



AICP Exam Study Material 2008

Census Data / Demographics / Forecasting

- Metropolitan Statistical Area (MSA): consists of one or more counties containing an urbanized core of over 50,000 residents – this classification system has been used by US Census since 1950
- Census Tract: small Census unit with approximately 4,000 residents
- Block Groups: the smallest Census units
- The 1940 Census was the first to reveal a pattern of cities losing ground to suburbs
- In 1900, 40% of the population was classified as Urban for the Census. In 1990, 75% was Urban.
- Percent of women in workforce (2003): females are 50.8% of the labor force and males are 49.2%
- Percent of minorities in US (2006): 33% of US population was a group other than non-Hispanic white.
- According to the US Census, the fastest growing state in the 1990s was Nevada with a 66% jump in population, and the second fastest in the 1990s was Arizona with a 40% increase in population.
 - Fast growth in population in NV, AZ suggests that securing adequate clean water supply is increasingly important as US population grows in areas where clean water supply is limited.
- Population estimates (2006) of major US cities (rounded off)
 - New York City 8,200,000
 - Los Angeles 3,800,000
 - Chicago 2,800,000
 - Houston 2,100,000
 - Phoenix 1,500,000
- Comprehensive plans require forecasting populations to estimate land use, housing, and transportation needs. The private sector draws upon such projections to make business decisions.
- Forecasting the need for housing includes a study of population trends, the existing supply of housing, vacancy rates, number of units that will be demolished and replaced, and household size.
- Rates of Homeownership: US Census 1900 there was 47% homeownership, 2000 66% homeownership
- Age Distribution Pyramid: graph shows that US population is aging, especially with large Boomer group
- Decreasing Family Size: average persons per family in US 1920 about 5, in 2001 about 3
- Step-down Methods of demographics: use ratio of population of community to a larger area
- Cohort Survival in demographics: birth rate, death rate, migration rate
- Estimates are a measure of a present or past condition that cannot be measured directly
- Projections are estimates of future populations based on statistical models
- Forecasts are estimates of future populations based on statistical models that include additional adjustments made to reflect assumptions of future changes
- Targets express desirable future populations based on policies and goals
- The smaller the area (cities, townships) and the longer the time period (10 years or more), the less likely a projection will be accurate. A large population base is less likely to exhibit short term variations.
- Demographic events important to statistics are birth, giving birth, moving, and dying.
- Population Pyramid shows the underlying demographic structure (in US, large swell in Boomer age, in some developing countries, large swell in younger ages, in Europe, large swell in older age)
- Cohort-Component method for population projections is most commonly used, where cohort is age group and component is demographics (fertility, mortality, migration)
- Distributed Housing Unit Method uses building permits data to provide estimates of housing units between Census decades then apply occupancy rates and average persons per household to derive population estimates.

- Linear Model: assumes that population growth or decline is a constant amount over time, represented by a straight line (communities in which growth or decline is stable)
- Exponential Curve: population growth or decline will occur at a constant rate over time (valid only for limited periods such as when fast-growing community doubles every 10 years)
- Modified Exponential Curve: shows population growth increasing at decreasing rate as approaches upper limit
- Gompertz Curve: shaped like an ‘S’ on a graph, describes a growth pattern that is initially slow, increases for a period, then flattens out as it approaches the limit
- Logistic Curve: shows population growth similar to Gompertz Curve with small initial growth followed by rapid growth then slower growth as upper limits are approached.
- Donald Newling is responsible for Population Density Model that describes how maximum population density changes in different stages in a community’s life cycle, resulting in growth or decline

Development plan and project review

- Developer is responsible for planning and execution of site development. Community planners review development proposals and approve projects that comply with relevant regulations.
- Development plan - work by architects, engineers, planners, financial consultants, landscape architects.
- For site development, a developer must consider constraints such as environmental, floodplain, wetlands, accessibility to transportation and utility systems, street standards, open space, lot size, and parking.
- An economic or market feasibility study evaluates potential costs of a development project and the potential for profit given market conditions.
- Density: most common measure of residential density is dwelling units per acre (du/ac). For dense urban projects, density may be measured in floor-area ratio (FAR), which is ratio of the gross building floor area to the net lot area of the building site. Net density is number of residential units per net developable area.
- ADA Accessibility Guidelines for Buildings and Facilities: national standard for pedestrian access and travel, provides minimum standards for all public and private facilities
- Telecommunications Act of 1996 clarifies the level of regulation that local governments can apply to service providers and provides for industry-wide competition
- Federal Communications Commission (FCC) regulates operational aspects of wireless services, including antenna frequencies, operating powers, and radio frequency emissions
- National Environmental Policy Act of 1969 (NEPA) all antenna structures must comply with NEPA, sometimes applicants must conduct an environmental assessment to investigate potential impacts
- National Historic Preservation Act of 1966 (NHPA) infrastructure providers must ensure that structures do not have an adverse effect on historic properties, including buildings, districts, objects, etc.
- Federal Aviation Administration (FAA) regulates structures within navigable airspace – towers above a certain height or within a certain distance of an airport must be registered with FAA and possibly lit
- Most states defer location of wireless infrastructure to local government control through zoning.
- Sign regulation is warranted on the basis of two public purposes: traffic safety and community aesthetics
- Tax Increment Financing (TIF) is a financing technique that allows a local government or redevelopment authority to target a group of contiguous properties for improvement – a TIF district – and earmark any future growth in property tax revenues in the district to pay for initial and ongoing improvements there.
- Site Planning Considerations
 - Locate compatible uses adjacent to each other.
 - Buffer incompatible uses with open space, trees and shrubs, fences, etc.
 - Minimize changes in the existing topography and vegetation.
 - Do not site buildings in floodplains
 - Restrict development on sensitive land (steep slopes, wetlands, filled areas)
 - Provide sidewalks along streets
 - Provide on-site bicycle storage
 - Identify and preserve good views
 - Break up parking lots with landscaped islands
 - Connect residential subdivisions to form a neighborhood.

Environmental Analysis

- Environmental analysis may include more than the natural environment and evaluate the social, cultural, educational, or economic environment in which a planning action will take place.
- National Environmental Policy Act (NEPA) process
 - Public and decision makers must be informed of potential environmental impacts prior to a decision being made about proceeding with a project or action
 - If a proposed action has no potential for significant environmental impact, no further analysis
 - If a proposed action might have potential for significant environmental impact, an Environmental Assessment must be prepared (does not require extensive research, describes a proposed action and likely environmental impacts of the action)
 - If a proposed action will have significant environmental impact, an Environmental Impact Statement must be prepared (lengthy document detailing all environmental impacts of a project)
- Sustainability: greater protection of natural resources for future generations
- National Environmental Policy Act (1969), administered by the new Environmental Protection Agency (EPA), required the preparation of environmental impact statements (EIS) before final decisions could be made to go ahead with federal and federally-funded projects.
- Sustainability: requires approaching matters based on their natural and geographic characteristics, not artificial and political units. Recognizes the interdependence of natural, built, political, economic, and organizational systems. Broad community participation in public decision making is essential.
- Air quality in the US is measured by whether a region complies with the National Ambient Air Quality Standards (NAAQS) for the six criteria area pollutants designated in the Clean Air Amendments of 1970: carbon monoxide, lead, nitrogen oxides, particulate matter, ozone, and sulfur dioxide
 - Nonattainment area is a geographic area whose air exceeds the primary standard for one or more criteria pollutants (example is Ozone in the Atlanta, St. Louis, and Chicago areas)
 - 1990 Clean Air Act Amendments established a list of toxic air pollutants for US EPA to regulate
- Impervious surfaces such as parking lots, roads, and rooftops preclude the infiltration of precipitation into soils and can significantly reduce groundwater recharge and increase surface runoff rates. Flood control structures such as detention basins attempt to mitigate this problem by slowing runoff flow.
- Floodplains are flat bottomlands adjacent to river channels – prone to flooding and pose a risk to human settlements. Floodplains naturally support riparian corridors, vegetation that flank a channel or lake
- Section 404 of the Clean Water Act authorizes US Army Corps of Engineers to issue permits for discharge of dredged or fill material into the waters of the US. Army Corps issues 404 permits.
- US Fish and Wildlife Service instituted National Wetlands Inventory in 1975 to determine extent of wetlands and open water habitats in US. Maps are produced from aerial photos and use USGS topo maps as base maps.
- NRCS (Natural Resources Conservation Service) publishes soil surveys with maps and descriptions for each county in US - Soil Conservation Act of 1935 created Soil Conservation Service (now NRCS) under USDA
- Slope is the rate of change in elevation between two points in a given area. The difference in height (rise over run) can be determined from surveyed points or estimated from the contour lines on a topo map. This calculation yields a number between 0 and 1, often converted to a percentage (0 is flat, 1 is vertical drop).
- Since 1988, US EPA requires newly installed Underground Storage Tanks to have leak detection mechanisms
- Solid Waste is regulated under Resource Conservation and Recovery Act (RCRA), which encourages solid waste management practices that promote environmentally sound disposal methods and maximize use of materials from waste. The US EPA implements RCRA – development of state plans is voluntary.
- Clean Water Act of 1972 has impacted wastewater treatment and receiving water quality. Act established the National Pollutant Discharge Elimination System (NPDES), a permitting program for all dischargers based on uniform minimum categorical standards.
 - Total Maximum Daily Load (TMDL) rule was put into place 2002 by EPA. Through the program, regulators establish a waste load allocation for the dischargers of industrial discharges, wastewater treatment plants, and others, and enables effluent credit-trading programs.
- Federal forests are managed by the US Forest Service and Bureau of Land Management. The National Forest Management Act of 1976 governs the planning process of the US Forest Service
- Leadership in Energy and Environmental Design (LEED): green building rating system that is a voluntary standard for developing high-performance, sustainable buildings

- Mitigation measures can avoid or reduce potential impacts on the human and natural environment. Identification of potential measures should evolve during impact assessment and inform project design
- Superfund Law of 1980 passed by Congress in response to the Love Canal disaster in upstate NY, it focuses on cleaning up hazardous waste sites
 - Brownfields Revitalization and Environmental Restoration Act of 2001 encourages brownfield development by providing federal liability relief to prospective purchasers of these properties and to persons who undertake cleanups of these properties
- Resource Conservation and Recovery Act (RCRA) focuses on the proper disposal of hazardous wastes
- Endangered Species Act of 1973 is cornerstone for protecting natural habitats to support and conserve endangered and threatened species. ESA jurisdiction covers all public and private land and water.
 - US Fish and Wildlife Service administers ESA for terrestrial and freshwater species
 - Incidental Take: 1982, ESA amended to include an incidental take exemption - applicant submits a Habitat Conservation Plan (HCP) to clarify where development on his/her land would be allowed and where habitats should be protected.
- Heat Islands in urban areas occur when buildings and paving materials absorb heat and cause an overall rise in ambient temperatures. Mitigation strategies include trees and shading, rooftop gardens, and porous paving materials for sidewalks, tennis courts, parking areas, and patios.

Ethics

- New Code adopted March 2005, effective June 2005. Creates three (3) distinct categories:
 - Aspirational principles: ideals too subjective to form the basis for finding of ethical misconduct
 - Rules of conduct: established, enforceable rules with the potential for disciplinary action
 - Procedures: clarifies complaint administration
- Principles to which we Aspire: Responsibility to the public, Responsibility to our clients and employers, and Responsibility to our profession and colleagues
- We shall avoid even the appearance of a conflict of interest.
- AICP Code of Ethics sets aspirational standards to elevate the planning profession.
- Responsibility to the Public: serve the public interest; be conscious of the rights of others; concern for long-range consequences; interrelatedness of decisions; meaningful impact; seek social justice; conserve and preserve the natural and built environment; deal fairly
- Responsibility to our Clients and Employers: exercise independent judgment; accept decisions unless the course of action is illegal or inconsistent with primary obligation to the public; avoid conflict of interest
- Responsibility to our Profession and Colleagues: protect profession's integrity; educate public; comment on others' work; share results & experiences; examine theory; contribute to professional development
- Rules of Conduct: 25 rules that include:
 - Accept no assignment we know to be illegal
 - Accept no other planning-related employment without disclosure and written permission
 - Accept no outside compensation which may be perceived as related to our employment
 - Do not perform work with the potential for direct financial gain to you or your family without disclosure and employer consent
 - Do not disclose confidential material unless 1) required by process of law 2) required to prevent a violation of law 3) to prevent substantial injury to the public
 - Do not work beyond your technical competence
 - **** Rule 3 **** We shall not accept an assignment to publicly advocate a position that is indistinguishably adverse to a position we advocated for a previous client/employer within the past three years unless change in position will not cause detriment to previous client/employer and we make full written disclosure of conflict to current client/employer and receive permission
 - We shall not deliberately or with reckless indifference fail to provide adequate, timely, clear, and accurate information on planning issues
 - We shall not, as public officials, accept from anyone other than our employer, any compensation, commission, rebate, or other advantage perceived as related to our employment.
- Procedures: describes the way that one may obtain either a formal or informal advisory ethics ruling and details how a charge of misconduct can be filed, charges investigated, prosecuted, and adjudicated.

Food system planning

- Planners have traditionally paid less attention to food system planning than other issues, partially with thought that food system only indirectly touches built environment and perception that food system is private concern
- Planners are now focusing on food systems because:
 - Food systems take up significant amount of land, represent an important part of community economies
 - Planners can play a role in alleviating the problems of hunger and obesity
 - Production, transportation, and disposal of food products require a considerable amount of fuel.
- Urban Agriculture: save land for urban farming and forestry, urban forest makes community more walkable
- Community Gardens / Urban Farms: potential increased land values as with being adjacent to a park, improved access to nutritious foods, planning for a community garden should involve public meetings with residents, garden budget, set milestones and monitor program progress
- According to APA Policy Guide on Community and Regional Food Planning (2007), farmland in urban-influence areas is disappearing at a rapid rate because these areas have annual population growth rates more than twice the national average growth rate. Between 1997 and 2002, the number of small farms 50 – 500 acres decreased by 7%, the number of medium sized farms 500 – 1,000 acres decreased by 11%, and the number of large farms over 2,000 acres increased by 5%
 - This loss of farmland in urban-influence areas suggests that current land use patterns threaten our capacity to obtain fresh, locally produced food.
 - The decrease in small and medium farms threatens rural communities by making them more economically insecure and by changing land stewardship practices handed down for generations.
- National planning implemented through the Farm Bill affects the nutrition, conservation, and rural development programs of communities.
- Planning might focus on developing or redeveloping areas with high degrees of poverty so that residents have access to grocery stores that offer nutritious food.

GIS / Mapping / Spatial Analysis

- Colors for density maps can be problematic because there are so many choices with GIS technology.
- Ian McHarg - 1967 book, *Design with Nature*, introduced environmental concerns to landscape architecture as well as concept of layering different types of spatial data, basic concept for GIS.
- Websites can be used to post and received information (land use maps, draft plans, meeting announcements, “contact us” options, web-based surveys
- GIS (Geographic Information System) is a computer software tool used to display multiple layers of information about a geographic location (roads, fire hydrants, parcels, etc)
- MIS (Management Information Systems) is a system for the management of people, projects, and information. Supports business processes and operations, decision-making, and strategies.
- Relief Map shows the changes in topography. The less distance between the contours, the faster the relief is changing, and the greater the slope of the land.
- US Geological Survey (USGS) maintains a database of aerial photographic coverage from the 1940s to the present for the US and its territories. Images from USGS are available through the National Aerial Photography Program (NAPP). USGS is also the main source for topographic maps.
 - Digital Orthophoto Quadrangles (DOQs) are rectified and projected digital aerial photographs. Relief displacement has been removed so that ground features are displayed in true position, allowing for direct measurement of distance, areas, angles, and positions.
 - Digital Raster Graphic (DRG) is a scanned image of a USGS topo map

Growth management / New Urbanism

- 1990s New Urbanism seeks to revive the art of urban design and promote neighborhood cohesion – led by Andres Duany and Elizabeth Plater-Zyberk. Seaside FL, Kentlands MD, Celebration FL are examples.
- Planning to manage growth must include transportation because land use and transportation are linked.
- Smart Growth: attempts to address the problems of low-density (sprawl) development such as development of viable farmland (threatens the agricultural economy), increased public service costs, reduced investment in central cities, increased traffic congestion
- Smart Growth Techniques: include Urban growth boundaries, Adequate public facilities ordinance, Concurrency, Re-use of existing buildings, Impact fees, Inclusionary housing

- Smart Growth Impacts: Increased density, Increased land prices (debatable), utilize existing infrastructure
- Neo-traditional development (New Urbanism): recommends development that is more dense and encourages less use of the automobile, minimal side and front setbacks, smaller lots, grid street pattern, mixed-use development, rear parking for commercial, walkability
- Statewide Land Use Planning in Oregon requires every municipality or metro area to establish an urban growth boundary (UGB)
- Walkability: the viability of a neighborhood center depends on the degree of dependency that can be established between the uses in the center and the neighborhood population. This is a function of the number of people that are within a walkable distance of the center (45 people per acre is target).
- Conservation Subdivision Design devotes a large percentage (perhaps 50%) of the land area within a residential area to undivided permanent open space (Randall Arendt 1997)
- Transect Zone: (Duany & Plater-Zyberk) similar to land-use zones in conventional codes EXCEPT that in addition to usual requirements, other elements of intended habitat are integrated, determined by location on transect scale (T1 Natural, T2 Rural, T3 Suburban, T4 General Urban, T5 Urban Center, T6 Urban Core)
- Floating Zones: some Planned Unit Developments are implemented through a floating zone process, with the boundaries of the development not determined in advance on the zoning map
- Unified Development Code: combines Zoning Ordinance with Development Regulations and may include circulation standards, utility standards, stormwater management standards
- Concurrency: term derived from Florida state growth management act which requires that needed facilities be available concurrent with development
- Transfer of Development Rights (TDR) yielding of some or all of the rights to develop or use a parcel of land in exchange for right to develop or use another parcel of land, or another portion of same land, more intensely
- Viewshed Protection: viewshed is the area visible from a point, a line, or a specific locality – visual equivalent of a watershed (landscape visible from a specific point). Denver’s Mountain View Ordinance protects views of the Rocky Mountains from the city’s squares and parks and applies to specific sites within the urban area.

Hazard mitigation and disaster recovery planning

- Hazard mitigation planning includes gathering and analyzing data, setting goals, and selecting actions that will help the community achieve its goals.
- A hazard mitigation plan must be approved by FEMA to establish eligibility to receive certain grant funds.
- Unlike hazard mitigation plans, disaster recovery plans are not guided by federal legislation.
- Disaster Mitigation Act of 2000 requires hazard mitigation plans
- Hazard Mitigation Plan components: Explain how the plan was developed and adopted; Present information and define problems; Present alternative actions; Identify the best actions; Explain how these actions will be implemented; Explain how plan will be monitored, evaluated, and updated.
- Civil Defense Act (1950) was early federal legislation related to disaster recovery
- Stafford Act (1988) federal legislation that provided a framework for continued disaster relief. Minimum 75 percent federal and 25 percent state and local cost sharing for public assistance, later amended to include acquisition of properties in floodplains.
- Disaster Mitigation Act of 2000: Local governments are required to address natural hazards with Hazard Mitigation Plans and encouraged to address other man-made hazards. FEMA implements this act.
- National Flood Insurance Program (NFIP) and local ordinances use the 100-year flood as a regulatory device. A 100-year flood is one that has, in a given year, a one (1) percent chance of occurring.
- Base Flood Elevation (BFE): rounded, whole-foot elevations of the one (1) percent (100-year) annual chance flood at selected intervals that have been studied in detail
- Flood Insurance Rate Map (FIRM) developed by FEMA, illustrates extent of flood hazards in community
- With environmental and disaster mitigation planning, intergovernmental coordination is critical because watersheds and floods, for example, do not respect political boundaries.
- FEMA provides guidance so that the jurisdictions within a county can work together to develop a multi-jurisdictional natural hazard mitigation plan.

History

- Mid-to-Late 1800s Frederick Law Olmsted - growth of cities inevitable and beneficial to society, incorporation of parks into urban fabric could counter negative effects of growth. He designed NYC Central Park in 1857.
- Morrill Act of 1862 was an Act of Congress that gave public land to each state to be sold for the establishment of engineering, agriculture, and military sciences colleges.
- 1900 City Beautiful plans prepared by Daniel Burnham (Chicago), Edward Bennett (San Francisco), others
- Around 1900 the Garden City movement led by Ebenezer Howard sought to be a mix of town and country on the edge of the city. Similar Greenbelt cities were built in the early 1900s.
- 1909 National Conference on City Planning and Congestion Relief
- 1916 New York City adopted the first true zoning ordinance, upheld in state court 1920
- 1917 American Institute of Planners (AIP) founded
- 1925-1926 Alfred Bettman - 1925, Bettman developed a comprehensive plan for Cincinnati, Ohio, the first American city to adopt a comprehensive plan. In 1926, Bettman successfully defended zoning before the US Supreme Court in *Village of Euclid v. Ambler Realty Co*, based on 5th and 14th amendments to Constitution.
- 1928 Standard City Planning Enabling Act (SCPEA) developed by US Commerce department
- Early 1900s Benton MacKaye argued for regional planning based on natural landscape patterns, such as river valleys (influenced by Geddes) and proposed the interconnected Appalachian Trail system
- 1932 Federal Home Loan Bank Act provided new source for buying homes and refinancing mortgages
- 1934 American Society of Planning Officials (ASPO) established
- 1934 National Housing Act created the Federal Housing Administration (FHA) to act as housing mortgage insurance agency to bring adequate funds into housing construction and boost the economy
- 1937 National Housing Act created the US Housing Authority to channel financial assistance in loans and subsidies to local housing authorities for slum clearance and for construction of new public housing
- 1930s and 1940s Redlining: sorted neighborhoods by social and economic status to effectively deny loan assistance in the worst districts inside the “red line” on the map
- 1949 National Housing Act and 1954 Urban Renewal focused on slum clearance and replaced with multi-story complexes that created islands of poverty in the city, built 1950s and 1960s, many torn down later
- 1960 In *The Image of the City*, Kevin Lynch argued that in a large city, people think in terms of districts, nodes, landmarks, rather than as if from an airplane - Urban Design joins planning with architecture.
- 1961 Jane Jacobs wrote *The Death and Life of Great American Cities*
- 1961 Jean Gottman identified multi-metro settlements in *Megalopolis* including Boston to Washington DC
- 1966 Congress established National Register of Historic Places and system of state historic preservation offices. In 1931, Charleston SC established first local historic district. In 2004, there were 12,500 listed National Register Historic Districts. National Park Service documents, evaluates, administers the program.
- 1974 Urban Renewal funds turned into the new Community Development Block Grant (CDBG) program
- 1970s New Towns such as Reston VA and Columbia MD on greenfield sites but somewhat planned for neighborhood character and urban feel
- 1978 AIP and ASPO merge to form the American Planning Association (APA)
- 1980 National Main Street Center tied together planning, preservation, and economic development
- 1990 Americans with Disabilities Act addresses rights of disabled in employment; how public entities must make programs and facilities accessible to disabled; new construction and alteration of existing buildings
- 1993 HOPE VI program: federal low-income housing program from 1993 to 2002. Private developers partner with local housing authorities, create HOPE VI communities, incorporate local market preferences and resident participation through a charrette. Most neighborhoods contain mix of housing.
- 2003 American Dream Downpayment Assistance Act created a program to provide down payment, closing costs, and rehab assistance to low-income first-time homebuyers

Intergovernmental / National / State / Local Planning

- At the regional level, such as with airport planning, intergovernmental coordination may be especially important. The land use and transportation decisions of jurisdictions can affect accessibility to an airport.
- National level planning includes regulations affecting the entire country such as NEPA or by actions of federal agencies, such as the location of levees.
- Congressional decisions about appropriations to HUD affect the development of affordable housing.

- Multistate regions may be defined by watershed (Chesapeake Bay) or by history and culture (New England)
- The US Census Bureau studies cross-state commuting where workers employed within one state live in another state, which has implications for transportation planning.
- State level planning may include encouraging local communities to adopt building codes or to develop and adopt hazard mitigation plans by providing training and technical assistance.
- State level regulations may extend to protection of air quality, wetlands, dunes and beaches, erosion and sedimentation, underground storage tanks, wireless facilities, and manufactured housing.
- Relationship between State and Local governments
 - Dillon's Rule states that local jurisdictions have no powers other than those explicitly assigned to them by state governments (Judge Dillon issued the 1886 ruling in response to political machines)
 - Home Rule is when a state transfers power to the local government to adopt regulations.
- In the US, local governments are “creatures of the States” and all local power comes from State enabling legislation to regulate land use.
- Sub-state Regions may be defined by geography such as the Outer Banks in North Carolina or by economics such as Silicon Valley in California.
- Suburban areas may be defined by style of land use (sprawl) or history of commuting patterns. Suburban development contributes to decline in supply of farmland in metro areas and reduces capacity to produce food locally. Concerns being addressed in older suburbs - aging infrastructure and challenges of infill development.
- County or small town planning may establish soil and water conservation districts, land conservation measures
- Corridor planning considerations include façade requirements, setback regulations, location of traffic signals and turning lanes, and supply of parking spaces.
- Neighborhood planning may address access to supermarkets or prevalence of convenience stores given that research suggests lower rates of obesity in areas where supermarkets located that offer healthy food choices.
- Waterfront planning includes variety of land uses - industrial production, commercial and retail development, transportation nodes, recreational uses, infrastructure, and residential areas. This planning should address need to protect people, structures, and infrastructure from damage if area is vulnerable to natural hazards. Planning may include tax incentives to attract desired commercial enterprises and brownfields remediation techniques.
- Historic District planning includes architectural requirements to ensure that renovations will blend with the historic character of the district or measures to protect historic structures, such as slower traffic speeds and prohibiting heavy buses and trucks on historic district streets to reduce vibrations.
- Regional planning may include: geographic and topographic facilities; political boundaries; transportation patterns; region-serving facilities; interrelated problems; population distribution; existing intergovernmental relationships; metro area boundaries; boundaries of existing regional groups
- Planning for education, institutional, or military facilities depends upon forecasting population. The population of such facilities depends on decisions made by administrators and governmental entities. Closure, reduction in size, and expansion affect surrounding communities to a great extent, thus planning should consider the impacts to nearby schools, roads, businesses, and housing supply.
- Developments of Regional Impact development that, because of its magnitude, nature, or effect on the surrounding environment, is likely to present issues of regional impact – *A Model Land Development Code* from the American Law Institute in 1976 authorized local regulation of these developments in a different way

Law / Legal Principles

- *First Evangelical Lutheran Church of Glendale v. County of Los Angeles (1987)*
 - Taking had occurred based on aftermath of flood - new LA County ordinance prohibited construction/reconstruction in an area that included destroyed church campground area
- *City Council v. Taxpayers for Vincent (1984)*
 - US Supreme Court upheld a section of LA Municipal Code prohibiting posting signs on public property to avoid visual clutter
- Legal principles include zoning and subdivision regulations for orderly development, growth management policies for more efficient use of infrastructure and protection of natural resources, affordable housing policies for housing choice, and aesthetic and historic preservation guidelines for protection of neighborhood character.
- Legal principles may include sustainable development, protecting the natural environment, and reducing environmental harm caused by earlier development, take no actions that will cause harm to others

- *Kelo v. City of New London (2005)*
 - A City of New London, Connecticut economic development plan included property owned by Suzette Kelo for a project to improve the economic situation in the city.
 - Whether economic development is public use for which eminent domain may be used. Court ruled YES if part of a development plan.
 - Decision indicates that public ownership is not the only method of promoting public purposes and the government's pursuit of a public purpose may benefit or depend upon individual private enterprise.
- *Lingle v. Chevron USA (2005)*
 - US Supreme Court provided clarity for takings cases by removing the "substantially advances" test, based on *Agins v. City of Tiburon (1980)* to identify regulatory takings.
 - Decision reaffirmed the principle that when government physically takes property, it must pay, and that a taking occurs when regulations destroy all economic value of property.
- *City of Rancho Palos Verdes v. Abrams (2005)*
 - What remedies are available to property owner if city violates Telecommunications Act of 1996, which prohibits local governments from unreasonably discriminating among providers of functionally equivalent services and from limiting placement of wireless facilities on basis of environmental effects of radio frequency emissions - decision means property owners who successfully challenge municipalities can ask court to remedy violation and issue permit but cannot obtain money damages
- *San Remo Hotel LP v. City and County of San Francisco (2005)*
 - Questions were which court should decide what and when - US Supreme Court concluded that state courts are fully competent to adjudicate constitutional challenges to local land-use decisions
- *Nollan v. California Coastal Commission (1987)*
 - California Coastal Commission required Nollan to maintain a public sidewalk on private property as a building permit condition. US Supreme Court ruled in favor of Nollan and established the principle of a rational nexus for regulatory action (also related is *Dolan v. City of Tigard 1994*).
- *Appeal of White (1929)*
 - US Supreme Court ruled: All property is held in subordination to the right of its reasonable regulation by government clearly necessary to preserve the health, safety, or morals of the people.
- 5th Amendment to the US Constitution: no person shall be deprived of life, liberty, or property without due process of law, nor shall private property be taken for public use, without just compensation.
- *Tahoe-Sierra Preservation Council Inc v. Tahoe Regional Planning Agency*
 - US Supreme Court found a taking was not implemented when a community instituted a building moratoria on development while it prepared its comprehensive plan
- *Metromedia v. City of San Diego (1981)* – court struck down city's sign ordinance for all off-premise signs (such as billboards). Court noted that non-commercial messages (such as political sign) were effectively banned by city. However, Court affirmed sign regulations for traffic safety and community aesthetics.
- *City of Ladue v. Gilleo (1994)* – Supreme Court ruled that ordinance banning all residential signs violated homeowners' First Amendment rights because it denied them ability to display messages on their property.
- *North Olmsted Chamber v. City of North Olmsted (2000)* – federal trial court ruled that a sign ordinance that classified signs by use (identification, information, etc) is content-based, therefore unconstitutional
- Police Powers are the rights of government to establish laws and ordinances to preserve public order and tranquility and to promote the public health, safety, morals, and general welfare
- Taking of Property: 5th Amendment of US Constitution applies to federal government, 14th Amendment applies to state & local governments, both prohibit taking a person's property without due process of law
- Development Exactions: Nollan/Dolan Double Nexus test to determine whether exaction is a taking – essential nexus and roughly proportionate

Planning Theories

- Planning: consideration of outcomes before choosing amongst alternatives to Improve efficiency of outcomes; Balance public and private interests; Enhance the consciousness of decision making; Expand opportunity and understanding in the community
- Wicked problems cannot be solved in linear fashion, because the problem definition evolves as new possible solutions are considered and/or implemented. Rittel and Webber (1984) "Planning problems are wicked problems". Solutions are not true-false, but good-bad. No immediate and no ultimate test of a solution.

- Synoptic Rationalism: Meyerson and Banfield “Politics, Planning and the Public Interest”, Davidoff and Reiner “A Choice Theory of Planning”, Faludi “A Reader in Planning Theory”
 - 1) Goals and objectives are set
 - 2) Policy alternatives are identified
 - 3) Policy alternatives are evaluated (example is cost/benefit analysis)
 - 4) Selected policy alternative is implemented
- Rational decision: one that decision-maker knows what ends decision-maker seeks, which is public interest. The decision-maker selects the alternative with consequences that most probably maximizes the desired ends.
- Incrementalism: Charles Lindbloom in *The Science of Muddling Through*, major changes are made in little increments over long periods of time. Mixture of intuition & experience - Meyerson “Building the Middle-Range Bridge for Comprehensive Planning”, Etzioni “Mixed Scanning”
- Transactive Planning: planning is a decentralized function based on face-to-face contacts, dialogues, and mutual learning (behavioralist-style)
- Advocacy Planning: planners become like lawyers, advocating and defending the interests of a particular client or group, preferably disadvantaged or underrepresented groups - Saul Alinsky, Alan Altshuler, Paul Davidoff “Advocacy and Pluralism in Planning”, Mazziotti “The Underlying Assumptions of Advocacy Planning”, Krumholz “A Retrospective View of Equity Planning in Cleveland 1969-1979”
- Radical Planning: planning is most effective when performed by nonprofessional neighborhood planning committees that empower citizens to experiment with solving their own problems (slightly Marxist)
- Utopian: planning most effective when proposes sweeping changes that capture public imagination (Daniel Burnham’s *Plan of Chicago*, Frank Lloyd Wright’s *Broadacre City*, Le Corbusier’s *La Ville Contemporaine*)
- Methodism: views planning techniques as ends into themselves (making a population projection just to have it handy when needed)
- Radical Planning: Krashaar “Outside the Whale: Progressive Planning and Dilemmas of Radical Reform”
- Traditional Participatory Planning: Arnstein “A Ladder of Citizen Participation”
 - Susskind and Elliott “Paternalism, Conflict, and Coproduction”
 - Langton “Citizen Participation in America”
- Collaborative Planning, Mediation: Susskind and Cruikshank “Breaking the Impasse: Consensual Approaches to Resolving Public Disputes”
 - Douglas “Mediation and Inequalities of Power”
 - Innes “Group Processes and the Social Construction of Growth Management”
- Transactive Planning: Friedmann “Transactive Planning”
 - Forester “Planning in the Face of Power”
 - Hemmens and Stiffler “Sources for the Renewal of Planning Theory”
 - Healey “Planning Through Debate: The Communicative Turn in Planning Theory”
- Social Learning, Phenomenology, Contingency Theory: Schon “The Reflective Practitioner”
 - Bolan “The Practitioner as Theorist: The Phenomenology of the Professional Episode”
 - Bryson and Delbecq “A Contingent Approach to Strategy and Tactics in Project Planning”
 - Hoch “What Planners Do”
- Social Mobilization, Postmodern Critiques: Alinsky “Reveille for Radicals”
 - Beauregard “Between Modernity and Postmodernity: The Ambiguous Position of US Planning”
 - Fainstein “Planning in a Different Voice”
- Moral Philosophy: Utopianism – Friedman “Moral Philosophy”, Hudson “hard to translate complex world into simplistic theory” – ends without means, clarification of values and desired ends
- Central Place Theory (1933) by Walter Christaller who studied small cities in Southern Germany and theorized that different place levels exist: hamlets, villages, towns, cities, and the regional capital

Plan Making & Implementation / Research / Surveys

- Ratio Variables have all the properties of interval variables as well as a clear definition of zero (the height of a building is a ratio variable).
- Reliability is an important concept in data collection. A measurement instrument, such as a scale, is reliable if it consistently measures what it is supposed to measure and gives consistent results.
- Tools to create plans: data gathering, research, presenting info, quantitative and qualitative methodology

- Techniques to foster participation in plan making: community meetings, facilitated meetings, public hearings, surveys, visioning techniques, SWOT analysis, charrette planning, visual preference surveys
- Data Types: Census data, FedStats, National Center for Health statistics, Bureau of Economic Analysis, Census Transportation Planning Package, US Geological Survey
- Distribution and Frequency: in a survey, suppose you ask how many days a New Orleans business was closed after Hurricane Katrina. If you interview 125 businesses, sample size is 125. Distribution is the set of measurements or values you obtain. Frequency is the number of measurements (values) at a particular level – if 60 businesses were closed for 100 days, frequency of being closed for 100 days is 60.
- Normal Distribution: bell-shaped curve with most measures near the middle, fewer on upper, lower ends
- Outlier Distribution: measurement that is noticeably different from others in the distribution, example would be the business in New Orleans that was only closed for one day rather than several after Katrina
- Analytic Tools: Chi-Square: statistic that suggests a relationship between two nominal variables – example is type of business (construction, retail) being back in business after Katrina (yes or no)
- Analytic Tools: Linear Regression: relationship shown in the form of an equation with a constant and a coefficient for each independent variable (influence of age of a business in years (Y) and distance from the Mississippi River in feet (F) on the number of days (N) a business was closed after Hurricane Katrina
- Comprehensive Plan is the official statement of a legislative body that sets forth its major policies concerning desirable future development. Adopted by governing body.
 - Comprehensive Plan elements include issues and opportunities; land use; housing; transportation; community facilities; economic development; critical and sensitive areas; natural hazards; agricultural lands; community facilities; and implementation planning.
- Strategic Plans involve analyzing community needs; determining long term objectives, SWOT analysis, involving stakeholders, developing and evaluating alternatives, developing policies, and evaluating plan.
- Goal Setting helps keep plans on track by stating where the community desires to go, a key element of the Comprehensive Plan, goal is a value-based statement not necessarily measurable
- Objective is a more specific, measurable statement of a desired end
- Policies indicate how the goals and/or objectives of the plan should be realized
- Programs are activities aimed at carrying out a particular goal or policy
- Gant Chart: part of survey method process that shows timeline for activities by date (X-axis) and activity (Y-axis), example could be preliminary design in 2000 to testing and manufacturing in late 2001
- Flow Chart: part of survey method process that flows from top to bottom showing how a process works, including alternatives if something is Yes met or No not met then what to do
- Matrix: rows by columns showing changes by changes (A1,3 A2,3 A3,3 etc)
- Data / Variables
 - Quantitative: blood type, political party
 - Qualitative: income, GPA, AICP score
 - Discrete: where each item is separate – number of dwelling units, vehicles per hour
 - Continuous: full range of values – height, IQ, temperature
- Inferential Statistics: try to reach conclusions that extend beyond the immediate data alone – for example, try to infer from sample data what the population might think
- Descriptive Statistics: describe what's going on in our data
- Types of Scales or Levels of Measurements
 - Nominal Scale: weakest level, equations don't apply – parcel numbers, license plate numbers
 - Ordinal Scale: assignment of names, numbers, etc to set an ordered relationship without the property of magnitude – tallest is 1, second is 2, third is 3
 - Interval Scale: assignment of names, numbers etc with property of magnitude – temperature example
 - Ratio Scale: assignment of names, numbers etc to define an ordered relationship with an absolute zero (0) point and equal intervals – distance, weight, number of vehicles
- Research Methods
 - Research Hypothesis: expresses a relationship between phenomena
 - Null Hypothesis: hypothesis of no difference, in which no relationship is found – number of donuts eaten while preparing for a test compared to test scores

- Tests such as Chi-Squared test the hypothesis. Hypothesis tests measure whether or not there is a relationship among variables.
- Ordinal (ordered) Data has four measures of association – Gamma, Kendal’s tau-b, Stuart’s tau-c (Kendal’s tau-c) and Somer’s D
- Pivot Tables often used, commonly known as Cross-tabs – example region of state by make of car sold
- Scale is a qualitative measure of the relative height and massing of buildings and spaces. Density is a quantitative measure of the number of units on a particular area of land, in acres or square miles.
- Classes of Office Space: class A office space is most desirable in location, design, management; class B office space is good location, good management, older; class C is oldest and has not been modernized
- Floor Area Ratio (FAR) describes density of commercial structures – it is the ratio of built floor area for all floors to the area of the site, a 2 FAR (2:1 FAR) allows for 2 square feet of development for every 1 square foot of site area. FAR can also be expressed as percentage or fraction (.50 or 50 percent)
- Defensible Space: term coined by Oscar Newman to cover a range of mechanisms, barriers, areas of influence, and opportunities for surveillance that combine to help crime prevention through design
- The National Recreation and Park Association (NRPA) provides *Park, Recreation, Open Space and Greenway Guidelines* as a framework for park system planning, level of service (LOS) standards, etc.
- Fiscal Impact Analysis compares local government costs against revenues associated with land-use policies and specific development projects. It projects net cash flow to the public sector resulting from development.

Policy Analysis and Decision Making

- Evaluation of public policy requires examining and measuring significant benefits and costs.
- Public policy analysis answers questions about the purpose or intent of a policy, how it is being implemented, and whether it is achieving its purpose.
- The consequences of planning policies are not immediately apparent, so analysis of their consequences is complicated by the fact that many factors change during implementation.
- Planners evaluate impacts of public policy decisions relative to quality of life factors (prosperity of a community, sustainability of the natural environment, affordable housing, adequate recreation, etc)
- To evaluate a proposed policy, planners identify alternative approaches and identify and evaluate the potential impacts of all alternatives, including the alternative of taking no action.
- A plan for developing an area such as a park, downtown, or an environmentally sensitive area may include policy statements that set forth the rules and courses of action decided upon for achieving an articulated vision.
- Planning efforts may center on implementation of a federal or state policy, such as protection of wetlands.
- Policy recommendations can be flawed and sound like nothing more than a wish list if a policy plan does not include gathering and analyzing data on existing conditions.

Public Participation / Social Justice / Environmental Justice

- Charrette involves multidisciplinary team of professionals developing all elements of plan, and team works closely with stakeholders. Conducted to address specific problematic situation. Charrette works best with high-stakes projects; volatile yet workable political environments; complex design problems; and projects that include imminent development. Charrette is part of larger process over many days called *Dynamic Planning*.
- Open House is used when planners prepare posters, make literature available, and area available to discuss a pending planning decision with the public in an informal, one-on-one manner.
- Obstacles to public participation may include the needs for child care, transportation, translators, as well as actual or perceived imbalances in power.
- Arnstein’s Ladder of Participation: public participation in policymaking is divided into three levels:
 - 1) Nonparticipation (general public is manipulated)
 - 2) Tokenism (general public is informed, consulted, and placated)
 - 3) Citizen Power (public becomes a partner with actual control over policy)
- Environmental Justice combines environmental awareness with racial & ethnic awareness so industrial, governmental, commercial practices do not unfairly burden people of color, economically disadvantaged.
 - 1994 President Clinton signed an Executive Order creating the National Environmental Justice Advisory Council within US EPA and strategies for environmental or land-use responsibilities
- Goal of Public Participation efforts: inform the public, avoid conflicts, build consensus

- Community Meetings: typical planning meeting type, useful for concerns related to a topic such as a neighborhood plan or zoning case opposition. Can be hosted by different groups or at City Hall.
- Facilitated Meetings: moderator helps focus discussion and obtain input, useful for timekeeping
- Surveys: different types (telephone, face-to-face, etc), concerns about sample size, question bias, cost
- SWOT Analysis: more in-depth analysis, different ways to tally preferences
- Visioning Techniques: what is our preferred future?
- Visual Preference Surveys: what does our preference look like?
- Delphi Method: allows participation of community residents, as experts and analysts, in several rounds of policy-thinking 1) Identify goals 2) Establish priorities 3) Identify areas of consensus and disagreement. Delphi Method was developed by the RAND Corporation in California in the 1950s to predict the Soviet Union's strategic targeting system. Forecasting method based on inputs of selected experts who answer questions, formulate hypotheses, and state when they think these hypotheses will be fulfilled
- Special needs populations: elderly, people with language barriers, sick, pets, ADA
- Press Release: to be good, needs to have clear writing without technical jargon, reasonable length and level of detail for the audience, explanation of why a project is important, describe goal of project
- Ways to learn community reaction to a proposed project: Volunteer sampling: data from volunteers who attend a meeting on a project; Convenience sampling: data from people who you see daily; Gather data from a randomly selected sample of the population (THE BEST)
- Telephone surveys: newer challenges include fact that they omit those who use only cell phones, and leave out those who use call waiting
- Participation can be classified into four categories or experiences, per Burns (1979): awareness - discovering the realities of a situation; perception – understanding all parts of the situation; decision making – create a plan for the situation; implementation – actions to achieve results
- Five Best Statements to Remember:
 - There is no “best” solution to design and planning problems.
 - “Expert” decisions are not necessarily better than “lay” decisions.
 - A planning task can be made transparent.
 - All individuals and interest groups should come together in an open forum.
 - The process is continuous and ever-changing.
- Visioning: involves the following characteristics
 - Understanding the whole community
 - Reflecting core community values
 - Addressing emerging trends and issues
 - Envisioning a preferred future
 - Promoting local action
- Oregon Model of Visioning: community-based visioning that is a process framed by the following questions: Where are we now? Where are we going? Where do we want to be? How do we get there?
- Montage Visualization: portrays changes to a place by overlaying images of potential new design elements, such as transit, retail, or pedestrian features, on an image of an existing location, such as a street. Visually portrays how planning and urban design can alter the look and function of a place.
- Three-dimensional (3-D) Visualization: show proposed buildings in the context of their actual surroundings, can communicate the potential impacts of a development more clearly than written reports.
- Visual Preference Techniques: allow people to choose their preferences among images used to illustrate various options applicable to a project, popular method since the 1990s to educate the public about design concepts and obtain feedback on planning and design alternatives
- Achieving Consensus: five keys
 - Account for and include key stakeholders
 - Anticipate the need to link informal processes with formal decision making.
 - Generate technical information viewed as legitimate, salient, and technically credible by all stakeholders and decision makers
 - Fully uncover parties' interests and generate mutually advantageous “packages” to meet those interests
 - Anticipate the challenges of implementing an agreement or resolution

- 1990 National Affordable Housing Act: administered by HUD, requires a housing needs assessment in preparation of the consolidated plan, the document that serves as the comprehensive housing assistance strategy for the purposes of the CDBG program
- Affordable Housing as defined by US HUD
 - Moderate-income housing: affordable to households with incomes between 50 and 80 % of the median income for county or primary metropolitan statistical area
 - Low-income housing: affordable to households with incomes 30 to 50 % of median income
 - Extremely low-income housing: affordable to those with income less than 30 % of median income

Transportation

- Complete Streets: streets designed in consideration of needs of pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Includes planning for sidewalks, bike lanes, travel lanes and shoulders, crosswalks, median strips, bus pullouts or bus lanes, raised crosswalks, audible pedestrian signals, street trees and groundcover, driveways and parking areas to improve safety, encourage physical activity, reduce crime.
- American Association of State Highway and Transportation Officials (AASHTO Green Book) provides guidelines for public rights-of-way focusing primarily on vehicle use
- Federal Highway Administration in 1962 created the currently recognized road classification system, which includes principal arterials, minor arterials, collector streets, and local streets
- Traffic Calming: combination of physical measures that reduce negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized users (Institute of Transportation Engineers 1997)
- Transit-oriented development (TOD): development located within a 10-minute walk, or approximately half a mile, from a light rail, heavy rail, or commuter rail station, and includes a mix of uses
- 1965 Highway Beautification Act adopted to control proliferation of billboards appearing on the new interstate highway system – BUT, has been used to extend legal protection to other types of signs not anticipated
- 1991 Congress passed Intermodal Surface Transportation Efficiency Act (ISTEA) to overhaul federal transportation planning and policy in the US. Reforms represented a shift toward greater local authority in setting transportation priorities – funding flexibility; broader support for nonhighway transportation projects; emphasis on planning; connection between transportation and air quality
- 1998 Congress passed TEA-21 which reauthorized ISTEA and brought change through guaranteed funding. 2000s Congress reauthorized this funding with modest changes with SAFETEA-LU (expires 2009)
- Road Diet: excess lanes are removed, or wide lanes are reduced in width (12 feet to 10 or 11 feet) to add parking, bicycle lanes, or turning lanes, and to slow vehicle speeds to safer levels.
- Levels of Service (LOS): classification system that exists for roads and freeways as well as for sidewalks and bicycle lanes – ranks from A (unimpeded movement) to F (complete congestion).
- Traffic Impact Study assesses effects that development's traffic will have on surrounding transportation network. To have measurable impact, development anticipated to generate significant amount of traffic
 - Typical thresholds for significant amount include traffic generated by 150 single-family dwelling units, 15,500 sqft of leasable retail space, or 55,000 sqft of leasable general office space
 - Any traffic study should be consistent with the current editions of these manuals: *Trip Generation*, *Highway Capacity Manual*, *Manual on Uniform Traffic Control Devices*, and the *AASHTO Green Book (American Association of State Highway and Transportation Officials)*
 - Traffic Impact Study considerations: impact study area; horizon year; analysis periods; existing conditions; planned and previously funded transportation projects; methods for forecasting background traffic; trip generation rates; site-generated traffic; and capacity analysis for build-out

Urban Spatial Organization Theories

- Concentric Theory: Burgess, 1925, a city is seen as a set of concentric rings growing out from the Central Business District (CBD) to Independent Worker Housing to Better Housing to Commuter/suburban Housing. As the city grows, each ring invades the next ring out, called Invasion/Succession.
- Sector Theory: Homer Hoyt, 1939, high-density residential, commercial and industrial radiate out from the Central Business District in sectors that follow major transportation routes. More expensive housing radiates toward open spaces and higher ground, and less expensive housing takes leftover land.
- Multiple Nuclei Zone Theory: Harris and Ullman, 1945, certain land uses group together to take advantage of unique facilities (universities, hospitals, etc). Applied also to cities with more than one CBD

- Dispersed City: Melvin Webber, 1962, future urban settlements would be more dispersed, varied, and space-consuming than in the past – development occurs in range of size from compact to sprawl
- Life-Cycle Model of Land Use 1971, Richard Andrews, identifies six phases in the life cycle of a community: growth, maturity, decline, uncertainty, late decline, and new growth.
- Edge City: Joel Garreau, 1991, urban growth clusters on the edges of metropolitan areas (Century City in LA)
- Peripheral Model: Chauncey Harris, 1997, *Urban Geography*, patterns are not defined in terms of distance to the central city but in relations with other parts of the peripheral zone, tied together by perimeter highway
- Urban Morphology is the study of the city as human habitat – analyzes a city’s evolution from its formative years to its subsequent transformations, uses GIS as a tool, Anne Moudon (1997).

Example Questions

- 1) Which of the following is NOT a characteristic of a flat organization?
 - a. Few middle managers
 - b. **Program-based budgets**
 - c. Shared responsibility for program implementation
 - d. Employees empowered to make decisions
- 2) In the 1930s, states started a functional classification system for highways that included all of the following EXCEPT?
 - a. **Interstate**
 - b. Primary
 - c. Secondary
 - d. Local
- 3) Which of the following has contributed to analysis of the suitability of land for urban development?
 - a. Kevin Lynch – associated with Urban Design
 - b. Saul Alinsky – associated with Advocacy Planning
 - c. **Ian McHarg**
 - d. Richard Babcock – chaired committee for American Law Institute’s 1970s *Model Code Book*
- 4) Which of the following has directly contributed to Urban design and the form of the city?
 - a. **Kevin Lynch**
 - b. Saul Alinsky
 - c. Ian McHarg
 - d. Richard Babcock
- 5) Ebenezer Howard is best known for the concept of self-sufficient towns with mixed economies called?
 - a. New towns
 - b. **Garden cities**
 - c. Planned unit developments
 - d. Suburbs
- 6) New towns such as Columbia, Maryland, have which of the following planned features?
 - a. **Neighborhood clusters**
 - b. Rail commuter system
 - c. **Prior land assembly**
 - d. Prohibition of industry
- 7) In preparing a physical plan for a site, which of the following types of maps would be LEAST useful?
 - a. Topographic map
 - b. Utilities map
 - c. **USGS map**
 - d. Parcel map

- 8) The location of cell phone towers is determined by which of the following?
- Federal Communications Commission
 - State utilities commissions
 - Local government jurisdictions**
 - Metropolitan planning organizations
- 9) The rational comprehensive method for decision making requires all of the following EXCEPT:
- Clarification of values
 - Consideration of extensive data
 - Anecdotal information**
 - Consideration of all relevant factors
- 10) Detailed information about a community's debt would be vital for carryout out which of the following?
- Establishing assessed values for property in the coming year
 - Applying to HUD for Section 8 (housing voucher) funds
 - Presenting a venture-capital fund to area financial institutions
 - Requesting a change in bond rating**
- 11) Which of these land-use models describes the pattern of axial growth along lines of least resistance?
- Multiple nuclei model
 - Concentric zone model
 - Sector model**
 - Negative exponential population density model
- 12) The planning director of a small city wants to get as much public input as possible on a city-wide study. Which of the following would be the LEAST effective method of stimulating citizen participation?
- Contacting neighborhood leaders, advising them, and asking them to report neighborhood reaction
 - Completing the study, printing the final report, and asking for citizen comments on it**
 - Preparing press releases that give general scope of study and asking for comments from general public
 - Offering to address interested neighborhood or other civic groups on the subject of the study
- 13) Which of the following refers to the first step in the conventional four-step approach to estimating travel demand by predicting the number of trips originating in or destined for a particular traffic analysis zone?
- Trip distribution
 - Trip generation**
 - Trip assignment
 - Modal split
- 14) Regional level planning may be appropriate to each of the following planning issues EXCEPT:
- Wetland and floodplain protection
 - Airport accessibility
 - Façade design standards**
 - Availability of grocery stores
- 15) Hurricane protection planning generally occurs at which level:
- National level**
 - Corridor level
 - Neighborhood level
 - Downtown level
- 16) Between July 2005 and July 2006, population of which state grew by almost 580,000, more than any other?
- Texas**
 - Nevada
 - Arizona
 - California

- 17) The benefits of the Tennessee Valley Authority (TVA) project including power generation and flood control extend to which type of area:
- National
 - Multi-State** – includes many states and is legacy of Senator George Norris from early 1930s
 - County
 - Urban
- 18) Food planning may involve any of the following EXCEPT:
- Making recommendations about commercial districts for grocery stores and restaurants
 - Developing strategies to protect farm and ranch land from development
 - Evaluating the supply of Mexican, Chinese, and other specialty restaurants in an area**
 - Suggesting policies to encourage community gardens
- 19) Which of the following are principles of environmental justice?
- Environmental justice opposes exploitation of lands, people, and cultures.**
 - Environmental justice calls for informed consent.**
 - Environmental justice recognizes the special relationship of Native Peoples to the US government through treaties and agreements.**
 - Environmental justice requires a public hearing prior to making final decisions.
- 20) In a cold climate, planning to create covered and heated walkways that are above the streets and connect retail shops, restaurants, hospitals, and hotels, is an example of:
- Evacuation planning
 - Downtown planning**
 - Small town planning
 - Waterfront planning
- 21) Planners pay special attention to the interrelatedness of decisions. This is an example of:
- Our overall responsibility to the public as indicated by the AICP Code of Ethics**
 - Obstacles to good planning practice
 - A rule of conduct in the AICP Code of Ethics
 - A planning vision statement
- 22) Which US Supreme Court decision removed the “substantially advances” test for takings cases?
- Village of Euclid v. Ambler Realty Co. (1926)*
 - Agins v. City of Tiburon (1980)*
 - Lucas v. South Carolina Coastal Council (1992)*
 - Lingle v. Chevron USA (2005)***
- 23) APA filed a friend of the court (amicus curiae) brief in support of an eminent domain action taken by a US city. The brief says that one way to reduce advantage developers currently see in greenfield development is to use eminent domain to assemble tracts of land in high-density urban areas. This brief was filed supporting:
- Kelo v. City of New London***
 - Lingle v. Chevron USA*
 - City of Rancho Palos Verdes v. Abrams*
 - San Remo Hotel LP v. City and County of San Francisco*
- 24) Which person is most often associated with synoptic theory or the rational planning model?
- Saul Alinsky – no, advocacy planning
 - Patrick Geddes – no, regional planning rooted in natural landscape patterns (river valleys, etc)
 - Charles Lindbloom – no, incrementalism
 - Charles Francis Potter**

- 25) Problem identification, generation of alternatives, selection, implementation, evaluation are elements of?
- Synoptic Planning Theory**
 - Incremental Planning Theory
 - Radical Planning Theory
- 26) Which of the following is least important in calculating population projections?
- Birth data
 - Race data
 - Death data
 - Income data**
- 27) Each of the following terms is associated with New Urbanism except:
- Transect Zoning
 - Minimum Parking Requirements**
 - Transit Oriented Development
 - Neo-Traditional Design
- 28) You want to draw a frequency-distribution bar graph (histogram) to represent the distribution of a certain grade among a group of students. The axes of this graph are the following:
- Number of students on the horizontal axis and their grade on the vertical one
 - Grade on the horizontal axis and percentage of students on the vertical one
 - Grade on the horizontal axis and percentage of students with a better grade on the vertical**
 - None of the above
- 29) Which of the following has the least public accountability at the local level?
- Planning Commission
 - Zoning Board of Adjustment
 - City Council
 - Housing Authority**
- 30) According to the Code of Procedures of the AICP Code of Ethics and Professional Conduct, an AICP member charged with ethics misconduct is subject to the final determination of:
- The AICP Commission
 - The Executive Committee of AICP
 - The Executive Director of AICP
 - The AICP Ethics Committee**
- 31) If a person has a question regarding the propriety of professional conduct of a certified planner per the AICP Code of Ethics and Professional Conduct, he or she should:
- Request informal or formal advice from the Ethics Officer**
 - File a complaint with the President of the American Planning Association
 - Submit a Request for Review by the Board of Professional Conduct Review
 - Submit an advisory to the AICP Commission
- 32) If a person wishes to file charge of misconduct against certified planner, he or she would submit a letter to the:
- President of AICP
 - AICP Commission
 - Director of AICP
 - Ethics Officer**
- 33) Who is the Ethics Officer as described in the AICP Code of Ethics and Professional conduct?
- The Executive Director of APA/AICP**
 - The Professional Development Officer of each chapter
 - The President of the AICP Commission
 - The President of the American Planning Association

- 34) Which section of Code of Ethics contains rules of conduct for planning professionals?
- Section C – no, procedures
 - Section A – no, aspirational statements
 - Section B**
 - Both Section B and C
- 35) The year in which you were born is an example of what type of variable?
- Nominal or categorical – no, describe categories (male, female)
 - Ordinal or ranking – no, indicates rank (oldest, youngest)
 - Continuous – no, takes on an infinite number of values (distance between points on a globe)
 - Interval** – yes, interval between measures (years) has meaning
- 36) Which statistic might best describe annual level of income?
- Mean – no, might be relatively high because of a few very high income people
 - Range – no, this states highest and lowest annual incomes and difference between them
 - Mode – no, this is the most frequently occurring annual income
 - Median** – yes, because 50% of residents earn above this and 50% below
- 37) You want to know if the type of planning project (Transit Oriented Development, Historic Preservation) is related to type of public event utilized (workshop, public hearing). The best approach would be to use:
- Linear regression – no, these are categorical (nominal) variables
 - Confidence intervals – no, confidence intervals estimate population means
 - Logistic regression – no, there is no binary dependent variable involved here
 - Chi-square** – yes, we are looking for a relationship between two categorical variables
- 38) As part of a brochure, which would best display locations of critical facilities in a county?
- Map showing all roads, all critical facilities, county & municipal boundaries in a 6-county region
 - Map showing all critical facilities and the boundaries of the county
 - Map showing census tract boundaries shaded by median age of housing in each tract
 - Map showing major roads, all critical facilities, and the boundaries of the county**
- 39) As a planner, you schedule a series of public meetings and workshops. Why should you evaluate such events?
- To estimate a level of attendance
 - To establish a record of the event
 - To demonstrate that this event worked better than previous such events
 - To improve future events**
- 40) Health and Safety Regulations give local jurisdictions the power to enforce:
- Design Standards
 - Eminent Domain
 - Development impact fees
 - Building codes**
- 41) Critical Path Method is a project management technique designed to:
- Help employees improve writing skills
 - Assist in decision making**
 - Reduce errors in traffic modeling
 - Identify evacuation routes
- 42) Cities in the US were densely settled in the late 19th and early 20th centuries. Each is a consequence except:
- Threat of communicable diseases
 - Great traffic congestion
 - Reform-mindedness
 - Massive federal aid to cities**

- 43) Environmental problems may be considered difficult to address because:
- Complex biological and chemical processes are involved**
 - Environmental problems do not respect political boundaries**
 - A solution to one problem may exacerbate another problem**
 - Solutions often have considerable economic impact**
- 44) Which of the following pieces of federal legislation focused on slum clearance?
- 1906 Antiquities Act
 - 1934 Federal Housing Act
 - 1949 Housing Act**
 - 1968 New Communities Act
- 45) The total area of permitted floor space expressed as a proportion of the site is known as the:
- Gross Leasable Area
 - Location Quotient
 - Floor Area Ratio (FAR)**
 - NAICS
- 46) Approximately what percentage of the US population was considered urban in 2000?
- 20%
 - 40%
 - 60%
 - 80%**
- 47) Traditional small towns feature each of the following characteristics EXCEPT:
- Incremental growth outward from a core
 - Low to very low density of development** – no, that would be outer rural county areas
 - Open space around the edges
 - Streets scaled for routine daily use rather than rush hour demand
- 48) This Act cut lot coverage to 70%, required separate bathroom for each apartment, courtyards for ventilation
- 1901 Tenement House Act**
 - 1909 Chicago Plan
 - 1916 New York City Zoning Act
 - 1920 New York Regional Plan
- 49) This measures the degree to which two variables are related:
- Coefficient of Correlation**
 - Coefficient of Variation
 - Gini Coefficient
 - Chi-Squared Statistic
- 50) All are known for their involvement in organizational approaches to citizen participation EXCEPT:
- Saul Alinsky – yes, advocacy planning
 - Homer Hoyt – no, sector theory of development**
 - Sherry Arnstein – yes, ladder of citizen participation
 - Paul Davidoff – yes, advocacy planning
- 51) You are planning director in a small city. An AICP planner on your staff has hung out his shingle as a real estate salesperson. He starts taking calls at the office. Such work is a conflict of interest. He would like to occasionally sell homes in city. He agrees to curtail use of the phone at work. What should you do next?
Place a warning memo in his personnel file and tell him that he will be dismissed if he fails to give up his real estate practice in its entirety.

- 52) You have been directed to prepare the city Capital Improvements Plan (CIP). Your job is to review the requests from city agencies for consistency with adopted plans and policies, and prepare a report listing the requests and offering recommendations. An in-house, informal review committee has ‘weeded out’ unnecessary requests to streamline the process. You are concerned that there is no public input. Problem?
There may or may not be a problem. Is the informal committee using reasonable planning standards or dividing the pie according to electoral districts? Find out if good planning rationale, consistent with adopted plans, is being followed.
- 53) At a planning conference, you hear negative things about the quality of work done by a well-known consulting firm. The firm, by coincidence, has submitted a proposal to do work for your community. You call all of the references supplied by the consultant. They are fine. What should you do?
When spending public money, you have a responsibility to make sure that the public gets the best value. This requires you to be zealous in determining whether there are any reasons for not hiring the consulting firm. After all, consulting firms do not list clients who might give a bad reference. You do additional research and check with names not on the list provided by the firm.
- 54) As a planner for a large city, you decide to seek a new higher paying job in the private sector. Before leaving, you did extensive planning work for a new transit-oriented development (TOD). Because of your high quality work, the local developer implementing the TOD project has offered you a job. Unsure if you can accept this work, you contact the Ethics Officer for an informal opinion. The most likely response is
Disclose your prior work experience to your new employer and receive written permission from your current employer.
- 55) At a recent public hearing, you are stunned to see an out-of-town AICP planner appear in front of the Planning Commission as an expert witness on behalf of opponents to a matter on the agenda. As staff to the Commission, you have prepared a thorough analysis supporting the project, which is now being dragged through the mud. A prudent course of action would be:
Check with the Ethics Officer regarding the propriety of these actions.