Sector specific key issues identified during the situation analysis have been taken forward towards formulation of vision/ strategies and idenfication of projects. Various activities under the broad head of a project have then been identified. Each project has been attached with a weight vector by various stakeholders at the city and state levels, and the consultant himself, which reflects intensity of requirement/ significance of a particular infrastructure project in Allahabad. There is another vector attached to each project which is called as sign vector, meaning that a project would have positive or negative impacts in terms of social, economic, environmental, and visual image/ appeal. The two vectors (sign vector and weight vector) taken together help quantify priority of a project in a manner as follows –

$$\frac{1}{n1}\sum_{a=1}^{n1} a_{n1} \cdot \frac{1}{n2}\sum_{b=1}^{n2} b_{n2} = x$$

where,
a represents the sign vector,
b represents the weight vector, and
x is the aggregate score.

Using this equation, all projects have been valued on a ten-point scale against these two vectors and the quantified priorities achieved. In *Annex 8* are given classified projects for each sector. Depending on the aggregate score achieved, all projects have been put in three categories as follows:

- Low priority – aggregate score of 0-3;
- Medium priority – aggregate score of 4-6; and
- High priority – aggregate score of 7 and above.

21.0 Urban Renewal

21.1 Issues & Strategies

In Section 5.2 of the report are discussed characteristic features as well as problems of the old city area. While the old city has maximum densities, enchroachments, mixed and dead slow traffic and other bottlenecks, it also happens to be the business centre where from most of the commerce (wholesale/ retail trade) is carried out. The old city area can be improved by way of –

- Decongestion of the core area;
- Relocation of wholesale trade;
- Creation of pedestrian friendly environment;
- Improvement of linkages and connectivity; and
- Facilitation of movement of residents and visitors by proper integration of the public transportation system.

An attempt has been made here in this section to seek strategies towards easing out the problem areas by way of attending to the identified issues, as follows:

Table 63: Issues and Strategies for Urban Renewal

Existing Issues	Strategies
Through traffic on the GT Road	Construction of bypass for through traffic
Presence of transport nagar in the core area	Shifting of truck terminals at identified locations in the peripheral areas
Presence of wholesale market within the city	Shifting of wholesale market to the nearby peripheral areas/ proposed locations and integrating it with the truck terminals
Inadequate parking provisions in commercial areas	Identification of parking areas in commercial areas for multi-level parking Options for involving private sector players
Poor public transportation system and lack of proper public transport parking facilities	Setting up facilities for public transport/ provision of terminals for public transport
Presence of two bus terminals in the CBD area	Relocation of the existing bus terminals
Inadequate capacity of roads	Removal of encroachments and widening of roads wherever feasible/ required
Environmental pollution	Use of cleaner fuel to reduce pollution
Large mix of traffic in the core city	Policy level intervention and traffic management schemes
Lack of proper traffic management	Implementation of traffic management schemes
High degree of encroachment on the footpath	Removal of encroachments and construction of footpaths
Bottlenecks at some points in the old city area	Widening of existing RUBs in the core areas.
Improper road geometrics of intersections, absence of footpaths	Properly designed intersections

21.2 Project Phasing & Costing

Based on the identified issues and strategies, several projects as follows, have been identified for urban regeneration/ renewal under different heads:

- Roads/ transport related –
  - Construction of southern bypass;
  - Widening of roads;
  - Construction of road dividers and footpaths;
  - Flyovers
  - Widening of existing RUB (at road level)
  - Intersection improvement
  - Signalistion of intersections
  - Zebra marking, lane marking and signages
  - Road lighting
  - Multi-level parking
  - Bus terminals
  - Truck terminals
- Trade and commerce related –
  - Shifting of existing wholesale market to Naini, Jhusi, Phaphamau, and Kanpur Road
- Environment related –
  - Removal of enchroachments of all types

While all these projects shall help ease out congestion and traffic related bottlenecks, only projects relating to pedestrian movement, trade and commerce, and environment are focused in the Section. Majority of roads related projects find place in Section 28 concerning traffic and transportation (*Table 64).* Priorities are based on the technique discussed earlier. Aggregate scores are given in *Annex 8*. The total estimated cost of projects is Rs. 75.50 crores. Projects have varying spans ranging between one to six years.

Table 64: Projects and Their Phasing

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Construction of Southern bypass	959	6000	12000	12000	8000	-	-	**38959**	**High**
Construction of road divider and footpath	-	60	90	150	-	-	-	**300**	**High**
Flyovers	-	1000	1000	-	-	-	-	**2000**	**High**
Widening of existing RUB (at Road level)	-	128	-	-	-	-	-	**128**	**Medium**
Intersection improvement	35	100	-	-	-	-	-	**135**	**Medium**
Road lighting	100	300	100	-	-	-	-	**500**	**Medium**
Multi-level parking	500	2000	2000	-	-	-	-	**4500**	**High**
Zebra marking, lane markings and signages	15	-	-	-	-	-	-	**15**	**Low**
Removal of enchroachment	600	900	-	-	-	-	-	**1500**	**High**
Relocation of bus terminals	400	1000	1000	-	-	-	-	**2400**	**High**
Relocation of truck terminals	400	1500	1000	500	-	-	-	**3400**	**High**
Relocation of wholesale market	290	500	1000	1000	800	-	-	**3590**	**High**
Provision of Cattle colonies/ dairies	50	100	100	100	50	-	-	**400**	**High**
Play grounds for children (4 nos)	20	20	20	20	20	-	-	**100**	**High**
Neighbourhood markets (15 nos)	20	300	300	300	300	280	-	**1500**	**High**
Total	**3389**	**13908**	**18610**	**14070**	**9170**	**280**	**-**	**59427**	
Say								***594.27 crores***	

22.0 Water Supply

22.1 Identification of Projects

The situation analysis suggests that 55% water supply of the city is being fulfilled by the ground water and only 45% is served by the surface water source even when surface water is abundant. Excessive use of groundwater should be checked which shall otherwise lead to depletion of underground water table. Proposals are based on the principle of optimum utilization of the surface source and reduction in use of sub surface (ground water) source to control the further depletion of the ground water table. DPR should be prepared based on the optimum utilization of the surface source and reduced dependence on the ground water.

Projects identified by JN and other concerned organisations for inclusion in the JNNURM have been taken into account, and given due consideration. The detailed list of these projects is, however, given as *Annex 9*. However, only those fitting into the city vision and found justified for the Mission have been proposed herein this report.

The vision for the city as regards water supply is to enhance the quality of life of urban people by providing safe, potable, accessible and affordable water to everyone. The following *Table 65* discusses presently pertinent issues in the sector and identifies strategies towards easing these out and achieving the vision.

Table 65: Issues and Strategies for Water Supply

Existing Issues	Strategies
➢ Water supply level is poor; ➢ Water supply is irregular; ➢ Water supply system is insufficient and inadequate; ➢ Major coverage of water supply by the ground water; ➢ Deficient pipeline Distribution network of supply; ➢ Leakages in the pipeline results large quantity of water is lost; ➢ Poor quality of water; ➢ Condition of existing water treatment plant is poor; ➢ Fall in the water level of Yamuna during summer putting adverse affect on tube wells; ➢ Poor power situation leads to severe dislocation and damage to the system operation as well as operational schedule;	➢ Preparation of layout plan for the complete water supply network; ➢ Inventory of the existing system; ➢ Identification of the problematic areas; ➢ Identification of the non-served areas; ➢ Prioritization of projects/works based on the condition of the existing system and requirements; ➢ Detailed design of the network and preparation of DPR; ➢ Approval and technical sanction by the concerned authority; ➢ Implementation of the proposed projects/ schemes with strong construction supervision either by some qualified external consultant or by the department itself for the rehabilitation and construction of new schemes based on detailed design, drawing and priority as per the present and future requirement; ➢ Following activities are to be carried out for improving the service level and making the system adequate and sustainable – o Provision for taping surface water availability o Renovation and rehabilitation of existing raw water pumping station including replacement of old pumps & pipe lines to increase the pumping capacity so that the full capacity of 135 mld of existing water treatment plant can be utilized

➢ Inadequate facility for water supply during *Kumbh mela*;	o Renovation and rehabilitation of existing water treatment plant o Renovation and rehabilitation of existing of existing pipe network and other city services like fire hydrant, *Pyaoos* etc o Provision of new intake works, rising mains, water works, storage and distribution system, city services etc ➢ Development of GIS system for the central monitoring to detect leakages, damages, theft control and management & transparency; ➢ Diesel generator sets to provide supply during the no supply hours of electricity; ➢ New construction of the services would be needed to enhance the water supply status of the city; ➢ Permanent facilitation in *Kumbh mela* ground.

22.2 Projects for JNNURM

Proposals have been framed for the improvement of the water supply system in the city to enhance the quality of life of the urban people and make it accessible and affordable to all urban citizens for the future period of 25 years. Water supply system is already existing in the city but is very old and in poor condition. There are so many colonies/ areas in the city where water supply is not available even when the total water production is higher than the requirement. About 20% to 25% of the total population of the city is not getting the supplied water. In order to develop a water supply system that can fulfil the water requirement for the next 25 years, the following works are being proposed to be planned and executed in a phased manner –

- Renovation and rehabilitation of existing schemes; and
- Construction of new schemes.

For the implementation of activities under the heads of renovation/ rehabilitation and construction of new schemes concerning water supply including the *Kumbh* area, several preliminary activities need be carried out. Training and educational programs are required for the capacity building of the division. Provision of 1.5% of total work cost i.e. Rs. 3.64 crore has been made for training and capacity building, including information, education and awareness programs for the community/ user groups. All the projects, project activities and the likely benefits are discussed in the *Table 66* below.

Table 66: Project Activities and Percieved Benefits

Sl.No	Project	Benefits	Activity Undertaken
1	Renovation and rehabilitation of existing schemes	➢ Enhance the quality of life of the urban people; ➢ Improvement of water quality, and supply system; ➢ Improvement in water quantity; ➢ Reduce the cost of operation & maintenance; ➢ Enhance the quality of life;	➢ Raw water pumping station including replacement of old pumps and to enhance its capacity to 150 mld; ➢ Rising mains from intake works to water works to take the required load of 150 mld; ➢ Water works at khusrobagh which would include the following – o Settling tanks/ raw water storage tanks o Clariflocculators o Rehabilitate alum dosing plant o Rapid gravity filters o Clear water storage reservoirs o Clear water booster pumps

		➢ Revenue generation will be increased; ➢ Unaccounted water supply will be taped; ➢ Slums will be properly served with water supply.	➢ Overhead tanks; ➢ Expired/ outgoing tube wells till the alternate/surface water arrangements have not been made; ➢ Old and damaged distribution lines to reduce the water losses; ➢ Protection of water supply lines crossing sewers and nallas; ➢ Repairing of existing deep bore hand pumps; ➢ Replacement and repairing of faulty meters, fire hydrants etc; ➢ Regulation of illegal connections; ➢ Rehabilitation/ renovation of ponds and lakes in the city.
2	Construction of New Schemes	➢ Enhance the quality of life of the urban people; ➢ Provide water supply to the entire city; ➢ Adequate amount of water to the citizens to satisfy their daily water demand; ➢ Enhancement of water supply status in the city; ➢ Reduce the dependency from the under ground water; ➢ Prevent rapid depletion of ground water; ➢ Control of theft; ➢ Control of water losses; ➢ Will develop transparency in the system and effective management.	➢ Construction of new raw water pumping station/ intake works of 140mld capacity and one intake works of 40 to 45 mld for naini area; ➢ Rising mains to accommodate the required discharge; ➢ Construction of New water treatment plant of 125 mld capacity for Sulem sarai, civil lines, part of kydganj, and colonelganj. And one water treatment plant of 30 to 35 mld capacity for Naini area; ➢ Storage/ service reservoirs/ overhead tanks with 50% storage capacity of the entire demand at different location in the city; ➢ Construction of Clear water boosting pumps; ➢ Construction of Distribution system in the remaining portion of the city; ➢ Construction of new tube wells only in areas where surface water is not an option (Daraganj, Rasoolabad, Phaphamau); ➢ Construction of new hand pumps in areas where piped water supply is not feasible; ➢ Distribution system/ pipe network in the Kumbh mela areas; ➢ Providing new connections to the remaining population/ households of the city; ➢ Providing water meters to measure the flow; ➢ Construction of public stand posts and pyaoos for the urban poor; ➢ Interconnection with existing system; ➢ Provision of water meters at different specified locations; ➢ Development of GIS system for the central monitoring to detect leakages, damages and theft control; ➢ Diesel generator sets to provide supply during the no supply hours; ➢ Rainwater harvesting system needs to be developed to conserve/ recharge underground water by making rainwater harvesting structures, construction of ponds and lakes, and plantation etc. and making it mandatory for the big commercial and institutional establishments.

3	Training & Capacity Building	➢ Efficient & motivated staff with department; ➢ Will develop awareness about the quality of water and its use among the community; ➢ Strengthening and capacity building of the divisions will be done.	➢ Conducting training and capacity building programs and Information, Education & Awareness activities to make the community aware and strengthening the capacity of the institutions responsible.
4	Implementation Schedule	➢ Easy in allocation of funds; ➢ Easy and better planning of the project; ➢ Easy Project management & monitoring of Construction activities.	➢ Assessment of project requirement; ➢ Phasing & Preparation of DPR.

23.3 Project Phasing & Costing

The best method of rainwater harvesting would be its storage in ponds and lakes for natural recharging of ground water and storage in storage tanks/ reservoirs for domestic purposes other than drinking. Recharging by construction of bores and recharging structures can be an efficient method of ground water recharging but it can be dangerous for the contamination and destruction of ground water if rain water gets contaminated before reaching the boreholes by surface impurities on the rooftop (surface) and its way. It is nevertheless, to be ensured that there is no injection of contaminated wastewater or industrial effluents in the name of rainwater harvesting.

Quality control of the projects should be assured. Since the staff/ resource with the department is not sufficient to monitor and execute projects of such magnitude under temporal constraints/ timelines, it is advisable to hire some qualified and experienced external agency/ agencies for the project management, quality control and transparency.

Priorities and aggregate scores of projects relating to water supply are discussed in *Annex 8*. While the break-down of costs towards estimating costs for city water supply is given as *Annex 10*, total cost of projects is estimated at Rs. 243.00 crores (*Table 67*).

Table 67: Phasing and Costing of Water Supply Projects

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Renovation/ rehabilitation & construction of new water supply schemes for the city	2500	5000	5000	5000	4500	-	-	**22000**	**High**
Estimated cost for the Kumbh mela area for the pilgrims @ 1.0 crore per mld for 5.0 mld for the complete water supply infrastructure	400	200	-	-	-	-	-	**600**	**High**
Rain water harvesting arrangement	100	150	150	100	100	-	-	**600**	**High**
Inventory survey of the existing scheme @ Rs.	15	-	-	-	-	-	-	**15**	**Low**

2000.00 per km									
Layout planning, designing, and preparation of DPR (LS)	40	-	-	-	-	-	-	**40**	**Low**
Generator set to provide supply during the no of hours of electricity and all kinds of electro-mechanical equipments like pumps, panels etc	150	100	100	-	-	-	-	**350**	**Medium**
Unforeseen items	20	30	30	20	20	-	-	**120**	**Medium**
Sub-Total	***3225***	***5480***	***5280***	***5120***	***4620***	***0***	***0***	***23725***	
Construction supervision @ 1.00% (assumed)	40	55	55	47	40.25	-	-	**237.25**	**High**
Training & Capacity building, asset creation, and information, education & awareness @1.5%	60	80	80	75	60.87	-	-	**355.87**	**Medium**
Grand Total	**3325**	**5615**	**5415**	**5242**	**4721.12**	***0***	***0***	**24318.12**	
Say								***243.20 crores***	

Figure 51 gives an indicative water supply network depicting tentative hierarchies in the network. The final overall network by incorporation of good features of the existing network shall emerge upon preparation of the DPR.

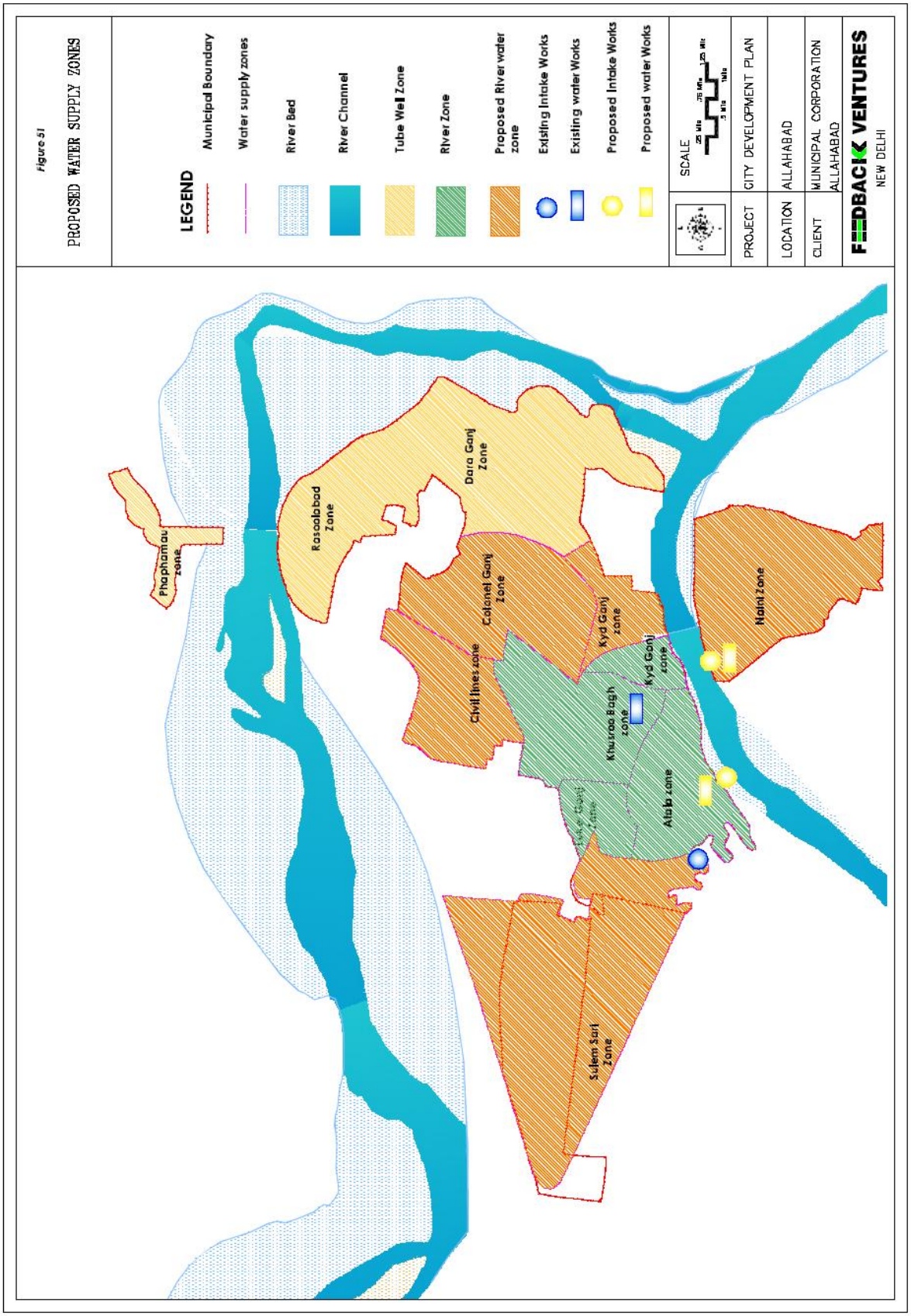


Figure 51
PROPOSED WATER SUPPLY ZONES
LEGEND
Municipal Boundary
Water supply zones
River Bed
River Channel
Tube Well Zone
River Zone
Proposed River water zone
Existing Intake Works
Existing water Works
Proposed Intake Works
Proposed water Works
SCALE
PROJECT CITY DEVELOPMENT PLAN
LOCATION ALLAHABAD
CLIENT MUNICIPAL CORPORATION ALLAHABAD
FEEDBACK VENTURES
NEW DELHI
Phaphamau zone
Rasoolabad Zone
Dara Ganj Zone
Colonel Ganj Zone
Civil lines zone
Kyd Ganj zone
Kyd Ganj zone
Khusroo Bagh zone
Alopi zone
Naini Zone
Sulem Sarl Zone

23.0 Sewerage and Sanitation

23.1 Identification of Projects

Since, Allahabad city is a religious place where millions of the people come to perform religious activities. An efficient and economical sanitation system needs be developed for the safe disposal of the wastewater and sludge. The objective is to provide an efficient, adequate and affordable sewerage system in the city to enhance the quality of life of the urban people. The system would be accessible and affordable to the urban poor for the present and future period.

Several projects have been identified by the JN under the Ganga Action Plan as also those to be undertaken under the Mission. This listing is given as *Annex 11*. Projects have also been identified for coverage (foreign funding) under JICA (*Annex 12*). Total cost of these projects is Rs. 574.21 crores. Some of these are:

- All main and trunk sewer lines;
- Branch sewers;
- Intermediate and main pumping stations;
- Replacement of M/E asset;
- Rising mains; and
- Sewage treatment plants.

All the components of the sewerage system of the city have been considered under the sewerage master plan of the Allahabad, prepared by JICA, to be executed in two stages. For this project is to be internationally funded (by JBIC), it cannot be proposed under the JNNURM project. JICA has considered the branch sewers in their report which as a policy matter, is not in their scope of work. Only branch sewers are to be considered under JNNURM. The following *Table 68* discusses presently pertinent issues in the sector and identifies strategies towards easing these out.

Table 68: Issues and Strategies for Sewerage & Sanitation

Existing Issues	Strategies
➢ Poor operation/ service of the sewerage system ➢ Poor maintenance ➢ Poor collection system of the sewerage system ➢ Silting and surcharging ➢ Ageing infrastructure ➢ Damaged and blocked man holes. ➢ Damaged sewer lines ➢ Partial coverage of the sewerage system in the city ➢ Combined sewerage and drainage system in the city ➢ House connection in the open drains causing foul smell and unhygienic situation in the city ➢ Storm water and solid waste ingress to sewers	➢ Providing separate sewerage networking ➢ Preparation of layout plan for the complete sewerage network ➢ Inventory of the existing system ➢ Identification of the problematic areas ➢ Identification of the non-served areas ➢ Prioritization of projects/works based on the condition of the existing system and requirements considering the upcoming *Ardh Kumbh* in the next year and the *Maha Kumbh* in the year 2013 ➢ Detailed design of the network and preparation of DPR ➢ Approval and technical sanction by the concerned authority ➢ Implementation with strong construction supervision either by some qualified external consultant or by the department itself for the following works –

➢ Disposal of untreated sewerage into Yamuna ➢ Sewerage system exists only in the central core of Allahabad city ➢ Poor sanitary condition in the slum areas ➢ No Sewerage system exists in kumbha area ➢ Poor record keeping and inadequate information for planning	o Renovated and rehabilitated based on detailed design, drawing and priority as per the present and future requirement o Adequate new sewerage system is to be provided in non-served area o Modification and up gradation of existing sanitary facilities (community latrines and bathrooms etc) o An effective sewerage system needs to be provided and community latrines to be constructed for the safe and hygienic defecation to the poorest in the city ➢ Development of GIS-system for the central monitoring and management, to detect leakages & damages, to make the system transparent and accessible to every one etc ➢ Conducting training and capacity, and information, education & awareness activities to make the community aware about the safe management of sewage and strengthening the capacity of the institutions responsible ➢ Major works are to be completed within a period of first five years

23.2 Projects for JNNURM

Proposals have been framed for the improvement of the sewerage system of the city to enhance the quality of life of the urban people and make it accessible and affordable to the urban citizens over the next 25 years. Existing sewerage system of the city is very old and poor which needs to be renovated and rehabilitated as per the present requirement. There are so many colonies/ areas in the city where sewerage system is not available and an adequate new sewerage system is to be provided.

To develop an effective sewerage system in the city which can provide a clean and healthy environment to the citizens for the next 25 years from now, following works are being proposed to be planned and executed in a phased manner –

- Renovation and rehabilitation work; and
- Construction of new works.

Table 69: Project Activities and Percieved Benefits

Project	Benefits	Activity Undertaken
Renovation/ Rehabilitation works	➢ Adequate, Improved and sustainable sewer infrastructure ➢ Improved collection and transportation of sludge ➢ Improved and clean environment ➢ Avoid water logging in the city ➢ Reduce seepage in the ground	➢ Renovation/ Rehabilitation of existing branch Sewage collection network based on detailed design and drawing, which includes branch sewers only with complete sewer appurtenances ➢ Cleaning of existing sewers ➢ Renewal and upgradation of existing community latrines and bathrooms
New Construction/ Creation of facilities	➢ Enhance the sanitation status of the city ➢ Effective collection, transportation, treatment, and disposal of the sewage generated in the city ➢ Upliftment of life standard and providence of healthy environment to urban poor ➢ Avoid water logging in the city	➢ Construction of new Sewage collection network in the entire city where the network does not exist like Naini, Ashok Nagar etc ➢ Interconnection with existing system ➢ Provide pumping systems wherever required as per the design and existing condition of the ground ➢ Construction of latrines and bathing facilities (paid/ unpaid) for the urban poor ➢ Develop GIS system for the central monitoring and management, to detect leakages & damages, to make the system transparent and accessible to every one etc ➢ Diesel generator set to provide supply during the no supply hours to operate the electromechanical units ➢ DPR shall be prepared based on the integrated design of the scheme for the entire area and analyzing the existing network

23.3 Project Phasing & Costing

Phasing of projects relating to sewerage and sanitation and their costs over the first five years is given in *Table 70*. This is based on priorities scores given in *Annex 8*. The total cost is estimated at Rs. 377.00 crores.

Table 70: Phasing of Projects & Cost Estimates

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Rehabilitation, renovation, construction of new Branch sewers, pumping stations etc, STP as per the requirement	2000	9000	9000	9000	6000	-	-	**35000**	**High**
Mechanical equipment needed for cleaning of Sewers (LS)	30	50	-	-	-	-	-	**80**	**High**
Construction of community latrines and bathing facilities	125	300	300	300	200	-	-	**1225**	**High**
Sewerage system for the *Kumbh* area	125	125	100	-	-	-	-	**350**	**High**
Inventory of the existing scheme, Layout planning, designing and preparation of DPR	80	-	-	-	-	-	-	**80**	**High**
Sub-Total	***2360***	***9475***	***9400***	***9300***	***6200***	***0***	***0***	***36735***	
Construction supervision @ 1.00% (assumed)	36.74	91.84	91.84	91.84	55.1	-	-	**367.35**	**Medium**
Training & capacity building, asset creation, and information, education & awareness @1.5%.	55.1	137.76	137.76	137.76	82.65	-	-	**551.03**	**High**
Projects Proposed under JICA - Stage 1 (upto 2015)	800.74	800.74	800.74	800.74	800.74	-	-	**4003.71**	**High**
Grand Total	**3252.58**	**10505.34**	**10430.34**	**10330.34**	**7138.5**	***0***	***0***	**41657.09**	
Say								***416.60 crores***	

It is believed that the estimated costs given above can be optimised by sound planning, effective and systematic implementation. *Figure 52* gives an indicative sewerage network depicting tentative hierarchies in the network. The final overall network by incorporation of good features of the existing network shall emerge upon preparation of the DPR.

Figure 52

24.0 Storm Water Drainage

24.1 Identification of Projects

A separate and proper drainage network is required to be planned for the entire city to drain off the storm water, so that water logging happening in different parts of the city (Allahpur, the most) is avoided. This shall also prevent quantity and quality of sewage water from being affected from storm water and treated effectively. DPR shall consider an integrated design of the drainage network in the city. *Table 71* identifies existing issues and strategies to tackle the issues.

Table 71: Issues and Strategies for Storm Water Drainage

Existing Issues	Strategies
➢ Only half of the city is covered by drainage facility; ➢ Drains are very old and in dilapidated condition; ➢ Due to combined system substantial quantity of silt and debris is drained into the sewer system; ➢ Blockage of drains in most parts of the city; ➢ Water logging is caused due to chocking of drainage lines in the residential area creating un healthy situation; ➢ Absence of roadside drains in some parts of city.	➢ Preparation of layout plan for the complete drainage network; ➢ Inventory of the existing network; ➢ Identification of the problematic areas; ➢ Identification of the non-served areas; ➢ Prioritization of projects/works based on the condition of the existing system and requirements; ➢ Detailed design of the network and preparation of DPR; ➢ Approval and Technical sanction by the concerned authority; ➢ Implementation with strong construction supervision either by some external consultant or by the department itself; Following works are to be executed in the implementation phase – ➢ Provision for separate drainage system/ network in the entire city; ➢ Augmentation and improvement of all the existing secondary drains; ➢ Augmentation of Storm water drainage network after studying city Contour maps; ➢ Scheduled cleaning should be implemented in the city; ➢ Strengthening of existing nallas & augmentation of Storm water drainage network after studying city Contour maps; ➢ Construction of new secondary drains along the road and street sides; ➢ Preparation of layout plan for the complete water supply network; and ➢ Construction of pumping stations to pump water from low lying areas.

24.2 Projects for JNNURM

Proposals are called for the development of effective and dedicated storm water drainage network so that the serious water logging problem of several low lying areas in the city is solved. This shall ease out the tremendous pressure on the sewerage network caused by the strom water during the rainy season. The projects, project related activities and the perceived benefits of these projects/ project activities are detailed out in *Table 72* below.

Table 72: Project Activities and Benefits

Sl. No	Project	Benefits	Activity Undertaken
1	➢ Construction of new drains, pumping stations etc; ➢ Renovation and rehabilitation of existing network; ➢ Mechanical equipment for cleaning of drains.	➢ Frequent & Scheduled cleaning will be augmented in the city; ➢ Provision of drains lines in the slum areas; ➢ Proper drainage network will be augmented for the entire city; ➢ Laying of drainage network in the newly developed areas of the city; and ➢ Proper cleaning will prevent flooding at times of rainy season.	➢ Augmentation and improvement of all the existing secondary drains; ➢ Lining of the unlined/ kutcha secondary drains (along the road and street sides); ➢ Lining of the unlined primary drains/ *nallas*; ➢ Construction of new secondary drains along the road and street sides; ➢ Construction of pumping stations to pump water from low lying areas; and ➢ Augmentation and improvement of all the existing primary drains/ *nallas* and realignment wherever required.

24.3 Project Phasing & Costing

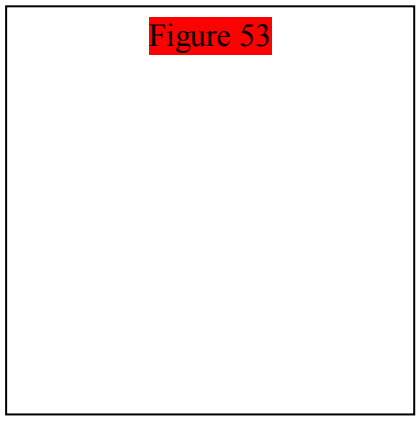
Phasing of the projects is based on priorities done by use of project weight and benefit scores given in *Annex 8*. Projects assigned higher priorities are taken up in the early years so that these works are started and completed at the earliest in the interest of the city community. *Table 73* below details out year-wise split of funds (Rs. 355.00 crores) for various activities.

It is believed that the estimated costs of a network can be optimised by sound planning, effective and systematic implementation. *Figure 53* gives an indicative yet dedicated storm water drainage network with network hierarchies. The final overall network by incorporation of good features of the existing network shall emerge upon preparation of the DPR.

Table 73: Phasing of Projects & Cost Estimates

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Rehabilitation/ renovation and construction of new drainage network (LS)	5000	7500	7500	7500	7500	-	-	**35000**	High
Mechanical equipment needed for the cleaning of drains (LS)	30	60	-	-	-	-	-	**90**	Medium
Inventory survey of the existing drains, layout planning, designing, and preparation of DPR (LS)	50	30	-	-	-	-	-	**80**	Medium
Sub-Total	***5080***	***7590***	***7500***	***7500***	***7500***	-	-	***35170***	
Construction supervision @ 1.00% (assumed)	70.34	175.85	175.85	175.85	105.51	-	-	**703.4**	High
Training & Capacity building, asset creation (LS)	5	5	5	5	5	-	-	**25**	High
Grand Total	**5155.34**	**7770.85**	**7680.85**	**7680.85**	**7610.51**	-	-	**35898.4**	
Say								***359 crores***	

Figure 53



25.0 Solid Waste Management

25.1 Identification of Projects

To provide aesthetic, clean, and healthy city environment by way of systematic and scientific system of SWM. A significant amount of solid waste garbage can through proper technology be converted into manure and/ or energy. Issues relating to SWM and strategies towards these are discussed in *Table 74*.

Table 74: SWM Issues and Strategies

Existing Issues	Strategies
➢ Poor/ absence primary collection system of MSW. ➢ Poor temporary collection system of MSW. Solid waste remains spread over the roads and streets. ➢ Insufficient bins for storage of domestic, trade and institutional wastes at source. ➢ Clogging of sewers and storm water drains. ➢ No Segregation of solid waste i.e. biodegradable and non-biodegradable matters. ➢ Picking of soiled Solid waste by rag picker without separation/segregation. ➢ Poor transportation system of solid waste due to inadequate /insufficient man power and machineries. ➢ Absence of treatment unit for the treatment of biodegradable municipal solid waste ➢ Transport facility are not linked with collection of waste from different localities ➢ Absence of proper Land filling Sites ➢ In-proper functioning of different authorities.	➢ Segregation of recyclable materials like papers, polythene bags, glass pieces, wrappers, plastics, metallic substances etc. that can be reused. ➢ Development of primary collection system by introducing door-to-door collection with public private participation system ➢ Segregation of biodegradable and non-biodegradable matters ➢ Training to rag picker for the segregation/picking of the recyclable waste. ➢ Installation of treatment unit for the treatment of biodegradable municipal solid waste e.g. compost plant, vermeculture etc. ➢ Develop a separate system for municipal wastes collection, transportation, treatment and disposal of biomedical wastes form the hospitals, dispensaries, and medical shops and bio wastes from the slaughter houses, poultry &fish shops etc ➢ Identification and development of Land filling Sites ➢ Institutional and Organizational Strengthening of Nagar Nigam Allahabad and other related organizations

25.2 Projects for JNNURM

SWM is a subject being paid good attention in several cities in India. It is the need of the hour that an appropriate and effective SWM system is in place for the city of Allahabad. An exercise has been done towards identifying projects/ activities that shall help not only in effective handling and management of solid wastes but provide useful returns as well. The following *Table 75* enlists projects and the perceived benefits thereof.

Table 75: Projects and Percieved Benefits

Sl. No	Project	Benefits	Activity Undertaken
1	Development of solid waste management system in Allahabad city by providing an efficient collection, transportation, treatment and safe disposal system.	➢ Will increase the capacity of sanitary workers and frequency of job; ➢ Door to door collection system will improve the waste collection and removal of waste from its source within 24 hours. ➢ Streets will be clean; ➢ Clogging of drains and sewers will be reduced with the provision of storage bins in the city and drains and sewers will function effectively; ➢ Will provide an esthetic, clean and healthy environment; ➢ Transformation of solid waste in to a valuable matter like manures, energy (Electricity) etc; ➢ Safe disposal of solid waste; ➢ Frequent & Scheduled waste cleaning will be developed in the city; ➢ Waste disposal in the open areas of the city will be stopped; and ➢ Hygienic condition s will be created with Provision of waste collection in slum areas.	➢ Deployment of sanitary workers as per the requirement and their ward wise allocation; ➢ Development of primary collection system of MSW (door-to-door); ➢ In slum areas, the Sanitary Workers will collect waste by announcement, bell ringing/ whistle system along the main access-lanes; ➢ Road sweeping. The sanitary workers will sweep the streets using brooms to make small heaps of solid waste. These heaps of solid waste will then be taken to nearest bin; ➢ Procurement of storage bins and its placement at the designated/ specified locations; ➢ Temporary storage of waste/refuse in the bins; ➢ Segregation of biodegradable and non-biodegradable waste; ➢ Development of scientific, hygienic, and efficient transportation system; ➢ Installation of treatment unit for the treatment of biodegradable municipal solid waste like – • Composting – manual or mechanical • Vermeculture composting etc • Power generation (Energy recovery) from the solid waste • Land filling ➢ Develop a separate system for the collection, storage, transportation, treatment and disposal of biomedical wastes form the hospitals, dispensaries, and medical shops; ➢ Conduct Training & Capacity building program's and perform Information, Education & Awareness activities;

			➢ Institutional and Organizational Strengthening of MCA and other related organizations; ➢ Enhancement of environmental education to gain city residents' awareness towards garbage; and ➢ Identification and development of land filling Sites.

25.3 Project Phasing & Costing

Phasing of projects is based on weight and benefit based quantified priorities given in *Annex 8*. Project costs have been worked out taking into account various unit rates/ costs and quanitities of activities. Higher priorities indicate higher requirements and these projects are thus to be taken up first in community's interest. *Table 76* details out year-wise split of funds for various projects totalling to Rs. 28.00 crores –

Table 76: Projects and Cost Estimates

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Dumper Placer with handle container of 4.5 cubic meter capacity (5 trips per day, average)	100	250	250	100	100	-	-	**800**	**High**
Dumper Placer Containers of 4.5 cubic meter capacity each	5	10	10	-	-	-	-	**25**	**High**
Tractors	40	60	50	40	20	-	-	**210**	**High**
Hydraulic tractor tipping trolley	40	40	40	30	--	-	-	**150**	**High**
Platforms and ramping for tipping trolleys	10	10	10	10	--	-	-	**40**	**High**
Skip Lifter for construction debris	30	40	40	30	20	-	-	**160**	**High**
Skips of 7 cubic meter capacity	4	4	4	4	4	-	-	**20**	**High**
Hand Carts	20	30	30	20	20	-	-	**120**	**High**
Bulldozer	100	100	100	100	-	-	-	**400**	**High**
Fully equipped medical waste collection vehicle	20	20	20	20	-	-	-	**80**	**High**
Weigh bridge of 15 ton capacity for the landfill cum compost plant site	10	20	20	10	-	-	-	**60**	**High**
Incinerator for hospital waste, complete with chimney and civil works etc (100kg/hr capacity)	10	30	30	30	-	-	-	**100**	**High**
Development of land fill sites for inert waste produced as 400 MT per day (average)	20	50	50	50	30	-	-	**200**	**High**
Finalization of conventional	10	20	10	-	-	-	-	**40**	**High**

method of sludge dislodge area									
Depot for the vehicle	20	40	40	-	-	-	-	**100**	**High**
Development of service at treatment site like road, drain etc	10	20	20	-	-	-	-	**50**	**High**
Energy production system	100	300	300	300	-	-	-	**1000**	**High**
Compost plant at different locations with all accessories	200	400	400	200	200	-	-	**1400**	**High**
Sub-Total	***749***	***1444***	***1424***	***944***	***394***	***0***	***0***	***4955***	
Capacity building and awareness programs @ 2.5%	18.58	30.97	30.97	30.97	12.39	-	-	**123.88**	**Medium**
Miscellaneous & unforeseen items @ 10%	37.26	62.1	62.1	62.1	24.84	-	-	**248.4**	**Medium**
Grand Total	**804.84**	**1537.07**	**1517.07**	**1037.07**	**431.23**	**0**	**0**	**5327.28**	
Say								***53.28 crores***	

The basis (units, rates, quantities etc) for arriving at the above costs is given as *Annex 13*.

26.0 Tourism and Heritage Conservation

26.1 Identification of Projects

Tourism and heritage conservation related projects have been identified keeping in view the ensuing *Kumbh* in January 2007 and its efficient hosting with provision of adequate/ maximum facilities to the *Teerth yatries* and with minimum inconvenience to the city dwellers. The following *Table 77* discusses presently pertinent issues in the sector and identifies strategies towards easing these out.

Table 77: Issues and Strategies

Existing Issues	Strategies
➢ Poor infrastructure facility on all major tourist sites	➢ Provision of public facility and provision of pre-paid booths
➢ Tourist circuit routes are missing in Allahabad leading to some of the important places unexplored by tourist	➢ Circuit routes can be designed & tourist buses for local site seeing can be promoted
➢ Absence of tourist information centres	➢ Development tourist information centre on railway station & Sangam area
➢ Absence of pre-paid ticketing booths on bus stands/ railway station	➢ Provision of pre-paid booths on *Kumbha Mela* ground, railway station
➢ Absence of public amenities on major tourist sites & Sangam area	➢ Provision of public facility like sheds, toilet, drinking water tab, street lighting etc.
➢ Absence of recreational areas in the city for local & domestic tourist	➢ Concept of River Front development should be promoted & designing of water circuit linking major ghats through Jetty to be done. Development of parks & open spaces in the town
➢ River facing side of Allahabad is still unused, hold huge potential for River Front development	
➢ Provision of new ghats	➢ Development of ghats around Sangam & strengthening of existing one
➢ Absence of "Vishramsthali" around *mela* ground & entry point of the city	➢ Development of "Vishramsthali in proposed mela ground &existing *Kumbha* area will help to stop Tourist on the entry points of town
➢ Development & identification of new mela grounds to share the thrust of *Kumbha* Ground	➢ Development of new mela ground can share the thrust of *Kumbha mela* area.
➢ Promotion of water sports activity in Allahabad	➢ Water sport activity can be developed in context to river front development
➢ Negligence in maintenance of heritage sites reduces historical relevance of Allahabad	➢ Renovation of heritages sites need to be done & walk-through can be planned
➢ Absence of facility like sound & light shows on major heritage sites in Allahabad	➢ Heritage buildings like Khusro Bagh, Allahabad fort, All Saint Church, proposed ghats can be provided with lighting effect
➢ Water circuits routes missing in Allahabad	➢ Proposed & existing ghats & areas of river front development can be linked through water routes with Sangam

26.2 Projects for JNNURM

This section discusses various projects identified for the development of tourism activity in Allahabad together with heritage conservation activities. The following *Table 78* enlists

these projects and analyses benefits the city would be rewarded with. The activities associated with these projects and the demarcated areas/ locations for these are also discussed in the table.

Table 78: Project Activities and Associated Benefits

Project	Benefits	Activity Undertaken	Area
River Front Development	➢ Release of prime land in the heart of the city ➢ Act as tourist attraction site Scope for development of water park ➢ Scope for development of water park ➢ Recharging of ground water aquifers of the city ➢ Elimination of flood hazard ➢ Provision of informal markets ➢ Beautification of the city ➢ City level recreational space	➢ Development of parks ➢ Restaurants ➢ Sheds for sitting purpose ➢ Provision for fountain & light shows ➢ Benches for sitting along River side ➢ Parking facility	➢ From Karel Bagh to fort area along Minto Road ➢ Along Ulta Kila on Sangam banks (Jhusi side) ➢ Upstream Ganga toward Jhusi (Tourism city)
Development of Ghats	➢ Ease while taking bath ➢ Share the thrust of Sangam at times of *Kumbh* ➢ Concurrently Support the location "VishramSthali" ➢ Arthi on Ghaths on the pattern of Hridwar & Varanasi can be promoted. ➢ Increase the heritage & religious value of Allahabad	➢ Construction of permanent Ghats ➢ Development of facility zone along the Ghats (Shops, Changing room) ➢ Provision of Sheds & Public facility ➢ Beautification with proper provision of landscaping should be done on Ghats	➢ Ghats along Arial area (Naini side) ➢ Augmentation of ghats along Rasulgagh/ Narani Ashram/Shiv kulti ➢ Ustapur Mohamadbad down streem Sangam area
Construction of Vishram Sthali	➢ Sheds for Tourist Round the year visiting Allahabad ➢ Distribute the load of Kumbha Mela ground	➢ Development of Public Facility like toilets, water tab, bathing Areas ➢ Internal Roads covering the area	➢ Sangam area near Sankar Viman Mandapam & Human Mindir

	➢ Directional distribution of tourist is possible with the construction of "VishramSthali" along major highway."VishramSthali" will also prevent the entry of Tourist vehicles in the city. ➢ Development of informal market around vishramsthali can be promoted, they can also be used for hat market sin particular areas which will help in Space creation & Space utilization	➢ Parking facility for vehicles ➢ Proper Landscaping required	➢ Ustapur Mohamadbad mela area in Jhushi, Downstream Sangam ➢ Arail in Nahi side ➢ Rasulbagh toward Fafamau ➢ Prayag vishramsthali near prayag station ➢ Near Shastri Bridge upstream Sangam
Tourist Information Centre	➢ Proper guidance to the tourist visiting Allahabad ➢ Information database under one roof ➢ Circuit routes can be designed & tourist buses for local site seeing can be promoted ➢ Provide Facility for booking of spaces & tents at times of *Kumbh* ➢ Single point tourist can get facility booked like Boating, Taxi & tourist circuit buses etc. ➢ Act as a information centre at times of *Kumbh*		➢ Sangam area ➢ Railway Station
Pre-Paid Counters	➢ Provide ease to tourist & will create sense of Safety ➢ Will increase source of income for taxi drivers	➢ Construction of pre-paid booth ➢ Permanent person to be appointed	➢ Sangam area ➢ Railway station ➢ Bus stands ➢
	➢ Create order & system. Pre-Paid system can evolve in the whole city in longer run.		

Provision of decorative Signage board	➢ Directional information ➢ Act as a source of revenue Generation through add hording ➢ Source of Information to tourists	➢	➢ Sangam area ➢ Railway station ➢ Bus stands ➢ Along major routes ➢ Tourist places
Provision of Public Facility	➢ Clean & Hygienic facility for tourist ➢ Promote cleanness in the tourist sites ➢ Can act as source of revenue generation, through Advertisement board & by Imposing small amount on the use	➢ Sulubh with a capacity of 8-10 toilet ➢ 24 hours facility for water & electricity ➢ Person for Cleaning, maintenance & revenue collection	➢ Sangam Area ➢ Bus Stands ➢ Important tourist places
Heritage & Conservation	➢ Attraction point for tourist ➢ Preferable site for organizing sound & light shows ➢ Walkway can be development across major heritage sites ➢	➢ Renovation of the heritage buildings & existing Temples ➢ Development of landscape around the sites ➢ Provision of public facility ➢ Separate space for parking around the sites	➢ Khusro Bagh ➢ All Saint Church ➢ Ulta Quila ➢ Hunman Mindir at Sangam ➢ Temple: Kalayani devi, ShivKulti, Allopi Devi, Mankamshwer Temple
Construction of Budget Hotels	➢ Cheep & Better Accommodation Facility for tourist ➢ Cater the thrust of *Kumbh mela* ground at times of *Kumbh*	➢ Building of new dharamshalas/ hotels	➢ Along Nani Ghat (Arail) ➢ Near Sangam area ➢ Railway Station
Illumination of Heritage Buildings	➢ Increase the aesthetic of the area ➢ Developed as recreational areas for local population reducing the thrust on Core areas ➢ Attraction point for Tourists	➢ Provision of proper lighting ➢ Identification of areas where lighting is required	➢ Allahabad Fort ➢ Khusro Bagh ➢ All St Cathedral church ➢ Proposed Ghats ➢ Azad Park
Sound & Light Shows	➢ Attraction factor for tourist & local persons ➢ Organizing of sound & light Shows in heritage area will boost up the tourist inflow		➢ Khusro bagh ➢ Allahabad Fort

Development of New Mela Ground	➢ Decentralize the load of Kumbh mela ➢ Area to be developed with a concept for Tourist town ➢ Space can be provided for different Ashram (religious group) ➢ Facility like Amphi-theater, stage for religious speeches, Hawan ground, yoga ashram, meditation center, old age homes can be developed ➢ New housing scheme can be promoted around site ➢ Sealing of plots will generate revenue for the development authority	➢ Inclusion of land under development limits ➢ Linking with Allahabad main city through road transport ➢ Strengthen of Existing Railway Station on Varanasi route ➢ Provision of Public Facility ➢ Development of ghats & linking with Sangam Area ➢ River front development along the periphery ➢ Setting up of a committee for development & monitoring of area	➢ Toward Jhusi
Development of water circuits in the city	➢ Link all proposed & existing ghats in the city with Sangam area ➢ Circuit boat routs can be developed for site seeing in the city ➢ Development of boat route will support the provision Vishramsthali & ghats ➢ Tourist can use these water routes at time of *Kumbh* for reaching Sangam ghat ➢ Provide opportunities for employment & revenue can be generated out of it ➢ Will become New point of attraction for foreign, domestic tourist	➢ Designing of boat Routes ➢ More no of boats will be required ➢ Pre-paid booth For ticketing	

Provision for Jetty/ Speed Boats	➢ Water routes can be linked with different Jetty locations ➢ Jetty will add value to Riverfront development in the city		➢ Along proposed River front development adjoining Minto Park ➢ Along proposed tourist site Jhusi area ➢ Along proposed ghats Arail area

26.3 Project Phasing & Costing

Phasing of development has been done depending upon the requirements of various facitilies and accordingly priorities to the various identified projects/ activities identified. Discussion on prioritisation of projects is given as *Annex 8*. *Table 79* presents span for completion of various tourism and heritage related projects and their broad cost estimates. The total cost of tourism and heritage conservation projects is estimated at Rs. 122.00 crores. *Figure 54* is intended at plotting all tourism and heritage conservation related proposals/ activities to show the proposed locations etc in Allahabad.

Table 79: Phasing & Priorities to Projects

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Pre-paid Counters (taxi, auto, boats)	10	-	-	-	-	-	-	**10**	**Medium**
Tourist Information Centre	40	40	-	-	-	-	-	**80**	**High**
Provision of Public Facility	75	75	-	-	-	-	-	**150**	**High**
Construction of "VishramSthali"	175	85	85	85	85	-	-	**515**	**High**
Construction of New Ghats	-	350	350	300	250	-	-	**1250**	**High**
Illumination of Heritage Buildings	25	25	25	25	25	-	-	**125**	**Medium**
Development & maintenance of City park	50	60	60	35	35	-	-	**240**	**Medium**
Provision of Sound & Light Shows	50	100	50	-	-	-	-	**200**	**High**
Provision of decorative signages/ board	50	50	50	-	-	-	-	**150**	**Medium**
Conservation & Restoration of Old Temples	-	25	25	25	25	-	-	**100**	**Medium**
Heritage & Conservation	-	500	500	500	500	-	-	**2000**	**High**
Construction of Budget Hotels	-	-	-	-	-	-	-	**--**	**Medium**
Development of New Mela Ground	250	1000	2000	1500	1250	-	-	**6000**	**High**
River Front Development	100	300	300	300	200	-	-	**1200**	**High**

Development of water circuits & Jetty/speed boats	-	50	50	50	-	-	-	**150**	**Low**
Total	**825**	**2660**	**3495**	**2820**	**2370**	**0**	**0**	**12170**	
Say								***122.00 crores***	

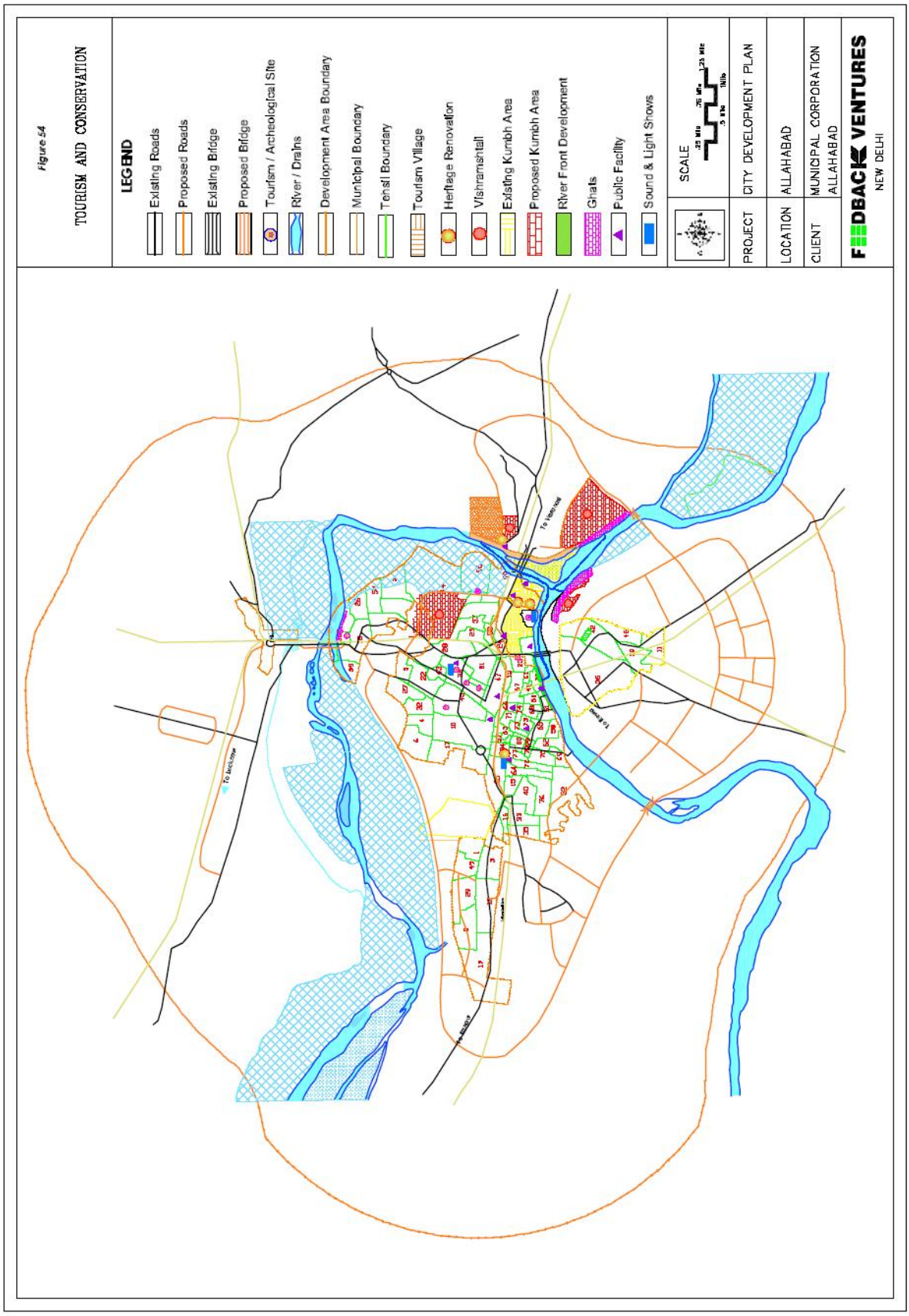


Figure 54
TOURISM AND CONSERVATION
LEGEND
Existing Roads
Proposed Roads
Existing Bridge
Proposed Bridge
Tourism / Archeological Site
River / Drains
Development Area Boundary
Municipal Boundary
Tehsil Boundary
Tourism Village
Heritage Renovation
Vishramsthali
Existing Kumbh Area
Proposed Kumbh Area
River Front Development
Ghats
Public Facility
Sound & Light Shows
SCALE
PROJECT
CITY DEVELOPMENT PLAN
LOCATION
ALLAHABAD
CLIENT
MUNICIPAL CORPORATION ALLAHABAD
FEEDBACK VENTURES
NEW DELHI

27.0 Roads and Transportation

27.1 Identification of Projects

The objective is to achieve a sustainable transport system that is adequate, safe, comfortable, equitable and efficient. The objective is also to providing relief to the city from the through traffic. Special arrangements have also been made to meet out the traffic demand during the *Kumbh mela*.

Pertinent issues relating to traffic and transportation situation in the city identified while situation analysis and the overall city and sector vision evolved thereafter have given rise to strategies and projects/ project activities, as discussed in the *Table 80* below.

Table 80: Issues and Strategies towards Projects

Existing Issues	Strategies	Projects
➢ Through traffic from the National Highways	➢ Construction of bypass for through traffic	➢ Construction of southern and Bandh Road
➢ Improper road geometric	➢ Road and Junction Improvements. Use of ITS	➢ Improvement of 40 identified intersections.
➢ Inadequate parking provisions in commercial areas	➢ Identification of parking areas in the commercial areas for multi-level parking ➢ Options for involving private sector players	➢ 9 Multi-level parking lots identified
➢ Poor public transportation system operated by private owners	➢ Setting up facilities for public transport ➢ Capacity building in existing public transport	➢ 13 major routes identified with provision of bus stops and parking spaces at end points
➢ Low handling capacity of Bus terminals	➢ Augmentation of the existing bus terminals and relocation	➢ Augumentation of civil lines bus terminal ➢ Relocation of Zero Road and Louther Road bus terminal
➢ Inadequate capacity of roads	➢ Widening of roads provision of flyovers/ RUB etc	➢ 5 flyovers and 4 RUB at selected locations ➢ Widening of the identified routes
➢ Environment pollution	➢ Use of cleaner fuel to reduce pollution	➢ Use of CNG based public transport vehicles
➢ Large mix of traffic in core city	➢ Policy level intervention and traffic management schemes	➢ Traffic management schemes for the core area
➢ Improper traffic management	➢ Implementation of traffic management schemes	➢ Enforcement

➢ Lack of pedestrian walkways and subways making safety an issue	➢ Provision of subways and footpath for safe movement of pedestrians	➢ Construction of 3 subways and foot path on the listed roads
➢ High migration or pilgrims during *Kumbh mela*	➢ Traffic management and identification of special routes to cater to pilgrim influx	➢ Bypass to directly shift the *mela* traffic to the Sangam area
➢ No provision for truck terminals	➢ Truck terminals to be provided	➢ Provision of four truck terminal located in the satellite towns of Allahabad

A large number of relevant and demanding projects have been identified in this sector for the purpose of easing the current traffic scenario as also the future traffic that would be generated in the city. The projects are also aimed at bypassing the through traffic that is destined for somewhere else and has nothing to do with it. The various projects identified to be implemented under the JNNURM have been identified under the broad heads as follows –

- Construction of Southern bypass
- Construction of Northern bypass
- Widening of Roads
- Flyovers
- Road Over-Bridges and Road Under-Bridges
- Widening of Rail Under-Bridge (at road level)
- Intersection Improvement
- Signalisation of Intersections
- Speed Breakers
- Zebra marking, lane marking and signages
- Road Lighting
- Multi-level Parking
- Bus Terminals
- Truck Terminals

Detailed project related activities under these heads are given as *Annex 14*.

27.2 Project Phasing & Costing

Phasing of development has been done depending upon the requirements of various facilities and accordingly priorities to the various identified projects/ activities identified. The quantification technique adopted towards computation of priorities is given as *Annex 8*. *Table 81* presents phasing of projects based on quantified priorities together with estimated costs. Projects relating to street lighting and their costs have also been dealt with in this section. The total cost of roads and transportation related projects is estimated at Rs. 1178.50 crores, including the cost of street lighting.

Figure 55 shows graphically the proposed road intersection improvements to take place. *Figure 56* depicts the transport land use.

Table 81: Project Span and Priorities

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Construction of Bandh Road	1500	6500	6500	5000	1348	-	-	**20848**	**High**
Widening of roads	3580	7161	3581	-	-	-	-	**14322**	**High**
Flyovers	-	-	2940	6860	-	-	-	**9800**	**High**
Road Over Bridge/ Road Under Bridge	-	500	4500	4500	500	-	-	**10000**	**High**
Widening of existing RUB (at Road level)	-	-	448	-	-	-	-	**448**	**Medium**
Intersection Improvement	200	250	--	-	-	-	-	**450**	**Medium**
Signalisation of Intersection	-	--	153	-	-	-	-	**153**	**High**
Speed breakers	-	6	9	-	-	-	-	**15**	**Low**
Zebra marking, lane markings and signages	7.5	7.5	--	-	-	-	-	**15**	**Low**
Road lighting	-	-	1724	2584	-	-	-	**4308**	**Medium**
Multilevel parking	1000	3000	2000	-	-	-	-	**6000**	**High**
Augmentation & relocation of bus terminal	700	1000	1000	1000	-	-	-	**3700**	**Medium**
Metro rail system for the city (phase II)	-	-	-	-	-	-	-		
Grand Total	**6987.5**	**18424.5**	**22855**	**19944**	**1848**	-	-	**70059**	
Say								***700.60 crores***	

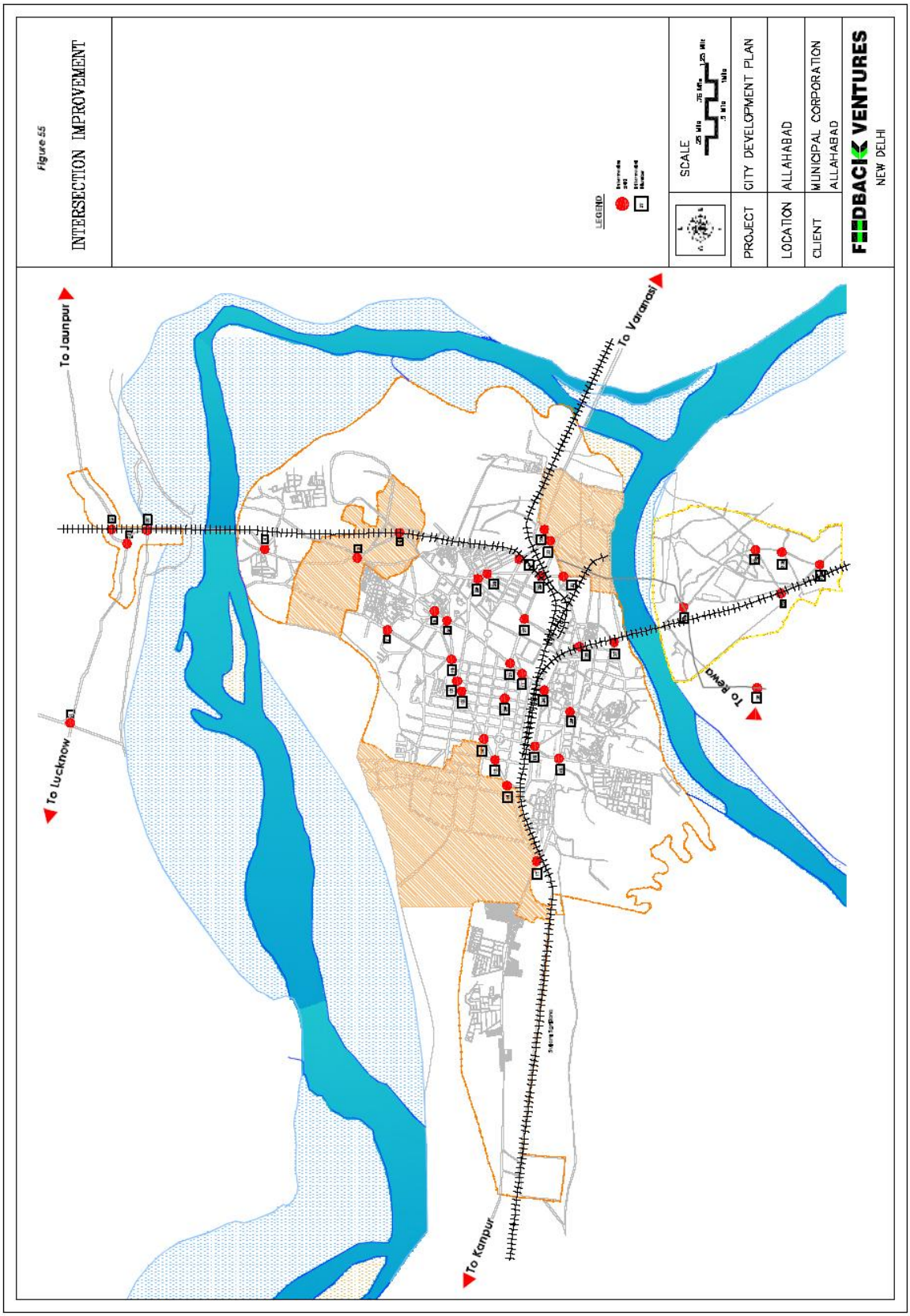


Figure 55
INTERSECTION IMPROVEMENT
LEGEND
SCALE
PROJECT CITY DEVELOPMENT PLAN
LOCATION ALLAHABAD
CLIENT MUNICIPAL CORPORATION ALLAHABAD
FEEDBACK VENTURES
NEW DELHI
To Jaunpur
To Varanasi
To Lucknow
To Rewa
To Kanpur

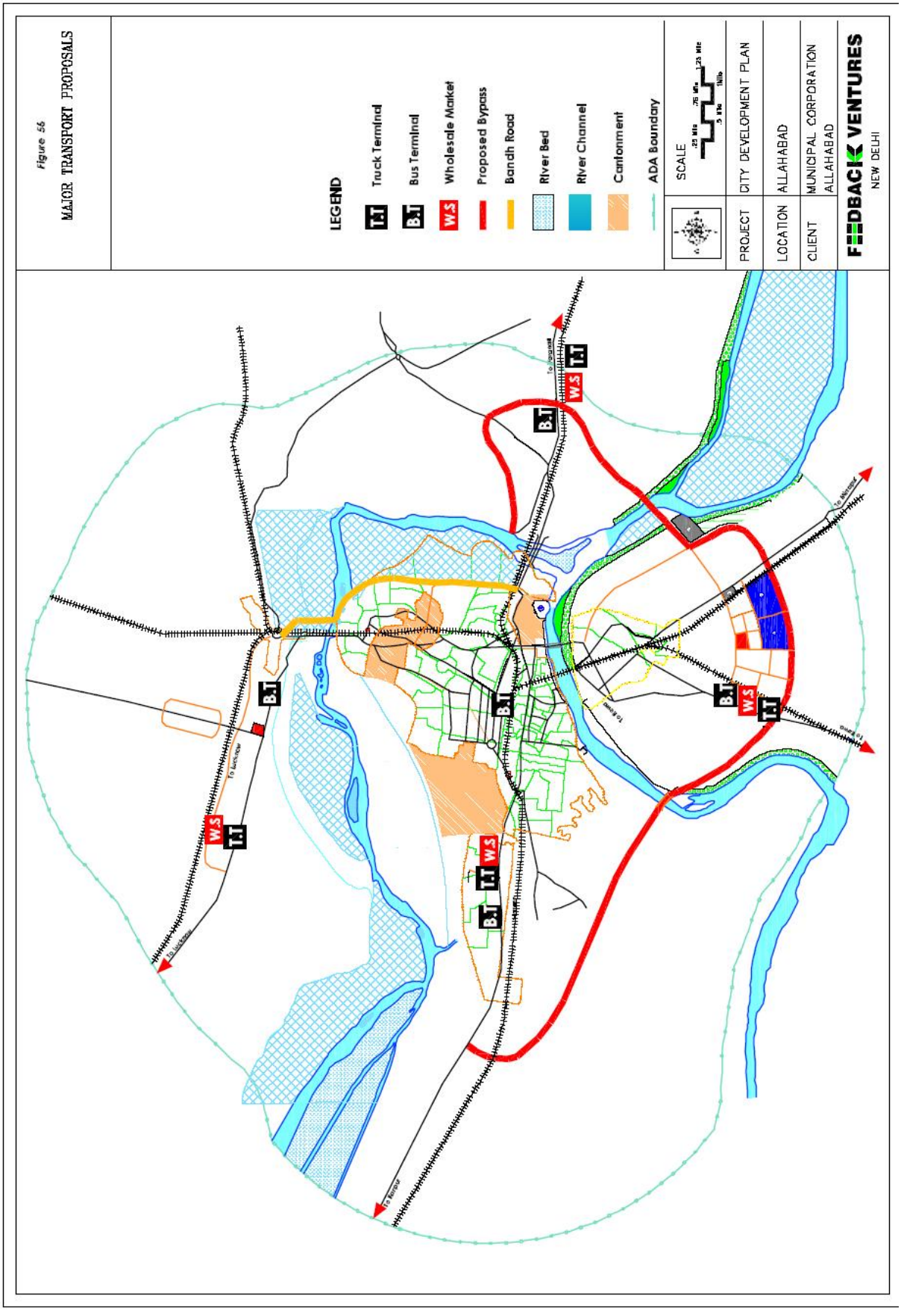


Figure 56
MAJOR TRANSPORT PROPOSALS
LEGEND
Truck Terminal
Bus Terminal
Wholesale Market
Proposed Bypass
Bandh Road
River Bed
River Channel
Cantonment
ADA Boundary
SCALE
PROJECT
CITY DEVELOPMENT PLAN
LOCATION
ALLAHABAD
CLIENT
MUNICIPAL CORPORATION ALLAHABAD
FEEDBACK VENTURES
NEW DELHI
T.T
B.T
W.S

28.0 Other Infrastructure/ Communities Facilities

28.1 Projects for JNNURM

Discussion with various stakeholders at the city and state levels has revealed that there is requirement of certain community facilities to benefit elderly, women and the youth of the city. Infrastructure towards this has been identified as under –

- Home for the elderly;
- Youth hostels; and
- Working hostels for girls and for men.

28.1.1 Prayag Home for the Elderly

It is proposed to build a 60-room home for the senior citizens that shall include separate office and a guardroom. There can be a mixed pattern in the building with provision of separate room and a big hall comprising of several beds and study tables. There can also be a provision for a garden on the campus with proper landscaping. Appropriate health facility also needs be provided on the campus to deal with any unforeseen situation. It is assumed that this shall require an area of 12000 m^2 of space for a constructable area of 2000 m^2 involving an estimated cost of Rs. 100.00 lakh.

28.1.2 Youth Hostels

There shall be youth hostel, both for boys and girls considering the fact the Allahabad is a centre of advance learning and is also proposed to come up a knowledge hub in the future. This shall provide affordable and healthy environment for the student class of the society. A suitable site in proximity with the educational institutions is recommended. The youth hostel shall be spread over an area of 2500 m^2 involving an estimated cost of Rs. 120.00 lakh.

28.1.3 Working Hostels for Girls & Men

Separate working hostels for girls and men have been proposed. There is a large influx of population into Allahabad from the neighbouring region and beyong for the purpose of education and employment. This influx is expected to grow over the years. Owing to this very fact, this facility is being recommended. A total of five hostels with a mix of 2 plus 3 for girls and men respectively is envisaged. Total area requirement is 1500 m^2. Each hostel shall involve an estimated cost of Rs. 75.00 lakh, and five hostels shall collectively cost Rs. 375.00 lakh.

28.2 Project Phasing & Costing

All the above miscellaneous community facilities are proposed to be completed over the next five years with an estimated expenditure of Rs. 6.00 crores (*Table 82*).

Table 82: Phased Community Failities and Estimated Costs

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Home for the elderly & destitute	25	25	25	25	-	-	-	**100**	**High**
Youth hostels	25	40	40	15	-	-	-	**120**	**High**
Working girls' hostel	25	50	50	25	-	-	-	**150**	**High**
Working men's hostel	25	75	75	50	-	-	-	**225**	**High**
Grand Total	**100**	**190**	**190**	**115**	-	-	-	**595**	
Say								***6.00 crores***	

29.0 Environmental Aspects

29.1 Projects for JNNURM

Few significant projects for the conservation of a healthy and liveable environment have been identified. This includes the following –

- Plantation along select roads;
- Slaughter houses;
- Rehabilitation of old electric crematoria (2 nos);
- Provision of new electric crematoria (2 nos); and
- Improvement and augmentation of graveyards (for Muslim and Christians).

29.2 Project Phasing & Costing

Project phasing and costing has been done in accordance with the requirements of the city as regards environmental conservation. All proposed projects are expected to complete in the next five years with an estimated expenditure of Rs. 14.60 crores (*Table 83*).

Table 83: Environmental Projects and Estimated Costs

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Plantation along select roads	250	250	250	250	-	-	-	**1000**	High
Slaughter Houses	25	25	25	25	-	-	-	**100**	High
Electric Crematorium improvement (2)/ provision (2)	30	100	100	30	-	-	-	**260**	High
Grave yard improvement/ augmentation (LS)	25	25	25	25	-	-	-	**100**	High
Environmental Impact Assessment studies for Infrastructure projects									
Grand Total	**330**	**400**	**400**	**330**	-	-	-	**1460**	
Say								***14.60 crores***	

30.0 Urban Basic Services

30.1 Integrated Slum Development

There is no sufficient water to fulfil the water supply requirement in slum settlements. There are areas/ slum settlements in the city where water supply is not available even when the total water production is higher than the requirement. The slum dwellers are therefore made to make their own water arrangements. Projects identified by various agencies including the JN, MCA and the DUDA have been evaluated and incorporated as a proposal under the JNNURM where justified.

Improvement of slums is proposed to be taken up in an integrated manner. The integrated slum development project is poposed to focus on roads, water supply, sewerage and sanitation, drainage, and solid waste management for improving the living conditions and quality of life of the urban poor in Allahabad.
This program shall enhance quality of life of the urban poor and make it accessible and affordable for them over the next 25 years. The works indicated in *Table 84* concerning water supply are proposed to be executed in a phased manner –

Table 84: Water Supply Projects For Slums

Sl. No.	Proposed Project	Costs (Rs Lakh)	
		In-situ	*Ex-situ*
1	Distribution system in slum areas as an integrated part of the main water supply network of the city	**600.00**	**500.00**
2	Construction of public stand posts and *pyaoos*	**30.00**	**25.00**
3	Provision of cattle troughs at select locations in slum settlements	**25.00**	**25.00**
4	Provision of water meters at specified locations	**300.00**	**17.50**
	Total	**955.00**	**567.50**

Old age people and women face problem in going for open defecation in the absence/ shortage of toilets/ community toilets. An effective sewerage system needs to be provided in these areas and community latrines to be constructed for the safe and hygienic defecation to the poorest. Towards this, projects as follows (*Table 85*) have been identified –

Table 85: Sanitation Projects For Slums

Sl. No.	Proposed Project	Costs (Rs Lakh)	
		In-situ	*Ex-situ*
1	Construction of community latrines and bathing facilities (paid/ unpaid) for the urban poor	**450.00**	**300.00**
2	Laying of sewer lines	**300.00**	**250.00**
	Total	**750.00**	**550.00**

No separate costs are required to be taken for storm water drainage, SWM and other environmental aspects for these are given due consideration at the city level. The component of street lighting has been included in the roads and transport costs.

Table 86: Roads and Transport Projects

Sl. No.	Proposed Project	Amount (Rs Lakh)
1	Roads network improvement for authorised slum settlements (*In-situ* development)	**1500.00**
2	Roads network improvement for *Ex-situ* development	**2300.00**
Total		**3800.00**

30.2 Housing

The parastatal agencies concerned with this sector will have to play a significant role in providing housing for the economically weater sections (LIG/ EWS) of the society. This need not be in the form of fully built houses but in the nature of sites and services. In such a case, smaller plots (25-30 m^2) with pedestrian accesses, and water and sewerage facilities need be provided, and a water tap and toilet seat built on the plot. The plot allottee can then build the shelter and improve it as his income improves. By ensuring water and sanitation, the environmental hygiene is ensured. There are experiences of such schemes in India, and lessons from them can be applied in Allahabad.

Taking stock of the situation at hand and considering the present status of the slums as reported above, it is suggested that *in-situ* rehabilitation option should be considered for the authorised slums and relocation (if at all necessary) should be seen as an option for the unauthorised colonies/ slums. In the *Table 87* are worked out housing and other requirements, both for *In-situ* (authorized slums) and *Ex-situ* (unauthorized slums) development. A plot of 4000 m^2 shall house four dwelling units each at three floors (G+2).

Table 87: Housing Requirement & Other Details

Slum Costing Allahabad (Housing for Urban Poor)		
Total Slum Population	400,000	
Average Household size	6.5	
Total number of Households	61,538	
	Exsitu Development	**Insitu Development**
Population to be relocated	60%	40%
Population to be relocated	240,000	160,000
Number of Households to be relocated	36,923	24,615
Insitu Upgradation of houses	-	40%
	-	96,000
Number of DUs	-	14,769
Total number of EWS Dwelling units (DUs) required	100%	40%
	36,923	9,846
Minimum area required per DU	25 sqm	25 sqm
	EWS Housing	**Insitu Housing**
Minimum Plot size per DU	0.4 ha	0.4 ha
Maximum Permissible FAR	133	133
Total number of floors	4	4
Permissible Ground Coverage	33%	33%
Number of DUs per floor	4	4
Area under DUs per floor	4 x 25 = 100sqm	4 x 25 = 100sqm
Area under services	22sqm	22sqm
Area per floor	122	122
Total covered area per building	122 x 4 = 488 sqm	122 x 4 = 488 sqm
Maximum number of buildings permitted per plot	11	11

Total built up area (sqm)	5368	5368
Total number of DUs per building	16	16
Total DUs per plot	176	176
Population accomodated per plot	176 x 6.5 = 1144	176 x 6.5 = 1144
Population to be accomodated in new plots	240,000	64,000
Number of plots required	210	56
Total area required (ha)	84	22
Cost of Upgradation of houses	-	1000/sqm
Cost of construction of new houses	3,500/sqm	3,500/sqm
Total floor area to be constructed	1126153.846	300307.6923
Total cost of construction	3941538462	1051076923
Cost of upgradation of Houses (at 25sqm per dwelling)	-	369,230,769
Cost of construction of new houses	3941538462	1,051,076,923
Total cost	3941538462	1,420,307,692
	Say 394 crore	Say 142 crore

Major components in estimation of costs have been land development and construction costs. The costs have been worked out assuming usage of low-cost and average quality construction material. Costs of land (purchase/ acquisition etc) have not been taken into account for estimation. *Table 88* below gives details.

Table 88: Estimation of Costs

Component	Ex-situ Development Cost (Figs in Lakh)	In-situ Development Cost (Figs in Lakh)
Development Cost per ha	25	25
Construction Cost per m^2	0.35	0.35
Total Cost of Land Development	1385	1620
Total Floor Area to be Constructed	5.4	5.4
Total Construction Cost	19198	22455
Total Cost (Rs Lakh)	**20584**	**24076**

30.3 Community Participation

Public interventions shall be required in providing basic services to the slums. To the extent feasible, community involvement may be secured in maintaining the facilities particularly community toilets, solid waste management etc.

The slum communities need to shoulder the responsibility of work execution and bring about transparency, accountability and quality of work. The women folk of the community will be empowered through training programs and discussions as the vital pillars of the work thereby converting the closed system of contractors into an open system of people. Following steps shall be adopted to bring this about:

- Conducting group meetings with the people about the need to take over the responsibility of execution of works in their own slums;

- Vigilance committees to be formed amongst the people as a cautionary measure to discharge the function of social audit. This will also ensure that the contractor does not degrade the quality of work in an attempt to make high profits out of the money allotted for slums;
- Identify the target beneficiaries and initiate efforts to form Community Based Organization (CBOs), covering the target population for participation in the implementation of JNNURM projects and State Reform Agency (SRA) projects for slum rehabilitation;
- The vulnerable groups are the socially under privileged, women and aged. Development programs are necessary for these vulnerable groups in the community, and they can be properly implemented and the services properly availed of, through the conduction of effective Information, Education and Communication (IEC) campaigns, thus improving the level of awareness among the communities and ensuring the participation of the vulnerable groups. This initiative aims at a long-term goal and needs sustained longstanding efforts on part of the CBOs. The activities of the CBOs shall be monitored through an evaluation procedure on a periodic basis. It would be expedient to involve local NGOs with experience in community empowerment activities in Allahabad, in the promotion, formation and capacity building of these CBOs;
- There needs a better convergence between different urban poverty programs so that resources from the centre, state and local governments are able to focus and make real change happen. A master plan should be prepared with special attention to land tenure, basic services, housing and employment needs, including informal enterprise of the poor, of women and children. The urban poor's access to housing finance at affordable cost through micro-credit schemes and community-based lending needs to be facilitated.

Granting security of land tenure to slums (individually or preferable to groups) will be a major intervention that would enable slum dwellers to access housing finance and improve their shelters over a period of time. An enabling environment will have to be created for this by co-ordination and liaison between the different departments/ organizations/ individuals owning the land on which the slums are located and proactive intervention by the state government in the form of a suitable GO, which will provide tenure rights (based on certain criteria which will have to be predetermined) to the slum-dwellers. Provision of basic services like paved streets, streetlights, community (or individual) water supply, and community toilets will also have to be extended to these settlements.

30.4 Project Phasing & Costing

As discussed elsewhere in the report, there are two types of slum settlements – authorised ones and those currently not authorised. It is proposed that the authorised be strengthrened by way of providing a set of infrastructure as given in *Table 89* below. All activities under *in-situ* development of slums, some of which have been outlined in *Tables 84-86* above, are spread over the next 3-6 overs incurring an estimated expenditure of Rs. 22.00 crores.

Table 89: In-situ Slum Development and Costs

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Water supply	100	450	450	200	-	-	-	**1200**	High

Sewerage & sanitation	100	400	400	200	100	-	-	**1200**	High
Storm water drainage	75	300	300	250	100	-	-	**1025**	
Solid waste management	*No separate costs for this component*						-	**0**	
Roads & transport	500	500	500	-	-	-	-	**1500**	High
Housing	3000	3200	3400	3500	1100	-	-	**14200**	High
Street Lighting	60	90	90	40	-	-	-	**280**	
Environmental aspects	75	100	100	100	50	50	-	**475**	
Sub-Total	***3910***	***5040***	***5240***	***4290***	***1350***	-	-	***19880***	
Awareness programs @ 2.5%	97.75	126.00	131.00	107.25	33.75	-	-	**495.75**	Medium
Other/ miscellaneous activities @ 10%	391.00	504.00	524.00	429.00	135.00	-	-	**1983.00**	Medium
Total	**4398.75**	**5670.00**	**5895.00**	**4826.25**	**1518.75**	**50.00**	**0.00**	**22358.75**	
Say								***223 crores***	

Likewise, it is proposed to rehabilitation the slum dwellers in unauthorised slum settlements by way of relocation to an identified site (*Table 90*). The proposed site shall have all the necessary infrastructure and utilities. Development is proposed in similar head as above. The development of new slum site is estimated to involve an expenditure of Rs. 15.20 crores and the activities shall complete in five years starting with the current financial year.

Table 90: Ex-situ Slum Development and Costs

Project Identified	**Phase I**						**Phase II**	**Amount (Rs Lakh)**	**Priority**
	2006-07	***2007-08***	***2008-09***	***2009-10***	***2010-11***	***2011-12***			
Water supply	125	500	500	75	75	-	-	**1275**	High
Sewerage & sanitation	100	425	425	250	100	-	-	**1300**	High
Storm water drainage	100	350	350	250	200	-	-	**1250**	
Solid waste management	*No separate costs for this component*						-	**0**	
Roads & transport	300	800	800	400	-	-	-	**2300**	High
Housing	8000	10400	15000	5000	4500	-	-	**42900**	High
Street Lighting	50	75	75	75	50	-	-	**325**	
Environmental aspects	75	100	100	75	75	50	-	**475**	
Sub-Total	***8750***	***12650***	***17250***	***6125***	***5000***	-	-	***49825***	

Awareness programs @ 2.5%	218.75	316.25	431.25	153.13	125.00	-	-	**1244.38**	Medium
Other/ miscellaneous activities @ 10%	875.00	1265.00	1725.00	612.50	500.00	-	-	**4977.50**	Medium
Total	**9843.75**	**14231.25**	**19406.25**	**6890.63**	**5625.00**	**0.00**	**0.00**	**56046.88**	
Say								***560 crores***	

Figure 57 shows the future land use of Allahabad covering all sectors/ infrastructure comprehensively in a single plan. this figure is primarily based on the Master Plan 2012 of Allahabad prepared by the ADA.

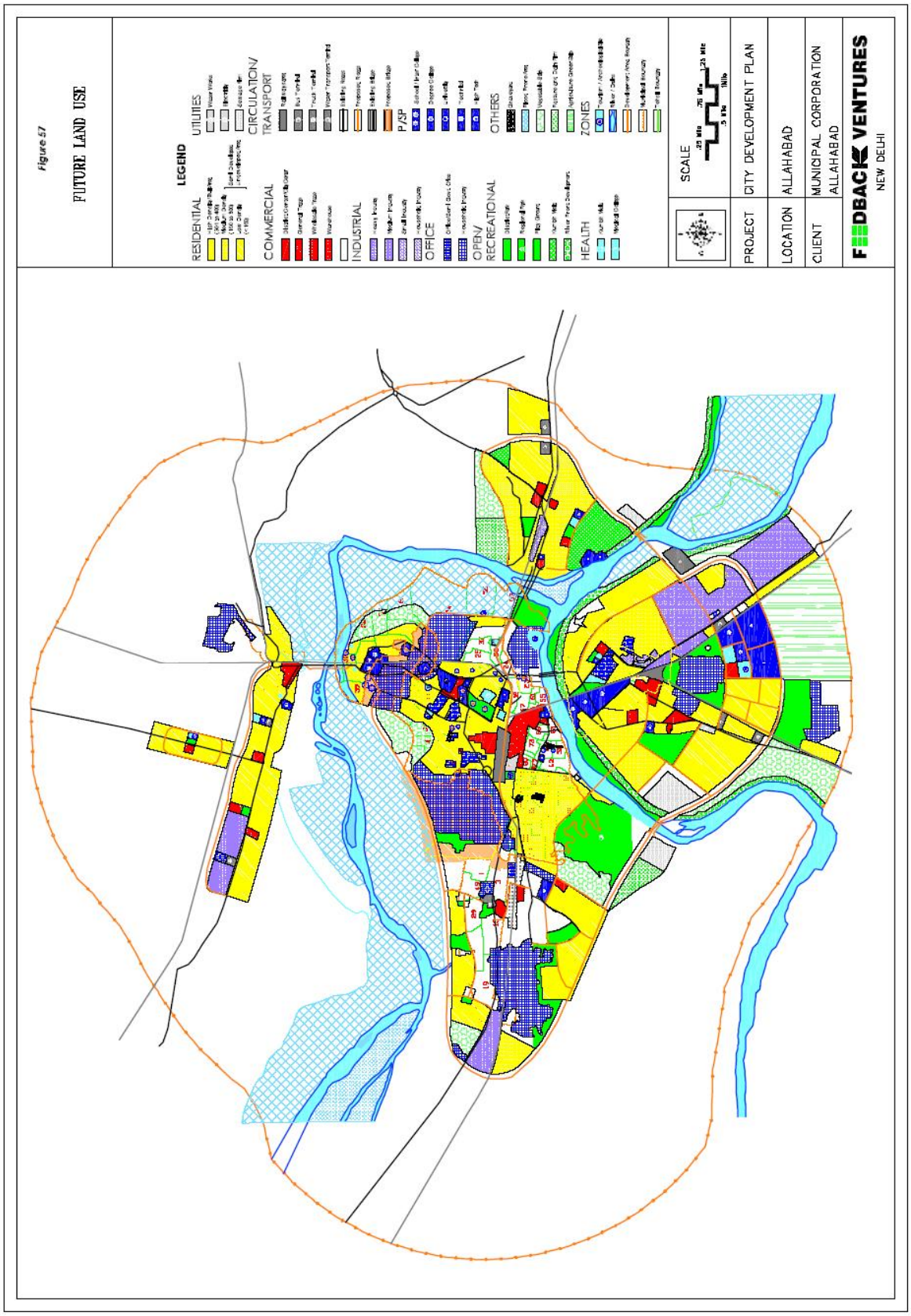


Figure 57
FUTURE LAND USE
LEGEND
RESIDENTIAL
UTILITIES
CIRCULATION/ TRANSPORT
COMMERCIAL
INDUSTRIAL
PSP
OFFICE
OPEN/ RECREATIONAL
OTHERS
HEALTH
ZONES
SCALE
PROJECT
CITY DEVELOPMENT PLAN
LOCATION
ALLAHABAD
CLIENT
MUNICIPAL CORPORATION ALLAHABAD
FEEDBACK VENTURES
NEW DELHI

31.0 Institutional Reforms

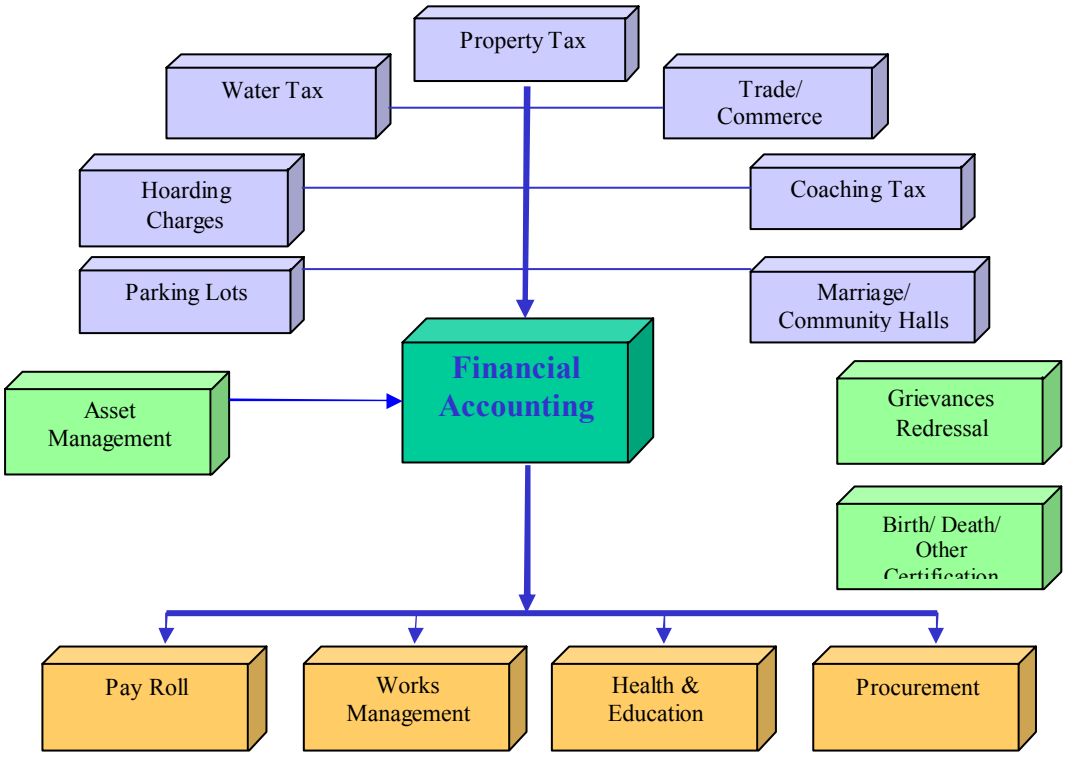
31.1 Introduction

Urbanization by itself is no cause for alarm; what is alarming are the gross inefficiencies and inequities that characterize urbanization ...
George Frie

The implementation of urban governance reforms is a difficult and long drawn out process. The experience of institutional reforms at various levels has shown that it is necessary to identify a 'mix' of activities – some short-term interventions that yield noticeable results and serve to keep up the interest in the reform process and the more long-term interventions. Keeping this in mind, it is necessary to identify reform interventions at two levels that serve the above purpose.

For effective urban governance, reforms will be necessary at the state level and the municipal level. Even at these two levels, the identified reforms can be further classified into 'mandatory' and 'optional' reforms. In implementing mandatory reforms, the focus is on the state creating the necessary enabling framework for the next lower tiers of government to enact the necessary mandatory reforms. While creating this enabling framework at the state and municipal level will be time consuming given that it will be heavily influenced by politics, certain smaller interventions will become necessary in preparation for the larger interventions. These smaller interventions will need to be designed and implemented in a manner that results are apparent in a relatively short time period and serve to keep up interest in the process. The following *Figure 58* shows a conceptual framework of institution building and accounting for better revenue collection, asset management, grievances addressal and service delivery etc.

Figure 58: Conceptual Framework for Institution Building



31.2 Mandatory Reforms at State Level

The majority of state level reforms can be classified as mandatory and are equally applicable to all the cities in the state that are preparing CDPs. These are fundamental reforms and necessary for the enabling framework for the municipal level reforms to take place. While all the reforms are necessary, their phasing will differ from city to city. In the case of Allahabad, the mandatory reforms identified to be undertaken at state level shall be as follows:

- Effective implementation of 74th CAA by way of –
  - Constitution of Ward Committees and DPCs
  - Complete transfer of funds, functions and functionaries to MCA
- Reform of rent control laws –
  - New development areas exempt from this law for next 10 years
  - Repeal of law across all areas
- Rationalisation of stamp duty by bringing it down
- Enactment of public disclosure law –
  - Effective implementation of Right to Information (RTI) Act
  - State level public disclosure law
  - Effective implementation of law empowering citizens to legal recourse
- Institutionalising community participation in decision making
  - Effective functioning of Ward Committees and DPCs through process of public consultations
  - Formulation of Citizens Charters that define time bound responses to community needs
  - Institutionalising system of undertaking 'Report Cards' across Wards
  - Enactment of Community Participation Law
- Better coordination between cities
  - City level coordination committee
  - Starting process of clear demarcation of roles & responsibilities across city level institutions
  - Clarity in roles & responsibilities across city level institutions thus eliminating functional overlaps
  - Effective participatory planning for city development through Ward Committees, District Planning Committees
  - Regular elections to local government institutions and creation of committees for effective decentralisation
  - Establishment of 'Association of Municipalities' at state level
  - Identification of common agenda that focuses on defining strategies for better city level planning

31.3 Urban Governance Reforms at Municipal Level

For the citizen of the city, the urban government is the 'Government', because all the basic urban services are provided by these agencies only. In the fast world of today, a normal citizen cannot spare too much time for deposit of taxes by inefficient means and for obtaining the simplest services he is not able to bear the unnecessary delays in execution. Under the present situation, a person has to visit the ULB so many times for calculation of property tax to be paid by him on his property. It is also not easy for him to obtain a birth or a death certificate effectively.

Few interventions towards improved urban governance can be implemented by the MCA at city level by way of adapting to some advanced technologies in information and communication. These interventions are –

- Creation/ construction of ten 'Citizen Service Centres' (CSC)/ 'E-Seva

Centres' (ESC)/ 'Lok-Vani Centres' (LVC) at different/ convenient locations in the city over the next seven years;

- One CSC/ ESC/ LVC may contain five computers and infrastructure set up of an office;
- Consultancy/ design services for so doing;
- System development costs including development of Website of MCA having all types of information related to each function and/ or services performed by it including LAN/ WAN networking;
- Citizen centre should be outsourced and each employee be taken on contract employment; and
- Training/ capacity building programs for various staff.

31.3.1 Functions of LVC

Service provision and complaint redressal system of the following functions can be handled through these centres

- Birth and death certificate issues;
- Dangerous and offensive trade license issue;
- Water connection;
- Assessment of property tax;
- Transfer of property title;
- Grant of building permission;
- Advertisement tax;
- Complaint redressal etc

31.3.2 Benefits of LVC

The CSC/ LVC is proposed to serve functions as follows:

- Information source to the citizens for adequate addressing of their problems;
- Simplified and standardised application forms;
- Simplified and standardised note files for easy and effective retrieval;
- Removal of non value adding steps in daily procedures; and
- Source of citizen feedback for improved and efficient functioning/ service delivery.

Most of the staff, including the technical one, spends its time in public dealing. Set up and effective functioning of LVC shall help safe time on the part of technical staff for better and dedicated service delivery to the citizens.

31.4 Project Phasing & Costing

Development activities together with costing relating to e-governance has been done in a phased manner (*Table 91*) depending upon the sequence of activities and priorities as per technique discussed in *Annex 8*. The set up of e-governance is expected to take a timeframe of three years starting from 2007-08 and involving a total cost of Rs. 11.00 crores.

Table 91: Phasing of E-Governance Projects and Costs

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Construction of LVC	150	150	-	-	-	-	-	**300**	High
Infrastructure Setup	50	50	-	-	-	-	-	**100**	Medium
Consultancy service and design	55	55	-	-	-	-	-	**110**	Medium
System development	150	150	-	-	-	-	-	**300**	High

(hardware/ software)									
Capacity Building	40	35	-	-	-	-	-	**75**	High
Operation & Maintenance of LVC	40	40	45	45	45	-	-	**215**	High
Finance and Accounting Reforms	5	10	10					**25**	High
Total	**490**	**490**	**55**	**45**	**45**	**0**	**0**	**1125**	
Say								***11.00 crores***	

32.0 Finance and Accounting Reforms

33.1 Introduction

MCA maintains records on single entry cash based system of accounting. The output of this cash basis of accounting is a **Statement of Receipts and Payments** that classifies cash receipts and cash payments under different heads. A statement of assets and liabilities is not prepared.

Due to single entry based cash records, MCA is faced with the following drawbacks:

- Not able to assess the accountability of all the resources that MCA controls and the deployment of those resources;
- Not able to assess the financial performance, financial position and cash flows of the entity;
- Cannot make decisions about providing resources for further capital projects to be undertaken by the MCA;
- Cannot evaluate MCA's ongoing ability to finance its activities and to meet its liability and commitment;
- Plan for future funding requirements of assets maintenance and replacement;
- Plan for the repayment of or satisfaction of existing liabilities;
- Manage its cash position and funding requirement;
- Demonstrate its performance in terms of service costs, efficiency and accomplishments;
- Assess whether current revenues are sufficient to cover the costs of current programs and services;
- Record the total costs, including depreciation of physical assets and amortization of intangible assets, of carrying out specific activities;
- Assess whether it can provide and the extent to which it can afford new programs and services;

32.2 Accounting Reforms

Several activities, as discussed in the ongoing section, have been proposed for implementation of finance and accounting reforms in MCA.

32.2.1 Double Entry Based Accounting

The objectives and scope of double-entry accrual based system of accounting is to maintain the accounts on generally accepted accounting principles along with the preparation of income and expenditure accounts to know the financial operation during a year and a balance sheet to know the true financial status of ULBs for a given period of time.

32.2.2 Asset Accounting & Creation of Fixed Asset Register

This shall mean identification and valuation of all assets and all ongoing works with the MCA. Development of a system is required to this effect so as to have the fixed asset register in place that would show the details of all the classified assets owned and maintained by MCA with due valuations incorporated to the assets.

32.2.3 Chart of Accounts

Standardization of a chart of accounts of MCA that would show all the accrual accounting heads, is proposed.

32.2.4 Accounting Manual

In order to switch over to the new proposed system of accounting, the system itself would be required to be designed with a set of new accounting rules, principles, and policies to ba called as **Accounting Manual**.

32.2.5 Capacity Building

Switch over to the new system also calls for training and capacity building of accounting staff so as to adapt to the change effectively and perform efficiently.

32.2.6 Computerisation of Procedures

All accounting procedure, old and new, together with data entry of all past records shall take place once the system is in place and the concerned finance and accounts personnel is trained. This is aimed at achieving efficiency in procedures and performance.

32.2.7 Benefits

The system of accrual accounting as recommended by the Twelfth Finance Commission when fully applied will allow better price calculations, record capital use properly, distinguish between capital and revenue expenditure, present a complete picture of debts and liabilities and present financial position of MCA and not just the cash flows and debts.

32.3 Increasing the Revenue Base

Property tax is the product of collection efficiency, tax rate, rateable value and number of assessed properties. The main source of revenue for the MCA is the revenue from property tax. But the capacity to charge property tax is not properly and fully utilized by the MCA due to the element of subjectivity in assessment and collection of these taxes. There is tendency among the public either to evade the taxes or to get it reduced from what it ought to be. The 74th CAA has given more powers and autonomy to the ULB in fixation of user charges, rates etc. The system of assessment and collections has to be improved. It is believed that the property tax of MCA can be more than doubled by introduction of serious tax collection efficiency measures. There is great untapped potential of property tax available for the MCA. Tax rates have been revised by MCA from time to time including revision (minor increase) in 2001. Surveys conducted by some neutral independent agencies have identified that although there remains huge potential of tax collection, the current tax base is very depleted; as many as 60% properties remain unassessed till date for property taxes. Several activities have been proposed in the foregoing section for the introduction of property tax reforms in MCA.

32.3.1 GIS Mapping

Property tax collections can be improved by using GIS based property mapping through city sketches and ground surveys. Street naming, property numbering and photographs of the property need to be carried out for each property in the city.

32.3.2 Comprehensive Database

MCA has a system of computerized billing and collection. This needs be strengthened for accurate and comprehensive record and listing of all properties under assessment correctly.

32.3.3 Self Assessment of Taxes

Under this program, it is proposed that the general citizen is encouragedso that he assesses and deposits his own taxes on time.

32.4 Water Supply Management

The total water supply from all resources is 240 mld which is above the current estimated demand. Of the total, 30% is lost in transmission and distribution through leaks and not accounted for which cannot be billed. There is a total of 80,000 metered water connections (flat rate) – domestic, commercial and industrial connections. The main revenue for JS comes from water charges received from the customers. Water tax and water charges revenues constitute 79.03% of the total revenue.

32.4.1 Non Performance

There are several reasons for non-performance. These, *inter alia*, include –

- Weak system operations: Inappropriate handling of pumping lead to high energy bills, inappropriate system management and failure to attend queries and complaints about water quality pressure and damaged water supply resulting in inequitable water supply;
- Lack of energy audits: Failure to reduce energy consumption through regulation of pumping operations and inability to carry out comprehensive maintenance of the pumps and/or install efficient pumping equipment to reduce electricity consumption increased expenditures; and
- Lack of water audits: Failure to detect and rectify leaks and failure to conduct audits to detect illegal use of water, unauthorized connections, and faulty meters led to loss of water and potential revenue.

32.4.2 Proposed Activities

Following specific activities are proposed to be undertaken to improve the efficiency of operations of water supply –

- Maximize the billed portion of water provided to the transmission system to striving to reach 100%;
- Reduce overtime, losses and leakages in the system;
- Detect illegal use of water by the customers; and
- Minimize the consumption of electrical powers.

32.5 Project Phasing & Costing

Certain activities have been identified that would help lead towards optimised property tax collection. These activities shall be implemented in the first year itself except for the annual updation of the software/ database. An estimated expenditure of Rs. 1.30 crores is envisaged for this (*Table 92*). Reforms towards efficient water supply management have been estimated to cost Rs. 0.32 crores and the activities towards this, shall be spread over the next 6-7 years as given in *Table 93*. Quanitification is discussed in *Annex 8*.

Table 92: Towards Property Tax Reforms

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
Satellite Imagery	10	-	-	-	-	-	-	**10**	High
Topographical Survey	10	35	30	-	-	-	-	**75**	
Cadastral Survey	20	0	-	-	-	-	-	**20**	High
Hardware & Software costs	20	60	20	-	-	-	-	**100**	
Data Coding & GIS	25	25	-	-	-	-	-	**50**	High
Web Base Development	15	15	-	-	-	-	-	**30**	High
Data updation (every year)	-	5	5	5	5	-	-	**20**	High
Total	**100**	**140**	**55**	**5**	**5**	-	-	**305**	
Say								***3.05 crores***	

Table 93: Activities for Effective Water Supply Management

Project Identified	Phase I						Phase II	Amount (Rs Lakh)	Priority
	2006-07	*2007-08*	*2008-09*	*2009-10*	*2010-11*	*2011-12*			
System operations for equitable water distribution and management	1	5	2	1	1	-	-	**10**	High
Operations relating to new connections and sale of potable water	1	5	4	-	-	-	-	**10**	High
Water auditing to minimize water losses and increase revenues	2	4	3	3	-	-	-	**12**	High
Energy audit to minimize power consumption at pumping stations	1	3	2	2	-	-	-	**8**	High
Total	**5**	**17**	**11**	**6**	**1**	-	-	**40**	
Say								***0.40 crores***	

33.0 Financial Operating Plan and Financial Strategy

33.1 Analysis of Existing Situation

The current financial situation of MCA has been analysed in terms of revenue and expenditure trends observed in the previous five years. The total financial profile of MCA is presented in *Annex 5*. The table shows a sufficient surplus at the end of each year. The reason behind this surplus is not that the MCA is able to provide services sufficiently to citizens; it is essentially due to the government grants received at the year end by the MCA.

The revenues of MCA comprise of revenues from own resources in the form of tax and non-tax revenues, and the government grants. Tax revenues contribute almost 20% of the total revenues of the MCA. This share has increased during the last five years. MCA is mainly dependent on the government grants as almost 65% of the revenues come from the State Government (*Annexes 4-5*).

33.1.1 Financial Performance Indicators

All financial performance indicators exhibiting the performance and efficiency of the MCA are calculated for the last five financial years. The revenue balance is negative in the initial three years but becomes positive in the last five years. This is also due to non utilisation of funds received at the year end. Capital account balance is positive due to non segregation of expenditure into revenue and capital.

The operating ratio which is the ration of revenue expenditure over revenue income is close to one and 0.88 in the last year showing that the MCA is able to meet out its revenue obligations from its revenue resources.

Table 94: Financial Health Indicator of MCA

Particulars	2001-02	2002-03	2003-04	2004-05	2005-06
Share of own resources to the total income	0.26	0.31	0.33	0.38	0.31
Growth in Revenue Income	-	0.11	(0.07)	0.21	0.14
Growth of own sources in the revenue income	-	0.09	0.50	0.22	0.06
Share of non taxes to the total income	0.09	0.09	0.10	0.08	0.05
Share of House Tax in the revenue income	0.11	0.12	0.20	0.19	0.17
Expenditure Management					
Share of Establishment costs in the revenue expenditure	0.71	0.69	0.80	0.75	0.71
Percentage of salary costs to the total revenue income	79.96	65.80	85.57	64.74	69.87
Performance Assessment					
Revenue Account Balance	(217.37)	(400.91)	195.63	(235.26)	591.69
Capital Account Balance	568.65	255.08	111.42	156.31	438.83
Operating Ratio	1.07	1.16	0.99	1.11	0.88
Establishment Costs/Revenue Receipts	0.80	0.66	0.86	0.65	0.70

33.2 Financial Operating plan

The investment strategy for various projects identified for coverage under the JNNURM has been prepared by way of Financial Operating Plan (FOP) which mainly focuses on capital investments in infrastructure over the next 7 years with a vision of benefits realized by the turn of the horizon year, 2031, and particularly during the course of implementation of these projects. The CIP presented herein represents the investments made with effect from financial year 2006-07 to financial year 2012-13.

The FOP makes projection of the revenue and expenditure of the MCA in the next 25 years, i.e. the horizon year. It predicts the ability of MCA to pay and provide for the services with the given set of policies and assumptions put forward in the CDP in line with the guidelines for so doing under the Mission.

The FOP is designed taking into account the sustainability of new identified projects under Mission. It also gives the idea about the alternate source of financing along with the investment pattern in the next seven years. The Existing financial information of MCA has been taken into account and future planning of resources and expenditure made accordingly.

33.2.1 Scenario Building

Two alternate scenarios have been considered while preparing the FOP, as follows:

1. Base Line Investment Scenario – where the forecasts of finances have been prepared without considering new investments and the static growth in revenue and expenditure of MCA is projected for the next 7 years; and
2. Sustainable Investment Scenario – where growth in revenue and reduction in expenditure is considered to reach to the ultimate goal of achieving financial sustainability after consideration of total investments projected in CIP.

The main assumption in forecasting the revenue and expenditure of MCA has been the average growth trend for the previous five years (*Annexes 4-6*), historic financial data before working on the projections in both scenarios.

33.3 Forecast of Revenues

The revenues of MCA comprise of revenues from own resources in the form of tax and non-tax revenues and the grants from the Government. The main source of revenue for the MCA happens to be the property taxation. Some financing improvement initiatives have been put forward as part of Urban Governance reforms (Section 32: Institutional Reforms). The likely impacts of these reforms have been taken into account under the sustainable investment scenario and proposed in the foregoing section.

33.3.1 Property Tax Assessments

There is high probability of increase in property tax considering the fact that the number of cases for property tax assessment will increase tremendously consequent upon introduction and implementation of GIS system in the city.

The total number of properties currently under assessment in Allahabad is around 155,529 and the total property tax collected from these in 2005-06 financial year has been Rs. 1009.45 lakh. Assuming the present population of the city as 12.05 lakh, and there are 5 persons per property, the total number of properties should be around 240,000. It could otherwise be assumed that currently 60% of properties are under tax net; assuming a target of 90% coverage of properties with introduction of GIS, the estimated number of properties shall be around 233,000. Sufficient growth rate in property tax can be assumed once these reforms are in place.

33.3.2 Property Tax Demand

The annual demand against property taxes for the financial year 2005-06 is Rs. 1614.32 lakh. It is expected to grow at the rate of 5% annually.

33.3.3 Tax Collection Efficiency

Tax collection efficiency is also projected to increase from 62% to 85% of the total demand of properties as predicted in the reform agenda of the JNNURM.

Advertisement tax will be more streamlined to identify the new avenues of advertisement with the establishment of LVC in the city. It is presumed to grow at the rate of 15% per annum over the next seven years.

Inconsistent trend is observed in the growth of assigned revenues and compensations. Based on the analysis of growth mainly over the last two years, it is expected to grow at the rate of 25% per annum.

The non-tax revenues are also based on the average growth trend of all non-tax revenues as one source. Rent on buildings can be increased sufficiently by revision in rent agreements made by MCA and by computerization of the properties on rent. Registration fees from death and birth certificates will be expected to grow with the establishment of CSCs/ LVCs at 12% per annum.

Octrai is abolished in the state in the last years. State Government is supposed to provide the Government grant in lieu of octrai to Urban local bodies of UP. This grant should have an annual increment of 10 percent each year, which is not currently done. Future projections are made taking into account the annual increase of 10% to that government contribution.

Allahabad is religious tourism city. *Ardh Kumbha mela* and *Kumbha mela* are the main events of Allahabad to be held in January 2007 (Financial year 2006-07) and January 2013 (financial year 2012-13) respectively. The State Government has already earmarked a fund of Rs. 170.00 crores for providing all the basic amenities to pilgrims and tourists. For the MCA is involved in the construction of roads, making street lighting arrangements and sanitary services in the city, it is expected to receive a share of Rs. 70.00 crores from the earmarked fund. Central Government also provides grants for *Kumbha mela*. In the financial year 2000-2001, Rs. 300.00 crore grant was received by the MCA and other prastatal agencies responsible for the basic services during the *Kumbh*. In 2012-13, the requirement of fund is expected to grow to Rs. 400.00 crores and the MCA share is presumed to be around Rs. 150 crores. These factors are taken into consideration while planning for financial projections of the MCA.

Also where the user of the services of MCA is directly linked with the provision of services by MCA, it can levy the appropriate user fees for the usage of services by the payee.

A proper survey needs be carried out towards identifying the regular license holders and the potential license holders. Revenue from license fees can double up the average growth trend of the historic data after the implementation of the improved measures.

Government grants are currently received on the basis of 1991 CoI population data. It is assumed that the grants in 2006-07 shall be received on the basis of 2001 CoI, and 2012-2013 onwards, these shall be based on 2011 CoI.

33.3.4 Forecast of Revenue Expenditure

Under the baseline scenario discussed above, all the expenditure is expected to go up by a static growth. But as a result of growth in infrastructure, the O&M costs of capital investments towards these, will further add on the current growth of revenue expenditure in a sustainable investment scenario.

33.4 Capital Investment Plan

Toolkit 1 of JNNURM explains the funding pattern, sanction and disbursement to funds to ULBs. Having a population of 12.50 lakh, Allahabad stands in Category C for funding[1].

Table 95 below gives costs of all project identified for coverage under the Mission with sectoral break-ups and classified as per the two sub-missions.

Figures 59 illustrates break-up of costs under the various sectors of infrastructure. *Figure 60* is about the costs to be incurred with regards institutional and financial reforms. *Figure 61* shows costs of infrastructure etc towards in-situ development of slums. *Figure 62* outlines costs for integrated development of slums for ex-situ development.

Table 95: Total Costs of Projects for JNNURM

Sl. No.	Activities	Total Cost (Rs Lakh)
A.	**URBAN INFRASTRUCTURE AND GOVERNANCE**	
a)	**Urban Renewal & Infrastructure**	
1	Urban Renewal	59,427.00
2	Water Supply	24,318.12
3	Sewerage & Sanitation	41,657.09
4	Storm Water Drainage	35,898.40
5	Solid Waste Management	5,327.28
6	Tourism & Heritage Conservation	12,170.00
7	Roads & Transport	70,059.00
8	Other Infra/ Community Facilities	595
9	Environmental Aspects	1,460.00
	Sub Total (a)	**250,911.89**
b)	**Urban Governance Reforms**	
1	Institutional Reforms	1,125.00
3	Property Tax Reforms	305
4	Water Supply Management Reforms	40
5	Public Awareness Program	70
	Sub Total (b)	**1,540.00**
	TOTAL A	**252,451.89**
B.	**BASIC SERVICES FOR THE URBAN POOR**	

[1] JNNURM Toolkit 1, *op cit*, pp 8-9.

a)	**In-situ Development of Slums**	
1	Water supply	1275
2	Sewerage & sanitation	1200
3	Roads & transport	1500
4	Housing	14200
5	Street Lighting	280
6	Environmental aspects	475
7	Awareness programs @ 2.5%	495.75
8	Other/ miscellaneous activities @ 10%	1983.00
	Sub Total (a)	***22,358.75***
b)	**Ex-situ Development of Slums**	
1	Water supply	1275
2	Sewerage & sanitation	1300
3	Storm water drainage	1250
4	Solid waste management	-
5	Roads & transport	2300
6	Housing	42900
7	Street Lighting	325
8	Environmental aspects	475.00
9	Awareness programs @ 2.5%	1244.375
10	Other/ miscellaneous activities @ 10%	4977.5
	Sub Total (b)	***56,046.88***
	TOTAL B	**78,405.63**
	GRAND TOTAL (Costs of Investments A+B)	**330,857.52**

Figure 59: Break-down of Costs of Various Infrastucture

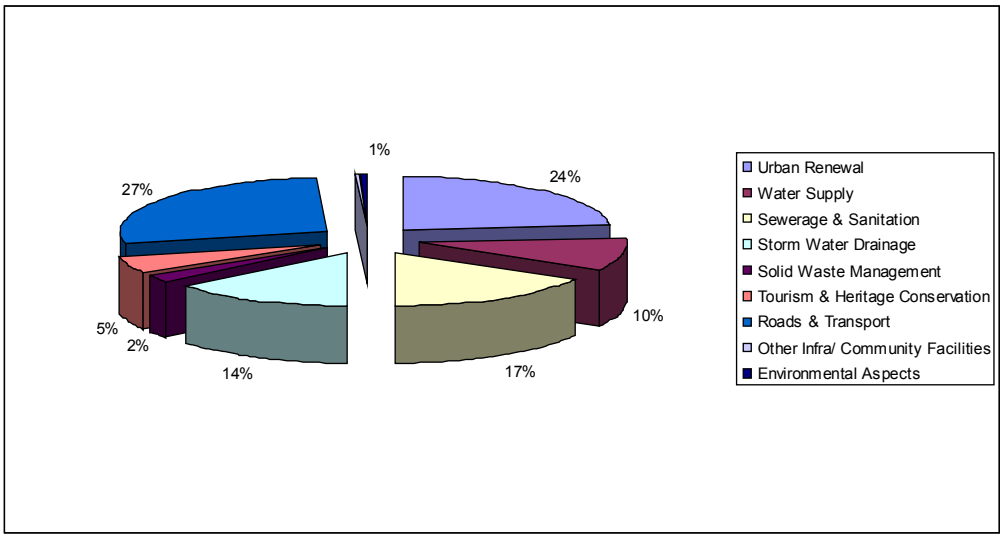


Figure 60: Costs for Institutional and Financial Reforms

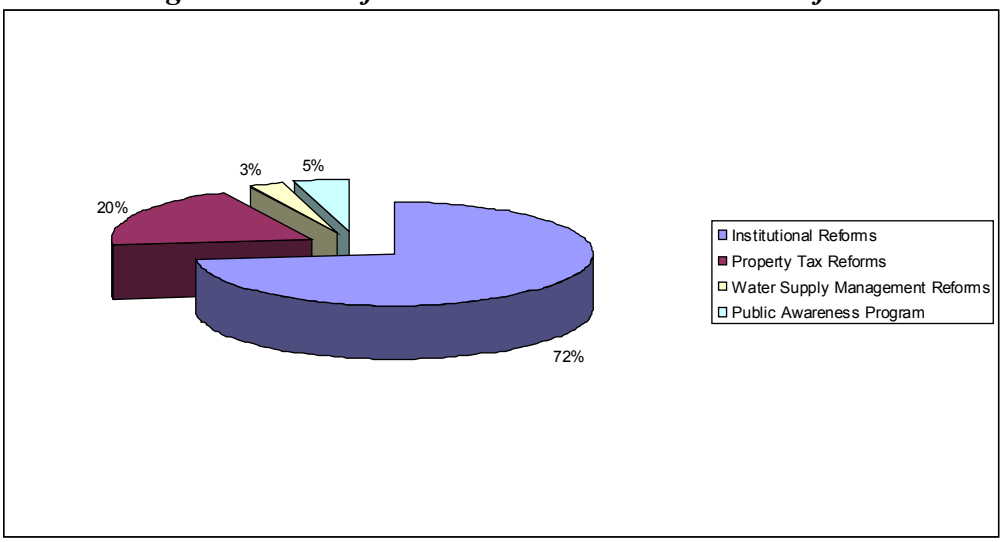


Figure 61: Costs for In-situ Development of Slums

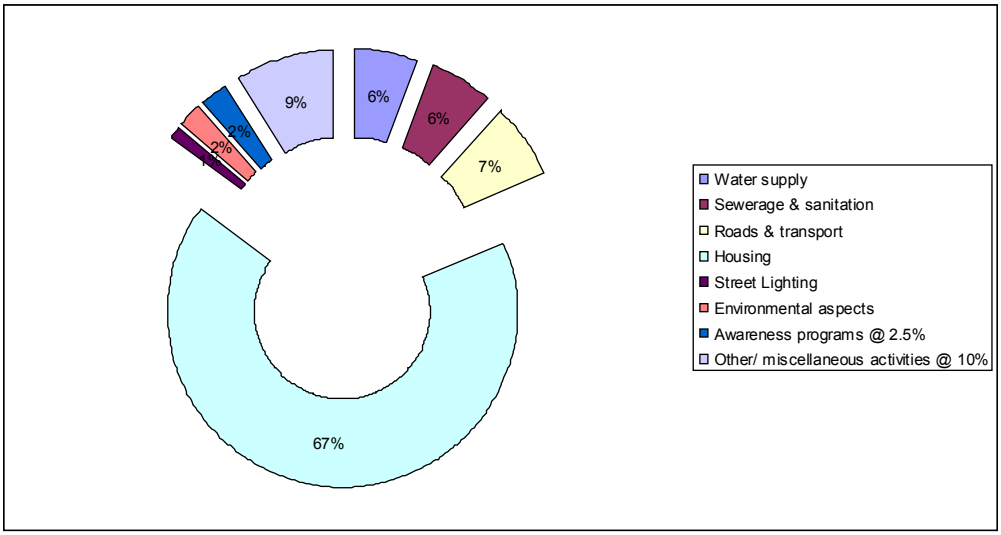
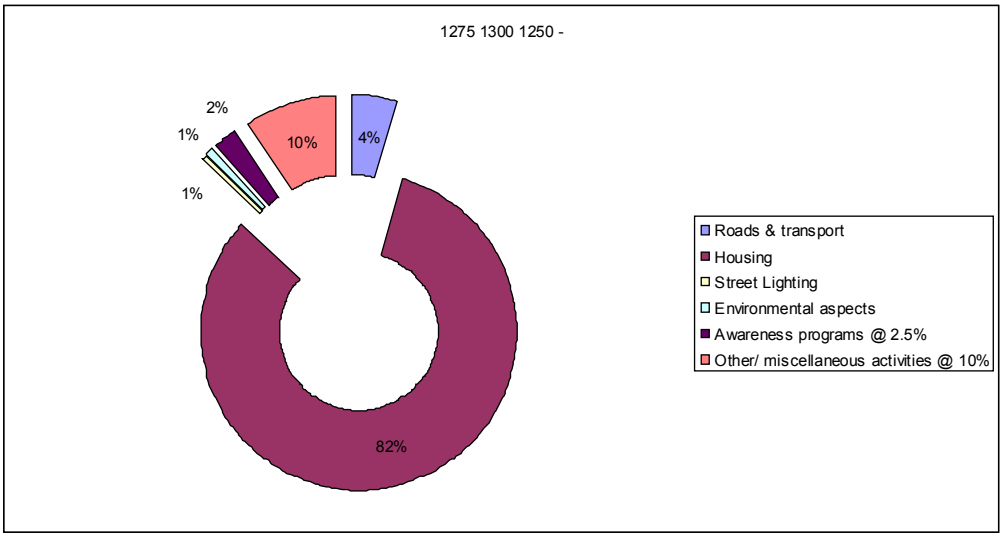


Figure 62: Costs for Ex-situ Development of Slums



33.5 Financing Strategies

The funding share of of ULBs in the city has to be decided on the basis of functions performed by the respective agency, e.g. JS for all water supply and sewerage related works. Projects relating to roads and transportation are decided on the basis of jurisdiction of the ULB (MCA/ ADA) where these would fall (*Tables 96-97*). *Table 98* indicates fund requirement for priority projects split into (i) first 2 years, and (ii) rest 4 years of phase 1.

From the total share required from ULB/ parastatal agencies the share of MCA, JS, ADA and other parastatals will be as follows :-

- Based on expected distribution of funds its drawn that MCA is mainly responsible for Urban renewal components of the city development alongwith the ADA. MCA is responsible for storm water drainage, solid waste management with PPP.

- For the total sewerage and Drainage works in the City MCA and JS and JICA are agencies for execution of the project. Since partly sewerage is funded by the external aid and that can be managed as ULB's share for sewerage and drainage work in the city.

- Other parastatal like PWD, UPSRTC, Railways, ADA and JS shall be responsible for the balance project works. Bridge Corporation will be mainly responsible for construction of roads over bridge, RUBs, flyovers and for development of multilevel parking sites for the city *(Table 99)*.

33.5.1 Public-Private Participation

On the basis of discussions held with stakeholders, including those at the State and the officals of the ULB/ parastatal agencies, several projects can be pursued with public-private participation (PPP). Private investments for the purpose of infrastructure development in the city shall contribute towards the share of the ULB/ parastatal at the city level.

PPP is a partnership between the public and complementary sector for the purpose of delivering a project or service which is otherwise traditionally provided by the public sector (ULB/ parastal body). The response of stakeholders in the City to PPP initiatives has shown that the MCA can now choose between various cost effective models involving PPP to upgrade the quality of basic services and other urban amenities in the City of Allahabad. PPP is a strategic alternative that follows principles of best sourcing.

Projects identified for coverage through PPP are as under –

- Multi-level parking
- Solid waste management
- Street cleaning/ sweeping
- Southern bypass
- Bandh road
- Heritage buildings (including illumination, and sound and light programs
- Maintenance of City parks

- Maintenance of community toilets (CTCs) in slums
- Jan Suvidha kendras
- Ghats/ River front development
- Vishram sthali
- Pre paid taxi counters
- Budget hotels
- Speed boats
- Home for the elderly and destitute
- Youth hostels
- Working men and girls' hostels

33.6 Impact of FOP under Sustainable Investment Scenario

The FOP has been prepared on the assumption that the inflation rate will be 0% per year over the next seven years of investment. The 12th Finance Commission has also reflected in the report that the State should help the ULBs achieve financial sustainability. Assumptions made towards preparation of FOP under sustainable investment scenario, in addition to those already discussed above, are stated in *Table 100*.

Tables 101-102 give elaborate analysis with regard to the two financial scenarios discussed in the beginning of this section.

Table 103 determines project wise annual share to be contributed by the ULB/ Parastal agencies by sector for each of the identified projects under phase 1 of the JNNURM.

Table 96: Funding Pattern for Urban Infrastructure and Governance

Sl. No.	Activities	Central Government	State Government	Urban Local Body/Parastatal	Total Cost (Rs Lakh)
A.	URBAN INFRASTRUCTURE AND GOVERNANCE				
a)	**Urban Renewal & Infrastructure**				
1	Urban Renewal	29713.5	11885.4	17828.1	59,427.00
2	Water Supply	12159.06	4863.624	7295.436	24,318.12
3	Sewerage & Sanitation	20828.545	8331.418	12497.127	41,657.09
4	Storm Water Drainage	17949.2	7179.68	10769.52	35,898.40
5	Solid Waste Management	2663.64	1065.456	1598.184	5,327.28
6	Tourism & Heritage Conservation	6085	2434	3651	12,170.00
7	Roads & Transport	35029.5	14011.8	21017.7	70,059.00
8	Other Infra/ Community Facilities	297.5	119	178.5	595
9	Environmental Aspects	730	292	438	1,460.00
	Sub Total (a)	**125455.945**	**50182.378**	**75273.567**	**250,911.89**
b)	**Urban Governance Reforms**				
1	Institutional Reforms	562.5	225	337.5	1,125.00
3	Property Tax Reforms	152.5	61	91.5	305
4	Water Supply Management Reforms	20	8	12	40
5	Public Awareness Program	35	14	21	70
	Sub Total (b)	**770**	**308**	**462**	**1,540.00**
	TOTAL A				**252,451.89**

Table 97: Funding Pattern for Basic Services for Urban Poor

Sl. No.	Activities	Central Government	State Government	Total Cost (Rs Lakh)
B.	**BASIC SERVICES FOR THE URBAN POOR**			
a)	**In-situ Development of Slums**			
1	Water supply	600	600	1200
2	Sewerage & sanitation	600	600	1200
3	Roads & transport	512.5	512.5	1025
4	Solid waste management	0	0	0
5	Roads & transport	750	750	1500
6	Housing	7100	7100	14200
7	Street Lighting	140	140	280
8	Environmental aspects	237.5	237.5	475
9	Awareness programs @ 2.5%	247.875	247.875	495.75
10	Other/ miscellaneous activities @ 10%	991.5	991.5	1983
	Sub Total (a)	***11179.375***	***11179.375***	***22,358.75***
b)	**Ex-situ Development of Slums**			
1	Water supply	637.5	637.5	1275
2	Sewerage & sanitation	650	650	1300
3	Storm water drainage	625	625	1250
4	Solid waste management	0	0	0
5	Roads & transport	1150	1150	2300
6	Housing	21450	21450	42900
7	Street Lighting	162.5	162.5	325
8	Environmental aspects	237.5	237.5	475
9	Awareness programs @ 2.5%	622.1875	622.1875	1244.375
10	Other/ miscellaneous activities @ 10%	2488.75	2488.75	4977.5
	Sub Total (b)	***28023.4375***	***28023.4375***	***56,046.88***

Table 98: Requirement of Funds for Priority Projects (Phase I)

priority projects

Sector	Requirement of Funds (Lakhs)												Total Cost
	Phase I										Total phase I	Phase II	
	First 2 Years								Total Priority I	Rest 4 years			
	2006-07				2007-08								
	GOI	GoUP	ULB/PS	Sub Total	GOI	GoUP	ULB/PS	Sub Total					
URBAN INFRASTRUCTURE AND GOVERNANCE													
Urban Renewal	1694.5	677.8	1016.7	3389	6954	2781.6	4172.4	13908	17297	42130	59427	-	59427
Water Supply	1662.5	665	997.5	3325	2807.5	1123	1684.5	5615	8940	15378.12	24318.12	-	24318.12
Sewerage & Sanitation	1626.29	650.516	975.774	3252.58	5252.67	2101.068	3151.602	10505.34	13757.92	27899.18	41657.1	-	41657.1
Storm Water Drainage	2577.67	1031.068	1546.602	5155.34	3885.425	1554.17	2331.255	7770.85	12926.19	22,972.21	35898.4	-	35,898.40
Solid Waste Management	402.42	160.968	241.452	804.84	768.535	307.414	461.121	1537.07	2341.91	2985.37	5327.28	-	5327.28
Heritage & tourism	412.5	165	247.5	825.00	1330	532	798	2660	3485	8685	12170	-	12170
Roads and Transport	3493.75	1397.5	2096.25	6987.5	9212.25	3684.9	5527.35	18424.5	25412	44,647.00	70059	-	70059
Other Infra/ Community Facilities	50	20	30	100	95	38	57	190	290	305.00	595	-	595
Environmental Aspects	165	66	99	330	200	80	120	400	730	730.00	1460	-	1,460
E-Governance Reforms	245	98	147	490	245	98	147	490	980	145	1125	-	1,125
Property Tax Reforms	50	20	30	100	70	28	42	140	240	65.00	305	-	305
Water Supply Management Reforms	2.5	1	1.5	5	8.5	3.4	5.1	17	22	18.00	40	-	40
Public Awareness Programs	12.5	5	7.5	25	12.5	5	7.5	25	50	25	75	-	75
Total (A)	12394.63	4957.852	7436.778	24789.26	30841.38	12336.552	18504.828	61682.76	86472.02	165984.88	252456.9	0	252456.9
BASIC SERVICES FOR THE URBAN PO	GOI	GoUP/ULB/PS		Sub Total	GOI	GoUP/ULB/PS		Sub Total	Total Priority I	Priority II	Total phase I	Phase II	Total Cost
										Rest 4 years			
In-situ Development of Slums	2,199.38	2,199.38		4398.75	2835	2835		5670.00	10068.75	12290.00	22358.75		22,358.75
Ex-situ Development of Slums	4,921.88	4,921.88		9843.75	7115.625	7115.625		14231.25	24075.00	31971.88	56046.88		56,046.88
Total Fund Requirement	7,121.25	7,121.25		14,242.50	9,950.63	9,950.63	-	19,901.25	34,143.75	44,261.88	78,405.63	-	78,405.63
Grand Total													330,862.53

Table 99: Identification of Stakeholders for the Projects

URBAN RENEWAL				
Project Identified	**Total Costs of Project**	**Stakeholder**		
Construction of Southern bypass	38959	PWD	BRIDGE CORPORATION	-
Construction of road divider and footpath	300	PWD		-
Flyovers	2000	PWD	BRIDGE CORPORATION	-
Widening of existing RUB (at Road level)	128	PWD	RAILWAYS	-
Intersection improvement	135	PWD	MCA	-
Road lighting	500	MCA		-
Multi-level parking	4500	MCA	Private party	-
Zebra marking, lane markings and signages	15	MCA	PWD	TRAFFIC POLICE
Removal of enchroachment	1500	MCA	ADA	-
Relocation of bus terminals	2400	ADA	UPSRTC	MCV
Relocation of truck terminals	3400	ADA	UPSRTC	MCV
Relocation of wholesale market	3590	MCA	ADA	-
Provision of Cattle colonies/ dairies	400	MCA	ADA	-
Play grounds for children (4 nos)	100	MCA	ADA	-
Neighbourhood markets (15 nos)	1500	MCA	ADA	-
Total	**59427**			

WATER SUPPLY

Project Identified	**Total Costs of Project**	**Stakeholder**		
Renovation/ rehabilitation & construction of new water supply schemes for the city	22000	JAL NIGAM	JAL SANSTHAN	-
Estimated cost for the Kumbh mela area for the pilgrims @ 1.0 crore per mld for 5.0 mld for the complete water supply infrastructure	600	MCA	JAL SANSTHAN	JAL NIGAM
Rain water harvesting arrangement	600	JAL NIGAM	JAL SANSTHAN	-
Inventory survey of the existing scheme @ Rs. 2000.00 per km	15	JAL NIGAM	JAL SANSTHAN	-
Layout planning, designing, and preparation of DPR (LS)	40	JAL NIGAM	JAL SANSTHAN	-
Generator set to provide supply during the no of hours of electricity and all kinds of electro-mechanical equipments like pumps, panels etc	350	JAL NIGAM	JAL SANSTHAN	-
Unforeseen items	120	JAL NIGAM	JAL SANSTHAN	-
Grand Total	**24318.12**			

SEWERAGE AND SANITATION

Project Identified	Total Costs of Project	Stakeholder		
Rehabilitation, renovation, construction of new Branch sewers, pumping stations etc, STP as per the requirement	35000	JAL NIGAM	MCA	-
Mechanical equipment needed for cleaning of Sewers (LS)	80	JAL NIGAM	MCA	-
Construction of community latrines and bathing facilities	1225	JAL NIGAM	MCA	-
Sewerage system for the *Kumbh* area	350	JAL NIGAM	MCA	-
Inventory of the existing scheme, Layout planning, designing and preparation of DPR	80	JAL NIGAM	MCA	-
Grand Total	**41657.09**			

STORM WATER DRAINAGE

Project Identified	Total Costs of Project	Stakeholder		
Rehabilitation/ renovation and construction of new drainage network (LS)	35000	MCA	-	-
Mechanical equipment needed for the cleaning of drains (LS)	90	MCA	-	-
Inventory survey of the existing drains, layout planning, designing, and preparation of DPR (LS)	80	MCA	-	-
Grand Total	**35898.4**			

SOLID WASTE MANAGEMENT

Project Identified	Total Costs of Project	Stakeholder		
Dumper Placer with handle container of 4.5 cubic meter capacity (5 trips per day, average)	800	MCA	-	-
Dumper Placer Containers of 4.5 cubic meter capacity each	25	MCA	-	-
Tractors	210	MCA	-	-
Hydraulic tractor tipping trolley	150	MCA	-	-
Platforms and ramping for tipping trolleys	40	MCA	-	-
Skip Lifter for construction debris	160	MCA	-	-
Skips of 7 cubic meter capacity	20	MCA	-	-
Hand Carts	120	MCA	-	-
Bulldozer	400	MCA	-	-
Fully equipped medical waste collection vehicle	80	MCA	-	-

Weigh bridge of 15 ton capacity for the landfill cum compost plant site	60	MCA	-	-
Incinerator for hospital waste, complete with chimney and civil works etc (100kg/hr capacity)	100	MCA	-	-
Development of land fill sites for inert waste produced as 400 MT per day (average)	200	MCA	-	-
Finalization of conventional method of sludge dislodge area	40	MCA	-	-
Depot for the vehicle	100	MCA	-	-
Development of service at treatment site like road, drain etc	50	MCA	-	-
Energy production system	1000	MCA	-	-
Compost plant at different locations with all accessories	1400	MCA	-	-
Grand Total	**5327.28**			

SOLID WASTE MANAGEMENT

Project Identified	Total Costs of Project	Stakeholder		
Pre-paid Counters (taxi, auto, boats)	10	DEPT OF TOURISIM	TRAFFIC POLICE	-
Tourist Information Centre	80	DEPT OF TOURISIM	-	-
Provision of Public Facility	150	MCA	-	-
Construction of "VishramSthali"	515	DEPT OF TOURISIM	-	-
Construction of New Ghats	1250	DEPT OF TOURISIM	-	-
Illumination of Heritage Buildings	125	DEPT OF TOURISIM	-	-
Development & maintenance of City park	240	MCA	-	-
Provision of Sound & Light Shows	200	DEPT OF TOURISIM	-	-
Provision of decorative signages/ board	150	DEPT OF TOURISIM	-	-
Conservation & Restoration of Old Temples	100	DEPT OF TOURISIM	-	-
Heritage & Conservation	2000	DEPT OF TOURISIM	-	-
Construction of Budget Hotels	--	DEPT OF TOURISIM	-	-
Development of New Mela Ground	6000	DEPT OF TOURISIM	-	-
River Front Development	1200	DEPT OF TOURISIM	-	-
Development of water circuits & Jetty/speed boats	150	DEPT OF TOURISIM	-	-
Total	**12170**			

URBAN TRANSPORT

Project Identified	Total Costs of Project	Stakeholder		
Construction of Bandh Road	20848	PWD	BRIDGE CORPORATION	-
Widening of roads	14322	PWD	MCA	-
Flyovers	9800	PWD	BRIDGE CORPORATION	-
Road Over Bridge/ Road Under Bridge	10000	PWD	BRIDGE CORPORATION	RAILWAYS
Widening of existing RUB (at Road level)	448	PWD	BRIDGE CORPORATION	RAILWAYS
Intersection Improvement	450	PWD	MCA	-
Signalisation of Intersection	153	MCA	TRAFFIC POLICE	-
Speed breakers	15	MCA	TRAFFIC POLICE	-
Zebra marking, lane markings and signages	15	MCA	TRAFFIC POLICE	-
Road lighting	4308	MCA	-	-
Multilevel parking	6000	MCA	ADA	-
Augmentation & relocation of bus terminal	3700	ADA	UPSRTC	-
Metro rail system for the city (phase II)		RAILWAYS	ADA	-
Grand Total	**70059**			

OTHER INFRASTRUCTURE

Project Identified	Total Costs of Project	Stakeholder		
Home for the elderly & destitute	100	ADA	Private party	MCA
Youth hostels	120	ADA	Private party	MCA
Working girls' hostel	150	ADA	Private party	MCA
Working men's hostel	225	ADA	Private party	MCA
Grand Total	**595**			

ENVIRONMENTAL ASPECTS

Project Identified	Total Costs of Project	Stakeholder		
Plantation along select roads	1000	MCA	-	-
Slaughter Houses	100	MCA	-	-
Electric Crematorium improvement (2)/ provision (2)	260	MCA	-	-
Grave yard improvement/ augmentation (LS)	100	MCA	-	-
Environmental Impact Assessment studies for Infrastructure projects		MCA	-	-
Grand Total	**1460**			

URBAN GOVERNANCE

Project Identified	Total Costs of Project	Stakeholder		
Construction of LVC	300	MCA	Private party	-
Infrastructure Setup	100	MCA	Private party	-
Consultancy service and design	110	MCA	Private party	-
System development (hardware/ software)	300	MCA	Private party	-
Capacity Building	75	MCA	Private party	-
Operation & Maintenance of LVC	215	MCA	Private party	-
Finance and Accounting Reforms	25	MCA	Private party	-
Total	**1125**			

PROPERTY TAX REFORMS

Project Identified	Total Costs of Project	Stakeholder		
Satellite Imagery	10	MCA	Private party	-
Topographical Survey	75	MCA	Private party	-
Cadastral Survey	20	MCA	Private party	-
Hardware & Software costs	100	MCA	Private party	-
Data Coding & GIS	50	MCA	Private party	-
Web Base Development	30	MCA	Private party	-
Data updation (every year)	20	MCA	Private party	-
Total	**305**			

WATER SUPPLY MANAGEMENT

Project Identified	Total Costs of Project	Stakeholder		
System operations for equitable water distribution and management	10	JAL NIGAM	JAL SANSTHAN	MCA
Operations relating to new connections and sale of potable water	10	JAL NIGAM	JAL SANSTHAN	MCA
Water auditing to minimize water losses and increase revenues	12	JAL NIGAM	JAL SANSTHAN	MCA
Energy audit to minimize power consumption at pumping stations	8	JAL NIGAM	JAL SANSTHAN	MCA
Total	**40**			-

Table 100: Assumptions for Sustainable Investment Scenario

Heads of Income	Trend Increase	Increase Assumed	Heads of Expenditure	Trend Increase	Increase Assumed
A. TAX REVENUES					
I. Tax by Municipality			**I. Salary Expenditure**		
General Tax (House Tax)	23.57%	30%	a) Salaries other than Sanitation staff	6.99%	8.00%
Animal Tax	11.47%	15%	b) Sanitation staff Salaries	1.38%	2.00%
Passenger Tax	19.75%	25%			
Advertisement Tax	-11.66%	10.00%			
Theatre Tax	4.46%	8.00%			
Dog Tax	24.62%	20.00%			
Assigned Revenues					
Stamp Duty on transfer of immovable properties	19844.83%	25.00%			
B. NON-TAX REVENUES			**II. Non-Salary Expenditure**		
Rent from land & building	17.60%	25.00%	Road Lighting	9.52%	10.00%
Tehbazari Fees	7.97%	10.00%	Construction/Repair of Roads,streets	-5.65%	10.00%
License Fees	7.14%	15.00%	Construction/Repair of Buildings	132.24%	10.00%
Fees from Cremation Grounds	16.60%	18.00%	Sanitation Euipments	11.86%	**12%**
Photocopy fees(from Records)	-3.32%	10.00%	Karkas Utilization\	3.04%	4%
Registration Fees from Death and Birth Certificates	-11.99%	12.00%	Financial Assistance to Institutions	-2.83%	2%
Income from Road Restoration	20.73%	25.00%	Printing & Stationery	18.30%	20%
Income under Special Act	0.00%	15.00%	Legal Expenditure	45.20%	45%
Income and penalities from Kanji House	7.49%	10.00%	Slum Basti Improvement	155.26%	25%
Namantaran Fees (cancelled admissions)	4.23%	5.00%	Other Expenditure	19.13%	20%
Penalities under Nagar Nigam Act & Rules	4.90%	5.00%			
C. NON-PLAN GRANTS			**C. Capital Expenditure**		
State Finance Commission	2.55%	20.00%	Repayment of loans	73.92	10.00%
Receipts for Flood Control Measures	361.00%	10.00%			
Grant under 10th/11th/12th Finance Commission	19.20%	30.00%			
Grants for Karkas Utlization	-18.12%				
Mahakumbh Mela 2001	-19.99%				
D. GOVERNMENT LOANS					

Loan from Government (Revolving Fund)	50.29%	
E. PLAN GRANTS		
MP/ MLA Fund	**135.16%**	30%
F. OTHER INCOME	**49.74%**	30%
G. CAPITAL RECEIPTS		
Income from sale of land & Buildings	5589.88%	50%

Assumptions for increase in growth rate of revenue and expenditure is based on average growth trend and minimum level and maximum level attained for respective heads of income and expenditure

Table 101: Financial Operating Plan under Sustainable Investment Scenario

	ACTUALS							PROJECTIONS					
Years	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Heads of Income (Rs. Lakh)													
A. TAX REVENUES:													
I. Tax by Municipal Corporation													
General Tax (House Tax)	365.35	410.46	465.22	727.23	893.60	1009.45	1514.18	1968.43	2558.96	3326.64	4324.64	5622.03	7308.63
Animal Tax	0.16	0.15	0.23	0.24	0.26	0.26	0.30	0.34	0.40	0.45	0.52	0.60	0.69
Passenger Tax	10.23	25.17	11.87	7.67	13.13	9.16	11.45	14.31	17.89	22.36	27.95	34.94	43.68
Advertisement Tax	46.19	50.73	52.37	60.48	63.21	5.47	6.02	6.62	7.28	8.01	8.81	9.69	10.66
Theatre Tax	1.70	1.78	2.29	1.58	1.45	1.86	2.01	2.17	2.34	2.53	2.73	2.95	3.19
Dog Tax	0.23	0.34	0.40	0.61	0.65	0.65	0.78	0.94	1.12	1.35	1.62	1.94	2.33
Other Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (I)	**423.87**	**488.62**	**532.37**	**797.80**	**972.30**	**1026.85**	**1534.73**	**1992.81**	**2587.99**	**3361.35**	**4366.27**	**5672.15**	**7369.18**
II. Assigned Revenues:													
Stamp Duty on transfer of immovable properties	0.50	120.44	281.99	0.50	376.39	465.74	582.18	669.50	769.93	885.42	1018.23	1170.96	1346.61
Total (II)	**0.50**	**120.44**	**281.99**	**0.50**	**376.39**	**465.74**	**582.18**	**669.50**	**769.93**	**885.42**	**1018.23**	**1170.96**	**1346.61**

Total Tax Revenues (I) + (II)	**424.37**	**609.06**	**814.36**	**798.30**	**1348.69**	**1492.59**	**2116.90**	**2662.31**	**3357.92**	**4246.76**	**5384.50**	**6843.11**	**8715.79**
B. NON-TAX REVENUES:													
Rent from land & building	28.80	28.12	31.16	58.21	45.10	51.98	64.98	81.22	101.52	126.90	158.63	198.29	247.86
Tehbazari Fees	45.41	54.86	68.58	73.49	81.49	61.93	77.41	96.77	120.96	151.20	189.00	236.24	295.31
License Fees	53.47	56.63	62.47	85.72	72.70	70.84	77.92	85.72	94.29	103.72	114.09	125.50	138.05
Fees from Cremation Grounds	2.97	3.59	3.70	5.44	6.03	6.11	7.03	8.08	9.29	10.69	12.29	14.13	16.25
Photocopy fees(from Records)	4.22	4.68	5.02	4.48	3.21	3.35	3.95	4.66	5.50	6.49	7.66	9.04	10.67
Registration Fees from Death and Birth Certificates	2.38	1.62	1.97	2.94	1.74	0.73	0.80	1.08	1.46	1.98	2.67	3.60	4.86
Income from Road Restoration	26.45	49.85	86.57	52.64	52.79	42.48	47.58	53.29	59.68	66.84	74.86	83.85	93.91
Income under Special Act	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income and penalities from Kanji House	6.28	7.47	7.44	8.05	8.91	8.91	10.25	11.78	13.55	15.58	17.92	20.61	23.70
Namantaran Fees (cancelled admissions)	5.10	6.28	6.80	7.23	7.44	5.99	6.59	7.25	7.97	8.77	9.65	10.61	11.67
Penalities under Nagar Nigam Act & Rules	82.10	116.59	71.50	60.91	100.85	70.98	74.53	78.26	82.17	86.28	90.59	95.12	99.88
Total Non-Tax Revenues	**257.18**	**329.68**	**345.21**	**359.10**	**380.27**	**323.30**	**371.04**	**428.10**	**496.40**	**578.45**	**677.36**	**797.00**	**942.16**
C. NON-PLAN GRANTS													
State Finance Commission	2535.11	2286.77	2273.85	2105.27	2270.50	2784.95	3341.94	3843.23	4419.72	5082.67	5845.07	6721.84	7730.11
Receipts for Flood Control Measures	0.50	0.50	0.50	10.00	0.50	0.50	0.55	0.61	0.67	0.73	0.81	0.89	0.97
Grant under 10th/11th/12th Finance Commission	103.54	115.99	271.94	155.81	155.81	143.67	186.77	205.45	225.99	248.59	273.45	300.80	330.88
Grants for Karkas Utlization	5.33	0.50	0.50	0.50	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mahakumbh Mela 2001	848.79	0.50	0.50	0.50	0.50	0.50	850.00						
Total Non-Plan Grants	**3493.27**	**2404.26**	**2547.29**	**2272.08**	**2427.81**	**2930.12**	**4379.26**	**4049.28**	**4646.37**	**5332.00**	**6119.33**	**7023.52**	**8061.96**
F. Other Income													
Money received from employees of Life Insurance Corporation	11.74	7.52	28.65	12.30	7.74	15.31	19.90	25.87	33.64	43.73	56.84	73.90	96.07
Total Revenue Income	**4186.56**	**3350.52**	**3735.51**	**3441.79**	**4164.50**	**4761.32**	**6867.20**	**7139.70**	**8500.69**	**10157.21**	**12181.19**	**14663.63**	**17719.90**

Heads of Expenditure:													
A. Salary Expenditure													
a) Salaries other than Sanitation staff	1114.51	1088.74	999.06	1247.22	1128.49	1468.79	1586.29	1713.20	1850.25	1998.27	2158.13	2330.79	2517.25
b) Sanitation staff Salaries	1676.03	1584.23	1440.00	1687.23	1562.40	1847.41	1847.41	1847.41	1847.41	1847.41	1847.41	1847.41	1847.41
Total (I)	**2790.54**	**2672.97**	**2439.06**	**2934.45**	**2690.89**	**3316.20**	**3433.70**	**3560.61**	**3697.66**	**3845.68**	**4005.54**	**4178.20**	**4364.66**
B. Non-Salary Expenditure													
Road Lighting	144.96	143.68	119.45	76.31	94.93	168.08	184.89	203.38	223.71	246.09	270.69	297.76	327.54
Construction/Repair of Roads, streets	1,007.51	559.58	551.87	295.18	394.61	514.65	566.12	622.73	685.00	753.50	828.85	911.73	1002.91
Construction/Repair of Buildings	5.31	4.78	32.58	1.85	4.95	5.76	6.34	6.97	7.67	8.43	9.28	10.20	11.22
Sanitation Euipments	275.33	171.27	197.25	190.56	234.45	380.53	426.19	477.34	534.62	598.77	670.62	751.10	841.23
Karkas Utilization\	23.75	14.95	2.22	9.28	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial Assistance to Institutions	2.18	1.43	0.85	0.67	1.47	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06
Printing & Stationery	7.73	6.88	12.97	7.34	9.88	12.13	14.56	17.47	20.96	25.15	30.18	36.22	43.46
Legal Expenditure	2.00	1.05	2.20	2.38	4.06	7.52	10.90	15.81	22.93	33.24	48.20	69.89	101.34
Slum Basti Improvement	0.02	0.19	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.12	0.15	0.19	0.24
Other Expenditure	144.60	174.65	181.43	159.03	135.77	268.79	322.55	387.06	464.47	557.36	668.84	802.60	963.12
Total (II)	**1613.39**	**1078.46**	**1100.87**	**742.65**	**881.97**	**1358.43**	**1532.54**	**1731.78**	**1960.43**	**2223.67**	**2527.83**	**2880.74**	**3292.13**
Total Revenue Expenditure (I+II)	**4403.93**	**3751.43**	**3539.93**	**3677.10**	**3572.86**	**4674.63**	**4966.24**	**5292.39**	**5658.09**	**6069.35**	**6533.38**	**7058.94**	**7656.79**
OPERATING SURPLUS/DEFICIT	**-217.37**	**-400.91**	**195.58**	**-235.31**	**591.64**	**86.69**	**1900.96**	**1847.31**	**2842.60**	**4087.86**	**5647.81**	**7604.69**	**10063.12**
CAPITAL INCOME:													
I. Capital Grants	**3.92**	**25.86**	**6.14**	**5.12**	**8.78**	**20.85**	30.00	40.00	57.00	68.40	82.08	98.50	108.60
II. Capital Receipts	**564.73**	**247.80**	**105.28**	**151.19**	**430.05**	**1195.32**	1434.38	1721.26	1893.39	2082.73	2291.00	2520.10	2772.11
III. Capital Expenditure	**0.00**	**18.58**	**0.00**	**0.00**	**0.00**	**0.00**	25.00	32.00	45.60	54.72	65.66	78.80	86.88

Table 102: Financial Operating Plan under Static Baseline Scenario

	ACTUALS						PROJECTIONS						
Years	**2000-01**	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Heads of Income													
Rs. Lakhs													
A. TAX REVENUES:													
I. Tax by Municipal Corporation													
General Tax (House Tax)	365.35	410.46	465.22	727.23	893.60	1009.45	1019.45	1029.45	1039.45	1049.45	1059.45	1069.45	1079.45
Animal Tax	0.16	0.15	0.23	0.24	0.26	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33
Passenger Tax	10.23	25.17	11.87	7.67	13.13	9.16	9.36	9.56	9.76	9.96	10.16	10.36	10.56
Advertisement Tax	46.19	50.73	52.37	60.48	63.21	5.47	5.48	5.50	5.52	5.54	5.56	5.58	5.60
Theatre Tax	1.70	1.78	2.29	1.58	1.45	1.86	1.88	1.90	1.92	1.94	1.96	1.98	2.00
Dog Tax	0.23	0.34	0.40	0.61	0.65	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72
Other Income	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total (I)	**423.87**	**488.62**	**532.37**	**797.80**	**972.30**	**1026.85**	**1037.10**	**1047.36**	**1057.62**	**1067.88**	**1078.14**	**1088.40**	**1098.66**
II. Assigned Revenues:													
Stamp Duty on transfer of immovable properties	0.50	120.44	281.99	0.50	376.39	465.74	468.74	471.74	474.74	477.74	480.74	483.74	486.74
Total (II)	**0.50**	**120.44**	**281.99**	**0.50**	**376.39**	**465.74**	**468.74**	**471.74**	**474.74**	**477.74**	**480.74**	**483.74**	**486.74**
Total Tax Revenues (I) + (II)	**424.37**	**609.06**	**814.36**	**798.30**	**1348.69**	**1492.59**	**1505.84**	**1519.10**	**1532.36**	**1545.62**	**1558.88**	**1572.14**	**1585.40**
B. NON-TAX REVENUES:													
Rent from land & building	28.80	28.12	31.16	58.21	45.10	51.98	52.00	52.02	52.04	52.06	52.08	52.10	52.12
Tehbazari Fees	45.41	54.86	68.58	73.49	81.49	61.93	61.96	61.99	62.02	62.05	62.08	62.11	62.14
License Fees	53.47	56.63	62.47	85.72	72.70	70.84	70.89	70.94	70.99	71.04	71.09	71.14	71.19
Fees from Cremation Grounds	2.97	3.59	3.70	5.44	6.03	6.11	6.16	6.21	6.26	6.31	6.36	6.41	6.46
Photocopy fees(from Records)	4.22	4.68	5.02	4.48	3.21	3.35	3.38	3.41	3.44	3.47	3.50	3.53	3.56
Registration Fees from Death and Birth Certificates	2.38	1.62	1.97	2.94	1.74	0.73	0.76	0.79	0.82	0.85	0.88	0.91	0.94
Income from Road Restoration	26.45	49.85	86.57	52.64	52.79	42.48	42.53	42.58	42.63	42.68	42.73	42.78	42.83
Income under Special Act	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Income and penalities from	6.28	7.47	7.44	8.05	8.91	8.91	8.93	8.95	8.97	8.99	9.01	9.03	9.05

Kanji House													
Namantaran Fees (cancelled admissions)	5.10	6.28	6.80	7.23	7.44	5.99	6.01	6.03	6.05	6.07	6.09	6.11	6.13
Penalities under Nagar Nigam Act & Rules	82.10	116.59	71.50	60.91	100.85	70.98	73.98	76.98	79.98	82.98	85.98	88.98	91.98
Total Non-Tax Revenues	**257.18**	**329.68**	**345.21**	**359.10**	**380.27**	**323.30**	**326.60**	**329.90**	**333.20**	**336.50**	**339.80**	**343.10**	**346.40**
C. NON-PLAN GRANTS													
State Finance Commission	2535.11	2286.77	2273.85	2105.27	2270.50	2784.95	2814.95	2844.95	2874.95	2904.95	2934.95	2964.95	2994.95
Receipts for Flood Control Measures	0.50	0.50	0.50	10.00	0.50	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57
Grant under 10th/11th/12th Finance Commission	103.54	115.99	271.94	155.81	155.81	143.67	148.67	153.67	158.67	163.67	168.67	173.67	178.67
Grants for Karkas Utlization	5.33	0.50	0.50	0.50	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mahakumbh Mela 2001	848.79	0.50	0.50	0.50	0.50	0.50	850.00						
Total Non-Plan Grants	**3493.27**	**2404.26**	**2547.29**	**2272.08**	**2427.81**	**2930.12**	**3814.13**	**2999.14**	**3034.15**	**3069.16**	**3104.17**	**3139.18**	**3174.19**
F. Other Income													
Money received from employees of Life Insurance Corporation	11.74	7.52	28.65	12.30	7.74	15.31	15.61	15.91	16.21	16.51	16.81	17.11	17.41
Total Revenue Income	**4186.56**	**3350.52**	**3735.51**	**3441.79**	**4164.50**	**4761.32**	**5646.57**	**4848.14**	**4899.71**	**4951.28**	**5002.85**	**5054.42**	**5105.99**
Heads of Expenditure:													
A. Salary Expenditure													
b) Sanitation staff Salaries	1676.03	1584.23	1440.00	1687.23	1562.40	1847.41	1857.41	1867.41	1877.41	1887.41	1897.41	1907.41	1917.41
Total (I)	**1676.03**	**1584.23**	**1440.00**	**1687.23**	**1562.40**	**1847.41**	**1857.41**	**1867.41**	**1877.41**	**1887.41**	**1897.41**	**1907.41**	**1917.41**
B. Non-Salary Expenditure													
Road Lighting	144.96	143.68	119.45	76.31	94.93	168.08	168.58	169.08	169.58	170.08	170.58	171.08	171.58
Construction/Repair of Roads,streets	1,007.51	559.58	551.87	295.18	394.61	514.65	524.65	534.65	544.65	554.65	564.65	574.65	584.65
Construction/Repair of Buildings	5.31	4.78	32.58	1.85	4.95	5.76	6.36	6.96	7.56	8.16	8.76	9.36	9.96
Sanitation Euipments	275.33	171.27	197.25	190.56	234.45	380.53	420.53	460.53	500.53	540.53	580.53	620.53	660.53
Karkas Utilization\	23.75	14.95	2.22	9.28	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial Assistance to Institutions	2.18	1.43	0.85	0.67	1.47	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06
Printing & Stationery	7.73	6.88	12.97	7.34	9.88	12.13	14.63	17.13	19.63	22.13	24.63	27.13	29.63
Legal Expenditure	2.00	1.05	2.20	2.38	4.06	7.52	7.57	7.62	7.67	7.72	7.77	7.82	7.87
Slum Basti Improvement	0.02	0.19	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.12	0.15	0.19	0.24

Other Expenditure	144.60	174.65	181.43	159.03	135.77	268.79	278.79	288.79	298.79	308.79	318.79	328.79	338.79
Total (II)	**1613.39**	**1078.46**	**1100.87**	**742.65**	**881.97**	**1358.43**	**1422.11**	**1485.80**	**1549.48**	**1613.18**	**1676.88**	**1740.59**	**1804.31**
Total Revenue Expenditure (I+II)	**3289.42**	**2662.69**	**2540.87**	**2429.88**	**2444.37**	**3205.84**	**3279.52**	**3353.21**	**3426.89**	**3500.59**	**3574.29**	**3648.00**	**3721.72**
OPERATING SURPLUS/DEFICIT	**897.14**	**687.83**	**1194.64**	**1011.91**	**1720.13**	**1555.48**	**2367.05**	**1494.93**	**1472.82**	**1450.69**	**1428.56**	**1406.42**	**1384.27**
CAPITAL INCOME:													
I. Capital Grants	**3.92**	**25.86**	**6.14**	**5.12**	**8.78**	**20.85**	30.02	30.02	36.03	43.23	51.88	62.26	70.71
II. Capital Receipts	**564.73**	**247.80**	**105.28**	**151.19**	**430.05**	**1195.32**	1434.38	1721.26	1893.39	2082.73	2291.00	2520.10	2772.11
III. Capital Expenditure	**0.00**	**18.58**	**0.00**	**0.00**	**0.00**	**0.00**	28.00	0.00	0.00	0.00	0.00	0.00	65.00

Table 103: Financial Share of ULB/ Parastals in each financial year for all projects under Phase I of JNNURM

Project Identified	Total Costs of Project	Phase I *(URBAN RENEWAL)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Construction of Southern bypass	38959	959	287.7	6000	1800	12000	3600	12000	3600	8000	2400	0	0	-
Construction of road divider and footpath	300	-	0	60	18	90	27	150	45	-	0	-	0	-
Flyovers	2000	-	0	1000	300	1000	300	-	0	-	0	-	0	-
Widening of existing RUB (at Road level)	128	-	0	128	38.4	-	0	-	0	-	0	-	0	-
Intersection improvement	135	35	10.5	100	30	-	0	-	0	-	0	-	0	-
Road lighting	500	100	30	300	90	100	30	-	0	-	0	-	0	-
Multi-level parking	4500	500	150	2000	600	2000	600	-	0	-	0	-	0	-
Zebra marking, lane markings and signages	15	15	4.5	-	0	-	0	-	0	-	0	-	0	-
Removal of enchroachment	1500	600	180	900	270	-	0	-	0	-	0	-	0	-
Relocation of bus terminals	2400	400	120	1000	300	1000	300	-	0	-	0	-	0	-
Relocation of truck terminals	3400	400	120	1500	450	1000	300	500	150	-	0	-	0	-
Relocation of wholesale market	3590	290	87	500	150	1000	300	1000	300	800	240	-	0	-
Provision of Cattle colonies/ dairies	400	50	15	100	30	100	30	100	30	50	15		0	
Play grounds for children (4 nos)	100	20	6	20	6	20	6	20	6	20	6		0	
Neighbourhood markets (15 nos)	1500	20	6	300	90	300	90	300	90	300	90	280	84	
Total	**59427**	3389	**1016.7**	13908	**4172.4**	18610	**5583**	14070	**4221**	9170	**2751**	280	**84**	**-**

Project Identified	Total Costs of Project	Phase I *(WATER SUPPLY)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Renovation/ rehabilitation & construction of new water supply schemes for the city	22000	2500	750	5000	1500	5000	1500	5000	1500	4500	1350	-	0	-
Estimated cost for the Kumbh mela area for the pilgrims @ 1.0 crore per mld for 5.0 mld for the complete water supply infrastructure	600	400	120	200	60	-	0	-	0	-	0	-	0	-
Rain water harvesting arrangement	600	100	30	150	45	150	45	100	30	100	30	-	0	-
Inventory survey of the existing scheme @ Rs. 2000.00 per km	15	15	4.5	-	0	-	0	-	0	-	0	-	0	-
Layout planning, designing, and preparation of DPR (LS)	40	40	12	-	0	-	0	-	0	-	0	-	0	-
Generator set to provide supply during the no of hours of electricity and all kinds of electro-mechanical equipments like pumps, panels etc	350	150	45	100	30	100	30	-	0	-	0	-	0	-
Unforeseen items	120	20	6	30	9	30	9	20	6	20	6	-	0	-
Sub-Total	**23725**	**3225**	967.5	**5480**	1644	**5280**	1584	**5120**	1536	**4620**	1386	**0**	0	**0**
Construction supervision @ 1.00% (assumed)	237.25	40	12	55	16.5	55	16.5	47	14.1	40.25	12.075	-	0	-
Training & Capacity building, asset creation, and information, education & awareness @1.5%	355.87	60	18	80	24	80	24	75	22.5	60.87	18.261	-	0	-
Grand Total	**24318.12**	**3325**	**997.5**	**5615**	**1684.5**	**5415**	**1624.5**	**5242**	**1572.6**	**4721.12**	**1416.336**	**0**	**0**	***0***

Project Identified	Total Costs of Project	Phase I *(SEWERAGE AND SANITATION)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Rehabilitation, renovation, construction of new Branch sewers, pumping stations etc, STP as per the requirement	35000	2000	600	9000	2700	9000	2700	9000	2700	6000	1800	-	0	-
Mechanical equipment needed for cleaning of Sewers (LS)	80	30	9	50	15	-	0	-	0	-	0	-	0	-
Construction of community latrines and bathing facilities	1225	125	37.5	300	90	300	90	300	90	200	60	-	0	-
Sewerage system for the *Kumbh* area	350	125	37.5	125	37.5	100	30	-	0	-	0	-	0	-
Inventory of the existing scheme, Layout planning, designing and preparation of DPR	80	80	24	-	0	-	0	-	0	-	0	-	0	-
Sub-Total	***36735***	***2360***	708	9475	2842.5	9400	2820	9300	2790	6200	1860	0	0	***0***
Construction supervision @ 1.00% (assumed)	367.35	36.74	11.022	91.84	27.552	91.84	27.552	91.84	27.552	55.1	16.53	-	0	-
Training & capacity building, asset creation, and information, education & awareness @1.5%.	551.03	55.1	16.53	137.76	41.328	137.76	41.328	137.76	41.328	82.65	24.795	-	0	-
Projects Proposed under JICA - Stage 1 (upto 2015)	4003.71	800.74	240.222	800.74	240.222	800.74	240.222	800.74	240.222	800.74	240.222	-	0	-
Grand Total	**41657.09**	**3252.58**	**975.774**	**10505.34**	**3151.602**	**10430.34**	**3129.102**	**10330.34**	**3099.102**	**7138.49**	**2141.547**	**0**	**0**	***0***

Project Identified		Phase I *(STORM WATER DRAINAGE)*												Phase II
	Total Costs of Project	Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Rehabilitation/ renovation and construction of new drainage network (LS)	35000	5000	1500	7500	2250	7500	2250	7500	2250	7500	2250	-	0	-
Mechanical equipment needed for the cleaning of drains (LS)	90	30	9	60	18	-	0	-	0	-	0	-	0	-
Inventory survey of the existing drains, layout planning, designing, and preparation of DPR (LS)	80	50	15	30	9	-	0	-	0	-	0	-	0	-
Sub-Total	***35170***	***5080***	***1524***	***7590***	***2277***	***7500***	***2250***	***7500***	***2250***	***7500***	***2250***	***0***	***0***	-
Construction supervision @ 1.00% (assumed)	703.4	70.34	21.102	175.85	52.755	175.85	52.755	175.85	52.755	105.51	31.653	-	0	-
Training & Capacity building, asset creation (LS)	25	5	1.5	5	1.5	5	1.5	5	1.5	5	1.5	-	0	-
Grand Total	**35898.4**	**5155.34**	**1546.602**	**7770.85**	**2331.255**	**7680.85**	**2304.255**	**7680.85**	**2304.255**	**7610.51**	**2283.153**	**0**	**0**	-

Project Identified	Total Costs of Project	Phase I *(SOLID WASTE MANAGEMENT)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Dumper Placer with handle container of 4.5 cubic meter capacity (5 trips per day, average)	800	100	30	250	75	250	75	100	30	100	30	-	0	-
Dumper Placer Containers of 4.5 cubic meter capacity each	25	5	1.5	10	3	10	3	-	0	-	0	-	0	-
Tractors	210	40	12	60	18	50	15	40	12	20	6	-	0	-
Hydraulic tractor tipping trolley	150	40	12	40	12	40	12	30	9	0	0	-	0	-
Platforms and ramping for tipping trolleys	40	10	3	10	3	10	3	10	3	0	0	-	0	-
Skip Lifter for construction debris	160	30	9	40	12	40	12	30	9	20	6	-	0	-
Skips of 7 cubic meter capacity	20	4	1.2	4	1.2	4	1.2	4	1.2	4	1.2	-	0	-
Hand Carts	120	20	6	30	9	30	9	20	6	20	6	-	0	-
Bulldozer	400	100	30	100	30	100	30	100	30	-	0	-	0	-
Fully equipped medical waste collection vehicle	80	20	6	20	6	20	6	20	6	-	0	-	0	-
Weigh bridge of 15 ton capacity for the landfill cum compost plant site	60	10	3	20	6	20	6	10	3	-	0	-	0	-
Incinerator for hospital waste, complete with chimney and civil works etc (100kg/hr capacity)	100	10	3	30	9	30	9	30	9	-	0	-	0	-
Development of land fill sites for inert waste produced as 400 MT per day (average)	200	20	6	50	15	50	15	50	15	30	9	-	0	-

Finalization of conventional method of sludge dislodge area	40	10	3	20	6	10	3	-	0	-	0	-	0	-
Depot for the vehicle	100	20	6	40	12	40	12	-	0	-	0	-	0	-
Development of service at treatment site like road, drain etc	50	10	3	20	6	20	6	-	0	-	0	-	0	-
Energy production system	1000	100	30	300	90	300	90	300	90	-	0	-	0	-
Compost plant at different locations with all accessories	1400	200	60	400	120	400	120	200	60	200	60	-	0	-
Sub-Total	***4955***	***749***	***224.7***	***1444***	***433.2***	***1424***	***427.2***	***944***	***283.2***	***394***	***118.2***	***0***	***0***	***0***
Capacity building and awareness programs @ 2.5%	123.88	18.58	5.574	30.97	9.291	30.97	9.291	30.97	9.291	12.39	3.717	-	0	-
Miscellaneous & unforeseen items @ 10%	248.4	37.26	11.178	62.1	18.63	62.1	18.63	62.1	18.63	24.84	7.452	-	0	-
Grand Total	**5327.28**	**804.84**	**241.452**	**1537.07**	**461.121**	**1517.07**	**455.121**	**1037.07**	**311.121**	**431.23**	**129.369**	**0**	**0**	**0**

Project Identified	Total Costs of Project	Phase I *(HERITAGE AND TOURISM)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Pre-paid Counters (taxi, auto, boats)	10	10	3	-	0	-	0	-	0	-	0	-	0	-
Tourist Information Centre	80	40	12	40	12	-	0	-	0	-		-		-
Provision of Public Facility	150	75	22.5	75	22.5	-	0	-	0	-		-		-
Construction of "VishramSthali"	515	175	52.5	85	25.5	85	25.5	85	25.5	85		-		-
Construction of New Ghats	1250	-	0	350	105	350	105	300	90	250		-		-
Illumination of Heritage Buildings	125	25	7.5	25	7.5	25	7.5	25	7.5	25		-		-
Development & maintenance of City park	240	50	15	60	18	60	18	35	10.5	35		-		-
Provision of Sound & Light Shows	200	50	15	100	30	50	15	-	0	-		-		-
Provision of decorative signages/ board	150	50	15	50	15	50	15	-	0	-		-		-
Conservation & Restoration of Old Temples	100	-	0	25	7.5	25	7.5	25	7.5	25		-		-
Heritage & Conservation	2000	-	0	500	150	500	150	500	150	500		-		-
Construction of Budget Hotels	--	-	0	-	0	-	0	-	0	-		-		-
Development of New Mela Ground	6000	250	75	1000	300	2000	600	1500	450	1250		-		-
River Front Development	1200	100	30	300	90	300	90	300	90	200		-		-
Development of water circuits & Jetty/speed boats	150	-	0	50	15	50	15	50	15	-		-		-
Total	**12170**	**825**	**247.5**	**2660**	**798**	**3495**	**1048.5**	**2820**	**846**	**2370**	**0**	**0**	**0**	**0**

Project Identified	Phase I *(ROADS AND TRANSPORT)*													Phase II
	Total Costs of Project	Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Construction of Bandh Road	20848	1500	450	6500	1950	6500	1950	5000	1500	1348	404.4	-	0	-
Widening of roads	14322	3580	1074	7161	2148.3	3581	1074.3	-	0	-	0	-	0	-
Flyovers	9800	-	0	-	0	2940	882	6860	2058	-	0	-	0	-
Road Over Bridge/ Road Under Bridge	10000	-	0	500	150	4500	1350	4500	1350	500	150	-	0	-
Widening of existing RUB (at Road level)	448	-	0	-	0	448	134.4	-	0	-	0	-	0	-
Intersection Improvement	450	200	60	250	75	0	0	-	0	-	0	-	0	-
Signalisation of Intersection	153	-	0	0	0	153	45.9	-	0	-	0	-	0	-
Speed breakers	15	-	0	6	1.8	9	2.7	-	0	-	0	-	0	-
Zebra marking, lane markings and signages	15	7.5	2.25	7.5	2.25	0	0	-	0	-	0	-	0	-
Road lighting	4308	-	0	-	0	1724	517.2	2584	775.2	-	0	-	0	-
Multilevel parking	6000	1000	300	3000	900	2000	600	-	0	-	0	-	0	-
Augmentation & relocation of bus terminal	3700	700	210	1000	300	1000	300	1000	300	-	0	-	0	-
Metro rail system for the city (phase II)		-	0	-	0	-	0	-	0	-	0	-	0	-
Grand Total	**70059**	**6987.5**	**2096.25**	**18424.5**	**5527.35**	**22855**	**6856.5**	**19944**	**5983.2**	**1848**	**554.4**	**0**	**0**	-

Project Identified	Total Costs of Project	Phase I *(OTHER INFRASTRUCTURE)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Home for the elderly & destitute	100	25	7.5	25	7.5	25	7.5	25	7.5	-	0	-	0	-
Youth hostels	120	25	7.5	40	12	40	12	15	4.5	-	0	-	0	-
Working girls' hostel	150	25	7.5	50	15	50	15	25	7.5	-	0	-	0	-
Working men's hostel	225	25	7.5	75	22.5	75	22.5	50	15	-	0	-	0	-
Grand Total	**595**	**100**	**30**	**190**	**57**	**190**	**57**	**115**	**34.5**	**0**	**0**	**0**	**0**	-

Project Identified	Total Costs of Project	Phase I *(ENVIRONMENTAL ASPECTS)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Plantation along select roads	1000	250	75	250	75	250	75	250	75	-	0	-	0	-
Slaughter Houses	100	25	7.5	25	7.5	25	7.5	25	7.5	-	0	-	0	-
Electric Crematorium improvement (2)/ provision (2)	260	30	9	100	30	100	30	30	9	-	0	-	0	-
Grave yard improvement/ augmentation (LS)	100	25	7.5	25	7.5	25	7.5	25	7.5	-	0	-	0	-
Environmental Impact Assessment studies for Infrastructure projects			0		0		0		0		0		0	
Grand Total	**1460**	**330**	**99**	**400**	**120**	**400**	**120**	**330**	**99**	**0**	**0**	**0**	**0**	-

Project Identified	Total Costs of Project	Phase I *(IN-SITU DEVELOPMENT OF SLUMS)*												Phase II
		Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Water supply	1,200.00	100	30	450	135	450	135	200	60	-	0	-	0	-
Sewerage & sanitation	1,200.00	100	30	400	120	400	120	200	60	100	30	-	0	-
Storm water drainage	1,025.00	75	22.5	300	90	300	90	250	75	100	30	-	0	-
Solid waste management	-	*No separate costs for this component*												-
Roads & transport	1,500.00	500	150	500	150	500	150	-	0	-	0	-	0	-
Housing	14,200.00	3000	900	3200	960	3400	1020	3500	1050	1100	330	-	0	-
Street Lighting	280.00	60	18	90	27	90	27	40	12	-	0	-	0	-
Environmental aspects	475.00	75	22.5	100	30	100	30	100	30	50	15	50	15	-
Sub-Total	19,880.00	**3910**	**1173**	**5040**	**1512**	**5240**	**1572**	**4290**	**1287**	**1350**	**405**	**50**	**15**	-
Awareness programs @ 2.5%	495.75	97.75	29.325	126.00	37.8	131.00	39.3	107.25	32.175	33.75	10.125	-	0	-
Other/ miscellaneous activities @ 10%	1,983.00	391.00	117.3	504.00	151.2	524.00	157.2	429.00	128.7	135.00	40.5	-	0	-
Total	22,358.75	**4398.75**	**1319.63**	**5670.00**	**1701.00**	**5895.00**	**1768.50**	**4826.25**	**1447.88**	**1518.75**	**455.63**	**50.00**	**15.00**	**0.00**

Project Identified		Phase I *(EX-SITU DEVELOPMENT OF SLUMS)*												Phase II
	Total Costs of Project	Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Water supply	1,275.00	125	37.5	500	150	500	150	75	22.5	75	22.5	-	0	-
Sewerage & sanitation	1,300.00	100	30	425	127.5	425	127.5	250	75	100	30	-	0	-
Storm water drainage	1,250.00	100	30	350	105	350	105	250	75	200	60	-	0	-
Solid waste management	-	*No separate costs for this component*												-
Roads & transport	2,300.00	300	90	800	240	800	240	400	120	-	0	-	0	-
Housing	42,900.00	8000	2400	10400	3120	15000	4500	5000	1500	4500	1350	-	0	-
Street Lighting	325.00	50	15	75	22.5	75	22.5	75	22.5	50	15	-	0	-
Environmental aspects	475.00	75	22.5	100	30	100	30	75	22.5	75	22.5	50	15	-
Sub-Total	49,825.00	**8750**	**2625**	**12650**	**3795**	**17250**	**5175**	**6125**	**1837.5**	**5000**	**1500**	**50**	**15**	-
Awareness programs @ 2.5%	1,244.38	218.75	65.625	316.25	94.875	431.25	129.375	153.13	45.9375	125.00	37.5	-	0	-
Other/ miscellaneous activities @ 10%	4,977.50	875.00	262.5	1265.00	379.5	1725.00	517.5	612.50	183.75	500.00	150	-	0	-
Total	56,046.88	**9843.75**	**2953.13**	**14231.25**	**4269.38**	**19406.2**	**5821.88**	**6890.63**	**2067.19**	**5625.00**	**1687.50**	**50.00**	**15.00**	**0.00**

Project Identified		Phase I *(URBAN GOVERNANCE)*											Phase II	
	Total Costs of Project	Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Construction of LVC	300	150	45	150	45	-	0	-	0	-	0	-	0	-
Infrastructure Setup	100	50	15	50	15	-	0	-	0	-	0	-	0	-
Consultancy service and design	110	55	16.5	55	16.5	-	0	-	0	-	0	-	0	-
System development (hardware/ software)	300	150	45	150	45	-	0	-	0	-	0	-	0	-
Capacity Building	75	40	12	35	10.5	-	0	-	0	-	0	-	0	-
Operation & Maintenance of LVC	215	40	12	40	12	45	13.5	45	13.5	45	13.5	-	0	-
Finance and Accounting Reforms	25	5	1.5	10	3	10	3		0		0		0	
Total	**1125**	**490**	**147**	**490**	**147**	**55**	**16.5**	**45**	**13.5**	**45**	**13.5**	**0**	**0**	**0**

Project Identified	Phase I *(PROPERTY TAX REFORMS)*													Phase II
	Total Costs of Project	Year 1 Fund Reqt.	Year 1 share of ULB/ PS	Year 2 Fund Reqt.	Year 2 share of ULB/ PS	Year 3 Fund Reqt.	Year 3 share of ULB/ PS	Year 4 Fund Reqt.	Year 4 share of ULB/ PS	Year 5 Fund Reqt.	Year 5 share of ULB/ PS	Year 6 Fund Reqt.	Year 6 share of ULB/ PS	
Satellite Imagery	10	10	3	-	0	-	0	-	0	-	0	-	0	-
Topographical Survey	75	10	3	35	10.5	30	9	-	0	-	0	-	0	-
Cadastral Survey	20	20	6	0	0	-	0	-	0	-	0	-	0	-
Hardware & Software costs	100	20	6	60	18	20	6	-	0	-	0	-	0	-
Data Coding & GIS	50	25	7.5	25	7.5	-	0	-	0	-	0	-	0	-
Web Base Development	30	15	4.5	15	4.5	-	0	-	0	-	0	-	0	-
Data updation (every year)	20	-		5	1.5	5	1.5	5	1.5	5	1.5	-	0	-
Total	**305**	**100**	**30**	**140**	**42**	**55**	**16.5**	**5**	**1.5**	**5**	**1.5**	**0**	**0**	-

Project Identified	Phase I *(WATER SUPPLY MANAGEMENT)*												Phase II	
	Total Costs of Project	**Year 1 Fund Reqt.**	**Year 1 share of ULB/ PS**	**Year 2 Fund Reqt.**	**Year 2 share of ULB/ PS**	**Year 3 Fund Reqt.**	**Year 3 share of ULB/ PS**	**Year 4 Fund Reqt.**	**Year 4 share of ULB/ PS**	**Year 5 Fund Reqt.**	**Year 5 share of ULB/ PS**	**Year 6 Fund Reqt.**	**Year 6 share of ULB/ PS**
System operations for equitable water distribution and management	10	1	0.3	5	1.5	2	0.6	1	0.3	1	0.3	-	0	-
Operations relating to new connections and sale of potable water	10	1	0.3	5	1.5	4	1.2	-	0	-	0	-	0	-
Water auditing to minimize water losses and increase revenues	12	2	0.6	4	1.2	3	0.9	3	0.9	-	0	-	0	-
Energy audit to minimize power consumption at pumping stations	8	1	0.3	3	0.9	2	0.6	2	0.6	-	0	-	0	-
Total	**40**	**5**	**1.5**	**17**	**5.1**	**11**	**3.3**	**6**	**1.8**	**1**	**0.3**	**0**	**0**	-