

Elements of Urban Design

TOPOGRAPHY AND LANDSCAPE

SOCIO-ECONOMIC FABRIC

URBAN STRUCTURE

URBAN GRAIN

DENSITY + MIX

HEIGHT + MASSING

STREETSCAPE AND LANDSCAPE

BUILDING FACADE INTERFACE

MATERIALS AND TEXTURE

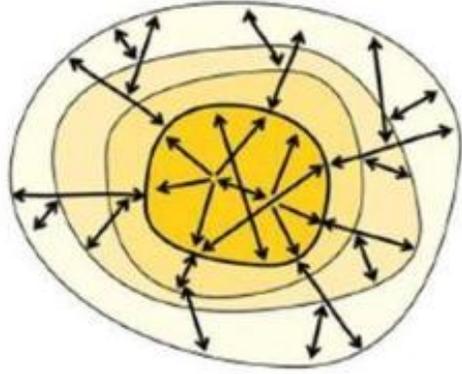
SCALE

URBAN FORM

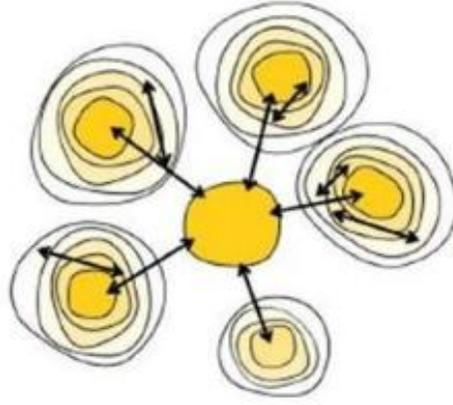
PUBLIC REALM

URBAN VISUALS

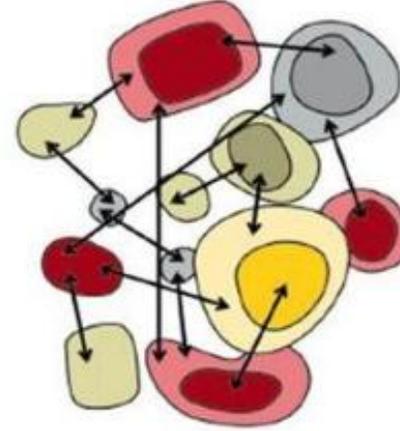
Urban Structure



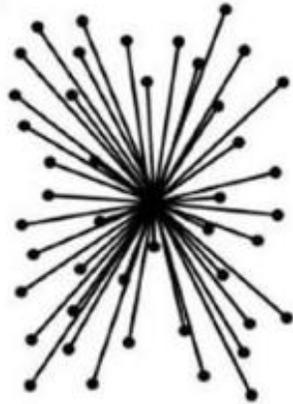
Monocentric city



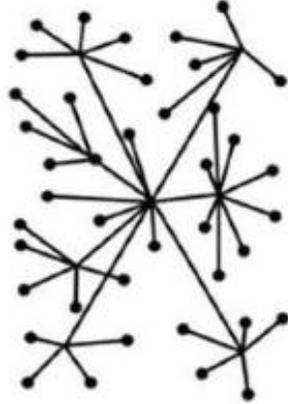
Polycentric city cluster
with "satellite centres"



Network city



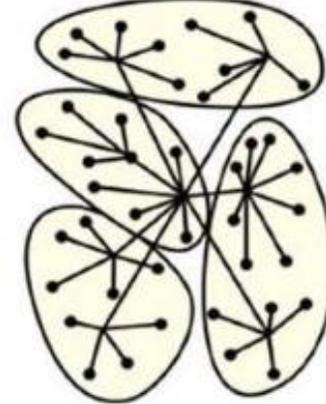
Centralized
structure



De-centralized
structure



Distributed
structure



Hybrid
structure

Urban Grain

Urban grain is essentially a description of the pattern of plots in an urban block and when this pattern is dominated by small plots it is described as fine urban grain.

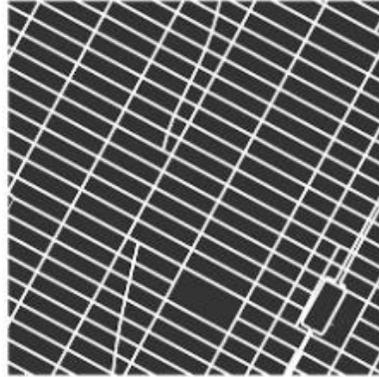
PORTLAND



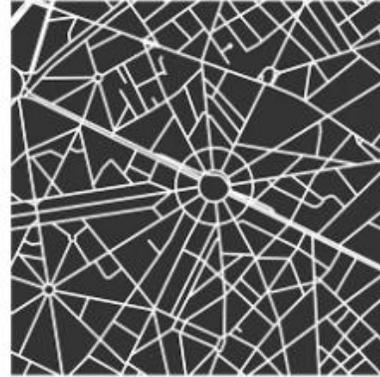
SAN FRANCISCO



NEW YORK



PARIS



IRVINE



ROME



TUNIS



ATLANTA



BOSTON



DUBAI



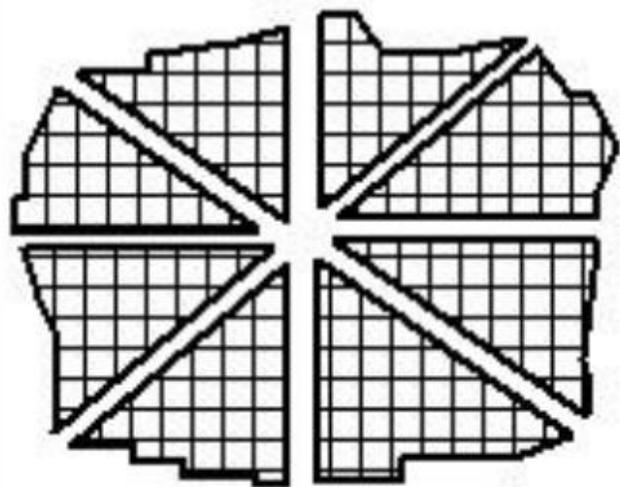
SACRAMENTO



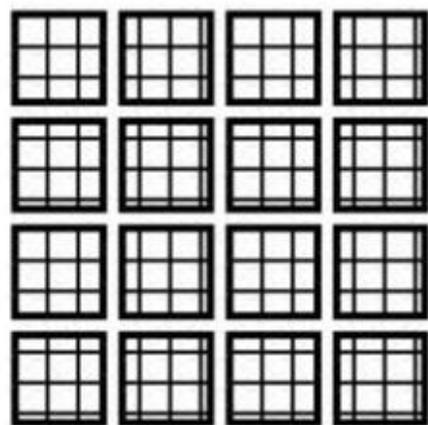
OSAKA



Urban Form



Radial



Grid



Irregular

Urban Form



MISSISSAUGA



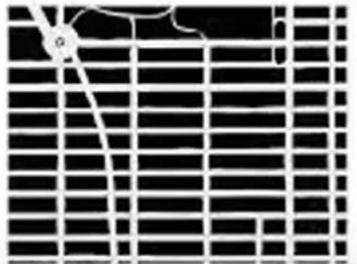
BARCELONA



COPENHAGEN



LONDON



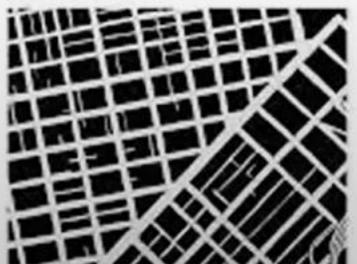
NEW YORK



PARIS



ROME



SAN FRANCISCO

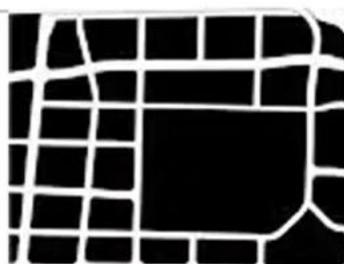


TORONTO

Autoplay is on

Urban Form

- Every human settlement consists of certain **elements**.
- Interaction of these elements form a pattern - the urban pattern.



MISSISSAUGA



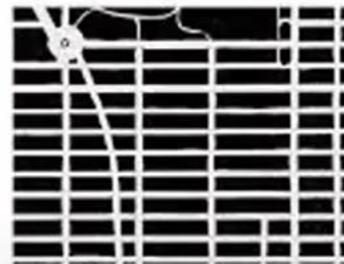
BARCELONA



COPENHAGEN



LONDON



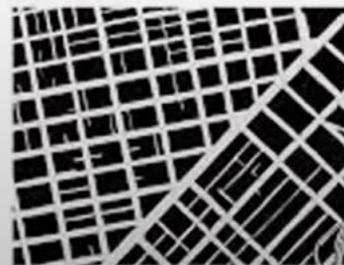
NEW YORK



PARIS



ROME



SAN FRANCISCO



TORONTO



BARCELONA



BRASILIA



Gramscichele, Sicily, Italy

Grammichele, Sicily, Italy

11



Settings



LONDON

Part 3 Urban Form and its Elements



3:02 / 15:36



Part 3 Urban Form and its Elements

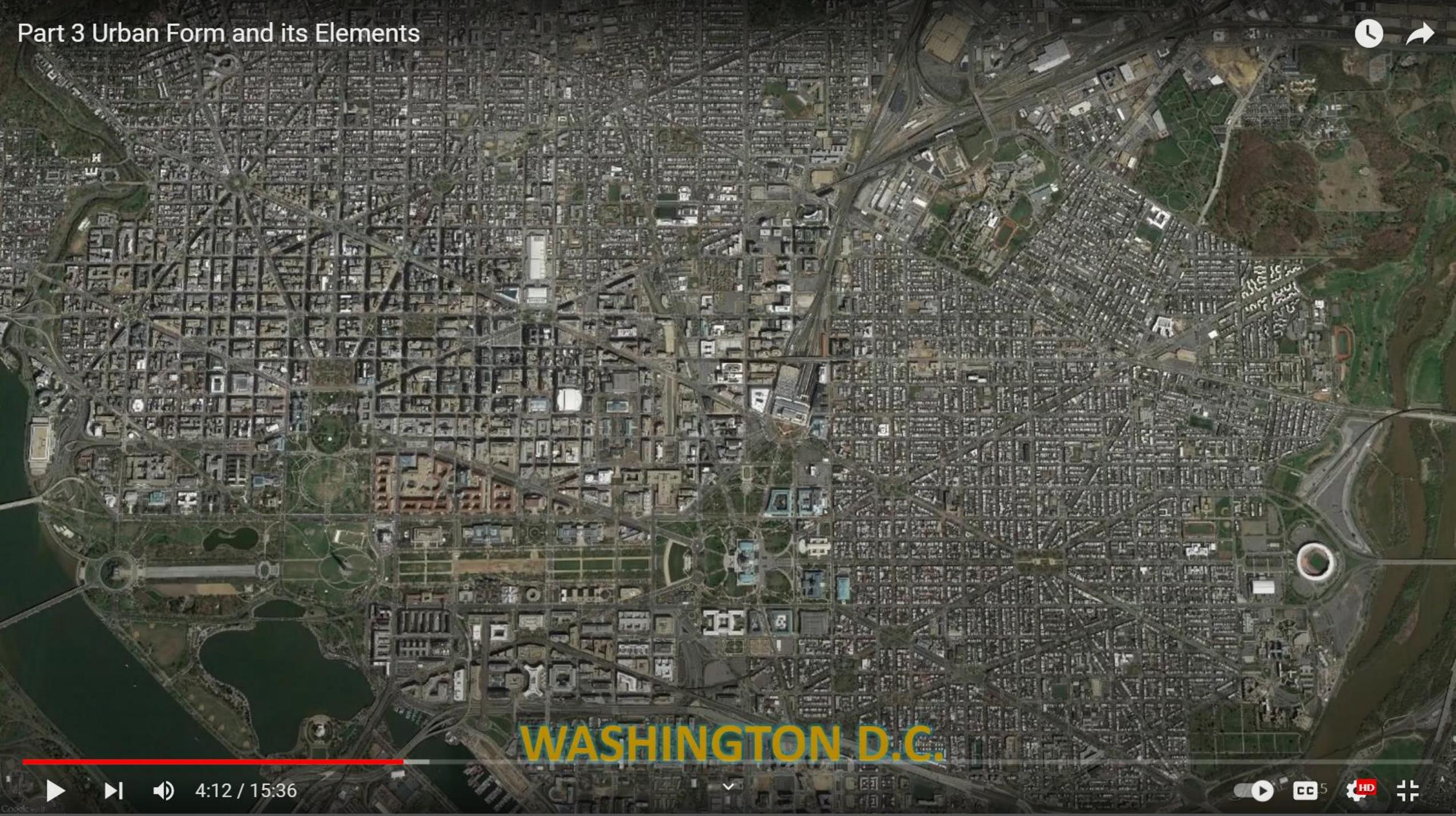


VENICE

3:27 / 15:36



Part 3 Urban Form and its Elements



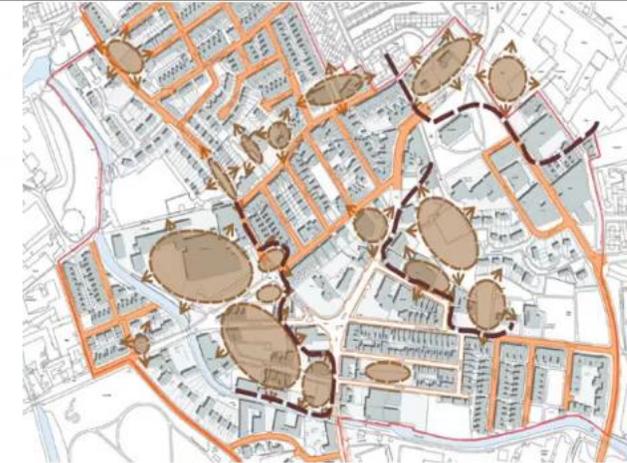
WASHINGTON D.C.

Urban Form

- Human-environment relationship is a two-way process termed as the **socio-spatial dialectic**.
- Urban patterns are influenced by the relationship of;
 - land ownership patterns
 - planning regulations
 - existing land use
 - transportation, and
 - street patterns

Urban Form

- The broad overall physical geographic arrangement of land-use and transportation facilities determines the urban form.
- Urban form **encompasses the nature of the transportation networks** and **configuration of land use** such as mono-centric versus polycentric



Formal and Functional Land Use



Formal Land Use

- Built up
- Paved
- Other

Functional Land Use

- Institutional
- Commercial
- Light industrial
- Residential
- Roadway
- Parking

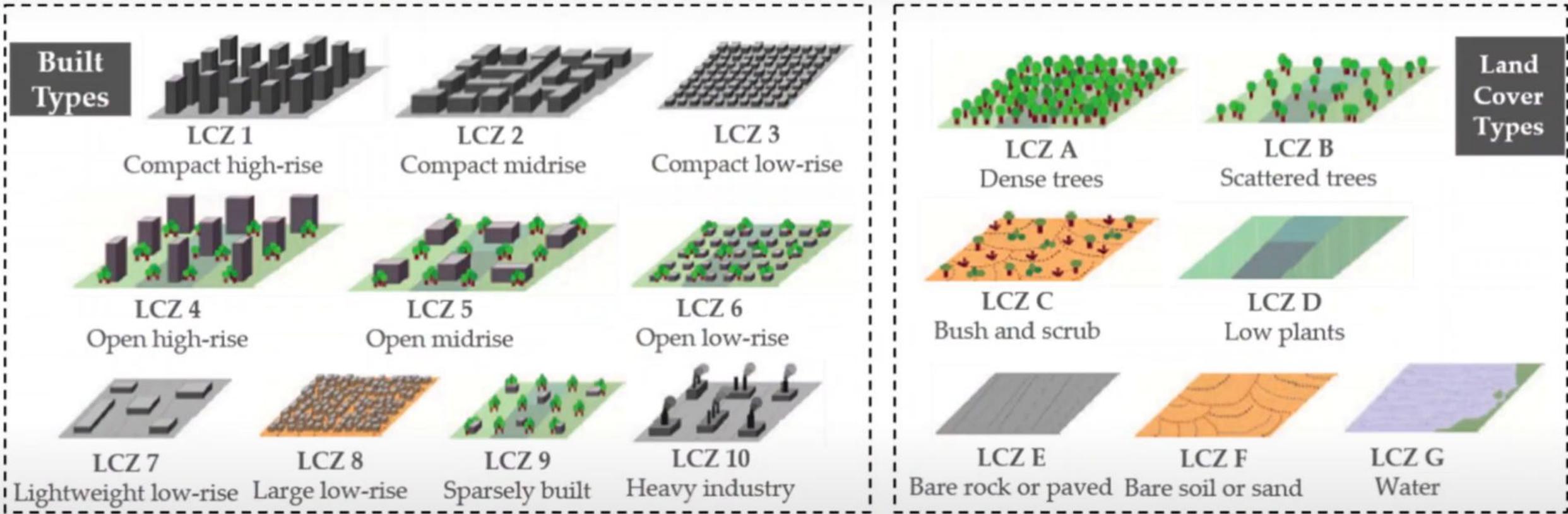


Figure 1. The local climate zone scheme.

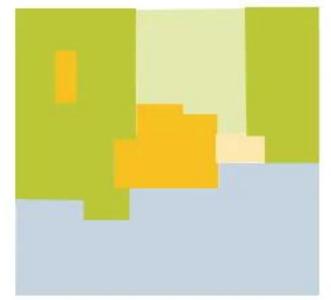
Types of Urban Growth



- Existing build up
- Infilling
- Extension
- Linear development
- Sprawl
- Large-scale projects

Zoning Types

Functional Zoning



- A zone for each type of land use.
- Land use zones subject to different regulations.

- Commercial
- Administrative
- Residential
- Industrial
- Green space

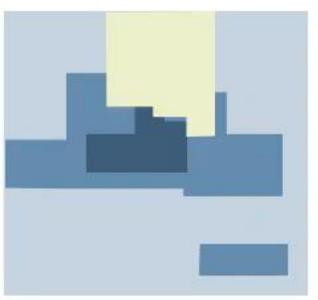
Form-Based Zoning



- Focuses on physical characteristics.
- Defined as a form of urban identity.

- Downtown
- Uptown
- East Side
- Historical district
- Manufacturing district

Intensity Zoning



- Sets land use intensity restrictions.
- Flexibility in forms and functions of land use developments.

- High density
- Average density
- Low density
- No development

Incentive Zoning



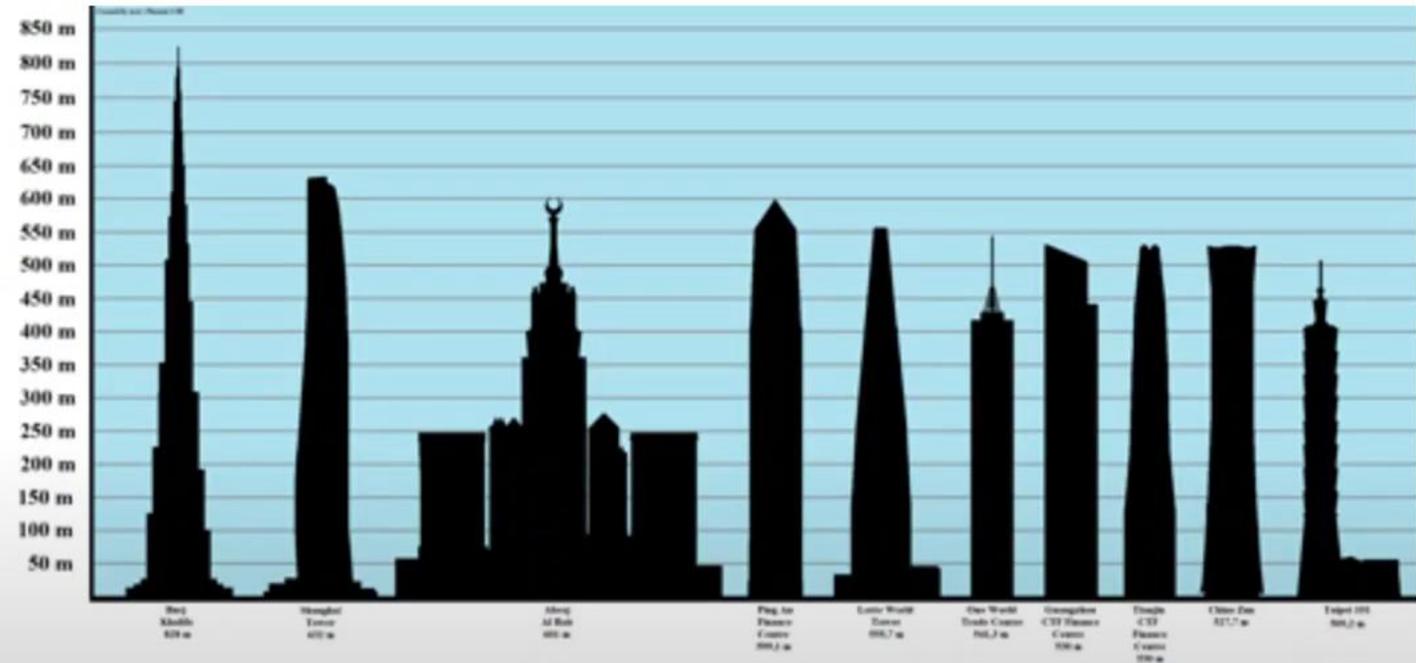
- Rewards for development in defined areas.
- Incite the provision of amenities.

- Incentives
- No incentives

Elements of Urban Form

Buildings:

- Buildings are the most pronounced elements of urban design - they shape and articulate space by forming the street walls of the city.
- Well designed buildings and groups of buildings work **together to create a sense of place.**



Elements of Urban Form

Public Space

- Great public spaces are the **living room of the city** - the place where people come together to enjoy the city and each other.
- Public spaces make high quality life in the city possible
- Public spaces range from grand central plazas and squares, to small, local neighborhood parks.



Exit full screen (f)

Part 3 Urban Form and its Elements



Elements of Urban Form

Streets

- Streets are the **connections between spaces and places**, as well as being spaces themselves.
- They are defined by their physical dimension and character as well as the size, scale, and character of the buildings that line them.
- Streets range from grand avenues to small, intimate pedestrian streets.
- The pattern of the street network is part of what defines a city and what makes each city unique.

London, UK



Elements of Urban Form

Transport

- Transport systems connect the parts of cities and help shape them, and enable movement throughout the city.
- They include road, rail, bicycle, and pedestrian networks, and together form the total movement system of a city.
- The best cities are the ones that elevate the experience of the pedestrian while minimizing the dominance of the private automobile.



London

Elements of Urban Form

Landscape

- The landscape is the green part of the city that weaves throughout - in the form of urban parks, street trees, plants, flowers, and water in many forms.
- The landscape helps define the character and beauty of a city and creates soft, contrasting spaces and elements.

