

# **Real Estate Development**

## **47th Annual Basic Economic Development Course**

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# Assignment

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- We will cover three major topics in this session:
  - Development Process
  - Development Roles
  - Development Decisions

Please 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

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- Development Process



# What is real estate development?

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- The developer begins with an idea and executes many related tasks to create real property
- Development ends when the property achieves “stabilized occupancy” (give the definition) or target sales



# Types of Property Development

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



# Unique Features of RED

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- Land developers install infrastructure that becomes public 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

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- 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 becoming the norm



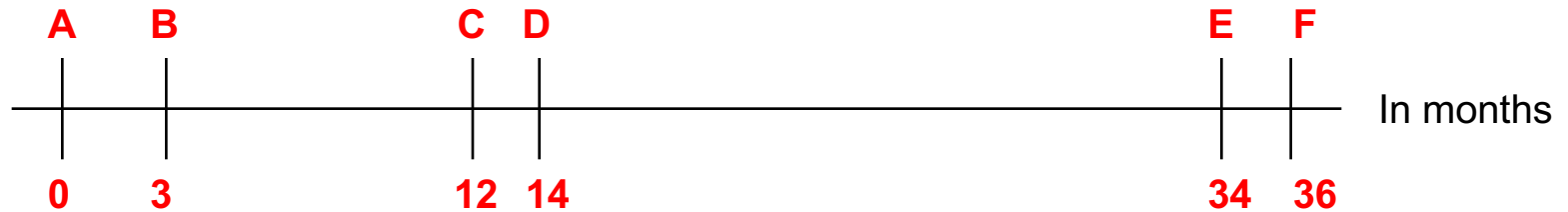
# Why should economic developers learn about real estate re/development?

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- Relevant to mainstream economic growth\* strategies of job creation & 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 Timeline



- A. Idea conception
  - Idea refinement
  - Search for site
- B. Option land
  - Continue refinement--feasibility studies, site design & financing alternatives
  - Public review of project for "entitlements"
- C. Project approvals from local government
  - Contract negotiations with landowner, investors, lenders, tenants
  - Sign contracts; Close construction loan
- D. Begin construction
  - Construction process
  - Begin leasing
- E. Complete construction
  - Continue leasing
- F. Achieve stabilized occupancy
  - Close permanent loan &
  - Begin property management



# Key Tasks to Complete by C

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- Raise needed equity
- Provide evidence of market demand to permanent lender
  - Market study for M-F projects
  - Preleasing for commercial projects
- Secure permanent loan commitment
- Secure construction loan commitment
- Provide construction loan guarantee
- Otherwise **STOP**



# RED is riskier than RE investment

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(See Appendix - slide 38)

- 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, accidents
- Market Risk – change in market fundamentals, business/building **cycles** (See Appendix - slide 39)
- Lease-up Risk – change in marketing conditions
- Financial Risk – change in interest rates, underwriting criteria, or investor expectations



# Development Process--Review

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- 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

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- Development Roles



# Who are the major participants in RED?

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## ■ 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 consumers and producers?

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- **Current consumers**
  - Lease space for a price and period of time
  - Purchase space
  - Pay taxes & receive public services
- **What about public & future consumers?**
- **Producers**
  - Develop land
  - Construct space
  - Lease/sell space
  - Pay taxes/fees & receive public services/subsidies



# Producers: The Development Team

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- Real estate developer as the 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 local government?

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- 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

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- 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

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- Comprehensive planning
- Zoning & CIP
- Subdivision regulations & Building codes
- Project review and approvals (See Appendix - slide 40)



# Role of government: Facilitate development

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- 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

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- EDO potential roles in Public Private Partnerships (See Appendix - slides 41-46)
- Compare economic development benefits to required financial outlays and subsidies
  - Impact on innovation potential/entrepreneurship & the productivity of economic base sectors
  - Impact on the number & quality of jobs
  - Also consider fiscal, environmental, traffic impacts
  - How much assistance/subsidy does this project deserve?



# Development Roles--Review

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

Questions & Comments



# Part III

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## Development Decisions



# Development Decision Making

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



# Cost versus Value

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## ■ Cost estimates

- Site cost (land only or land + building)
- Site development costs
- Construction (hard) 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 47)
- Direct capitalization =  $\text{NOI} / \text{capitalization rate}$
- Market or direct capitalization rate =  $\text{NOI} / \text{sales price of comparable properties}$



# Financial Analysis Tools

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- B-of-E: compare current market cap rates to anticipated return on total development cost
- Static comparisons
  - Cost driven analysis
  - Market driven analysis
- Dynamic comparisons
  - Discounted Cash Flow analysis (DCF)
  - Cash Flow Accounting - See Slide 47



# Legend

- GPR. Gross Potential Revenue.
- VAC. Vacancy Rate.
- EGI. Effective Gross Income.
- OEX. Operating Expenses
- NOI. Net Operating Income.
- DS. Debt Service.
- BTCF. Before-tax Cash Flow.
- GSP. Gross Sales Price.
- SE. Selling Expenses.
- NSP. Net Sales Price.
- UM. Unpaid Mortgage Loan Balance.
- BTER. Before-tax Equity Reversion.
- $PVCF_1$ . Present Value Cash Flow Yr. 1
- PVER. Present Value Equity Reversion.



# DCF for Income Generating Project

<b>Development</b>	<b>Operations</b>				
<b>Year 0</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Acquisition</b>	<b>GPR</b>	<b>GPR</b>	<b>GPR</b>	<b>GPR</b>	<b>GPR</b>
<b>Site Development</b>	<b>-VAC</b>	<b>-VAC</b>	<b>-VAC</b>	<b>-VAC</b>	<b>-VAC</b>
<b>Construction</b>	<b>EGI</b>	<b>EGI</b>	<b>EGI</b>	<b>EGI</b>	<b>EGI</b>
<b>Hard Costs</b>	<b>-OEX</b>	<b>-OEX</b>	<b>-OEX</b>	<b>-OEX</b>	<b>-OEX</b>
<b>Soft Costs</b>	<b>NOI</b>	<b>NOI</b>	<b>NOI</b>	<b>NOI</b>	<b>NOI</b>
	<b>-DS</b>	<b>-DS</b>	<b>-DS</b>	<b>-DS</b>	<b>-DS</b>
<b>Total Dev Cost</b>	<b>BTCF</b>	<b>BTCF</b>	<b>BTCF</b>	<b>BTCF</b>	<b>BTCF</b>

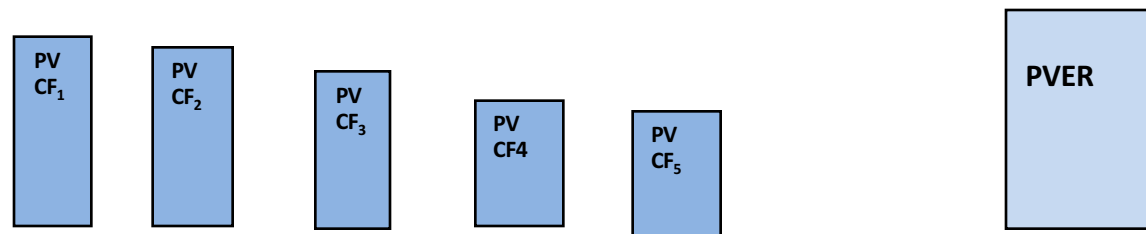
Sale at end Yr. 5

$$\text{GSP} - \text{SE} = \text{NSP} - \text{UM} = \text{BTER}$$



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## ■ Discounting to Calculate Present Values



At Time 0: RETURNS =  $PVCF_1 + PVCF_2 + PVCF_3 + PVCF_4 + PVCF_5 + PVER$

EQUITY INVESTMENT = TOTAL DEVELOPMENT COST – ORIGINAL LOAN

At Time 0: NET PRESENT VALUE = RETURNS – EQUITY INVESTMENT



# Decision Criteria

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- Solvency
  - Estimate monthly revenues & expenses from A to F
  - Be sure monthly  $CF > 0$
- Equity return requirements
  - Cash-on-cash return = or  $>$  minimum required return
  - BTCF at stabilized occupancy per dollar invested (equity)
- Change/test assumptions to maximize profits
  - Compute IRR\* to compare alternative projects with  $NPV > 0$
  - BTIRR
  - ATIRR for tax credit projects



# Development Decisions--Review

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

Questions or Comments?



# Sources

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- 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, 14<sup>th</sup> edition, Appraisal Institute, 2013



# Part IV

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- Questions & Discussion



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



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



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**Thank you!**



# Appendix

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# Why is real estate development riskier than real estate investment?

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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

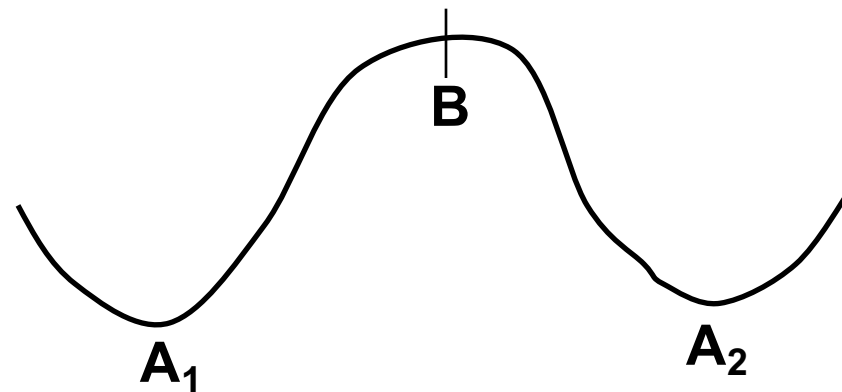
D-F: Manage/minimize time expended  
(construction-period interest)

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



# Stages of the real estate cycle

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$A_1$  Low construction  
Normal vacancies

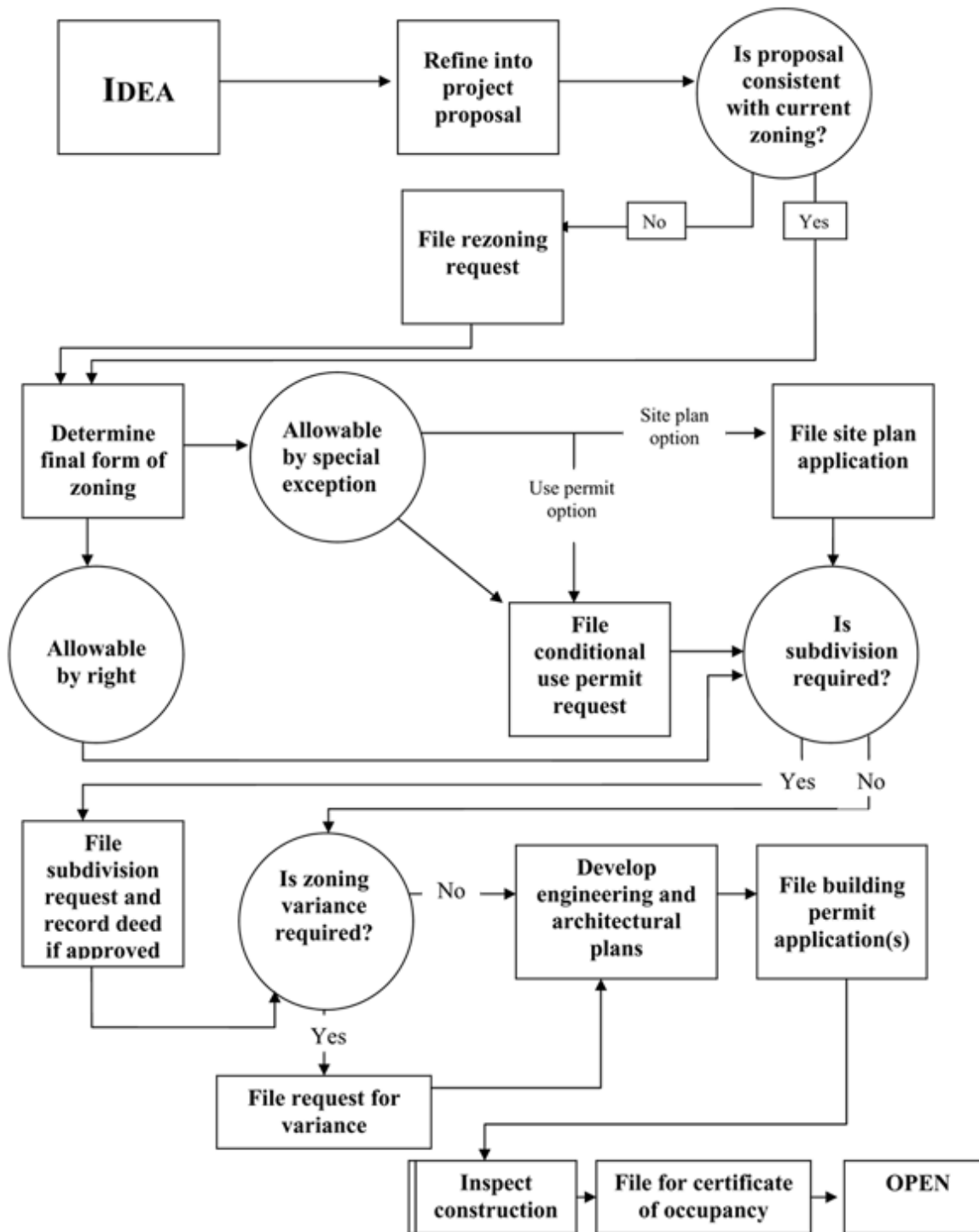
$B - A_2$  Supply exceeds demand  
Construction declines  
Effective rents decline  
Vacancies rise

$A_1 - B$  Demand exceeds supply  
Construction increases  
Rents rise  
Vacancies fall

$A_2$  Same as  $A_1$

$B$  Construction slows  
Rents stabilize





Source: Adapted from reference 26, p. 403.



# EDO Roles in Public Private Partnerships

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- 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)

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- 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)

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- 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)

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## 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)

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- 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)

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- 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

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- GPI            Gross potential revenue (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

