



Module :

**Practical decisions facing
urban planners**

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Summary

- 1. Should densities be controlled?**
- 2. Should planners favor monocentric or polycentric cities?**
- 3. Side effects of green belts**
- 4. Do satellite towns decrease the need for transport?**
- 5. Is it desirable to match employment and housing in each neighborhood?**



Section 1:

Should densities be controlled?

Should densities be controlled?

- **Densities are generated by the interaction of markets, regulations and infrastructure availability**
- **Population densities cannot be directly controlled by regulations**
- **Regulations can only control the amount of floor space built on a plot of land**
- **As a consequence controlling densities means restricting the amount of floor space built**

Should densities be controlled?

- **Many land use regulations, by imposing a minimum plot size and restricting the floor area ratio, aim at reducing densities**
- **The effect of regulations aimed at reducing densities is therefore only indirect**

Should densities be controlled?

- **The control of densities raise 2 questions:**
 - **What is the rationale for imposing lower densities?**
 - **Does reducing the density of floor space always reduce population densities?**

Rationale for controlling densities

- **Regulations may limit densities, but they cannot increase densities in the absence of demand;**
- **The rationale for restricting density below an allowed threshold is often based on the capacity of existing or planned infrastructures;**
- **However, restricting density below market demand increases land consumption and requires an extension of existing infrastructure**

Rationale for controlling densities

- Therefore, regulations to limit densities are appropriate only when increasing the infrastructure capacity would be more costly than the developed land value of the additional land area which would be required as a result of the density restriction.
- An exception should be made for limiting densities for clear environmental reasons or for protecting historical heritage
- In other cases, infrastructure capacity should be increased to match the densities implied by land values



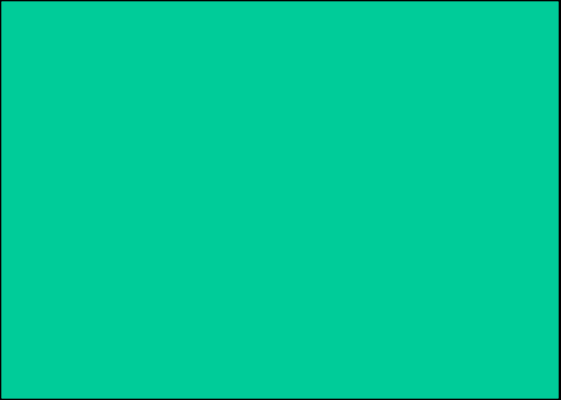
Is it effective to control density through regulations?

- **Regulations aimed at controlling densities are in fact limiting the amount of floor space per unit of land**
- **This limit may decrease the overall supply of housing in a city, resulting in higher housing prices**
- **Higher housing prices decrease the area of floor space affordable per households, and therefore may result in higher density, defeating the objective of the legislation;**



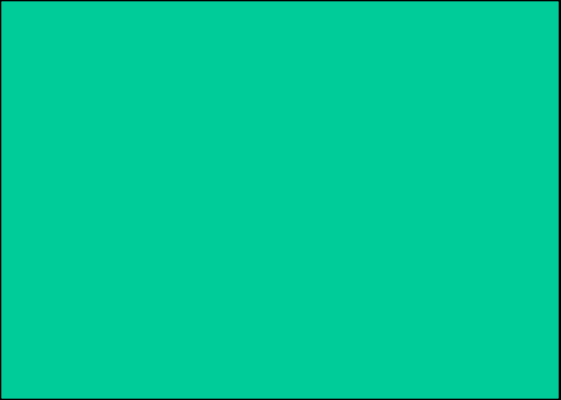
Section 2:

Should planners favor
monocentric or polycentric
cities?



Monocentric Vs. Polycentric cities: Advantages of monocentric cities

- **Monocentric cities are more effective spatial structures to maintain a high ratio of public transport trips over all trips**
- **Monocentric cities tend to have shorter average trips than polycentric cities**
- **Monocentric cities tend to have higher densities than polycentric cities and therefore put less pressure on the natural environment**



Monocentric Vs. Polycentric cities: Advantages of Polycentric cities

- **Polycentric cities tend to have cheaper land and therefore tend to increase the consumption of floor space**
- **For the same reason, small businesses find it easier to find land in a polycentric city**
- **Although more pollutants are emitted because of longer trips, pollution is less concentrated in a polycentric city and therefore less damaging for health**



Monocentric Vs. Polycentric cities conclusions

- **In low and moderate income cities it is better to maintain or even reinforce the degree of monocentricity of a city**
- **When a city become very large (say, >5 million people) the degree of monocentricity is bound to decrease**
- **However, it is a good practice to maintain or even add to the civic and cultural amenities of the center (example Shanghai)**



Section 3:

Side effects of green belts

Side effects of Green Belts

- **Green belts oblige cities to grow through densification or by creating suburbs on the outside of the green belt**
- **Densification increases housing price and reduce housing standards**
- **The growth of suburbs on the outside of the greenbelt increases trip length and commuting time for a significant part of the population**
- **In Seoul the green belt has resulted in very high housing price and a low housing consumption, in spite of the high income of the population**

Side effects of Green Belts conclusions

- **It is better to preserve open space around cities based on its environmental value rather than based on the “geometry” of a green belt.**
- **For instance, linear strips of land kept along rivers or lakes are a more effective way of preserving the natural environment with fewer of the price side effects generated by the green belt.**



Section 4:

Do satellite towns decrease the
need for transport?

Satellite towns

- **Satellite towns are based on the premises that they are self sufficient, i.e. that:**
 - **People who live in them work in them**
- **In reality, surveys are showing that:**
 - **most people who live in a satellite town work outside it,**
 - **Most people who work in a satellite town live outside it.**
- **As a result, satellite towns increase commuting time and distance for a large number of population**



Section 5:

Is it desirable to match
employment and housing in each
neighborhood?



Matching employment and housing

- **The economy of a large modern city is based on labor mobility and in the integration of labor markets**
- **This means that all the metropolitan jobs should be physically accessible to the entire active population within the metropolitan area;**

Matching employment and housing

- **Matching employment and housing in each neighborhood denies the basic economic principle on which city are based: labor mobility and integration.**
- **Further it implies that:**
 - **Households should limit their search for job in the neighborhood where they live**
 - **When households wants to change jobs they should also change neighborhoods**
 - **Households who wants to move to a new house should change jobs**

Matching employment and housing

- Obviously, none of the above propositions are correct, therefore there is no rationale for trying to build “self contained” neighborhoods.
- However, residential areas of various standards should be available in every part of a city.
- Mixed land use providing jobs and retail space in the middle of residential neighborhoods are an efficient way of reducing trip length

Conclusions

- In making decisions about regulations or planning land use, urban planners should always try to anticipate the reactions of the market;
- Potential negative side effects of regulations and investments should always be studied
- Planners do not design cities, they only provide a framework affecting the supply and demand for land and floor space.