



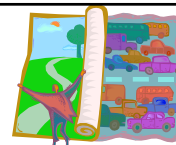
Introduction to Land Development

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RCB

Land Development



- ❑ Simply: process of converting land from one use to another
- ❑ Converting unimproved property into a site possessing features capable of supporting a desired activity
- ❑ Systematic approach to land use planning, analysis & engineering
- ❑ Categories
 - Commercial
 - Industrial
 - residential



Commercial Development

- ❑ Located to minimize consumer transportation requirements
- ❑ Office, retail, wholesale, financial, general services, traveler needs
- ❑ Success – function of economic power of supporting population
- ❑ Downtown central business district, outlying shopping districts, neighborhood facilities



Industrial Development

- ❑ Light to heavy processing of materials for production of consumer goods
- ❑ Industrial parks, urban areas, stand-alone facility
- ❑ Depend on favorable social/political factors, affordable property, availability of material and labor, climate, topography, transportation access, availability of sewer and water, future expansion capability, environmental compatibility
- ❑ Increased used of brownfields – referred to as “redevelopment” projects
 - Productive use of land can be regained



Residential Development

- Largest percentage of land use
- Typical types
 - Single-family – single dwelling unit (detached or attached)
 - Multi-family – unity contains more than 1 unit
 - Manufactured housing – factory-built housing that is then transported to site



History



- Land development found in Egypt, Greece, Rome
 - Had complex roadways, aqueducts, commercial markets, & residential areas
 - Battled problems of transportation, waste disposal, water supply, population density, drainage, security, complaining neighbors, etc.
- Factors influencing suburbanization of America
 - Advancement of modern transportation
 - Rapid population increase in cities during first part of 19th century

History

- 1700s – homes, shops, public buildings, hotels, places of worship & commerce interspersed throughout urban areas
 - Lifestyle whose primary mode of transportation was horse and foot
 - Shopkeepers often lived above their stores or within 1 mile of store



History



- Before 19th century
 - Distinction between city and suburbs both social & economic
 - Aristocracy lived at core of city near places of culture & commerce
 - Denizens of outer core
 - Further away from available services
 - Perceived inferior
- Congestion & need for more affordable housing forced people to move where land more available & less expensive
 - Evolution of transportation technologies changed city from a “walking city” to a “commuter city”
 - Outer fringe areas became accessible – shift in residential status
 - Suburbs now destination of upper class – move away from inner city’s unattractive squalor

Mass Transit



□ Omnibus

- Established in 1829 in New York
- Urban counterpart of stagecoach
- Gave rise to new traveler - commuter

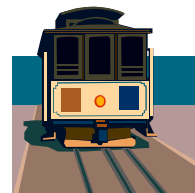


Mass Transit

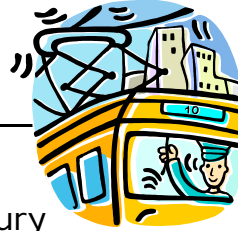


□ Horsecar

- Combination steam railroad & omnibus – replaced omnibus
- Popular in 1850s
- Smoother & faster than omnibus
 - 6-8 mph



Mass Transit



- Electric streetcar
 - Replaced horsecar by turn of century
 - Average speed 10-15 mph
 - Pattern of suburbanization still linear due to rails & power lines for their operation



Automobile

- Model T cost \$950 in 1914, \$290 in 1924
 - Assembly line
- Auto registrations in 1913 – 1 million; by 1927 was 26 million
- Suburban development freed from limitations of rail lines
- Increased amount of developable land with access to lands between rail corridors



Suburbanization

- ❑ Rate of new houses between 1922 – 1929 was 883,000 units/year
 - More than double any previous 7-year period
- ❑ More land available with auto and traveling convenience improved
 - Densities of development decreased
 - Lot sized increased
- ❑ New construction techniques – decreased cost of new construction



Suburbanization



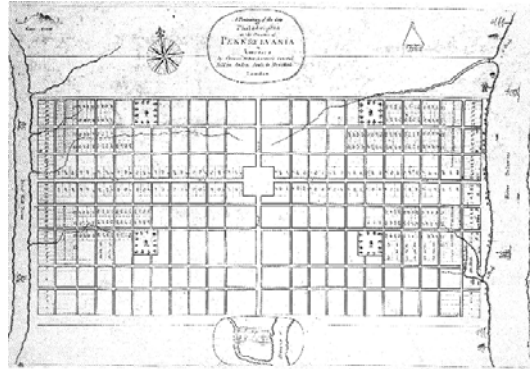
- ❑ Latter part of 19th century
 - Suburban single-family dwelling ⇒ viewed as sign of success & reward for hard work
 - Architectural style changed ⇒ row houses or farms replaced with manicured lawns and picturesque gardens



Early Subdivision Development

□ Gridiron street pattern

- Simple
- Maximized no. of lots
- Easy to survey



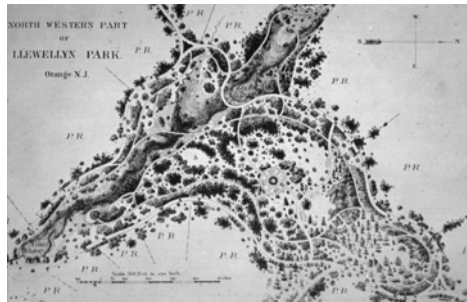
Early Subdivision Development

□ Late 19th century ⇒ change

- Preserve natural beauty with open spaces within development
- Curvilinear street pattern
- Grandeur accomplished with wide streets and minimum setback distances



Llewellyn Park, New Jersey

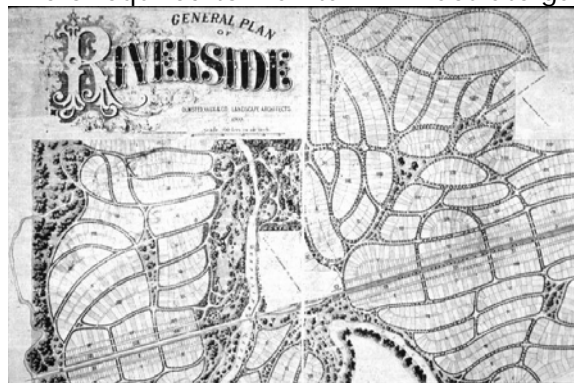


*Thomas A. Edison in front of his home,
Llewellyn Park, Glenmont, Orange,
New Jersey, June, 1917.
SI neg. # 85-8771.*

- ❑ 400 acres owned by Llewellyn Haskell and developed by Alexander Jackson Davis
- ❑ Included curvilinear streets, 59 acres of natural green space
- ❑ Average lot size 3 acres
- ❑ Covenants: no factory, shop, slaughterhouse, or other place of industry permitted
- ❑ Fences prohibited

Riverside, Outside of Chicago

- ❑ 1600 acres developed by Frederick Law Olmstead
- ❑ Lots 100' x 225'
- ❑ Amenities: lake & 700 acres for parks & recreation
- ❑ Houses set back 30' from street
- ❑ Homeowners required to maintain immaculate gardens



Stock Market Crash

- ❑ October 1929
- ❑ Ended housing boom
- ❑ Residential construction decreased by 95% between 1928-1933
- ❑ Emergency Farm Mortgage Act of 1933 – intended to reduce rural foreclosures
- ❑ Home Owners Loan Corporation (HOLC) – provided low-interest loans to recover homes lost through forced sale
 - Repayment period 20 years versus typical loan of 5-10 years

Stock Market Crash

- ❑ National Housing Act of 1934 – created Federal Housing Administration (FHA)
 - FHA-secured loan only required 10% down payment ⇒ about 1/3rd what saving and loan associations required
 - Repayment period increased to 25-30 years with loans fully amortized
 - FHA set minimum construction standards for houses mortgaged under program
 - 332,000 housing starts in 1937 ⇒ 619,000 by 1941

World War II

- ❑ Another slowdown in residential construction
- ❑ Housing starts decreased to 139,000 in 1944
- ❑ End of war start of Baby Boom Generation
- ❑ Servicemen's Readjustment Act of 1944 – created VA mortgage program like FHA
- ❑ Housing starts 1,015,000 in 1946 ⇒ 1,430,000 by 1949

Post WWII

- ❑ Housing designers developed innovative mass production
 - Levittown on Long Island
 - 17,400 dwellings from 4,000 acre potato farm

Area Planning

- ❑ Consider area's present and future growth
- ❑ Foster livable environment
- ❑ Safeguards property values
- ❑ Regulations guide development to protect
 - Developer, public, tax officials, municipal engineer, health department, fire chief, educator and recreation officials, residents, land planner, local governing body

Planning Objectives

- ❑ Improve quality of life
 - Lower rates of crime, suicide, and disorders associated with urbanization
- ❑ Provide safety to inhabitants
 - Safety in travel, safety from fire, safety from crime, safety from disease, safety from peril
- ❑ Provide reasonably quiet environment
- ❑ Affordable housing
- ❑ Economic development
- ❑ Historic preservation
- ❑ Environmental protection
- ❑ Aesthetics
- ❑ Urban design issues

Land Planning

- Purpose
 - Addresses ways of providing services in efficient manner
- GIS effective method of facilitating planning process
- Enabling legislation
- Types
 - Metropolitan, community, neighborhood
- Legislation may require planning initiatives
 - Example: Urban Mass Transportation Act of 1964, Clear Water Act

Planning Process

- Formulate a plan
 - Area goals over area of 20-25 years
 - Inventory current assets
- Implement plan
 - Utilize generalized land use maps, zoning maps, zoning ordinances, subdivision regulations, urban renewal, codes for building, electrical and plumbing
- Plan maintenance
 - Periodic modifications may be necessary to update plan

Land Development Team - Possibilities

- ❑ Client
- ❑ Financial Institution
- ❑ Land Surveyor
- ❑ Civil Engineer
- ❑ Landscape Architect
- ❑ Architect
- ❑ Project Designer
- ❑ Attorney (land use and other)
- ❑ Urban Planner
- ❑ Transportation planner
- ❑ Environmental specialist
- ❑ Market analyst/researcher
- ❑ Real estate broker
- ❑ Real estate specialist
- ❑ Economist
- ❑ Geotechnical engineer/geologist
- ❑ Structural engineer
- ❑ Archeologist
- ❑ Public approval agencies
- ❑ Citizens
- ❑ Others (sociologists, recreational specialists, cultural and education specialists, other engineers, etc)

Land Development Team

- ❑ Engineer, planner, surveyor
 - Intimate part of development team
 - Usually first on the site and last to leave upon completion
 - Help guide and direct process from start to finish