

Team-24 PROJECT REPORT

Urban development and city management involve planning, designing and maintaining cities to ensure they are functional, sustainable and livable for residents.

Urban development is about planning and organizing city growth to create safe, livable, and sustainable spaces. It includes deciding where to build housing, businesses, and public areas, ensuring essential services like transport and utilities, supporting the economy with job opportunities, and protecting the environment with green practices. The goal is to make cities more inclusive, efficient, and resilient for all residents.

City management applies modern management principles to plan and organize cities, addressing physical and social challenges to improve urban life. Key principles include sustainability, which focuses on responsible growth and resource conservation, and efficiency, which optimizes infrastructure and reduces waste to meet population needs. Social equity ensures equal access to services and resources, while public participation involves residents in decision-making, fostering community engagement. Cities use technological innovation for efficient operations, such as data analysis and smart systems, and prioritize safety in public health, crime prevention, and emergency response. Lastly, economic vitality promotes job creation, investment, and balanced budgeting, supporting long-term urban prosperity. Together, these principles create balanced, adaptable cities that prioritize the well-being of all residents.

To address these sectors of development and management. We included many different types of buildings. We used residential buildings to implement a simulation of civilians. It was used as a way to represent a population growth and a sector with no production of resources. Commercial buildings were used as a way to represent economic growth and the working population of the city. Industrial buildings were used to represent industrial and technological development in the city. Landmarks showed the physical growth and extension of boundaries within the city. We were further influenced in our design by principles of sustainable urban development and the need for resilience in city planning. This led to the implementation of simulations for resource allocation and distribution of utilities.

For our system we assumed that everyone above 18 was employed and paid tax in the sense that they contributed in some way to the economy. We also assumed that for the time being there would be no conflicts in the constructions of buildings. It's also assumed that the city manager has direct say in the construction of buildings and allocation of resources.

Reference List

https://www.researchgate.net/publication/322152661_City_Management_Theories_Methods_and_Applications_Book_Proposal#:~:text=Therefore%2C%20city%20management%20is%20defined,tw o%20areas%3A%20cities%20and%20management.

<https://www.cs.up.ac.za/cs/lmarshall/TDP/TDP.html>