



Urban Development and Housing Department  
Government of Bihar

## City Development Plan (2010-30)

### **GAYA**



### EXECUTIVE SUMMARY

CDP Prepared By:



**Support Programme for Urban Reforms in Bihar**

(A Government of Bihar Initiative)

Supported by DFID, United Kingdom

**प्रेम कुमार**  
मंत्री  
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संदेश

मुझे यह घोषणा करते हुए अति प्रसन्नता हो रही है कि नगर विकास ने राज्य के प्रमुख 28 शहरों की नगर विकास योजना (CDP) तैयार की है। यह विभाग के लिए विशेष उपलब्धि है क्योंकि ये नगर विकास योजनाएँ (CDPs) राज्य में नगरीय आधारभूत संरचनाओं पर होने वाले व्यय के लिए मील का पत्थर साबित होगी।

समग्र विकास की धारणा से राज्य में नगरीय विकास में बड़ा लाभ मिलेगा। ये नगर विकास योजनाएँ (CDPs) विस्तृत विचार विमर्श के बाद वर्ष 2010 से 2030 तक के लिए बनाई गई हैं। विचार विमर्श द्वारा एक दृष्टिकोण परिभाषित हुआ है जिसे परियोजनाओं (Projects) के रूप में परिवर्तित किया जाएगा। नगर विकास योजनाओं (CDPs) में न केवल 20 वर्षों में आधारभूत संरचनाओं की जरूरतों को परिभाषित किया है बल्कि नगर सुधार की जरूरतों एवं परियोजनाओं के क्रियान्वयन के लिए धन राशि की उपलब्धता के लिए स्रोत को भी दर्शाया गया है। सभी नगर विकास योजनाओं (CDPs) में नगरीय स्तर पर वित्तीय सुधार पर जोर दिया है जो दीर्घ काल में न केवल विकास की जरूरतों को पूरा करने में लाभप्रद होगा बल्कि निजी क्षेत्र द्वारा निवेश को आकृष्ट करने में मदद करेगा। नगर विकास योजनाएँ (CDPs) राज्य को आर्थिक क्रिया कलापों के केन्द्र के रूप में नगरीय क्षेत्र के विकास के लिए पथप्रदर्शक होंगी।

ये नगर विकास योजनाएँ ब्रिटिश सरकार के अन्तराष्ट्रीय विकास विभाग (DFID) द्वारा वित्त पोषित संवर्धन परियोजना (SPUR) के तहत बनाई हैं। "संवर्धन" परियोजना वृहद आर्थिक क्रिया कलापों एवं सेवाओं जो गरीबों के विकास में सहायक हो सकती हैं को केन्द्र में रखते हुए आर्थिक वृद्धि एवं गरीबी उन्मूलन में विशिष्ट योगदान के लिए शहरी क्षेत्रों को मजबूती प्रदान करने पर केन्द्रित है।

जन प्रतिनिधि के रूप में मेरी हार्दिक इच्छा है कि बिहार अग्रणी राज्य की श्रेणी में खड़ा हो जैसे प्राकृतिक एवं मानवीय संसाधन में अग्रणी, आर्थिक एवं मानवीय विकास में अग्रणी, ऐतिहासिक रूप से अग्रणी। अभी हम इस दिशा में एक छोटा सा कदम रख रहे हैं।

(प्रेम कुमार)



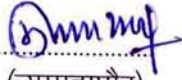
## संदेश




हमें यह घोषणा करते हुए अति प्रसन्नता हो रही है कि गया के दीर्घकालीन विकास के लिए समेकित दृष्टिकोण के साथ शहर की नगर विकास योजना (CDP) बन चुकी है। इस नगर विकास योजना में समेकित दीर्घकालीन कार्यनीति (दृष्टिकोण-2030) जो कि आगे अल्पकालीन, मध्यकालीन एवं अन्तकालीन कार्यनीति में विभाजित की गई है के साथ ही नगर निवेश योजना (CIP) का भी समावेश है। इस योजना के आधार पर गया नगर निगम योजना में वर्णित प्राथमिकता आधारित चिन्हित परियोजनाओं के लिए भारत सरकार, राज्य सरकार, स्वयं के वित्तीय स्रोतों एवं अन्य वित्तीय स्रोतों से धन राशि प्राप्त कर सकेगा। नगर विकास योजना में विभिन्न क्षेत्रों की परिचालनीय कार्यनीति (Operational Strategy) एवं प्रत्येक व्यवहारिक क्षेत्र के क्रियान्वयन हेतु कार्य योजना शामिल है। इसके अतिरिक्त नगर विकास योजना (CDP) में शामिल वित्तीय क्रियान्वयन योजना (FOP) के अनुसार नगर निगम चिन्हित परियोजनाओं के क्रियान्वयन के लिए वित्तीय संसाधन उपलब्ध करा सकेगा।

यद्यपि नगर विकास योजना तैयार करने के लिए उच्च स्तरीय तकनीकी कार्य किया गया है तथापि नगर विकास योजना विस्तृत विचार विमर्श के बाद तैयार की गई है जिसमें शहर के सामाजिक एवं आर्थिक विकास में भागीदारी सुनिश्चित करने के लिए जन प्रतिनिधियों, नगर निकायों के पदाधिकारियों, सम्बन्धित संस्थाओं, नीति निर्धारकों, निजी क्षेत्र की संस्थाओं, नागरिक समितियों एवं जन साधारण के विचारों को शामिल किया गया है। नगर विकास योजना में गया शहर के भविष्य एवं विभिन्न क्षेत्र की परिचालनीय कार्यनीति (Operational Strategy) के बारे में एक दृष्टिकोण को प्रस्तुत किया गया है और क्रियान्वयन योग्य कार्य योजना को दर्शाया गया है।

यह नगर विकास योजना, ब्रिटिश सरकार के अन्तर्राष्ट्रीय विकास विभाग (DFID) द्वारा वित्त पोषित संवर्धन कार्यक्रम के तहत बनाई गई है। गया नगर निगम इस सहयोग के लिए DFID का आभारी है।

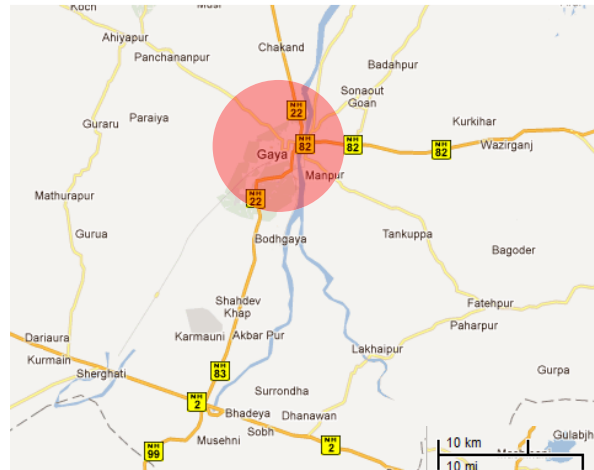
  
(उपमहापौर)  
गया नगर निगम

  
(महापौर)  
गया नगर निगम



## Overview

**Gaya** is a town of ancient historical significance and finds mention in texts dating back to 600 BC. Gaya was projected to the world by Bimbisara the Fifth of the Sisunaga dynasty who lived and ruled around 519 BC. Gaya finds mention in the great epics of Ramayana and Mahabharata. Lord Rama is said to have visited Gaya along with Sita and Lakshman to offer 'pind-dan' to his father. The Mahabharata refers to the city as Gayapuri.



Gaya is located in south central Bihar on the banks of the River Falgu 13km to the north of Bodhgaya and 120 km south of Patna. Gaya is well connected to Patna via NH 83; to Aurangabad, Sasaram and Delhi by NH 2 and to Kolkata by SH 8 and NH 2. Gaya is the second most important railway junction in the state after Patna. It has an international airport catering to tourists from Sri Lanka, Thailand, Singapore and Bhutan.

Gaya is a Municipal Corporation with an area of 50.17 sq km. It is divided into 53 wards and had a population of 3,89,192 (Census 2001). The gross population density of the town is 78 persons per hectare.

**The competitive advantage of Gaya** lies in its good connectivity. The town has several National and State Highways that support its connectivity to other parts of the state and region. Gaya also has an international airport and serves as a gateway to religious tourism.

Gaya is surrounded by hills on three sides – Mangala Gauri, Shringa Sthan, Ramshila and Brahmayoni – and the River Falgu forming the fourth natural boundary. Gaya is an important place of Hindu tourism for 'pind-dan' and sees a huge influx of tourists for the month long 'Pitra Paksh' mela annually.





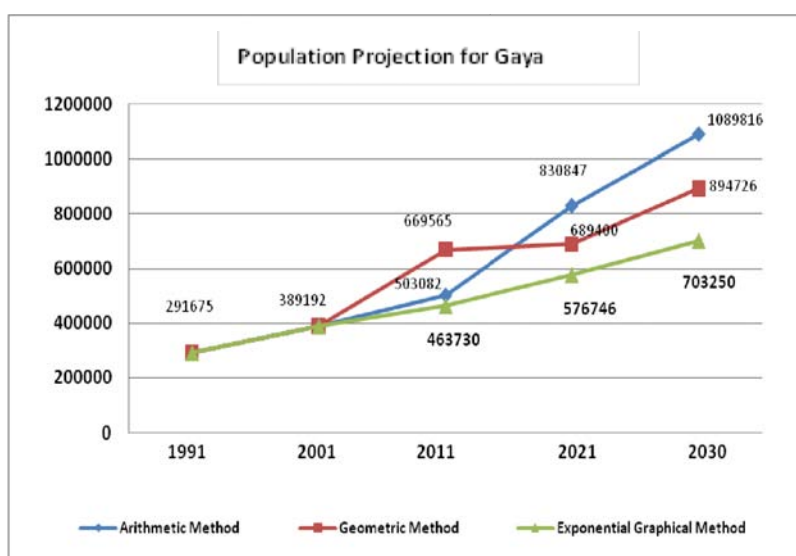
### CITY VISION

The vision for Gaya was derived on the basis of the status assessment of the city, stakeholder consultations and focused group discussions. Participatory consultations during the visioning process concluded that there is need to revive growth and improve the overall quality of life of its citizens. The identified Vision is as follows: ***“To develop Gaya as a regional service centre with well-defined hierarchical commercial centres and as a pilgrimage and leisure destination with thriving sustained economy supported by quality physical and social infrastructure for its citizenry and visiting tourists.”*** The identified vision forms the basis of sector-specific strategies adopted in framing the action plan. The CDP focuses the following sectors - water supply; sewerage & sanitation; storm water drainage; solid waste management; roads, traffic & transportation; street lighting; urban poverty & housing; urban heritage & tourism; and urban environment & social amenities.

## Demography

Gaya's growth has been largely an outcome of its position as the leading town in the region. Gaya's connectivity to the neighboring towns and villages also contributed to its development into a regional centre for trade and commerce. The average growth rate of the population in the period 1961 – 2001 has been between 18-37%. The highest growth rate in the last ten decades was in the period 1971-1981 at 37.4%. Thereafter, the rate has shown a marginal decline to 33.4% in the decade 1991-2001. This fluctuating growth rate may be due to the migration from surrounding villages linked to economic possibilities in the town.

Based on population figures from Census 1961 to 2001, a population projection has been done using three different methods namely Arithmetic Increase Method, Geometric Increase Method and Incremental Increase Method. The estimated population using the Incremental Increase Method has been adopted for planning purposes in this CDP on account of its greater alliance with ground realities.



The estimated projection shows that the population of Gaya will increase to about 7.03 lakhs (approx.) by year 2030.

## Sector Assessments & Growth Strategies

### A) Water Supply

Ground water is the main source of water in Gaya. Ground water is extracted through 28 functional high yielding tube-wells. The water supply system is decentralised and based on 7 overhead tanks (OHTs) with a combined capacity of 30 lakh gallons. The present demand is 46.4 MLD at the rate of 100 lpcd. The present supply is 20 MLD at 40-50 lpcd. The water supply system covers 40-45% of the town. The supply duration is for 8 hours a day through direct pumping and 4 hours a day through reservoirs. Only bleaching powder is used as a disinfectant. The town is divided into five water supply zones and the total length of the distribution system is 70kms. It is estimated that 60% of households have individual connections; the town has 122 public stand posts and 493 hand pumps. Water does not attract a separate charge – the municipality charges a flat fee of Rs. 700 as connection charges.

**Strategies:** The CDP suggests:

- A comprehensive water supply augmentation scheme with detailed engineering design of all required components
- To enhance supply to 100 lpcd in Phase 1 and 135 lpcd in Phase II
- To ensure minimum transmission losses; ground water recharge through rain water harvesting, conserving water bodies and controlling water extraction
- Recycling of treated waste water
- Reduction of non-revenue water in phases through 100% metered pipe connections and removal of public stand posts
- Recovery of O&M costs

**Vision:** To assure adequate and equitable water supply daily and for reasonable length of time.

Detailed Project	Phase-I (2011-16)		Phase-II (2016-21)	
	Quantity	Investment (in Rs. Crore)	Quantity	Investment (In Rs. Crore)
Main W/S pipeline	10 kms	4.2		
Distribution W/S pipeline	58 kms	17.4	20kms	6
Construction of underground Tank, Pump house with 6 no. of pump sets (Raw Water)	1 No.	15		
Overhead reservoirs (25 lakh capacity each)	3 Nos.	18.75	1No.	6.25
Pumps and pumping station		8.25		2.75
Underground reservoirs	2 Nos.	6.4	1 No.	3.2
Filtration / treatment works (100 MLD capacity)		26.72		9.76
Contingency Charges (10% )		9.672		2.796
<b>Sub Total</b>		<b>106.392</b>		<b>30.756</b>
<b>Grand Total</b>	<b>Rs. 137.15 crore</b>			

## B) Sewerage and Sanitation

Gaya has no organised sewerage system. The absence of a systematic wastewater disposal system has led to waste water and sullage into the rivers/storm water drains that are mostly open. It is estimated that 40% of households have septic tanks. Gaya town has 10 public conveniences, of which 5 are located in slums. It is estimated that the current waste generation is about 37.09 MLD and this is projected to increase to 75.95 MLD. At present, waste water and sullage are discharged into the River Falgu and in other low lying areas of the town. The present system is inadequate and poses a potential threat to overall health and hygiene.

**Strategies:** The key strategies in the CDP are:

- Making Gaya 'open defecation free' through 100% access to toilets
- Establishment of a waste water treatment plant in the short term
- A comprehensive sewer network in the long term & household connections to the network
- Community toilets where individual toilets are not possible
- Integrated planning & implementation of water supply-drainage-sewerage-solid waste management system to optimize benefits including recycling

**Vision:** To provide citywide coverage of system to make it environmentally safe.

Detailed Project	Phase-I (2011-16)		Phase-II (2016-21)	
	Quantity	Investment (In Rs Crores)	Quantity	Investment (In Rs. Crore)
Main Pipe line installation	20Km	30		
Secondary & Collector line	102km	35.7	26km	9.1
Treatment Plant (2 nos., 40 MLD each)	1No.	32	1No.	32
Community Toilet Blocks	5No.	0.15	5No.	0.15
Public Toilets	10No.	0.5	5No.	0.25
<b>Sub Total</b>		<b>98.35</b>		<b>41.5</b>
<b>Grand Total</b>	<b>Rs. 139.85 crore</b>			

## C) Storm Water Drainage

The drainage of Gaya is influenced by the hills surrounding it on three sides – Mangla Gauri, Shringa Sthan, Ramshila and Brahmayoni – and the River Falgu on the remaining side. The road to the west of the Collectorate divides the drainage into two zones – western and eastern. Gaya's drainage network is 60kms long – covering 40% of the road network – with 46 kms of the drains being pucca and 16km kutchha. The main drains in the western zone include Kujapi,

**Strategies:** The key strategies in the CDP are:

- To attain full network coverage of adequate capacity
- To manage water logging – this is a priority area
- To install a waste water treatment plant in the short term



## City Development Plan for Gaya: EXECUTIVE SUMMARY

Karimganj and Katari Hill Road Nallah and these discharge effluents at various places like the Gandhi Maidan, near the Railway Station etc. The main drains in the eastern zone include Mansarva, Mashanghat and Nadraganj Nallah and these discharge effluents into the River Falgu. The area to the north of Dhobi Road Nallah to Katari Hill Road Nala, Gandhi Maidan to Kujapi Nallah and newly developed colonies in Manpur, Ghughari, Monapur, and Kumar Colony have no drainage and are prone to water logging.

**Vision:** To enhance the drainage network that reduces the intermixing of rain and sullage water as well as water logging.

Detailed Project	Phase-I (2011-16)		Phase-II (2016-21)	
	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)
Main line	30 km	9		
Secondary & Tertiary drains length	180 km	36	40 km	8
Strengthening of existing drain	46 km	2.3		
Construction of Waste Water Treatment Plant 10 MLD capacity each	2 Nos.	1	1 No.	0.5
Sub Total		48.3		8.5
<b>Grand Total</b>	<b>Rs. 56.80 crore</b>			

### **D) Solid Waste Management**

It is estimated that Gaya generates about 275 tonnes of garbage per day. Garbage generation is expected to increase to 415 tonnes per day by 2030. About 90% of the waste generated is collected while the rest is unattended. Door to door collection has been introduced recently and covers 25% of the city area. Secondary collection of garbage is done from 250 dustbins in different parts of the city in addition to street sweeping. The municipal corporation uses hand trolleys, hand rickshaws, tractors, dumpers, loaders, tempos and roller to collect and transport garbage. Sites have been identified at Panchvati Akhata (5acres) and Nailli (23 acres) for development into sanitary landfill sites. Currently garbage is dumped at various open spaces.

**Strategies:** The key strategies in the CDP are:

- Door to door collection in whole town
- Segregation of wastes at source
- Introduction of best practices to reduce manual handling of wastes and efficient and effective outcomes
- Scientific disposal at sanitary landfill
- IEC campaigns to complement planned systems improvements

**Vision:** To establish and maintain an effective and sustainable waste management practice in the city.

Identified Projects	Phase-I (2011-16)		Phase-II (2016-21)		Phase-III (2021-30)	
	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)
Solid Waste Management (Operational Cost from Collection to Disposal)		36.9				
Vehicles and Equipment's related to collection, transportation & disposal *	1118 Nos.	7.92	1117	7.1	563	4.67
Landfill Site Development		0.11				
Miscellaneous		4.82		4.75		2.37
<b>Grand Total</b>	<b>Rs. 68.76 crore</b>					

\* Community bins, Containers, handcarts, tricycles, dumper, trailer, bulldozer, compacters, excavators etc.

## **E) Roads, Traffic, and Transportation**

Gaya is well connected to the rest of the state and other parts of the country through the NH 83, SH 7, SH 8 and SH 70. The total road length in the city is estimated at 128 kms of which 39% is surfaced. The road width varies from 12 – 3.5m on account of encroachments and on-street parking. Some important roads in the city are Collectorate Road, Station Road, Jail Road, Tikari Road, Nawada Road, Manglagauri Road, Vishnupad Road, Swarajpur Road, G.B. Road etc.

**Strategies:** The key strategies in the CDP are:

- Upgradation, strengthening of existing roads; development of missing links
- Development of an Outer Ring Road
- Development of new roads in Phase II
- Junction improvements, signage's etc. priority
- Removal of encroachments from pavements & construction of new pavements
- Organised parking lots at main commercial centres
- Comprehensive Mobility Plan
- Provision of street lights including non-conventional energy based

Some important intersections in the city are Sikaria More, Ghewal More, Ghughritad Chowk, Swarajpuri Chowk, Collectorate Chowk and Manpur Chowk. Gaya has three bus stands located at Sikaria More, Gandhi Maidan and on Gaya College Road for interstate movement.

**Vision:** To improve the condition of the roads and provide adequate, safe and user friendly public transportation in Gaya.

Detailed Project	Phase-I (2011-16)		Phase-II (2016-21)		Phase-III (2021-30)	
	Quantity	Investment (In Rs. Crores)	Quantity	Investment (In Rs. Crores)	Quantity	Investment (In Rs. Crore)
Development of Bus Terminal	4 Nos.	24				
Truck Terminal	1 No.	35				
Footpaths (Rs. 1000 / sq. m.)	30	4.5	20	3		
Parking lots	2 Nos.	30	3	45	1	15
Construction of passenger sheds	6 Nos.	0.6	4	0.4		
Up gradation and Strengthening of roads within the city and for missing links.	58.5kms	35.1	19.5kms	11.7		
Construction of R.C.C. Bridge	1 No.	15				
Construction of Ring Road			10kms	18		
New Road Construction and linking			6kms	9	4	6
Repairing of the City Road	30kms	15	20kms	10		
Signage, Road Markings and Pedestrian Crossing etc. at various locations	11 Nos.	0.22	5Nos.	0.1		
Foot Over Bridge	1No.	0.5	1No.	0.5		
Junction and Traffic Signal Improvement	8Nos.	4	8 Nos.	4		
Comprehensive Mobility Plan	LS			0.75		
<b>Sub Total</b>		<b>163.92</b>		<b>102.45</b>		<b>21</b>
Conventional Street Lights	1373	4.1				
Solar Lights	1373	5.5				
<b>Sub Total</b>		<b>9.6</b>				
<b>Grand Total</b>	<b>Rs. 287.37 crore</b>					

## F) Street Lighting and Fire Fighting

There is general inadequacy of street lights in town. Only 39% (50 kms) of the roads are having street lights showing poor lighting condition in town. There is lack of maintenance of street lighting in Gaya Municipal Corporation. Only few major roads and junctions (Chauks) have facilities of street lighting and high masts lamp posts. There are 1500 bulbs and 20 high masts light in the town. It is estimated that 2747 streetlights shall be required for the city for next a decade (till 2020).



### **G) Housing and Urban Poverty**

Gaya has 41 slums with a population of 26620 (SPUR Survey December 2010). 17 of these slums are located on state government owned land, five on central government owned land and the others on privately owned lands. Approximately 7-10% of the city's population reside in slums. Only 13 slums have access to individual toilets while open defecation is the norm in the other slums. Only 14 slums have access to municipal piped water supply with the others relying on public stand posts and hand pumps. In general, access to infrastructure is poor leading to unhygienic conditions in slums.

**Strategies:** The key strategies in the CDP are:

- Affordable housing for the poor including improvement of dilapidated structures
- Extension of basic services to include slum areas
- In-situ development of slums as a first option
- Low cost individual toilets as a first priority and community toilets only where individual toilets are not feasible

**Vision:** Service provision and universal access to all basic urban services at an affordable cost.

Detailed Project	Phase-I (2011-16)		Phase-II (2016-21)		Phase-III (2021-30)	
	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)
Construction of housing for poor	1500	15	1737	17.4	1500	15
<b>Grand Total</b>	<b>Rs. 47.40 crore</b>					

### **H) Social Infrastructure**

An assessment of social infrastructure in Gaya was done. Gaya has several colleges of repute – Gaya College, Anugraha Memorial College, Jagjivan College, Mirza Ghalib College and Gautam Buddha Mahila College. The city also has a medical college and hospital – Anugraha Narayan Magadh Medical College – and an Industrial Training Institute. Gaya has six major hospitals, seven private nursing homes and one veterinary hospital.

**Strategies:** The key strategies in the CDP are:

- Maintenance of existing and development of new recreational complexes
- Maintenance of city parks and development of neighbourhood parks
- Development of lower hierarchy medical facilities
- Construction of community halls
- Construction of entry and exit gates to give the city an identity
- Upgradation of existing cremation ground and development of modern cremation facilities

The town has several recreational places including the Gandhi Maidan (stadium and park), four auditoriums, the Khel Parisar inside

## City Development Plan for Gaya: EXECUTIVE SUMMARY

Gaya College, two public libraries and two reading rooms, the Town Hall and the Azad Park. The other community facilities in the town include eight police stations, one fire station (this serves the entire district), several fire hydrants (Dandhibagh, Panchwati Akhara, Azad Park, and Municipal Store), one Head Post Office and two other post offices.

Detailed Project	Phase-I (2011-16)		Phase-II (2016-21)		Phase-III (2021-30)	
	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)
Multipurpose/Community Hall	4	2	3	1.5	3	1.5
Neighborhood Parks	5	1.5	5	1.5	5	1.5
Recreational Centers	1	2.5	1	2.5	1	2.5
City Park	1	1.5	1	1.5		
Night Shelters	1	0.05	1	0.05	2	0.1
Welcome Gate	2	0.1	1	0.05	1	0.05
Fire Station	2	10	1	5		
Cremation Ground	4	0.2	2	0.1	2	0.1
<b>Sub Total</b>		<b>17.85</b>		<b>12.2</b>		<b>5.75</b>
<b>Grand Total</b>	<b>Rs. 35.80 crore</b>					

### I) Local Economy

Gaya has a large number of household industries like production of agarbattis, production of tilkut and lai, power looms and hand looms. Gaya functions as a service centre for the surrounding towns and villages. Commercial activities are located along the important roads of the town. The main vegetable market in the city is the Kedarnath Market. In addition the city has a large number of informal shops. On account of Gaya being an important centre for religious tourism, the city has a large number of affordable accommodations.

**Strategies:** The key strategies in the CDP are:

- Development of industrial sheds for household industries
- Strategic interventions for effective marketing of products
- Redevelopment of existing markets including organization of vending
- Promotion of dairy processing units in line with the potential of the region

Detailed Project	Phase-I (2011-16)		Phase-II (2016-21)	
	Quantity	Investment (In Rs. Crore)	Quantity	Investment (In Rs. Crore)
Renovation of existing municipal Markets	3	1.5	2	1
Construction of Industrial Sheds / Promotion Zone to accommodate 250 household and small scale Units/ industries with storage	250	25		
Construction of Market Complexes/ ,Household			150	7.5

## City Development Plan for Gaya: EXECUTIVE SUMMARY

shelters				
Shopping / Commercial Complex	2	14	2	14
Platforms for Weekly Market/ Vegetable	2	6	3	9
Dairy promotion and product processing units	1	2.5	1	2.5
<b>Sub Total</b>		<b>49</b>		<b>34</b>
<b>Grand Total</b>	<b>Rs. 83 crore</b>			

### J) Heritage and Tourism

Gaya is an important pilgrimage site especially for 'pind-daan'. The city has several important heritage sites like the Vishnupad Temple, Mangla Gauri Temple, Pretshila Temple and Ramshila Temple. The Brahmayoni Hill is an important pilgrimage for Buddhists while the largest mosque in Bihar, the Jama Masjid is also located in Gaya. Gaya has 54 sites for pind daan including the Brahma Kund, Ram Kund, Uttarmanas, Brahma Sarovar, Rukmani Sarovar, Sita Kund etc. Gaya contributes 10% of the total domestic tourist inflow to Bihar and 3.32% of the foreign tourist inflow to Bihar. The largest number of domestic tourists visit Gaya at the time of the month long 'pitra paksh' mela.

**Strategies:** The key strategies in the CDP are:

- Beautification and construction of ghats and sarovars to be undertaken on priority
- Development of Vishnupad, Brahmayoni, Ramshila, Pitamaheshwar, Sitakund temples and their surroundings
- Redevelopment and up gradation of pind-daan sites
- Environmental conservation of River Falgu including river front development

Detailed Project	Phase – I (2011-16)	Phase – II (2016-21)
	Investment (In Rs. Crore)	Investment (In Rs. Crore)
Conservation and development of Visnupad, Brahmayoni, Ramshila, Pitamaheshwar, Sitakund temples and surroundings	8	
Redevelopment and up gradation of pind-daan sites and ghats and sarovars	25	
River front development (channelization, lake formation in river bed, construction of steps/check dams, landscaping)	8	22
<b>Sub Total</b>	<b>41</b>	<b>22</b>
<b>Grand Total</b>	<b>Rs. 63 crore</b>	

### K) Financial Position of the Local Body

The Gaya Municipal Corporation has recorded an annual growth of 21.5% in revenue income. Tax revenue has registered an annual growth of 20.22%. Non tax income has registered a growth of 20.33% per annum. The growth of total income including capital grants has been 36.75% per year.



## City Development Plan for Gaya: EXECUTIVE SUMMARY

The average growth rate of 'own resources' (tax and non-tax) is 20.27%. The expenditure of the Nagar Nigam has grown at 6.6% per annum. Wages and salaries have registered an increase of 6.88% per annum. Non development expenditure has grown at nearly 8% per annum.

### Municipal Income

Year	Total Owned Income (Rs. Lakhs)	Assigned Rev, Rev Grants & Other income (Rs. Lakhs)	Total Revenue Income (Rs. Lakhs)	Capital Grants (Rs. Lakhs )	Total Income (Rs. Lakhs)
2008-09	491.27	744.65	1,235.92	-	1,235.92
2009-10	575.34	1,130.47	1,705.81	644.65	2,350.47
2010-11*	737	1,164.00	1,901.00	677	2,578.00
<b>*Growth Rate (annual)</b>	<b>20.27</b>	<b>22.33</b>	<b>21.5</b>		<b>36.75</b>

### Municipal Expenditure

Year	Non Development Expenses (Rs. Lakhs)	Development Expenditure (Rs. Lakhs)	Total Expenditure (Rs. Lakhs)
2008-09	713.03	71.21	784.24
2009-10	880.61	43.34	923.95
2010-11*	836	60	896
<b>Annual Growth Rate</b>	<b>7.95</b>	<b>-8.56</b>	<b>6.66</b>

### Key Parameters

Year	Total Income (Rs. Lakhs)	Total Expenditure (Rs. Lakhs)	Surplus /Deficit (Rs. Lakhs)	%	Income from Own Sources (Rs. Lakhs)	Financial Sustainability (%)
2008-09	1,235.92	784.24	451.68	36.55	491.27	62.64
2009-2010	2,350.47	923.95	781.86	45.84	575.34	62.27
2010-11	2,578.00	896	1,005.00	52.87	737	82.25
<b>Average</b>				<b>45.08</b>		<b>69.06</b>

**Key Findings:** The key findings in municipal finance identified in the CDP are:

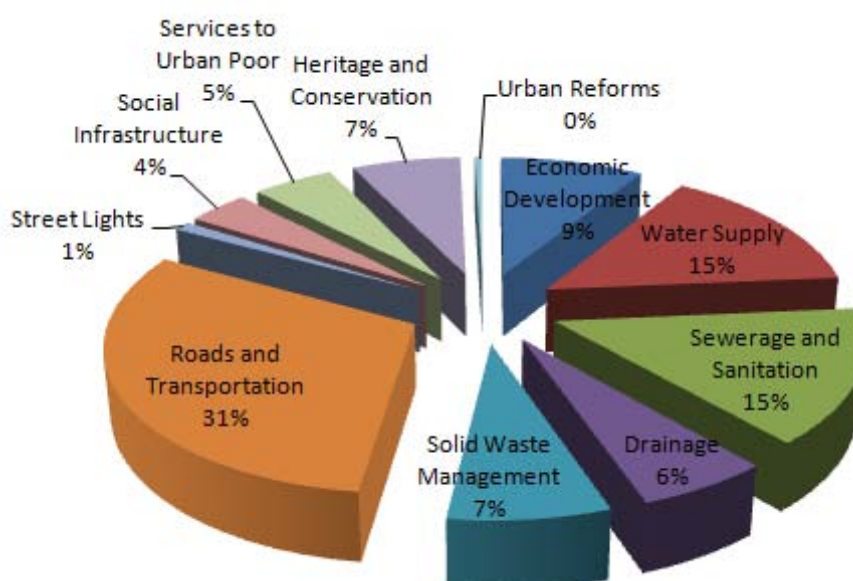
- Small size of the budget with no surplus for provision of basic services to urban poor
- 93.18% of the total expenditure is for 'non developmental' purposes and only 6.82% is for 'development' purposes
- Income comprises 20% tax component, 12% non-tax
- Average surplus of Corporation in last three decades is 45.08%
- Share of 'own resources' in total income is about 20.27%
- Fiscal gap is 30.94%

## Capital Investment Plan (CIP)

The total funding over the life of the CDP period, i.e. up to year 2030, is estimated at **Rs. 933.03 crore**. Sector-wise details of the investments have been defined for the entire period.

The scheduling or phasing of the CIP is based on the analysis of fiscal resources for new investments and O&M, technical capacity for construction and the choice of specific improvements to be taken up over the CDP period. About 31% of the capital investment estimate is envisaged for roads and transportation; 15% for sewerage and sanitation and 15% for water supply.

Sectors	Investment Required (Rs. Crore)			Total	Sector-wise Distribution (%)
	Phase-I (2011-16)	Phase-II (2016-21)	Phase-III (2021-30)		
Economic Development	49	34	-	83	8.9
Water Supply	106.39	30.76	-	137.15	14.7
Sewerage and Sanitation	98.35	41.5	-	139.85	14.99
Drainage	48.3	8.5	-	56.8	6.09
Solid Waste Management	49.76	12.67	6.33	68.76	7.37
Roads and Transportation	163.92	102.45	21	287.37	30.8
Street Lights	9.61		-	9.61	1.03
Social Infrastructure	17.85	12.2	5.75	35.8	3.84
Services to Urban Poor	15	17.37	15	47.37	5.08
Heritage and Conservation	41	22	-	63	6.75
Urban Reforms	4.32	-	-	4.32	0.46
<b>TOTAL</b>	<b>603.51</b>	<b>281.44</b>	<b>48.08</b>	<b>933.03</b>	<b>100</b>
<b>Phase-wise Distribution (%)</b>	<b>64.68</b>	<b>30.16</b>	<b>5.15</b>	<b>100</b>	



## Financial Operating Plan (FOP)

The investment capacity of the Gaya Municipal Corporation is assessed through a Financial Operating Plan (FOP) that gives a multi-year forecast of finances of the local body for the short term period. The FOP is generated to assess the investment-sustaining capacity of the ULB, if it adopts a project funding structure comprising grants with internal resources and loans accounting for the rest. The level of investment that the ULB can sustain is then determined by studying the overall surpluses/year-to-year opening balance and debt service coverage ratio (DSCR).

An important aspect that needs to be considered in raising financial resources is beneficiary contribution. This practice has to be promoted and the concept of PPP also needs to be introduced to make the services sustainable. Thus a total investment of Rs. 603.50 crores in the short-term (2011-12 – 2015-16) can be pooled by implementing PPP – this further decreases the financial burden of the ULB in the next five years.

Sector	Amount (Rs Crore)	Funding Pattern (Rs. Crore)			
		Other sources including Gol	GoB	ULB	PPP
Economic Development	49.0	15.0	7.5	24.0	2.5
Water Supply	106.4	85.1	10.6	10.6	0.0
Sewerage & Sanitation	98.4	78.3	9.8	9.8	0.5
Drainage	48.3	38.6	4.8	4.8	0.0
SWM	49.8	33.5	4.2	4.2	7.9
Roads & Transportation	163.9	15.8	51.7	7.5	89.0
Social Infrastructure	17.9	0.0	13.8	1.5	2.5
Urban Poor & Slums	15.0	12.0	1.5	1.5	0.0
Urban Reform	4.3	0.0	3.9	0.4	0.0
Street Light	9.6	0.0	8.6	1.0	0.0
Heritage & Tourism	41.0	32.8	4.1	4.1	0.0
<b>Total</b>	<b>603.5</b>	<b>311.1 (51.5%)</b>	<b>120.5 (20.0%)</b>	<b>69.5 (11.5%)</b>	<b>102.4 (17.0%)</b>

The FOP assumes that in the short term:

- At least 10% contribution of the overall fund requirement will be from the ULB
- Rs. 0.50 crores (Sewerage and Sanitation) for public toilets will be through PPP
- Rs. 7.90 crores (Solid Waste Management) towards vehicles and equipments will be through PPP
- Rs. 89.00 crores (Roads and Transportation) towards upgradation of bus terminal, construction of truck terminal and parking lots will be through PPP

The key considerations for the FOP are:

- At least 10% of the overall fund requirement will be from the ULB therefore, stringent steps and interventions are required to enhance its 'own' resource base
- It is assumed that in cases where funding other than state government will be available (could be loans from financial institutions, central government, other funded programmes), there will be part contribution from the state government and the ULB will contribute at least 10%
- Emphasis to be on developing projects on PPP wherever possible





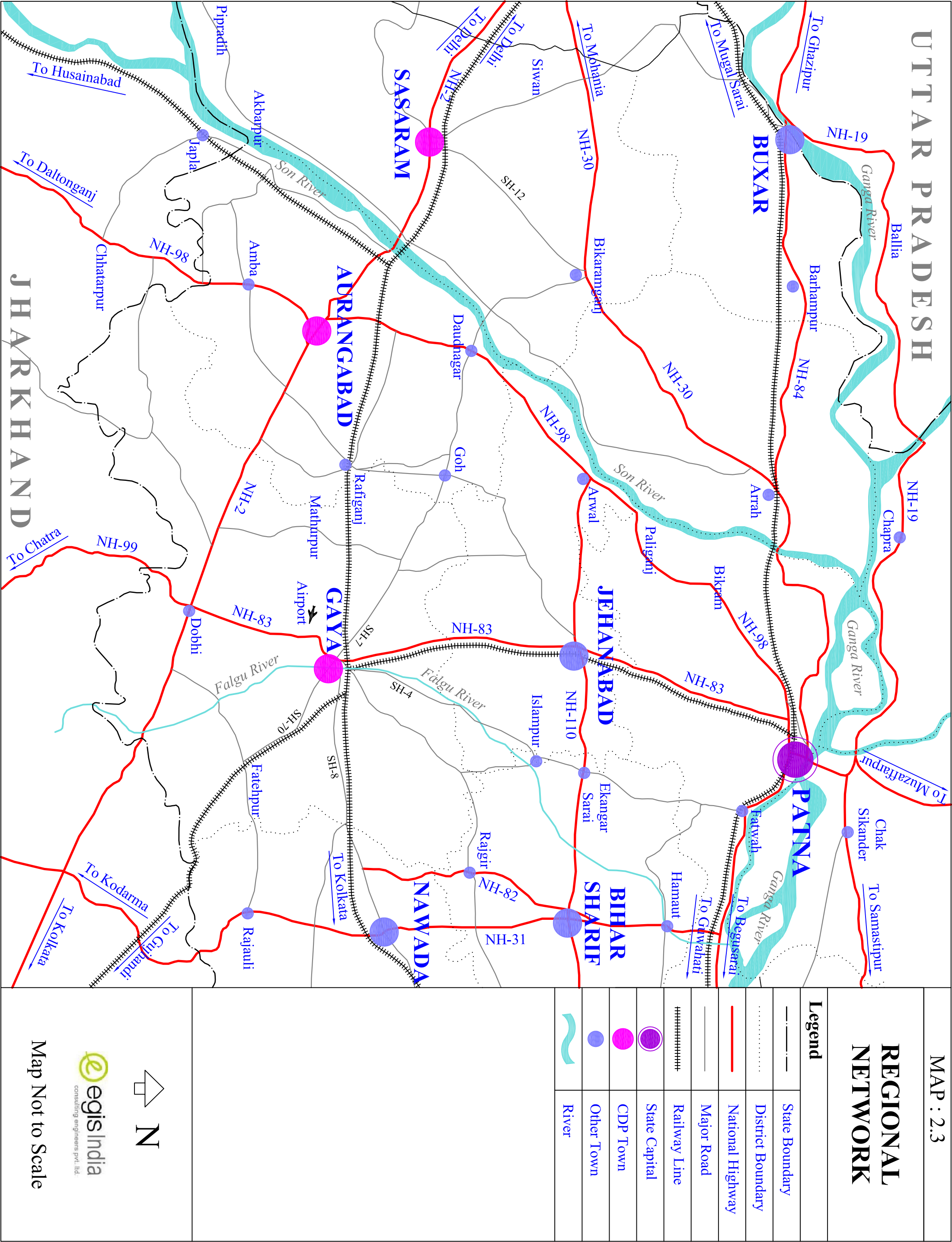
## Overall Assessment

An overall assessment of the existing service delivery levels on various indicators. It is observed that in Gaya town most of the service levels are Average and Below Average.

	Parameter	Indicators	Category	Colour Code for Status
1	Status of Infrastructure and Service Delivery Levels	Coverage of Water Supply Connections	40%	
		Per Capita Availability of Water	40 LPCD	
		Continuity of Water Supply	4 – 8 hrs	
		Coverage of Individual Toilets	40%	
		Door to Door Collection of SWM	25%	
		Collection Efficiency of Solid Waste	90%	
2	Financial Management	Operating Ratio	> 1	
		Growth in Revenue Income	11%	
3	Poverty Level	% of Below Poverty Line (BPL) Population	21.6%	
4	Organization Structure	Staffing pattern, availability of sufficient staff, competency level of existing staff for implementing proposed projects	<i>Observation Based</i>	
5	Leadership	Leadership quality, awareness and understanding regarding urban sector, proactive approach for implementing reform measures	<i>Observation Based</i>	
6	Economic Development Potential	Potential for Development, linkages to the state capital and other cities, status of existing infrastructure	<i>Observation Based</i>	
7	Environment Sustainability	Status of Environment, quality of water, air	<i>Observation Based</i>	
8	Participation	Level of Participation from Citizen/Citizen Forums/Welfare Association in municipal affairs	<i>Observation Based</i>	
9	Compliance with Reforms	Status of reform implementation and preparedness for implementation	<i>Consultant's Analysis</i>	

### Legend

Alarming Average Below Average Good 





GAYA  
BIHAR

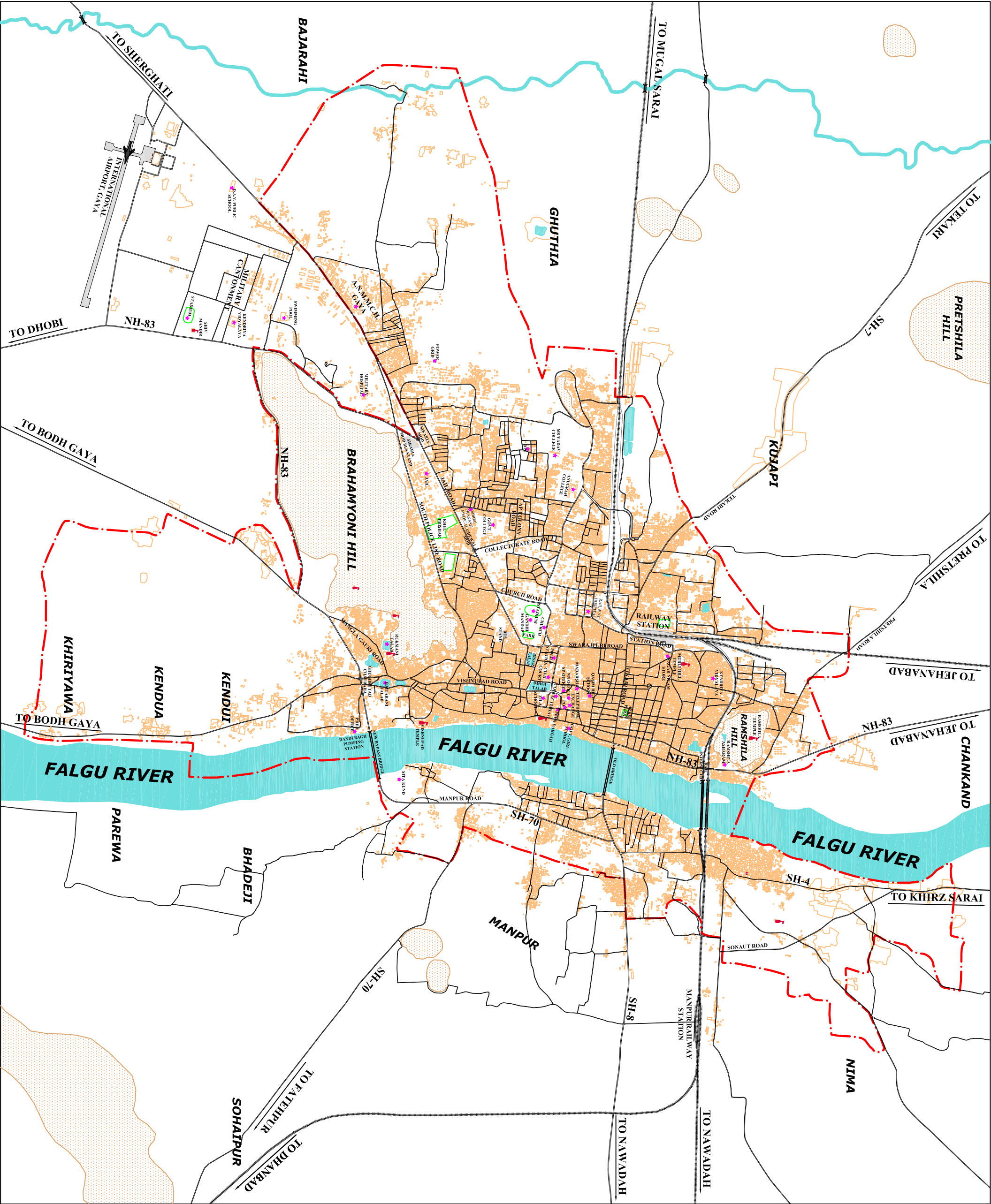
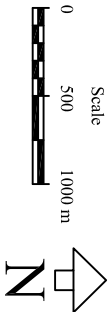


KEY MAP

Legend	
	Road
	Railway Line
	Built-up
	Park/Playground
	Transportation Facilities
	River/Canal/Water Bodies
	Hill
	Bridge
	Municipal Boundary
	Major Landmark
	Major Intersection
	Temple

MAP : 2.4

CITY MAP



GAYA  
BIHAR



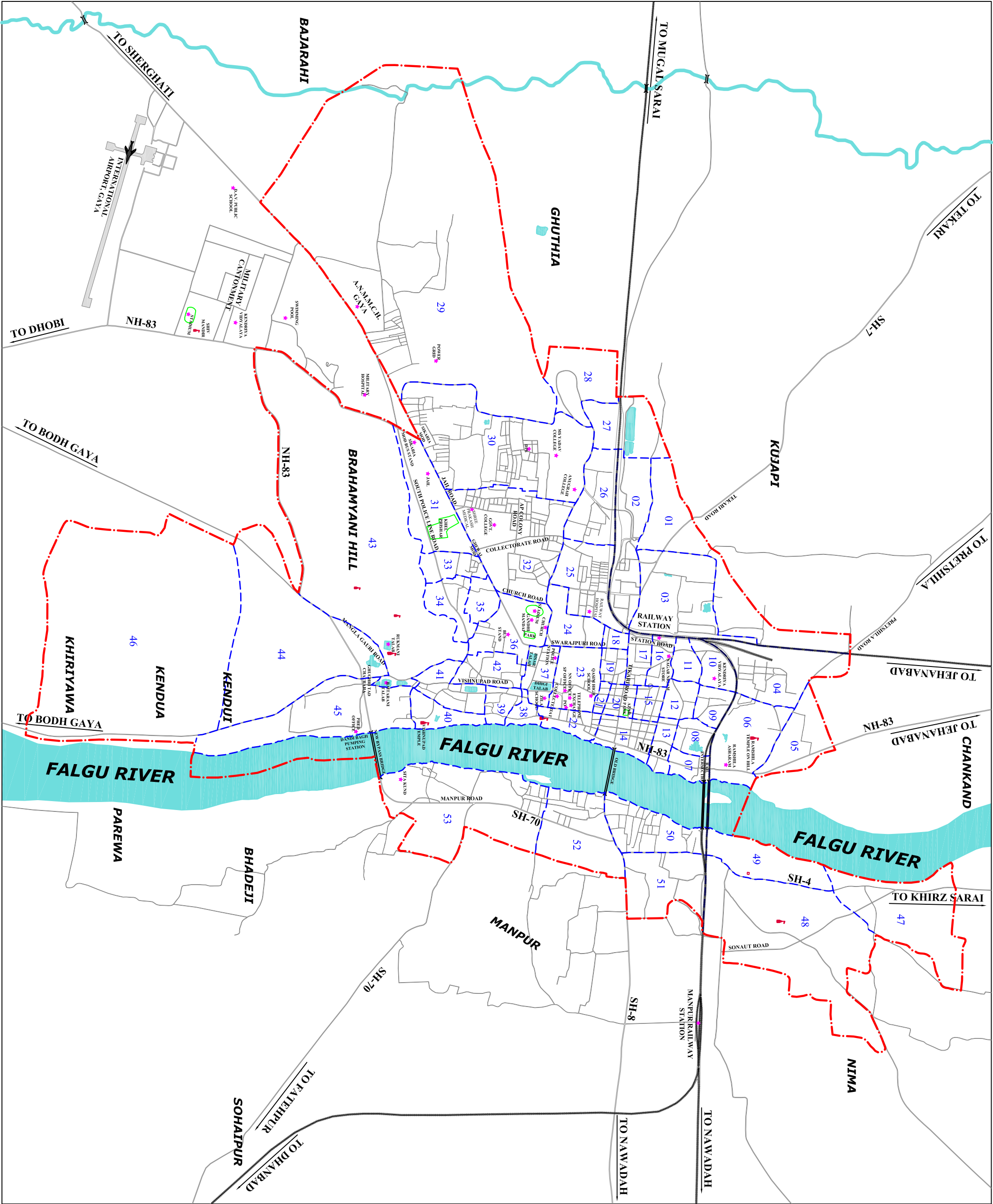
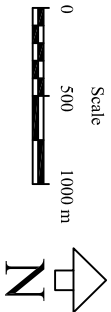
KEY MAP

Legend

	Road
	Railway Line
	Park/Playground
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Ward Boundary
	Major Landmark
	Temple

MAP : 3.1

WARD MAP





GAYA  
BIHAR



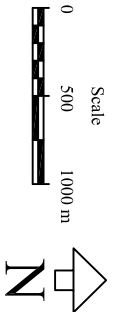
KEY MAP

Legend

	Road
	Railway Line
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Ward Boundary
	Major Landmark
	Temple
Population Size Distribution	
	<7000 Persons/Hect.
	7000-8000 Persons/Hect.
	>8000 Persons/Hect.

MAP : 3.2

POPULATION SIZE  
DISTRIBUTION





GAYA  
BIHAR



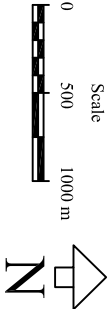
KEY MAP

Legend

	Commercial
	Road
	Railway Line
	Park/Playground
	Transportation Facilities
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Major Landmark
	Temple

MAP : 4.1

COMMERCIAL  
ACTIVITIES



GAYA  
BIHAR



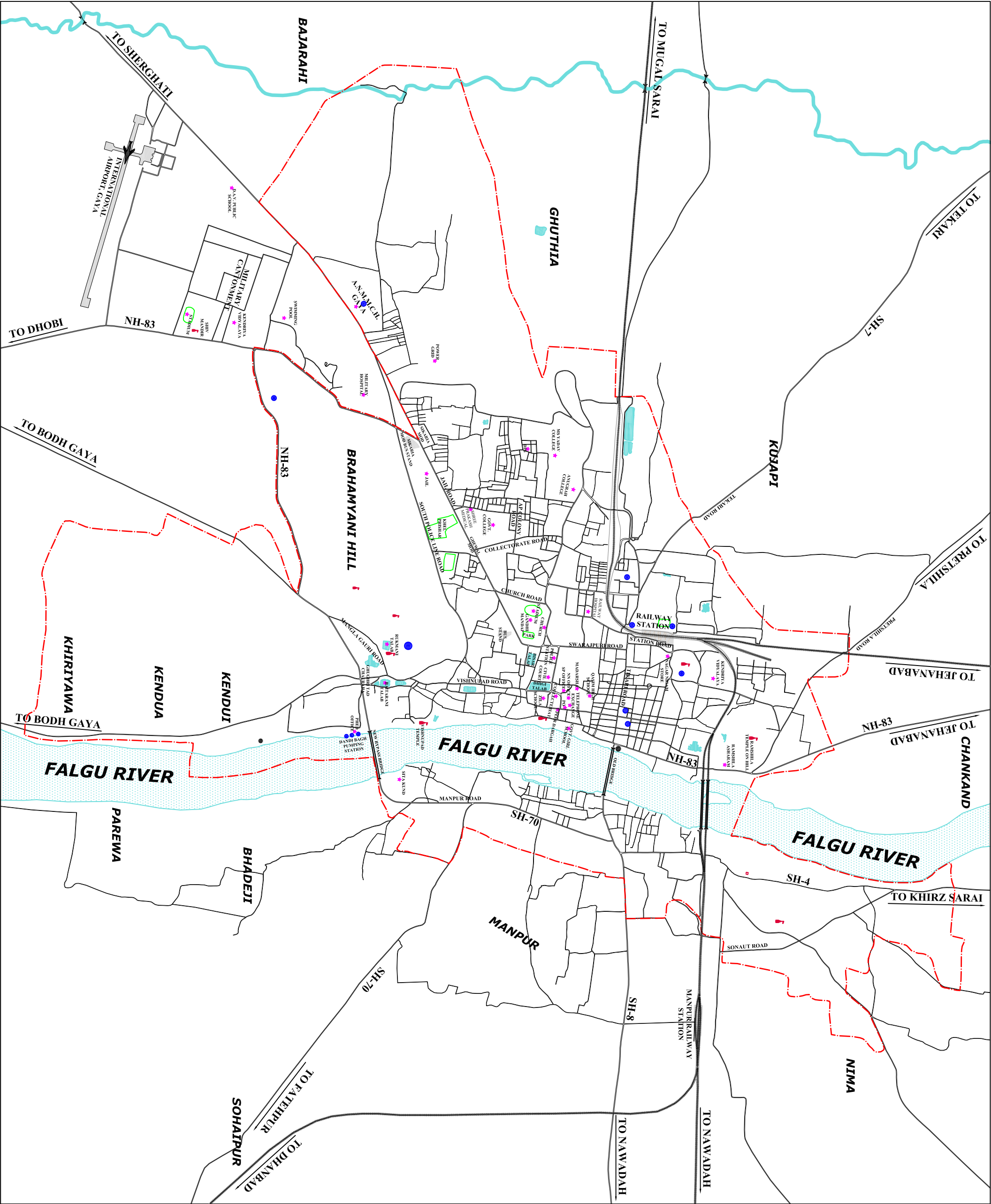
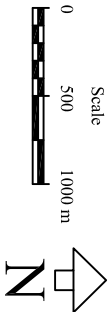
KEY MAP

Legend

	ESR
	Proposed Waste Water Treatment
	Road
	Railway Line
	Park/Playground
	Transportation Facilities
	Falgu River
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Major Landmark
	Temple

MAP : 6.1

WATER SUPPLY  
INFRASTRUCTURE





GAYA  
BIHAR



KEY MAP

Legend

	Major Road
	Other Road
	Railway Line
	Transportation Infrastructure
	Park/Playground
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Major Landmark
	Temple
MAJOR INTERSECTION	
	1 Sikaria Mod
	2 Gheawal Mod
	3 Ghughrirad Chauraha
	4 Rail Intersection
	5 Vishnupad Chowk
	6 Swaraipuri Chowk
	7 Collectoriat Chowk
	8 Gandhi Chowk
	9 Manpur Chowk
	10 Station Chowk

MAP :10.1

EXISTING ROAD &  
TRANSPORTATION

Scale

0

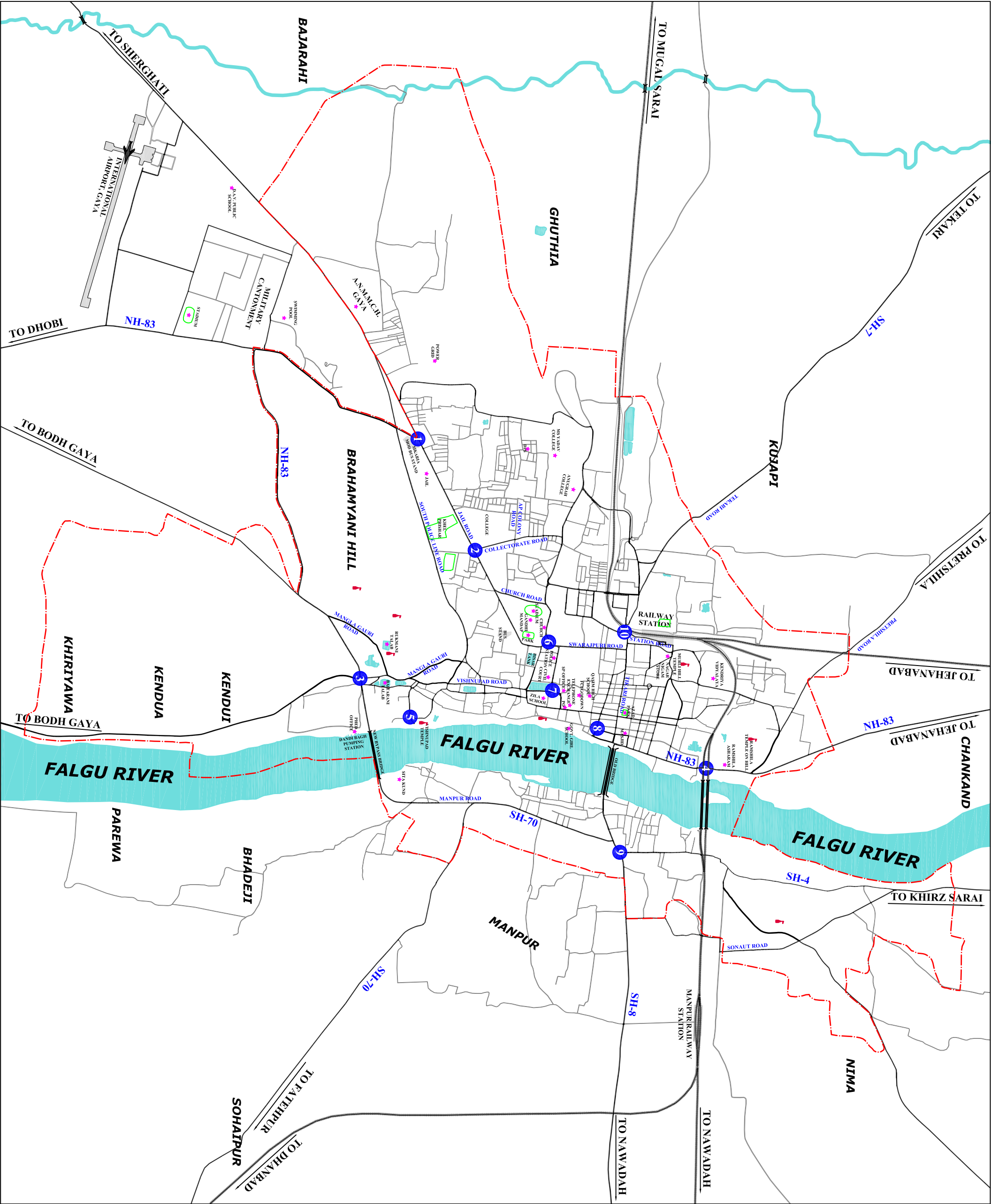
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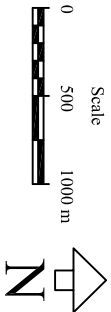


KEY MAP

Legend	
	Proposed Link Road
	Proposed R.C.C. Bridge
	Proposed Parking Lot
	Proposed Passenger Shed
	Proposed Foot Over Bridge
	Proposed Truck Terminal
	Road
	Railway Line
	Transportation Facilities
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Major Landmark
	Major Intersection
	Temple

MAP : 10.2

PROPOSED ROAD &  
TRANSPORTATION  
INFRASTRUCTURE





GAYA  
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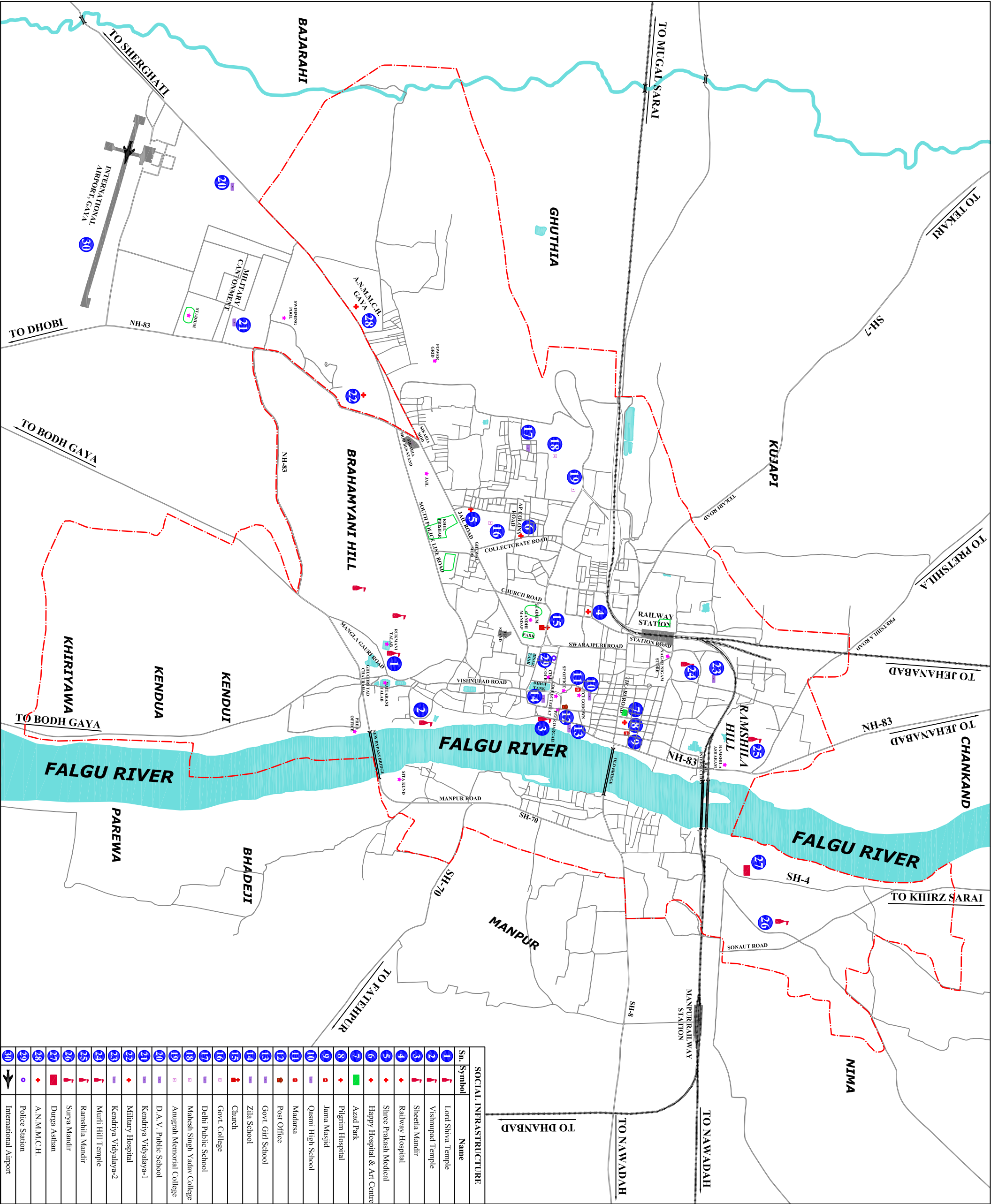
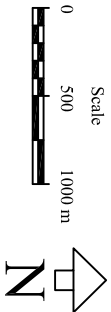
KEY MAP

Legend

	Road
	Railway Line
	Transportation Facilities
	Park/Playground
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Major Landmark

MAP : 11.1

SOCIAL  
INFRASTRUCTURE



GAYA  
BIHAR



KEY MAP

Legend

	Road
	Railway Line
	Transportation Facilities
	Notified Slums
	River/Canal/Water Bodies
	Bridge
	Municipal Boundary
	Major Landmark

MAP : 12.1

SLUM MAP

