	251600 12580. 32000. 63000 147020. 45936. 108836. -7752. 45936. 13024 25160. 0 503. 16899. 0. 16899. 2325. 19225.	264 180 13209 33920. 61200. 155851. 45098. 107256 3497 45098 14604. 33991. 1049 659 32283 0. 32283 0. 32283 1558510 77926 924615. 13061 569031 352185	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 16375. 43280. 4611. 773. 37896 0. 37896. 0. 37896.	2912: 1456 3811 636: 1749 434: 10356 279 434: 183: 446: 446: 446: 446: 446: 446: 47: 47: 48: 48: 48: 48: 48: 48: 48: 48: 48: 48
GASH FLOW 1 G 2 G 3 G 4 G 5 N 6 G 7 G 8 T 9 10 11 C 12 G 13 G 14 C 15 W 16 D 17 T 18 S MARKET VAL CASH FLOW 19 E1 20 C 21 C 22 C 23 B 24 C 25 C 26 C 27	ROSS RENT LESS VACANCY LESS REAL ESTATE TAY LESS EXPENSES ET INCOME LESS DEPRECIATION LESS INTEREST PMTS AXABLE INCOME PLUS DEPRECIATION LESS PRINCIPAL PMTS ASH THROW-OFF LESS INCOME TAXES LESS RESERVES ASH FROM OPERATION: OFIXING CAPITAL LOAN AX SAVINGS ON OTHER PENDABLE CASH AFTER LUE & REVERSION ANALYSIS NO OF YEAR MARKET VA LESS RESALE COST LESS LOAN BALANCES PULS CUM CASH RESE EFORE TAX NET WORTH APITAL GAIN IF SOLD CAPITAL GAIN STAX MINIMUM PREF TAX	STER TAX INCOME I TAXES ALUE RVES	251600. 12580 16000. 84000 139020. 46800 144000 -51780. 46800 0. 0. 0. 0. 0. 15534 15534 15534 1780. 1980 1390200 69510 960000 107770. 371460 117890 14147	251600 12580, 32000, 65000 147020, 45936, 108836, -7752, 45936, 13024 25160, 0 503, 16899, 0, 16899, 2325, 19225,	264 180 13209 33920. 61200. 155851. 45098. 107256. 3497 45098. 14604. 33991. 1049 659 32283 0. 32283 0. 32283 1558510 77926 924615. 13061 5690313 5690313 5690313 5690313	277389 13869 35955. 62424 165140. 44285 105485 15370. 44285. 18375. 43280. 4611. 773. 37896 0. 37896 0. 37896. 1953 1651404 62570. 906240 14488 675081 477634 57316	2912: 1456 3811 6365 1749 4344 10356 83 4446 446 446 152 7896 6076 6076

BEFORE TAX RATIO ANALYSIS					
CASH FLOW ANALYSIS					
	1960	1981	1982	1983	198
30 RETURN ON NET WORTH B'4 TAX	0.2592	0 3102	0.2850	0 2624	0 244
31 CHANGE IN NET WORTH B 4 TAX	76460	97823	99748.	106050	11190
32 ORIG EQUITY CASH RTNB 4 TAX	-0.0169	0.0853	0 1152	0.1467	0.179
33 ORIG EQUITY PAYBACK 8.4 TAX	0 0000	0 0573	0 1667	0 2952	0 448
34 B.4 TAX PRESENT VALUE	1284319	1335057	1385464.	1431682	147357
AFTER TAX RATIO ANALYSIS					
CASH FLOW ANALYSIS					
	1980	1981	1982	1983	_194
35 RETURN ON NET WORTH AFR TAX	0.2541	0.2845	0 2640	0 2443	0.22
36 CHANGE IN NET WORTH AFR TAX	59433.	81619	82847.	88871.	9441
37 ORIG EQUITY CASH RTN AFR TAX	0 0527	0.0652	0 1094	0.1285	0.15
38 ORIG EQUITY PAYBACK AFR TAX	0.0527	0.1178	0.2273	0 3557	0.50
39 AFTER TAX PRESENT VALUE	1287405.	1322538.	1363642.	1399418.	143202
CASH FLOW ANALYSIS	4040	4094	***		
	1960	1981	1982	1983	
40 NET INCOME-MARKET VALUE FITO	0.1000	0.1000	0.1000	0 1000	0.10
41 LENDER BONUS INTEREST RATE	0.0000 0.9698	0.0000	0.0000	0 0000	0.00
42 DEFAULT RATIO	Q.3030	0.8500	0.8213	0.7940	0.76
					
RT SECTION S SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981		0.000		0.000	
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED -		0 8500	0.8500	0.8500	
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981		9696	0 8500	0.8213	0.79
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL -					0.79
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01		9696	0 8500	0.8213	0.79 0.05
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE · NEEDED · DEFAULT RATE · ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING	βY	0.9696 -0.1198	Ø 8500 Ø.0000	0.8213 0.0287	0.79 0.05
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE · NEEDED · DEFAULT RATE · ACTUAL · DIFFER · TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS	BY BY	0.9698 -0.1198	0 8500 0.0000	0 8213 0.0287 <u>1982</u>	0.79 0.05
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES		0.9698 -0.1198 -1960 -0.1573	0 8500 0.0000 1981 0.0786	0 8213 0.0287 	0.79 0.05 <u>19</u> 0.07
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES	BY	0.9696 -0.1198 -0.1196 -0.1573 -0.0300	0.8500 0.0000 1981 0.0786 0.0419	0.8213 0.0287 1982 0.0779 0.0432	0.79 0.05 19 0.07 0.07 0.07
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS.	BY BY	0.9698 -0.1198 -0.1198 -0.1573 -0.0300 -0.0466	0.8500 0.0000 1981 0.0786 0.0419 0.0419	0.8213 0.0287 	0.75 0.05 0.05 0.05 0.05 0.05 0.05
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PMTS.	BY BY BY BY	0.9696 -0.1198 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000	0 8500 0.0000 1981 0.0786 0 0419 0 0000 0.0231 0.1932	0.8213 0.0287 	0.79 0.05 0.05 0.05 0.05 0.05 0.05 0.05
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PMTS. WORKING CAPITAL LOAN	BY BY BY BY BY	0.9696 -0.1196 -0.1573 -0.0300 -0.0466 0.0000 -0.0175 0.0000 0.0000	0 8500 0.0000 1981 0.0786 0 0419 0 0000 0.0231 0.1932 0 0000	0 8213 0.0267 1982 0.0779 0.0432 0.0432 0.0000 0.0246	0.79 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.0
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PMTS. WORKING CAPITAL LOAN GROSS INCOME	BY BY BY BY BY BY	0.9696 -0.1198 -0.1198 -0.1573 -0.0300 -0.0466 0.0000 -0.0007 0.0000 0.0000 0.0000	0 8500 0.0000 1981 0.0786 0.0419 0.0419 0.0000 0.0231 0.1932 0.0000 -0.0065	1982 0 0779 0 0432 0 0000 0 0000 0 1809 0 0000 0 0000 0 0000	0.79 0.05 18 0.07 0.04 0.04 0.04 0.00 0.11 0.00
SENSITIVITY ANALYSIS ANALYSIS YEAR IS 2 = 1981 DEFAULT RATE - NEEDED - DEFAULT RATE - ACTUAL - DIFFER - TO CHANGE THE DEFAULT RATE .01 CHANGE ANY ONE OF THE FOLLOWING CASH OUTLAYS REAL ESTATE TAXES TOTAL EXPENSES FIXED EXPENSES VARIABLE EXPENSES TOTAL INTEREST PMTS. TOTAL PRINCIPAL PMTS. WORKING CAPITAL LOAN GROSS INCOME FIXED INCOME	BY BY BY BY BY BY BY	0.9696 -0.1198 -0.1573 -0.0300 -0.6466 0.0000 -0.0175 0.0000 0.0000 0.0000 0.0000	0 8500 0.0000 1981 0.0786 0 0419 0 0419 0 0000 0.0231 0.1932 0 0000 -0.0085	0 8213 0.0287 0.0287 0.0779 0.0432 0.0000 0.0246 0.1809 0.0000 -0.0082	0.79 0.05 15 0.00 0.00 0.00 0.00 0.00 0.00 0
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This example is based on earlier Figures 8-10

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Marketing is also intended to protect the developer from the uncertainty of competitive pricing. Free enterprise includes the art of creating a monopoly, if only for a moment, so that as a developer one is not forced to use price cutting as a primary device to acquire business. Profit margins typically are not adequate to provide for price cutting. As one analyst once stated. "If you compete on price, there is always someone who can build for less, and by the time he learns his true costs, all of us will be broke." Therefore, marketing is intended to create a product which is unique, in terms of sensitivity to the needs of the consumer, and which reduces the other costs of the consumer to a point where the intended buyer or tenant will pay full price.

A strong marketing position requires careful research of the needs and budget limits of the prospective user. No American industry spends less on legitimate consumer research and product development than does the real estate industry. This failure to spend even 1 percent of project budgets on primary research about the intended consumer. is one explanation for many business failures of real estate projects across the land. Developers simply misjudge the number of consumers in the market. the needs as those consumers perceive them, and the rate at which new units can be absorbed in the marketplace. There is great irony in the fact that mortgage lenders expect insurance premiums to be paid in advance in case the project should burn down but typically require nothing in the way of original research to discover whether the project will rent up. Nevertheless, real security for their loan is a customer, not a fire. Lenders assume that a developer with "a track record" knows his market from past projects, but past success is no guarantee that any demand remains unsatisfied or that market action has not shifted its location and product preferences. Design serves society best when it serves the intended user rather than the normative standards of the designer or developer or yesterday's market.

Market Data Versus Merchandising Data

Market data is typically aggregate data describing population by age group, income category, business activity, location of residence, average price of home, and other statistical information typically collected by planning offices, census data, and other public sources. Market data will assist in scaling the project so that 800 housing units are not planned for a community that will only need 600 in the foreseeable future. It may measure the expected rate of absorption for broad categories of space, say 500,000 square feet of class A office space, 200 condominium units, or 600 single-family lots per year. More to the point, however, is how much of that potential market can be captured for a specific project and this capture rate is related to merchandising data.

Merchandising data is typically collected with a specific project in mind and involves primary research by the analyst with the objective of determining the competitive standard of project attributes and discovering the unmet needs in the market which could provide the competitive edge. In some markets, the competitive standard becomes a very precise and well-known set of specifications. The competitive standard in apartments in the Southwest reveals consistent standards for the number of inches of counter space, cabinet fronts. the weight of carpeting, the cost of the dining room fixtures, and the basic size of rooms. The consumer has taken these for granted and competitive developers have studied each other carefully to measure what the consumer expects as a basic minimum. Everyone expects a bathroom; however, the bathroom may have a variety of layouts which are more convenient, private, spacious, etc. Office buildings also may have a basic competitive standard of one parking stall for every 300 square feet of gross leasable area. Ceiling and lighting systems may be standard, and wall systems may be standard.

A competitive edge depends on finding a true unmet need of a particular consumer group, it is not an edge obtained through gimmicks and eleverness on the part of the designer or the developer. The competitive edge typically is created by finding

methods to enhance user self-esteem or to reduce the cost of friction, of anxiety, or of inefficient space layouts housing the user's activity. Medical office layouts can be more efficient with structural column systems which may not fit general office use with the same net product of useable space. Customers may be attracted to a store with better access to parking, wider parking stalls, or better linkages to work and home. An alternative is to reduce the level of anxiety of the user in terms of security of property and person or as to future adjacent development or control of other tenants in the project. A third method of creating a competitive edge is to enhance the consumer's sense of well-being by selling him on the more comfortable romantic lifestyle of a particular project, or the prestige which is to be transferred and contributed to the consumer for locating in a specific project. Another method of building a competitive edge is to shift the balance of who typically pays and who typically benefits in the marketplace. For example, the apartment project located on the site adjacent to a major park provides all the benefits of open space, control of neighboring properties, and convenience of recreational alternatives without necessarily requiring the tenant to pay the true cost. Of course, it may be that the site is more valuable because of its proximity to publicly maintained and operated amenities. Nevertheless, over the long run, there is a significant cash cost benefit shift from those who live closest and enjoy the park most to those who are expected to pay real estate taxes in general to support parks in other parts of town from where they themselves live.

Finally, the competitive edge may be created by shifting or reducing the risk of change. For example, a primary advantage of a shopping center development where the developer has achieved an operating agreement with three or four major department stores is that he can now promise the smaller retailers who locate within that shopping center control of the total shopping environment by a single landlord. In addition, the operating agreement guarantees joint marketing and promotion of the center by major department stores who have committed themselves to operate under their own brand names for at least 25 years in the future. The developer will maintain certain tenant mixes, park-

ing ratios, and housekeeping standards for long periods of time. Thus, the small retail tenant is willing to pay a premium rent to be in a shopping center as opposed to locating in a commercial strip where there is no assurance that those department stores on which he may depend for primary draw, the parking on which he may depend for convenience, and the tenant mix and marketing efforts in his symbiotic relationships can be sustained over long periods of time without drastic and critical changes detrimental to his business.

There is little monopoly to be gained by providing the identically same product as those already in the marketplace. Monopoly is achieved when you can find a group unserved adequately by present offers, a gap, if you will, of unmet needs within an array of small micro-markets that in total create that vague and nonexistent phenomenon called the real estate market. Consider that a 25-unit apartment project today may require as much as \$1,000,000 in capital and \$240,000 of annual rents (sales), which is more capital and more sales than is characteristic of 65 percent of all American enterprises. Nevertheless, this big business needs only 25 customers who find it unique because of its sensitivity to their needs.

Marketing Research and the Collective Consumer

Recently, marketing research survey techniques have been used advantageously to control political risks which are inherent in a regulated process like development. Before spokesmen for neighborhoods or trade associations or other collective segments of the community can render public opinions which are difficult to retract, it is useful to discover whether expressions of concern about traffic congestion, environment, or fiscal impacts are only good reasons for the tendency of people to fear change in the physical status guo of their lives. These fears can be recognized and resolved in preliminary plans to defuse negative political action. Indeed, some political pollster firms can be found doing housing, downtown mall, and redevelopment attitude studies in advance of public and private planning efforts.

For example, a developer acquired a three-block area of a downtown, single-family residential area with the intent to upzone the land for garden apartments. The plot had been vacant for many years. and there was now a scattered stand of wainut and maple trees. A political survey by mail of residents within half a mile of the site generated a high rate of response so that the developer was able to defuse latent fears before any preliminary plan galvanized the neighborhood into an unnecessary political confrontation. The plan showed that two dead-end streets were cul-de-saced and flanked with singlefamily townhouses compatible with existing homes. Favorite neighborhood pathways were maintained in the site plan, paved, and lighted. Resident parking was placed below the proposed structures; trees were mapped and virtually all were saved in the placement of structures. Guest parking was bermed and driveway outlets carefully placed to avoid conflict with a neighboring church, arterial, and bus stops. The architectural styling required use of old brick, shingles, and the wood detailing of the early Victorian and midwest farm styles which characterized the neighborhood. Finally, a Victorian gazebo was placed at the key intersection as a bus stop and as the logo for the development.

The neighborhood ad hoc committee not only approved the architectural program, but also secured the approvals of the City Planning Commission, which issued a commendation. Research prevented inadvertent detailing of preliminary plans which might have triggered bitter political resistance leading to a hardening of positions to avoid personal embarrassment. Egos in place of facts ultimately leads to unreasonable and noncommunicative negotiations of all parties in the real estate development permit process.

Another primary problem in marketing research is determining whether the collective consumer truly understands the fiscal impacts of broad value judgments which are often the grist for newspaper and political debates. Growth management may need to be redefined in terms of long-term fiscal impacts, as has been done for a number of communities in California (i.e., San Jose) and elsewhere recently (see Roca; also see Gruen Gruen + Associates). The residents may be working against their better interest by blocking further development of a tax base which can share in the costs of providing adequate water treatment, expanded sewer facilities, and other services desired by the community.

The Prearchitectural Marketing Program

Careful consumer marketing research through a telephone survey, mail guestionnaire, and personal interview permits development of a prearchitectural marketing program for each project proposal. First, it is necessary to define a particular market segment. or micro-market toward which the project is directed. One developer in the Chicago market has identified 13 single-family home purchase groups ranging from the young family with children to the unmarried, single individuals seeking some tax shelter for his professional income. Each group is surprisingly predictable in terms of needs, budgets, season of the year for purchase, and style preferences. Another award-winning builder in Denver summarized the personality of single-family homebuyer segments at the upper end of the market by stating his firm catered to the French cuff and study set, competitor A reached the buttondown collar boys, while competitor B focused on the Pendleton plaid woolen shirt crowd. Similarly, office building users can be segmented by those whose customers come to them versus those who go out to meet the customer on his turf, those linked to the courthouse or the financial district and those linked to the suburban service base, those linked to production facilities and those closely linked to merchandising areas, and so on, Each will rank style, convenient access of parking, special linkages, monthly costs, and peer group proximity quite differently.

A significant part of the merchandising strategy is anticipation in the design program and product perception by means of the sales themes, logos, and competitive sales points to be advanced by the project. Moreover, the designer needs to consider what will be used as an initial sales area, which units may serve as models, and whether the approach zone to the project is a positive reinforcement of project image. The approach zone, of course, will consider signs, entrances, paving, site development, and the visibility of positive project amenities to the prospects arriving on site by foot or by car. Too often the architect treats the merchandising campaign of the developer's marketing force as an area of discipline remote and unrelated to the design process. The result will be projects like those designed for the New York Housing and Urban Development Authority, which placed chic, cubist, early Marekesh, epoxy apartments in small New York communities which favored the New England colonial and early American styles of architecture. Neither logo, project title, nor furnishings related to the preferences and patterns of the community, and the initial fears of subsidized housing were simply aggravated by providing no sense of architectural

identification with the community. Marketing is not a distinct discipline from design but is in fact a significant portion of the prearchitectural program.

Anticipating the Future User

Most structures outlive the lifestyle, cultural, and business needs for which they were originally intended. Recently, development emphasis has been placed on the recycling of older buildings to new and unintended uses as compared to their original function. These adaptive use efforts have been most successful where floor load capacity in the old structures was generous, ceiling heights were adequate, and column spacing was modular and flexible. Long-term investors now recognize the probability that many buildings will change uses during the time of ownership so that investment safety is linked to project designs which anticipate convertibility of space-time units from one function to another.

The alternative to recycling is a high profit margin and high rate of return on capital which permits rapid recovery of investment and junking of improvements at the end of their useful life. A multistory parking garage might be better designed so the floors are flat rather than sloped and have a higher floor load capacity than required for American over-sized automobiles. In the foreseeable future smaller cars will mean a higher concentration of weight loads, and in the longer term it may be desirable to convert parking garages to office space or warehouses. The added cost might be offset by parking fees, higher salvage costs in the structure, or lower interest rates on capital provided.

For many years, rental office buildings have used utility grid systems, modular ceiling units, and 'HVAC systems which anticipate continual rearrangement of office layouts and equipment. This anticipation of future users must be extended to other forms of real estate and the added capital cost incorporated in the capital budget and rent structure. Computer cash flow models have made it possible to compare cost/benefits of alternative building concepts in terms of maximizing the present value of spendable cash for private investors or minimizing the present value of building life cycle cost outlays on public buildings. It is imperative that

all parties in the development process learn present value methods of money management reflecting compound interest over time (see Grant and Ireson). Although future needs and lifestyles cannot be anticipated with great accuracy, there is growing recognition that the undefined future user must be considered explicitly in the initial investment formula and design program. Institutional investors need long-term productive investments with protection against the reverses of a fast changing society: society needs structures which can be recycled in order to conserve the energy required of new development and to speed the response of the urban fabric to changing conditions, thus avoiding the wholesale obsolescence of neighborhoods, the glacial pace of land use succession, and the intolerable cost of past urban renewal programs.

Foreseeable future trends have many subtle impacts on real estate development. Conservation of prime agricultural lands for future food supplies may shift residential development into the hills or into higher density condominiums in formally exclusive, detached single-family home areas. Subdivision layouts will recognize the need for better solar orientation of structures, to anticipate improved technology and changing cost effectiveness ratios for solar energy, and home design will invest in features which reduce heat gains and losses, not only to reduce current energy consumption, but also to attract even more energy conscious buyers at the time of resale, thus protecting investment value. As these added costs modify the pricing structure and trade-off issues for the real estate consumer, the defined competitive standard will begin to shift. For example, in California the basic 1,500-square-foot house has shrunk recently to perhaps 1,300 square feet in order to maintain price, to reduce the space that must be heated and cooled, and to hold total monthly housing costs within income limitations of the consumer. Notice that the ability to internalize these requirements in the capital cost/monthly payments and therefore the cash cycle of the user begins to provide an infinite number of trade-off decisions for the developer, the consumer, and the public agencies regulating the development process. Overregulation can adversely influence capital cost and monthly cash payments (see U.S. General Accounting Office). Sensitivity to the cash cycle and therefore the rent or purchase price that is within the means of the consumer permits a gradual and economically smoother transition to a modified view of the marketing and development process.

The Ethics of Fit and Monopoly

The concept of monopoly or design to channel demand insulated from direct price competition to a project is often regarded as suspect with respect to the free enterprise system, but just the opposite has been demonstrated here. There is a direct relationship between the ethics of fitting a project to the environmental constraints of a site, to the needs and budget of the eventual user, and to the concerns and fears of the collective consumer, and the uniqueness of a project which creates a monopolistic dimension in its pricing. A full price willingly paid by the individual user measures satisfaction and maximizes investment value by stabilizing many of the critical risks of the development process for the investor. Feasibility was defined as measuring the fit of the project to its physical context, to its intended users, to the objectives of the investor, and to the limited resources of the developer and the community. While fit of a project design to soil profiles and topography maps is taken for granted, lest the structure collapse or sag, it is not generally accepted that the project will financially collapse if it is not sensitive to customer profiles and cash cycle topology. These steps will greatly reduce both the variance between expected revenues and those which are achieved and the variance in cost from budgets to those which are actually incurred, as well as reduce the risk of upset due to political resistance, rejection by the financial markets, or inflexibility to changing conditions and market needs. Sensitivity is the source of monopoly pricing, and strong demand with stability of the pricing structure is the primary concern of the financial manager, the marketing director, and the physical planner. In the past, prearchitectural or design programs were primarily concerned with product specification and site characteristics. However, modern design philosophy has been proadened to recognize that the product and the site contribute significantly to revenues and expenses of the enterprise. Because the financial flows of the project are intimately and inseparably related to the design product, it is necessary to recognize the cash cycle criteria of the users, the selection criteria of capital investors, and the mechanisms of risk management with which capital budgeting decisions are made in the development process.

Summary

Each new development, large or small, is an enterprise and a subsystem within a larger environment. The form and behavior of that enterprise will be a consensus or equilibrium between external forces of interest and the force of talents, energies, and resources internal to the development enterprise. Such an equilibrium is reached more efficiently through an appreciation of joint objectives of development participants rather than through confrontation and desperate pursuit of total victory in a contest of wills. All of the development groups—the consumer group, the production group, and the public infrastructure group—are limited by their cash receipts and the need for solvency as well as dependent upon one another for their cash income: each has a financial interest in the survival of the others. Thus, solutions to business and political problems are most productive in a cooperative environment (see McDonald).

The development process is a loop system involving many subsystems or cash cycles. Today's buyer of a development product is tomorrow s customer for services from the public infrastructure. Without new customers the infrastructure may not operate at its most efficient scale, thus overcharging consumers or deferring charges to future users.

The development process is the interaction of the three major groups to produce land use plans and building specifications where the present value of the benefits to each group exceeds the present value of all expenditures that will be required of each group over the life of the development. More specifically, it is a cash cycle investment which requires: 1) present value of the benefits to equal or exceed present value of the cash outlays and 2) cash receipts from all sources including borrowing and ownership interest to equal or exceed net cash outlays, including repayment of debt and dividends on ownership capital, in each accounting period in order to survive as a justified economic project. Public buildings should be designed to minimize the present value of all cash outlays, direct and indirect, over the life of the facility, and private development should maximize the present value of spendable cash dollars after all expenditures, including taxes.

Real estate development, whether public or private, is constrained by solvency and uncertainty. Because cash projections depend on an infinite number of

assumptions, explicit and implicit, about the future, all parties to the development process must tolerate variance in their cash planning and negotiate a risk management plan which is equitable. Rish should be reduced through merchandising research, tight control of development plans, and incentive rewards and penalties for managerial operation. Risks must be allocated to match expertise and responsibility for execution of a plan or responsibility for time delay. Changes to cash plans must occur within cash tolerances of all parties with a vested interest.

The development process historically has been viewed in terms of individual benefit (highest and best use) and has only recently accommodated political interests (most probable use); the search is now on for the law and technology in which real estate development can reflect the needs of society as a cluster of groups (most fitting use). The development process is our most challenging manufacturing process because its subsystems are complex and because it is the instrument of change which affects all of a community and a society.

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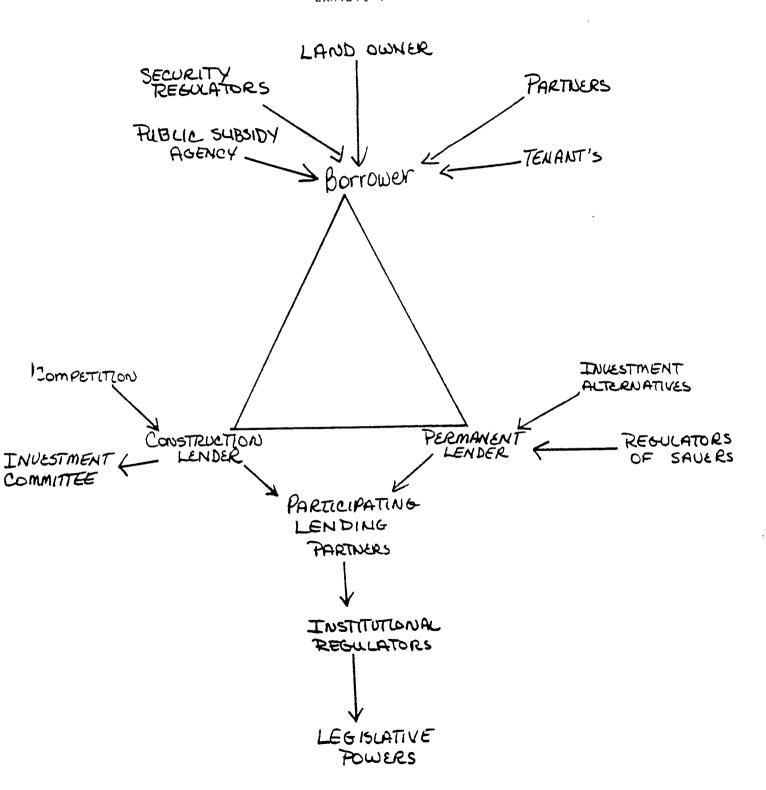
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FINANCE & RISK MANAGEMENT CONCEPTS

James Graaskamp

- 1. Organization of an Analytical Viewpoint
 - A. Basic strategy pleasure, pain, and bailout
 - 1. Continuous monetary profit for the borrower
 - 2. Contingent opportunities to apply pain in the form of money and pride
 - 3. Consider the loan the sale of the put and price for the bailout
 - B. The Harvard view
 - 1. The property
 - 2. The people
 - 3. The package
 - C. The Wisconsin view of income property analysis
 - 1. Political exposure
 - 2. Market control
 - 3. Management intensiveness
 - 4. Sensitivity of financial plan
 - 5. Sensitivity of tax plan
 - 6. Thoroughness of risk management plan
 - 7. Realism of estate plan of principal borrower
 - D. Major misconceptions of bankers in real estate lending
 - 1. Mortgage loans are a two party contract
 - a. See Exhibit 1 for party clusters
 - b. See Exhibit 2 for minimum list of documents
 - 2. A real estate loan is a credit loan
 - a. It's a small business loan
 - b. It's a commodity straddle
 - 3. Capitalization rates indicate value, and loan to value ratios indicate security of principal
 - 4. Real estate marketing is shot gun rather than rifle
 - a. High degree of segmentation
 - b. High sensitivity to price, product, pace, and promotion
 - 5. Foreclosure losses are minimal relative to income
 - a. Mismatching of losses to income
 - Opportunity costs of concealing mistakes of auditors in terms of management time
 - c. Opportunity costs of money tied down in non-earning assets
 - d. Opportunity costs of loss reserves which diminish loanable funds, reported income per share and increased cost of new capital

Exhibit 1



APPLICATION AND CLOSING CHECKLISTS

CONSTRUCTION LOAN

FROM BORROWER FOR APPLICATION

- Permanent or standby commitment.
- 2. Financial statement of principal (balance sheet and cash flow).
- Background, experience and current projects of principal.
- Bank references of principal.
- Income-expense pro forma or sales schedule (include outline of all leases indicating name of tenant, area, initial term of lease, renewal options, base rent, rent escalation during initial term, rent during renewals, tenant contributions for common area, parking lot or mall, details of tax stop, percentage rent, status of signing of lease, etc.).
- Plans and specifications.
- Detailed projected cost breakdown (include direct building costs by trade, land, site preparation, paving, interest, taxes, architect, engineer, legal, closing, promotion, leasing, operating deficit, brokerage, loan fees, tenant improvements, contingency, overhead, etc.).
- Survey and legal description.
- Appraisal and/or feasibility study.
- 10. Name of architect and general contractor.

FROM BORROWER FOR CLOSING

- 11. Principal's statement as to no adverse change of financial condition since application.
- Permanent lender approval of site, leases, lease amendments, plans, specifications, appraisal, survey, title, etc.
- List of general contractor and major subcontractors over \$10,000.
- Copies of general contract and major subcontracts.
- Contractor's performance and/or payment bond.
- General contractor's letter agreeing to perform for construction lender.
- Architect's contract.
- Architect's letter agreeing to perform for construction lender.
- Builder's risk insurance policies and other casualty policies with endorsement naming lender as loss payee.
- 20. Public liability and workmen's compensation policies.
- 1. Title insurance binder or commitment with copies of all easements, restrictions, covenants, etc.
- Inventory of personal property.
- Executed leases.
- Required executed lease amendments.
- Executed ground lease.
- Ground owner's estoppel certificate.
- Evidence that real estate taxes and assessments are current.
- 28. Required legal opinions (borrower's counsel and outside counsel).
- Cross easement, common wall, ingress and egress, and other similar agreements.
- Subordination of existing mortgage or letter from existing mortgagee indicating amount required for satisfaction.
- Corporate, partnership or beneficiary documents and consents. Copy of building permit and other permits or variances.
- Required governmental consents (including health, water, sewer, air, ecology, etc.).
- Utility availability letters (including electric, gas, water, sewer, storm drainage, etc.). 34.
- 35. Compute elosing costs and legal fees (loan settlement statement).
 36. Set closing date, time and location.

FROM LENDER FOR CLOSING

- 37 Construction loan commitment.
- 38 Buy/sell agreement.
- Promissory note. 39.
- Mortgage or deed of trust.
- Construction loan agreement.
- Collateral assignment of tenant leases, rents and profits.
- U.C.C. security agreement and financing statement.
- Principal's guaranty of payment and/or completion.
- 45 Conditional assignment of construction contract.
- Loan requisition form.
- Procedure for loan advances and billing of interest.

PERMANENT LOAN

FROM BORROWER FOR APPLICATION

1. See "Permanent Loan Submission Checklist" on reverse side.

FROM BORROWER FOR CLOSING

- 2. Principal's statement as to no adverse change in financial condition since application.
- Final rental schedule (certified by principal).
- 4. Final as built survey.
- Appraisal.
- 6. Architect's certificate of completion.
- 7. Final site inspection and approval from lender.
- Required insurance policies with endorsement naming lender as loss payee.
- Up-dated title insurance binder or commitment with copies of all easements, restrictions, covenants, etc.
- Inventory of personal property.
- 11. Mortgage insurance policy issued to lender.
- 12 Executed leases
- 13. Required executed lease amendments.
- 14. Executed ground lease.
- 15. Ground owner's estoppel letter.
- 16. Subordination and non-disturbance agreements.
- 17. Tenant estoppel letters.
- 18. Evidence that real estate taxes and assessments are current.
- 19. Required legal opinions (borrower's counsel and outside counsel).
- 20. Cross easement, common wall, ingress and egress, and other similar agreements.
- 21. Letter of construction lender and other mortgagees indicating amount required for satisfaction (or subordination agreements).
- 22. Corporate, partnership or beneficiary documents and consents.
- 23. Certificate of occupancy (original) and other permits or variances.
- 24. Required governmental consents (including health, water, sewer, air, ecology, etc.).
- 25. Compute closing costs and legal fees (loan settlement statement).
- 26. Set closing date, time and location.

FROM LENDER FOR CLOSING

- 27. Buy/seil agreement.
- 28. Mortgage note (or endorsement from construction lender without recourse).
- 29. Mortgage or deed of trust.
- 30. Loan agreement for continued disbursements.
- 31. Collateral assignment of tenant leases, rents and profits.
- 32. U.C.C. security agreement and financing statement.
- 33. Agreement relieving principal from personal liability.
- 34. Interest and amortization schedule.
- 35. Date first payment is due.

NOTE:

These checklists are representative of the general application and closing requirements of many lenders. In dealing with a lending institution or broker it is suggested that these lists be used as guides and that the borrower contact the lender or the lender's attorney for a list of those specific items required by the lender for a commitment or for closing.

PERMANENT LOAN SUBMISSION CHECKLIST

FUTURE CONSTRUCTION

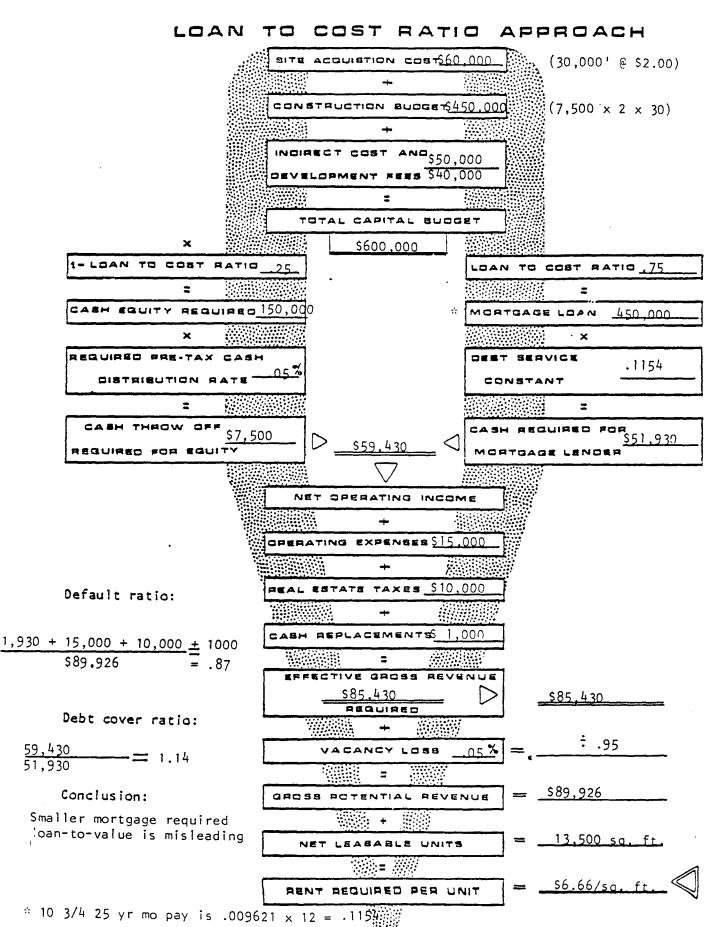
- 1. Description of specific project and overall development plans.
- 2. Loan requested (amount, interest rate and payout).
- 3. Name of interim lender and availability of participation by permanent lender in construction loan.
- 4. Financial statement of principal (balance sheet and cash flow).
- 5. Background, experience and current projects of principal.
- 6. Bank references of principal.
- 7. Name of architect and general contractor.
- Income-expense pro forma or sales schedule (include outline of all leases indicating name of tenant, area, initial term of lease, renewal options, base rent, rent escalation during initial term, rent during renewals, tenant contributions for common area, parking lot or mall, details of tax stop, percentage rent, status of signing of lease, etc.).
- 9. Copies of major tenant leases and/or letters of intent.
- 10. Appraisal and/or feasibility study.
- 11. Rental and operating comparables (market survey).
- 12. Plot plan outlining site in red (indicating area in square feet).
- 13. Street map outlining site and competing projects.
- 14. Survey and legal description.
- 15. Aerial photograph of site.
- 16. Rendering.
- 17. Present use of site or status of construction.
- 18. Cost of land and date of acquisition.
- 19. Present value of land.
- 20. Present zoning of land,
- 21. Preliminary building plans and construction specifications.

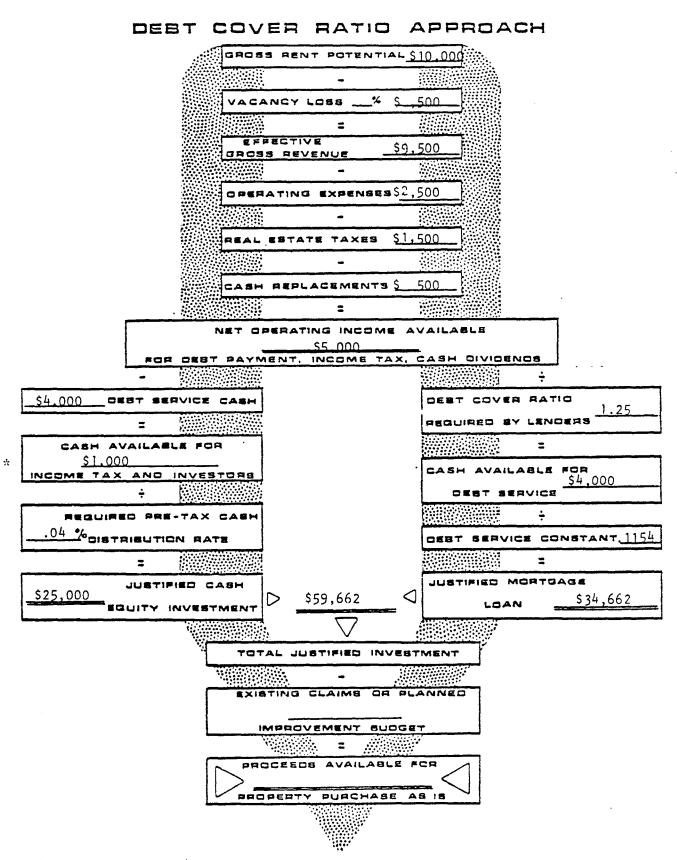
- 22. Typical floor plans, layouts and elevations.
- Projected cost breaknown (include direct building costs, land, site
 preparation, paving, interest, taxes, architect, engineer, legal, closing,
 promotion, leasing, operating deficit, brokerage, loan fees, tenant
 improvements, contingencies, overhead, profit, etc.).
- 24. Economic and general information on the area.
- 25. Leasing brochure.
- List of project features (parking, type of fuel, heating, air conditioning, elevators, guards, pool, laundry facilities, basements, storage, club house and recreational facilities, appliances, patios, etc.).
- Method of real estate tax computation (basis of valuation, equalization rate and millage rate).
- 28. Month of construction start and projected completion.
- 29. Projected month of loan closing.
- 30. Unusual development obstacles or problems.

EXISTING BUILDINGS

- 31. Year project was completed.
- 32. Copy of certificate of occupancy.
- 33. Operating statements for prior three years.
- 34. Detailed rent roll (include items from number (8) above).
- 35. Copy of real estate tax bills for prior three years.
- 36. Photographs of property.
- 37. Name and address of managing agent.
- 38. Renovation or remodeling plans and specifications.
- 39. New income-expense pro forma if income is expected to change.
- 40. Cost and terms of purchase (if property is to be acquired).
- Name of existing lender, original loan amount, interest rate, term, annual payment, present loan balance, earliest prepayment date, prepayment penalty, and maturity date.

- 6. Appraisals and market studies are worthless
 - a. Regulatory CYA documents
 - b. No input to basic lending decision
 - c. No letter of engagement to specify product
- 7. Real estate is generic so that site planning, architecture and engineering professionals make little difference
- II. A Risk Management Approach to Underwriting
 - A. Risk is variance between budget and realization
 - B. Risk management is control of variance by means of:
 - 1. Information (to reduce frequency and severity of loss
 - Incentive (positive and negative) to reduce frequency and severity of loss
 - 3. Insurance to share loss
 - 4. Guarantees to shift loss
 - 5. Shift of reliance by contract
 - 6. Limit of liability for losses
 - 7. Limit losses by hedging
 - C. Mortgage closing as risk management
 - 1. Title insurance as guarantee
 - 2. Bonded surveyor to shift by contract
 - 3. Property and casualty insurance
 - 4. Default guaranty (FHA, PMI, SBA)
 - 5. Letters of credit or escrows
 - D. Mortgage underwriting
 - 1. Control of capital cost
 - 2. Capacity to absorb excess capital cost variance
 - 3. Limit of liability on total capital cost
 - 4. Quality and duration of income
 - 5. Control and limit on operating expenses
 - 6. Capacity to cover negative cash flows
 - 7. Capacity to cover variable interest rate charges
- III. Basic Cash Flow Formats
 - A. Front door approach, Exhibit 3
 - B. Back door debt cover approach, Exhibit 4
 - C. Back door breakeven approach, Exhibit 5
 - D. Timing and amount of operating receipts
 - 1. Base rents
 - 2. Index adjustment to base
 - 3. Collection of escalators and passthroughs





^{*} Note that a full \$1,000 is distributed to investors rather than the \$750 in Case 1.

Exhibit 5

DEFAULT RATIO APPROACH GROSS RENT POTENTIAL × \$10,000 15 . 85 1- DEFAULT RATIO DEFAULT PATIO = CASH BUDGET QUTLAYS\$8.500 RISK VARIABLES AND \$1,500 EGUITY CASH CPERATING EXPENSES \$2,500 \$500 VACANCY LOSS \$1,500 REAL ESTATE TAXES_ \$250 RISK RESERVE CASH REPLACEMENTS 500 \$750 CASH AVAILABLE FOR INVESTORS CASH AVAILABLE FOR \$4,000 DEST SERVICE REGUIRED PRE-TAX CASH 04% DEST SERVICE CONSTANT . 1154 DISTRIBUTION PATE = JUSTIFIED CASH BDADTROM CEIRITBUL \$18,750 \$53,412 \$34,662 EQUITY INVESTMENTS LOAN TOTAL JUSTIFIED INVESTMENT EXISTING CLAIMS OF PLANNED \$ 8,412 IMPROVEMENT BUDGET PROCEEDS AVAILABLE FOR

PROPERTY PURCHASE "AS IS

^{* 10} 3/4% 25 yr. monthly pay is .009620 x 12 = .1154 9% 25 yr. mo. pay is .008391 x 12 = .1006 or a \$40,000 justified loan

- 4. Collection of special assessments for common areas or refurbishing
- 5. Collection of tenant improvement amortization
- 6. Collection of percentage clause rents
- 7. Collection of parking revenues
- 8. Collection of service charges
- E. Timing and amount of operating outlays
 - Operating expenses
 - 2. Real estate taxes and insurance
 - 3. Utilities
 - 4. Energy costs
 - 5. Management fees
 - 6. Leasing fees
 - 7. Replacement and refurbishing
 - 8. Sinking fund disbursements
- F. Timing and amount of interest and principal payments
 - 1. Fixed rate loans, Exhibit 6
 - 2. Variable rate loans, Exhibit 7
 - 3. Standby loans, Exhibit 8
 - 4. Accrual loans, Exhibit 9
- IV. Critiquing a Leasing Program
 - A. Computer spread sheet powers
 - B. Leasing abstracts and rollover assumptions
 - C. Key questions for the analyst, Exhibit 10
 - 1. Definition of space
 - 2. Definition of finish
 - 3. Definition of services
 - 4. Definition of parties
 - 5. Conditions of commencement
 - 6. Conditions of termination
 - 7. Recognition of changing conditions
 - 8. Formula for rental adjustments
- V. Adequacy of Expense Budget Planning
 - A. Always regard large loans as sale of a put
 - B. Evaluate operating efficiency and material quality as though the lender would own the building
 - C. Use the banks own mechanical engineer for structural and energy analysis

Exhibit 6

FIXED-RATE MORTGAGES

Parameters

Rate/Yield

- . Coupon rates of 100 to 250 basis points above prime or other similar index.
- . Approximately comparable to similar-term corporate bonds of BAA rating.
- . Long-term rates of 175 to 250 basis points above prime.
- . Medium-term rates of 150 to 225 basis points above prime.
- . Short-term rates of 100 to 200 basis points above prime.
- . Forward commitment coupon rates of 100 to 200 basis points above regular rates.

Term

- . Flexible: two to fifteen years.
- . Most popular demand for five years or more.

Payment Format

- . Flexible: fifteen- to thirty-five-year amortization for longer terms. Older properties use lower amortization.
- . Typically interest-only for shorter terms (five years or less).
- . Interest-only converted to amortization. Available for medium- and long-term loans.

Debt Coverage Ratio

- . Higher coverages with longer terms (e.g., 120 percent, ten-year term).
- . Flexible: 105 to 130 percent of annual debt service payments.
- . 120 to 130 percent for multitenant and/or management-intensive projects.
- . 105 to 120 percent for limited-tenant and/or credit-backed projects.

Loan-to-Value

- . Lower ratios with longer terms (e.g., 65 percent, ten-year term).
- . Flexible: 60 to 80 percent or less of appraised value.
- . 65 to 75 percent most common range.

Dollar Size

- . Various sizes.
- . \$350,000 or more as practical minimum.
- . \$2 million or more as a competitive and preferable range.

Prenayment Penalties

- . Frequently negotiable for longer-term loans.
- . Shorter-term loans typically locked in.
- . Declining penalties available (e.g., 6 percent in year 5, reduced one percent annually).
- . Yield recapture formula based on the spread between the current rate (or index) and the stated rate along with the remaining term of the loan.

Exhibit 6 (Continued)

Funding Period

- . Immediate funding preferred, usually thirty to 120 days.
- . Forward funding available, extremely limited supply; six to twenty-four months.

Financing Fees

- . Flexible: lower fees for larger projects.
- . 2 to 5 percent for smaller and unique deals (approximately \$2 million or less).
- . Zero to 2 percent for larger deals.
- . Partially or fully refundable standby deposit fees of 5 percent or more for forward commitments.

Property Types

- . Traditional: commercial, industrial, office, and residential.
- . New and existing property preferred.
- . To-be-built projects: scarce lending demand.

Special Features

- . Personal guarantees required for smaller loans.
- . Fully amortized term available with call options or rate review.
- . Significant preleasing required for forward commitments, typically 30 to 50 percent minimum. Upon physical completion and minimum leasing achievements, floor funding of 65 to 80 percent of loan amount. Ceiling funding offered if approximately full debt coverage payments are achieved within six months or more. Extensions available at lender's option.

Exhibit 7

VARIABLE-RATE MORTGAGES

Benefits and Risks

Borrower - Benefits

- . Lower initial coupon (interest) rate results in larger loan amount.
- . Longer loan term available than other floating-rate debt vehicles such as accrual, construction, and standby loans.
- . Lower initial coupon rates often fixed in earlier years.
- . Attractively low payments during favorable interest rate cycles.
- . Prepayment penalties often waived.
- . Interest rate fluctuation protection. Upper and lower interest rate payment limits are frequently included.

Borrower - Risks

- . Index formulas may not reflect mortgage market conditions.
- . Increased default probabilities. Cash flows must be responsive enough . to absorb increased rates paid to lenders.
- . Increased payments and negative amortization reduce yields and equity.
- . Higher financing fees than most other forms of permanent mortgages. As a result, early prepayment is discouraged.
- . Difficult to refinance or encumber with secondary financing. Rate payment uncertainty and negative amortization are major obstacles.

Lender - Benefits

- . Inflation and yield protection. Yields are indexed to cost of funds or other similar index.
- . Attractive income generated from financing fees.
- . During rapidly increasing interest rate cycles, borrowers are encouraged to prepay loan as soon as possible. Should unfavorable market conditions continue, lender's risk exposure is eliminated during the early part of the cycle.

Lender - Risks

- . Index formula may not correspond to actual cost of funds.
- . Negative amortization increases risk exposure.
- . Interest rate adjustment ceilings effectively eliminate maximum yields during tight credit market conditions.
- . Maturities could be extended beyond statutory and regulatory limits if payments were to remain the same and maturities were extended to accommodate increased interest rates.

Parameters

Rate/Yield

- . Up to 100 basis points below comparable fixed-rate mortgages.
- . 300-500 basis points above 180-day Treasury bills.
- . 100-400 basis points above bank prime rates.

Exhibit 7 (Continued)

Rate Adjustment Periods

- . Flexible: monthly, quarterly, semiannual, annual, or more rate adjustments.
- . One- to three-year fixed rates available during early years. Subsequent years convert to more frequent adjustment periods.

Rate Adjustment Limits

- . Flexible: 0-15 percent maximum fluctuation over previous period payment.
- . Overall cap on rate of 0-5 percent.
- . Deferred interest payments similar to accrual loans (negative amortization).
- . Floor is set typically 100 basis points below initially funded interest rates.
- . Floor and ceiling limits may be equidistant (e.g., ± 4 percent).
- . Ceiling is set as high as 600 basis points or more above initially funded interest rates.

Term

. Flexible: one to fifteen years.

Amortization

- . Flexible; interest-only for shorter-term loans.
- . Amortized and/or interest-only combinations for longer-term loams.

Debt Coverage Ratio

- . Lower than comparable fixed-rate mortgages.
- . 100 to 120 percent of debt service.
- . Lower coverage traded for higher rates and/or less restrictive adjustment limitations.

Loan-to-Value

- . Higher than comparable fixed-rate mortgages.
- . 65 to 90 percent of appraised value.
- . Higher ratios traded for higher rates and/or less restrictive adjustment limitations.

Dollar Size

. Various sizes; \$1 million or more preferable.

Prepayment Penalties

- . Flexible; typically prepayable without charge.
- . Early years may have smaller penalties of one to 3 percent.

Funding Period

- . Immediate funding desired, usually thirty to 120 days.
- . Forward commitments available. Rates based on future delivery quotes.

Exhibit 7 (Continued)

Financing Fees

- . Flexible: zero to 5 percent.
- . 1.5 to 3 percent range most common.

Property Types

- . Properties with readily adjustable cash flows preferred.
- . Residential, hotel/motel, and health-care preferred.

Special Features

- . Lenders may joint-venture or participate in loan if project cash flows are attractive and refinancing unattractive.
- . Option available to change index used in the loan term (e.g., change from bank prime rate to LIBOR).
- . Interest-rate hedging with futures contracts may be used to reduce borrower's exposure to dramatic interest rate fluctuations.

Exhibit 8

STANDBY LOANS

Benefits and Risks

Borrower-Benefits

- . A construction loan may be obtained for speculative development.
- . With regular and suicide standbys, short-term permanent mortgage funds are available upon project completion.
- . With regular and suicide standbys, 100 percent ownership rights and full control of the project are retained.
- . Upon project completion, with regular and suicide standbys, a favorable permanent mortgage market may exist and the standby loan can be ignored.
- . Regular and suicide standbys are practical alternatives to a forward commitment, a permanent mortgage that requires stricter leasing and funding provisions and is less available.
- . With presale standbys, development profits are earned for successful projects.
- . Standby commitments are available for a wide variety of to-be-built projects, including higher-risk projects such as hotels/motels, miniwarehouses, mobile home parks, and nursing homes.

Borrower Risks

- . Standby fees create additional financing costs. Forward commitments, participating loans, and other direct permanent loan formats eliminate the need for interim financing.
- . The construction lender may reject the standby commitment.
- . Personal liability is involved. Funded regular and suicide standbys are typically structured as recourse loans.
- . A successfully completed project in an unfavorable permanent mortgage market may have to be funded with a suicide standby loan.
- . Construction and leasing delays can cause higher financing costs because commitment will continue to be extended or be canceled.
- . With presale standbys, the buyer purchases project at a below-market price.
- . Onerous suicide standby loan terms combined with poor market conditions and expensive alternative financing sources could force the project into failure and bankruptcy.

Lender-Benefits

- . With regular and suicide standbys, fees are earned without advancing funds.
- . Highly attractive yields for funded regular and suicide standby loans.
- . Funded regular and suicide standby loans are usually protected by the personal liability of the borrower.
- . If the project is unsuccessful and regular or suicide standby funding provisions are not met, the loan does not have to be funded.
- . With presale standbys, property is purchased at an attractive price based on economic and leasing conditions.

Exhibit 8 (Continued)

Lender-Risks

- . The construction lender may reject the standby commitment.
- . Under difficult market conditions, borrower may be forced to accept an arduous suicide loan and subsequently declare default and bankruptcy.
- . Under favorable market conditions, borrower may accept more attractive permanent financing from other lending sources over a regular standby loan.

Observations |

A standby commitment should be marketable. The construction lender must be willing to accept the standby commitment, otherwise the borrower is wasting time obtaining that commitment. Many construction lenders refuse to accept standby commitments issued by lenders with unacceptable credit ratings and lower financial strength. The borrower should consult with the construction lender during the negotiation process with the standby lender.

Funding

For speculative projects, the releasing requirements play a key role in triggering a standby commitment. Requirements vary among lenders, although 25 to 50 percent preleasing is the most often quoted range. Many lenders will normally arrange floor funding without a leasing provision. In addition to floor funding, the lenders also establish holdback provisions for leasing and tenant improvements.

Parameters

Commitment Fees

- . Flexible: 2 points or less for the initial one-year period: one point or less for every six-month renewal exercised.
- . One-year minimum typically required.

Leasing Requirements for Funding

- Less stringent than forward commitments and traditional loans.
- . Flexible: 25-50 percent preleasing for regular and suicide standbys.

Funded Standby Rates

- . 150 to 300 basis points above bank prime rates for regular standbys.
- 300 to 500 basis points or more above bank prime rates for suicide standbys.

Funded Standby Term

- . Flexible: two to seven years for regular standbys; extensions are available.
- . Shorter terms for suicide standbys
- . Six to twenty-four months or more, depending upon construction time, for presale standbys.

Exhibit 8 (Continued)

Funded Standby Payment Schedule

- Zero to 250 basis points over prime; fixed-rate payments with excess interest payments accruing to principal with an open accrual or up to a 10 percent maximum accrual permitted in regular and suicide standbys. (See "Accrual Loans.")
- . 300 to 500 basis points over prime, floating rate, interest payments with no accruing permitted for suicide standbys.

Funded Standby Debt Coverage Ratios

- . Lower than conventional, fixed-rate mortgages for regular standbys.
- . Flexible: 100 to 125 percent of annual debt service payments.
- . Most common range is 110 to 120 percent for regular and suicide standbys.

Funded Standby Loan-to-Value Ratio

- . Higher than conventioanl fixed-rate mortgages.
- . 75 to 90 percent or more of development costs for regular and suicide standbys.
- . 100 percent of development costs (including developer profit), plus additional funds depending upon leasing achievements for presale standbys.

Dollar Size

- . \$1 million or more.
- . Medium-sized deals preferred--\$3 million to \$25 million.

Funded Standby Prepayment Penalties

- . Flexible: more attractive than permanent financing alternatives.
- . None or minimal for regular standbys.
- . Arduous penalties and restrictions for suicide standbys.

Funding Period

- . Borrower's option; typically eighteen months or more.
- . Commitment usually available thirty to 120 days.

Property Types

- . All types for regular and suicide standbys.
- . Traditional: institutional-grade office, industrial, residential, and retail for presale standbys.
- . Limited demand for specialty properties, including hotels and medical facilities.

Exhibit 9

ACCRUAL LOANS

Benefits and Risks

Borrower-Benefits

- . Full ownership is retained.
- . Predictable payment schedule stabilizes project income stream.
- . Construction loans can readily roll over to interim financing.
- . Aggressive underwriting; lower debt coverages and initial rates provide higher loan amounts and a broad range of property types are acceptable.
- . The actual value of future-paid accruals is reduced because of the time value of money.
- Attractive tax benefits--accrual basis taxpayers have larger soft-dollar losses.
- . No or minimum prepayment penalties permit inexpensive conversion to more favorable permanent financing if available.

Borrower-Risks

- . Unless project cash flow and/or value increases correspond to interest accrual increase amounts, refinancing and default risks arise.
- . During higher interest rate cycles, negative amortization occurs and loan balance is increased.
- . Interim financing only. Permanent financing will eventually be required in most cases.
- . Negative amortization places additional pressure for property values to proportionally increase. Otherwise, refinancing and salability are hampered.
- . Total interest paid--including fixed base rate and accrued rate--is typically above permanent mortgage rates.
- . Additional financing is difficult to encumber over an accrual loan.
- . Significantly higher up-front fees than with most other forms of debt.
- . Personal guarantees are frequently required.

Lender-Benefits

- . Attractive financing and commitment fees available.
- . Inflation protection: during high interest rate cycles, attractive interim-term interest rate yields are available that are similar to short-term construction loans.
- . Competitive yields: higher yields offered in comparison with similarterm permanent loans.
- . Flexibility: accruals can be adjusted, capped, and restructured with changing market conditions.
- . Project and risk control: optionally, a construction loan can be converted to an accrual loan followed by a permanent loan.
- . Additional security--personal guarantees are often available.

Exhibit 9 (Continued)

Lender-Risks

- . Accrued interest repaid with discounted future moneys.
- . Loan risk exposure increases proportionally with rising accruals.
- . Strong project performance required for timely repayment of loan principal and accrual. Cash flow should be expected to increase proportionally with respect to interest rates.
- . Limited prepayment control--loan may be prematurely repaid during lower interest rate cycles.
- . Illiquid investment--less salable debt instrument in secondary mortgage market.

Observations |

Since additional interest is accrued adding to the total indebtedness, original coverage ratios and the loan-to-value relationships are changed. Where interest accrual is based on floating rates, initial underwriting parameters are difficult to establish. However, if the spread between the actual and accrual rate is initially fixed, the lender can readily identify the expected yeilds and the borrower can identify expected costs using discounted cash flow analysis. Investment analysis is often for structuring these loans to measure the effects of the various accrual formulas and predicted cash flow requirements needed to justify the initial loan amount along with deferred accruals due at the end of the loan term.

Because of higher interest rate costs and uncertainty, accrual loans are suitable interim loans for entrepreneurial properties such as hotels/motels nursing homes, rehab properties, and other projects that offer higher cash flows to support regular payments plus accurals. Eventually, more favorable permanent financing can be arranged with the same lender (or another lender) once the property demonstrates a strong, stabilized cash flow.

Parameters

Actual Rate/Yield

- . 300 to 500 basis points over six-month Treasury bill rates.
- . 100 basis points above comparable medium-term fixed-rate mortgages.
- . 200 to 400 basis points above bank prime rates.

Payout Rate (Coupon Rate)

- . Relatively equivalent to traditional permanent rates.
- . Initially set lower than actual rate.
- . Adjustable or step-up rates occasionally used.

Loan Accrual Limits

- . Flexible: 5 to 15 percent of outstanding loan amount set as maximum accrual allowed; additional balance must be paid out.
- . Interest costs may be charged on accrued amounts.

Exhibit 9 (Continued)

Term

- . Flexible: two to ten years; three to seven years most common.
- . Extensions negotiable.

Payment Schedules

- . None or light amortization during early years.
- . Typically interest-only payments.

Debt Coverage Ratio

- . 100 to 120 percent or more of annual debt service.
- . Comparable to variable-rate mortgages and lower than traditional permanent mortgages.
- . Higher coverages are exchanged for higher accrual limits.

Loan-to-Value

- . Increases during the accrual of additional interest.
- . Higher than traditional permanent mortgages.
- . 65 to 80 percent loan-to-value common.

Dollar Size

- . \$1 million or more.
- . Medium-sized deals preferred: \$3 million to \$20 million.

Prepayment Penalties

- . Flexible: no or small penalties.
- . Zero to 5 percent penalties. One to 2 percent common.

Funding Period

- . Immediate funding; usually thirty to 180 days.
- . Forward delivery available to twenty-four months or more.
- . Upon project completion, if tied to a construction loan.

Financing Fees

- . One to 5 percent.
- . Smaller deals require higher fees.

Property Types

- . All Types
- . Most suitable for management-intensive properties with substantial cash flows--hotels/motels, nursing homes, miniwarehouses, rehab properties, etc.

Exhibit 9 (Continued)

Special Features

- . Accrual lenders may convert property to permanent, joint venture, or participating loan when cash flows are stabilized and seasoned.
- . Rate ceiling and floor limits are sometimes available.
- . Personal guarantees often required.

Exhibit 10

Leases - Their Various Clauses and Their Importance

Definitions

- A. Specific space and location to be leased
- B. Specific business entity as lessor
- C. Specific business entity as lessee
- D. Specific description of real estate elements to be leased (Definition of shell provided by landlord and finishes provided by tenant)
- E. Specific exemptions of tenant improvements to remain tenant property

II. Conditions for Commencement of Lease

- A. Conditions permitting cancellation by landlord (lessor)
 - 1. Failure to obtain specified financing prior to construction
 - 2. Death or disability prior to a certain date
 - 3. Impossibility of performance due to acts of God, government, regulation, labor conditions, etc.
- B. Conditions permitting cancellation by tenant (lessee)
 - 1. Completion according to specification
 - 2. Compeltion according to scheduled time
 - 3. Conditions relative to other occupancies
- C. Remedies of landlord
 - 1. Forfeiture of tenant deposits or escrow funds
 - 2. Liquidated damage provisions
 - 3. Guarantees by others
 - 4. Penalty rents, assessments, etc.
- D. Remedies of tenant
 - 1. Postponement of commencement date
 - 2. Rental abatement
 - 3. Cancellation of lease at option of tenant
 - 4. Penalty payments in contract assessed to the landlord
 - 5. No penalties other than suit for damages

III. Conditions for termination of lease

- A. Death or disability at option of lessee estate
- B. Scope of "change in conditions" clause

- C. Guaranteed occupancy and operations clause
- D. Cancellation liquidated damages formula
- E. Bankruptcy receivership of business termination clause
- F. Assignability clause
- G. Implied good faith effort of percentage lease
- H. Permitted uses clause
- I. Casualty loss event
- J. Condemnation events
- K. Specific conditions subsequent explicitly identified as grounds for termination
- L. Subordination position

IV. Rental Formula

- A. Basic minimum rent
- B. Formula for rental adjustment over time
- C. Renewal options, if any, and base rent
- D. Calculation of prominent area charges and tenant participation in same
- E. Real estate tax escalator clause
- F. Insurance premium stop loss clause
- G. Utility expense stop loss clause
- H. General maintenance and replacement assessments for HVAC, parking, lighting, etc.
- I. Audit of sales and overage rents
- J. Conditions for rental abatement due to casualty loss, remodeling, road construction, or business interruption due to riot, strike, civil commotion, or disruption of public services

- D. Anticipate where trends are leading in ten years to protect collateral value
 - Office trends toward smaller tenants spaces, less partitioning, more window wall
 - 2. Retail trends toward smaller stores, domestic materials, low cost store cabinetry and display
 - 3. Less finish by landlord

VI. Adequacy of Investment Capital

- A. Strength of contract detail and bidding winners
- B. Payment and performance bonds
- C. Letters of credit for specific variables such as contingencies, latent defects, operating losses, rental abatement
- D. Gap financing
- E. Assessment of partners
- F. Standby credit from general partner or parent corporation
- G. Inadvertent credit from building subcontractors

VII. Traditional Appraisal Process--Normalized Assumptions

- A. Date of appraisal--hold harmless clause
- B. Definition of value--hold harmless clause
 - 1. Five basic conditions--cash equivalency
 - 2. "Financing typical of the market"
 - ''As financed''
 - 4. Limiting conditions
- C. Highest and best use (most probable use)
 - 1. Technically feasible
 - 2. Legal and political feasibility
 - 3. Effective demand
 - 4. Financing viable
- D. Legal property description
 - 1. Land
 - 2. Building and improvement
 - 3. Tangible personal property
 - 4. Intangible personal property
 - 5. Public entitlement and their transferability

E. Essence of collateral

- 1. Salvage value (exit value vs. finished value)
- 2. Going concern value
- 3. Profit centers for services
- 4. Commodity value
- 5. Franchise value
- 6. A set of assumptions about the future
- 7. Credibility of expertise

F. Three approaches to value

- 1. Market comparison (suspect due to engineered prices)
- Cost approach (invalid since collateral is a customer which determines liquidity price of space-time inventory--just like self-liquidating retail loans)
- 3. Income approach (NOI/OAR is infantile for commercial loans)

G. Appraisal reconciliation

- 1. Three approaches should not produce same number
- 2. Go with method with best data

H. Problems with traditional appraisal for commercial properties

- 1. Methods have no predictive power
- 2. Fair market value is normalized economies rather than behavioral
- Lenders have corrupted process by using appraisal to vindicate a decision rather than make a decision
- Lenders have corrupted process by requiring borrower to pay appraiser directly
- Lawyers have corrupted process by confusing their advocacy with appraisal objectivity
- Appraisal organizations have been unable to improve process because of laws of defammation, American tradition of reciprocity, economic weakness, inertia of courtroom precedence

VIII. Contemporary Process of Appraisal

- A. What is the issue for which the appraisal is required?
- B. What is the definition of property to be appraised?
- C. What is the definition of value?
 - 1. Fair market value
 - 2. Most probable price
 - 3. Liquidation value
 - 4. Insurable value

D. What is most probable use?

- 1. Physical attributes
- 2. Legal/political attributes
- 3. Linkage attributes
- 4. Dynamic attributes
- 5. Environmental attributes
- 6. Matrix of alternatives

- E. Who is most probable buyer?
 - 1. Motives
 - 2. Criteria
 - 3. Limitations
- F. Which method best predicts buyer/seller behavior?
 - 1. Inference from past transactions
 - 2. Simulation of decision method
 - 3. Normative methods
- G. Demonstration of value conclusion as compatible with buyer/financing constraints
- H. An appraisal is a fictitious feasibility study
 - 1. Underscore assumptions
 - 2. Business research problem
- IX. Trends in Appraisal
 - A. Cash flow modeling
 - 1. Basic financial budgets
 - 2. Cash flow projections
 - 3. Sensitivity analysis
 - B. Intensive analysis of market position
 - 1. Occupant market
 - 2. Political marketplace
 - 3. Next user market position
 - C. Use of letter of engagement for appraisal services (Exhibit 11)
 - 1. Advancing fiduciary law
 - 2. National Counsel of Real Estate Investment Fiduciaries
 - Appraisers as consultants/separate letter from appraiser to remain confidential
 - 4. Merrill-Lynch approach definition of value
 - 5. Appraiser/lawyer development of appraisal issues
 - The appraisal team--engineer, lawyer, land planner, data manager, and appraiser

An Approach to Real Estate Finance Education by Analogy to Risk Management Principles

by James A. Graaskamp, C.R.E.

I. INTRODUCTION

Risk Defined

Real estate investment of either mortgage or equity money requires the investor to accept a set of assumptions about the future productivity of a property and its management, assumptions that may be facts presumed to be true or future conditions over which the investor has only partial control. The passage of time will always reveal some variance between expectation and realization, between pro forma budgets and accounting history, between management hopes and individual performance. It is this inevitable variance between assumptions and realizations that is termed risk. Virtually all devices of real estate finance are related to the strategic and tactical methods of holding the variance in expected receipts and outlays within acceptable limits of predictability. Surprise, unpredictable variance, must be allocated through negotiation among parties to any transaction. Within the concept of risk management can be found an analytical framework to structure and edit the morass of descriptive detail that otherwise smothers courses in real estate finance.

Risk Management and Real Estate Finance

The educational value of providing an analogy between real estate finance and risk management principles as taught in current college insurance department programs has significance to the basic philosophy of real estate education. In the late 1950s insurance education at the college level was shifting from courses on how to manage and market insurance companies toward how to control financial variance from a variety of potential contingencies for any enterprise, a process in which insurance plays some part. In short, the educational thrust shifted its primary concern from purveyors of insurance to users

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of insurance. Similarly, today's real estate education at the university level is changing from concern for the few students who plan to go into the real estate business to virtually any user who will need to make real estate related decisions.

At the classroom level risk management principles provide a base for textbook selection, analytical problem exercises, and explanation of the dynamic factors that fit together in the real estate transaction process. The classics in real estate finance, such as Real Estate Finance by Hoagland and Stone, provide rich mechanical detail and some view of the bargaining objectives of the parties but little analytical technique. Case problems in mortgage loan underwriting and cash flow projections become manageable as the student is taught to discover implicit assumptions about the ability to pay, tolerance in the numbers for surprise contingencies, and security against specific contingencies. In class discussions the risk management viewpoint provides a common point of departure for explanation as it provides a comprehensive analytical viewpoint that ties real estate finance to the main stream of corporate finance and budgeting thought. These elements are missing or fragmented in recent textbooks.2 The effort at the University of Wisconsin to structure the real estate finance course around the risk management analogy is the basis for this essay.

Broader Applications of Risk Management Insights

Continuing education for those in the real estate finance game would also benefit by an emphasis on risk management principles. The collapse of most mortgage investment trusts can be attributed to the lack of any semblance of management of their assumption about interest rates in a capital market, about effective demand in specific project markets, or about desirability of diversification even at the expense of reduced volume and increased administrative budgets. At the highest executive levels there is a willingness to ignore risk management concepts. In 1974 the Federal Reserve Board was willing to consider private mortgage insurance as an extension of credit rather than as a form of property insurance.3 In another case a private guarantor had no concept of financial risks as an insurance company and challenged the Mortgage Corporation of the Federal Home Loan Bank as to minimum capital required to be eligible for participation in the secondary market. Application of basic risk management techniques in both court cases led to straightforward and obvious resolution of the issues. Somehow educators as well as real estate professionals have forgotten that risk in financial management matters is an explicit and measureable phenomenon and not banal, conventional wisdom, a shrug of the shoulders, a simple perception that hotels are always riskier than apartments to everybody concerned.

Essay Outline and Purpose

Part II will review the principles of risk management and then apply these by analogy to a variety of topics in real estate finance. Part III will suggest an analogy to the residential mortgage-lending field, while Part IV will sketch income property lending as shaped by basic risk management tools. Part V will suggest the appearance of risk management concern in all sectors of real

estate institutions. A full real estate textbook could be written from the risk management viewpoint; this essay focuses only on cognate relationship of real estate finance and the basic principles of risk management. The conclusions in Part VI are limited to the tutorial values of the risk management theme in business school instruction and in the development of a critical viewpoint for land economics literature in general.

II. PRINCIPLES OF RISK MANAGEMENT

Control of Variance in Financial Expectations

The real estate process is the exchange of a space/time commodity, such as a room for the night or a tennis court by the hour, for a money/time commodity. Real estate always involves three cash cycle enterprises that are attempting to find cash solvency equilibrium, with land the nexus of tension between space users, space producers, and the public infrastructure. Accounting tools are capable of budgeting items fixed in time and amount such as rent, items of predictable frequency and severity such as machinery repair, or items providing a funded reserve to anticipate a future expenditure for replacement or repair. Accounting cannot prepare for the financial contingencies that are unpredictable in terms of frequency and amount or whose timing and consequential total cost could consume all cash resources of the enterprise, remote as these contingencies might be in terms of probability. Those contingencies and surprises that surpass the capacity of normal accounting and budgeting techniques are the concern of risk management control. The financial consequences of such contingencies must be funded or eluded in order to maintain the reality of balance sheets and to achieve the goals of financial budgets.

The causes of such financial surprises are called perils, and perils can be static or dynamic.⁵ Static perils always cause a loss. They are related to physical cause and effect, occur at random, and are beyond the control of the enterprise. Dynamic perils, on the other hand, are those that can mean either profit or loss. They are caused by variations in business expertise or entrepreneurial motivation.

The primary objective of those entrusted with the application of risk management to financial planning is to avoid loss of assets already in hand due to static or dynamic perils. Of secondary priority is the realization of net income through the stabilization of outlays and receipts relative to a financial plan. Thus the risk manager strives to reduce the maximum exposure of existing assets to direct loss and then to avoid consequential losses of future income that would erode expectations of future spendable cash and of growth in net worth.

The Process of Risk Management

The various risk management texts describe the risk management process as:

- 1) Identification of significant exposures to loss in terms of frequency and severity.
- 2) Identification of alternative control procedures.
- 3) Selection of appropriate risk management methods at acceptable cost.
- 4) Implementation of the appropriate procedures.

While the definition of "significant" varies with the scale of the enterprise, the utility of money, and the degree of willingness to accept considerable variance in future financial outcomes, a significant event might be termed one that could cost the enterprise .5 of 1% of its present net worth or future income. The identification of exposure to the contingencies of a faulty assumption or an unpredictable future event might begin with the analysis of an enterprise balance sheet, profit and loss budget, or the underlying functions and activities of the enterprise itself. Does not a mortgage lender examine financial capacity, net operating real estate income assumptions, and the basic functional aspects of the real estate enterprise?

The Tactics of Risk Management

In the never-ending pursuit of certainty, enterprise management can choose procedural alternatives that will mitigate financial consequences of some risks. Nine of these tactics are listed below.

- 1) Avoid the risk by refraining from an activity, the ownership of an asset, or the pursuit of a future income when it exposes the enterprise to possible surprises of a character or amount that is unacceptable to the enterprise. For example, to avoid insolvency due to rent controls, lenders might avoid multi-family rental projects in certain communities.
- 2) Improve information since much uncertainty or financial surprise is due to ignorance of the facts rather than to any inherent unpredictability. An analysis of all available facts provides superior control on future expectations. Combinations for statistical predictability can advance data gathering to scientific rather than intuitive control. For example, because normal foundation costs can be affected by soil conditions, a factual study of those conditions in a property might permit a more accurate budgeting for rock removal or design of spread foundations.
- 3) Reduce frequency of loss by changing procedure or techniques once patterns have been identified from past experience. For example, careful loan servicing might reduce the frequency of loan delinquency just as fire-resistant construction reduces the frequency of fire.
- 4) Control severity of loss from static or dynamic contingencies regarding direct or consequential amounts. For example, a conservative loan ratio reduces the severity of loss in excess of foreclosure proceeds just as sprinklers do not prevent fires but do reduce the severity of fire damage.
- 5) Shift a risk by insurance contract, given the willingness of the risk manager to substitute the small, timely, but certain premium cost for the uncertain magnitude and untimely costs due to an insurable event. The insurer, of course, achieves predictability of financial outcomes through statistical combination, reinsurance to stabilize loss severity, and control through better information and expertise in drafting and executing the coverage. For example, the lender gives up 14% of annual interest to secure mortgage guaranty insurance to indemnify for losses due to mortgage foreclosure of a specific loan.
- 6) Transfer an unpredictable dynamic cost by contract to the second party. Unlike insurance the second party may shift the burden of increased cost to others by subcontract, retail price changes, or absorption of the increase from discretionary resources. There is no previously established actuarial pool of funds behind the acceptance of risk by the second party. For example, in residential mortgages

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- it is common to find clauses permitting periodic increases in interest charges which shifts the increasing opportunity costs of money to the borrower.
- 7) Limit the financial consequences of surprise by operation of contract "hold-harmless" clauses, by the statutory characteristics of corporate or limited partnership forms, or by the pooling of capital fund risks in a single venture among multiple investors. For example, the exculpatory clause might limit recourse of the lender to retaking the property while use of private mortgage insurance might require the lender to relinquish pursuit of a deficiency judgment.
- 8) Hedge changing values of money by taking opposite but equal positions in present and future markets for a fungible good. Despite the physical uniqueness of real estate, the interests in real estate are often fungible as space/time units (i.e., square foot per year of office space or room per night in a motel) or as money equivalents of space/time in terms of rents per square foot or interest rates per dollar of investment. Thus any real estate investment is an exchange of present dollar values for future space/time values expressed in dollars, a subject to be explored more fully under the topic of income properties. To hedge in residential finance the Chicago Board of Trade has recently created an explicit futures market in residential mortgage interest rates by using \$100,000 GNMA certificates at a stated interest at 8%.
- 9) Motivate entrepreneurial execution of a plan by increasing incentives and penalties for management of dynamic risks. For example, much mortgage negotiation is concerned with defining the progressive levels of pain that can be applied to the delinquent borrower, ranging from late payment charges to court orders for specific performance and forfeiture.

Credit Extension versus Risk Assumption

In 1974 the Federal Reserve Board (FRB) was petitioned to permit bank holding companies to own and operate private mortgage insurance companies on the grounds that mortgage insurance was credit (a permissible function of the holding company) as opposed to property-liability insurance (presently not permissible). The existing private mortgage insurance companies resisted the competitive threat by petitioning the FRB to carefully distinguish between credit risks and insurance risks. Credit risks involve the deviation in the program to collect the balances due on schedule at the least possible servicing cost; lenders nevertheless intend to incur zero net losses by proper substitution of collateral and lay off of the consequences of other threats to collection. This objective is significantly different from that of insurance, which is designed to absorb the losses of future contingencies, if not from budgets predicated for rate-making purposes, then from policyholders surplus.

Consider the mortgage lender at the closing of the loan as he covers each assumption which is the basis for credit and collection:

- 1) Marketable title is insured with a title insurer or a title search by a lawyer of means.
- 2) Location of improvements on the pledged title is assured by a bonded surveyor.
- 3) Destruction of improvements is insured against by required property coverages in specified amounts.
- 4) Loss of income of the borrower due to illness or death is compensated by income replacement or life insurance adequate to repay loan.

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5) Indemnity is sought from government or private mortgage default insurance programs, should pledged collateral have a possibility of netting less in the event of forced sale than outstanding debt balance.

Both the mortgage creditor and the mortgage guarantor are explicitly involved in risk management but are utilizing decidedly different specialized techniques, thus demonstrating the need for institutional specialization in real estate finance.

The mortgage guarantor depends almost entirely on the certainty of outcome produced by the theory of large numbers applied to geographic dispersion, heterogeneity of property and borrower types, past foreclosure experience, and policy provisions to protect against casualty losses to the collateral or gross negligence on the part of the lender. To the degree that economic cycles overpower loss expectations, the guarantor depends on financial pooling of surplus premium and stockholder capital to create financial mass to underwrite the guaranty. The lender, to the contrary, is regulated to avoid all foreseeable losses and employs a wide variety of options to lay off the contingencies of error, change of conditions, or random upset of the assumptions on which credit was granted.

The Real Estate Mortgage Transaction-

In his effort to provide a unified approach to the multi-disciplines of economics and the other social sciences, Alfred Kuhn has identified the subsystems of the decision-making process as detectors, selectors, and effectors (DSE). Detection involves the process of gathering information, while the selection process involves the formation of values with which to choose among alternatives. Effectation is doing whatever course of action has been decided upon. A transaction occurs when two entities exchange positive values despite separate detector and selector systems. The devices to effect a transaction attempt to neutralize the doubts each party has regarding their assumptions or measurements of value.

A mortgage lender's selection depends on safety of principal, maximum return on investment, and liquidity. On the other hand the potential borrower seeks the use of someone else's money as a way to avoid the high risk in real estate investment, to exploit the leverage between cost of borrowed funds and their earnings invested in real estate, and to avoid the illiquidity of real estate in poor economic times. The selector values of lender and borrower are diametrically opposed, and a transaction could never occur if both parties did not perceive ways in which to control the risk attributes of real estate that were in conflict with their objectives. The inherent incompatibility between lender and borrower is essentially mitigated through the explicit and implicit risk management and allocation tools that are employed by each. The history of mortgage law is a struggle of lender and borrower, each trying to gain an edge on the other regarding potential of all future contingencies. Indeed, a mortgage is a straddle position for the borrower, giving him a call on future values but permitting a put to the lender under specified conditions. The lender negotiates to neutralize the straddle by making the cost of the put in terms of downpayment and other claims unacceptable relative to the advantages of the call on future value benefits. The borrower negotiates to perfect the straddle with high loan to value ratios, exculpatory clauses, or other limitations on liability.

III. RESIDENTIAL LENDING AS A DEMONSTRATION OF RISK MANAGEMENT TACTICS

Introduction

The nine basic techniques of risk management in Part I are well demonstrated by the making and servicing of a residential loan and the assembly of a residential mortgage portfolio. A review of the mortgage loan process will illustrate the risk management approach applied almost subconsciously since the repetitive nature of a standardized residential mortgage loan has institutionalized financial risk management into a set of forms and procedures that are thought of as legal procedure rather than risk management administration. It is only when observing special features of the income property loan that explicit negotiation of who bears the consequences of variance is ever present. Although the borrower may shop alternative institutions for the best terms of the moment, the residential loan is basically a contract of adhesion. The security of any mortgage loan is a combination of the continued satisfaction of the borrower with possession of the property, of painful penalties imposed for delinquency, or ultimately of bail-out by repossession of collateral. Many contingencies can destroy the psychic income of home ownership so that the lender must look to risk management through pain and bail-out techniques.

Risk Avoidance

Risk avoidance by pre-selection of borrowers, property types, and terms is the first defense of the mortgage lender. The board of directors provides initial guidelines as to the percentage of funds managed to be allocated to residential mortgage loans, the acceptable range of loan ratios to property values, the acceptable range of housing costs to disposable income, and a variety of constraints intended to avoid those loan opportunities that statistical experience or intuition suggest as expansive to service and costly to foreclose. Information about the borrower might reveal uncertain family motivation or no capacity for penalties incurred for nonperformance—a borrower to be avoided.

In the past, the directors may have chosen to avoid some perceived risk by blanket prohibitions on loans for reasons of sex, race, or neighborhood location. Failure to discriminate on a case basis has been scored as against the public interest or as unsubstantiated bias in policies to control variance in mortgage loan returns and cost, to the injury of specific individuals. Indeed, mortgage lenders are now facing the same arguments that have long confronted insurance companies that attempt to discriminate among different classes of insureds, to offer rate preference, or to avoid some classes of business altogether. Allocation of the costs of risk by means of discriminate selection has always been a major social issue, whether one is attempting to avoid risk of military service, of neighborhood friction, of political fragmentation, or costs of financial services. The current dilemma of mortgage lenders is made more apparent to the student by analogy to the traditional pricing and selection issues of risk underwriting.

Risk Control through Better Information

Past experience might provide better information by cross distributions of the frequency of delinquency correlated with foreclosure losses, property attributes, or borrower characteristics. 10 To further improve the predictability of the individual mortgage loan outcome, the loan officer takes an application form and then attempts to verify it directly by contacting employers, relatives, or others, or indirectly through credit services and inferences from the interview, and so forth. Information gathering may include property inspection, a visit to the home of the borrower, as well as a review of existing neighborhood conditions. The object is to estimate the psychic income of the borrower from home ownership and the sensitivity or capacity for correcting delinquencies upon some painful stimulus. When the young family has no credit record from which to infer motivation to meet the terms of agreement, the loan officer attempts to improve the motivation and shift the risk by contract, using the relatives of the borrower as guarantors or the coverages of a public or private guaranty agency. The borrower might be required to provide income insurance as well as life insurance in the amount of the payments due to assure repayment despite the worst that might befall the income earner of the household. The ultimate product of the information gathering process is a set of facts that have been verified and a set of inferences (assumptions) about the future willingness or capacity of the family to repay the loan. Should recourse to the collateral asset be necessary, the asset or the equivalent must exist.

Closing the Residential Mortgage Loan

The closing process is a sequence of arrangements executing a risk management program for the collateral asset. While title has been verified, the possibilities of errors on the records upon which verification depended is shifted by title insurance. The lender requires affidavits from the seller or borrower regarding the absence of other liens or lien rights that have not appeared on the public record. Lest the improvements to serve as collateral are not properly located on the insured title, the lender requires inspection and survey by a bonded surveyor, the bond providing a cushion against error by the surveyor who is further qualified by licensing examination. In addition to basic property insurance to the benefit of the lender, destruction of collateral may be further insured against earthquakes, seiche, or other perils unique to the property. Payment plans provide for advanced collection of future premiums for continuity of insurance coverage to the benefit of the lender, as well as advanced funding of real estate taxes, nonpayment of which would undermine first lien position of the lender. Acquisition of the property by foreclosure is further protected when the borrower acknowledges that he was informed of various charges in advance as a requirement of truth-in-lending " and that he was charged for various closing costs within maximum limits imposed by federal law. 12

Should the collateral in default provide less cash than required to meet the debt, the lender may anticipate the shortage by previous acquisition of public or private mortgage default insurance, supplementary collateral, or third

party endorsements. There is also the after-the-fact remedy of a deficiency judgment. All of these measures are intended to provide full recovery of both debt and collection expenses to produce zero net loss in dollars, if not in good will. At the closing the documents are shuffled around in careful sequence to maintain the defenses or priorities of each party. Filing of the documentation is required, but in addition prudent lenders might maintain insurance for sins of omission or commission in the documentation of the transaction. Is not this confusing myriad of documents best explained as risk management of the assumptions relative to credit collection in almost any future circumstance?

Servicing the Mortgage Loan

History has shown that the majority of defaults occur from a failure of the will to pay rather than the ability to pay so that servicing is involved in the dynamic risks of the mortgage loan relationship, as well as in the execution of the contractual shifts of risk found in the closing process.

The lender expects to control variance in repayment of the loan according to its terms by means of its mortgage servicing procedures, which depend on timely measurements of the significance of any delinquency or default. Servicing collects information (as well as money) about those liens, tax delinquencies, or other encumbrances that might erode the collateral or reveal some change in the borrower's intention to repay (permitting prompt corrective action). Should all these efforts fail to prevent a default on loan terms, the lender may look to public or private agencies that guarantee repayment of interest, principal, and other accumulated costs. Indeed, the guaranty insures against the consequences of an inaccurate appraisal on which the property loan was based and hedges the lender against property value deflation or a rate of inflation insufficient to recover balances due. Since these guaranties tend to encourage careless lending and servicing, the federal government has promoted coinsurance programs where the lenders could incur losses against current income expectations, an incentive device presumably of sufficient strength to motivate the lenders to do better. 13

In summary, mortgage servicing monitors and executes the risk management plan surrounding the residential loan transaction. The first security is to maintain control of the dynamic risk by monitoring family pride, family satisfaction with neighborhood social and investment values, and the other psychic benefits of home ownership that are expected to maintain mortgage payments on schedule. In the absence of positive benefits perceived by the debtor in continuing to meet payments, the mortgage servicer might inflict increasing discomfort with various collection ploys to motivate payment on schedule. Ultimately when management of the dynamic risks fails, the lender seeks a bailout by liquidating his capital investment through a foreclosure sale, endorsement collection, or indemnity through some form of credit insurance. The significant fact is the heavy dependence of residential lenders on psychic income to equalize the value exchange in the transaction. That element is far more elusive than in the income property loan where income is essentially in cash or of little weight in the transaction.

Interest and Money Risks for the Mortgage Lender

The residential mortgage lender has at least four functional subsystems including:

- 1) A savings attraction system.
- 2) A lending transaction system.
- 3) A liquidity system.
- 4) A safety system.

To control variance in attracting savings flows, the lender needs to insulate dividends to savers from capital markets or to respond with competitive dividend rates. In the United States the risk management device has insulated the savings rate through Regulation Q, through concealment of interest returns by means of apparent benefits such as insurance, savings discipline, preparation for retirement, and so forth. In more capital-shy countries interest paid to savers must be more directly comparable with capital markets. Nonetheless, the cost of money to the lender varies more or less, and to maintain spreads between money cost and money lending rates, alternative loan forms might be used:

- Loan provisions can be designed to trigger maturity of the loan under a wide variety of domestic situations such as divorce, resale under land contract, delinquency, and so forth, in order to create frequent opportunities to renegotiate the interest.
- 2) Interest rates can be raised at irregular intervals as an assessment on borrowers by such lenders as savings and loans and credit unions.
- 3) Short-term loans automatically renewable at rates that provide a guaranteed spread can be used as in Canada.
- 4) More sophisticated variable rate mortgages, tied to internal indexes of institutional costs of funds or external indexes of competitive capital market lurk in the background to lay off the risk of savings pools fluctuations due to changing cost of savings.

Note that various plans to alter rates paid to savers (and stabilize the flow of savings to residential mortgage finance) trade off the inconvenience of frequency of adjustment against severity of the impact on the budgets of the borrower. Again the student can quickly perceive the negotiation to allocate the impact of changing interest rates among the saver or the borrower or the intermediary institution as an issue of risk allocation.

Residential mortgage lenders have significantly different requirements for liquidity, depending on their ability to protect the savings pool from demand withdrawals within a web of periphery benefits from free checking to pensions, to life insurance, to income tax exemptions. Nonetheless, the institution provides liquidity reserves to meet unpredicted drains and attempts to affiliate with larger systems that provide additional liquidity sources. These systems include holding companies, the Home Loan Bank, the Federal Reserve Bank, and other agencies created by government or the securities market to permit liquidation of mortgage portfolios. Because the liquidating value of mortgages varies inversely with interest rates, government has found it necessary from time to time to provide liquidity at par to protect safety

through nonmarket loans, purchases, or indirect subsidies through such agencies as the Home Loan Bank and Government National Mortgage Association (GNMA). All these methods combine a shift of risk by contract, limits placed on liability, hedges, as well as internal accounting preparations for variance. The student quickly perceives that holding interest rates constant on mortgages shifts the interest risk and the liquidity risk to the mortgage lender who then transfers the cost of that variance to savers, a super agency, or a capital pool subsidized by government. Presumably government absorbs the cost since the political dynamics of its policies contributed greatly to the variance in the first place. Thus the politicians protect against obvious consequences of their own policies by pooling the risk of error through oblique taxation of the residents—and the circle of risk transference is complete.

The safety system is ultimately concerned with variance in the value of mortgage-lender assets to a point where net worth is destroyed and payment of all creditor claims, including those of savers, is threatened. Here again reinsurance devices provide another cognate to real estate financing institutions.¹⁴

- Loan participations, endorsements, and loan guaranty plans are not unlike facultative treaties in which each party agrees on every individual risk regarding the exact level of participation.
- 2) The new coinsurance program for FHA eligible lenders is actually an excess-of-loss agreement on a defined class of business as found in reinsurance.
- 3) GNMA guaranties of collateral modified pass-through trust certificates for timely payment of interest and principal are not unlike income stabilization agreements as found in reinsurance.
- 4) Ultimately the Federal Deposit Insurance Corporation (FDIC) or Federal Savings and Loan Insurance Corporation (FSLIC) coverage of individual savings accounts provides liquidity for the saver, as a reporting form coverage of assets funded by pooling of a risk charge among all members of the respective systems.

Of course there are a variety of subsystems to protect the safety and integrity of the mortgage lender that are internal to the enterprise including audits, blanket fidelity bonds, loan committees, and all manner of administrative checks and balances.

The risk of devaluation of money during the long term of a mortgage commitment is now being addressed in foreign countries by elaborate indexing arrangements applicable to mortgage balances due as well as interest rates. Inflation in the United States has been less dramatic, and so its costs are concealed in the rise of interest rates, the rise in government subsidies to housing costs, subtle taxation of the saver by means of Regulation Q, progressive income taxation, and transfer payment escalation. Nevertheless, U.S. lenders have been selectively seeking investment devices to soften the erosion of long-term advances to real estate, primarily in the income property area where political sentiment to grant the borrower all the leverage benefits of inflation is not so strong.

Conclusions

Just as a course in real estate law might dwell on the nuances of "Title, title, where lies the title?" the teaching of the dynamics of residential mortgage

lending has the constant refrain "Variance, variance, where lies the burden of variance?" The mechanisms through which the variance in cash flows and values is allocated among individual borrowers, individual lenders, and pools of lenders, borrowers, or the public at large are the heart of the subject matter. Development of the continuing negotiation refinements of this issue seems far more instructive than requiring memorization of long lists of mortgage clauses, lending rules, or institutional attributes. To date, however, the strategy of real estate investment to lay off excessive risks on others is best articulated in the humor of trade publications. 15

IV. INCOME PROPERTY LENDING AS FURTHER DEMONSTRATION OF RISK MANAGEMENT TACTICS

Introduction

Nonresidential income property loans lack the standardized, fungible character of residential mortgages, an attribute that makes possible the super institutional pools with which to homogenize residential loan risks. Thus lenders are far more dependent on customizing the loan agreement to allocate the risk between borrower and lender. However, income properties provide more opportunity to create monopoly values for property through the synergy of money and talent than is true for the individual homeowner who must compete in a far more homogeneous market. Thus, there is more opportunity to employ the risk/pay-off matrix which is the essence of free enterprise, that is, those who take the risks take the profits.

It should be noted that virtually every outlay for an income property investment is revenue and therefore a profit center to some other enterprise system. Those profit centers are for material, services, or expertise, the types and amounts of each differing over the time cycle of an income property. Thus, the timing of benefits and outlays is greatly out of synchronization as compared with the purchase and enjoyment of a single-family home. If anything, during a period of inflation the benefits of home ownership might increase downstream, while the costs of mortgage payments and other housing related expenses might decline as a percentage of disposable income. Just the opposite can be true of an income property investment unless it is carefully structured by both the borrower and the lender to accomplish a more even distribution of benefits and outlays over time. Thus, all of the concerns of variance in the residential loan must be dimensioned by the additional attributes of flexibility for variance in the timing of the income property collateral.

Definition of Timing

Application of the pleasure, pain, and bail-out considerations of any mortgage loan in order to structure dynamic and static risk management arrangements depends on when the borrower plans to take the most cash from the income property. Cash profits are in part a function of the profit centers retained by the borrower as compared to those subcontracted away to avoid the unknown costs inherent in doing some function without adequate experience. The borrower may enjoy profits from loan values on land, from construction contracts, from services for design, marketing, or management which make it

Real Estate Issues, Summer 1977

unnecessary for him to risk any of his net worth beyond the date of closing on the permanent loan. These cash profit centers make the hard dollar maximum exposure of the borrower to loss equal to zero, greatly reducing threat of loss as a motivation to repayment. Of course these profit centers might be non-existent due to ineptness, changes in conditions not anticipated by contract, or failure to achieve marketing goals.

Thus income lenders sometimes seek to avoid these risks with loans that can be closed only when critical conditions have been met, such as completion of construction, payment of all obligations, achievement of occupancy levels sufficient to carry mortgage payments, or deadline dates. The borrower attempts to shift the risk of not meeting these conditions to subcontractors, to payment and completion bond companies, to tenants willing to prelease, and to standby lenders. All of these arrangements come at a cost in terms of higher contract prices, premiums, rent concessions, and commitment fees.

The Reliance on Take-outs

To unravel risk management of the income property loan, one must reverse the chronological time line of development events. The ultimate source of satisfaction to the borrower and security for the lender is a tenant willing to pay rent adequate to meet operating costs, real estate taxes, interest and principal payments, and cash dividends to the equity investor and still allow a cushion for unexpected variance in rents collected and expenses incurred. All cash requirements should not exceed a desired ratio to gross income, called breakeven point or default ratio. On the basis of the business forecast and cash flow projections, it should be possible to secure a permanent loan commitment, subject, of course, to a variety of conditions as to completion, occupancy levels, and other qualifications. This qualified permanent loan commitment provides hope of liquidation for the progressive commitment of funds by the construction lender. The latter seeks a variety of assurances that this hope can be realized, including escrowed equity, letters of credit, performance and payment bond, and other evidences of borrower ability to qualify for closing the permanent loan commitment. The student will quickly perceive how the permanent lender identifies the assumptions on which a solid loan depends and shifts the risk of nonconformance to the construction lender up to the point where no construction lender would regard the commitment as a probable cash-out of the construction loan. Too many conditions due to too many unsubstantiated assumptions by the borrower kills the deal. The wise construction lender then needs to shift his risk of loss to the borrower or others. Presumably the maximum potential loss for the construction lender is the difference between cost to complete and market as compared to funds not yet disbursed from the construction loan or available from various security instruments mentioned earlier.

Traditionally the lenders have assumed that the satisfaction of the borrower will be found in completion of the project in order to receive cash dividends, and that the motivational pain will occur through the loss of equity provided by the borrower in the form of land, escrows, and front money cash. In recent years, however, these assumptions were insidiously undermined by the fact

that competition for loans had led to recognition by the lenders of soft dollar equities from land appreciation, contractor profits and fees, contribution of cash by limited partners or other silent investors. In addition there were serious errors regarding building cost due to over-estimation or under-supervision. As a result many borrowers found their profit centers in the construction process itself and relied little on the need for a take-out at the end of the line by cash paying customers. Application of pain to instill performance was dulled by the skill with which the developer used devices for limiting his liability or defending his position. 16 In any event the permanent loans seldom required personal liability on the theory that the balance of the loan far exceeded the ability of the borrower to pay so that the lender must and could look only to the property for his bail-out. While the lenders would spend a considerable portion of total funds lent on property insurance, on completion escrows, or on bonds, seldom would the lender require that even 1% of project cost be spent on consumer research to provide reasonable certainty as to the quantity and character of effective demand on which the liquidity and safety of the loan depended. As a result the fundamental assumption that there was a need for the project was never tested, and ultimately the lender and/or equity position had to absorb the cost of an imperfect straddle, that is, a put to the lender without balancing take-outs in the marketplace.

Timing and Adequacy of Interest Returns For the Income Property Loan

A look at the phenomenon of participating loans provides one additional illustration of the risk management process at work in the mortgage loan negotiation. The At first lenders were concerned that high ratio loans on shopping centers with little or no recourse other than the property meant lenders were taking equity risks (accepting a put on a weak center) for only interest returns on money. Thus they offered the borrower alternatives of progressively higher interest rates and progressively lower participation in future net worth for the lender, accomplished through stock warrants in development corporations. Developers were willing to trade away a share of the indefinite future for the immediate benefits of building a center with the higher loan possible with lower interest rates without exceeding a specific default point. With inflationary increases in retail sales, lenders regretted retaining a futures market in net worth in lieu of a share of current shopping center percentage rents in excess of debt service.

Then came the issue of which revenue line represented the risk position appropriate to something termed "an equity participation." Depending on the bargaining position of lender and borrower, an infinite variety of agreements have been struck as to how defined gross potential rents, effective gross rents, net income, cash throwoff, after-tax cash flow, or spendable after-tax cash are to be the basis for participation. Obviously at each step along the profit and loss statement, the balance becomes more volatile, that is, more subject to variance. At the same time each allowable deduction for operations provides a potential for discretionary, preferential diversion of equity dollars to the borrowing institution or its subsidiary. Conversely, cash returns in which the lender might participate could exceed anything justified by the passive con-

tribution of funds, by the maximum potential loss to the lender at some specific time, or by the maximum interest rate permissible under applicable usury laws. Thus the loan agreements became a maze of controls on participation that would either avoid stripping the borrower of management incentive or solvency, or stripping the lender of a profitable loan, public good will, or his position as a secured creditor, should be violate usury constraints.

What is significant here is the evolutionary recognition that all foreseeable contingencies leading to variance in cash shares had to be anticipated by contract. At the same time that the relationship of landlord to lender became articulated in terms of variance, the landlord reshaped his arrangements with his tenants. Pass-through of increasing operating expenses by means of escalator clauses expanded from simple proration of real estate taxes to sophisticated lease-construction packages. Architectural design coordinated with lease terms either isolated mechanicals and maintenance to the space occupied by a single tenant or prorated all expenses through compulsory tenant associations that assessed members but were managed by the landlord. Projects without direct ties to retail sales found various applications of the consumer price index to escalate collections, sometimes independently of a change in operating costs. Once the student recognizes the strategic interplay between allocation of variance between landlord and lender and landlord and tenant, he is prepared to approach the appraisal process, investment analysis, and contract negotiation with more willingness to test alternative positions with careful cash flow projections.

V. REAL ESTATE FINANCE INSTITUTIONS AS RISK MANAGEMENT DEVICES

Introduction

The essay has already alluded to some of the specialty institutions designed to provide liquidity and risk transfer for residential mortgage loans. Risk management strategies provide insight to all types of real estate institutions that have appeared over the years, highlighting weaknesses or advantages of each in ways that might not be found in most current real estate literature.

Some Institutional Risk Control Examples

The popular limited partnership form most often stresses its advantages as an income tax conduit or as a pooling of small investors in a larger property. However, those limited partners by law may have no part in management, and their shares of cash profits are subordinated to a variety of claims including management profit centers for the general partner and contingent shares to creditor positions. Thus the limited partners are in a position analogous to a second mortgage revenue bond holder with only the tax loss ploy as a sweetener. However, the feature of contingent return for the use of capital would justify financing real estate entirely with limited partnership funds to hold the debt service requirements within cash available for distribution. The default point of an income project financed exclusively with limited partnership units becomes equal to its expenses as a ratio of gross revenue so that holding power during the rental absorption period becomes impressively

secure. Only recently has the contingent interest feature been used to improve investment quality. 18

Real estate equity trusts are parallel to the maritime joint ventures of previous generations and the trading companies which were the developers of colonialism. However, the identification as an equity risk capital pool is shown to be deceptive when the implications of Internal Revenue Service requirements for passive investment are studied. As suggested earlier, equity is the degree to which cash profit centers can be diverted to a specific position, and that power to divert is limited for the equity trust. Ironically some of the participating loans negotiated by insurance companies during the money crunch have more character as equity than shares in an equity trust where profit centers are limited. The general profit centers for the investor income properties are found in operating revenues, refinancing surplus, capital gains on sales, or tax savings attributable to the real estate to other income. The trust share investor who has limited access to the last three cannot be compared to property investors who enjoy all four without regulatory limitations. These other investors, as well as the equity trust management advisor, might also exploit the real estate investment as a customer for services of all types, thus diverting further cash flows to support justified investment values. Where then is the advantage of true equity investment for the small investor in the equity trust?

The elaborate joint venture arrangements between financial institutions and real estate developers¹⁹, mergers of building companies and corporate conglomerates²⁰, and the defects appearing in state housing finance agencies²¹, all appear in the literature as studies in inadequate preparation for potential variance of underlying assumptions. The legal literature is saturated with comment on this common theme of who bears the consequences of change in long standing assumptions about the use, sale, or rental of land.²² Institutional financing solutions are sought to the windfalls and wipeouts created by reimposing public control on land, land investments, and even housing rents of low income groups.²³ Risk measurement and management for real estate finance has also become a favored topic for academic research as the new generation of academics applies the most sophisticated techniques of finance to analysis of real estate portfolios or individual properties.²⁴

Certainly all of this literature and activity must begin to influence the regulation of real estate finance institutions. If regulators were to match cash flow assumptions to the ability to repay income loans, loan-to-value ratios would be quickly recognized as irrelevant. Worse, traditional loan-to-value ratios are counterproductive as they do not reveal how changes in interest rates and term relate to the default point of the project. Moreover, default ratios and debt cover ratios or deficiencies therein immediately suggest what additional endorsement, escrow, holdback, marketing plan, or escalation clauses are required to reasonably anticipate cash needs for repayment of loans on schedule. Abandonment of the traditional loan-to-value ratio in favor of cash flow planning by the lender could be the motivation necessary to update the moribund appraisal process with contemporary business forecasting methods. There is reason to believe that the court and public administrative institutions are a significant deterrent to application of the best real

estate principles which build on the concept of real estate investment as business planning under conditions of uncertainty.²⁵ Financial risk management deals with control of those uncertainties.

VI. CONCLUSIONS

One of the basic objectives of business education is to teach students why and how to be explicit when defining assumptions for a business plan or forecast. By tracing the burden of possible variance in each assumption or surprise contingency, the student learns that most risks can be measured, that business bets can be shifted to others or systematically accepted as skill and transaction patterns permit. Rational balancing of potential losses and potential gain is the essence of entrepreneurship. To appreciate real estate finance the student must be taught to perceive the risk/payoff matrix in far different dimensions than simply the gross balance of the loan relative to the dollar amount of interest income.

When real estate finance is taught to include the financing of public infrastructure systems, of the development-production sector, and of the long-term user, there is then an opportunity to synthesize the subject matter into a total system. Each of these groups consists of cash cycle enterprises with different cash requirements and capacities for raising capital. The instruments of real estate finance ultimately allocate the shock and cost of variance in the assumptions under which each group and enterprise made its decisions among the three parties to land use decisions. Thus real estate finance is pivotal to the study of other aspects of land use and real estate ranging from the impacts of alternative public policies to construction design and contracting.

Student perception of the web finance-related contracts among public, user, and production segments then leads to the hypothesis that maintenance of cash solvency, and not value maximization, is the critical decision point for economic decisions about land and related improvements. That hypothesis, of course, subjects most of the traditional land economics theory to a skeptical review and might explain the recent importance of land economics value theory in directing or innovating land use policy.²⁶

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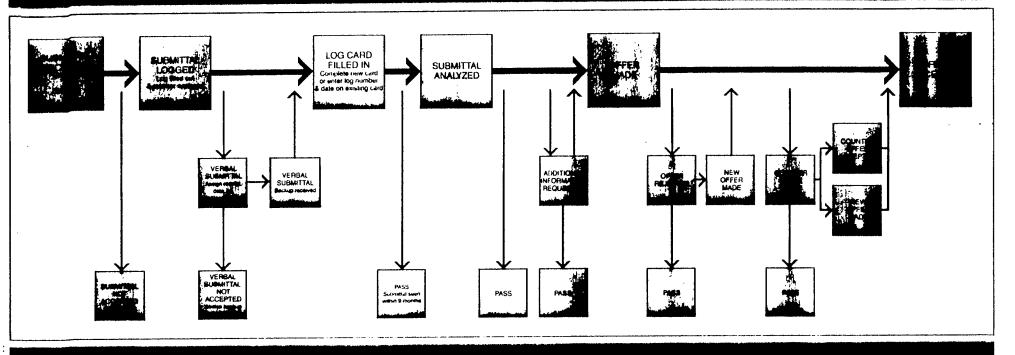
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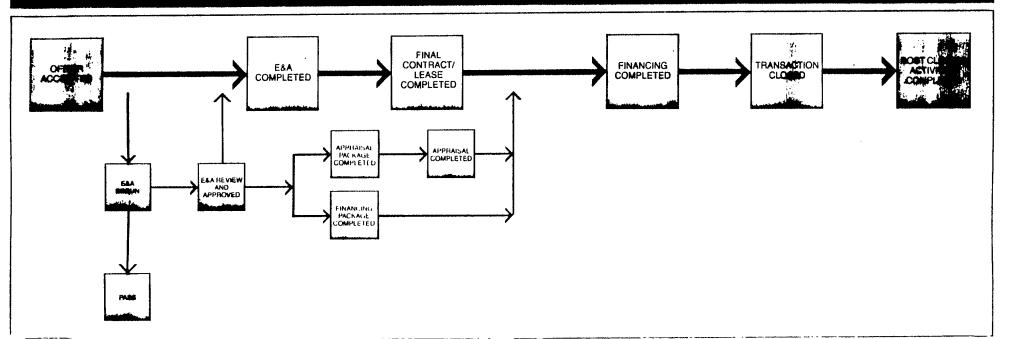
PROPERTY LOAN PROPOSAL

James Graaskamp

Acceptance Phase



Closing Phase



METHODS OF ACQUISITION

PURCHASE

PURCHASE OF FEE P-1

Buy fee simple title in land or land & building. (Charleston Business Park, etc.)

PURCHASE OF BUILDING ON LEASED LAND P-2 uv building constructed on long-term ground lease (Beachcombe: Hote

PURCHASE OF EXISTING LEASEHOLD P-3 Buy existing long term lease. Useful where existing tenant has favorable long-term lease and wants to vacate (Hollywood & Vine Plaza)

PURCHASE OF EXISTING SANDWICH I FASEROLD P.4. But existing long-term lease subject to prefer sting sublease. (Keeaumoru Center Campbel Industria Parki

LEASE

GROUND LEASE L.1

Lease of land only for contracted rent and term

MASTER GROUND LEASE L-2

Lease of land & building for contracted rent and term. subject to existing tenancies, (401 Park South

MASTER GROUND LEASE PARTICIPATION L-3

Lease of land & building for contracted rent and term bius % of NO or Modified Gross (Gross less specific identified and eatly documented expenses such as R.E. takes (Holywood Ta": 5 og

MASTER GROUND LEASE INDEXATION L-4

Lease of land & building for contracted rent and term plus rent increases based of increases in some index in el. CP. but not to exceed X % of NO or a predetermined rental

MASTER GROUND LEASE CANCELLABLE L-5

Lease of land & buylong for contracted rent and term. Fee owner has right to cance, at specific date with payment edua. to tenantis equity (365 Broadway

MASTER GROUND LEASE THIRD PARTY L-6

Contract to buy fee assign contract to third party who closes and leases back land & building to us. Converts multi-tenant building to detacto's note tenant, trible net lease. Pensado a

SANDWICH MASTER GROUND LEASE 1-7

Lease of land & building subject to existing long-term lease (expiration or renegotiation within 5 years). Creates negative sandwich, which turns positive on renegotiation, (Texaco,

LEASE/PURCHASE

BRIDGE LEASE PURCHASE AGREEMENT LP-1

Short-term lease of property with contractual obligation to buy fee at lease expiration for fixed or formula based. consideration (411 W. 7tr. Maude Macara)

LEASE PURCHASE OPTION LP-2

Lease with option to buy fee for fixed or formula based consideration (2301 Market 816 Grand

LEASE PURCHASE OPTION (LIFE ESTATE) LP-3. Lease with option to buy fee on lesson's death at set price plus escalation (2301 Market

LEASE PURCHASE OPTION (HIGHBALL) LP-4

Lease with option (with or without consideration) to buy fee at substantially above market value. Consideration becomes defacto lease renti (Walkin Marketo ace

PURCHASE/LEASEBACK

PURCHASE LEASEBACK PL-1

But fee and lease back to selector contracted remaind term

PURCHASE PARTIAL LEASEBACK PL-2

Buy fee and lease back part of propert, to seller (Amtac Kakaako City Bank

PURCHASE (LEASEBACK (CANCELLABLE) PL-3

Buy fee and lease back at or part of property to selfe typical, short-term with selection or to cance lease (JP

PURCHASE LEASEBACK (SELLBACK) PL-4

Buy fee and lease back to seller with seller's option to buy property back at liked time or occurrence of ellent at present, tilled or formula based consideration (J.P. Stevens

LEASEHOLD STRIP PL-5

Buy tenant's interest in existing retail lease having X % rent Sub-lease back to tenant coterminus with underlying lease but for higher % rent. Price must sert liquidate within 80% of term and be serviced by % spread. Success depends or ab ", to project sales

CORPORATE OWNED REAL ESTATE

LEVERAGED BUYOUT/REVERSE C O.R.E -1

Buy corporation or division with substantial real estate assets Lease real estate to operations, self-off operations, keeping

LEVERAGED BUYOUT-BANKABLE PURCHASE COMMITMENT CORE -2

Buy corporate real estate assets using forward purchase of purchase leasettack commitment which fact tates this class. (management etc.) financing an LBO

EARNINGS PURCHASE LEASEBACK C O R E -3

Reach purchase leaseback agreement. Then increase of ce and fully amontize increase at marker rate and about them. Use with publicly help corporations, wishing to increase immediate earnings and immediate cash, (Amtac Kakaa) c

PACKAGE PURCHASE CORE.4

Buy group of properties in single package. Provides there opportunities and alows for individual basis allocar of its reduce tax consequences of selloffs, its lander inns Chair

OPTIONS

Create present right to adoure in the future any complination of fee or leasend dinterest. Option consideration can be applied to purchase price or lease ren

INTEREST OPTION O-1

Option payment provides seller with market return or lequity (Current property cash flow taken into consideration

CREDIT OPTION 0.2 Letter of credit or personal promissory note to seller iclavatile

if option not exercised CARRYING COST OPTION O.3

Assume all property related expenses including debtilisers de during option period. Existing income may be used to offset Works we' with vacant buildings

IMPROVEMENT OPTION 0:4

Guarantee to make property improvements in exchange for

FEFORT ACHIEVEMENT OPTION O-5

Exchange option privileges to rights to architectural claims tenants concepts etc. Fortior not exercised

METHODS OF FINANCE

SELLER FINANCING

PURCHASE MONEY MORTGAGE SE-1

Selet taket back portion of purchase price and liens property. May be junior to or wrap existing financing. (Millian

SELLER SUBORDINATION SF-2

Seller subordinates part or all of seller financing to new and or future debt (Islander Inns. 625 Polk

BIG DOWN WITH SUBORDINATION SF-3

Up to 75% cash down used to pay off a levisting roans. Series takes back 25% or more subpromated to new future first mortgage. Selects equity must exceed 25% for this to work. (Walkle Marketo ace

REVERSE WRAP SF-4

What has lower interest rate and or constant than select underlying financing. Payments on what should not be less than seller's total payment on underlying financing

STAGGERED INTEREST SF-5

Interest rate low in early years, then jumps to compensate Alea Shooping Center

INTEREST DEFERMENT SF-6

Selier defers and accrues part or all of interest on equity Deferred accided interest may or may not compound (1500

NO INTEREST LOAN SF-7

Amortize seller financing or straight basis. Since no interest charged full asking price can usually be paid if amortization long enough Example A \$2,000,000, 0%, 25-yr. PMM has same payments as \$633,000 12% 25-yr PMM

CONTINGENT INTEREST SF-8

Interest as % of cash flow. Example: Market is 12%, we pay 8% with 10% to 50% of net spendable as additional interest up to celling of 14% or for limited term in 1500 Kacip an

CROSS COLLATERAL/TAKE BACK PERFORMANCE SF-9 Purchase and leaseback to seller. Seller takes back financing wind is used to Colore a release Seleciase detailed and a respective with Big Down with Subordination financing technique (Campbel Industria Park.

LENDER FINANCING

CONVENTIONAL FIRST MORTGAGE LF-1 Loan amounts determined by decripoverage ratio of 1.15 to 1.25 and loan value ratic of 75% to 80%

CONVENTIONAL 2ND, 3RD, ETC. MORTGAGE LF-2 Loan amounts determined by cash flow available after servicing senior debt. Debt coverage ratio of 1.1 to 1.25 and loan value ratio of 80% to 90%

WRAP-AROUND MORTGAGE (A1T.D) LF-3

Lender writes mortgage at below market rate subject to existing below market mortgage and funds difference between existing loan and new wrac amount. Lender's leveraged position earns market return.

BLANKET MORTGAGE LF-4

Pleade equity in other properties as security. Get specific

PARTICIPATION MORTGAGE LF-5

Exchange 10% to 50% of net spendable or ownership for below market pay rate and possible waiver or reduction of debt coverage and loan value ratios. Residual may of may not be recognized U.F. Stellens. Orangewood

STAIRCASE FUNDING LF-6

Loar, funded in stages as a function of performance Example \$2 million toan \$1 million funded at closing \$1 million funded in \$100,000 increments corresponding to \$15,000 annual increases in NO: (CDC Building Beachcompe: Hote

INDUSTRIAL REVENUE BONDS LE-7

Governmental entity (redevelopment district, parking authority etc) issues obligations using tax exempt status but not credit, achieving below conventions, rate for funding designated acquisition and improvement expenses Obligation is usually secured by unconditional bank LC at

HISTORICAL LANDMARK TARGET PROPERTY LF-8 Some federal state or city programs will provide or influence offle's to provide to the oximarker francing for structural facable and other renovation expenses of historical landmarks. or target property (101 4th St.)

TENANT/OPERATOR FINANCING

KEY MONEY TOE-1

Common area storetront and tenant improvements finances in whose or part by tenant deposits. Deposits may be paid unconditionally as ke, money or earmarked for use of designated work, with or without escrow of the funds, (41) V. 715 523 & 525 Broadway

OPERATOR/CONCESSIONAIRE AGREEMENTS TOF-2 Agreement with 3rd party to operate or manage with provision for funding negative cash flow by deferment or management fees, cash contributions or the guarantee contributions of the guarantee contributions. separate loans secured by designated classes of one and revenue of the operating management company's securate credit or assets (Beachcombe Hote

JOINT VENTURE

50% EQUITY PARTNER JV-1

Partner puts up 100% of cash

1) 50% contributed to partnership 50% loaned to us separately to be contributed as our share 2) 100% contributed to partnership, equity partner get.

preferred return prior to 50% 50% sp.

3) 100% contributed to partnership, equity partner detail contractual return (guaranteed by other partners, prio, to 50% 50% sout

TAX SHELTER PARTNER JV-2

Structure to maximize equity partner's depreciation interest

TAY EXEMPT PARTNER JV-3

Structure tax exempt partner as lender or owner of nordepreciable assets

REVERSE PARTICIPATION JV-4

Commit to loan funds to principal at specific interest rate plus % of NO. Fund loar by borrowing against mortgage of place with one of our lenders, keeping participation.

_ 11 85

M - 47

CONFIDENTIAL



101485

THE MANORS APARTMENTS

INDEX

- I SUMMARY OF SALIENT FACTS
- II LOCATION MAPS, SITE PLAN, PHOTOGRAPHS
- III PROPERTY DESCRIPTION
 - IV PRO-FORMA PROJECTIONS
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 - VI MARKET VALUE ANALYSES REALVAL
- VII VALUE DEFINED
 MAI APPRAISAL
- VIII ADDITIONAL EXHIBITS

 TRAFFIC COUNTS

 WEST TOWNE AREA HOUSING INFORMATION
 OFFER TO PURCHASE
 PROSPECTUS

101485

LOAN SUMMARY

The Manors Apartments Madison, Wisconsin

Project Description

An existing 115 unit spartment complex located at 7045 Watts Road on the west side of Madison, Wisconsin. Built in three phases in 1984 and 1985, the complex contains 28 one bedroom and 87 two bedroom units. The spartments are single story frame construction with brick and aluminum siding. Each unit is separately metered with tenants paying utilities.

Ownership

Management

Loon Roquested	Immediate Funding	\$2	,800,000
Loan Analysis	Cost of Project Cost per unit Loan per unit Loan to cost ratio Value — August 1985 MAI	\$ 3	,635,000 31,608 24,347 77%
	Appraisal Loan to Value	\$4,049,000 59%	
Income Analysis	Gross Income Less Vacancy & Miscl. Adjusted Gross Income Loan to Gross Income		581,045 32,052 548,993 5.10X
	Operating Expenses Expenses per unit Operating Expense Ratio		185,847 1,616 32%
	Net Operating Income Loan to Not Income	\$	363,146 7.71X

Page 2 Loan Summary The Manors Apartments

Loan Coverage

Annual Debt Service

\$ 337,400

(Assumes \$2,800,000 X 12.05K)

Debt Coverage Ratio

1.08X

Lease Information

Annual leases with tenants paying all utilities. Landlord provides snow removal, grounds maintenance and rubbish removal.

Syndication Information

The general partners have formed a Wisconsin Limited Partnership and are selling 220 limited partnership interests of \$11,625 per interest. The total equity being raised is \$2,557,000. The offering came to market September 1, 1985 and was <u>sold out in 28</u>

days.

101485

PROJECT DESCRIPTION

The Monors Apartments 7045 Watts Road Madison, Wisconsin

The project is an existing 115 unit apartment complex located on the west side of Madison. It is situated two blocks from West Towne Mall, a 900,000 square foot regional enclosed shopping mall. The area is one of rapid residential and commercial development. It is also within six blocks of West Towne Office Park, Memorial High School, various restaurants and several strip shopping malls. The recently opened Woodman's grocery store, the largest grocery store in the state, is across the street from the complex. Current vacancy rates for apartments on the far west side of Madison are 3.5%.

The project contains 11 buildings totalling 115 units. The apartment mix and sizes are as follows:

28 - 1 Bedroom, 1 Bath, 552 sf 43 - 2 Bedroom, 1 Bath, 736 sf 44 - 2 Bedroom, 1 Bath, 759 sf

Each unit is furnished with draperies, corpeting, stove, refrigerator and air conditioner. Hook-ups for a washer and dryer are provided in each unit. An electronic security system serves each unit, where each tenant through the push of a button has instant access to police, fire and emergency medical services via the phone lines.

The buildings are single story, frame with brick and aluminum construction, built on slap. Each unit is served by its own entrance and brick fenced—in patio. There are no hallways or common areas. The buildings were constructed to be maintenance free to the owner and to offer privacy to the tenants. Exterior finishes of brick veneer, aluminum fascie and soffit with vinyl covered windows will keep maintenance to a minimum. The tenants pay all utilities, the owner provides snow removal, lawn care and trash removal. Each unit is separately metered. The heat is electric baseboard.

The project was built in three phases, starting in April 1984, by Construction Concepts, Inc. of Madison (former owner). Phase I [43 units] was completed in September 1984 and 100% leased by November. Phase II (28 units) was started in January 1985 and completed in July 1985. It was 90% leased by July and 100% by September. Phase III [42 units) was started in July 1985 and will be completed by December 1, 1985. There is currently a waiting list of 12 units for Phase III to be occupied upon completion.

Page 2
Project Description
The Manors Apartments

Situated on eight acres, the design and layout affords 188 parking spaces so that each tenant may park in front of his own unit. There is an abundance of green areas and a play area for children.

The apertments are designed and intended for "mid-market" tenants. That is, those who do not desire such amenities as swimming pools, tennis courts, health clubs and garages, yet they are provided with privacy and security at an affordable price. Initial reaction to the complex has been extremely favorable. This is evidenced by the quick lease-up and the owners ability to raise rants \$15 per month since opening. Current rants range from \$360 per month for a one bedroom to \$420 per month for a two bedroom unit.

The project is being purchased by Westowne/Brookfield Partners, a Wisconsin Limited partnership formed by Spring & Boe as General Partners. The purchase price allocated to the real estate is \$3,275,000 or \$28,478 per unit. Total price paid to seller is \$3,635,000 or \$31,608 per unit. The purchase price equates to \$40.71 per square foot. The owners are seeking long term fixed rate financing in the amount of \$2,800,000 or \$24,347 per unit. The property was appraised on August 28, 1985 by D. H. Behrens, MAI, of Madison, Wisconsin. The property was appraised for \$4,049,000 or \$35,208 per unit. The resulting loan to value ratio is 69%.

The property is being purchased in two closings. The first closing will cover Phases I and II which are completed and 100% occupied. The final closing will be for Phase III. To guarantee lease—up and completion of Phase III as well as continual occupancy of the first two phases, a hold back of \$175,000 is being kept from the seller until successful closing of Phase III. In the event a closing does not occur by December 31, 1985, the partnership may retain the funds as liquidated damages. The seller will also guarantee construction and will warranty workmanship of the project.

A one year covenant not to compete is also utilized.

The partnership equity is being raised via a public offering of limited partnership interests. The syndication is underwritten by Spring & Boe Investment Corp., an affiliate of the General Partners. The offering will raise \$2,557,000 of investor capital. There were 220 interests offered at \$11,625 per interest. The investor may pay all at once or over four installments. If the investor chooses the installment option, he signs an installment note for the balance. The offering came to market on September 1, 1985 and was completely sold out in 28 days. In addition to the Manors Apertments, the partnership is purchasing two office buildings in Brookfield, Wisconsin that total 21,202 square feet of net rentable area.

Paye 3
Project Description
The Manors Apartments

Mr. William A. Spring and Mr. Larry K. Boe are the principals of the Spring & Boe Companies. Their companies act as syndicators, owners and managers of real estate projects. Both gentlemen have been involved in real estate investments for over 15 years. To date, their companies have sponsored four public and eight private partnerships, with a total equity raised of over \$30,000,000. See the Prospectus for company history.

They are currently managing 1,600 apartment units, 500,000 square feet of retail space and over 100,000 square feet of net rentable office space.

The partnership is seeking a \$2,800,000 loan to be secured by a first mortgage on the Manors Apartments. The office buildings are also available for financiny if desired.

YEAR

	1	5	3	4	5	6	.7	8	9	10
GROSS INCOME										
41 6 0	\$559,440	\$587,412	\$616,783	\$647,622	\$680,003	\$714,003	\$749,703	\$787,188	\$826,547	\$867,874
1) Current Rents 2) Mid Year Increases	21,605	22,685	23.819	25,010	26,261	27,574	28,953	30,401	31,921	33,517
2) Mid Year Increases	21,000	22,000	20,010	4-,		•				
TOTAL INCOME	\$581,045	\$610,097	\$640,602	\$672,632	\$706,264	\$741,577	\$778,656	\$817,589	\$858,468	\$901,391
	·	•					00.004	40.004	42 025	45 074
3) Less Vacency (5%)	29,052	30,505	32,030	33,632	35,314	37,080	38,934	40,881	42,925 4.432	45,071
Miscellaneous	3,000	3,150	3,308	3,473	3,647	3,829	4,020	4,221	4,432	4,654
ADJUSTED GROSS	\$548,993	\$576,442	\$605,264	\$635,527	\$667,303	\$700,668	\$735,702	\$772,487	\$811,111	\$851,666
4) EXPENSES										
	07.000	404 050	400 043	112,290	117,905	123,800	129,990	136,490	143,315	150,481
Taxes & Insurance	97, 0 00	101,850	106,943 7,607	7,987	8,386	8,805	9,245	9,707	10,192	10,702
Utilities	6,900	7,245	23.924	25,120	26,376	27,695	29,080	30,534	32,061	33,664
Administrative	21,700 26,600	22,785 27,930	29,327	30,793	32,333	33.950	35,648	37,430	39,302	41,267
Maintenance & Repair	5,380	5,649	5,931	6,228	6,539	6,866	7,209	7,569	7,947	B,344
Employee Taxes Management	28,267	29,680	31,164	32,722	34,358	36,076	37,880	39,774	41,763	43,851
TOTAL EXPENSES	\$185,847	•	\$204,896	\$215,140	\$225,897	\$237,192	\$249,052	\$261,504	\$274,580	\$288,309
NET OPERATING INCOME	\$363,146	\$381,303	\$400,368	\$420,387	\$441,406	\$463,476	\$486,650	\$510,983	\$536,531	\$563,357
5) DEBT SERVICE \$2,800,000 @ 12.05K	337,400	337,400	337,400	337,400	337,400	337,400	337,400	337,400	337,400	337,400
CASH FLOW	\$25,746	\$43,903	\$62,968	\$82,987	\$104,006	\$126,076	\$149,250	\$173,583	\$199,131	\$225,957
DEUT COVEHAGE RATIO	1.08	. 1,13	1.19	1.25	1.31	1.37	1.44	1.51	1.59	1.67

¹⁾ Current rents 0 \$360-1 BH, \$420-28H, - increases 5% per year.

²¹ Assumes average increuse of 51 0 6 months, 5% annually thereefter.

³⁾ Projecte 5% elthough current Medison West is 3%.

⁴⁾ Exponses based on actual and pro-rated to include Phase III. Projected to increase 5% per vent.

THE MAYORS - FRAIT COMPANABLES May 21, 1984

Project	Age .	Ho, of Unites	Perit 1 Bedroom	Parit 2 Bedroom	Stan 1 Bedroom	Size 2 Bedroom	Pent Per Sf 1 Belroom	Parit Par SF 2 Badroom	Heat Paid By	Electric Paid By	Yacancy	Amenities/ Converts
Balboa Valley	12	11.2	\$ 310	\$ 360	550 SF	900 SF	\$.55	\$.40	0-ner	Tenant	2%	Outdoor pool Starting to look eld
Alherbra	10	96	\$ 360	\$ 450	625 SF	1450 SF	\$.58	\$.32	0-ner	Tenant	2%	Outdoor pool, Indoor parking Fair condition
Brighton Square	12	122	\$ 345	\$ 405	710 SF	945 SF	\$.47	\$.46	Owner	Tenant	45	Health club membership included
Mote Lavi	14	163	\$ 310	\$ 360	6 2 \$	800 SF	s .50	\$.45	Owner	Tenant	23.	Pool, recreation building Poor soundproofing Inexpensive appliances
Westridge Highlands	4.5	176	\$ 335	\$ 340	679 SF	902 SF	,5 3:19	\$.38	Tenant	Tenant	5%	Temis courts across street Construction - fair
Nestacod Y(11age	10	196	\$ 289	\$ 349	720 SF	800 SF	\$.40	\$.4	Tenant	Tenant	Mouldn't Cooperate	Outdoor pool, two tennis courts from appearance
Greenbrian	11	270	\$ 320	\$ 390	675 SF	93 SF	\$,47	\$.42	Tenant	Tenant	3%	Electric heat Pool, ternis courts Some underground purking - \$20/month Three story
1 High Paint Madows 	New One Year		\$ 375	\$ 455 \$ 510	730 SF	958 SF 1056 SF	\$.51	\$.47 \$.48	Tenant	Tenant	53	No amenities Two story frame
The Manors	New	115	\$ 360	\$ 415	552 SF	759 SF	\$.65	\$.55	Tenant	Tonant	New .	Single story brick & frame construction Tenants pay all utilities Separate entrances, security Enclosed patio

rent comps 1 br Thu Mar 15 1984 FAGE 1

ADDR/PROJ	VGE	RENT-1DR	SIZE-1DR	RENT/SF	UTIL TEN	UTIL OWN	EXTRAS
BALBOA V ALHAMERA BRIGHTON MAPLE LAW WESTRIDGE WESTWOOD GREENBRIA HIGH POIN UNIVERSIT W WASH AV GRANADA W	12 12 14 4.5 10 11 1 20 75 14	310 360 345 310 340 320 375 275 350 295	550 425 710 425 479 720 475 730 585 400 595	.58 .49 .5 .47 .51 .47 .58	ELE E+HEAT E+HEAT	HEATT HEATT HEATT HEATT HEATT HEATT NON NON END NON END HEATT HEATT HEATT HEATT HEATT	F00L F00L H CLUB F00L F00L F00L F00L F00L F00L F00L F00
AVER D-15	15.69	324.45	644.91	.51	AVER 3-1	331.13	664.25

Thu Mar 15 1984 FAGE

rent comps 25r

ADDR/FROJ	AGE F	RENT-28R	SIZE-2DR	RENT/SF	UTIL TEN	חבור סאא	EXTRAS
BALBOA V ALHAMBRA BRIGHTON MAPLE LAW WESTRIDGE WESTWOOD GREENBRIA HIGH POIN HIGH FOIN GRANADA W MIDDLETON HIGHLAND	12 12 14 4.5 10 11 1 14 17	340 4405 340 340 347 349 4510 350 375	900 1455 900 900 900 900 900 900 900 900 900 9	.32 .43 .45 .38 .44 .42 .47 .48 .41	ELE E+HEAT E+HEAT E+HEAT	HEE A A B B B B B B B B B B B B B B B B B	POOL
AVER D-14	9.38	388.25	957.17	. 41	AVERU-10	J89.88	3

REALVAL EXPLANATION

Realvel (trademark) is a computer software program designed to assist lenders and investors to more accurately analyze real estate income properties. It has the ability to determine investment or market value, sensitivity, financing, tax and profitability analyses as well as pro-forma operating statements for up to 20 years.

The attached enalysis was made on an IBM PC computer by North Central Mortgage and Investment Company for the Manors Apartments project.

The assumptions are as follows:

- 1. Initial rents at \$581,045
- 2. Rents to rise at 5% annually after 90% occupancy is achieved
- 3. Operating expenses to rise 5% annually
- 4. Loan amount to be \$2,800,000
- 5. Debt service at a 11 3/4% constant, 30 year amortization, 10 year balloon
- 6. Required equity yield for an investor is 12%
- 7. Stabilized vacancies will be 5%
- 8. Property holding period is 10 years
- 9. Investor income tax bracket is 50% for combined federal and state
- 10. ACRS method of depreciation is used
- 12. Initial cost of project at \$3,635,000. Assumed to rise at 3% per year due to inflation.

Realvel was programmed by Dr. Jeffrey D. Fisher, a real estate professor, and Dr. Jerrold J. Stern, an accounting professor, at the Indiana University Graduate School of Business. Realval is currently being used by investment counselors, accountants, insurance companies, federal government agencies and major universities.

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REALVAL INPUT SET
TITLE OF PROJECT:
The Manors Apartments - 10/11/85
BENERAL INPUTS
TYPE OF ANALYSIS: EXISTING PROPERTY ANALYSIS
PROPERTY HOLDING PERIOD IS 10 YEARS
REALVAL WILL CALCULATE 10 YEARS OF INFORMATION
THE REQUIRED EQUITY YIELD FOR THIS ANALYSIS IS 12 PERCENT
I LOAN IS INCLUDED IN THIS ANALYSIS
3 DEPREC. ASSETS ARE INCLUDED IN THIS ANALYSIS
1 LEASE CATEGORY IS INCLUDED IN THIS ANALYSIS
SELLING EXPENSE IS 3 PERCENT
1 OPERATING EXPENSE CATEGORY IS INCLUDED IN THIS ANALYSIS
LAND LEASE PAYMENTS ARE O PERCENT OF LAND PRICE
LAND LEASE GROWTH RATE IS 0 PERCENT
TYPE OF LENDER PARTICIPATION: NO PARTICIPATION
THE INITIAL PARTICIPATION IS O PERCENT
THE INCREMENTAL PARTICIPATION AT BASE $1 IS 0 PERCENT
BASE #1 DOLLAR AMOUNT IS $ 0
THE INCREMENTAL PARTICIPATION AT BASE $2 IS 0 PERCENT
BASE 12 DOLLAR AMOUNT IS 1 0
THE MARGINAL ORDINARY INCOME TAX RATE IS 50 PERCENT
THE MINIMUM TAX RATE IS 10 PERCENT
NO PARTICIPATION IN SALE
LEASE AND PURCHASE PRICE INPUTS
FIELD
         PURCHASE PRICE LEASE 1
------
TRUCKA
                3635000 581045
CHANGE 7
                0.0300 0.0500
                   2
                             2
YEAR
CHANGE I
                0.0300 0.0500
                   3
YEAR
                0.0300 0.0500
CHANGE I
YEAR
                   4
               0.0300 0.0500
CHANGE I
                              5
YEAR
                    5
                0.0300
                             0.0500
CHANGE I
                             0.0500
VACANCY 1
VACANCY 2
                             0.0500
                             0.0500
VACANCY 3
                             0.0500
EIPERSE INPUTS
               EXPERSE 1
FIELD
                185847
195139
YEAR 1
YEAR 2
                 204896
YEAR 3
                 215140
YEAR 4
                 0.0500
CHANGE I
```

M - 59

YEAR

CHANGE I

0.0500

YEAR CHANGE I	6 0.0500			
FINANCING INPUT	5			
FIELD	LOAN I			
ANOUNT	2800000			
RATE	0.1175			
TERM	30			
YR BEGIN	1.0000			
YR CALL	11			
YRS INT ONLY	0			
POINTS	0			
PREP PENALTY	0			
NEX RATE	0			
YEAR	0			
NEW RATE	0			
YEAR	. 0			
NEW RATE	0			
YEAR	0	·		*********
ASSET INPUTS				
PRICE OF LAND 1	5 \$ 340000			
FIELD	ASSET 1	ASSET 2		
COST		333910	290000	
RECOV CLASS	18	10	5	
RECOV PERIOD	18	10	5	
METHOD	1.0000	1.0000	1.0000	
1 IF NEW	1.0000	1.0000	1.0000	
1 IF RSDNTL	1.0000	1.0000	1.0000	
ITC	0	0	0	

1	2	3	4	5	6	7	8	9	
581045	610097	640602	672632	706264	741577	778656	817588	858468	901
				35313	37079	38933	40879	42923	450
					704498	739723	776709	815544	856
			215140	225897	237192	249051	261504	274579	2883
366146	384453	403474	423861	445054	467306	490672	5 15205	540965	568
339162	339162	339162	339162	339162	339162	339162	339142	339162	224
0	ŋ	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
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0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	
26984	45291	64514	84699	105892	128144	151510	176043	201803	228
366146	384453	403676	423861	445054	467306	490672	515205	540965	568
0	0	0	0	0	9	0	0	0	
0	0	0	0	0	0	0	0	•	
328435	327104	325408	323927	322037	319913	317526			308
179250	251656	251656	251656	251656	222656	193656			193
0	0	0	0	0	0	0	•	-	
-141539	-194307	-173589		-128640					65
-70769	-97153	-86794	-75861	-64320	-37632	-10255	2323	17742	32
								201007	220
									228 32
97753	142445	151308	150560	1/0212	165//6	191/92	1/2670	184052	195
/ OPERATI	ONS AND REV	ERSION							
869440	1008757	1153754	1304760	1462133	1626260	1797567	1976514	2163608	2359
-14048	77590	206965	337863	468385	599820				1041
883498	931167	946789	965898	993748	1026440	1079167	1152316	1231818	1318
4.12	11.54	14.11	15.40	16.19	16.71	17.09	17.37	17.60	17
5.81	11.62	13.97	15.41	16.49	17.34	17.99	18.49	18.68	19
-46172	-5400	39741	88015	139452	192182	244303	294718	34327.0	389
	339162 0 0 0 0 0 0 26984 366146 0 0 328435 179250 0 -141539 -70769 97753 7 OPERATI 26984 -70769 97753 7 OPERATI 869440 -14048 883498	29052 30505 551993 579592 185847 195139 366146 384453 339162 339162 0 0 0 0 0 0 0 0 0 0 0 0 26984 45291 366146 384453 0 0 0 26984 45291 366146 384453 0 0 0 328435 327104 179250 251656 0 0 0 -141539 -194307 -70769 -97153 6 / OPERATIONS ONLY 26984 45291 3670 OPERATIONS ONLY 26984 77590 869440 1008757 -14048 77590 883488 931167	29052 30505 32030 551993 579592 608572 185847 195139 204896 366146 384453 403676 339162 339162 339162 0 26984 45291 64514 366146 384453 403676 0 0 0 0 26984 45291 64514 366146 384453 403676 0 0 0 0 328435 327104 325608 179250 251656 251656 0 0 0 0 -141539 -194307 -173589 -70769 -97153 -86794 97753 142445 151308 6 / OPERATIONS DNLY 26984 45291 64514 -70769 -97153 -86794 97753 142445 151308 6 / OPERATIONS AND REVERSION 869440 1008757 1153754 -14048 77590 206965 883498 931167 946789	29052 30505 32030 33632 551993 579592 608572 639001 185847 195139 204896 215140 366146 384453 403676 423861 339162 339162 339162 339162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	29052 30505 32030 33632 35313 551993 579592 608572 639001 670951 185847 195139 204896 215140 225897 366146 384453 403676 423861 445054 339162 339162 339162 339162 339162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	29052 30505 32030 33632 35313 37079 551993 579592 608572 639001 670951 704498 185847 195139 204896 215140 225897 237192 366146 384453 403676 423861 445054 467306 339162 339162 339162 339162 339162 339162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 26984 45291 64514 84699 105892 128144 366146 384453 403676 423861 445054 467306 0 0 0 0 0 0 0 0 0 0 328435 327104 325608 323927 322037 319913 179250 251656 251656 251656 251656 251656 0 0 0 0 0 0 0 0 0 0 -141539 -194307 -173589 -151723 -128640 -75263 -70769 -97153 -86794 -75861 -64320 -37632 5 / OPERATIONS ONLY 26984 45291 64514 84699 105892 128144 -70769 -97153 -86794 -75861 -64320 -37632 97753 142445 151308 150560 170212 165776 869440 1008757 1153754 1304760 1462133 1626260 -14048 77590 206965 337863 468385 599820 883498 931167 946789 965898 993748 1026440	29052 30505 32030 33632 35313 37079 38933 551993 579592 608572 639001 670951 704498 739723 185847 195139 204896 215140 225897 237192 249051 366146 384453 403676 423861 445054 467306 490672 339162 339162 339162 339162 339162 339162 339162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	29052 30505 32030 33632 35313 37079 38933 40879 551993 579592 608572 639001 670951 704498 739723 776709 185847 195137 204896 215140 225897 237192 249051 261504 386146 384453 403676 423861 445054 467306 490672 515205 339162 339162 339162 339162 339162 339162 339162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	29052 30505 32030 33632 35513 37079 38933 40879 42923 551993 579592 608572 639001 670951 704498 739723 776709 815544 185847 195139 204896 215140 225897 237192 249051 261504 274579 366146 384453 403676 423861 445054 467306 490672 515205 540965 339162 339162 339162 339162 339162 339162 339162 339162 339162 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

YEAR	1	2	2	4	5	6	7	8	9	10
SELLING PRICE	3744050	3858372	3972063	4091224	4213961	4340380	4470591	4604709	4742850	488510
SELLING COSTS	112322	115691	119162	122737	126419	130211	134118	138141	142286	14655
MORTGAGE BALANCE	2789273	2777215	2763661	2748426	2731301	2712052	2690416	2666096	2638759	260800
PEWALTY / PARTIC	0	0	0	0	0	0	0	0	0	
BICF FROM REVERSION	842456	963465	1089240	1220062	1356241	1498116	1646058	1800471	1961805	213050
SELLING PRICE	3744050	3856372	3972063	4091224	4213961	4340380	4470591	4604709	4742850	488510
SELLING COSTS	112322	115691	119162	122737	126419	130211	134118	138141	142286	14655
ADJUSTED BASIS	3501446	3295485	3043829	2792172	2540515	2259860	2066203	1872547	1678890	148520
TOTAL GAIN OR LOSS	130283	445196	809073	1176316	1547028	1950309	2270271	2594021	2921675	325334
RECAPTURE - SEC 1245	0	55403	157103	259112	353260	473651	507042	540433	573824	60721
RECAPTURE - SEC 1250	0	0	0	. 0	0	0	0	0	0	
CAPITAL BAIN	130283	389793	651970	917204	1193768	1476658	1763229	2053588	2347851	264610
ORDINARY LOSS	0	ŋ	0	0	0	0	0	ŋ	0	
TOTAL BAIN OR LOSS	120582	445196	809073	1176316	1547028	1950309	2270271	2594021	2921675	325334
UNAMORTLIED POINTS	0	0	ņ	0	0	0	0	0	0	
ATCF FROM REVERSION	785735	788722	795480	804338	823538	860654	917402	979627	1047757	11222

PERFORMANCE MEASURES

The Manors Apartments - 10/11/85

YEAR	1	2	3	4	5	6	7	8	9	1
MORTEAGE BALANCE	2789273	2777215	2763661	2748426	2731301	2712052	2690416	2665096	2638759	26030
EST. SELLING PRICE	3744050	3854372	3972063	4091224	4213961	4340380	4470591	4604709	4742850	48851
DEBT COVERAGE RATIO	1.08	1.13	1.19	1.25	1.31	1.38	1.45	1.52	1.60	1.
LOAN BAL /ORIS VALUE	76.73	76.40	76.03	75.61	75.14	74.61	74.01	73.35	72.59	71.
LOAN BAL /CURR VALUE	74.50	72.02	69.58	67.18	64.82	62.48	40.18	57.90	55.64	53.
BEFORE TAX CF/EQUITY	3.23	5.42	7.73	10.14	12.68	15.35	18.14	21.08	24.17	27.
AFTER TAX OF /EQUITY	11.71	17.06	18.12	19.23	20.38	19.85	19.37	20.68	22.04	23.
CURRENT VALUE / PGI	6.44	6.32	6.20	6.08	5.97	5.85	5.74	5.63	5.52	5.
0.1./ CURRENT VALUE	9.78	9.97	10.16	10.36	10.58	10.77	10.98	11.19	11.41	11.
MARGINAL RETURN	5.81	18.51	20.04	21.55	23.24	24.64	25.39	25.61	25.74	25.
REINV. RATE OF RETURN	11.36	11.93	12.52	13.13	13.74	14.34	14.91	15.44	15.72	16.
LENDER'S R.O.R.	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.

REALVAL DEPRECIATION SCHEDULES

The Manors Apartments - 10/11/85

LAND VALUE IS: 340000

SUMMARY INFORMATION FOR ALL DEPRECIABLE ASSETS

YEAR	1	2	3	4	5	6	7	. 8	9	1
TOTAL TAI CREDIT ITC RECAP. POT.	0 0) 0	0			0		0 0	0	
TOT. DEPR. NOT ALLOWED IN YEAR OF SALE	45696	91391	91391	91391	91391	33391	33391	33391	22241	3 33

REALVAL DEPRECIATION SCHEDULES

ASSET 1 1

COST BASIS 2671090

YEAR	i	2	2	4	5	ė	7	8	9	10
BEGINNING BASIS DEPRECIATION CLAIMED UNDEPRECIATED BAL. BASIS FOR SALE INV. TAI CRED. TAKEN	2671090 133555 2537536 2537536	2537536 160265 2377270 2377270	2377270 160265 2217005 2217005	2217005 160265 2056739 2056739	2056739 160265 1896474 1896474	1896474 160265 1736209 1736209	1736209 160265 1575943 1575943	1575943 160265 1415678 1415678	1415678 160265 1255413 1255413	1255413 160265 1095147 1095147
ITC RECAPTURE	ŏ	Ö	Ö	ő	ŏ	Ô	Ŏ	Ŏ	Ů	0

REALVAL DEPRECIATION SCHEDULES

ASSET | 2

COST BASIS 333910

YEAR	1	2	2	4	5	6	7	8	9	10
BEGINNING BASIS DEPRECIATION CLAIMED UNDEPRECIATED BAL. BASIS FOR SALE INV. TAI CRED. TAKEN ITC RECAPTURE	333910	317215	283824	250433	217042	183651	150260	116869	83478	50087
	16696	33391	33391	33391	33391	33371	33391	33391	33391	33391
	317215	283824	250433	217042	183651	150260	116869	83478	60087	18696
	333910	317215	283824	250433	217042	183651	150260	116869	83478	50087
	0	0	0	0	0	0	0	0	0	0

REALVAL DEPRECIATION SCHEDULES

ASSET # 3

COST BASIS 290000

YEAR	i	2	2	4	5	δ	7	8	9	10
BEGINNING BASIS	290000	261000	203000	145000 58000	87000 58000	29000 29000	0	0	0	0
DEPRECIATION CLAIMED UNDEPRECIATED BAL.	29000 261000	58000 203000	58000 145000	87000	29000	0	Ŏ.	ó	0	0
BASIS FOR SALE INV. TAI CRED. TAKEN	290000 0	261000 0	203000 0	145000 0	87000 0	. 0	0	0	0	0
ITC RECAPTURE	0	0	0	0	0	0	0	0	0	0

REALVAL PURCHASE PRICE SUNNARY

The Manors Apartments - 10/11/85

FUNCHASE PRICE IS: \$ 3622000



Crecipolicy

Commercial mortgages: a new rating approach

S&P recently developed criteria for rating debt obligations secured by commercial mortgages. There are currently more than \$500 billion in outstanding loans secured by these income-producing properties.

This overview of the commercial mortgage rating process is a product of extensive industry research and criteria development over an 18-month period. It was initiated because of the financial community's interest in utilizing these properties as collateral for issuing debt securities.

S&P developed two rating models whereby prime quality commercial mortgages are analyzed for collateral pool eligibility, starting with a screening of each mortgage against minimum criteria.

The "property specific" rating model analyzes a property and its income stream as if it were a stand alone entity. The "actuarial" rating model, the second approach, analyzes the default record and commercial mortgage portfolio characteristics of lenders who possess credit ratings.

The real estate risk factors and formation of the

rating models were developed with the assistance of Kenneth Leventhal & Co., consultants. They also commented on the criteria, as did Stephen Roulac & Co.

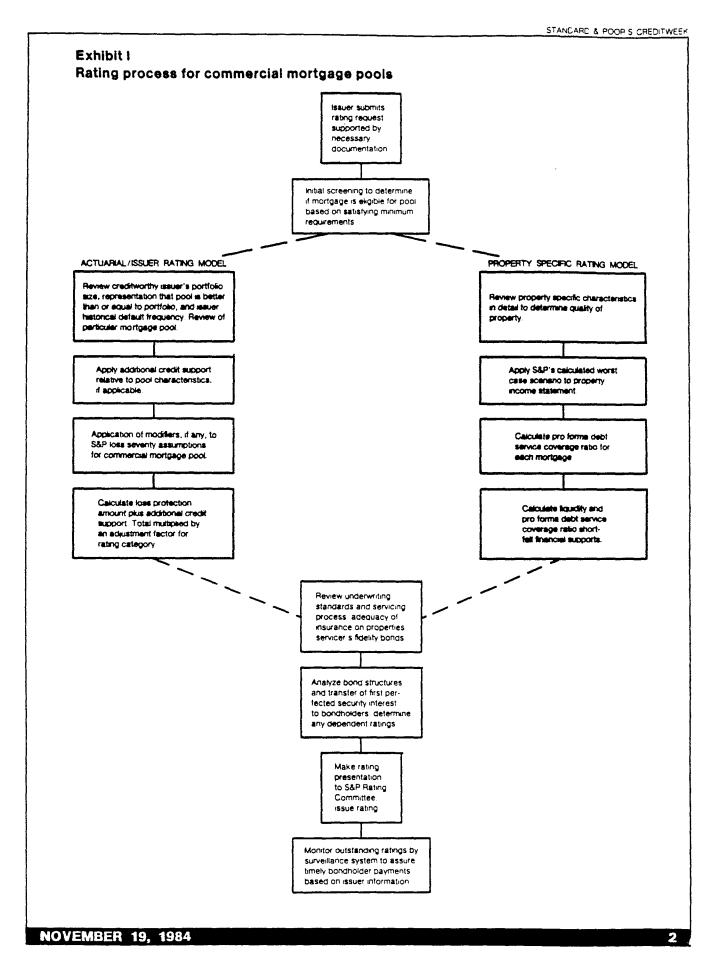
Key among the considerations in the rating process is the quality of each mortgage and its eligibility for entry to the collateral pool securing a fixed debt obligation. Then, either the property specific or actuarial rating model is applied to analyze the eligible collateral. Following this, the credit support needed for each mortgage is calculated in the property specific pool and in the case of the actuarial model, for the total pool. As with all mortgage financings, the rating process includes examination of mortgage underwriting standards and the servicing process: analysis of the bond structure itself, issuance of the particular rating; and surveillance of the rating.

The following overview represents a general perspective of S&P's current thinking in an innovative area of structured financing. For more detailed information and requests for ratings, contact Janet V Conway, assistant vice president.

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NOVEMBER 19, 1984



Rating process

Initial mortgage screening. The rating process for both the property specific and actuarial models begins with a screening of the mortgage proposed for entry into the collateral pool (see Exhibit I) S&P examines eight critical factors relating to each mortgaged property. These include property type and size, property seasoning, debt service coverage and ioan to value ratios at origination, and mortgage terms. Mortgagor characteristics relating to late payment history are also important when reviewing seasoned mortgages.

The final screening requirement applicable to the property specific approach is that the mortgagor must be a special purpose limited debt obligor. This requires that the commercial property is the sole asset and the mortgagor may incur debt relative to that asset to enhance or maintain its value.

Analysis of commercial mortgages and credit support calculations. After concluding that each property is eligible for entry into a mortgage pool, one of the two rating models is chosen. As part of this analytical process, the particular mortgage pool's amount of financial support is calculated. Both rating models will require, at a minimum, having available a liquidity source of the greater of either 10% of the bond issue or one year is debt service on the bonds. Additional credit support may be necessary, depending on the particular rating model and the extent of projected shortfalls. This coverage can be satisfied by a combination of cash reserves, letters of credit, surety bonds, cash advances and, if applicable, collateral substitutions.

Analysis of underwriting and servicing. Original underwriting standards are emphasized to assist in analyzing the reliability of timely debt service payments by the mortgagor to the lender. In addition, the mortgage servicing process is an important consideration, requiring an evaluation of the servicer's experience, its servicing functions and capability to work out problem loans. While a liquidity reserve will be available to cover any inadequate or late payments on the pooled mortgages, if the servicer promises to advance cash, the servicer's ability to pay will be analyzed. Also incorporated in the servicer's review will be, when necessary, the availability of errors and omissions bonds and fidelity bonds.

Analysis of the bond structure. The bond structure for the commercial mortgage rating models is similar to rated instruments emphasizing a mortgage payment stream, commonly referred to as pass-through certificates or pay-through bonds. Structures relying on a market value approach would not be applicable under these rating models because cash flow generated by the property, rather than its resale value, is the primary determinent for the rating

Depending on the format, mortgage prepayments either are promptly flowed through to the security holders or held by the trustee or other party if reinvestment risks are ameliorated. Furthermore, mortgage documents supported by an issuer's representations relative to assignment of a first perfected security interest in the pooled properties to bondholders must be re-

The credit rating. A debt security solely collateralized by commercial mortgages and meeting eligibility requirements under the property specific model currently can be rated only as high as 'A'. This is because income generated from the rental of these prime quality commercial properties is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than expected for collateral supporting higher rated debt instruments. However, through the inclusion of credit enhancements, the rating may be raised to the 'AA' level

Ratings above 'A' based on the actuarial model will be dependent on three factors collateral characteristics, the extent of a rating adjustment factor applied to the credit support equation and the issuer's unsecured debt rating

Surveillance of bond ratings. Rating surveillance is critical under both models. The property specific model focuses on rental income generated from the commercial property as the bond issue's credit support. S&P's property specific model based on worst case cash flow assumptions incorporates the possibility that the property's income would be subjected to worst case conditions in an unstable real estate market. However, it is not expected that any collateral eligible for the pool and located in a poor marketplace should face such severe financial difficulties. Furthermore, any cash flow deterioration would only be temporary and covered by the liquidity reserve Nevertheless, it is plausible that a prime quality property could be affected by an extraordinary or unforeseen occurrence Therefore, S&P will review at least annually the collateral. Aberrations in cash flow would not result in either upward or downward rating adjustments. However, a long-term impairment or improvement of the property's flow of funds could arise necessitating a rating change on the bonds to reflect the issuer's apility to meet timely bond principal and interest payments

The actuarial model's rating surveillance system will include examination of the particular collateral pool's performance. Additionally, any changes in the issuer's default frequency or ability to service loans and work out problem loans effectively will be monitored periodically.

Eligible property types. Eligible property types for the actuarial model will depend, in part, on the issuer's particular portfolio.

However, for the property specific model, S&P's current criteria only apply to commercial office buildings as an eligible property type to collateralize debt. Guidelines for multi-family properties should be available in the near future. Criteria applicable to industrial and retail properties are expected to be formulated during 1985. Service oriented properties, including hotels, theaters and gasoline service stations, are not qualified to secure rated debt financings under either rating model now. The relationship between economic downturns and cash flow volatility associated with these special purpose enterprises is presently perceived as too risky.

Commercial mortgage minimum standards and ratings matrix

	Ratings					
Variables	'B'	.88.	,868,	'A'	'AA'	
Debt service coverage ratio	minimum 1.05x at ongi- nation	minimum 1.1x at ong- nation	minimum 1.15x at ong- nation	minimum 1.2x at ong- nation	minimum 1.2x at ong- nation	
Loan to value ratio ²	meximum 90% at ong- netion	maximum 85% at ong- nation	meximum 80% at ongi- nation	maximum 75% at ongi- nation	maximum 75% at ong- nation	
Seasoning	minimum 3 years	minimum 3 years	minimum 3 years	minimum 3 years	minimum 3 years	
Property type	office building	office building	office building	office building	office building	
Property size (only ap- plicable to office build- ings)	50,000 square feet	50,000 square feet	50,000 square feet	50,000 square feet	50,000 square feet	
Loen terms	fully amortizing, level pay	fully amortizing, level pay	fully amortizing, level pary	fulty amortizing, level pay	fully amortizing, level pay	
Seasoned mortgage late payment history	no late payments in preceding year; no more than 2 in the 3 years pnor to submis- sion to pool	no late payments in preceding year, no more than 2 in the 3 years prior to submis- sion to pool	no late payments in preceding year: no more than 2 in the 3 years pnor to submission to pool	no late payments in preceding year; no more than 2 in the 3 years pnor to submis- sion to pool	no late payments in preceding year, no more than 2 in the 3 years prior to submis- sion to pool.	
Needed credit support	Property specific rating model: Calculation for particular pool plus liquidity reserve.				Add 25% to reserve needed for 'A' pool	
	Actuarial rating model. Apply the appropriate rating category adjustment factor to calculation.					

Debt service coverage ratio is calculated as effective gross revenues minus operating expenses before taxes divided by total debt service charges. Loan to value ratio is the amount of the mortgage outstanding divided by the value of the property.

Property specific worst case cash flow rating model

The property specific rating model applies a worst case cash flow scenario to a prime quality property satisfying the initial screening. The model is based on the actual historical results of a volatile market place in a major U.S. city. Each property type—office retail multifamily, and industrial—will have different assumptions for deteriorated rental income, vacancy rates, and when applicable operating expenses. The particular qualitative factors pertinent to each property type will determine the extent of potential volatility that may be expected.

Office building worst case cash flow analysis. In deriving a worst case model for office buildings, an analysis of external factors beyond the mortgagor's control is required. Such factors could cause a financially healthy building to face unexpected difficulties. Therefore, rapid property development and a weak economy causing high vacancy rates and deteriorated rental income are incorporated into the worst case cash flow scenario. Oversupply fueled by new empty buildings together with high unemployment in a one industry region which is affected by an unstable economy would have a severe negative impact on vacancy rates and rental income.

Review of each property's income capabilities. A detailed analysis of the property's actual income generating capabilities is needed to assess the impact of a worst case scenario. For office buildings, the documentation needed to complete such an analysis includes, a review of the lease terms to determine potential turnover, construction quality with accompanying independent engineering reports to ascertain the remaining property life of the building, tenant quality, and the question of reliability of receiving rental payments, property management energy efficiency, functional obsolescence, site specific location, and regional and submarket economic trends which emphasize marketing aspects.

By providing information on leases, tenants, building quality, property management and locality, it will be determined if any of the collateral's specific characteristics can be considered as meeting good or excellent—as opposed to minimum—standards if so, the worst case cash flow conditions can be modified upward accordingly (see Exhibit II)

Deriving a projected debt service coverage ratio and residual value for each property. After any modification of S&P's assumed worst case vacancy and rental income analysis for each property is concluded, a pro-forma debt service coverage ratio is calculated if the ratio is projected to be less than 1-1 times (x), the shortfall is the difference between the pro-forma debt service coverage and 1-1x. For the mortgage to remain in the pool, credit support up to the 1-1x level must be provided. The 1-1x coverage requirement takes into account ten basis points for costs which would be applied should a delinquency and work out period occur.

A residual cash flow value also can be incorporated into the calculation. Inclusion of this variable allows S&P to make the assumption that some value or ongoing cash flow can be received during the work out period if any is projected for the particular property as evidenced by the pro-forma debt service coverage ratio.

Based on discussions with major lenders, the general practice has been that in extreme problem loan work out cases a mortgagor is allowed to refrain from paying monthly debt service payments for up to six months or to reduce the monthly payments by one third for up to two years. However, the question arises as to when a mortgagor may decide to relinquish the property rather than work out the financial difficulties with the mortgagee. S&P has concluded that if the worst case cash flow debt service coverage ratio is projected to be less than 0.8x, it

is possible that the mortgagor would not in good faith be able to arrange refinancing or meet other loan covenants required by the lender. Therefore, only prime quality properties which are able to react to and survive poor market conditions will be considered as collateral. A property with such a projected coverage ratio of less than 0.8x should be removed from the pool or be backed by 100% financial coverage

Actuarial rating model

Minimum standards for each mortgage. The actuarial model combines minimum commercial mortgage standards with certain issuer requirements. Each mortgage in the actuarialbased pool must be screened based on property size, mortgage and property seasoning, mortgage terms, debt service coverage and loan to value ratios at origination, and mortgagor late payment requirements also addressed in the property specific model. On a case-by-case basis, the degree of diversification of property type will depend on the issuer's portfolio and underwriting standards.

The issuer's default frequency. The actuarial model emphasizes the issuer's frequency of mortgage defaults instead of the indepth analysis of each property under the property specific model. The default frequency is defined as the greatest

number of mortgages in actual default for any one year. Foreclosure, bankruptcy, and problem loan work out proceedings plus any mortgages affected by late payments would be included it is expected that this default frequency would be reviewed over a history extending from the mid-1960s

Requirements the issuer must satisfy. The issuer must have a debt rating to enable S&P to rely on the issuer's actual default record at this early stage of criteria development. The issuer's rating implicitly permits regular surveillance of the institution's operations and analysis of the commercial loan portfolio Any material alteration in underwriting standards or in the servicing process which seriously affect the frequency of defaults in the portfolio could have an impact on the issuer's credit rat-

The issuer's commercial loan portfolio must meet minimum size requirements relative to both the number of mortgages and the amount of principal lent. Moreover, underwriting standards are expected to be formalized. The issuer also must demonstrate a proven ability to service problem loan work outs. Furthermore, the institution is required to represent that the collateral pool of mortgages is better than or equal to the quality of the total portfolio

Exhibit II

Application of property specific worst case cash flow model based on a request for an 'A' rating

-Office building example -

Assumptions

Original property value \$14 250 000 Original mortgage amount \$10,687,500 Annual debt service \$1 571 582 Gross annual potential income at origination, \$2,627,361. Building's assumed vacancy rate 3%

Operating expenses \$4/expense stop Rental income increases assuming rent escalator of 4% beginning in year 3.

Square footage 160 000 iniba: rentai

\$16.42 avg per sq. ft Mortgage terms 20 years 13 75%

S&P Analysis

Modifying factors determined by property specific reviews Excellent-property size and site specific location Good—lease terms, tenant quality and regional economic base Minimum—property management, energy efficiency and construction quality

Worst case rent decline 22 55% Worst case vacancy increase 10 12% Worst case operating expense increase 0

Income statement		—Projectea—			
	Year 1	Year 2	Year 3	Year 4	WCCF*
Gross potential income (\$)	2,627,361	2 627 361	2 732 455	2 84 1 754	2.200.938
Building's vacancy rate (%)	3	3	5	4	10 12
Effective gross income (\$)	2 548 540	2 548 540	2 595 833	2 728 084	1 978 203
Operating expenses (\$)	640 000	640 00C	640 000	640 000	640,000
Net operating income (\$1	1 908 540	1 908 540	1 955 833	2 088 084	1 338 203
Debt service (prin + int) (\$)	1 57 1 582	1 571 582	1 57 1 582	1,571,582	1,571 582
Before tax cash flow (\$)	336 958	336 958	384 251	516 502	(233 379)
Annual debt service coverage (x)	1 2 1	121	1 24	1 33	0.85

^{*}WCCF. Application of worst case cash flow projection to particular property's last actual financial data

Process

Step 1 Analyze eight property specific characteristics based on information provided by the issuer

Step 2 Quantity qualitative factors and if applicable, modify S&P's assumed worst case cash flow conditions. In this example the rental income deterioration assumption is modified to 22 55% and the assumed vacancy increase is modified to 10 12%

Step 3 Based on actual results of Year 4, gross potential income is reduced by 22 55% to \$2,200,938. Projected vacancy rate of 10,12% reduces effective gross income to \$1,978,203

Step 4. After operating expenses and payment of annual debt service, pro-forma DSCR equals 0.85x

Step 5. The reoccurring annual shortfall is equal to the difference between 100% debt service coverage less the 85% worst case cash flow debt service coverage. projected by the model and additional 10% loss in annual revenues due to administrative costs associated with the mortgage that is either delinquent or in a work out situation [1.0 - (0.85 - 0.10)] x \$1.571.582 = reoccurring annual shortfall of \$392.895. The reoccurring annual shortfall can be covered by various means including overcollateralization under issuance, reserve funds, standby letters of credit, or surety bonds and quarantees

Step 6 in addition to the reoccurring annual shortfall S&P will also assume that for a delinquent loan in work out the trustee may only receive 60% of schedule debt \$1.571.582) x 3 - \$707.212. This one time shortfall can be gradually covered over the first few years of the bond issue is life through a buildub of reserves equaling the projected shortfall

Note. These amounts are in addition to the minimum liquidity reserve of 10% of the bond issue. The liquidity reserve can be satisfied with cash, letters of credit, surety bonds or cash advances by creditworthy servicers

(continued on next page)

Exhibit III

Application of actuarial issuer dependent model based on a request for an 'A' rating

Assumptions

Issuer has long term unsecured debt rating of 'A'

Commercial mortgage portfolio 15,000

Portfolio principal amount outstanding \$7.8 billion

Pool of 325 mortgages representative of issuer's total commercial mortgage portfolio

Amount of collateral for bond issue \$250 million

Each mortgage in pool satisfies threshold requirements and is fully amortizing and level pay

Issuer's default frequency 11.5%

Additional credit needed for risks applied for lack of adequate geographic distribution and for mean current LTV which is in excess of 60%

Mean values for pool above threshold requirements

Pool characteristics

quality Good

Debt service coverage ratio-based on supporting documentation -1.7x Loan to value ratio-based on supporting documentation 70°s

Property type: 88% office buildings Property size: 74,000 square feet Mortgage seasoning: 7,5 years Minimum Good Minimum Excellent

Methodology

((issuer's default rate x S&P commercial mortgage loss severity of 75%, as modified) + additional credit needed for risks) x adjustment factor = total credit support

Process

Step 1 Calculate issuer sidefault frequency including all late payments in addition to foreclosures based on portfolio data provided by issuer idetermined as 11.5%

Step 2. Assume 75% loss severity and modify based on pool characteristics, determined as 68.88%:

Step 3. Assume that all mortgages in pool have current 70% loan to value ratios. Therefore 11.5% of the mortgage amounts in the pool totaling \$28.750.000, may go into default.

Step 4 Property owners, equity is calculated (100% = 70% = 30%)

Step 5. Property owners, equity is subtracted from the modified loss severity of 68.88% (68.88%) = 30% = 36.88%.

Step 6 Multiply \$28 750 000 x 38 88 = \$11 178 000

Step 7. Again excess credit support for tack of geographic distribution of pool and inadequate mean current LTV and multiply total by . A lifting adjustment factor for total credit support needed for the pool

Step 8. Total credit support equals \$25, 150,500, in excess of the minimum financial coverage needed (at least 10°; of the bond issue).

Pool characteristics. Each collateral pool should include at least 300 mortgages. Pools with as few as 50 mortgages may be acceptable but credit support would be added to the financial coverage calculation. Geographic dispersion and ownership concentration also will be reviewed. Pools with inadequate distributions would require additional credit support to offset any potential financial risks associated with concentration. On the other hand, on a case-by-case basis, when the issuer has a high quality debt rating, that credit rating may be a positive factor in deriving the pool is financial coverage.

Methodology to calculate pool loss coverage. In calculating the amount of financial coverage of an actuarial mortgage pool (see Exhibit III) the primary mathematical variable is the issuer's default frequency. The other variable in the equation is S&P's assumed commercial mortgage pool loss severity of 75%. Under the actuarial model, in a worst case real estate market S&P assumes that the lender can expect to receive, at a minimum 25% of the value of the property upon liquidation. The 75% assumption is based on each mortgage meeting eligibility standards relative to property size, seasoning, debt service.

coverage and loan to value ratios at origination, mortgage terms, and mortgagor late payment history. During this process S&P also must assume that mortgages with the highest loan to value ratios will become insolvent.

However reduction of S&P's commercial mortgage loss severity assumption may occur based on the positive financial strengths of the pooled properties. This is similar to the modification concept that is applied under the property specific model. Moreover, modification may be appropriate after analysis of the issuer is servicing record, the work out process for problem loans and the actual commercial mortgage portfolio financial losses.

After arriving at a coverage level based on the particular pool, the amount is multiplied by a rating adjustment factor. The minimum amount of pool coverage will be at least the greater of 10^{6} 0 of the bond issue or one year's debt service on the bonds which can also act as liquidity support. Any assessments to compensate for inadequate pool characteristics in addition to the 10^{6} 0 amount must be in the form of cash, letters of credit or surety bonds. Cash advances and collateral substitution may also be relied upon

Analysis of the mortgage pools

Minimum standards for pool eligibility

Both the property specific and actuarial rating models require each commercial mortgage to be initially screened (see matrix on page 4) If the minimum requirements are not satisfied, the mortgage is disqualified as eligible collateral. The following standards are property type and size, property or mortgage seasoning, debt service coverage and loan to value ratios at origination, mortgage terms, mortgagor payment history, and when applicable mortgagor qualifications.

Property size. The minimum property size of an office building is 50,000 square feet of space. However, generally the larger the property, the lesser the credit risk. This premise is partially based on economies of scale, professionalism of development teams, property management characteristics, and tenant quality. For instance, concerns associated with smaller properties relate to the tenant's longevity at the leased premises which may increase the likelihood of an empty building or high turnover, both potentially resulting in negative cash flow

Property seasoning. As a minimum requirement, property seasoning, or age of the property, is defined as three years which should cover the expected lease up period for a newly constructed building if a property still faces high vacancy rates, the seasoning period would be extended as needed. Of course, longer property lives are judged more favorably. It is expected that a building with a seven-year rental record would better demonstrate long term and quality sources of income than a property with a shorter life since it should have already gone through lease renewals.

The seasoning qualification can be viewed from two perspectives seasoning of the income producing property or seasoning of the mortgage secured by such property. The property seasoning factor addresses the extent to which the substantial construction, development and initial leasing risks may be reduced. This concept is also implicit in mortgage seasoning. Generally, when commercial properties exchange ownership, tenants remain contractually liable on their leases. With continuity of tenancy, the amount of income generated from the property should be relatively stable. As a result, a newly originated ioan may be eligible as collateral when it is supported by audited financial statements reporting the income currently being generated by the property.

The attribute of mortgage seasoning is that, in addition to the debt service coverage ratio significantly rising reflected by income growth over a constant debt requirement, equity may build up to levels which increases the mortgagor's commitment to the property. This form of seasoning based on the life of the mortgage can often offset other negative property specific characteristics.

Debt service coverage ratio at origination. The commercial mortgage collateral supporting an "A" rated debt issue must have a minimum debt service coverage ratio (DSCR) requirement of 1.2 times (x) at origination. The DSCR is calculated as dividing the mortgage's effective gross revenue after vacancies minus operating expenses by total debt service charges. The 1.2x conservative benchmark for office buildings assures. S&P that only prime quality properties are eligible and aberrations in lending practices are kept to a minimum. Modification of the 1.2x standard may be possible if a high quality tenant has a long term lease or other property variables are considered excellent.

However, as pointed out in Exhibit II's property specific financial example, when analyzing the quality of a property's cash flow with an actual DSCR (1 33x) and the DSCR did not improve

greatly since origination but is applied to a worst case scenario, the projected deterioration of the DSCR to under 1.0x could be severe (0.85x in this case). The result would be the need for a greater amount of credit support. If under that same example the actual DSCR at year four was 1.7x the projected calculation would be 1.12x. This pro-forma DSCR would be above 1.1x and eliminate the need for any additional financial coverage in excess of the liquidity reserve. Again, the 1.1x ratio includes 10 basis points for default administrative costs.

In evaluating the DSCR of a seasoned mortgage, the analysis will focus on the trend of improvement over the life of the mortgage note from the originated 1.2x DSCR. Growth of net income would be expected as rent escalated or inflation adjustment clauses increased income while fixed debt costs remained constant. The extent of improvement from loan origination should be significant absent acceptable mitigating circumstances.

Loan to value ratio at origination. A property's loan to value (LTV) interrelates with debt service coverage. Therefore, the ratio of the principal amount outstanding to the value of the property must be conservatively applied and approximate no more than 75% when securing a debt instrument rated 'A'

Mortgage terms. Level pay and fully amortizing mortgage terms are characteristics which qualify a loan for the pool. Also, each property is expected to be secured by only a first mortgage to protect the bondholders' perfected first security interest. On a case-by-case basis, second mortgage financing prior to pool entry may be acceptable. However, the bondholders rights cannot be impaired. The DSCR must include all fixed costs and the LTV ratio cannot exceed pool eligibility requirements.

Under the property specific model after the mortgage is pledged as collateral, additional financing may be allowed on a limited basis (see mortgagor qualification paragraph below). Eligible uses include making repairs and any necessary improvements to retain tenants. Also, a limited amount of equity may be withdrawn from the property subject to S&P's projected worst case cash flow calculation.

Mortgagor late payment history. Seasoned mortgages will not meet eligibility requirements if any late payments occurred during the preceding year. If more than two late payments were made in the three years prior to submission to the pool, the mortgage also would be ineligible unless there is reasonable explanation. While the particular loan terms define late payment, in practice mortgage payment delinquencies for more than 30 days can reflect potentially questionable borrower behavior.

Mortgagor qualification under property specific model. The property specific model focuses on the revenue generating capacity of a commercial property. The model is not designed to extensively take into consideration the mortgagor as either an aid or an hinderance to this capacity. Consequently, S&P must feel comfortable that the mortgagor is an entity that by its nature cannot impair the cash flow in the form of mortgage payments from the property to the mortgagee. One way this can be accomplished is by allowing mortgages in the property specific collateral pool only to be held by "single purpose limited debt mortgagors"

A single purpose limited debt mortgagor will be defined generally as an entity that only has one significant asset—the commercial property which secured the mortgage and a single business consisting of the ownership and management of that property, can incur debt with respect to such property, and has an

(continued on next page)

ability to incur any such additional debt beyond the mortgage on a limited basis

Each mortgagor will be evaluated independently to determine if the above criteria for a single purpose limited debt entity are satisfied. Nevertheless, it is anticipated that all such mortgagors.

either will be single purpose corporations or limited partnerships. As an alternative, if the mortgagor has a credit rating as high as or higher than the bond issue, the obligor would not have to meet these "single purpose limited debt mortgagor" standards.

Review of property specific rating model variables

As stated previously, the property specific model focuses on the ability to ascertain and quantify a property's projected income generation which is secured by a mortgage that is considered as eligible collateral for a pool. In projecting the long-term quality of the funds generated from the property, the following characteristics are reviewed lease terms, tenant mix and quality, property management, construction quality, energy efficiency functional obsolescence, site location, and regional and submarket economic trends. By determining that any of these same variables enhance the property's value or stability of cash flow, modifications to the maximum worst case cash flow financial support requirements may be appropriate. On the other hand, if, as a result of S&P's analysis, any or a combination of these variables could be considered as severely impairing cash flow, the collateral would lose its eligibility status in the pool

Lease terms. All leases must be subordinated to the mortgage. Analysis of lease terms centers on the extent of financial exposure the mortgagor /landlord will face. It is expected that some form of protection against inflation—expense stops, consumer price index escalators or partial pass-throughs of operating expenses—will be terms of the lease. Advantageous leasing strategies may vary. The length of the lease, rental value of square footage, and leasehold size may be either positive or negative factors and depend upon the supporting contract terms between landlord and tenant. Awareness of potential supply and demand changes in the particular market place will also have an effect upon leasing evaluations. Another factor to consider is the percentage of a property's space that may become vacant at the same time. To reduce cash flow volatility, lease renewals ideally should overlap.

Tenant mix and quality. Tenant quality is an important variable in analyzing the reliability of steady income over a projected period. For larger properties, a positive feature is when a significant portion of an office building is occupied by nationally based, financially strong tenants with established corporate track records. It is likely that, absent deterioration of the property, such a tenant base would generate adequate levels of cash flow from the rented office building for the remaining lease term. These quality tenants acting as anchors are expected to have limited turnover and should serve as a draw for similar quality tenants. Tenant mix across industry lines also would be beneficial to lessen economic risk. If appropriate, the creditworthiness of a major tenant possessing an investment grade rating may be partially relied upon in certain circumstances to support the bond issue sirating.

Property management. The primary responsibilities of the property manager acting on behalf of the mortgagor are to minimize vacancy rates and increase rents. Furthermore the mort-

gagor's implementation of a tenant selection plan during leaseup and a tenant relations program should bolster management/ tenant relations

Quality property management, illustrated by the extent of day to day operations and maintenance of the mortgaged property. can ameliorate lessee turnover. The absence of such management can hasten tenant dissatisfaction. If the manager lacks experience or is not on site or close by, the firm's ability to monitor the property may be in doubt. Sophistication and expertise can be reflected by a review of the manager's accounting system. annual operations plan and long range capital improvement budgeting process. Questions which can be raised concern -how does the owner select the manager? -what is the extent of management's communications with both the owner and tenants? —how aware is the manager of whether the tenant plans to renew or terminate the lease? —how promptly does the manager respond to maintenance problems? —what is the extent of regular inspections of the property, especially structure and equipment? —does the manager select new tenants? -in what manner are late rents collected? -and is the manager involved in the eviction process?

Energy efficiency/functional obsolescence. Energy efficiency and functional obsolescence can have a direct relationship with the future rentability of a building. Energy costs as a percentage of total operating costs should be below average or average for the region. If a building has high energy costs compared to other similarly situated properties, a tenant may decline to pay utility bills or amounts over and above a set rate pursuant to the lease. When the mortgagor must absorb these rising costs the effect on net income could be significant. As a result, debt service coverage ratios may not exhibit expected improvement and the property's resale value may be seriously jeopardized. Furthermore, energy management plans based on an energy audit should be in place for office buildings.

Construction quality. Independent engineering reports similar to those required by major lenders are necessary to determine the construction quality of the building. Reliable information relative to the structural integrity and remaining economic life of the premises and its major operating systems helps to assess projected rentability and resulting income generation. The underwriter's familiarity with the developers' and contractors' track records relative to construction quality also can be of value.

Site specific location. It is important to note that the quality of a property's location will influence virtually each of the variables under review, especially tenants, lease terms, and current debt service coverage ratio. However, because of the extreme significance of this variable, an analysis in and of itself must occur. Factors which can be evaluated by site inspection are pres-

tige, amenities, compatible land uses surrounding the property, access to transportation and services, physical plant appearance, and proximity of other similar developments. Such an examination should conclude that there are not site specific factors which could lead to a radical change in the property's current operating performance. Physical inspection of the premises is expected in rare cases, photographs of the property and surrounding area shall be substituted.

Economic trend. Diversity of the economic base, on both regional and submarket levels, reduces the probability of a severe decline in demand. Steady regional growth helps demand prospects. Stable market conditions, as opposed to cyclical market conditions, promote uniform occupancy and rental rates over time. When appropriate, information gathered by S&P relative to the locality's economy will be compared with the issuer's documentation.

Review of actuarial rating model variables

The criteria which must be satisfied pursuant to the actuarial model concern both the pool of mortgages and the issuer

Mortgage requirements. Each mortgage in the collateral pool must meet six minimum standards delineated in the matrix (see page 4), property size, seasoning relating to the mortgage, debt service coverage and loan to value ratios at origination, mortgage terms, and mortgagor late payment history. Reliance on the issuer's default frequency resolves the need for each mortgagor to be a special purpose limited debt mortgagor.

The property type variable also is absent from the eligibility requirements because the type of properties in the pool will depend on the issuer's portfolio characteristics. Financial risks attributable to the various forms of income producing properties in a portfolio should be reflected in the issuer's actual default record. Nevertheless, if property types other than office buildings exceed 25% of the pooled collateral, additional initial screening criteria applicable to those other properties may be required.

When applying the actuarial model requiring inclusion of seasoned mortgages in the pool, current loan to value ratios (LTV) may be taken into account. The calculation can be derived from amortization of the loan amount or a reliable appraisal. The more accurate this LTV ratio is, the more this equity component—the value of the property in excess of the mortgage amount—can be treated by S&P as a portion of the pool's credit support.

Pool size and concentrations. Commercial mortgage pools should consist of at least 300 mortgages without application of additional financial support. Additionally, no one mortgage amount or one mortgagor s ownership should exceed 5% of the total bond issue. Geographic dispersion must be considered whereby no more than 10% of the properties are in any one of the standard metropolitan statistical areas (SMSA) and no more than 20% in three contiguous SMSAs within a distance of 250 miles. Also, no more than 25% of the properties should be located in any one economic region of the country which lessens the impact of relying on any single or similar economy Again, additional credit support may be incorporated to compensate for the risk of concentrations.

Issuer's responsibilities. Reliance on the issuer's historical default frequency and representations are so important at this stage of criteria development that the issuer must possess a debt rating. The credit rating, however, does not directly affect the rating on a bond issue collateralized by a commercial mortgage pool. Instead, an adjustment factor applied to the

proposed debt security's rating category and the commercial mortgage minimum collateral requirements determine the rating on the debt issue. In addition, the issuer must satisfy other criteria.

At the time of the bond issue, the issuing institution's commercial loan portfolio must have in excess of 1,000 income producing properties with an outstanding principal amount of at least \$1 billion. Underwriting requirements in addition to the servicing process must be standardized. Emphasis will be placed on the procedures to work out problem loans. Furthermore, as previously discussed, the institution must represent that the pool is better than or equal to the quality of the total portfolio.

Addressing each of these factors allows S&P to rely on the institution's actual default frequency. All foreclosures, bankruptcies, problem loan work outs, and late payments in any one year must be incorporated in the default frequency. Furthermore, classification of a late payment will be determined by the particular loan terms. If not, any delinquencies beyond 30 days would be suspect.

Financial supports needed to cover certain risks. If pool requirements are not met, credit support to compensate for the increased risk will be needed. The risks relating to the specific mortgages which may be satisfied with additional financial assessments are when mortgages with late mortgage payments are included, the mean current LTV ratio is in excess of 60% (based on loan amortization or other reliable documentation), and more risky mortgage terms are incorporated. Any pool characteristic percentage concentrations exceeding allowable levels or a pool with fewer than 300 but no less than 50 mortgages also will require financial support.

Calculation of financial coverage. By applying the issuer's default frequency to S&P's assumed 75% loss severity for a pool of eligible commercial mortgages, the amount of credit support needed for the pool can be derived. However, by taking into consideration both positive and negative features of the particular pool, it is possible to calculate a more accurate level of financial coverage. As exemplified in Exhibit III, mean values for each of the five specified eligibility variables can be determined. Any mean variable in excess of a range for minimum standards will proportionately reduce the amount of overcollateralization from the total loss assumption of 75% Also. analysis of the issuer's performance record will be taken into consideration. By multiplying the issuer's actual default frequency with the modified loss assumption and adding any coverages for risks, the pool's total loss coverage can be calculated. The appropriate rating adjustment factor up to the 'AA' rating category is then multiplied to the pool's loss coverage

Additional factors to be reviewed

Evaluation of issuer's underwriting standards

Underwriting losses usually are caused by incomplete or inadequate analysis, inexperience or lack of foresight on the part of the underwriter. Quality underwriting standards assist in lessening the number of mortgage failures and potential loss amounts. The best measurement is the lender's historical foreclosure, delinquency and loss record. Review of the lender's organizational structure and method of analysis is also important. Furthermore, standards relating to a mortgagor's property, casualty and liability insurance, as required by the lender, must be examined.

An underwriter's success rate is attributable to the following factors experience, performance, organization, personnel, and project and borrower evaluation. A sampling of questions that can be raised include —is there experienced personnel at both

the analysis and decision making levels?—what is the lender's experience with the property type of the proposed pool?—are foreclosure and delinquency rates above or below industry averages?—are problem loans in a particular property type?— what is the form of relationship with correspondents and is there formalized staff training?—are there separate divisions and how closely do they work together (i.e., lending, appraisal and legal)?—is there a written lending policy?—are technical skills handled by specialists?—what type of studies are required for project review?—what supporting documentation is incorporated in the project review?—are leases and other legal forms analyzed?—are site visits required?—how is the borrower sinancial strength determined?—and what form of record keeping and reporting is required of the borrower?

The mortgage servicer's responsibility to assure bondholders of timely payment

Foreclosure of a commercial property results in severe consequences for the mortgagor from a tax perspective. Tax benefits accruing from accelerated depreciation on the held property can be subject to recapture at foreclosure, requiring the mortgagor to pay additional taxes. The mortgagor may file for bankruptcy as the only recourse to retaining ownership of the property. To lessen the likelihood of such an action, when a mortgage note is in default, the servicer on behalf of the lender may engage in a work out of the bad loan with the mortgagor rather than foreclose on the property or precipitate a bankruptcy filing. From the event of default to resumption of loan payments or sale of the encumbered property, the capability of the servicer to arrange for timely debt service payments to the bondholders must be ascertained.

In the event that the servicer does not have an outstanding unsecured long term debt rating as high as the bond issue, additional support in the form similar to a fidelity bond is necessary. The quality of servicer staffing and monitoring operations.

also is at issue. Questions include how successful is the servicer in turning financially troubled properties around? —what processes are in place to resolve problem loans? —what type of monitoring mechanisms are in place to predict deteriorating financial and property conditions? —are correspondents involved in the monitoring process? —if so, how active are they in notifying the servicer of potential problems? —what is the servicer's definition of problem loan? —when is the lender informed of delinquencies?—is there a "watch list" and how is it defined?

During the problem loan work out process how broad is the servicer's authority and what responsibilities are undertaken?—how often has the work out process been used?—what is the typical duration prior to recovery of debt service coverage or sale of the property?—who pays debt service shortfalls?—and how is the mortgagee (now bondholder) compensated if the borrower's payments are insufficient?

Exhibit IV
Summary of key factors for mortgage pool evaluation

Step	Purpose	Property specific rating model	Actuarial rating model
Property Type Screen	Eliminates special-purpose or other property types with above average risks	Office buildings in the future apartment, retail, and industrial buildings may be applicable.	If non-office building properties exceed 25% of pool, additional screening criteria may be applicable.
Mortgage Eligibility Screen	Screen all incoming mortgages to insure that only prime quality mortgages are included in rated pools	Key risk variablesProperty size	Key risk variables —Same as property specific model —Mortgage seasoning —No mortgagor restrictions
Determine Required Financial Coverage	Determine if, for property specific model mortgages and for actuarial model pools, quality exceeds minimum requirements and is entitled to adjustments in financial support requirements.	Property specific analysis —Lease terms —Tenant mix and quality —Property management —Energy efficiency/functional obsolescence —Construction quality —Site specific location —Economic trends	Pool level analysis —Issuer credit rating —Issuer portfolio size —Standard underwriting procedures —Problem loan work out procedures —Pool size —Ownership concentration —Geographic dispersion —Additional credit support for pool risk assessment
Additional Factors to Be Reviewed	Further risk reduction	Evaluate underwriting standards Mortgage servicer's responsibility Collateral substitution	Same as property specific model Same as property specific model Same as property specific model

Collateral substitution by creditworthy issuers

Under both rating models any issuer who has an outstanding credit rating as high as the proposed bond issue may substitute eligible mortgage collateral for a non- or inadequately performing loan. An exchange of collateral would occur when either a mortgaged property's cash flow is insufficient to cover or is diverted from payment of debt service. The substituted mortgage

package can be screened with the original bond issuance and be subjected to the same monitoring standards required of the mortgage pool securitizing the bonds. Rather than substitute mortgages, the issuer may also guarantee debt service payments to the extent actual mortgage revenue is insufficient.

Conclusion

The key factors relating to commercial mortgages collateralizing rated debt which must be addressed by an issuer are summarized in Exhibit IV S&P's development of these factors into property specific and actuarial rating models is based on related structured financing, operating and legal rating criteria S&P believes that, through this program, a broad framework exists for utilizing commercial mortgages as collateral to finance public and private debt securities

Nevertheless, it is expected that the buildup of commercial mortgages securing debt financings will be both gradual and evolutionary. First, this reflects the need for detailed and reliable property information. Conservative underwriting standards also are required to reduce the risks in an industry in which historical

lending practices are often subjective and vary widely. Furthermore, the economics of certain commercial mortgages in the secondary mortgage market may be inadequate for existing mortgage holders. Finally, investor acceptance of these collateralized securities may take time to develop

In the near future S&P expects to continue to establish criteria relative to commercial properties beyond the framework delineated here

Janet V Conway

Inquiries for additional information on the commercial mortgage rating models may be directed to Janet V. Conway, Sam Kirschenbaum, Muhamed Sacirbey at (212) 208-1579

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THE AUTHORITY ON CREDIT QUALITY

Commercial mortgage terms: the balloon payment

Last November, S&P announced criteria making commercial mortgages eligible as collateral to secure rated debt obligations. Fully amortizing and level pay loan terms were required as initial screening criteria (see Nov. 19, 1984 CreditWeek) However, most commercial mortgages are financed by interest-only loans with principal due at note maturity. The criteria allowing such "balloon" mortgages are discussed in this Q & A by Janet V. Conway, assistant vice president. Financing of American Express Co.'s new corporate headquarters, which incorporates the balloon mortgage concept, is the first publicly rated commercial mortgage-backed security (see analysis page 25).

Can balloon mortgage obligations act as security for rated debt?

On a case-by-case basis, S&P believes that newly originated balloon mortgages may act as eligible collateral so long as debtholders can be assured of timely payment of principal.

What can assure repayment at stated maturity?

S&P would need to conclude that, under a worst case economic scenario, the property's market value at stated maturity exceeds the principal amount due plus a conservative loan to value ratio. This ratio is the amount of the mortgage outstanding divided by the value of the property. The property's market value would be calculated assuming a period of high interest rates and excessive vacancy levels incorporated under worst case cash flow projections. This pro forma income assumption is derived by applying S&P's national worst case model as modified by the particular property's characteristics.

Are special provisions needed in the indenture?

Yes. The indenture will assure that the bond trustee can readily obtain the principal prior to the stated balloon maturity either through refinancing or sale mechanisms. The mortgagor is expected to enter into a refinancing agreement supported by an unsecured letter of credit obligation or sale of the property within three years of the balloon mortgage being due. The time frame may be as short as one year depending upon the mortgagor's qualifications and terms of the indenture. This threeyear period assumes that the mortgagor faces a deteriorated real estate market. Under such a scenario, the mortgagor either is unwilling to refinance the property or decides to delay selling the property. By requiring this prior commitment financing period, there should be sufficient time available for the mortgagor to arrange for payment of the soon to be due balloon. If not, he should still be able to sell the property without jeopardizing his interests. If the mortgagor still balks, the bond trustee as mortgagee can foreclose on the property. Then, upon liquidation of the collateral, funds will be available to repay bondholders by the stated maturity of the balloon.

What additional credit supports are needed to secure a balloon mortgage?

Any shortfall between the actual mortgage amount due and S&P's worst case market value of the property at stated maturity must have credit support. This coverage would be in addition to credit support needed for any inadequate debt service evidenced under S&P's worst case cash flow projections during the life of the bonds. Moreover, a liquidity fund to assure timely

payments to debtholders is an ongoing requirement. This commitment can be met by support provided from a creditworthy third party or by segregating monies through a reserve fund Since this fund would be replenished when a late payment is received, any credit support needed for cash flow shortfalls also may be available for liquidity purposes. If the monies were not reimbursed, the mortgagor would be in default under the terms of the mortgage note.

How does S&P view accumulated equity in the property?

The accumulation, whether by inflation or amortization of the note, reaffirms the mortgagor's commitment to maintain a property and stay current in debt service payments. The value added acts as a credit support. Furthermore, as the mortgage becomes seasoned, the corresponding cash flow generated by the property should improve, resulting in a healthier debt service coverage ratio. This ratio is calculated as the effective gross revenues minus operating expenses before taxes divided by total debt service charges

Can equity in the property be regarded as near-term ilquidity support?

No. Because of the inability to liquidate the collateral promptly, built-up equity cannot be considered as a first source of funds to pay debt service in a timely manner. On the other hand, ac-

Document package for rating requests

in order to rate a commercial mortgage-backed security, S&P must be provided with the following documents. Additional documentation may be required in certain circumstances depending upon the bond structure and particular property.

Property information

- Mortgage note
- Income statement for last three years (preferably audited) and most recent quarter
- Most recent rent roll report
- Leases
- Most recent engineering report
- Appraisal (alternatively, cash flow forecast)
- Review of local economic base or a market study of it (ms) be incorporated in appraisal)
- Ground lease (if applicable)
- Representation of insurance policies

Bond issue

- Indenture
- Servicing agreement
- Prospectus
- Credit support agreements (if applicable)
- Legal opinions (if applicable)

(continued on next page)

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tual excess cash flow on an annual basis from increased rental income, reflecting a higher debt service coverage ratio, may be used as a source of liquidity.

Can additional financing be secured by the property? Secondary financing may be permitted in certain cases. When the first lien is secured by a balloon mortgage, any further financing cannot exceed the projected worst case market value that incorporates a sufficient loan to value ratio. S&P will at least annually review the mortgaged property's income statements and supporting information. As the maturity draws nearer and actual rental income rises, the available equity which can be withdrawn should increase without impairing bondholders' rights. Under the indenture, additional first lien indebtedness may be permitted as long as the outstanding debt rating is not affected. Subordinated debt may be unrated if the second lien holder stipulates that a default will not occur upon nonpayment of the junior indebtedness by the single purpose limited debt mortgagor. Generally this entity will only have one significant asset—the commercial property securing the mortgage—and a single business consisting of the ownership and management of that property. The mortgagor may incur debt for repairs to the property in addition to being able to withdraw equity on a limited basis. If the mortgagor's credit rating is at least as high as the

bond issue's, the obligor does not have to meet these single purpose limited debt mortgagor standards

Can seasoned balloon mortgages secure debt under the property specific rating model?

Refinancing provisions required under the indenture are unlikely to be attached as amendments to outstanding mortgage notes. However, if the issuer can assure timely payment of the principal due, such mortgages may still be eligible. For example, a creditworthy third party could commit to providing refinancing as an alternative to requiring the mortgagor to make such a promise.

How about under the actuarial model?

If a large pool of seasoned mortgages is secured under the actuarial model, the servicer or other party would need to substitute the mortgage upon nonpayment of the principal. Again, the promisor is expected to have a credit rating as high as the bond obligation's S&P's analysis would take into consideration the particular substitution method and flexibility of underwriting standards and servicing procedures. The availability of refinancing sources from the lender also would be reviewed. In certain cases, some balloon mortgages may be included without such credit support. This would depend on whether the principal amounts have different due dates and on the mortgage pool's characteristics.

CREDIT ANALYSIS

American Express Co.

\$450 million zero coupon Euronotes due 2000 First public commercial mortgage bond Sold, May 14, Salomon Brothers International; Shearson Lehman Brothers International Rated 'AA'

Rationale: S&P assigns an 'AA' rating to American Express Co and its subsidiaries' \$450 million zero coupon Euronotes due 2000, which provides \$82 million of proceeds to the company (see Credit Comment, page 16) This debt issue is secured primarily by a leasehold interest in the company's New York City-based new corporate headquarters. While the property will not be occupied until 1986, bond proceeds will be available immediately to the issuers—American Express Co., American Express International Banking Corp., American Express Travel Related Services Co. Inc., and Shearson Lehman Brothers inc. Prior to delivery of the mortgage note to the bond trustee on behalf of bondholders evidencing a first lien on the collateral, American Express Co. will guarantee payment of the accrued value of the notes. Thereafter, based on a detailed analysis of the property's characteristics, the collateral standing on its own will act as credit support for the issued debt. The critical analytical variables included, in part, a review of long-range demand for office space in downtown Manhattan, longevity of the building's occupants, and caliber of property management. The impact of these factors appropriately modified S&P's commercial mortgage worst case cash flow assumptions (see Nov. 19, 1984 CreditWeek). As a result, it was determined that, in an environment of high vacancies and reduced rental income, the property's market value should always be in excess of the outstanding debt obligation which accrues over a 15-year term to \$450 million. Furthermore, the significant overcollateralization level over and above the accruing outstanding debt provided by this mortgagor-occupied property satisfies the 25% excess coverage requirement for the 'AA' rating

Property evaluation: This World Financial Center property is located in the Wall Street area where demand for large use office space is at a premium. Given the layout and size of the 2,300,000 square-foot, 51-story building, the property is contemplated for users requiring extensive space for operations. Furthermore, the new construction incorporates state of the art energy efficient apparatus and other high quality design fea-

tures. Also, American Express, as mortgagor, has contracted with a well respected firm to manage this corporate headquarters.

Lease terms criteria are not at issue since the company will be occupying the premises. However, assumptions based on local practice for large users were incorporated into the modification process to simulate future vacancies. These assumptions included analysis of the vigorous growth of financial services in Manhattan's downtown area supported by New York. City's prominence as an international financial hub. In addition, the limited availability of new construction starts for large space users make this property attractive as potential leaseable quarters.

The need for property seasoning is resolved by American Express Co.'s guarantee to meet debt service until certain terms under the construction agreement and mortgage are satisfied, allowing for delivery of the mortgage note to the bond trustee. At that point, the guarantee will be replaced by the cash flow potential of this fully occupied prime quality property.

S&P also reviewed the ground lease between American Express as lessee and Battery Park City Authority as lessor it was concluded that, based on the terms of the lease read in conjunction with the mortgage note, the bondholder's first lien interest in the leasehold property would be protected at an 'AA' credit rating level

Credit support: Current market rental rates for new large use office space in downtown New York City range from \$38 to \$42 per square foot. While American Express Co. and its subsidiaries will be occupying the building, pro forma income statements were compiled simulating a leased up property. By analyzing the qualitative aspects of the American Express Co. corporate headquarters, the worst case model was modified significantly.

The modification variables applicable to this mortgaged property include project size, tenant quality, property management, energy efficiency, construction quality, site specific location, and the locality's economy. The modification process ef-

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fectively reduced S&P's assumptions of potential income deterioration, increased vacancy rates, and rising operating expenses during the mortgage term. As a result, even in a severely depressed real estate market, the property's income stream is expected to support the accreting zero coupon debt obligation from date of issuance to stated maturity.

Under this bond structure, no debt service is paid to note holders during the 15-year term (see *Credit Comment, page 16*). The absence of scheduled payments ameliorates the need for an annual liquidity reserve. However, the question of liquidity arises in year 15 when repayment of principal plus accrued interest of \$450 million is due. This requires that the issuer arrange for refinancing prior to the stated maturity to satisfy the debt obligation. In this case, a one-year period is expected to

adequately provide the bond trustee time, if called upon, to initiate foreclosure proceedings and sell the property prior to the bonds becoming due in the event funding cannot be obtained.

With this balloon principal payment due at maturity, the next step was to determine if, under worst case economic conditions, the property could secure the \$450 million obligation. By projecting the building's market value in 2000 based on the expected cash flow, assuming a period of oversupply of office space and high interest rates, it is determined the property's value will exceed the mortgage amount due. As a result, no additional credit support is necessary to cover the indenture's riskier balloon mortgage provision.

Sam Kirschenbaum, Janet V. Conway

S&P's RATING DEFINITIONS

A Standard & Poor's corporate or municipal debt rating is a current assessment of the creditworthiness of an obligor with respect to a specific obligation. This assessment may take into consideration obligors such as guarantors, insurers, or lessees

The debt rating is not a recommendation to purchase, sell, or hold a security, inasmuch as it does not comment as to market price or suitability for a particular investor.

The ratings are based on current information furnished by the issuer or obtained by S&P from other sources it considers reliable S&P does not perform an audit in connection with any rating and may, on occasion, rely on unaudited financial information. The ratings may be changed, suspended, or withdrawn as a result of changes in, or unavailability of, such information, or for other circumstances.

The ratings are based, in varying degrees, on the following considerations

- 1 Likelihood of default—capacity and willingness of the obligor as to the timely payment of interest and repayment of principal in accordance with the terms of the obligation;
- 2 Nature of and provisions of the obligation.
- 3 Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

AAA Debt rated 'AAA' has the highest rating assigned by Standard & Poor's Capacity to pay interest and repay principal is extremely strong

AA Debt rated 'AA' has a very strong capacity to pay interest and repay principal and differs from the highest rated issues only in small degree

A Debt rated 'A' has a strong capacity to pay interest and repay principal although it is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than debt in higher rated categories

BBB Debt rated 'BBB' is regarded as having an adequate capacity to pay interest and repay principal. Whereas it normally exhibits adequate protection parameters, adverse economic conditions, or changing circumstances are more likely to lead to a weakened capacity to pay interest and repay principal for debt in this category than in higher rated categories.

BB, B, CCC, CC Debt rated 'BB', 'B', 'CCC', or 'CC' is regarded, on balance, as predominantly speculative with respect to capacity to pay interest and repay principal in accordance with the terms of the obligation 'BB' indicates the lowest de-

gree of speculation and 'CC' the highest degree of speculation. While such debt will likely have some quality and protective characteristics, these are outweighed by large uncertainties or major risk exposures to adverse conditions

C This rating is reserved for income bonds on which no interest is being paid

D Debt rated 'D' is in default, and payment of interest and/or repayment of principal is in arrears.

Plus (+) or minus (-): The ratings from 'AA' to 'B' may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories

Provisional ratings: The letter 'p' indicates that the rating is provisional. A provisional rating assumes the successful completion of the project being financed by the debt being rated and indicates that payment of debt service requirements is largely or entirely dependent upon the successful and timely completion of the project. This rating, however, while addressing credit quality subsequent to completion of the project, makes no comment on the likelihood of, or the risk of default upon failure of, such completion. The investor should exercise his own judgment with respect to such likelihood and risk.

Let The letter 'L' indicates that the rating pertains to the principal amount of these heads where the underlying deposit collatoral.

amount of those bonds where the underlying deposit collateral is fully insured by the Federal Savings & Loan Insurance Corp. or the Federal Deposit Insurance Corp.

* Continuance of the rating is contingent upon S&P's receipt of an executed copy of the escrow agreement or closing documentation confirming investments and cash flows

N.R. Indicates no rating has been requested, that there is insufficient information on which to base a rating, or that S&P does not rate a particular type of obligation as a matter of policy

Debt Obligations of Issuers outside the United States and its territories are rated on the same basis as domestic corporate and municipal issues. The ratings measure the credit-worthiness of the obligor but do not take into account currency exchange and related uncertainties.

Bond Investment Quality Standards: Under present commercial bank regulations issued by the Comptroller of the Currency, bonds rated in the top four categories ('AAA', 'AA', 'BBB', commonly known as "investment grade" ratings) are generally regarded as eligible for bank investment. In addition, the laws of various states governing legal investments impose certain rating or other standards for obligations eligible for investment by savings banks, trust companies, insurance companies and fiduciaries generally



CredilPolicy

Commercial mortgage structured financing

Over the past year S&P developed criteria for debt obligations secured by commercial mortgages. The first rating was assigned in May for a debt issue secured primarily by a leasehold interest in American Express Co. 's New York City-based new corporate headquarters.

There are two parts to the rating process for debt obligations secured by commercial mortgages. First, the properties collateralizing the mortgages are examined (see Nov. 19, 1984 and May 20, 1985 CreditWeek). The property's income projections are modified to arrive at cash flow which would be available for debt service under S&P's worst case scenario. The worst case analysis determines a property's eligibility as collateral and the debt level the property can support in a structured financing Second, an in-depth review of the bond structure is conducted Satisfactory completion of this second portion of the rating process is critical in order for S&P to assign and release a rating

The criteria for analyzing the structure of a commercial mortgage financing are the same as those considered for structured financings in general. All relevant documents—the bond indenture, mortgage and note, loan agreement, and any ground leases, if applicable—must be reviewed. Seven issues critical to this examination are discussed below.

Mortgage recordation: To guarantee the first kien position of a mortgage against a property, that mortgage is expected to be recorded in its full amount. If it is not recorded, mechanics' kens or liens of judgment creditors could be filed prior to the mortgage lien. A recording reduces the forms of liens which could be senior to the mortgage, such as real estate taxes, and limits them from materially jeopardizing the mortgage ken. If prior kens were substantial they could have an adverse impact on the value of the property securing the mortgage. In the event of a mortgage note default and foreclosure, payment of these kens before the mortgage payment could result in a shortfall to bond-holders.

Mortgage assignment: In structured financings, the asset is assigned to the bond trustee for the benefit of the bondholders. Such assignment creates the bondholders' first perfected security interest. Without it, the bonds would be unsecured. Therefore, in commercial mortgage-backed financings, the mortgage note, as collateral, is assigned to the bond trustee.

Bond trustee's rights and duties: in all structured financings the bond trustee takes an active role and is empowered to act in the best interest of the bondholders in typical structured mortgage financings, the debt issuer is the mortgagee. Upon obtaining the monies, the mortgagee lends the proceeds of the debt financing to the mortgagor in return for a collateral interest in the property. Simultaneously, the mortgagee assigns his interest in the mortgage to the bond trustee, who becomes mortgagee of record. S&P realizes, however, that relative to commercial real estate, the trustee may not have sufficient information and property specific expertise for all necessary business decisions. Therefore, the issuer, in its former position as mortgagee, can make certain decisions as long as they incorporate the interests of the bondholders. To assure this balance, the bond trustee should maintain the right to override specific mort-

gagee decisions and have an administrative program for duties such as controlling the flow of funds from the mortgagor to bondholders.

Flow of funds: A critical factor in a structured mortgage financing is the flow of monies from mortgagor to bondholder. Bond indenture instructions should act as a road map for the bond trustee in collecting, investing, and disbursing funds in a timely manner. When the mortgagor makes note payments to the mortgagee, they should be passed through immediately to the trustee. Funds so received would be held in an escrow account and invested in S&P-approved eligible investments (see July 2, 1984 CreditWeek) until used to pay bondholders. Only after making the periodic debt service payment should the trustee release excess monies to the mortgagee or mortgagor.

Credit support facilities are often used to cover potential asset-related shortfalls. If needed, such supports are expected to be in place at bond closing. They can be in the form of cash or a letter of credit (LOC), surety bond, or cash advance guarantee from an entity with a credit rating as high as the bonds' rating. Commercial mortgage structured financings can experience shortfalls under both pro-forma and S&P's worst case cash flow analyses. Credit support should be provided for these amounts, as well as for a liquidity reserve to insure timely payment of debt service. On a property specific basis, the liquidity reserve should be funded at an amount equal to the greater of two months of gross revenues or three months of rental payments from the highest paying tenant.

The financing documents outline how the bond trustee applies the credit support facility. Amounts should be designated as coverage for both pro forma and S&P worst case cash flow shortfalls on an annual basis. If the amounts are not used during the year intended, the total credit support facility can be reduced accordingly. Since the liquidity reserve will always be needed to guarantee timely debt service payment, a replenishable instrument should be used. When drawn upon, the liquidity reserve is to be restored to its original amount upon receipt of late rental payments. If not replenished, a mortgage default could be declared.

Permitted additional indebtedness: Both the mortgagor and the mortgagee can incur additional debt for the benefit of the property collateralizing the mortgage. This debt can take one of two forms. First, additional debt can be pari pasu with the debt issued under the bond indenture. Pari pasu debt would be rated as high as the bonds or, alternatively, not impair the rating on the outstanding debt. Second, additional debt is permitted if its lien is subordinate to that of the bondholders.

Subordinated indebtedness can be incurred in two ways. In both cases the debt authorization terms may not contain any provisions more onerous than those contained in the financing documents. The first category is debt that either meets predetermined tests for debt service coverage and loan-to-value ratios or will not impair the bond rating. The second category is debt that meets these conditions.

the subordinated mortgagee is prohibited from commencing foreclosure, bankruptcy, receivership, or other insolvency proceedings.

(continued on next page)

SEPTEMBER 9, 1985

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- the debt is nonrecourse to the mortgagor other than with respect to cash flow in excess of the amounts necessary to meet the obligations under the mortgage and other forecloseable indebtedness, and
- the debt does not constitute a claim against the mortgagor to the extent that excess cash flow is insufficient to pay such debt

The first lien position of the mortgage as collateral for the rated financing is essential to afford bondholders the necessary protection in events of default. Therefore, neither the mortgagor, nor the mortgagee, is permitted to incur additional indebtedness which would subordinate the mortgage's first lien position. In addition, both mortgagor and mortgagee should be organized as single-purpose entities. This provides additional safeguards in preserving the unencumbered nature of the collateral and reduces the potential for creditors to seek forectosure.

Dependent issues: The timely and ultimate payment of outstanding debt in commercial mortgage financings is dependent on the cash flow from the mortgage, casualty insurance proceeds, and credit supports provided to cover potential cash flow shortfalls in structured financings, the ability of third-party insurers and credit support providers to meet their payment obligations is critical. Therefore, the rating on the bonds depends upon the casualty insurance carriers' claims-paying abil-

ity rating and the credit support providers' unsecured long-term debt rating assigned by S&P. Consequently, a rating change for either of these entities could change the rating on the bonds.

Obtaining an insurance carrier and a credit support provider with ratings as high as the bonds is not sufficient in and of itself Casualty insurance coverage should always be in an amount at least equal to the total bond indebtedness. The casualty insurance policy and shortfall credit support should name the bond trustee as beneficiary or be assigned to the bond trustee in the financing documents. If the credit support is in the form of a LOC, it should be a direct pay LOC, accompanied by necessary legal opinions.

Ground leases: In many commercial real estate financings, the mortgage may be subordinate to a ground lease. In such a case, should the mortgagor as lessee default on the ground lease, the bondholders' security interest in the property would be jeopardized. As a result, it is anticipated that any ground lease would be subordinate to the mortgage. Nevertheless, if the leasehold position is superior to the mortgage and the mortgage has the right to cure any mortgagor defaults under that lease. S&P may conclude that the bondholders' first lien interest would be sufficiently protected.

Marcia Scheiner (212) 208-1883 Janet V Conway (212) 208-1579

CREDIT POLICY

Qualified investment criteria

An increasingly important factor in the ratings process is how municipalities and corporations invest restricted and unrestricted funds and bond proceeds. In S&P's opinion, only certain investments are appropriate for issuers to maintain ratings in specific categories. Defining which investments quality for each rating category is particularly critical for structured financings because sources of payment for debt service are limited. In contrast, ongoing entities have multiple sources of funds to provide for debt service payments.

Standard & Poor's makes a distinction between structured financings and financings done by ongoing entities in determining the appropriateness of qualified investments. Structured financings generally call for investments which produce returns at designated levels to meet legal and cash flow requirements Bonds of this nature include student loans, pay-through and collateralized mortgage obligations, letters of credit, mortgagebacked bonds, mortgage revenue bonds, and leases among others. Due to the quasi-regulated nature of health care facilities, and the fact that investment losses are not usually a reimbursable expense from third-party payers, these issues are more closely aligned with structured financings.

investments of ongoing entities are assessed differently due to the self-perpetuating nature of a municipality or enterprise. Investments are viewed as a management evaluation factor in most cases, with attention given to the use of the particular funds. These include reserve construction, renewal and replacement, and sinking funds. Ongoing entities include municipalities, authorities, states and state agencies, and enterprise systems which issue bonds to finance capital needs. Although most housing bonds involve structured financings, state housing agencies are regarded as ongoing entities because of their operating status and functions

S&P's position on qualified investments for designated funds recognizes the significance of yield risk, and liquidity. Depend-

ing on the use of invested funds, each of these factors takes on a different degree of importance. For example, funds used for current operations may be invested in highly liquid securities including money market funds with relatively low risk and moderate yields. Similarly, sinking funds might be invested in highly liquid securities to assure availability at debt service due dates. perhaps yielding somewhat higher returns with relatively low risk. Escrow funds, which require specified returns to meet cash flow requirements, should be invested in risk-free U.S. government obligations.

Since qualified investments are looked upon as a management evaluation factor in most issues of ongoing entities, S&P's guidelines are broad. Issuers would ordinarily invest construction funds, for example, in securities with a high degree of safety and with maturities following construction draw down schedules, but management here has discretion

In structured financings, debt service reserve funds are often used as an arbitrage vehicle to cover interruptions in cash flows and reinvestment risk, hence, they must be maintained at specified levels. Ongoing entities usually have more flexibility in their use of reserve funds. Bond covenants generally allow such entities the freedom to draw down reserve funds provided that replenishment takes place in a timely manner

Escrow funds, created to refund outstanding debt, must be composed of U.S. government obligations, as defined in item 1. below to receive S&P's 'AAA' rating Typically, U.S. government securities are purchased with maturities matching those of the refunded bonds either to the first call date or to final maturi-

A list of qualified investments for structured financings follows. A complete statement regarding over-collateralization levels and repurchase agreements is available upon request

Rob Reiner, Tom Gillis

Qualified investments for 'AAA' rated structured financings

- 1. Obligations of lor guaranteed as to principal and interest by the United States. or any agency or instrumentality thereof when such obligations are backed by the full faith and credit of the United States. These include (but are not necessarily limited to
- -U.S. Treasury obligations
- All direct or fully guaranteed obligations
- -US Export-Import Sans
- Direct obligations
- Fully quaranteed certificates of beneficial ownership
- -Farmers Home Administration
- Certificates of beneficial ownership
- -General Services Administration
- Participation certificates
- -U.S. Maritime Administration
- Guaranteed Title XI financing
- Government National Mortgage Association (GNMA).
- GNMA-guaranteed mortgage-backed bonds
- GNMA-guaranteed pass-through obligations
- -New Communities Depentures
- U.S. government guaranteed debentures
- -- U.S. Public Housing Program
- U.S. government guaranteed public housing notes and bonds
- —U.S. Department of Housing & Urban Development
- Project notes
- Local authority bonds
- 2 Federal Housing Administration debentures
- 3 Federal Home Loan Mortgage Corporation (FHLMC) and Farm Credit Banks (Federal Land Banks, Federal Intermediate Credit Banks, and Banks for Cooperatives) participation certificates and senior debt obligations
- 4. Federal National Mortgage Association's (FNMA) mortgage-backed securities and senior debt obligations

- 5. Studient bean Marketing Association (SLMA) letter of credif-backed issues. and servor debt obligations
- 6. Federal funds, certificates of deposit, time deposits, and bankers, acceptances chaving maturities of not more than 365 days) of any bank the dept obligafions of which for in the case of the principal bank in a bank holding company debt obligations of the bank holding company) have been rated. A-1 -
- 7. Deposits which are fully insured by the Federal Savings and Loan Insurance Corp. (FSL C) or Federal Deposit Insurance Corp. (FDIC).
- 8. Repurchase agreements with financial institutions insured by the FDIC or FSLIC or any broker-dealer with "retail customers" which falls under Securities Investors Protection Corp. (SIPC) jurisdiction provided. 1) the over-collateralization is at a level acceptable to S&P (2) the trustee or a third party acting solely as agent for the trustee has possession. 3) the trustee has a perfected first security interest in the collatera. 4) collateral is free and clear of third-party kens. 5) failure to maintain the requisite collateral percentage will require trustee to liquidate the collatera:
 - 9 Repurchase agreements with any institution with AAA rated debt
 - 10 Obligations rated AAA
- 11. Commercial paper (having original maturities of not more than 365 days). rated A-1-
- 12 investments in money market funds rated AAAm or AAAm-G by S&P Qualified investments for AA rated bonds include all of the preceding and investments rated AA or higher where the AAA rating is noted above qualified investments for 'A' rated bonds include all of the preceding and investments rated A or higher where the IAAA rating is noted above, and IA-1, or higher rated debt instruments in addition investments in money market funds rated AAH or AAH. G or higher are permitted for AA irated bonds investments in money market. funds rated Amilor AmiG or higher are permitted for All rated bonds

MARKET ANALYSIS & THE INDIVIDUAL LEASE

James Graaskamp

Leases - Their Various Clauses and Their Importance

1. Definitions

- A. Specific space and location to be leased
- B. Specific business entity as lessor
- C. Specific business entity as lessee
- D. Specific description of real estate elements to be leased (Definition of shell provided by landlord and finishes provided by tenant)
- E. Specific exemptions of tenant improvements to remain tenant property

II. Conditions for Commencement of Lease

- A. Conditions permitting cancellation by landlord (lessor)
 - 1. Failure to obtain specified financing prior to construction
 - 2. Death or disability prior to a certain date
 - Impossibility of performance due to acts of God, government, regulation, labor conditions, etc.
- B. Conditions permitting cancellation by tenant (lessee)
 - 1. Completion according to specification
 - 2. Compeltion according to scheduled time
 - 3. Conditions relative to other occupancies
- C. Remedies of landlord
 - 1. Forfeiture of tenant deposits or escrow funds
 - 2. Liquidated damage provisions
 - 3. Guarantees by others
 - 4. Penalty rents, assessments, etc.
- D. Remedies of tenant
 - 1. Postponement of commencement date
 - 2. Rental abatement
 - 3. Cancellation of lease at option of tenant
 - 4. Penalty payments in contract assessed to the landlord
 - 5. No penalties other than suit for damages

III. Conditions for termination of lease

- A. Death or disability at option of lessee estate
- B. Scope of "change in conditions" clause

- C. Guaranteed occupancy and operations clause
- D. Cancellation liquidated damages formula
- E. Bankruptcy receivership of business termination clause
- F. Assignability clause
- G. Implied good faith effort of percentage lease
- H. Permitted uses clause
- I. Casualty loss event
- J. Condemnation events
- K. Specific conditions subsequent explicitly identified as grounds for termination
- L. Subordination position

IV. Rental Formula

- A. Basic minimum rent
- B. Formula for rental adjustment over time
- C. Renewal options, if any, and base rent
- D. Calculation of prominent area charges and tenant participation in same
- E. Real estate tax escalator clause
- F. Insurance premium stop loss clause
- G. Utility expense stop loss clause
- H. General maintenance and replacement assessments for HVAC, parking, lighting, etc.
- I. Audit of sales and overage rents
- J. Conditions for rental abatement due to casualty loss, remodeling, road construction, or business interruption due to riot, strike, civil commotion, or disruption of public services

COURSE/INSTRUCTOR EVALUATION

Using a scale of 1 - 5, where 1 = lowest and 5 = highest, please rate the extent to which:

iraaskamp

				
the objectives of the session were stated clearly				
2. the course objectives were fulfilled				
3. the instructor knew the subject thoroughly				
4. the session was well-organized				
the material was presented in an interesting manner				
6. you were encouraged to ask questions/express opinions				
7. questions were answered to your satisfaction				
8. what is your overall opinion of the course content/session? (5 = excellent; 1 = poor)				
9. what is your overall opinion of the instructor? (5 = excellent; 1 = poor)				
10. Additional Comments: (please specify which course/ii	nstructor):			
		· · · · · · · · · · · · · · · · · · ·	- 1	

Monday, July 20, 1987 COURSE/INSTRUCTOR EVALUATION Using a scale of 1 - 5, where 1 = lowest and 5 = highest, please rate the extent to which:	Finance & Risk Graaskamp	Property Loan Graaskamp	Market Analysis Graaskamp	Giovinazzo
the objectives of the session were stated clearly				
2. the course objectives were fulfilled				
3. the instructor knew the subject thoroughly				
4. the session was well-organized				
the material was presented in an interesting manner				
you were encouraged to ask questions/express opinions				
7. questions were answered to your satisfaction				
 what is your overall opinion of the course content/session? (5 = excellent; 1 = poor) 				
 what is your overall opinion of the instructor? (5 = excellent; 1 = poor) 				
10. Additional Comments: (please specify which course/i	nstructor):			
				
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University of Wisconsin-Madison

1155 Observatory Drive Madison, WI 53706 608/262-0391

December 27, 1986

Mr. Nino Amato 917 North Westfield Road Madison, WI 53717

Dear Nino:

It was a distinct pleasure to hear you speak at the Dane County Regional Planning Seminar at the Sheraton several weeks ago and see first hand the expertise you have acquired in economic development, an expertise which I had known only by street conversation. I chair the American Bankers Association's National School of Real Estate Finance here on the Madison Campus each July. Course I spends six days on residential lending and Course II spends six days on income property lending. Each course has approximately 150 bankers from across the country.

Course II has scheduled a lecture from 10:15 to 12:00 p.m. on Friday, July 24, on economic development loans that are available, including both those that are available through a lead bank and those which are available directly through government agencies for purchase or construction of a commercial facility. As I understand it, this is an area in which you have considerable expertise and all of us in the School of Business and the ABA School would be pleased if you were available to lead that lecture and discussion on Economic Development Loans on the Friday morning indicated. While the ABA covers expenses in full and reproduction of any materials you would like in their student notebook, the honorarium is minimal, approximately \$100.

If you would be available for the ABA, give me a call at 238-8452 in the evenings as soon as possible and send along in the mail a personal resume and tentative outline. Incidentally, Lee Kendall is the speaker to a joint session of the courses immediately following lunch, and we would be delighted to have you as our guest for both lunch and the presentation.

Very best wishes for the New Year,

Professor James A. Graaskamp Chairman, ABA National School of Real Estate Finance

JG:mif

cc Michele Thompson



University of Wisconsin-Madison

1155 Observatory Drive Madison, WI 53706 608/262-0391

December 30, 1986

Dr. Lee Kendall Mortgage Guaranty Insurance Company 250 East Kilbourn Avenue Milwaukee, WI 53202

Dear Lee:

Once again the ABA National School of Real Estate Finance will be held on the University of Wisconsin Campus in Madison, and the committee has asked me to inquire if you would be available to speak to both the residential group and the income property loan group in a joint session on Friday, July 24. The preferred time would be immediately following lunch at 1:15 to 2:30 P.M. on Friday afternoon. An alternative time slot would be 7:00 P.M. on Thursday evening July 23, 1987.

We were hoping you would talk about the general subject of 'Managing Risks: Key to Bank Projects in Real Estate Finance.' A fifty minute presentation would leave approximately 20 minutes for questions and discussion.

You were so successful last year at communicating basic economic reality in a useful form to bankers, we hope very much that you will do so again this year. We look forward to an early reply.

In the meantime, we wish you all the best of the season, continued low interest rates, and a surge in home buying markets.

Sincerely,

Professor James A. Graaskamp

Chairman, ABA National School of Real Estate Finance

JAG/db

cc: Michele Thompson

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AMERICAN BANKERS ASSOCIATION 1120 Connecticut Avenue, N.W. Washington, D.C. 20036



EDUCATION POLICY & DEVELOPMENT GROUP GRADUATE BANKING EDUCATION DIVISION

April 6, 1987

Dr. James Graaskamp Chairman Department of Real Estate and Urban Land Economics University of Wisconsin 155 Observatory Drive Madison, WI 53706

Dear Professor Graaskamp:

Thank you for agreeing to teach at and to serve as the academic advisor for the 1987 session of the National School of Real Estate Finance. The purpose of this letter is to specify the terms of our agreement.

First, in exchange for your services as academic advisor, we request that you:

- o attend two advisory board meetings (one prior to the school for planning purposes and one following the school for evaluation purposes).
- o assist in the development of individual course abstracts. Review and modify where appropriate.
- o approve course objectives, outlines, and exam questions as submitted by instructors.
- o assist in identifying and contacting new faculty members.
- o attend the National Conference on Real Estate Finance and speak about the school.
- o allow ABA to use your name in marketing and promoting the school.
- o serve as liaison between ABA and the University of Wisconsin with regard to logistical needs and arrangements.

In exchange for your services as academic advisor, ABA agrees to pay you \$6,000.

\$1,000 is to be paid following the planning meeting.

\$1,000 is to be paid when all course abstracts have been finalized.

\$1,500 is to be paid when you have reviewed and approved all course objectives, outlines, and exam questions.

\$1,500 is to be paid when faculty positions for which you have accepted responsibility have been filled.

\$1,000 is to be paid following the evaluation meeting.

For this year, \$4,000 of the \$6,000 remains to be paid. I've enclosed a packet of course abstracts for your review. Rob Abelman has sent the enclosed materials to all faculty members and will forward their submissions to you as received. Please note that we still need your abstract and an instructor (vendor) for the Computer Processing of Mortgages course.

Please let me know if this agreement is satisfactory to you. It's just a draft and can be modified easily.

Thank you so much for working with us on this school. We are most appreciative of your help.

Sincerely,

Michele A. Thompson

Undergraduate Schools Manager

(202) 663-5364

Michele

MAT/kc

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AMERICAN BANKERS ASSOCIATION 1120 Connecticut Avenue, N.W. Washington, D.C. 20036



EDUCATION POLICY & DEVELOPMENT GROUP GRADUATE BANKING EDUCATION DIVISION

April 7, 1987

Dr. James Graaskamp Chairman Dept. of Real Estate and Urban Land Economics University of Wisconsin 155 Observatory Drive Madison, WI 53706

Dear Professor Graaskamp:

On behalf of the American Bankers Association, I would like to thank you for your willingness to teach at the 1987 session of the ABA National School of Real Estate Finance (NSREF).

I have enclosed a school overview packet, showing the purpose, target audience, 1986 student profile, schedule, faculty, and course listing. In addition, you will find a set of course abstracts for the 1987 session. You may find the information useful in planning your presentation.

Attached, you will find a list of the courses you will be presenting. In exchange for your related services ABA will pay you \$2,700, plus reimburse you for your travel and related expenses in accordance with ABA policy.

We ask that you assist us in our efforts to deliver a thoroughly-prepared, high-quality educational program by completing the following tasks for us:

- 1. Please examine the course abstract prepared for your course. Is it accurate? Is it sufficient? Please revise it in any way you see fit.
- 2. Please write several learning objectives for your course. These should be statements indicating what students will be able to do (describe, explain, state, list, discuss, etc.) when you've finished teaching.
- 3. Please prepare a course outline for inclusion in the student notebook. It should be detailed enough to serve as an organizational tool for the schedule.

- 4. Please submit copies of any handouts you plan to use. We will see that they are included in the notebook.
- 5. Please prepare five multiple choice questions based on the $\underline{\text{major}}$ points in your presentation.
- 6. If you wish, we can produce any visuals that you may need for your presentation.

We would appreciate receiving these items no later than May 15, 1987.

Should you have any questions or concerns about your part, please do not hesitate to call me (202/663-5351) or Michele Thompson (202/663-5364). We are both available to assist you in any way we can.

Thank you for your efforts and cooperation.

Sincerely,

Rob Abelman

Educational Coordinator

Molicar

RA/kc

Enclosures

Real Estate Process (The New Approach to Real Estate Systems)
Sunday, July 19
4:00 - 5:00 p.m.

Course 1 - Residential Property

Housing Market Analysis Thursday, July 23 8:00 - 9:45 a.m.

Course 2 - Income Property

Finance and Risk Monday, July 20 8:00 - 9:15 a.m. Market Analysis & the Individual Lease
Monday, July 20
10:45 a.m. - 12:15 p.m.

Property Loan Proposal Monday, July 20 9:30 - 10:30 a.m. Property Risks Tuesday, July 21 1:15 - 3:15 p.m.

Various Elements of Credit
Enhancements for Income Property Loans
Tuesday, July 21
3:30 - 5:00 p.m.

Local Case Study Thursday, July 23 7:00 - 8:00 p.m.

Appraisal Standards and Procurement Friday, July 24 8:00 - 10:00 a.m.

Real Estate Process-Course Objectives

- 1. Student should perceive financing requirements for real estate requiring sensitivity to borrowing capacity of the property owner, financing needs of the developer/seller, and financing needs of the municipality as interrelated.
- 2. A financial plan for repayment depends on a forecast of the future so there must be a capacity to tolerate surprise and variance in the projected cash flows available for debt repayment in terms of amount and timing.
- 3. Future behavior of the borrower must be conditioned for positive motivation from enjoyment of the financed asset, the potential for negative motivation in terms of sanctions applied by the lender, and the lender should always plan for the worst alternative of taking title to the property.
- 4. Urban structures create the terrarium in which we live and we build what we can finance so that real estate lending has a significant ethical responsibility for the living quality and consequences of what is financed.
- 5. Real estate finance must manage the risks of the future to minimize waste of bankers' capital, waste of social capital, and waste of the borrows life energies in order to minimize costs of the free market system.

Housing Market

- 1. Recognition that complete market anahysis includes definition of demographic market segmentation, specific product feature segmentation, custom crafted promotion and merchandising program, and research of political attitude controlling entitlement process.
- 2. Introduction to types of market research and sources available.
- 3. New regulatory burdens placed on lenders and appraisers to provide legitimate and comprehensive market data to support value conclusions.
- 4. Suggest market research issues for which each lender should have local knowledge.

Risk Management Objectives

- 1. Underwriting and lending as an applied case of risk management principles.
- 2. Structuring the loan to controll variance and avoid consequences of spcefic assumptions.
- 3. The lean closing as an exercise in laying off risk to specialized risk bearing institutions.
- 4. Portfolio servicieng as an exercise in motivationg performance despite future facts which vary form an aumptions.
- 5. Lenders are shifting risk management from static risks related to the property to dynamic risks related to the cost of money, the value of a dollar and changing economic and social environments.

Property Loan Proposal

Course Description

Critical Elements of the loan Package Provided by the Borrower and a detailed case study of a letter of commitment as a risk management device will be reviewed.

Course Objective

- 1. Sensitize the lender to the implicit assumptions of the archietectural and engineering plans, the capital costs, the distrib utable cash for debt service, and the probability of completion provided by the description.
- 2. Application of the pleasure of pain and bailout elements of the loan strategy in the little of commitment
- 3. Teaching the difference between conditions, definitions of time line windows, and & conditions embarquent for a letter of commitment of Pandang changes in government regulation of regulation market, fearbility, and approximate repeated.

Course Objectives

- 1. Demonstrating need for careful market segmentation for the office or retail lease to avoid pitfall of over-stating size of market potential or the rate and degree of lease expiration which will determine market capture rate for the subject property.
- 2. Organizing the lease abstract in terms of risk management issues:
 - 4. What property rights have been leased?
 - d. Under what conditions does the lease begin?
 - Q. Under what conditions can the lease be terminated prior to the end of its contract term?
 - Under what conditions can rent payment be abated or renegotiated prior to the end of the term?
- 3. Changing space pricing methods to reduce delays in collecting expense participation, percentage rents and rent indexing adjustments.

4. Supl Yementary income sources for the project available to the lender,

Course Description

Introduction to various applications of credit enhancement instruments to provide supplementary collateral for high risk segments of the capital budget, the operating budget, or the time schedule assumptions in the financing plan.

C. Objectives

Demonstrate applications of credit enhancement :

A. Bonds

- 1. Completion and performance bonds
- 2. Insurance company chancements written as a performance bond
- 3. Bonding of lease payments
- B. Letters of credit
 - 1. Advance payment of loan fees
 - 2. Latent defects protection
 - 3. Operating deficits protection
 - 4. Parcial andorementa
- C. Long term loan guarantees
 - 1. FHA
 - 2. SBIC
 - 3. Insurance company programs for private placement bond trustee funds
 - 4. Privfatfe placement and municipal bond mortgage bankruptcy trust funds

\$5. Parent Cosporation indocemente

D. Joint venture moral obligation protocols and assessment procedures

Course Desc

Analysis of a shopping center permanent loan mortgage opportunity where the case study has elements of property, lease, borrower, and demographic risks

Course Objec

- 1. Demonstrate how implicit assumptions undermine apparent security of the loan
- Demonstrate that systematic inquiry by means of a check list can reveal lending pitfalls
- 3. Opportunity for students to share experiences with similar propertiers

Course Desc

Introduction to major changes in procurement of appraisal and standards of the appraisal product required for income property mortgage lending. Course will emphasize implication of R41(c) for all federally insured mortgage lenders, the need for privity of contract between lender and appraiser, and gowing use of letters of engagement.

Course Obj

- 1. Brief review of pending appraisal legislation and regulation
- 2. Introduction to subject matter of R41(c) from the viewpoint of the lender
- 3. Introduction to sample appraisal policy statement required of bank board of directors
- 4. Example of a letter of engagement for a new project requiring a construction loan and permanent financing

Course Desc

Class is intended to provide a systematic appraoch to proopetty analysis in terms of risks to the capital budget, operating budget, and lender liabilities to the third parties.

Course Objec

- 1. Introjuce the lender to a structured method of property analysis:
 - A. Physical attributes of iste affecting collateral values
 - b. Legal/political entitltements
 - c. Linkage attributes which are basis for demand, revenue, and market value
 - d. Dynamic attributes or perceptions of the site in the market place
 - e. Environmental impacts off iste as a result of site development
- .2 Evaluating the building as a set of subsystems integrated to each other and preferred in the marketplace.
 - a. Foundation systems
 - .b Structural systems
 - c. Floor system
 - d. Vertical circulation system
 - e. Horizontal circulating system
 - f. Exterior wall system
 - q. Interior wall system
 - h. Roof system
 - i. HVAC system
 - j. Plumbing and utility system
 - k. Life safety system
 - 1. Security system
 - m. Energy conservation and monitoring system
 - n. Approach zoneand public space interface
- 3. Collateral risks to the lender in building subsystem specifications

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ABA National School of Real Estate Finance





September 3, 1987

Professor James Graaskamp University of Wisconsin School of Business 1155 Observatory Drive Madison, WI 53706

Dear Chief:

Enclosed is a copy of the cancelled check from the school that you received in the month of May. The check was mailed to the school of business address but was deposited to Landmark. The outstanding \$1,500 from San Francisco was just processed last week. The last payment of \$1,000 will be sent to you following the board meeting scheduled for October 19 and 20th. We realize that you will be unable to attend the meeting but hope that you will be able to participate for a short period via a conference call.

If you should have any questions regarding your payment, please call Michele Thompson at 202/663-5364.

Sincerely,

Nga Do Thi Program Coordinator 202/663-5413

cc: Michele Thompson



1155 Observatory Drive Madison, WI 53706 608/262–1550

August 4, 1987

Ms. Nga Do Thi American Bankers Association 1120 Connecticut Avenue, NW Washington, DC 20036

Dear Nga:

I've enclosed the invoice for business school overhead charges related to the 1987 ABA Real Estate Finance program. Jim Graaskamp will prepare a separate invoice for out-of-pocket charges (e.g., copying, audio-visual) and send it directly to you.

Several of your students commented to me (during break periods) that they found the program to be useful and well-done. I'm very pleased that you've signed up for 1988 (July 17-22). Again, we will get parking for you and arrange for a telephone. The weather should be better, but we'll work for air-conditioned classrooms and expect the overall sytems to work all week.

Sorry I didn't see more of you and Tom. Again, The CUNA School (I teach 25 hours) interfered. Have a good year.

Sincerely,

William A. Strang Associate Dean for External Relations

WAS: 19k

cc: Jim Graaskamp



1155 Observatory Drive Madison, WI 53706 608/262-1550

August 4, 1987

INVOICE FOR OVERHEAD CHARGES PROVIDED TO AMERICAN BANKER'S ASSOCIATION SCHOOL FOR REAL ESTATE FINANCE, July 16-21, 1987

Overhead as agreed in Letter of Agreement:

\$6,000

Please make this check out to: <u>U.W.-Madison School of Business</u>

Mail to: William A. Strang, Associate Dean

UW-Madison School of Business

1155 Observatory Drive Madison, WI 53706

Graduate School of Business

1155 Observatory Drive Madison, WI 53706 608/262-0391

September 14, 1987

Ms. Michele Thompson
ABA National School of Real Estate Finance
1120 Connecticut Avenue, NW
Washington, DC 20036

Dear Ms. Thompson:

RE: Curriculum Comments and Suggestions

On review of both Course I and Course II, I have the feeling that we are trying to do too much within a limited period of time, although all the important subjects are touched on at some point or other.

Relative to Residential Course I:

- Should the secondary mortgage market section be all on Tuesday afternoon and the concurrent sessions on profitability and adjustable rate mortgages be put in the ll o'clock slot? Secondary market materials may have to be updated for REMICS. Should there be any discussion on how to invest in secondary securities rather than mortgages for smaller banks.
- 2. Since Course I is now entirely single family homes and land development, should we add a more specific section in Course II on apartment loans?
- 3. Is there likely to be a Course III where banks that could move into single family brokerage and appraisal would be discussed?
- 4. Is management development specifically on training opportunities for real estate loan personnel or is it general management? It should be only on real estate personnel development and additional training and compensation opportunities.
- 5. I havn't heard any comment on the computer processing of mortgages presented on Monday evening. How did that work out? Should that receive stronger treatment using part of Friday morning?

Ms. Michele Thompson September 14, 1987 Page two

Relative to Income Property Course II:

- 1. There seems to be some objection by advanced bankers to two, half days of financial statement analysis. How much of the focus is on analysis of cash flow for real estate income properties? That's where the emphasis should be.
- 2. More time should be spent on the letter of committment as it controls closing, servicing, and lender liability. How much attention is given to liabilities for hazardous materials, damages for reliance on a conditional committment, etc?
- 3. By next year there will be federal legislation on Appraisal standards to the Friday morning session will be very intense.
- 4. Our case studies should probably be more explicit on Thursday--probably an FHA apartment project and a small strip shopping center.
- 5. Should there be a short session on inter-bank relationships in participating loans, tri-party agreements, and responsibilities of the lead bank?
- 6. I think scheduling time could be created by moving my Tuesday session of property risks into underwriting on Monday or if you eliminate a half day of financial statement analysis, leave property risks on Monday morning and put leasing and credit enhancement on Tuesday morning to provide Tuesday afternoon for more emphasis on committments, etc.

I would be happy to take responsibility for improved case studies for FHA and the shopping centers and giving Courtnell some suggestions on model letters of committment with a risk management orientation.

Sorry I cannot be at the review session, but, hopefully, I will be traveling again by mid-November.

Sincerely,

Professor James A. Graaskamp Chairman, Real Estate and Urban Land Economics

JAG:mjf

ABA's National School of Real Estate Finance

July 10-15, 1988 University of Wisconsin Madison, Wisconsin







A Message from the NSREF Co-Chairmen

ABA National School of Real Estate Finance





To reach the upper echelons of today's complex, fiercely competitive real estate Dear Colleague: environment, lenders must be highly skilled and knowledgeable, ready to meet the rapidly changing needs of the marketplace . . . and able to gain an edge on their

Real estate lending requires a specialized type of knowledge—one that is difficult to competitors. acquire without additional training and education.

For almost a quarter of a century, ABA's NATIONAL SCHOOL OF REAL ESTATE FINANCE has provided superior training and education to experienced lenders like

The two-year program offers an innovative curriculum focusing on critical and timely yourself. issues facing real estate lenders. The first year is devoted to the study of residential property; the second to income property. Or, you may attend for one year only, and concentrate on the career track that best suits your needs and interests.

Under the direction of a prestigious faculty—senior-level bankers, CPAs, attorneys, and leading academicians—students are guided through all phases of residential and

The school's alumni list reads like a "Who's Who" in real estate finance—some 4,000 commercial real estate finance. talented graduates who have gone on to assume senior positions in banks of all sizes. Some of their impressions of the school are included elsewhere in this brochure.

Since the majority of our students are loan officers and vice presidents, your classmates will be upwardly mobile—like yourself. You will find that sharing ideas and solutions with your peers greatly enhances the educational experience, and provides you with invaluable contacts long after the school has ended.

NSREF draws upon the University of Wisconsin's renowned faculty and excellent facilities. The University is known for the scenic beauty of its hills along Lake Mendota, providing a pleasant and peaceful setting for your pursuit of knowledge and profes-

To ensure active student-faculty interaction, we are limiting the number of students sional growth. we accept. So please review this brochure, and submit your application early.

We look forward to your participation.

Sincerely,

David A. Christianson, Jr. Co-Chairman, NSREF Senior Vice President and Real Estate Banking Manager Southeast Bank, N.A. Miami, Florida

Thomas A. Wagasky Co-Chairman, NSREF Vice President Old Kent Bank & Trust Company Grand Rapids, Michigan

An intensive, results-oriented educational experience, taught by the nation's finest minds in real estate finance.

The National School of Real Estate Finance provides the best in continuing education and professional development opportunities for bankers who want to push themselves as far as they can go in today's highly competitive real estate environment.

NSREF offers a program that is neatly balanced between the practical aspects of lending and a superior academic experience.

A two-year program with two major courses of study

The **NSREF's** innovative curriculum focuses on critical and timely issues facing the real estate finance industry. The program is a two-year course of study, covering residential property during the first year, and income property during the second. Extensive case studies and full student-faculty interaction are built into the program, so that a maximum learning environment is created.

"The chance to exchange productive and profitable ideas in a noncompetitive peer group makes it possible to find out how others have dealt with the same situations we face, and the results of their actions. This, added to the detailed information about real estate lending, gives the opportunity to think more broadly and profitably."

R. Thomas Mockler, President First Bank of Tomah Tomah, Wisconsin

"I am most grateful to the American Bankers Association for providing me with an opportunity to attend the National School of Real Estate Finance held in Madison, Wisconsin.

"The school is an excellent residential and commercial real estate finance course. I found it to be professional and comprehensive with a highly competent faculty and superb course material. This program has my highest recommendation."

Gale Williams Federal Reserve Bank of Atlanta Atlanta, Georgia

"I highly recommend the American Bankers Association's School on Real Estate Finance. It is an outstanding program for lenders, teaching beneficial information which is current and practical.

"The University faculty and various speakers are exceptionally well versed in their field. Their presentations are excellent."

Jill L. Johnson President C.R. Scott Mortgage Co., Inc. Topeka, Kansas

"To be a survivor, it is becoming even more important for all banks to compete with our competition, whether it be other banks, savings and loans, brokerage houses, or mortgage companies. Real estate lending, for smaller banks, has generally been restricted to a few good customers, while others were referred to the friendly S&L or mortgage company down the street.

"The school does an excellent job in exposing the commercial lender to the opportunity available in real estate lending. It covers the importance of quality in all areas—from construction lending, to selling the loan pool to the secondary market, and makes it evident that when done right, real estate lending can become a major income source for our banks."

James W. Ries Senior Vice President Frontier Bank Everett, Washington

"...an intensive and top-notch curriculum for both residential and commercial real estate finance, with some of the best instructors. It doesn't really matter what size institution you represent, you will learn new skills and techniques that will be immediately applicable to your real estate related loans and customers."

Karen Boyce Real Estate Banking Officer Southeast Bank, N.A. Fort Lauderdale, Florida

"...very highly recommended. Experienced lenders will find this course well worth their time. The curriculum is very well organized and the staff highly qualified and knowledgeable...a quality program."

> David J. Ramnath Loan Officer and Assistant Cashier Clinton National Bank Clinton, Iowa

COURSE HIGHLIGHTS

Residential Property Courses

The Real Estate Process: The New Approach to Real Estate Systems

The components of the real estate process are defined and explored in this stimulating class. Dr. James Graaskamp, noted expert in the field, describes the dynamic interaction among the three major decision groups involved in the real estate process: space users (consumers), space producers, and the various public agencies that provide services and capital in support of consumer needs.

Historical Evolution of Residential Lending

This course will give you a firm understanding of the history of mortgage lending in the United States, from the 1800's to the present. The advent of various mortgage-related institutions, the opening of the secondary mortgage market, and the effects of deregulation on the financial services industry will also be examined.

The Loan Application Process

The complete mortgage lending process, from interview to closing, will be discussed. A separate course, which concentrates on VA/FHA lending requirements, is also offered.

Servicing

The functional responsibilities of the bank's servicing department will be discussed in detail. Various approaches to data capture, payment processing, collections, reporting, escrow processing, and customer service will be explained. In addition, factors affecting the value of a servicing portfolio, and new directions in the servicing area, will be described.

Secondary Mortgage Markets

This is an overview of the alternatives available in today's secondary market. It will provide you with a basic understanding of FHLMC, FNMA, GNMA, and private secondary market participants, as well as the role of security dealers, and the services available from special corporations.

Real Estate Lending: Compliance with Federal Regulations

Learn about the compliance requirements at each of the ten stages of the real estate lending process, including specific actions that the bank must take, along with specific prohibitions. Robert Chamness, renowned compliance expert and author of numerous ABA books, will also focus on changes in regulations, including changes in ARMs, lending, RESPA, equity lines, and rate caps.

Real Estate Development and Tract Financing

This course covers the various elements of analysis needed to determine the feasibility of development and tract financing. First, it will examine the market for the product; second, site opportunities and limitations; and third, the development potential. Finally, it will present

the lender's analysis of both project and developer in relation to the loan proposal.

Other significant course topics include...

- Lender Liability
- Residential Private Guarantee Programs
- Adjustable Rate Mortgages
- Residential Appraisals
- Housing Market Analysis
- Bi-weekly Mortgages
- FHA/VA Single Family Mortgage Loan Processing
- Competitive Banking under Current Economic Conditions.

Income Property Courses

Financial Statement Analysis

Analyzing financial statements and other relevant data to produce information for income property lenders is the focus of this course. The three major issues in statement analysis—profitability, liquidity, and safety—are covered in depth, and will provide you with skills critical to today's lender.

Market Analysis and the Individual Lease

Understanding the market in which you are lending, and its relevance to specific lease clauses and their importance, are the highlights of this course. Topics include the real estate to be leased, cancellations, remedies, and rental formulas used in leasing activity.

Appraisals

This course introduces you to major changes in procurement of appraisal, and standards of the appraisal project required for income property mortgage lending. Also discussed are the implications for R41(c) for all federally insured mortgage lenders, the need for privity of contract between lender and appraiser, and the growing use of letters of agreement.

Troubled Real Estate Loan Workouts

This timely course will prepare you to deal with the significant problem of troubled loans, and how to manage them successfully. The most effective methods of dealing with properties undergoing foreclosure will also be presented.

Construction Lending

Students will be taken through the entire construction lending process, including detailed project analysis, identifying a good borrower, monitoring the progress of construction, and successfully administering the flow of funds. A detailed case study is used to highlight key points of construction lending activity.

Other significant course topics include—

- Credit Enhancement Instruments
- Bankruptcy/Lender Liability
- Insurance Considerations for the Mortgage Lender
- The Loan Proposal Process
- Commitment and Closing
- Economic Risks of the Income Property Market
- Participations.

1988 NSREF FACULTY

JAMES A. GRAASKAMP Chairman, Department of Real Estate & Urban Land Economics University of Wisconsin Madison, Wisconsin

Dr. Graaskamp has a double career as educator and real estate consultant. In addition to his position at the University of Wisconsin, he is President of Landmark Research, Inc., a consulting firm specializing in courtroom appraisals, feasibility and institutional investment. Well known for his work in feasibility analysis, Dr. Graaskamp is a former member of the Board of Directors of the Wisconsin Housing Finance Authority, a ULI Trustee and Research Fellow, and a member of the Salomon Brothers Real Estate Advisory Committee.

ROBERT P. CHAMNESS

Partner

McKenna, Conner & Cuneo San Francisco, California

Mr. Chamness is a distinguished attorney whose primary areas of practice include bank regulatory compliance, consumer credit, retail banking products and services, and residentially secured lending. A well-known author, he has written numerous ABA books, including the best-selling compliance manuals. Of particular interest is his soon-to-be-released *Real Estate Lending Comprehensive Compliance Manual*. Mr. Chamness is a frequent speaker on bank regulatory matters, and a former faculty member of ABA's National Compliance School, National Graduate Compliance School, and National Consumer Credit School.

JOHN R. HAYES Senior Vice President Federal National Mortgage Association Chicago, Illinois

John R. (Jack) Hayes, who joined Fannie Mae in 1960, is now in charge of the company's Midwestern Regional Office in Chicago. A native of Chicago, he has earned widespread recognition as a mortgage banker, and is a highly regarded lecturer in the mortgage banking field.

DEREK A. BARRETT President & City Executive Citizens & Southern National Bank Tampa, Florida

A native of England, Mr. Barrett has been affiliated with the Citizens & Southern group since 1958. He is a former real estate finance advisor to the ABA, a current faculty member of several banking schools, and a thesis examiner/advisor for ABA's Stonier Graduate School of Banking.

DAVID A. CHRISTIANSON, JR. Senior Vice President and Real Estate Banking Manager Southeast Bank, N.A. Miami, Florida

Mr. Christianson currently manages a \$350 million portfolio, and oversees all real estate transactions for 46 of the Southeast Bank's 60 offices. He has served on the Executive Committee of the ABA Housing and Real Estate Finance Division, and is co-chairman of the Board of Advisors for ABA's National School of Real Estate Finance.

PAUL COURTNELL

Attorney

Gunster, Yoakley, Criser & Stewart West Palm Beach, Florida

Mr. Courtnell, who is presently head of Gunster, Yoakley's Tax-Exempt Bond Practice Group, specializes in real estate finance, tax-exempt bond finance, commercial real estate transactions, and purchase and sale contracts. He deals

successfully with the impact of federal tax legislation, and with complex issues involving conversions, reissuances, arbitrage, and validation proceedings.

GRACE MUSCO-CURRID Vice President Chase Home Mortgage Montvale, New Jersey

In her position as Eastern Regional Staff Credit Officer for Chase Home Mortgage, Grace Musco-Currid is responsible for the lending activity of twelve offices in the East Coast Region, and is an approved Direct Endorsement Underwriter for ten FHS Regional Offices. An experienced mortgage banker, she also serves as an instructor for both the FHA and the SRA Appraisal Societies.

CHRISTOPHER J. O'DONNELL

Vice President

Continental Illinois National Bank & Trust Company Chicago, Illinois

As Vice President, and Division Manager of the Real Estate Advisory and Staff Development Division, Mr. O'Donnell monitors a commercial and industrial portfolio of over \$535 million. He has been with the Continental Illinois organization for more than 20 years, serving for several years in their Toronto office, and in Chicago since 1978.

THOMAS A. WAGASKY Vice President Old Kent Bank & Trust Company Grand Rapids, Michigan

Mr. Wagasky, who serves as Co-Chairman of the Board of Advisors of ABA's National School of Real Estate Finance, is a leading expert on residential real estate finance. In addition to his banking activities, he is a thesis review examiner for ABA's Stonier Graduate School of Banking, and a member of the Executive Committe of ABA's Housing Real Estate Finance Division.

NSREF's distinguished faculty also includes:

CHRIS AVREN
Senior Vice President of
Production
United Guaranty
Residential Insurance
Company
Greensboro, North
Carolina

VINCENT J. GIOVINAZZO
Professor, School of
Accountancy
Georgia State University
Atlanta, Georgia

JAMES M. JOHANNES
Professor, Chairman of the
Department of Finance
University of Wisconsin
Madison, Wisconsin

MICHAEL RICHARDSON Vice President Merchants National Bank Muncie, Indiana EDMOND J. SEIFREID
Chairman
Lafayette College
Department of Economics
& Business
Easton, Pennsylvania

LARRY SOUTHWELL Senior Vice President Citizens Bank Flint, Michigan

PAUL H. SWAN
Vice President
National Bank of Detroit
Detroit, Michigan

NATIONAL SCHOOL OF REAL ESTATE FINANCE

Course I—Residential Property

SUNDAY, JULY 10	MONDAY, JULY 11	TUESDAY, JULY 12	WEDNESDAY, JULY 13	THURSDAY, JULY 14	FRIDAY, JULY 15	
	8:15-9:15 Historical Evolution of Residential Lending	8:00-10:30 Processing and Closing	8:00–12:15 Real Estate Lending: Compliance with Federal Regulations	8:00-9:45 Housing Market Analysis	8:00–10:15 Management Development	
	9:30–11:15 Competitive Banking Under Current Economic Conditions	10:45-12:15 Servicing		10:00-12:15 Real Estate Development and Tract Financing	10:30–12:00 Lender Liability	
	11:30–12:15 Origination, Preprocessing, and Underwriting					
	LUNCH					
	1:15–2:30 Origination, Preprocess- ing, and Underwriting	1:15–2:30 Secondary Mortgage Market (SMM)	1:15–3:00 Compliance Case Studies	1:15-3:00 FHA / VA Single Family Mortgage Loan Processing	1:30-2:30 Real Estate Finance: An Industry Perspective	
	2:45-5:00 Loan Application Process Case Studies	2:45–4:00 SMM Arithmetic	3:15–4:15 Electives: 1) Bi-weekly Mortgages 2) Reduced Documentation Underwriting	3:15–5:00 Residential Appraisals	2:45–4:00 Final Exam	
4:00-5:00 Real Estate Process		4:15-5:15 SMM Conduits	4:30–5:30 Residential Private Guarantee Programs			
6:00–8:30 Reception/Dinner Orientation	7:00-8:00 Adjustable Rate Mortgages	7:00–8:30 Computer Applications in Residential Lending		7:00-8:00 Guest Speaker		

Course II—Income Property

SUNDAY, JULY 10	MONDAY, JULY 11	TUESDAY, JULY 12	WEDNESDAY, JULY 13	THURSDAY, JULY 14	FRIDAY, JULY 15	
	8:00–9:15 The Loan Application Process	8:00-12:30 Financial Statement Analysis	8:00-9:15 Commitment and Closing (continued)	8:00–9:45 Construction Lending	8:00–9:45 Bankruptcy/Lender Liability	
	9:30–10:45 Market Analysis	(continued)	9:30-11:00 Various Elements of Credit Enhancements for	10:00–12:30 Construction Lending Case Study	10:00–12:15 Troubled Real Estate Loan Workouts and REO	
	11:00–12:30 Appraisal		Income Property Loans 11:15–12:30 Participations		Techniques	
	LUNCH					
	1:30-5:00 Financial Statement Analysis	1:30–3:15 Property Risks	1:30-5:00 Income Property Loan Case Study	1:30-2:30 Insurance Considerations for the Mortgage Lender	1:30–2:30 Real Estate Finance: An Industry Perspective	
		3:30–5:00 Commitment and Closing		2:45–5:00 Economic Risks for the Dynamic Income Property Market	2:45–4:00 Final Exam	
4:00-5:00 Real Estate Process				roper, rame		
6:00–8:30 Reception/Dinner Orientation	7:00–8:00 Financial Statement Analysis–Breakouts			7:00–8:00 Guest Speaker		

GENERAL INFORMATION

University Facilities

The ABA National School of Real Estate Finance is held at the University of Wisconsin at Madison.

Students are required to live in assigned dormitories at the University of Wisconsin during the session. Classes are held in buildings within a short walk of the dormitories.

The University is known for the scenic beauty of its hills along Lake Mendota. During free time, students can enjoy a leisurely walk along the lakeshore path that stretches from the Memorial Union to Picnic Point. Students are also welcome to use the University of Wisconsin's library and recreational facilities.

Admission Requirements

Real estate personnel holding intermediate level assignments in real estate finance are eligible to attend regardless of prior educational background.

Extension Work

Following completion of the first-year courses, students are given five extension problems, which must be completed by specified deadlines. The problems are taken from real situations from commercial bank real estate finance departments.

Topics include appraisal, compliance, construction loans, credit analysis, loan servicing, and legal aspects of mortgages.

Graduation Requirements

A diploma will be awarded to those students who meet all of the following requirements for graduation:

- 1. Attendance at all scheduled classes and work periods during each one-week session;
- 2. Successful completion of an examination at the end of each one-week session:

- 3. Successful completion of all extension problems prior to attending the second year;
- 4. Successful completion of all assigned work, and adherence to the standards provided by the school.

Students may apply for admission to either the first or second session, based on special needs. In the event that only one session is attended, students will be granted a certificate of completion in lieu of a diploma.

Application Procedures

To be considered, all applications must be approved by an appropriate bank officer or supervisor.

Enrollment is limited. Applications will be accepted on a first-come, first-served basis, so early submission is recommended.

Completed application forms should be sent to Nga Do Thi, ABA National School of Real Estate Finance, American Bankers Association, 1120 Connecticut Avenue, N.W., Washington, D.C. 20036. For more information, call (202) 663-5413.

Fees*

\$1,375 Fee

\$1,100 ABA Member Discounted Fee

The fee covers room and board, instruction, and classroom materials for the 1988 session.

All fees are payable to the American Bankers Association upon receipt of the invoice, which will be sent following acceptance. DO NOT SEND PAYMENT NOW.

All cancellations must be made in writing. An administrative fee of \$200 will be charged for all cancellations. Cancellations received less than 20 working days prior to the session will be subject to a charge equal to 50% of the tuition fee.

FACULTY AND CURRICULUM ADVISOR

James Graaskamp

Chairman
Department of Real Estate and Urban Land
Economics
School of Business
University of Wisconsin
Madison, Wisconsin

BOARD OF ADVISORS

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Miami, Florida

Derek A. Barrett

President & City Executive Citizens & Southern National Bank Tampa, Florida

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Senior Vice President First Alabama Bank of Montgomery, N.A. Montgomery, Alabama

Peter Holman

Senior Vice President Signet Bank, N.A. Washington, DC

David Stoecker

President and CEO Bank of South County St. Louis, Missouri

ABA STAFF

Gail Kolakowski

Center Manager Housing and Real Estate Finance Division

Michele A. Thompson

Undergraduate Schools Manager Executive Education Division

Robert Abelman

Undergraduate Schools Coordinator Executive Education Division

Nga Do Thi

Program Coordinator Educational Services

The Real Estate Center



1120 Connecticut Avenue, N.W Washington, D.C. 20036

^{*}Fees are subject to change.





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Plea Il Richard Sairigan Lowell Hall - 10 rooms.

American Enterprise and Economic Development Center

University of Wisconsin-Madison

Jon G. Udell Irwin Maier Professor of Business Graduate School of Business 1155 Observatory Drive Madison, WI 53706 608/263-4100

April 4, 1988

MEMORANDUM

To:

Jim Graaskamp

From:

Jon Udell

Subject:

ABA's National School of Real Estate Finance

Thank you for your invitation to be a speaker at the ABA's National School of Real Estate Finance.

I didn't have my calendar handy when you called, but I thought the day was available. However, it is in fact already committed to another program which takes me out of town on both July 11 and 12.

Sorry, I can not help you out.

JGU:dp

- P.S.: Have you considered Bob Cramer of Valley Bank of Madison (now president, I believe) and past-faculty member of our School? He should be outstanding on that topic.
- P.S.S.: Your brochure is well done. The cover is great (very appealing).

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ABA 1988 NATIONAL SCHOOL OF REAL ESTATE FINANCE Course I - Residential Property

Sunday, July 10	Course	Instructor	Advisor
4:00 - 5:00	Real Estate Process	Graaskamp	Thompson
Monday, July 11			
8:15 - 9:15 9:30 - 11:15	Hist. Evolution of Res. Lending Comp. Banking Under Current Economic Conditions	Graaskamp TBA (*****)	Miller Miller
11:30 - 2:30	Origination, Preprocessing, and Underwriting	Wagasky, Stoecker	Wagasky
2:45 - 5:00	Loan Application Process Case Studies	Southwell, Stoecker,	Wagasky
7:00 - 8:00	ARM's	Wagasky, Southwell, Wagasky	Wagasky
Tuesday, July 12		Wagasky	Wagasky
8:00 - 10:30 10:45 - 12:15 1:15 - 5:15 6:30 - 8:30	Processing & Closing Servicing Secondary Mortgage Market Computer Applications in Residential Lending	Wagasky Swan FNMA, FHLMC EDS	Wagasky Stoecker Miller Stoecker
Wednesday, July 1	3		
8:00 - 12:15 1:15 - 3:00	Real Estate Lending : Compliance w/ Federal Regulations Compliance Case Studies	Chamness Chamness,	Kolakowski Kolakowski
3:15 - 4:15	Electives: Bi-weekly Mortgages Reduced Documentation	Wagasky Richardson Musco-Currid	Wagasky Kolakowski
4:30 - 5:30	Underwriting Residential Private Guarantee Programs	Avren	Stoecker
Thursday, July 14			
8:00 - 9:45 10:00 - 12:15	Housing Market Analysis R.E. Development & Tract Financing	Graaskamp Barrett	Thompson Barrett
1:15 - 3:00	FHA/VA Single Family Mortgage Loan Processing	Musco-Currid	Miller
3:15 - 5:00 7:00 6:00	Residential Appraisals Guest Speaker	Est. Graaskamp	Stoecker
<u>Friday</u> , July 15	Tsames/Quality Control	Och by blance	•
8:00 - 10:00 10:15 - 12:15 1:30 - 2:30	Management Development √	TBA	Thompson
1.00	Lender Liability Real Estate Finance: An Industry Perspective	Zalenski Graaskamp	Stoecker Kolakowski

1988 ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE COURSE I - RESIDENTIAL PROPERTY

COURSE ABSTRACT

COURSE NAME:

THE REAL ESTATE PROCESS: THE NEW APPROACH TO REAL ESTATE SYSTEMS

DATE AND TIME:

Sunday, July 10, 1988 4:00 - 5:00 p.m. **INSTRUCTOR:**

Dr. James Graaskamp Chairman, Dept. of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706 (608) 262-6378

COURSE DESCRIPTION:

The components of the real estate process are defined and explored in this initial session. Dr. James Graaskamp, noted expert in the field, describes the dynamic interaction of the three major decision groups involved in the real estate process: space users (consumers), space producers, and the various public agencies that provide services and capital in support of consumer needs. He reviews concepts such as the most fitting use of land, the most probable use of land, management of risk, land economics, and feasibility analysis.

COURSE OBJECTIVES:

- 1. Students should perceive financing requirements for real estate requiring sensitivity to borrowing capacity of the property owner, financing needs of the developer/seller, and financing needs of the municipality as interrelated.
- 2. A financial plan for repayment depends on a forecast of the future so there must be a capacity to tolerate surprise and variance in the projected cash flows available for debt repayment in terms of amount and timing.
- 3. Future behavior of the borrower must be conditioned for positive motivation from enjoyment of the financed asset, the potential for negative motivation in terms of sanctions applied by the lender, and the lender should always plan for the worst alternative of taking title to the property.
- 4. Urban structures create the terrarium in which we live and we build what we can finance so that real estate lending has a significant ethical responsibility for the living quality and consequences of what is financed.
- 5. Real estate finance must manage the risks of the future to minimize waste of bankers' capital, waste of social capital, and waste of the borrower's life energies in order to minimize costs of the free market system.

COURSE ADVISOR:
Michele Thompson

1988 ABA NATIONAL SCHOOL OF REAL ESTATE FINANCE COURSE I - RESIDENTIAL PROPERTY

COURSE ABSTRACT

COURSE NAME

HISTORICAL EVOLUTION OF RESIDENTIAL LENDING

INSTRUCTOR:

Dr. James Graaskamp Chairman, Dept. of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706 (608) 262-6378

DATE AND TIME:

Monday, July 11, 1988 8:15 - 9:15 a.m.

COURSE DESCRIPTION:

The history of mortgage lending in the U.S. is traced from the 1800's to the present. The advent of various mortgage related institutions, the opening of the secondary mortgage market, and the effects of deregulation of the financial services industry are described in this session.

COURSE OBJECTIVES:

The goal of this course is to explain why and how the mortgage lending business developed into its current state. The major theme is that the current mortgage market has been shaped by several forces:

- A. American preoccupation with, and Congressional bias toward, home ownership;
- B. Financial crisis such as the Great Depression and disintermediation;
- C. Regulation of financial intermediaries; and
- D. Technological changes.

COURSE ADVISOR: Kay Miller

COURSE ABSTRACT

COURSE NAME:

INSTRUCTOR:

HOUSING MARKET ANALYSIS

James A. Graaskamp, Chairman Dept. of Real Estate & Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706 (608) 262-6378

DATE AND TIME:

Thursday, July 14, 1988 8:00 - 9:45 a.m.

COURSE DESCRIPTION:

This course analyses the housing market, with emphasis on market research and customer research.

COURSE OBJECTIVES:

- Recognition that complete market analysis includes definition of demographic market segmentation, specific product feature segmentation, custom crafted promotion and merchandising program, and research of political attitude controlling entitlement process.
- 2. Introduction to types of market research and sources available.
- 3. New regulatory burdens placed on lenders and appraisers to provide legitimate and comprehensive market data to support value conclusions.
- Suggest market research issues for which each lender should have local knowledge.

COURSE ADVISOR:
Michele Thompson

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ABA 1988 NATIONAL SCHOOL OF REAL ESTATE FINANCE

Course II - Income Property

	<u>Instructor</u>	<u>Advisor</u>
Registration Real Estate Process Reception/Dinner/Orientation	Graaskamp	Thompson
The Loan Proposal Process Market Analysis Appraisal Financial Statement Analysis Breakout Groups - Financial Statement Analysis	TBA Graaskamp Blazejack Giovinazzo Giovinazzo	Holman Thompson Christianson Barrett Barrett
Financial Statement Analysis	Giovinazzo	Barrett
Property Risks Commitment & Closing	Graaskamp Courtnell	Thompson Christianson
Commitment & Closing	Courtnell	Christianson
Various Elements of Credit Enhancements for Income	Graaskamp	Thompson
Participations Income Property Loan Case Study	Graaskamp Christianson Barrett, TBA	Thompson Christianson
Insurance Considerations in	Courtnell	Barrett
Construction Lending	Myers	Christianson
Guest Speaker aculty Dinner	TBA	T hompso n
V		
Lender Liability Trouble R.F. Loan Workouts	Zalenski	Holman
and REO Techniques	O'Donnell	Christianson
Real Estate Finance:	Graaskamp	Thompson
	Real Estate Process Reception/Dinner/Orientation The Loan Proposal Process Market Analysis Appraisal Financial Statement Analysis Breakout Groups - Financial Statement Analysis (Continued) Property Risks Commitment & Closing (Continued) Various Elements of Credit Enhancements for Income Property Loans Participations Income Property Loan Case Study Insurance Considerations in Real Estate Lending Construction Lending (continued) Guest Speaker aculty Owner Lender Liability Trouble R.E. Loan Workouts and REO Techniques	Registration Real Estate Process Reception/Dinner/Orientation The Loan Proposal Process Market Analysis Appraisal Financial Statement Analysis Breakout Groups - Financial Statement Analysis Financial Statement Analysis (Continued) Property Risks Commitment & Closing Commitment & Closing Commitment & Closing Commitment & Closing Continued) Various Elements of Credit Enhancements for Income Property Loans Participations Income Property Loan Case Study Insurance Considerations in Real Estate Lending Construction Lending (continued) Guest Speaker Acculty Dinner Lender Liability Trouble R.E. Loan Workouts and REO Techniques Graaskamp Graaskamp Courtnell Graaskamp Craaskamp Courtnell Myers Courtnell

COURSE ABSTRACT

COURSE NAME:

THE REAL ESTATE PROCESS: THE NEW APPROACH TO REAL ESTATE SYSTEMS

DATE AND TIME:

Sunday, July 10, 1988 4:00 - 5:00 p.m.

INSTRUCTOR:

Dr. James Graaskamp Chairman, Dept. of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706 (608) 262-6378

COURSE DESCRIPTION:

The components of the real estate process are defined an explored in this initial session. Dr. James Graaskamp, noted expert in the field, describes the dynamic interaction of the three major decision groups involved in the real estate process: space users (consumers), space producers, and the various public agencies that provide services and capital in support of consumer needs. He reviews concepts such as the most fitting use of land, the most probable use of land, management risk, land economics, and feasibility analysis.

COURSE OBJECTIVES:

- 1. Students should perceive financing requirements for real estate requiring sensitivity to borrowing capacity of the property owner, financing needs of the developer/seller, and financing needs of the municipality as interrelated.
- 2. A financial plan for repayment depends on a forecast of the future so there must be a capacity to tolerate surprise and variance in the projected cash flows available for debt repayment in terms of amount and timing.
- 3. Future behavior of the borrower must be conditioned for positive motivation from enjoyment of the financed asset, the potential for negative motivation in terms of sanctions applied by the lender, and the lender should always plan for the worst alternative of taking title to the property.
- 4. Urban structures create the terrarium in which we live and we build what we can finance so that real estate lending has a significant ethical responsibility for the living quality and consequences of what is financed.
- 5. Real estate finance must manage the risks of the future to minimize waste of bankers' capital, waste of social capital, and waste of the borrower's life energies in order to minimize costs of the free market system.

 COURSE ADVISOR
 Michele Thompson

COURSE ABSTRACT

COURSE NAME:

INSTRUCTOR:

MARKET ANALYSIS AND THE INDIVIDUAL LEASE

Dr. James Graaskamp, Chairman Dept of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706 (608) 262-6378

DATE AND TIME:

Monday, July 11, 1988 9:30 a.m. - 10:45 a.m.

COURSE DESCRIPTION:

Understanding the market you are lending in, and the relevance to specific lease clauses and their importance, are highlighted. Issues discussed include the real estate to be leased, cancellations, remedies, and rental formulas used in leasing activity.

COURSE OBJECTIVES:

- 1. Demonstrating need for careful market segmentation for the office or retail lease to avoid pitfall of over-stating size of market potential or the rate and degree of lease expiration which will determine market capture rate for the subject property.
- 2. Organizing the lease abstract in terms of risk management issues:

a. What property rights have been leased?

- b. Under what conditions does the lease begin?
- c. Under what conditions can the lease be terminated prior to the end of its contract term?
- d. Under what conditions can rent payment be abated or renegotiated prior to the end of the term?
- 3. Changing space pricing methods to reduce delays in collecting expense participation, percentage rents and rent indexing adjustments.

COURSE ADVISOR Michele Thompson

COURSE ABSTRACT

COURSE NAME:

INSTRUCTOR:

(608) 262-6378

PROPERTY RISKS

Dr. James Graaskamp, Chairman Dept . of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706

DATE AND TIME:

Tuesday, July 12, 1988 1:30 - 3:15 p.m.

COURSE DESCRIPTION:

Class is intended to provide a systematic approach to property analysis in terms of risks to the capital budget, operating budget, and lender liabilities to the third parties.

COURSE OBJECTIVES:

- Introduce the lender to a structured method of property analysis:
 - Physical attributes to site affecting collateral values
 - Legal/political entitlements b.
 - Linkage attributes which are basis for demand, revenue, and market С. value
 - Dynamic attributes or perceptions of the site in the marketplace Environmental impacts off site as a result of site development d.
- Evaluating the building as a set of subsystems integrated to each other and preferred in the marketplace.
 - Foundation systems a.
 - Structural systems b.
 - Floor systems c.
 - d. Vertical circulation systems
 - Horizontal circulating systems e.
 - f.
 - Exterior wall systems Interior wall systems g.
 - Roof systems HVAC systems h.
 - i.
 - Plumbing and utility systems j.
 - Life safety systems k.
 - Security safety systems ٦.
 - Energy conservation and monitoring systems
 - Approach zone and public space interface
- Collateral risks to the lender in building subsystem specifications

COURSE ADVISOR Michele Thompson

COURSE ABSTRACT

COURSE NAME:

VARIOUS ELEMENTS OF CREDIT ENHANCEMENTS FOR INCOME PROPERTY LOANS

INSTRUCTOR:

Dr. James Graaskamp, Chairman Dept . of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706 (608) 262-6378

DATE AND TIME:

Wednesday, July 13, 1988 9:30 - 11:00 a.m.

COURSE DESCRIPTION:

Introduction to various applications of credit enhancement instruments to provide supplementary collateral for high risk segments of the capital budget. the operating budget, or the time schedule assumptions in the financing plan.

COURSE OBJECTIVES:

Demonstrate applications of credit enhancement:

- Bonds Α.
 - 1. Completion and performance bonds
 - Insurance company enhancements written as a performance bond
 - Bonding of lease payments
- Letters of credit В.
 - 1. Advance payment of loan fees
 - Latent defects protection
 - Operating deficits protection 3.
 - Partial endorsements
- C. Long term loan guaranties
 - 1. FHA
 - 2. SBIC

 - Insurance company programs for private placement bond trustee funds Private placement and municipal bond mortgage bankruptcy trust funds
 - Parent corporation endorsements
- Joint venture moral obligation protocols and assessment procedures

COURSE ADVISOR Michele Thompson

COURSE ABSTRACT

INSTRUCTOR: COURSE NAME:

PARTICIPATIONS

Dr. James Graaskamp Chairman, Dept. of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive

Madison, WI 53706 (608) 262-6378

DATE AND TIME:

Wednesday, July 13, 1988 11:15 a.m. - 12:30 p.m.

COURSE DESCRIPTION:

COURSE OBJECTIVES:

COURSE ADVISOR Michele Thompson

COURSE ABSTRACT

COURSE NAME:

REAL ESTATE FINANCE:
AN INDUSTRY PERSPECTIVE

DATE AND TIME:

Friday, July 15, 1988 1:30 - 2:45 p.m.

COURSE DESCRIPTION:

COURSE OBJECTIVES:

COURSE ADVISOR Michele Thompson

INSTRUCTOR:

Dr. James Graaskamp Chairman, Dept. of Real Estate and Urban Land Economics School of Business University of Wisconsin 1155 Observatory Drive Madison, WI 53706 (608) 262-6378

ABA ADDRESS - SAN FRANCISCO

- I. As an educator I teach real estate finance and as a consultant, I practice real estate finance and in both roles, I'm impressed by the continuing dynamic institutional evolution taking place in real estate finance.
 - A. Seldom do we find strictly mortgage lenders or mortgage debtors pledging the productivity of land and buildings. Instead, the creditors have a set of benefits which encroaches on the equity benefits and the debtors often have it within their power to modify the credit instrument and their ownership positions.
 - B. There is almost nothing in either residential or commercial finance courses today that we were teaching 10 years ago. The mortgage note, the repayment terms, the secondary markets, the credit analysis, the property analysis, and the risk control process are almost entirely new and different.
 - C. The appraisal conspiracy between lender and borrower will be gone as R41(c) and federal legislation make the lending officer a fiduciary who is responsible for failing to obtain a properly executed appraisal.
 - D. Ironically, borrowers have always looked for the least efficient markets in which to borrow money, i.e., the dumbest most generous lenders, however, the pressure on FDIC and FSDLIC is forcing regulated lenders to become street smart, tough, and efficient so that the biggest customers are shifting to the non-bank banks and Wall Street securitization.
 - E. The non-bank bank such as GECC can appear to take more risks because it is more flexible and how it raises capital, modifies the constant or uses variable interest rates. Alternatively, Wall Street can shear the sheep by changing the apparent character of a mortgage investment through securitization as a CMO, a REMIC, or what have you.
 - F. Clearly real estate loan underwriting requires unique training well beyond the traditional bankers preparation in credit analysis and judgments on character and capacity.
- II. The ABA National School of Real Estate Finance was relocated to the University of Wisconsin School of Business in the summer of 1985 and in the past two years has been completely revamped in terms of content and teaching staff.
 - A. The Board of Advisors include Tom Wagasky, Chairman, David Christianson, Co-Chairman, Kay Miller, Paul Ohmart, Denek Barret, Paul Swan
 - B. The ABA staff is Nga Do Thi, Jeff Hoeksma, Michael Scheurer, Michele Thompson.
 - C. The teaching staff represents an effort to balance assignments about one third college professors, one third bankers with expertise in a specific subject area, and one third guests from related areas which service the real estate banker with mortgage guaranty's, insurance, computer services, legal advice or other professional inputs such as architecture, engineering, etc.

- D. The approach taken in both the residential and commercial program has been highly influenced by the philosophy and techniques of the Wisconsin Real Estate program. These basic principles might be summarized as follows:
 - Man is the only animal who builds his own terrarium around him as he goes and real estate is the process of building and operating that terrarium. Since we only build what we can finance, real estate finance carries the burden of a tremendously high social responsibility.
 - 2. There are three major groups of actors in the decision process space consumers, space producers, and infrastructure tying it together in some urban framework and each group are cash cycle enterprises negotiating to establish a reasonable certainty of solvency and positive cash flow. Risk is the variance between pro forma cash flow expectations and actual realizations. Equilibrium in the market occurs when all parties receive sufficient positive cash flow to be solvent and maintain credibility with the next higher level of authority the spouse, the board of trustees, the City Council, or the legislature.
 - 3. The nature of risk is examined in a variety of ways:
 - a. Business risk the adequacy of revenue to meet expenses
 - b. Financial risk the adequacy of net income to meet debt service
 - c. Interest rate risk in terms of the adequacy of interest rates charged relative to the opportunity costs of money.
 - d. The purchasing power risk to principal dollars
 - e. Social/political risk to the concept of property and creditors rights
 - f. The liquidity risk to the lender matching capital pools against lending opportunities
- E. Reference to course topic and schedules in Exhibits 1 and 2 will provide an overview of topics and faculty which will prepare the bankers new to real estate or retread the bankers brought up in the old days when the mortgage was a simple accommodation to bank customer credit needs.
- F. At Wisconsin all cash flows are market driven by careful research of the effective demand for the proposed real estate product. Traditionall bankers have required 1% at the closing to insure the principal if it should burn down without insisting that you spend 1% to discover if it would rent up. Appraisal and real estate lending must become market driven rather than fee driven if we are to avoid calamity to our deposit insurance agencies. Three are four types of market research:
 - 1. Aggregate market data studies of secondary data
 - 2. Indepth merchandising studies of primary data
 - 3. Indepth political research of the entitlement process
 - 4. Indepth analysis of promotion methods using primary research

- G. Old and young bankers alike must be taught how to critique effective appraisal work, marketing feasibility work, financial planning, and promotion strategies.
- H. At the same time down payments, capital constants, loan constants, spread and flexibility have all taken on new meanings
 - 1. The downpayment may include credit enhancements, subordinated positions of a second mortgage lender, demand notes for limited partners and a variety of other devices
 - 2. Constants may be modified by arbitraging in the international money market with Japanese yen, Euro dollars, interest swaps, and a dozen other devices
 - 3. To create spread where none appears to exist, bankers have created false constants, future equity participation, or even future conversion from creditor to owner
- I. At the same time banking has become more sophisticated in recognizing the impact of real estate operations on earnings, merger opportunities, economic development of the bank trade area, and the political power of the region in terms of holding and attracting jobs.
- J. Real estate operations will have an increasing role in trust department operation for personal estates, administrative trusts, and pension trusts.
 - 1. With no advantage to capital gains tax, the major tax shelter in town is the stepped up basis that benefits the estate so that family investment real estate will be held for longer terms and probably managed by trust officers who were once trained to put a fresh coat of paint on the real estate and sell it.
 - 2. A new product will be unit trust shares for which trust customers are eligible as investors which are invested solely in equity real estate. As a tax conduit the banks would take the place of syndicators with no front end load and no back end load and only an annual trust fee.
 - Pension funds under the control of banks are moving steadily toward heavier real estate investments to diversify, to insure against runaway inflation, and to improve cash yields in a deflationary period.
- K. Lending skill developed property managing, asset management, financial management and portfolio management skills which lead to many more opportunities for personal advancement in the banking industry because it is a unique kind of expertise.
- III. The real estate process cuts across every major issue of our time and of our community in terms of economic base, environmental sensitivity, social justice, wealth accumulation, and life quality in our community. Banks depend on listening posts which are sensitive to future trends of hope or discontent in the community and there is no area of lending which provides more inside knowledge, social sensitivity, and awareness of things to come than real estate. The modern bank must be in real estate

if it is to have a complete and adequate base for financial information.

- A. Since we can build what we can finance, the resolution of many of our major issues will depend on the creativity of our banking institutions and the value systems reflected by those institutions who must lead the business community in social sensitivity rather than simply reflect the values of that community.
- B. Nowhere will that role for bankers be more obvious than in real estate in terms of their willingness to aggressively finance factory space for new economic base, refuse to finance projects which are environmentally unsound, or lack the aesthetics to improve life quality.
- C. For example, in matters of social justice the real estate tax will bear an increasing emphasis on financing remedial education and job preparation for the 25% of our urban population which is being cut out of participation in our society. The real estate tax has a prior lien to the mortgage lender which would bias the lender to political action to hold down the real estate tax or impede programs of social action. Perhaps another 1% on the real estate tax should be looked at as an additional insurance premium, enhancement of the social transaction premises on which long terms are made.
- D. In short, the bank must look at the real estate process as part of a larger system in its bank trade area just it now perceives internally that real estate capital financing pervades most aspects of bank growth strategy and stability.
- E. The ABA's National School Real Estate Finance is continually moving toward a program that balances the basic skills of the mortgage lending process with the larger issues of corporate planning and institutional impact. Post industrial enterprise is quietly shifting from organizations which are intended to improve the life quality of management to those which will improve the life quality of all persons on whom it has an impact, employees, customers, and the general public.
 - I. Thus it is particularly appropriate that the School of Real Estate Finance combine the philosophical, conflict resolution role of university education with the technical sharing of expertise among and between banking peers.



Graduate School of Business

1155 Observatory Drive Madison, WI 53706 608/263-3460

January 21, 1988

Mr. Robert Abelman
Undergraduate Schools Coordinator
American Bankers Association
1120 Connecticut Avenue, Northwest
Washington, DC 20036

Dear Rob:

I received your letter of December 14, 1987, regarding the National School of Real Estate Finance. Unfortunately, I must withdraw as an instructor in the program. Since becoming Department Chairman, my time has become very scarce and I have had to make some difficult decisions regarding projects. This decision was indeed difficult, but one I had to make.

I thank you for the opportunity to be associated with the ABA and wish you and the program the best.

Sincerely,

James M. Johannes Professor and Chairman Department of Finance

JMJ:smk-174

cc: J.A. Graaskamp