

Real Estate Development

46th Annual Basic Economic Development Course

Emil Malizia
Research Professor
Department of City and Regional Planning
University of North Carolina at Chapel Hill
August 1, 2018



Assignment

- We will cover three major topics in this session:
 - Development Process
 - Development Roles
 - Development DecisionsPlease formulate a question about one of these topics
- You may also formulate a question on ANY economic development topic that you want to discuss



Part I

■ Development Process



What is real estate development?

- The developer begins with an idea and executes many related tasks to create real property
- Development ends when the property achieves stabilized occupancy* or target sales



Types of Property Development

- Horizontal development
 - Site development that installs infrastructure
- Vertical development
 - New construction on greenfield site
 - Redevelopment = new construction on infill/brownfield site or rehabilitation/renovation of existing building



Unique Features of RED

- Land developers install public infrastructure to convert raw land to developable sites
- Vertical development constructs durable physical assets that occupy unique locations for many years
- Real estate development always requires balancing public and private interests
- Redevelopment projects often require public-private partnerships to become “doable deals”



Vertical Development Categories

- Income-generating or For sale
- Income-generating
 - Build-to-suit = development fee for prospective owner
 - Speculative development = build, operate & lease then sell
- Types of development
 - Industrial/manufacturing (often build-to-suit)
 - Office, Warehouse, Flex, Retail, Hospitality, Multi-Family
 - Mixed-use/Multi use projects are now the norm

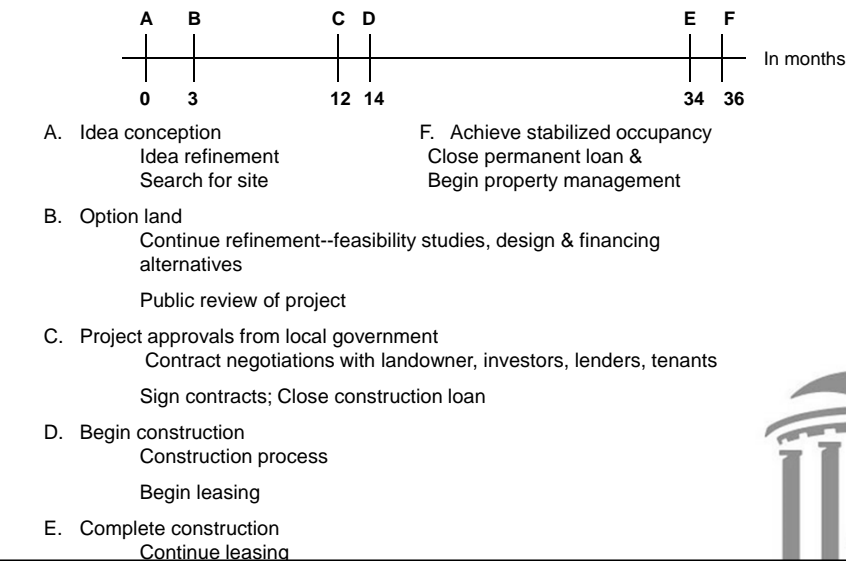


Why should economic developers learn about real estate re/development?

- Relevant to mainstream economic growth*
strategies of job creation or tax-base expansion
 - Install infrastructure to create an industrial park (horizontal development) on a greenfield site
 - Construct a spec building (vertical development) to have product to market
- Relevant to emerging economic development*
strategies
 - Downtown/employment center redevelopment (adaptive reuse of historic properties) to improve the workshop*
 - Promote innovation potential & productivity growth of the economic (export) base



Development Process with Timeline



RED is riskier than RE investment

(See Appendix - slide 34)

- Entitlement Risk – Garner needed political support. NIMBY, BANANA, CAVE, NOPE, in response to low density sprawl => crowded schools & congested roads
- Construction Risk – weather, rocks, coordination of subs, material deliveries
- Lease-up Risk – change in marketing conditions
- Market Risk – change in market fundamentals, business/building **cycles** (See Appendix - slide 35)
- Financial Risk – change in interest rates, underwriting criteria, or investor expectations

Development Process--Review

- Definition of RED
- Unique features of RED
- Types of RED
- Why learn about RED
- Development Process & Timeline
- Forms of Risk

Questions or Comments?



Part II

- Development Roles



Who are the major participants in RED?

■ Private

- Consumers = space users (current, future, & public)
- Producers = real estate development team

■ Public

- Local government most important but also state, federal & special districts
- Public-interest/non-profit organizations
 - Community-Based Organizations
 - Economic Development Organizations



What are the roles of each participant?

■ Consumers

- Lease space for a price and period of time
- Purchase space
- Pay taxes & receive public services

■ Producers

- Develop land
- Construct space
- Lease/sell space
- Pay taxes & receive public services/subsidies



Producers: The Development Team

- Real estate developer as keeper (timeline A through F)
- General contractor (timeline D & E)
 - Subcontractors
- Lender(s)
 - Construction (timeline D & E)
 - Permanent (timeline F)
- Investors
 - Limited partners or LLC members (timeline B-F)
 - Tax-credit investors (timeline F)
- Professions (timeline B-C)
 - architects & engineers (structural, mechanical, environmental, transport)
 - land planners & landscape architects
 - appraisers, market analysts, accountants & attorneys
 - economic developer as facilitator through EDO



What are the roles of each participant? (cont.)

- Local government
 - Provide public infrastructure
 - Regulate the development process
 - Facilitate development in the public interest
- Local government must avoid conflicts of interest when it both facilitates and regulates development



Role of government: Provide Infrastructure

- Water & sewer + other utilities including broad band
- Roadways & parking + transit
- Parks, open space, schools, civic centers, other public facilities
- Public services in addition to facilities & infrastructure



Role of government: Regulate development

- Comprehensive planning
- Zoning & CIP
- Subdivision regulations & Building codes
- Project review and approvals (See Appendix - slide 36)



Role of government: Facilitate development

- Economic developers can facilitate development with authority granted from local government
- Land development to create industrial parks & sites
- Employment center revitalization for better workshops
- Participate in public-private partnerships when public benefits exceed public costs



Economic Development Organizations (EDOs) as facilitators of development

- EDO potential roles in Public Private Partnerships (See Appendix - slides 37-42)
- Compare economic development benefits to required financial outlays and subsidies
 - Impact on the innovation potential & productivity of economic base sectors
 - Impact on the number & quality of jobs
 - Also consider fiscal, environmental, traffic impacts
 - How much participation/subsidy does this project deserve?



Development Roles--Review

- Three Participants
- Roles of Private Participants
- The Development Team
- Role of Local Government
- Focus on how EDOs can facilitate development

Questions & Comments



Part III

Development Decisions



Development Decision Making

- Evaluate many development options
 - Property types including mixed use
 - Location: region, city, neighborhood
 - Sites: greenfield and infill
- Compare cost to value: market test
- Compare land area to site's development envelope: political test
- Consider Exit strategy
- Most projects are deemed infeasible



Cost versus Value

- Cost estimates
 - Land cost
 - Site development costs
 - Construction costs per SF or unit
 - Soft costs as % of hard costs
- Value estimates
 - Sales price per SF or unit
 - Capitalized net operating income (**NOI**) (See Appendix- slide 43)
 - Direct capitalization = $\text{NOI} / \text{capitalization rate}$
 - Market or direct capitalization rate* = $\text{NOI} / \text{sales price of comparable properties}$



Financial Analysis Tools

- Static comparisons - simple
 - Cost driven analysis
 - Market driven analysis
- Dynamic comparisons - complex
 - Yield capitalization (from property appraisal)
 - Discounted Cash Flow analysis (DCF)
- Cash Flow Accounting - See Slide 43



Decision Criteria

- Value > Cost
 - Conduct sensitivity analysis to test assumptions
 - Select best project from all projects under consideration or STOP
- Cash-on-cash return > required return on equity
 - BTCF at stabilized occupancy per dollar invested (equity)
- IRR* > hurdle rate
 - BTIRR
 - ATIRR for tax credit projects



Development Decisions--Review

- The Development Team
- Development Decision Making
- Cost vs. Value
- Financial Tools
- Decision Criteria

Questions or Comments?



Sources

- James A. Graaskamp, Fundamentals of Real Estate Development, Development Component Series, ULI, 1981.
- B.A. Ciochetti and E.E. Malizia, Ch. 8 in DeLisle and Worzala, Essays in Honor of James A. Graaskamp, Kluwer Academic Publishers, 2000.
- The Appraisal of Real Estate, 14th edition, Appraisal Institute, 2013



Part IV

■ Questions & Discussion



-
- Do you have questions or comments on any of the three major topics we covered today?

- Development Process
- Development Roles
- Development Decisions



-
- Do you have a question on any economic development topic?



Thank you!



Appendix



Why is real estate development riskier than real estate investment?

Real estate is inherently **cyclical**

Real estate investment purchases cash flow from owners of (stabilized) properties at or beyond point F

Real estate development realizes an idea through the development process – points A through F

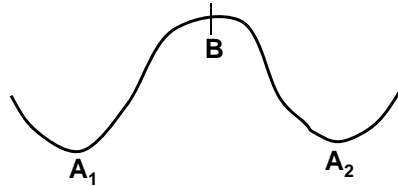
A-C: Manage/minimize cash outlays to remain solvent

D-F: Manage/minimize time expended
(construction-period interest)

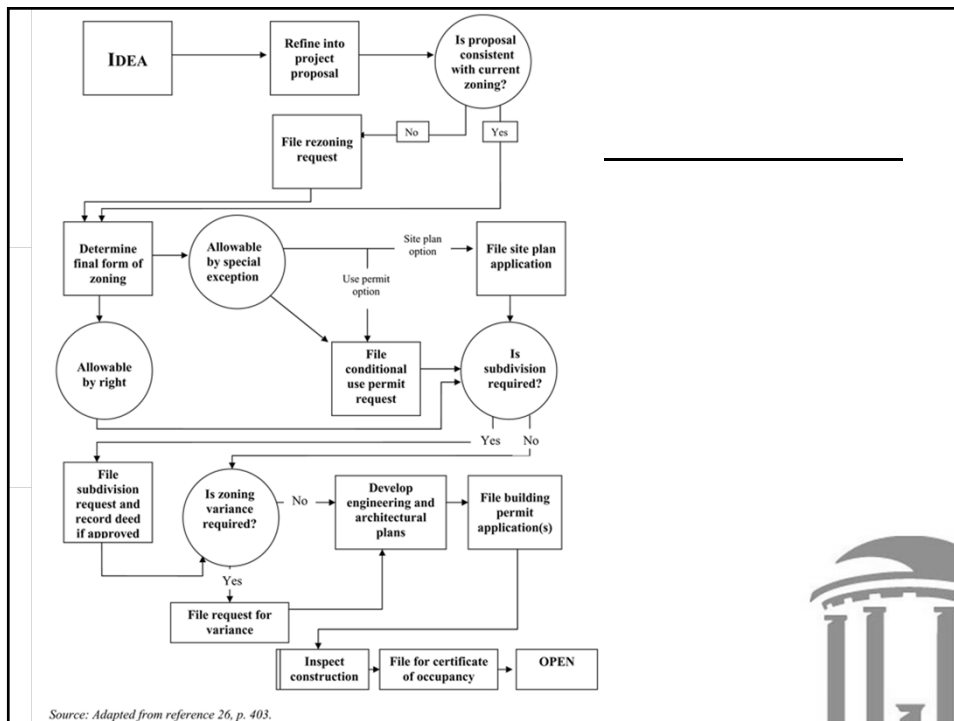
Real estate development requires a higher rate of return than real estate investment due to greater risk



Stages of the real estate cycle



A_1	Low construction Normal vacancies	$B-A_2$	Supply exceeds demand Construction declines Effective rents decline Vacancies rise
A_1-B	Demand exceeds supply Construction increases Rents rise Vacancies fall	A_2	Same as A_1
B	Construction slows Rents stabilize		



EDO Roles in Public Private Partnerships

- Lower costs in near term
 - Land lease / Land write-downs
 - On-site infrastructure development
 - Subordinated debt financing or guarantees
 - Other techniques
 - Lower soft costs: pro bono professional services, waive fees
 - Lower operating costs: property tax abatements/reductions



EDO Roles in Public Private Partnerships (page 2)

- Mitigate risk by finding ways to reduce barriers in the near term
 - Simplify public-private development agreements
 - Shorten development review period
 - Increase flexibility in construction inspections
 - Consider density bonus or similar inducements



EDO Roles in Public Private Partnerships (page 3)

- Mitigate risk by increasing predictability/reducing uncertainty in the long term
 - Promote long-term viewpoint
 - Gain consensus on comp/small area plans
 - Fund capital improvements to implement plans
 - Focus public facilities/services on strategic sites
- Mitigating risk >> Lowering costs through direct subsidies



EDO Roles in Public Private Partnerships (page 4)

Idea conception

- RFPs for specific site
- Promote Sustainable Development concepts
 - Type: Mixed use
 - Form: Compact development
 - Location: Efficient use of existing infrastructure
 - Protection of environmental assets



EDO Roles (page 5)

- Idea refinement
 - Market studies
 - Environmental assessments
 - Small area plans
 - Business parks
 - Industrial parks
 - Downtown re/development
 - Infill development
- Option Land
 - Site assembly
 - Land grants or below market sales
 - Land lease



EDO Roles (page 6)

- Project reviews/approvals
 - Neighbors
 - Existing businesses & industries
 - Professional staff
 - Local elected officials
- Contract negotiations
 - Development agreements
- Construction process
 - Infrastructure development for project
 - Spec building
 - Green building techniques
- Leasing
 - Marketing assistance



Cash Flow Accounting

- GPI Gross potential rental income
 - less Vacancy Allowance equals
- EGI Effective gross income
 - less Operating Expenses including property taxes equals
- NOI Net operating income
 - less Debt Service equals
- BTCF Before-tax cash flow

