

ALS Pre-Design 1

Chapter 1

HISTORY

Rectilinear pattern:	agricultural
Circular:	herding
Radiocentric:	incremental urban growth
Greek Town (Hippodamus):	rectilinear
Roman Town (Vitruvius):	rectilinear enclosing walls and two main streets: : Cardus : Decumanus : commercial town (oppidum) or military camp (castrum)
Medieval town:	: absence of geometry : walled for defense
Renaissance town:	: Town Square (focus) : ideal city was a star shape, military town
Baroque Town Planning:	: grew from Renaissance : Made use of the boulevard (connected the various parts, expanding the city) : Versailles, rebuild of London in 1666, Washington DC, modern Paris

U.S.

Under Jefferson, rectilinear land division which led to states
Established worker towns (Lowell, Mass) and garden suburb towns (Llewellyn Park, NJ)
Frederick law Olmstead introduced the urban park (Central Park & Prospect Park)
After the civil war, decline of the farmers, miners, etc. More factory and service workers.
City Beautiful movement: turn of the century – improve urban life.
Henry Wright and Clarence Stein: re-planned NY (Ecologically friendly)
In 1920's development of the Regional Planning Association of NY

Then came:

NRPB (National resources Planning Board)
WPA (Works Projects Administration)
PWA (Public Works Administration)

Post WWII:
emerged the regional metropolis
: cities abandoned public systems, never extended them out to suburbs
: suburban auto dependent shopping centers left the downtown centers for commercial offices.

URBAN FORMS

Concentric:
: concentric rings around a business center
: Type of transportation determines the pattern within each ring
: Rings blend into each other
: Center = Original Business Center
: Ring 1 = Old Housing, factories, etc
: Ring 2 = Turn of the century suburbs
: Ring 3 = Post WWII – low density suburban housing
: EX: Chicago, St. Louis, Detroit, Houston, Boston

Sector:
: Pie shaped wedges radiating from the center

Multiple Nuclei Pattern:	: several sub centers : Finger plan: development occurs along transportation routes : Cluster plan: varying centers of activities : Satellite pattern: similar to cluster, but has a distinct center – usually the old city
Linear:	: in a line connected by a transportation spine : “Megalopolis” describes extensive linear arrangements of cities
Rectilinear:	: streets and blocks at right angles
Radiocentric:	: circular urban form with radial bands of development. (Typical of cities that grew over time) : Star or Finger
Ring Shaped:	: linear form encircling an open area
Sheet:	: extensive urban area without focal points, routes, or forms. (Urban or suburban sprawl)
Satellite:	: urban developments, each with their own core, around a major urban center.
Constellation:	: similar to satellite, but without a major center.

NEIGHBORHOOD CONCEPT

As per Clarence A. Perry (The Neighborhood Theory in 1929):

1. No major traffic through residential areas
2. Interior streets to use cul de sacs, curves, low volume
3. Population tbd by number of people to support 1 school
4. Focal point to be school
5. Occupy 160 acres. 10 families per acre. No child to walk more than ½ mile to school
6. served by shopping, church, etc.

In 1942 Clarence Stein wrote similar theories and implemented them:

Clarence Stein 1882–1975, American architect, b. New York City, studied architecture at Columbia Univ. and the Ecole des Beaux-Arts. Stein worked in the office of Bertram Grosvenor Goodhue, where he assisted in the planning of the San Diego World's Fair (1915). Along with Lewis Mumford and Henry Wright, Stein was a founding member of the Regional Planning Association of America, a group instrumental in importing Ebenezer Howard's [garden city](#) idea from England to the United States. Stein and Wright collaborated on the design of Radburn, New Jersey (1928–32), a garden suburb noted for its superblock layout. Stein wrote *Toward New Towns for America* (1951).

Sir Ebenezer Howard 1850–1928, English town planner, principal founder of the English garden-city movement. His *Tomorrow: a Peaceful Path to Real Reform* (1898), reissued as *Garden Cities of To-morrow* (1902), outlined a model self-sustaining town that would combine town conveniences and industries with the advantages of an agricultural location.

As a result of the first publication he was able to form (1899) the Garden City Association, and, in 1903 Letchworth, the first English garden city, was founded. In 1920 he organized Welwyn Garden City.

garden city, an ideal, self-contained community of predetermined area and population surrounded by a greenbelt. As formulated by Sir Ebenezer [Howard](#), the garden city was intended to bring together the economic and cultural advantages of both city and country living, with land ownership vested in the community, while at the same time discouraging metropolitan sprawl and industrial centralization. The garden city was foreshadowed in the writings of Robert Owen, Charles Fourier, and James Silk Buckingham, and in the planned industrial communities of Saltaire (1851), Bournville (1879), and Port Sunlight (1887) in England. The term *garden city* was introduced in Howard's book *To-morrow: A Peaceful Path to Real Reform* (1898); it was revised (1902) under the title *Garden Cities of To-morrow* (reedited by F. J. Osborn, 1946). Howard organized the Garden-City Association (1899) in England and secured backing for the establishment of Letchworth (1903), designed by the architects Barry Parker and Raymond Unwin, and Welwyn Garden City (1920), designed by Louis de Soissons. Neither community, however, was an entirely self-contained garden city. The idea spread rapidly to Europe and the United States, but it commonly resulted in residential [suburbs](#) of individually owned homes. Under the auspices of the Regional Planning Association of America, the garden-city idea was more fully realized in the community of Radburn, N.J. (1928–32) outside New York City designed by Clarence Stein and Henry Wright. Most of these satellite towns, however, failed to attain Howard's ideal, since local industries were unable to provide employment for the inhabitants, many of whom commuted to work in larger centers. The congestion and destruction accompanying World War II greatly stimulated the garden-city movement, especially in Great Britain, where the passage of the New Towns Act in 1946 led to the development of over a dozen new communities based on Howard's idea. The open layout of garden cities has had a great influence on the development of modern city planning.

HOUSING TYPES

Single family

Town houses became possible when densities began to exceed 5 to 6 units per acre.

Two family houses – less costly than single

Row Houses – 2 stories high, basements, 20 to 35 feet wide. Sound is a problem.

Walk up Apartment – 3 stories in height.

High Rise

HOUSING PATTERNS

Densities = net or gross

Ratio of inhabitants to land

Net does not include streets, gross does

Lower densities:

: expensive utility distribution costs

: dependent on automobile

: for public transit to be effective and efficient need moderate density = 30 persons per acre. (30 persons is a high but livable density in suburban America, but common in European towns)

Street Front Pattern: : linear with houses lining the street

End On Pattern: : Rows of units on small streets at right angles to the street. Reduces street frontage and increases lot depth.

Court Pattern: : units face into a common open space.

Cluster development: : dwellings are clustered, open space is common.

PUD: : zoning designation used to achieve the cluster development

: large developments

: mixture of uses

: requires phased development

: Urban redevelopment and urban renewal are PUDs

: reintroduce diversity and mixture

CHAPTER 2

Indigenous Architecture: : accepted style of design

CONSIDERATIONS

1. relationship between site and structure
2. respond to site (climate, sun, vegetation)
3. be seen in the landscape
4. serve its purpose
5. express its purpose
6. economy of means to achieve its purpose
7. utilize technologies
8. have human scale
9. utilize materials appropriately
10. utilize local building techniques
11. be graceful
12. exhibit exuberance
13. hierarchy of parts
14. be interesting to look at
15. relationship between interior and exterior
16. integrity
17. expressive of the human spirit
18. demonstrate architecture's basic principles
19. have a concept
20. encourage human contact

Anthropomorphic: : associations with the human characteristics

Human body is most important measurement

Fathom: : measure of spread of arms

FORM

Point: : position. No dimension

Line: : when a point moves. Has direction and length. No thickness

Plane: : Line in motion. Has position, direction, length. No thickness

Volume: : 3D. Plane in motion.

Shape: : outline

Size: : physical dimension

Color: : quality of reflected light

Texture: : surface

1. Space: : 3D volume enclosed by building elements
: should feel secure, oriented, and at ease

2. Form: : convey different senses

3. Scale: : Reference to the human body

4. Proportion: : relationship between its parts
: order of importance: Primary, secondary, or supporting
: Provide harmonious order

Golden Section: : renaissance concept that the whole is divided so that the smaller part is to the larger as the larger is to the whole. $A:B=B:C$

5. Rhythm: : Regular occurrence of elements in time or space.

6. Balance: : Equilibrium

- a. Static= parts are equal in size and located about a reference axis
- b. Dynamic = parts are unequal in size and arranged about a reference point axis to compensate for their differences.

- 7. Symmetry: : Balanced arrangements
- 8. Light: : radiant energy perceived by the human eye
- 9. Color: : articulates form and space

HUMAN ELEMENTS

- 1. The Senses: : sound gives us an impression of size, shape, and material
: smell, touch, etc
- 2. Style: : conventional acceptable solutions
: maintains consistency and harmony
: may also be restrictive
- 3. Culture: : different cultures use buildings differently
- 4. Beauty: :
- 5. Architectural Design: : Is the organization of forms to serve functional needs
: materials and structure are the science (analyzed)
: form and space are the art (experienced or sensed)
- 6. Organizational Concepts:

Chapter 3

The Human Dimension

Housing projects = sterile

Old neighborhoods = vital, better to rehabilitate

Planning: Create an optimum environment for the widest range of human activity, social contact, privacy, stimulate senses, restful. Allow...not prescribe.

Man can adapt socially more than biologically and physiologically.

Efficient, specialized societies can collapse when effected by change.

Perception

Diversity of surroundings = mental capacity.

Substitute diversity in time for diversity in space (drive faster on an open highway).

Environment: Senses, memories, smells, experiences, etc.....

Images of the City (Kevin Lynch)

Urban Legibility: ability to recognize a city and organize it into a pattern
Basis of orientation
(Signs, posts, ability to find one's way around)

Imageability: quality of a place
Ex: new York, Paris, San Francisco
Leaves a mental image

5 elements structure mental images:

1. Paths: routes of circulation
2. Districts: sections having an identifying character
3. Edges: Boundaries, seams
4. Landmarks: points of reference
5. Nodes: centers of activity

These elements overlap (edge is a path; node is a landmark)

Sociopetal = encourages social interaction

Sociofugal = discourages it

Demographics

Demography: Statistical study of human populations

Census taking started in 1790 and continues every 10 years

Density: Number of people per unit of area

Population size: actual number of people in a given location

Sociological Considerations

Each individual lives in two interdependent worlds:

2 Social Groups:

Primary: one's intimate social interaction (close friends and family)
This association helps a person develop as an individual

Secondary: less intimate, more specialized (work friends)
Allows a person to give to society

Design for primary and social needs:

- : daycare facility at work
- : old age communities for interaction

Work Groups (Based on one's work or profession)

Broken up into Primary, Secondary, Tertiary Work Groups:

1. Primary: Deals with resources
Miners, fisherman, farmers
2. Secondary Takes the materials and produced by primary and converts them into products
food processors, factory workers
3. Tertiary: Services society
managers, salespeople, delivery, etc.

: In US and Europe, fewer primary and more service (tertiary) create larger cities

: In underdeveloped countries, improvements in health and food supply increase population. No opportunities in rural areas.

Use Network: pattern of places in a city used for work, home, recreation connected by convenient transportation

Human Factors (research)

Time and Motion Studies: Ex: Study the work processes of factories in relation to human operations for reasons of efficiency

Ergonomics: Design based on the mechanics of the human body
Study relationship between vision, body motion, and response time in product design

Office workstation design and Kitchen and bath design:

Time and motion studies in conjunction with ergonomics to create a good design

CHAPTER 4

Ownership

Land was first owned communally

Primogeniture: land passed from father to eldest son

In England, land was owned by the King and given to people in return for loyalty, support, military

Fee Simple: land could be transferred and used as the owner pleases.

Homestead Act: Passed by Congress in 1862. In America, land was transferred to private ownership. 160 Acres were free to anyone who built a house and lived on it for 5 years.

Catchment Areas

Geographic area from which the participants in an activity are drawn.

: also called market area, trade area, or tributary area

Increases and shrinks with the activity

Residential catchments are determined by local transportation systems.

: an extension of a transportation system may encourage the creation of a new catchment

Land Use and Value

Land Use depends on its role in a catchment area, location, topography and cost.

Eight basic categories of use:

- : Natural resources
- : Agricultural
- : Residential
- : Commercial
- : Industrial
- : Gov
- : Institutional
- : Open space/conservation

Vacant or improved, land is valued in relation to the use which will yield the highest return.

Comparison Method: other similar parcels (used for all classes of land)
Most accurate if data is available.

Residual Method or Income Approach method: Used for highly developed areas.
: Estimate potential income from improvements which would yield highest returns
(highest and best use)

Allocation Method: : used to determine value of improved properties. Deduct value of site improvements to get the value of the land.

Development Method: : depends on estimated development costs. Used when comps are not available.
: determine ultimate selling price of lot, cost to develop, time to develop, and net sale price.

Overimprovement and Underimprovement

Over: cost of improvement exceeds potential revenue or income

Under: Not built to maximize revenue

Surveys

Preliminary: basic for prep of architectural plans
Construction: precise condition of site and adjacent structures, bench marks
Possession: records completed development
2 types: Geodetic: spherical shape of earth (precision)
Plane: flat earth. Many kinds of plane:

1. Land Survey: description of land parcel
2. Topographic:
3. Route Survey: used by CE for roads or utility lines
4. Hydrographic: oceans, lakes, rivers
5. City
6. Aerial: Photography
7. Construction: system of markers

Topography

Surface features of an area

Contour interval: change in elevation between 2 contours. Smaller the scale of map, larger the interval.

Ground Slope: percentage: $V/H \times 100 = \%G$

<4% are flat	good for all activities
4% - 10%	are moderate
10%-50%	are steep and unusable
>50%	very steep. Subject to erosion

Storm drains:	.3% min
Sanitary sewers	.4% to 1.4%
Street surface drainage	.5% min
Planted or large paved	1% min
Parking area	5% max
Auto ramps	8% max
Sidewalks	10% max (15% for short)
Streets, paved drives	10% max
Lawns	25% max
Planted banks	50% max

Land Problems

: When water table is less than 6' below land surface
: pump out excavation site. Waterproof basement. Resist hydrostatic pressure
: rock close to surface of ground
: may need explosives
: soft clay, waterbearing sand or silt
: deeper foundations or piles. Remove clay, fill ,etc
: underground streams
: slides or faults
: restrict siting of structure
: land is unsuitable

Soils

: A level: Topsoil – organic and mineral material
: B Level: minerals
: C Level: partially weathered and fractured rock. Little biological activity
: D level: Bedrock

Organic or inorganic

: Gravel: 2mmmm
well drained, able to bear loads

: Sand: .05 to 2 mm
well drained and good foundation when graded

: Silt: .002 to .05
stable when dry or damp, not wet. Swells when frozen.

: Clay <.002
plastic when wet, Stiff when dry. Must be removed.

Chapter 5

Macroclimate: : depends on latitude, elevation, and proximity to water
: bodies of water reduce temperature extremes. More constant and moderate climate at islands and coastal areas
: Arid regions with low humidity experience greater temperature variations. Ex. Desert.
: southerly winds from carry moist air from the Gulf of Mexico
: cold Arctic air comes in from the North
: Mountains force winds to rise
: In the Sierra and coastal ranges, winds cool as it rises, clouds form and rain falls. Dry winds come down the leeward side of the mountain
: In Hawaii, the rain usually occurs on the leeward side.

Microclimate: : NOAA (National Oceanic and atmospheric Administration)
: solar radiation is a function of the angle between the ground and the direction of the sun's rays (Altitude)
: perpendicular to the ground is the greatest rays.
: Summer Solstice: max hours of sunlight
: Winter Solstice: least hours of sunlight
: Vernal and autumnal equinox: equal day and night
: Best is a south facing site
: Top of a hill is too windy
: Midway on the hill is best
: Fog and cold air settles in the valley

: Admit summer breezes while blocking winter ones
: Overhangs block summer sun
: Courtyards and porches allow summer breezes

Water Sites: : Cooler in summer and warmer in winter
: Cool during the day and warm at night
: small body of water moderates the micro as oceans moderate the macro
: Best to face south east (morning exposure, less winter glare)
: Upper or middle slopes are best as opposed to crest or base

Albedo: : fraction of radiant energy that is reflected. 0 is a flat black surface which absorbs all heat. 1 is a mirror.

Conductivity: : speed with which heat passes through a material. Metals high, sand and soil low.

Climatic Considerations

Comfort Zone: : between 63 and 71 in winter
: between 66 and 75 in summer
: humidity between 30% and 60%. At 75% = discomfort

Winds : <50 feet per min not noticed
: 50 to 100 feet per minute is pleasant
: 100 to 200 feet per minute is pleasant and noticeable
: 200 to 300 feet per minute is drafty
: more than 300 is uncomfortable

Air pollution: : Temperature Inversion Phenomenon
: air temp at ground level is lower than at some elevation above ground. The cold air at the bottom is heavier than the air above it and cannot move upward. It is trapped and releases pollutants.

- Noise:
- : One decibel is the smallest difference between 2 sounds that the human ear can detect. Each increase of 10 decibels, the human ear perceives as 10 times as loud.
 - : Comfort is 50-60 decibels (kitchen, conversation)
 - : 30 decibels (sleep, study, whisper)
 - : 85 decibels is the safety threshold (90 -100 is a rock band)

 - : Doubling the distance between source and ear diminishes sound level 6 decibels.

 - : Doubling the distance between source and ear reduces sound intensity to $\frac{1}{4}$.
 - : (Except on freeways. Sound level drops 3 decibels and intensity drops to $\frac{1}{2}$ by doubling).

 - : Winds add a "white noise" – a blend of all sound frequencies which blurs out a specific frequency.

 - : trees thin out high frequency noises
 - : a wall close to the source reduces high frequency, but midway between the source and the ear does nothing.

Ecology

Old idea, new term.

George Perkins Marsh published "Man in Nature " in 1875.

: Introduction to the study of ecology

In 1920's formed Regional Planning Association of America

: Lewis Mumford and Benton Mackaye members

: In 1926 Clarence Stein and Henry Wright (2 members) wrote an ecologically based plan for the state of NY

: water, forest, soil, topo

: determined land uses appropriate to resources

: harmony between natural and human activities

Ecology: : science of the pattern of relations between a community of organisms and its environment.

Forms an ecosystem.

: an ecosystem may be a forest, desert, pond, manned space vehicle.

: ecosystems are constantly changing

: If one species is destroyed, the system will form new relationships.

: Simple, uniform ecosystems tend to be unstable.

: rural = natural ecology

: urban = man made ecology

: rural or urban = a balance must be sought.

CHAPTER 6

Circulation Systems

: Surface road systems most often determine the patterns of land use and utility systems

- Grid System: regular, simplicity, convenience, gives sense of orientation.
Radial System: can cause congestion at center. By-passes connecting outlying radials can be created
Linear System: congestion. No focal point. On and off is dangerous. Useful when it is parallel to an existing artery.
Curvilinear: responds to topography. Interesting.

Vehicular Circulation

Freeways

- Arterial streets or highways 2 or 3 lanes; on/off ramps; traffic signals
Collector-distributor stop signs; sidewalks; between local & arterial
Local loop, cul-de-sac, low density

Design Criteria

- : Crown to curb & Gutter: 1/8" to 1/2" per foot
: 6" curb and gutter on heavy traffic streets
: minor streets have 4" roll curbs or gravel.
: made of: concrete, asphalt, gravel, decomposed granite
: Typically 11'-12' wide
: Typical 2 lane highway: 9' shoulders on each side = 40'-42' wide
: 8' wide parking lanes for parallel
: 16'-24' wide parking for angled or perpendicular
: landscape strip: 7' wide for trees; 4' fro ground cover
: roads consist of straight sections (tangents) and curves
: Simple curves = OK
: Broken back = 200' tangent between
: Reverse = 100' tangent between
: Compound = Avoid altogether
: Avoid intersections slightly offset
: Avoid intersections where the angle is less than 80 to 85
: Cul-de-sacs should be 400' max with an 80' diameter turn around
: max depth at loop street = 700'
: max length of a block = 1600'
: 12' min curb radii at minor street intersection and 50' at major
: traffic signal at intersection where volume exceeds 750 vehicles per hour
: At intersection with more than 3000 cars per hour, grade separation required
: Cloverleaf
: Direct left-turn (where 2 expressways intersect). 3 level structures. More lanes operate at high speeds.
: Diamond (where expressways intersect secondary roads)

Parking

- Cartridge Roads: on site loop distributor-collector drive with access to the local road
: 8'-4" (9') wide stall (allows 20" of clearance between cars) and 18-20' long
: 12' wide circulation aisle
: the smaller the angle, the less the projection and bay width has to be:
: 30 = 15'-7" projection; 43'-2" bay width
: 35 = 16'-7" projection; 45'-2" bay width
: 40 = 17'-6" projection; 47'-0" bay width

- : 45 = 18'-2" projection; 48'-4" bay width
- : 90 = 60 to 64 feet
- : 90 degree parking can accommodate more stalls than 60 or 45. Convenient and less dangerous with more aisle room
- : 60, 45, or 30 establishes a 1 way circulation system – easy driving
- : in lots with attendants: 8' x 18' stalls and 20' aisles
- : 3,000 to 4,000 sq feet of parking for every 1,000 of shopping center
- : Ramps to new levels = 15% slope with an 8' transition

Pedestrian Circulation

- : area of a person = 3 sq ft
- : easy movement = 13 sq ft
- : crowd movement = 7 sq ft
- : no movement = 3 sq ft
- : Sidewalks = no less than 5' wide
- : Collector walks = no less than 6 to 10 feet wide

Public Transit

- Collective Transit System: needs at least a population density of 30 persons per acre.
- : Max distance to walk is ¼ to ½ mile
- : local bus = short trips in medium to high and long trips in medium (15 to 30 mph)
- : express bus = between medium density areas and within high density areas (40 to 60 mph)
- : Rail = between areas and within high density (40 to 70 mph)

Handicapped

- : walks = 1:20 (5%)
- : curb cut = 3' plus flared sides with a max slope of 1:10
- : ramp = 1:12 (8.3%); 3' wide min; 30' long max; 5' long landings; handrails if rise is greater than 6" or run is greater than 72".
- : HC parking space no more than 200' from building entrance
 - : 7-50 car lot = 2 HC spaces
 - : 51-100 car lot = 3 HC spaces
 - : 101- 150 car lot = 5 HC spaces

Service and Utilities

- : wastewater lines need to be designed firstpitch and gravity
- : water and wastewater at least 10' away. Wastewater at center of street.
- : gas and electric under sidewalk.

Water Supply & Distribution

- : Supply is installed in branch or gridiron systems. Looped feeder is good in high density areas. Dual main systems service both sides of the street.
- : Water main = 6" in residential areas; 8" in high density
- : Main lines valves are located that no single break in line effects more than 500 feet of water main.
- : When density is under 1,000 persons per sq mile, no public water supply.

Wastewater

- : to convey solid material = velocity of 2 ½ feet per second to 10 feet per second
- : to convey solid material = ½% to 2% slopes

Electric

- : electric is generated by turbines powered by steam produced by coal, oil, gas or water

CHAPTER 7

Regulation

- : of ownership
- : of land itself
- : of structures (materials, fire safety, electrical and mechanical equipment, etc)

Types of owners

- Joint Tenancy: : each tenant has a share in the whole. Interest of each automatically passes to the survivors
- Partnership: : upon death of a partner, the partnership may be dissolved and the assets distributed among surviving partners and estate of deceased.
- Corporation: : independent of its shareholders. If a shareholder dies, his share passes on and corp stays in tact.
- Trustee: : hold property for benefit of another.

Federal government land is administered by the US Bureau of Land management

Types of ownership

1. Fee Simple or Fee Absolute (non conditional)
2. Condo
3. Coop (owns shares of stock of a corp that owns the land)
4. Leasehold (rent. Can sublet sometimes)
5. Sale and leaseback – sells the property and then leases it back

Transferring Title

Deed

2 methods used to finance:

1. mortgage
2. deed of trust – title is held by a fourth party called a trustee. Foreclosure can happen under the power of sale clause without court proceedings

First mortgages take priority to second mortgages.

Property Descriptions

- North –South lines = Meridians (some are called principal meridians)
- = between the principal are called range line
- East-West Lines = Parallels (Some are called base lines)
- = between the parallels are called township lines

Check = each 24 mile square created by the meridians and parallels

Townships = Each check is divided into 16 townships (each one 6 miles square)

: each township is numbered and designated as North or South of the base line and east or west of principal meridian.

Sections = Townships are subdivided into 36 square sections (each one square mile)

Quarters = Sections are divided into 4 quarters and the

Deed Terms

- Covenants: : limit the height, size, or appearance of a building
- Easements: : acquired right of use, without ownership.
- Party Wall Agreement: : each has an easement of support in the other half of the wall.
- Right-of-way: : Allows one person to traverse the land of another

Eminent Domain:

: an owner must relinquish his property to gov if needed for a public project.

: Involves a condemnation proceeding. The compensation is the fair market value of the land.

: Public utilities also enforce eminent domain in the form of an easement for access.

Zoning

: introduced in NY in 1916

: health, welfare, and safety

: After the depression, to stimulate building, the gov started home loans guaranteed by the Federal Government. To safeguard investment funds, began the uniform standards of construction.

: protects property values

: regulates use of land

: protects against nuisances (factories)

: Protects against undesirable businesses (porn)

: protects against danger (hazardous)

: protection of light, air, open space.

Nonconforming use: : building that was built prior to zoning and now does not meet the codes

Conditional use: : use that is permitted when it normally is not

Variance: : where the application of ordinance would cause hardship to the owner.

Spot Zoning: : make a change in the zoning ordinance for a particular area

Building Codes

: regulate the design of structures. Safety and soundness of structures.

: UBC – Northeast

: BOCA – west

: SBC - South