Basic Concepts of Real Estate Marketability Analysis

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Property Productivity Concepts

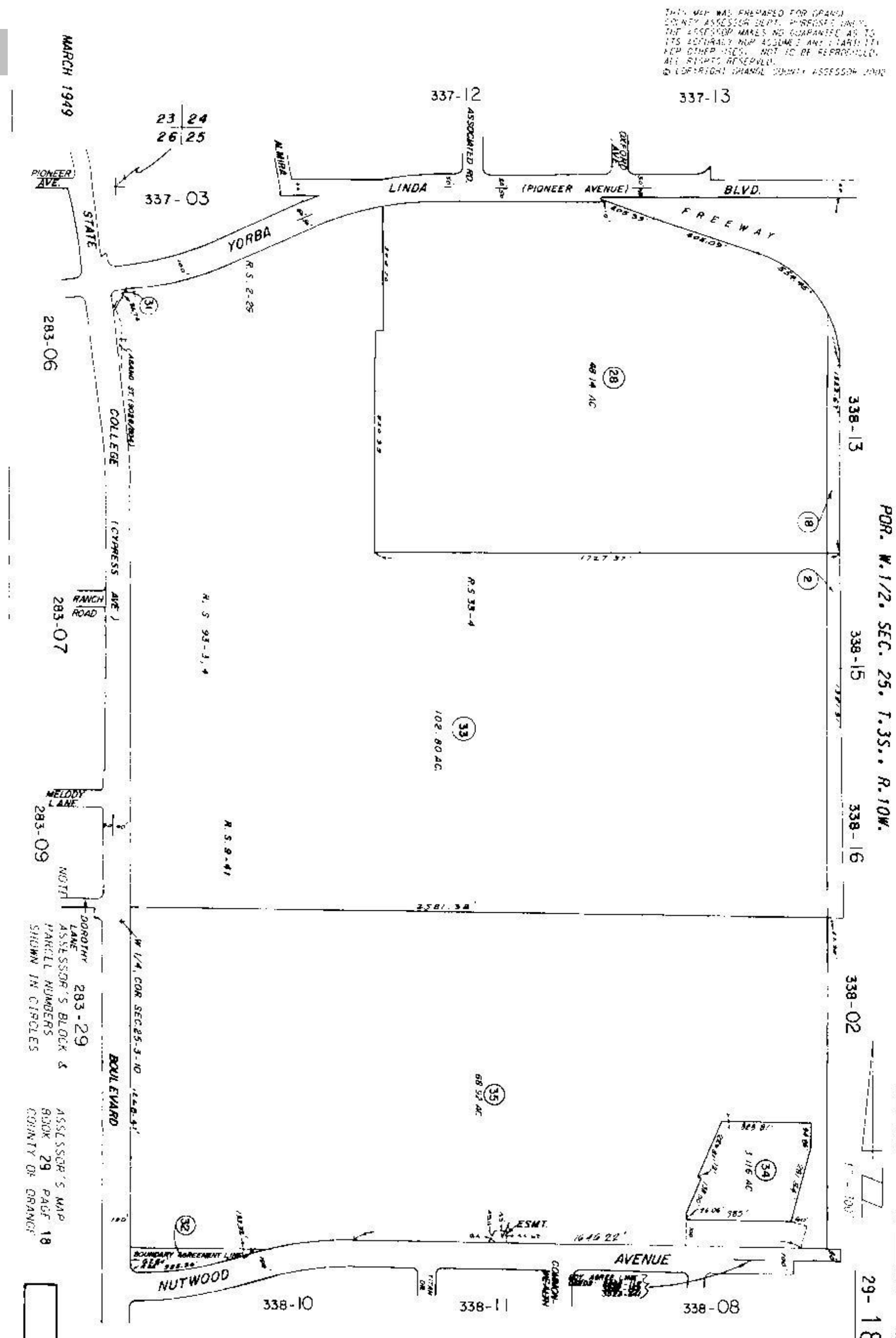
- Productivity Analysis -
  - Analysis of a property's capacity to deliver services to meet human needs, house economic activities, and supply satisfaction and amenities.
- A parcel of real estate produces (supplies) services for those who use it.
  - Price paid is a function of:
    - its supply of services relative to potential users' purchasing power
    - need for its services
    - inability to find good substitutes at a lower price
- Market Analysis in Real Estate is different from other types of market analysis
  - real estate is not well defined
  - product can change over time
  - location is fixed

Property Productivity Concepts

- Focus of the discussion for all aspects of the subject property is to:
  - Segment the subject market to address advantages and disadvantages
- Property Productivity Analysis seeks to answer:
  - What does the subject have to offer to the market?
  - What are the subject's competitive advantages and disadvantages

Property Productivity: Site and Improvements

- Design and condition of the subject can limit the potential market it can serve.
- Physical attributes analysis is the initial action in marketability analysis
- Physical attributes of the site:
  - Size, Shape, Topography, Climate
  - Vegetation, Natural Drainage, Floodplain
  - Soil and Subsoil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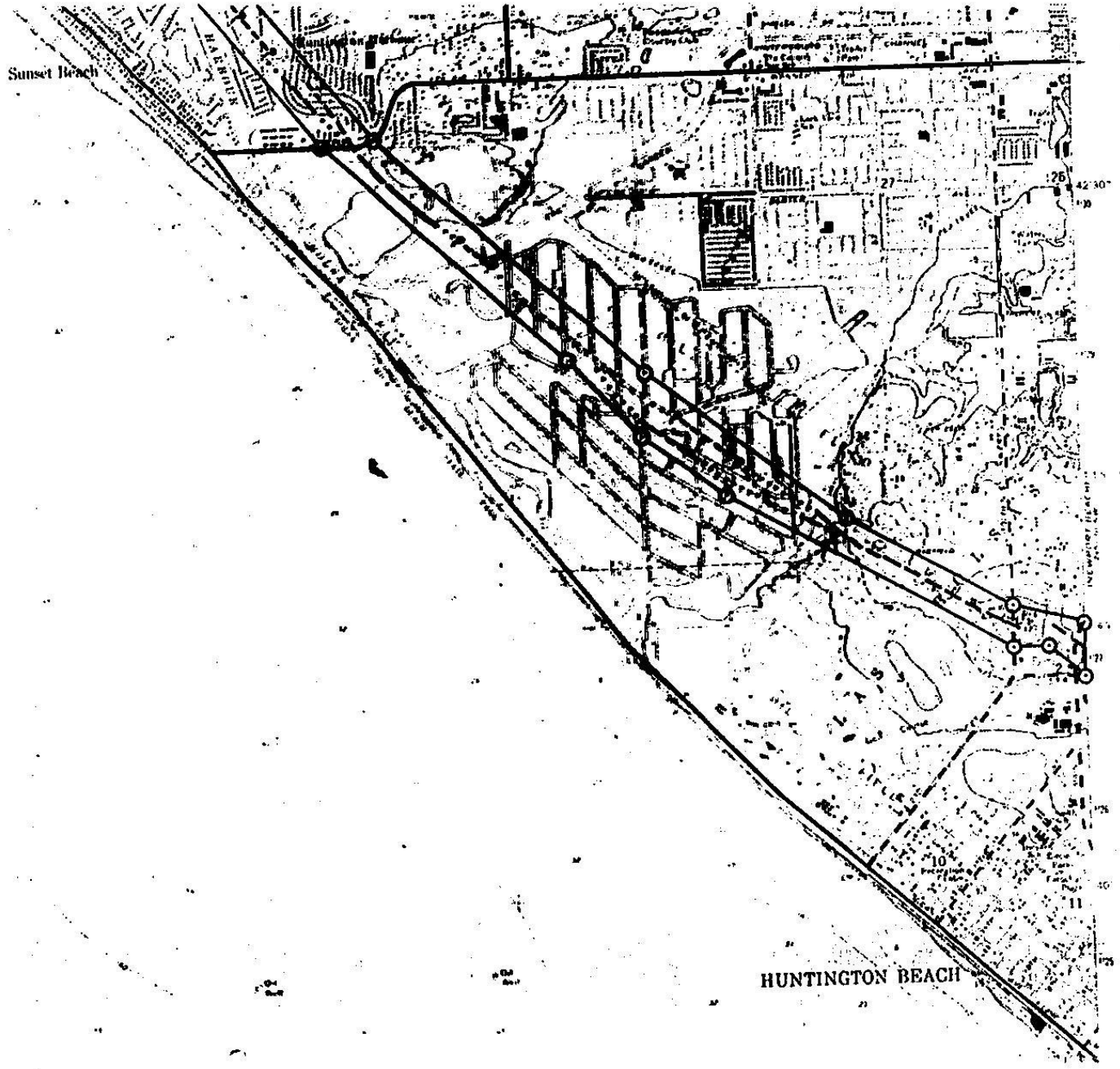
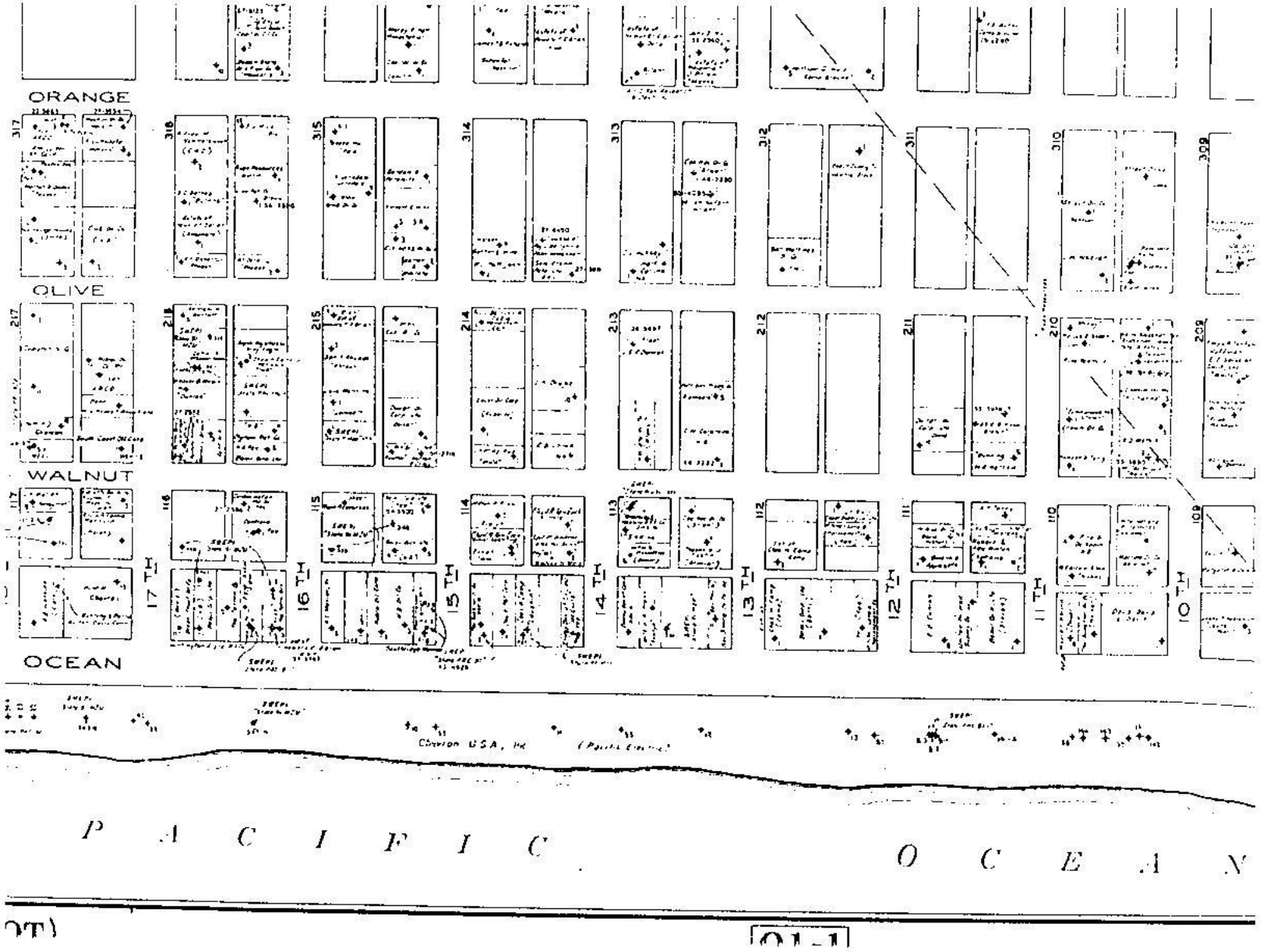
MARCH 1949
337-12
337-13
337-03
23 24
26 25
PIONEER AVE.
STATE
YORBA
LINDA
(PIONEER AVENUE)
BLVD.
ASSOCIATED RD.
OXFORD AVE.
FREEWAY
R.S. 2-25
283-06
COLLEGE
(CYPRESS AVE.)
RANCH ROAD
283-07
MELODY LANE
283-09
DOROTHY LANE
283-29
BOULEVARD
ASSESSOR'S BLOCK & PARCEL NUMBERS SHOWN IN CIRCLES
ASSESSOR'S MAP BOOK 29 PAGE 18 COUNTY OF ORANGE
28
48.14 AC.
18
2
R.S. 33-4
R.S. 93-3,4
33
102.80 AC.
R.S. 9-41
338-13
338-15
338-16
338-02
POR. W.1/2, SEC. 25, T.3S., R.10W.
W.1/4 COR. SEC.25-3-10
35
68.52 AC.
34
3.116 AC.
32
BOUNDARY AGREEMENT LINE
ESMT.
NUTWOOD
AVENUE
338-10
338-11
338-08
29-18


Sunset Beach
HUNTINGTON BEACH


ORANGE
OLIVE
WALNUT
OCEAN
17TH
16TH
15TH
14TH
13TH
12TH
11TH
10TH
PACIFIC OCEAN

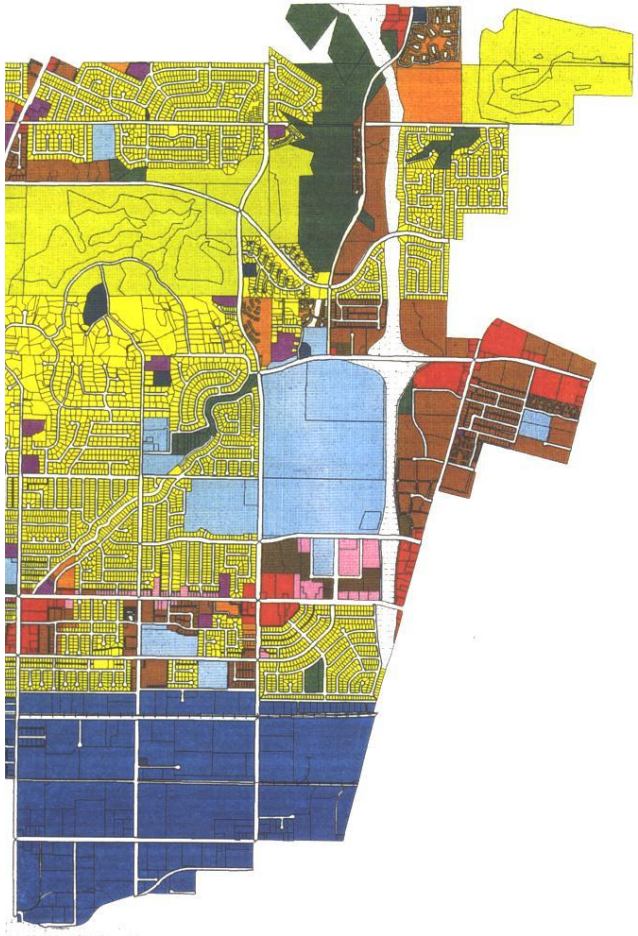
Property Productivity: Site and Improvements

- Physical Attributes of a Structure
  - Exterior physical features
    - Substructure and Superstructure
  - Interior physical features:
    - Walls, Supports and Finish
    - Equipment and Mechanical Systems
      - Plumbing, Heating, Ventilating, and air-conditioning
      - Electrical
      - Miscellaneous including fire protection, sprinklers, escalators and elevators, signal, alarm or call systems
- Market Appeal Attributes
  - Unique and Special features of a property
  - Think: Appeal to *Who* or *what* group of users?

Property Productivity: Legal and Regulatory Attributes

- Regulations may be Public or Private
  - Can enhance or detract from the value of the property
- Examples of Constraints:
  - Local Zoning Ordinances and General Plans
    - restrict a site that is ideal for an office building to residential housing
    - strong neighborhood association prevents changes in use
  - Local Subdivision Codes
    - requirements for extra wide streets and landscaping increase cost of development, thereby reducing the supply
- Examples of Enhancements:
  - Rezoning of a neighborhood that is undergoing transition to a higher and more intensive use. (i.e.: residential to commercial)

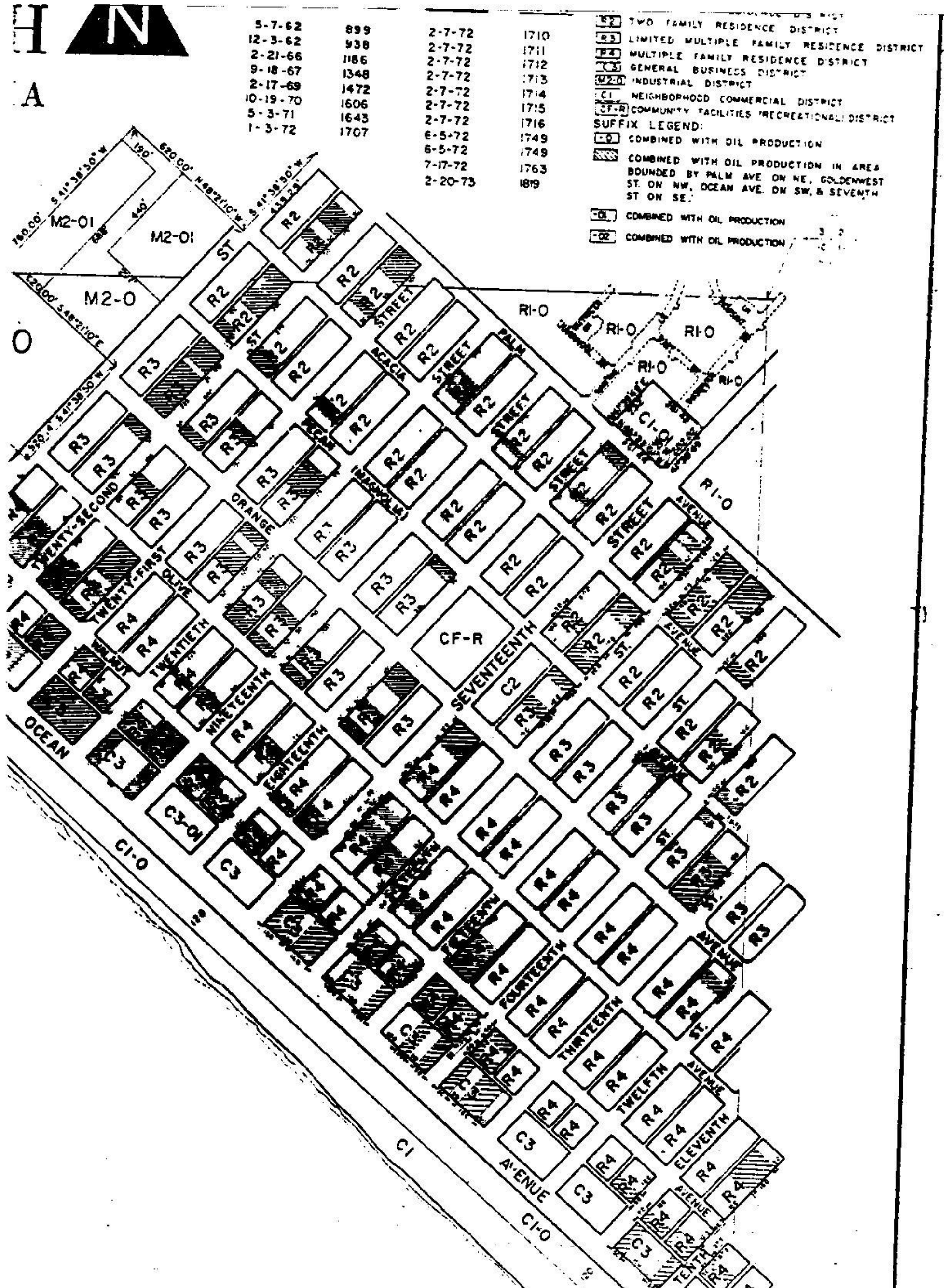
LAND USE MAP



LEGEND

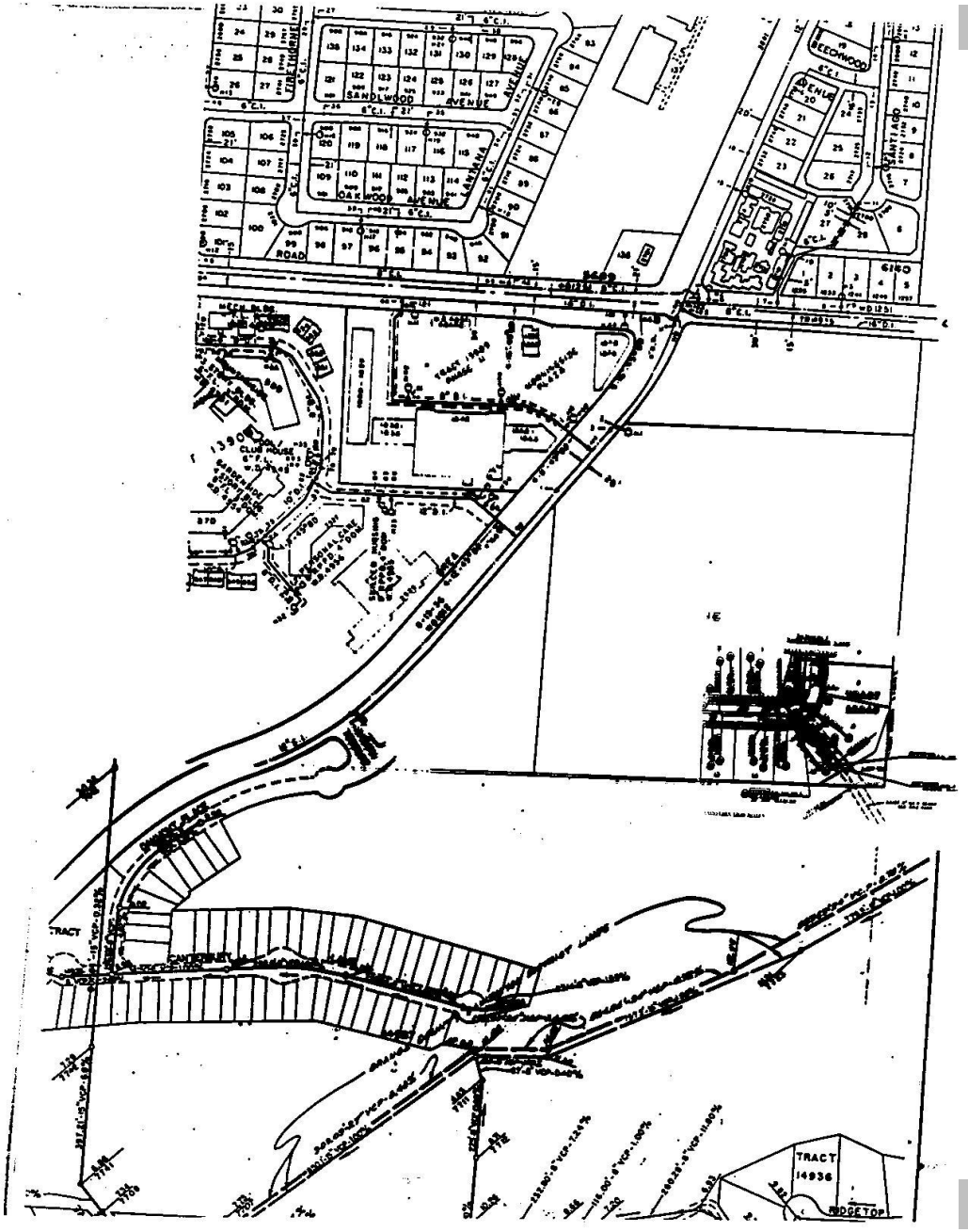
Planned Use

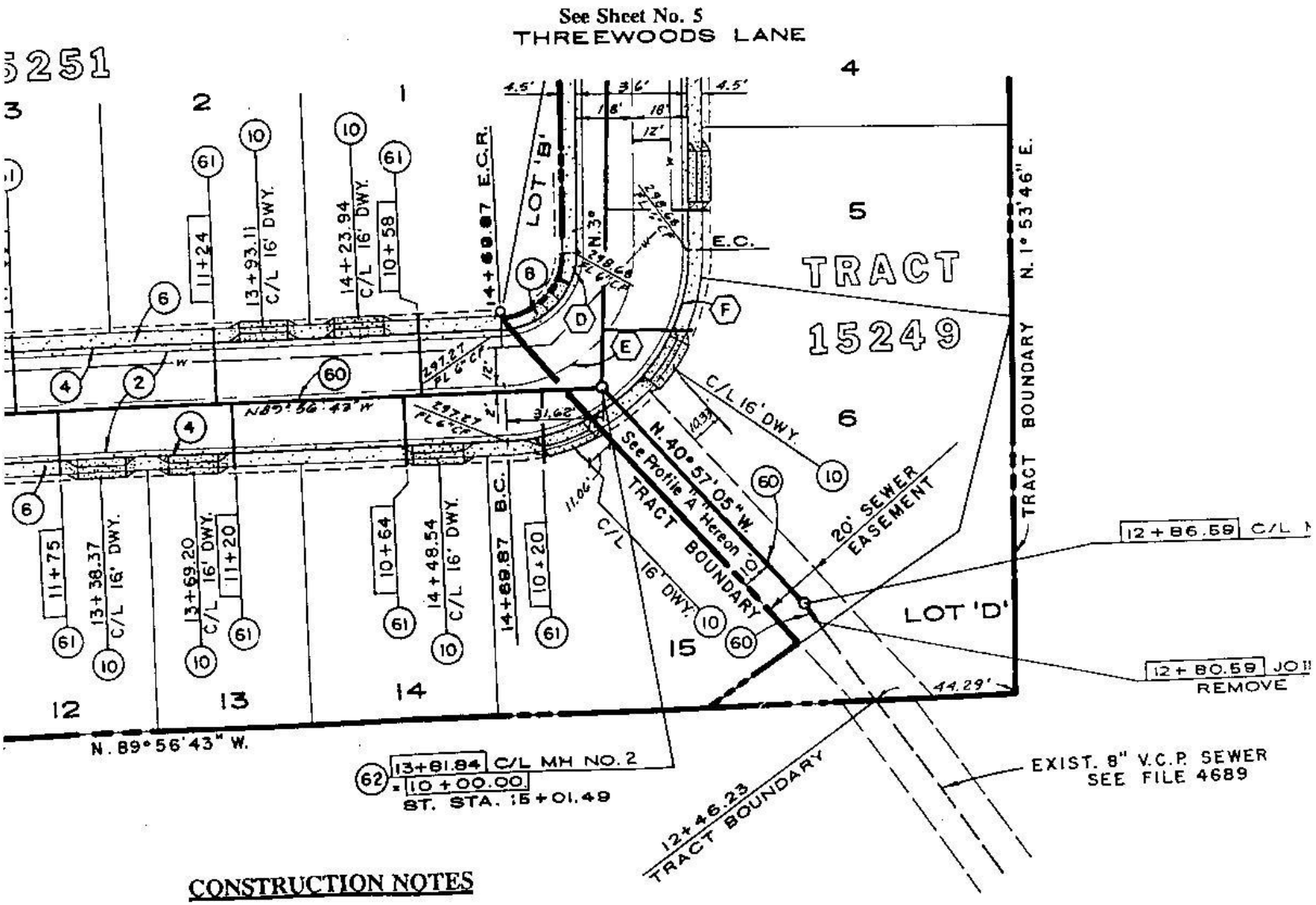
- Low Density Residential
- Low-Medium Density Residential
- Medium Density Residential
- High Density Residential
- Greenbelt Concept
- Commercial
- Downtown Mixed Use
- Office
- Industrial
- Schools
- Parks and Recreation
- Government Facilites
- Religious Uses


5-7-62 899
12-3-62 938
2-21-66 1186
9-18-67 1348
2-17-69 1472
10-19-70 1606
5-3-71 1643
1-3-72 1707
2-7-72 1710
2-7-72 1711
2-7-72 1712
2-7-72 1713
2-7-72 1714
2-7-72 1715
2-7-72 1716
6-5-72 1749
6-5-72 1749
7-17-72 1763
2-20-73 1819
R2 TWO FAMILY RESIDENCE DISTRICT
R3 LIMITED MULTIPLE FAMILY RESIDENCE DISTRICT
R4 MULTIPLE FAMILY RESIDENCE DISTRICT
C3 GENERAL BUSINESS DISTRICT
M2-O INDUSTRIAL DISTRICT
C1 NEIGHBORHOOD COMMERCIAL DISTRICT
CF-R COMMUNITY FACILITIES (RECREATIONAL) DISTRICT
SUFFIX LEGEND:
-O COMBINED WITH OIL PRODUCTION
COMBINED WITH OIL PRODUCTION IN AREA BOUNDED BY PALM AVE ON NE, GOLDENWEST ST. ON NW, OCEAN AVE. ON SW, & SEVENTH ST ON SE.
-01 COMBINED WITH OIL PRODUCTION
-02 COMBINED WITH OIL PRODUCTION
M2-01
M2-O
R1-O
C1-O1
CF-R
OCEAN AVENUE
C1-O
C1
PALM AVENUE
ACACIA STREET
PECAN
MAGNOLIA
ORANGE
OLIVE
WALNUT
TWENTY-SECOND
TWENTY-FIRST
TWENTIETH
NINETEENTH
EIGHTEENTH
SEVENTEENTH
FOURTEENTH
THIRTEENTH
TWELFTH
ELEVENTH
TENTH

Property Productivity: Location Determinants

- Linkages:
  - Transportation linkages
    - Movement of people, goods and services to and from the subject
    - Utility linkages: gas pipelines, sewer, water, telephone, electricity
  - Components
    - Route: The established or directed course of travel between two spatially separate parcels of real estate
    - Access: The ability to enter or pass to a site from a route, or to a route from a site.
      - Examples are streets, curb cuts, sewer laterals
    - Travel Mode: The locomotion method for traversing a route and gaining access.
      - Examples are automobile, bus, train, truck, airplane, boats, etc.
    - Route Orientation: A route may be oriented inward toward the subject, outward from the subject or dual directional.
      - Example, a grocery store located on a busy street so that people returning from work can easily stop.


SANDLEWOOD AVENUE
OAKWOOD AVENUE
BEECHWOOD
CLUB HOUSE
TRACT 14936
RIDGETOP



CONSTRUCTION NOTES

...A.C. over 4" C.A.B. with approved prime coat.

...PLANS WERE PREPARED UNDER

Property Productivity: Location Determinants

- Exposure and Externalities
  - May have positive or negative effects on the productivity of the site and its linkages
- Neighborhood Externalities
  - neighborhood character - properties compatibility with each other
- Linkage Externalities
  - impairment to the productivity of the land such as when a sewer has reached it's capacity, but the neighborhood is only one-half developed or streets are too narrow and overcrowded.
- Classification of Externalities
  - can be Positive or Negative, Natural or Man-made

Property Productivity: Location Determinants

- Associations: Different types of property require different linkages and land use associations
  - Housing must be linked to jobs, shopping and community facilities
  - Retail uses need customers
  - Office uses are supported by hotels, print shops and restaurants

SITE ACCESSIBILITY ORIENTATIONS BY RELATIVE TIME DISTANCES

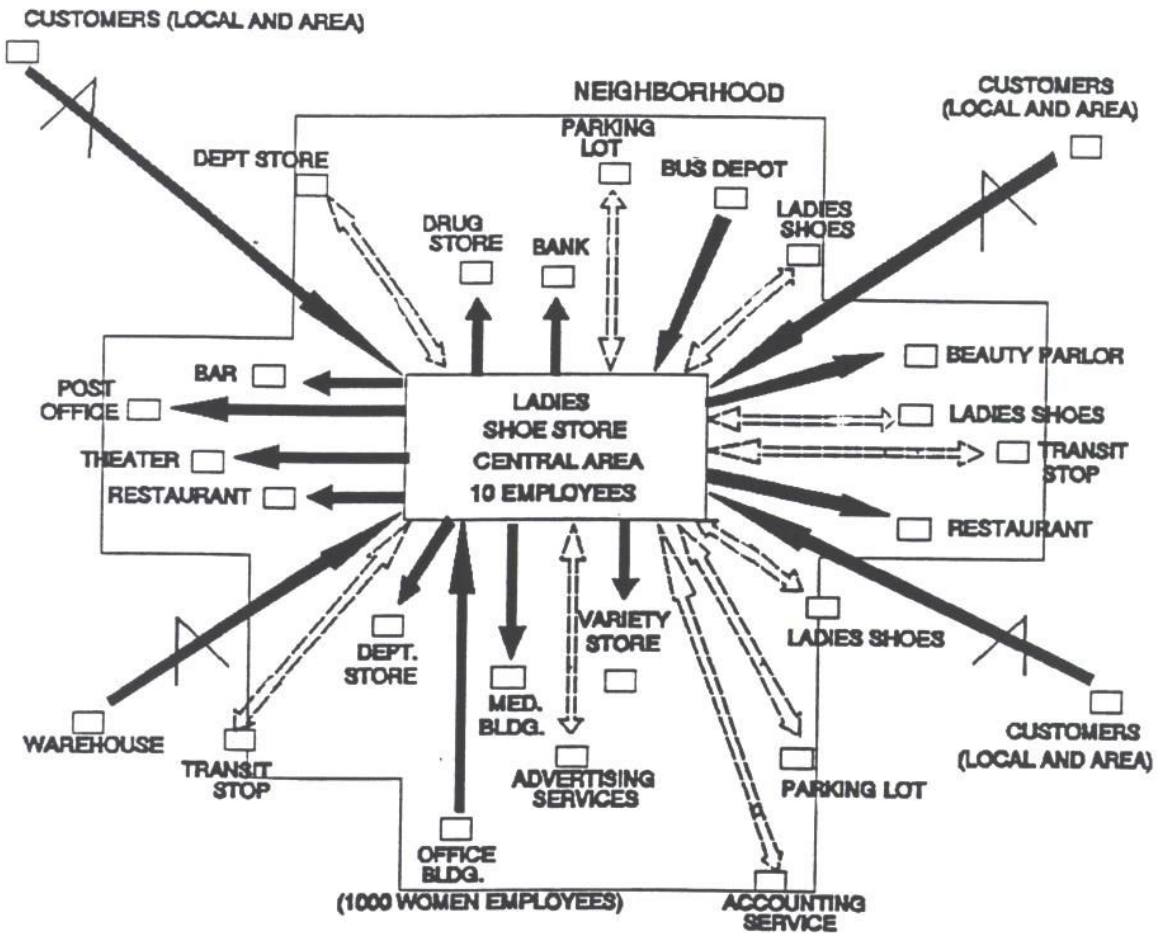
OUTWARD ORIENTATION

INWARD ORIENTATION

TWO-WAY ORIENTATION

LONG RANGE ACCESS

Source: Richard B. Andrews, *Urban Land Economics and Policy* (New York: Free Press, 1971).



SITE ACCESSIBILITY ORIENTATIONS BY RELATIVE TIME DISTANCES

OUTWARD ORIENTATION
INWARD ORIENTATION
TWO-WAY ORIENTATION
LONG RANGE ACCESS

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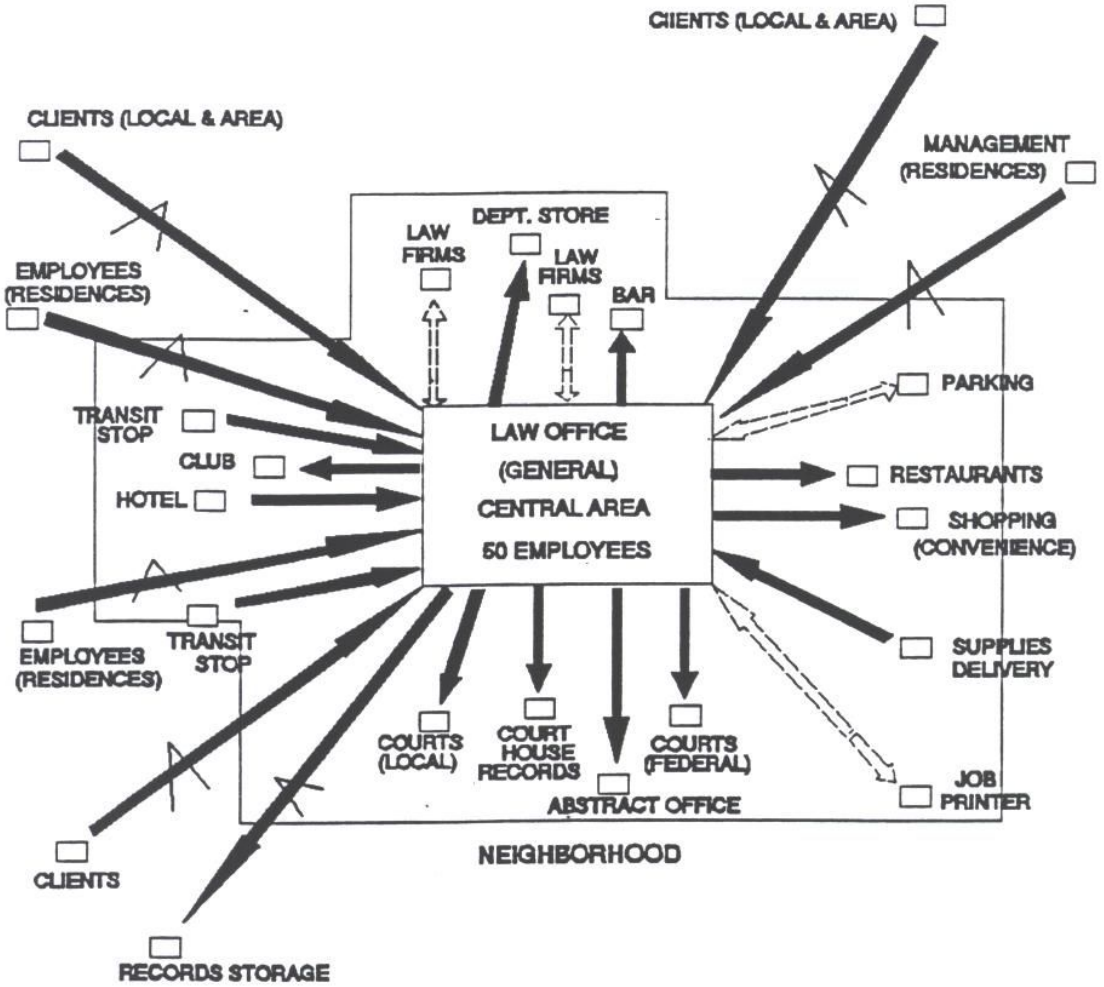


SITE ACCESSIBILITY ORIENTATIONS BY RELATIVE TIME DISTANCES

OUTWARD ORIENTATION →
INWARD ORIENTATION ←
TWO-WAY ORIENTATION ↔
LONG RANGE ACCESS

Source: Richard B. Andrews, *Urban Land Economics and Policy* (New York: Free Press, 1971).

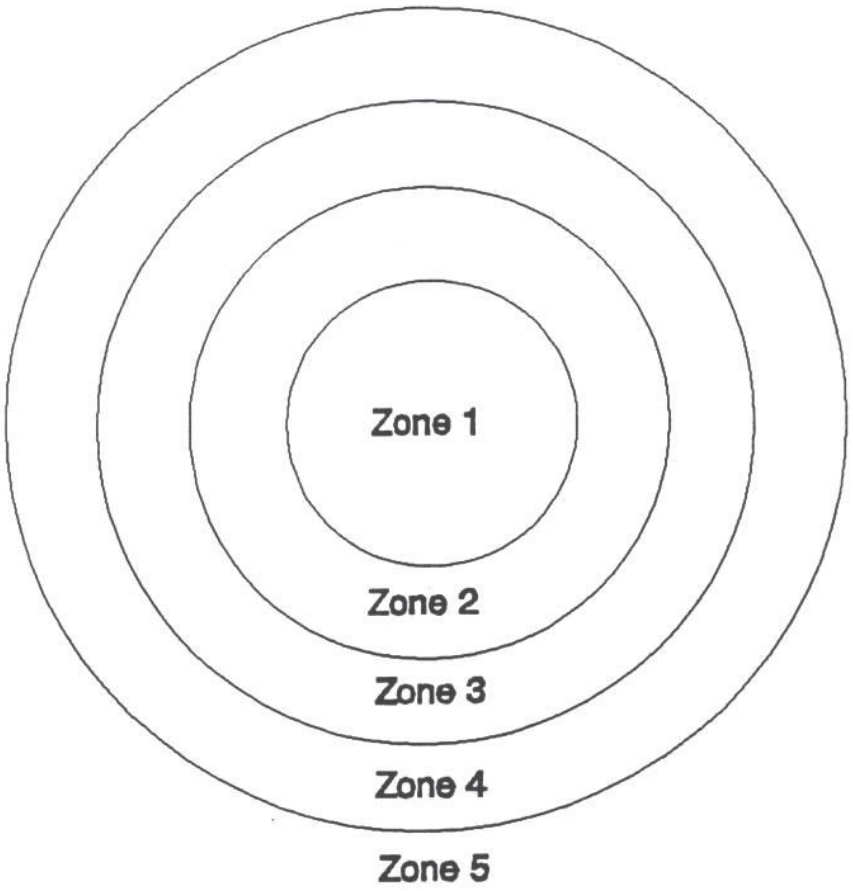
Property Productivity: Location Determinants

- Situs Analysis as a Land Use Predictor
  - Definition: The total urban environment as it relates to a specific land use on a specific land parcel as they function in time.

- A Process of analysis of the subject location
  - Identifying activities in the area
  - Establishing the nature of associations between the activities
  - Identifying and analyzing the accessibility of the site to the surrounding area
  - Identifying and evaluating the total environmental impact of the area on the site use.

Urban Growth Structure Analysis

- Theories of Urban Growth
  - Concentric Zone Structure
    - Presumes five concentric zones that influence property use
    - Presumes growth is outward from the central core.
    - Can be a ripple effect from the center of major intersections of transportation arteries
  - Sector Structure
    - Urban area will develop in sectors in which high, middle and low-income residents will tend to group
    - High income groups will purchase the most desirable areas for their houses
    - Middle groups will strive to join the upper-income groups
    - Basic premise is that higher-income groups establish the general direction of urban growth
    - Presumes that growth occurs at the urban fringe.



Source: Earnest W. Burgess, "The Growth of the City," in R.E. Park, et al, editors *The City* (Chicago: University of Chicago Press, 1925).

Legend:

Zone 1: CBD
Zone 2: Transition
Zone 3: Low-income housing
Zone 4: Middle-income housing
Zone 5: Commuting

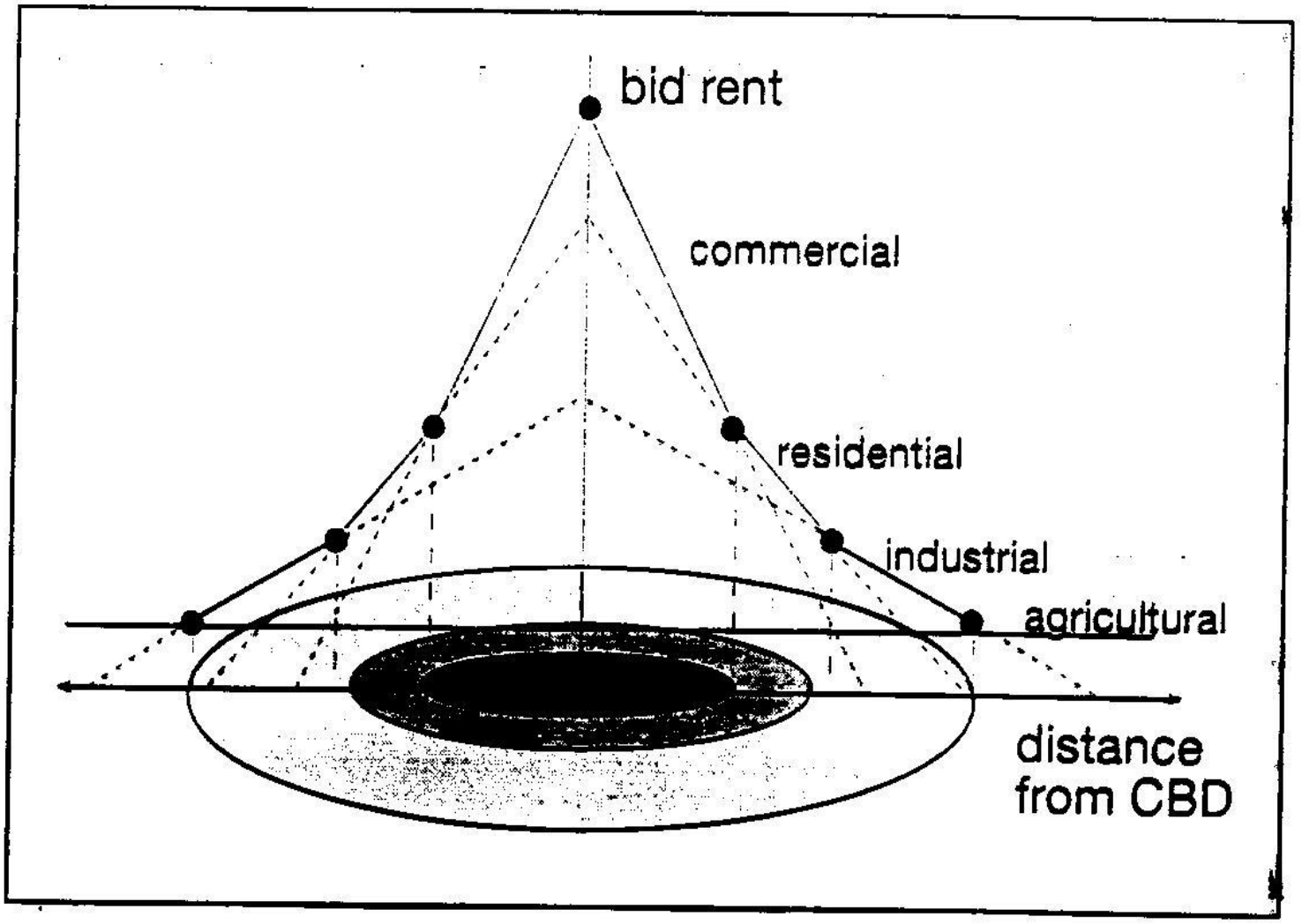
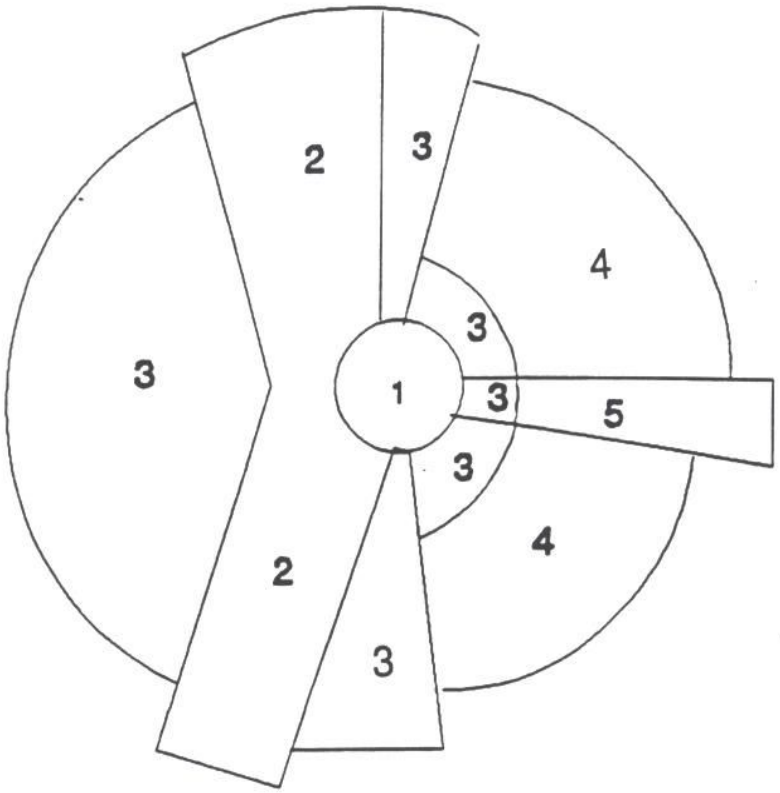


FIGURE 4.2
Bid-rent curves for urban land



Source: Homer Hoyt, "The Structure and Growth of Residential Neighborhoods in American Cities," (Washington, D.C.: F.H.A., 1939. U.S. Government Printing Office, 1939).

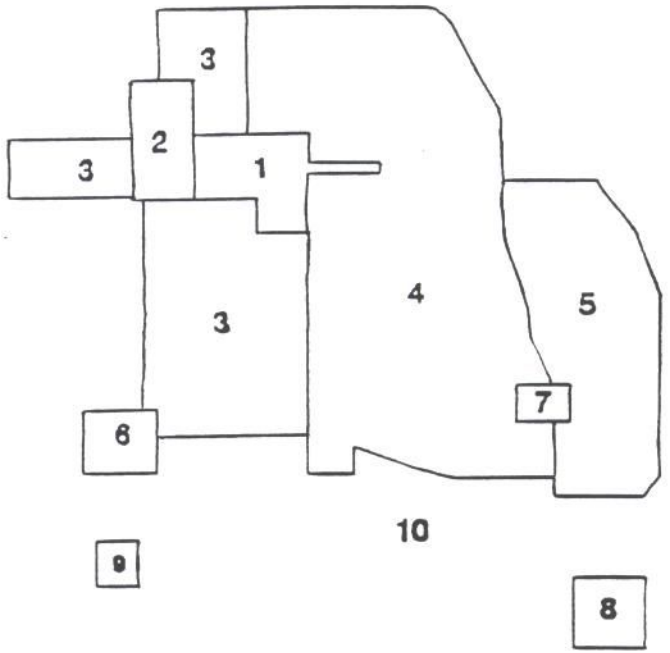
Legend

1	CBD
2	Wholesale manufacturing
3	Low-class residential
4	Middle-class residential
5	High-class residential

Urban Growth Structure Analysis

- Theories of Urban Growth
  - Multi-nuclei Structure
    - Basic premise is that an urban area does not necessarily develop from a single core, but around several distinct nuclei.
    - Presumes that land uses will locate to form nodes.
    - Examples: harbors attract docks and warehouses, courthouses attract attorney's offices
  - Radial-Corridor Structure
    - urban development often takes place along major transportation routes
    - growth can be predicted based on the development of major transportation arteries

Multiple Nuclei



Legend:

1	CBD
2	Wholesale, light manufacturing
3	Low-class residential
4	Middle-class residential
5	High-class residential
6	Heavy manufacturing
7	Outlying business district
8	Residential suburb
9	Industrial suburb
10	Communter zone

Source: C.D. Harris and E.L. Ullman, "The Nature of Cities," The Annals of the American Academy of Political and Social Science, Vol. 242 (November 1945), p. 13.

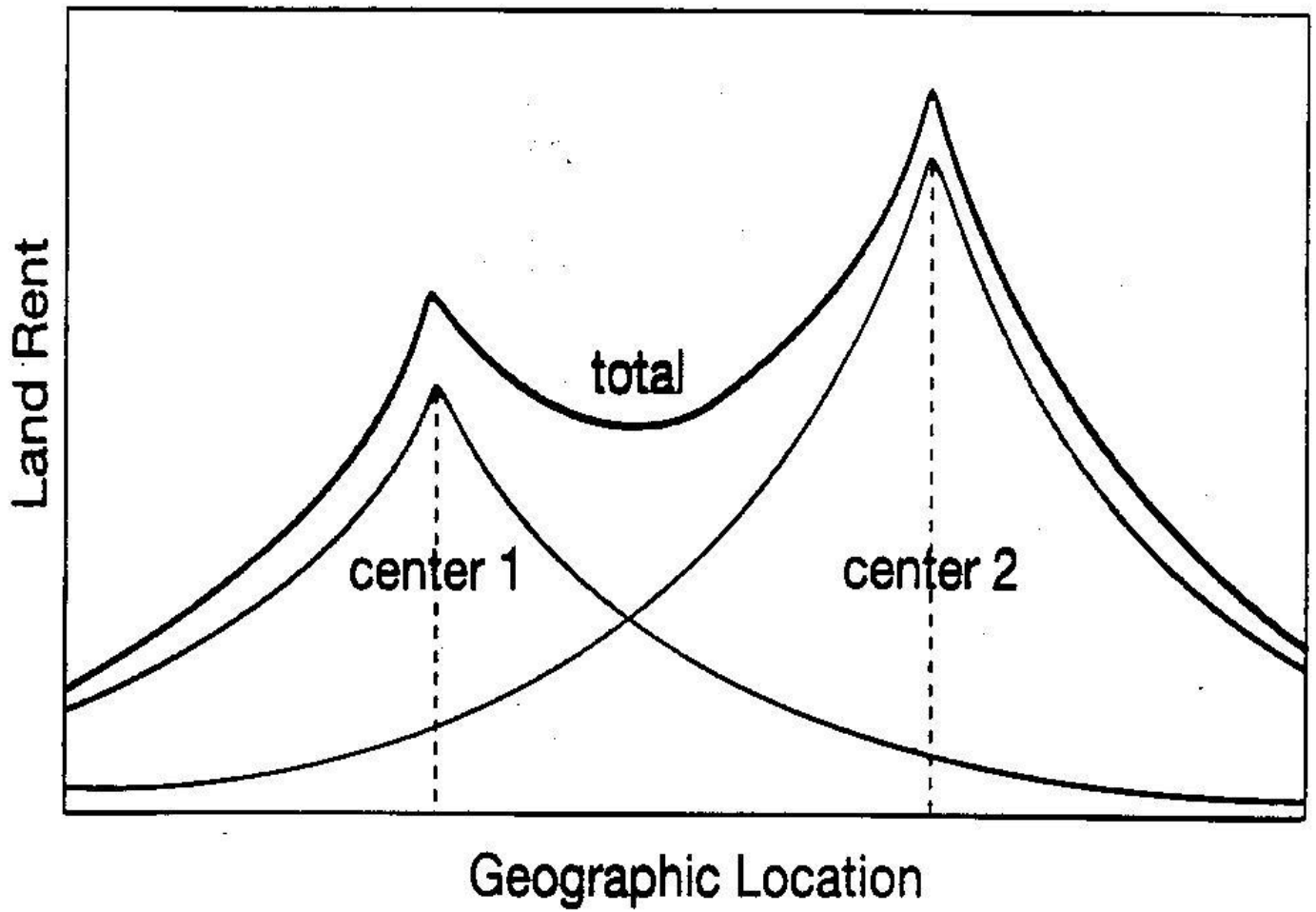
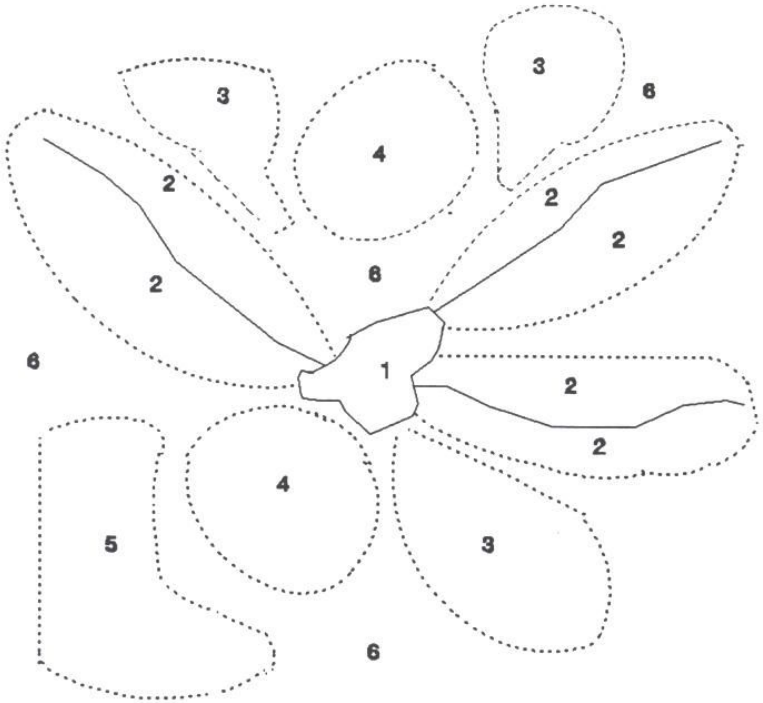


FIGURE 4.7
Land rents in a polycentric urban area

RADIAL-CORRIDOR STRUCTURE



Legend

Zone 1 Central Business District

Zone 2 High Intensity Corridor
- Manufacturing
- High-Density Housing (All Income)
- Retail, Office, etc.

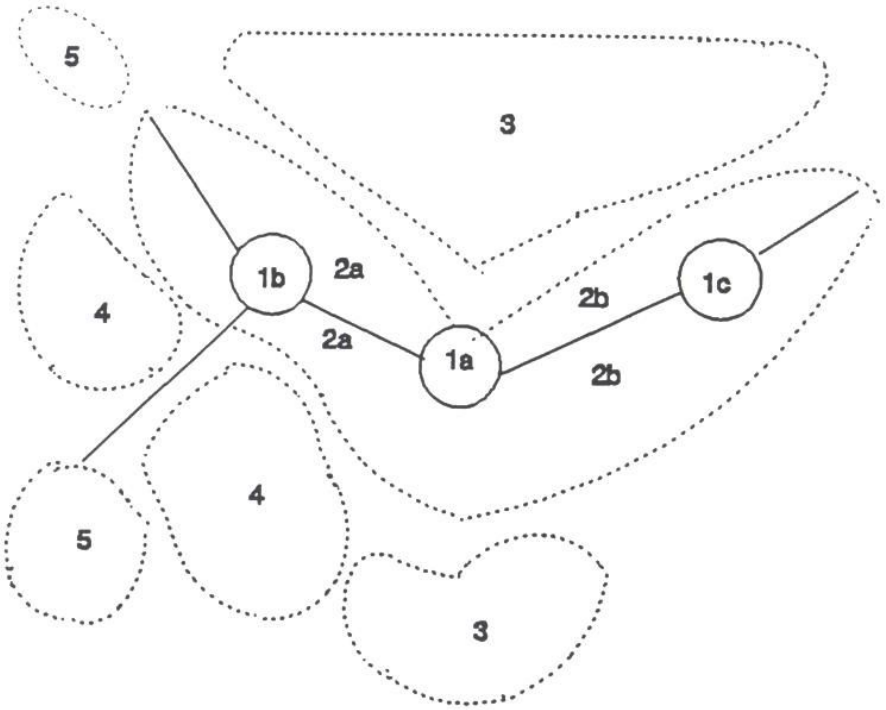
Zone 3 Blue-Collar Housing (Moderate Income) Moderate Density Housing

Zone 4 Middle-Income Housing
- Low Density Housing

Zone 5 High-Income Housing (Very Low Density)

Zone 6 Open Space/Agriculture

Current Trends in a Metropolitan Area



Legend

Zones 1a Old Central Business District
1b New Higher-Income Office – Shopping
1c Lower Income – Shopping

Zones 2a High Intensity Corridor
- Light Industrial – Newer
- High-Density Housing – Middle Income
- Retail/Service – Strips – Newer

2b High Intensity Corridor
- Heavy Industrial
- High-Density Housing – Low Income
- Service Retail

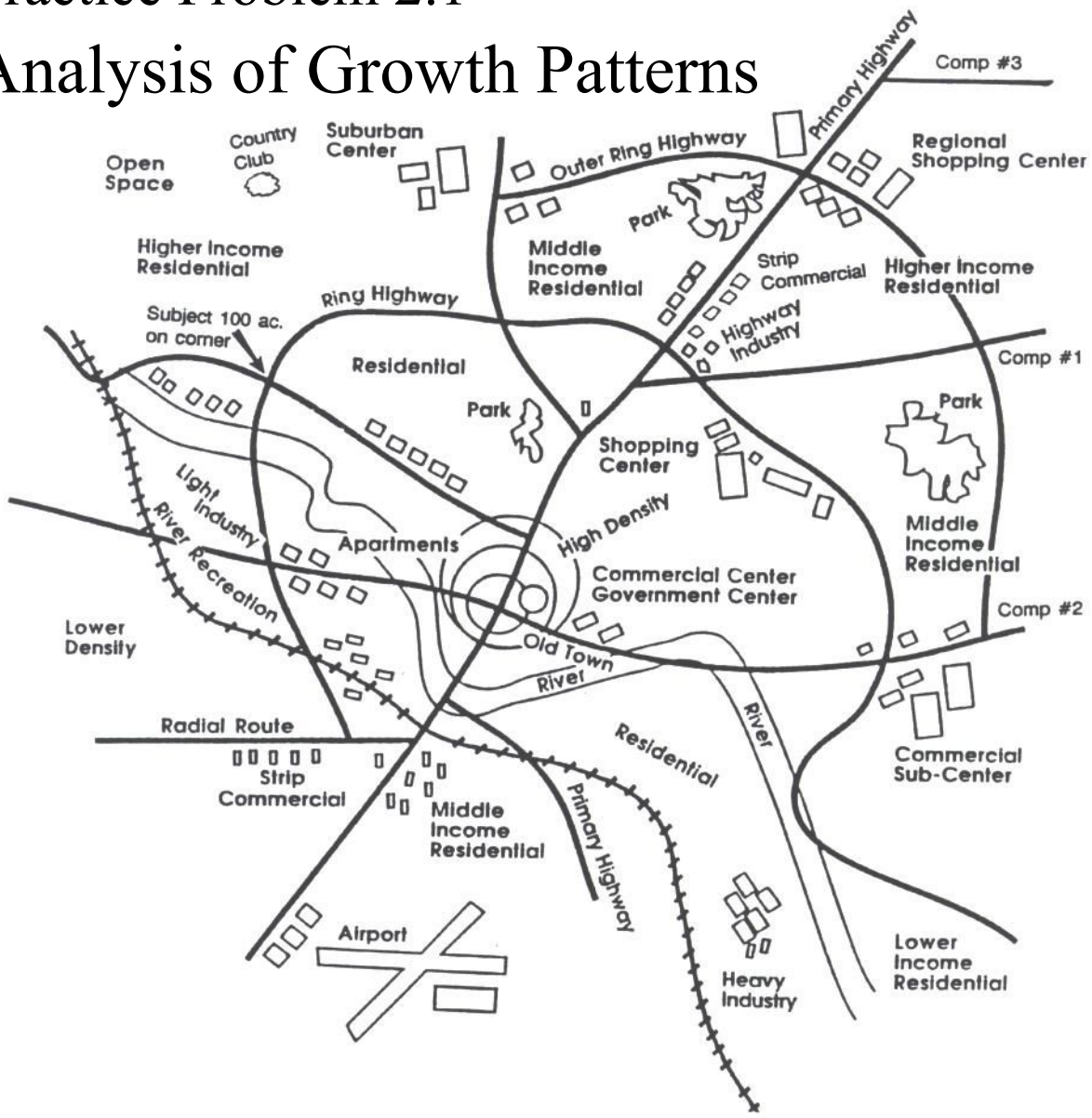
Zone 3 Blue-Collar Housing (Low to Moderate Income)
Mixed-Density Housing

Zone 4 Upper-Middle-Income-Housing
- Including Neighborhood Support Retail
- Mixed Density

Zone 5 High-Income Housing (Predominately Low Density)

Practice Problem 2.1

Analysis of Growth Patterns



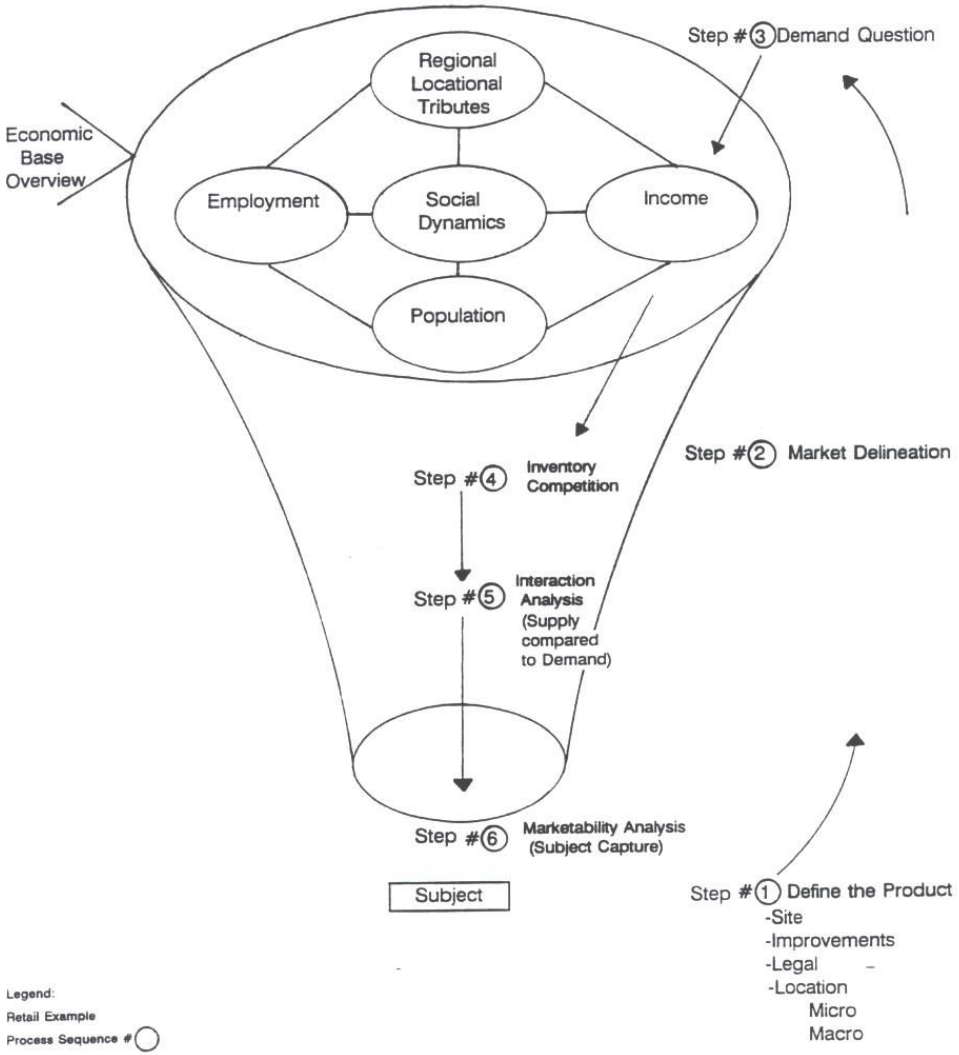
Market Area Concepts

- Demand and Time-Distance Relationships
  - Most common way to define a market area
    - Example: Primary market area for a neighborhood convenience store is a five minute driving time.
    - Example: Primary market area for a outlet mall is forty miles or 1 to two hour driving time.
  - Principle of Substitution
    - The area in which equally desirable substitute properties compete with the subject can delineate a market area.
  - Population Projection Area
    - Must identify the area to be included in the projection
    - Projection area is different for different property types
      - How much of the market can I capture? *or*
      - What will be my market share?

Demand Concepts
Local Economic Analysis

- The Economic Overview
  - Provides the base data for analysis of the subject's market segment
  - Support for location analysis and the economic relationship to physical growth patterns
  - Helps to identify the demand segment
  - Provides data to check the secondary data and forecasts made by other professionals
- Demand Side Economic Variables
  - employment
  - population and households
  - income
  - housing
  - retail expenditures
  - spatial growth patterns

Relationship of the Local Economic Overview to the Marketability Analysis Process



Demand Side Economic Variables

- Employment
  - Total Employment for the Subject Market Area
  - By NAICS (formerly SIC) Code
  - Major Employers and Industries
    - Economic Base Analysis
  - Unemployment
- Sources of Employment Data
  - Regional Planning Agencies
  - Metropolitan or City Planning Agencies
  - University forecasting centers
  - Department of Labor for the State
  - Local Development Agencies

CALIFORNIA LABOR MARKET BULLETIN

STATISTICAL SUPPLEMENT

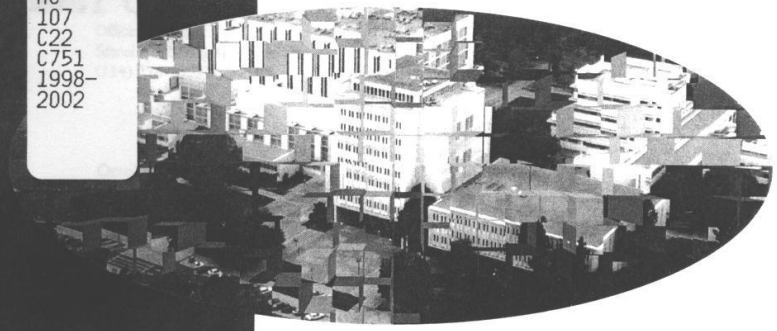
MARCH 1996

GUIDE TO TABLES

Prepared in cooperation with the Bureau of Labor Statistics and of the U.S. Department of Labor by the Labor Market Information Group, P.O. Box 826880, Sacramento CA 94280-0001, (916)

Demand Side Economic Variables

- Population and Households
  - Population and Number of households and families, population in group quarters
    - Household: includes all the persons who occupy a housing unit
    - Family: includes a householder and one or more persons related to the householder by birth, marriage or adoption.
  - Composition variables
    - Age distribution
    - Education and Occupation
    - Income Distribution
    - Household Size
- Sources of Population Data
  - Regional Planning Agencies
  - Metropolitan or City Planning Agencies
  - University forecasting centers
  - Department of Labor for the State
  - Local Development Agencies



1998-2002

Economic Forecast

FOR SOUTHERN CALIFORNIA AND ORANGE COUNTY

October 1997

INSTITUTE FOR ECONOMIC AND ENVIRONMENTAL STUDIES

SCHOOL OF BUSINESS ADMINISTRATION AND ECONOMICS

CALIFORNIA STATE UNIVERSITY, FULLERTON

Demand Side Economic Variables

- Income
  - Mean, Median and per Capita Income
  - Income Distribution
- Data to Gather and Analyze
  - Number of existing housing units
  - New Construction
  - Types of existing and newly constructed housing units
  - Occupancy and vacancy data
  - Price level
  - Compositional data concerning the housing stock
    - size, age, style, stories, etc.
  - Mortgage interest rates and credit availability
  - Demolitions and net conversions

Demand Side Economic Variables

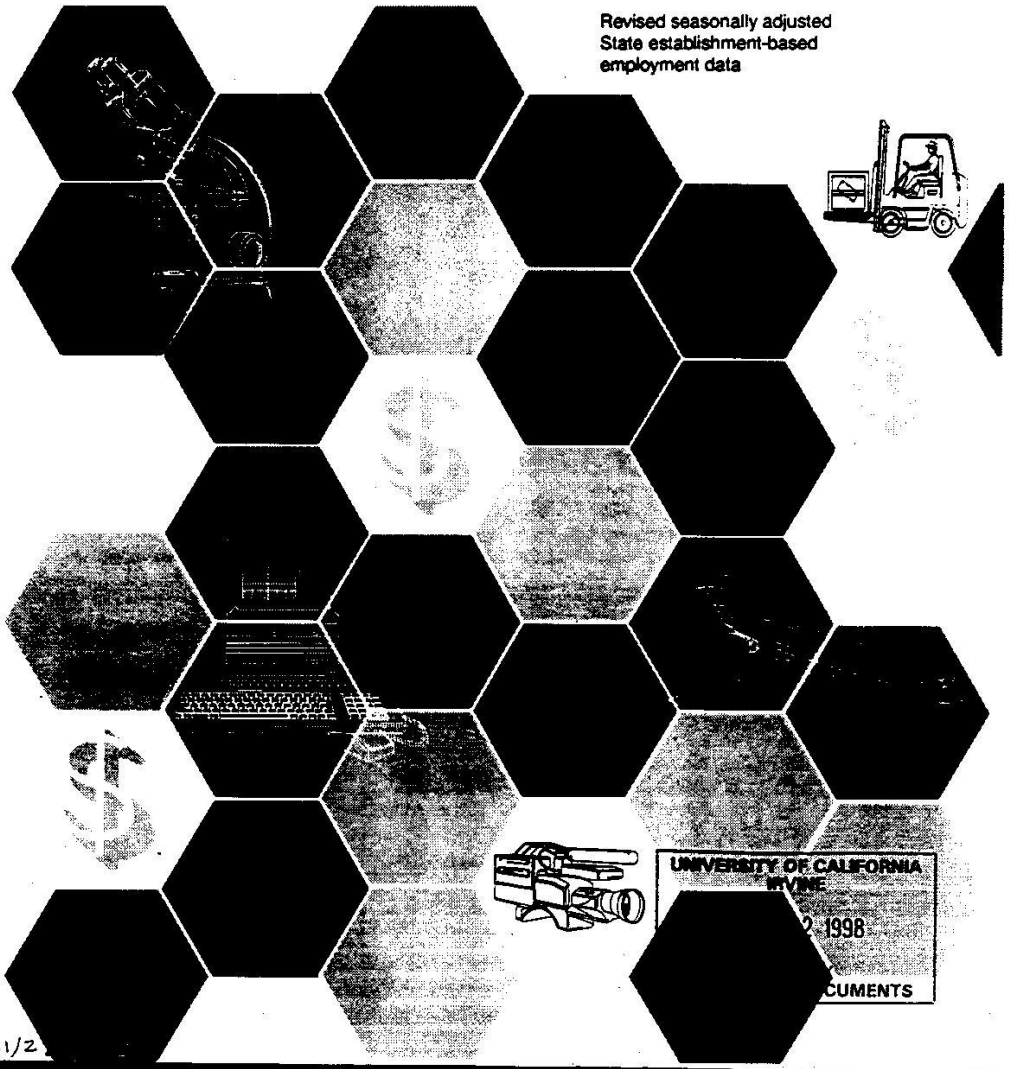
- Retail Expenditures
  - The retail SIC Codes (generally codes 44)
  - Characteristics of and differences among convenience, neighborhood, community, regional and super-regional shopping centers

- Data to Gather and Analyze
  - Sales by retail category or NAICS (SIC) code
  - Typical sales volume per square foot of space for different retail establishments
  - Tenant mix in successful shopping centers by type of center
  - The percentage of income spent by consumers on different retail products or spent in different retail establishments
  - Should prepare or obtain forecasts for expenditures by retail categories and changes in the purchasing power of the population in the study area

EMPLOYMENT AND EARNINGS

U.S. Department of Labor
Bureau of Labor Statistics
March 1998

In this issue:



California. Equalization, State Board of.

cd

http://www.boe.ca.gov/

Taxable Sales In California (Sales & Use Tax)

During 1995

Thirty-Fifth Annual Report

RETAIL SALES LEAKAGE ANALYSIS								
Retail Sales per Capita (2001)								
	Regional Total		Los Angeles Cty		Pomona		Leakage In/(Out)	
Item		Pctg.		Pctg.		Pctg.	Region	County
Apparel Stores	394.54	4.9%	387.70	5.2%	71.90	1.6%	(322.64)	(315.81)
Gen. Merchandise Stores	1,244.71	15.5%	1,118.52	15.0%	397.54	8.6%	(847.17)	(720.98)
Grocery Stores	479.78	6.0%	436.82	5.8%	350.75	7.6%	(129.03)	(86.08)
Restaurants & Bars	1,034.39	12.9%	1,033.35	13.8%	567.84	12.3%	(466.55)	(465.51)
Home Furn. & Appliances	367.67	4.6%	348.29	4.7%	169.97	3.7%	(197.70)	(178.32)
Building Materl./Farm Impl.	642.99	8.0%	542.63	7.3%	641.74	13.9%	(1.25)	99.10
Auto Dealers & Supplies	1,611.19	20.1%	1,472.35	19.7%	1,131.23	24.5%	(479.96)	(341.12)
Service Stations	761.15	9.5%	741.30	9.9%	719.66	15.6%	(41.49)	(21.64)
Other Retail Stores	1,488.78	18.6%	1,397.72	18.7%	561.05	12.2%	(927.72)	(836.66)
Retail Sales Total	8,025.18		7,478.69		4,611.67		(3,413.51)	(2,867.02)

Demand Analysis

- Housing Market
  - Population forecast
  - Income
  - Household Size
  - Age
  - Rental versus owner-occupied
- Retail Market
  - Population forecast
  - Disposable income - available for retail sales
  - Household size
  - Spending patterns

Demand Analysis

- Office Market
  - Employment by NAICS and SIC codes
  - Occupied office space percentage
  - Occupied detached office space percentage
  - Typical size of occupancy

Supply Analysis

- Must be performed in relationship to the market that is being analyzed.
- For Example: the market for new residential construction
  - The Supply of New Residential Construction
    - Number of new residential construction
    - affected by: price of land, construction labor, financing, materials and risk
    - The number of builders in the market
    - Builders expectations about profits
    - Seasonality
  - The Supply of Resale Units
    - Economic factors such as employment and layoffs
    - Employee relocation
    - Reduction in household purchasing power
    - Family life cycle - changes in household needs due to maturing population
    - Mortgage interest rates
    - Price of substitute housing

Supply and Demand Interaction

- Indicators of Oversupply or Excess Demand
  - Vacancy (or occupancy) rates
  - Absorption Rates
  - Demand compared to supply that suggests an excess of supply (or demand)
  - Rising (or declining) prices and/or rents
  - Lack of Sale transactions
- Important Questions to Ask and Answer
  - Do the current trends in absorption, vacancies etc. make sense and support the demand and supply conditions?
  - What is the current stage of the real estate cycle?
  - How long might these observed conditions persist?

Summary of the Basic Concepts

- Property Productivity Analysis
  - Physical and market appeal attributes of the site and the structures
  - Legal and Regulatory constraints
  - Location attributes
    - Urban Growth and the forces that influence them
- Market Area Concepts
  - Time-distance relationships
  - Market or Trade Area (population projection area)
- Demand Concepts
  - Major economic variables
    - Employment
    - Population and Households
    - Income
    - Housing
    - Retail Expenditures
    - Spatial Growth paths

Summary of the Basic Concepts

- Supply Concepts
  - Stock of competitive properties
  - Changes in the stock
  - Influences on the supply of new construction
- Supply and Demand Interaction Concepts
  - The significance of equilibrium analysis
  - Indicators of disequilibrium
    - Vacancy rates
    - Absorption rates
    - Residual demand/supply imbalance
    - Price/Rent changes

Demand Side Economic Variables

- Housing
  - Housing or Dwelling Unit versus Structure
  - Housing Unit versus Household
  - Single-family detached versus single-family attached
  - Single-family versus multi-family structures
- Sources of Population Data
  - Regional Planning Agencies
  - Metropolitan or City Planning Agencies
  - University forecasting centers
  - Department of Labor for the State
  - Local Development Agencies

Feasibility Rent

Definition:

The rent (income) required to attract new construction for a specific property type.

Rent can be expressed in either monthly or annual amounts.

Feasibility Rent an example

Property Description:					
50,000 square foot metal warehouse building					
5 acres of land (217,800 sf)					
Market Data:					
Property Capitalization Rate					10.0%
Land Value	217,800	$	1.84	$	400,000
Building Cost	50,000	$	16.00	$	800,000
Vacancy and Collection loss					8.0%
Management					5.0%
Variable Expenses				$	45,000
Insurance				$	1,800
Taxes				$	16,200

Feasibility Rent
an example

Cost Approach:	
Building Cost	$ 800,000
Land Cost	$ 400,000
Total Cost	$ 1,200,000
Required Net Operating Income	
Total Cost	$ 1,200,000
times Overall Rate (Ro)	10.0%
equals Required Net Operating Income	$ 120,000

Feasibility Rent
an example

Effective Gross Income Calculation		
Net Operating Income	$	120,000
Variable Expenses	$	45,000
Insurance	$	1,800
Taxes	$	16,200
Total Expenses & NOI	$	183,000
Calculation of Management Charges		
Total Expenses & NOI	$	183,000
divided by 0.95		0.95
(Mgt Rate 1-.05)		
Effective Gross Income	$	192,630
Management Charge	$	9,630

Vacancy and collection loss calculation		
Effective Gross Income	$	192,630
divided by 0.92		0.92
(Vac & Coll 1-.08)		
Potential Gross Income	$	209,380
Feasibility Rent		
Potential Gross Income	$	209,380
divided by GBA		50,000
Annual Rent per SF	$	4.19

So That's

Basic Concepts of Real Estate Marketability Analysis

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