

**Department of Urban Planning
School of Planning and Architecture, New Delhi**

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PART -1

**INFRASTRUCTURE DEVELOPMENT PLAN OF
JABALPUR MADHYA PRADESH**

BACKGROUND:

Jabalpur is an important administrative, industrial and business centre of Madhya Pradesh, that is situated on the banks of Narmada River and is the third-largest urban agglomeration in the state. The city is an important administrative headquarters, judiciary and educational centres of the state. The place is also known for its tourism destinations. The city is a military headquarters, containing the central gun-carriage factory, an ordnance factory, and an ammunition depot. According to the 2011 India census, the Jabalpur city (the area covered by the municipal corporation) recorded a population of 11 Lakhs. The Jabalpur metropolitan area (urban agglomeration) recorded a population of almost 13 Lakhs. In 2018 the population estimates are around 14.5 Lakhs in the metropolitan area. Jabalpur covers an area of 367 km² and the city municipal corporation is in charge of the governance of the city civic and infrastructural assets. Jabalpur Development Authority looks after the planned and balanced development of Jabalpur city. The city has various development plans in place and has the record of performing well in both its administrative and executive fields. Jabalpur has bagged two awards under the Smart Cities missions in the India Smart Cities Awards Contest (ISAC) 2020. In the best performing cities category, Jabalpur is awarded 3rd position, whereas Indore ranks first.

NEED OF THE STUDY:

Jabalpur has witnessed some infrastructure development initiatives over the years. The city has a reasonably well-developed road network, including national and state highways connecting it to other major cities. It also has an airport that serves both domestic and limited international flights. The city has a railway station that connects it to various parts of the country. Jabalpur has a decent healthcare infrastructure, with government and private hospitals providing medical services to residents. The city also has educational institutions, including schools, colleges, and universities, catering to the educational needs of the population. In terms of basic amenities, the city has access to electricity, water supply, and telecommunication services. However, the city does face a lot of issues and constraints in its different sectors. Some have been mentioned below:

1. Traffic Congestion: Jabalpur faces traffic congestion, especially during peak hours. The road infrastructure needs further improvement to handle the increasing number of vehicles.
2. Public Transportation: The city's public transportation system, including buses, needs enhancement to provide efficient and reliable services to the residents. Limited options for public transportation can lead to increased reliance on private vehicles.

3. Solid Waste Management: Effective solid waste management remains a challenge in Jabalpur. Proper waste collection, segregation, and disposal systems need to be implemented to maintain cleanliness and hygiene.
4. Drainage System: The drainage system in some areas of the city requires improvement. During monsoons, waterlogging issues can arise, leading to inconvenience for residents and potential health hazards.
5. Water Supply: While the city has a water supply system, ensuring a consistent and reliable water supply for all residents can be a challenge, particularly during the summer months.
6. Urban Planning: Efficient urban planning is crucial for the sustainable development of any city. Jabalpur needs to focus on comprehensive urban planning to address issues related to population growth, land use, and infrastructure requirements.
7. Environmental Concerns: Like many growing cities, Jabalpur faces environmental challenges. Balancing infrastructure development with environmental conservation is essential to preserve the city's natural resources and reduce pollution levels.

The most important concern is that despite of having Development Plans, CDPs, Mobility Plans, physical Infrastructure plans prepared for the city, it still lacks a holistic infrastructure plan supported by a budget for the development and growth of the city in the near future. Therefore, the need of the study is to prepare an Infrastructure Development Plan for the city of Jabalpur.

STUDY OBJECTIVE:

The main objective of the study is to prepare an Infrastructure Development Plan for the city of Jabalpur in Madhya Pradesh. The Infrastructure Report would cover the detail plans for the following sectors:

1. Physical Infrastructure (water supply, drainage and sewerage, solid waste,)
2. Social / Economic Aspects (education, health, other municipal services)
3. Mobility and Transport
4. Environment and Disaster Management
5. Affordable Housing
6. Heritage and Tourism
7. Electricity and Telecommunication (Internet connectivity and broadband access)
8. Information and Digital Technology for Administration and Governance

SCOPE OF STUDY:

- To understand the characteristics, profile and demands for growth of an urban agglomeration and understand the process of preparation of an Infrastructure Development Plan with future perspectives.
- To undertake field visit of the study area to collect necessary primary and secondary data.
- To assess and analyse the data collected to comprehend the issues and sector wise concerns affecting their growth and potential.
- To carry out planning forecast and evolve scenarios of infrastructure development strategies for the city.
- To propose for a holistic Infrastructure Development Plan for the city.

DETAILS OF WORK:

- To study relevant literature and reports for understanding concepts of urban agglomerations development and process of an Infrastructure Development Plan preparation.
- To design the data collection programme, including check list, questionnaire, survey design, etc. and undertake field visit to the case city.
- To assess the land use, settlement patterns, socio-economic characteristics, heritage and environment of the city and the region.
- To assess the infrastructure development in terms of physical, social and transportation networks, operating modes, and public infrastructure etc.
- To carry out planning forecasts using mathematical techniques.
- To develop and evaluate alternate urban development strategies for horizon year.
- To formulate policies, schemes and programmes and develop an Infrastructure Development Plan for the city.

EXPECTED OUTPUT:

An Infrastructure Development Plan including key issues and constraints in different sectors followed by analysis, projections and proposed financial recommendations.

PART 2 – FORMULATION OF DETAILED PROJECT REPORTS (DPR):

Different Sectors will identify a problematic area and prepare a Detailed Project Report (DPR) for the city as a solution to the concerned area.

STUDY OBJECTIVE:

The objective of this studio exercise is to familiarise students with the process of planning for various types of innovative development projects within Jabalpur city.

SCOPE OF STUDY:

1. To study and appreciate various concepts emanating from the Infrastructure Development Plan, planning principles, norms and standards, state-of-the-art practices related to the identified projects.
2. To assess baseline characteristics of verified project influence areas and assess the land requirements based on various proposed project activities.
3. To develop conceptual layout plans and proposals for the proposed project schemes.
4. To evolve broad financial costing and phasing of activities along with mechanisms for financing the projects.

EXPECTED OUTPUT:

Detailed Project Reports under different thematic areas outlining the following aspects:

- Identification and justification of the Project
 - Formulation of project along with technical specifications and itemization
 - Phasing and costing
 - Implementation Mechanism
 - Appraisal of the project (financial, economic, environmental, etc.)
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