Planning Concepts:
- Medieval city planning
- Garden City Planning
- Cite Industrielle
- City Beautiful
- New Urbanism

Planners:
- Christopher Wren
  - one of the best known and highest acclaimed English architects in history, responsible for rebuilding 55 churches in the City of London after the Great Fire in 1666, including his masterpiece St Paul's Cathedral, completed in 1710
  - St Paul's has always been the touchstone of Wren's reputation. His association with it spans his whole architectural career, including the thirty-six years between the start of the new building and the declaration by parliament of its completion in 1711
  - now known as the greatest architect of the English baroque style
  - After the great fire of 1666 Wren prepared a master plan for the reconstruction of London, which was never executed. He designed, however, many new buildings that were built, the greatest of which was Saint Paul's Cathedral.
  - In 1669 Wren was named royal architect, a post he retained for more than 45 years. From 1670 to 1711 he designed 52 London churches, most of which still stand, notable for their varied and original designs and for their fine spires. They include St. Stephen, Walbrook; St. Martin, Ludgate; St. Bride, Fleet Street; and St. Mary-le-Bow, the latter manifesting the type of spire in receding stages generally associated with Wren's name. Among his numerous secular works are the Sheldonian Theatre, Oxford; the elegant library of Trinity College, Cambridge; the garden facade of Hampton Court Palace; Chelsea Hospital; portions of Greenwich Hospital; and the buildings of the Temple, London. Wren also built residences in London and in the country, and these, as well as his public works, received the stamp of his distinctive style. His buildings exhibit a remarkable elegance, order, clarity, and dignity. His influence was considerable on church architecture in England and abroad. Wren was knighted in 1675, and is buried in the crypt of St. Paul's.
- Kevin Lynch - Image of the City
  - Path, edge, node, center, district
  - an American urban planner and author.
  - Lynch studied at Yale University, Taliesin (studio) under Frank Lloyd Wright, Rensselaer Polytechnic Institute, and received a Bachelor's degree in city planning from MIT in 1947. He worked in Greensboro, NC as an urban planner but was recruited to teach at MIT by Lloyd Rodwin. He began lecturing at MIT the following year, became an assistant professor in 1949, was tenured as an associate professor in 1955, and became a full professor in 1963.
  - Lynch provided seminal contributions to the field of city planning through empirical research on how individuals perceive and navigate the urban landscape. His books explore the presence of time and history in the urban environment, how urban environments affect children, and how to harness human perception of the physical form of cities and regions as the conceptual basis for good urban design.
  - Lynch's most famous work, The Image of the City published in 1960, is the result of a five-year study on how users perceive and organize spatial information as they navigate through cities. Using three disparate cities as examples (Boston, Jersey City, and Los Angeles), Lynch reported that users understood their surroundings in consistent and predictable ways, forming mental maps with five elements:
    - paths, the streets, sidewalks, trails, and other channels in which people travel;
    - edges, perceived boundaries such as walls, buildings, and shorelines;
- **districts**, relatively large sections of the city distinguished by some identity or character;
- **nodes**, focal points, intersections or loci
- **landmarks**, readily identifiable objects which serve as reference points
- In the same book Lynch also coined the words "**imageability**" and "**wayfinding**". *Image of the City* has had important and durable influence in the fields of **urban planning** and **environmental psychology**.
- Kevin Lynch. Memorize his concept about Pattern Language.

- **Haussmann**
  - was a work commissioned by **Napoléon III** and led by the Seine **prefect, Baron Georges-Eugène Haussmann** between 1852 and 1870, though work continued well after the **Second Empire**'s demise in 1870.
  - The project encompassed all aspects of **urban planning**, both in the centre of Paris and in the surrounding districts: streets and boulevards, regulations imposed on facades of buildings, public parks, sewers and water works, city facilities and public monuments. The planning was influenced by many factors, not the least of which was the city's history of street revolutions.
  - Haussmann's approach to urban planning was strongly criticised by some of his contemporaries, ignored for a good part of the twentieth century, but later re-evaluated when modernist approaches to urban planning became discredited. His restructuring of Paris gave its present form; its long straight, wide boulevards with their cafés and shops determined a new type of urban scenario and have had a profound positive productive influence on the everyday lives of Parisians. Haussmann's boulevards established the foundation of what is today the popular representation of the French capital around the world, by cutting through the old Paris of dense and irregular medieval alleyways into a more rationally-designed city with wide avenues and open spaces which extended outwards far beyond the old city limits.

- **Ebenezer Howard**
  - known for his publication **Garden Cities of To-morrow (1898)**, the description of a **utopian** city in which man lives harmoniously together with the rest of nature. The publication led to the founding of the **Garden city movement**, that realized several Garden Cities in Great Britain at the beginning of the Twentieth Century.
  - called for the creation of new **suburban** towns of limited size, planned in advance, and surrounded by a permanent belt of agricultural land. These **Garden cities** were used as a role model for many suburbs.
  - Howard believed that such Garden Cities were the perfect blend of city and nature. The towns would be largely independent, and managed and financed by the citizens who had an economic interest in them.
  - ideas attracted enough attention and financial backing to begin **Letchworth Garden City**, a suburban **garden city** north of **London**. A second garden city, **Welwyn Garden City**, was started after **World War I**.

- **Tony Garnier**
  - Tony Garnier 1869-1948, French architect. His greatest achievement was in urban planning. After his study of sociological and architectural problems of an industrial city, he began in 1901 to formulate an elaborate solution, published as **Une cité industrielle** (1918). His proposals served as a stimulus to young architects of the 1920s. From 1905 to 1919 Garnier was architect to the city of Lyons. In this capacity he built the municipal slaughterhouse, a hospital, and a stadium, which are of interest for their use of reinforced concrete.

- **L’Enfant**
  - asked (1789) by Washington to submit plans for the capital city at Washington. His plans were presented in 1791, but he antagonized Congress and was opposed by Thomas Jefferson.
  - L’Enfant's plans were exhumed from the archives, and in 1901 the design of the capital was developed along the lines that he had laid down.

- **Daniel Burnham**
  - American architect and urban planner whose impact on the American city was substantial. He was instrumental in the development of the skyscraper and was noted for his highly successful management of the World’s Columbian Exposition of 1893 and his ideas about **urban planning**.

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He was the Director of Works for the World's Columbian Exposition in Chicago and designed several famous buildings, including the Flatiron Building in New York City and Union Station in Washington D.C.

American architect and city planner b. Henderson, N.Y. He was trained in architects' offices in Chicago. In that city he established (1873) a partnership with John W. Root and soon gained many of the most important architectural commissions of the day. Their Chicago works include the Monadnock Building; the 20-story Masonic Temple Building (1892), the first important skeleton skyscraper; the Reliance Building; and the "Rookery" offices. Among their other works were the Flatiron Building and the Wanamaker store in New York City, Union Station in Washington, D.C., and buildings in Cleveland, Buffalo, and San Francisco.

Burnham and Root also designed the general plan for Chicago's World's Columbian Exposition (1893) and through it exerted an enormous influence upon contemporaneous civic design. In 1901, Burnham served with C. F. McKim, F. L. Olmsted, Jr., and Augustus Saint-Gaudens on the Senate Park Commission in planning for the future beautification of Washington, D.C. With E. H. Bennett he created a civic improvement plan of great importance for Chicago (1907), much of which has since been put into execution. He also prepared plans for Baltimore, Duluth, and San Francisco, and was commissioned by the U.S. government to design plans for Manila and other cities in the Philippines.

- Olmstead
  - was an American journalist, landscape designer and father of American landscape architecture. Frederick was famous for designing many well-known urban parks, including Central Park and Prospect Park in New York City
- Frank Lloyd Wright
- Corbu

**Road & Parking Design:**

- Entrance locations:
  - Most desirable to be located on a collector street rather than arterial street
  - Sufficiently separated from an intersection
  - Reasonable angle for connection
- Parking Configurations:
  - 90 degree
    - most difficult for a driver to maneuver within
    - only configuration that allows for a two-way travel lane
    - most efficient; 11 cars per 100 lineal feet of curb
  - 60 degree
    - Relatively economical
    - Allow easy access to and from parking spaces
    - 9 cars per 100 lineal feet of curb
  - 45 degree
    - Relatively economical
    - Allow easy access to and from parking spaces
    - 8 cars per 100 lineal feet of curb
  - 30 degree
    - Least efficient, uneconomical
    - 5 cars per 100 lineal feet of curb
- Slope percentage for different uses:
  - parking is 5% max,
  - street is 10%
Parking Space Sizes
  - Accessible space is minimum 96” wide (8 ft) with access alley 60” (5 ft) wide for cars or 96” (8 ft) wide for vans adjacent to the space
Codes & Regulation Topics:

Code Analysis:
- Building Codes
- Life Safety Codes
- Plumbing Codes
- Handicapped / Accessibility Codes
- Zoning Ordinances
- Other specialty code requirements

Zoning Ordinances – regulate land usage, function, size & certain exterior aspects
- Segregate uses
- Control density
- Parking & loading requirements
- Heights, sizes & setbacks
- Site layout & coverage
- Signage & landscaping
- Water retention & detention

Note – if zoning ordinance and building code give different maximum heights or areas, the lower of the two takes precedence

Incentive Zoning:
- way to encourage private developers to provide amenities for public use in exchange for the opportunity to build larger or taller structure on the site
- must include a base floor area (standard for comparison) and a bonus ratio (the floor area ratio (FAR) that is provided if the public space is part of the design
- value of additional leasable floor area must exceed the cost of providing the public amenity or be a true incentive

Easements - easement in law, the right to use the land of another for a specified purpose, as distinguished from the right to possess that land

Deed Restrictions - restrictions on the deed that place limitations on the use of the property. Restrictive covenants are an example of deed restrictions Deed restrictions are usually initiated by the developers - those who determined what the land would be used for, divided the land into plots, and built homes, office buildings, or retail buildings on it. Deed restrictions come with the property and usually can't be changed or removed by subsequent owners.

Covenants – dictate type and appearance of exterior materials for aesthetic reasons, ex. Allowable color schemes

Egress Requirements:
- Exit Access Travel Distance- distance a building occupant must travel from the most remote point in the occupied portion of the exit access to the entrance of the nearest exit
- Common Path of Egress Travel – portion of an exit access that occupants are required to traverse before two separate and distinct paths of egress travel to two exits are available
- Exit Separation Distance- minimum distance by which two exits must be separated when two exits are required
- Exits cannot pass through:
  - Kitchens
  - Storerooms
  - Closets
  - Other spaces used for similar purposes
Through rooms that can be locked to prevent egress

- Spaces with more than 50 occupants must have 2 exits; doors swing in the direction of travel

**ADA Accessibility Guidelines (ADAAG):**

- State that all newly designed or newly constructed areas must meet accessibility requirements
- Includes all employee work areas and all temporary construction that is open to the public
- Following areas are not required to be accessible:
  - Temporary facilities associated with the process of construction (trailers, scaffolding)
  - Raised areas used primarily for security or life safety (security or life guard towers)
  - Non-occupiable service areas accessed infrequently for maintenance or monitoring (catwalks, penthouses, pump rooms)
  - Single occupant structures accessed from above or below grade (tollbooths)
  - Raised structures for officiating sporting events
  - Water slides
  - Non-public animal containment areas
  - Raised boxing & wrestling rings
- Minimum clear door opening width = 32” so typically use a 36” door
- 1:12 maximum ramp slope