

How Urban Planning Works

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Urban Planning Basics

The goal of planning is to guide the development of a city or town so that it furthers the welfare of its current and future residents by creating convenient, equitable, healthful, efficient and attractive environments. Most urban planners work in existing communities, but some help develop communities -- known as new towns, new cities or planned communities -- from scratch. Either way, urban planners must consider three key aspects of a city as they [map](#) out their programs:

The physical environment: A city's physical environment includes its location, its climate and its proximity to sources of food and [water](#). Because drinking water is so crucial, many cities are founded at the head of a river or at the **fall line**, the point where rivers descend from the regions of older, harder rocks toward the softer sediments of the coastal plain. The rapids that often form at the fall line mark ideal locations for towns and villages to evolve. Coastal cities also have a great advantage in that their accessibility positions them to become important trading centers.

Planners must often consider an area's geologic history to understand the full character of a city. For example, the physical environment of New York City and the surrounding region reflects the culmination of a billion years of geologic activity. Over this great span of time, mountain ranges formed and were worn away. Seaways came and went. Most recently, episodes of continental [glaciation](#) covered the area with ice sheets that eventually retreated. All of this activity makes New York City what it is today and affects how it might change in the future.

The social environment: The social environment includes the groups to which a city's residents belong, the neighborhoods in which they live, the organization of its workplaces, and the policies created to impose order. One of the biggest issues in most cities is the inequitable distribution of resources. For example, more than 50 percent of the population of Mumbai and New Delhi (cities in India) live in slums, while in Lagos and Nairobi (cities in Africa), more than 60 percent of households aren't connected to water [source: [United Nations Human Settlements Programme](#)]. As a result, the social environment can be a risk factor for disease and mortality as much as individual risk factors.

Planners work with local authorities to make sure residents are not excluded from the benefits of urbanization as a result of physical, social or economic barriers.

The economic environment: All cities work hard to support the retention and expansion of existing local businesses. Primary employers, such as manufacturing as well as research and development companies, retail

businesses, universities, federal labs, local government, cultural institutions, and departments of tourism all play strong roles in a city's economy. The programs of an urban planner should encourage partnerships among public agencies, private companies and nonprofit organizations; foster innovation and competitiveness; provide development opportunities and resources to small businesses; and nurture, preserve and promote local arts and creative industries in order to sustain a city's cultural vitality.

The Master Plan

As you can imagine, urban planners must do a great deal of research and analysis to fully understand how the physical, social and economic aspects of a city interact. Before they ever put pen to paper, they study:

- The current use of land for residential, business and community purposes
- The locations and capacity of streets, highways, airports, water and sewer
- The types of industries embedded in the community
- The characteristics of the [population](#)
- Employment and economic trends

They also gather input from residents, government officials, politicians, business executives and special groups. Armed with all of this information, planners develop short- and long-term strategic alternatives for solving problems in a coordinated and comprehensive manner. They also show how these programs can be carried out and how much they will cost.

All of these details are captured in a formal document known as a comprehensive plan or a master plan.

Any municipality, from small village to sprawling metropolis, can have a master plan. Small communities will hire a private planning firm to prepare a plan and submit it to the local government for approval. In big cities, the department of city planning prepares the master plan.

The plan itself is a document, sometimes hundreds of pages long, that shows a community as it is and recommends how it should exist in the future. It often contains diagrams, aerial photos, [maps](#), reports and statistical information that support the planner's vision.

A typical master plan addresses the following:

- **Transportation and traffic:** A good master plan takes all of a city's **transportation corridors** into account. A transportation corridor is any channel along which people and goods move from place to place.
- **Community facilities:** Cities support an array of community facilities that satisfy its demand for social and cultural enrichment. These include public and charter schools, police and fire departments and community centers.

- **Parks and open space:** Parks are vital to cities because they serve as the focal points of neighborhoods and often have community and cultural facilities grouped around them. In addition to parks, cities maintain a variety of open spaces, which may be undeveloped lands or land set aside for health and safety reasons or for preservation.
- **Neighborhoods and housing:** Although they have unique characteristics, neighborhoods in vibrant cities are interconnected and enjoy a dynamic exchange of commuters, ideas and influences. Successful neighborhoods also emphasize community, livability, appearance, transportation opportunities, convenience and safety for all residents.
- **Economic development:** A master plan recommends how a city's design can be enhanced to attract new businesses and protect existing businesses. For example, a plan might call for redevelopment of a downtown area to include a public market and a conference/convention center, with the goal of better serving the city.
- **Land use:** The major land use recommendations presented in a master plan result from analysis of a city's environmental and physical conditions, as well as the planner's vision for future growth. A map of future land use is generally included and makes recommendations about land set aside for parks and open space; residential areas; commercial, office and industrial uses; civic and institutional uses; and mixed-use areas.

Public support of a master plan, no matter how comprehensive or visionary, is crucial to its overall success. Strong public opposition can arise if city residents believe the proposals of a plan are too costly, aren't fair and equitable or could interfere with their safety and well-being. In situations like this, urban planners may have to explain their plans to planning boards, interest groups and the general public. If opposition cannot be overcome, governments sometimes refuse to act on proposals of a master plan.

Once a plan is adopted, implementation can begin. Not all programs can be implemented at once, so most plans include, usually as part of the appendix, an action agenda that provides an outline of the short- to medium-term actions essential to getting the master plan off the ground. The implementation process relies heavily on government authority.

The city may use its grant of the police power to adopt and enforce growth and development regulations. It may also use its power to tax to raise the money necessary to fund growth and development. And it may use **eminent domain** -- the power to force sale of private property for valid public use -- to enable various infrastructure investments and redevelopment actions in support of public policy and plans.

Planners must also be aware of zoning laws, which are another way cities control the physical development of land. Zoning laws designate the kinds of buildings permitted in each part of a city. An area zoned R-1 might allow only single-family detached homes, whereas an area zoned C-1 might allow only certain commercial or industrial uses.

Zoning is not without controversy. Zoning ordinances have been challenged as unconstitutional several times, and some argue that they are tools of racial and socioeconomic exclusion.

Some Criticisms of Planning

Some early opponents of urban planning blamed its practitioners for focusing only on aesthetics with no regard for human welfare. But today, such criticisms are largely unfounded because urban planners take a much more holistic approach to community development. They look far beyond aesthetics to consider the environmental, economic and social health issues that affect a community as it grows and changes.

Unfortunately, as the complexity of urban planning has increased, so have the length of time and costs required to complete the process. The time-intensive nature and high costs of planning are two of the biggest criticisms. If the planning process takes too long, the solutions it proposes may be obsolete before they're fully implemented -- a serious concern in emerging cities where change occurs more rapidly.

Some people object to the fact that urban planning gives the government too much power over individuals. And still others say urban planners put too much emphasis on the future of cities and towns and not enough on present problems. This discontent with urban planning pushes the field forward and forces it to evolve.

One of the most influential critiques of modern urban planning came in 1961 by Jane Jacobs. Her book, "Death and Life of Great American Cities," blasted 20th century urban planning and proposed radically new principles for rebuilding cities:

- **Cities as ecosystems:** Jacobs compared cities to living things that change over time as they interact with their environment. If the city is the organism, then the sidewalks, parks, streets and neighborhoods are the various systems, each with a different function but tightly and seamlessly integrated. By viewing cities in this way, planners can better understand their structure and make more efficacious recommendations.
- **Mixed-use development:** Jacobs saw diversity as an absolute requirement for healthy, vibrant urban communities. Diversity didn't just refer to populations. Jacobs also felt that buildings should vary in age, condition, use and rentals. In such an environment, people of different ages and backgrounds use different parts of the city at different times of the day, making the city vital and healthy around the clock, not just during business hours.
- **Bottom-up community planning:** Jacobs felt that planners didn't rely enough on local expertise. How could an outsider, she argued, know the real-life needs of a neighborhood better than the people who actually lived there? In the Jacobian planning model, residents are highly involved in the entire development process.
- **The case for higher density:** While conventional wisdom suggested that densely populated neighborhoods led to crime and squalor, Jacobs called for even more density. She believed that diverse and highly concentrated populations of people, including residents, promote visible city life and help to combat the homogeneity that ultimately leads to dullness.

- **Local economies:** Jacobs developed a model of local economic development based on revitalizing old businesses, promoting small businesses and supporting entrepreneurs, as opposed to replacing smaller, less-profitable businesses with large, stable corporations. In fact, her approach to economic development is just another way a city can maintain diversity. Having a variety of businesses forms the base for diversity in a specific district and has a cross-effect on the diversity of other localities by providing affluent residents and patrons needed for mutual support.

Although controversial, Jane Jacobs' ideas shook the industry and heavily influenced a new generation of planners and architects. Her theories and principles will, no doubt, continue to affect the design of cities for years to come.

The Future of Urban Planning

As long as people live in cities, there will be a need for urban planning. In developing countries, such as China and India, high rates of urbanization make successful city planning especially difficult. Planners must balance the speed of decision-making with the need for thoughtful, well-considered programs for development. And they must address very difficult questions: What qualities in society should be valued most? What is fair and equitable? Whose interests will be served first?

In the future, these questions will likely be posed for cities that exist on the moon or Mars. Urban planning in such situations will have the added challenge of dealing with microgravity, extreme temperatures, radiation and other environmental issues. You might think that such a city is unrealistic, but NASA has been planning a "city in the sky" for years. In 1975, a team of researchers, planners and NASA officials met for 10 weeks to design this space city. The team's solution was a giant wheel nearly two kilometers across. Inside the wheel, the city's 10,000 inhabitants would enjoy breathable air and normal Earth gravity due to the rotation of the wheel about its axis. They would work in factories; travel across the city in transport tubes; and participate in activities at schools, arenas and theaters. They would, in short, do all of the same things residents of Earth-bound cities do. And they would require superior urban planning to make sure they lived in a healthy, comfortable and efficient community.