

City Development Plan for JNNURM Project

(Jawaharlal Nehru National Urban Renewal Mission)

Presentation

Pune Municipal Corporation (PMC)



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Why JNNURM -

28% of India's population lives in the Urban areas, which is projected to go to 40% by 2011

Post independence population of India has grown 3 times, while urban has grown 5 times

As per 2001 estimates the slum population is estimated at 61.8 million

Tremendous amount of pressure on the urban basic infrastructure and services

It is estimated that over a seven-year period the Urban Local Bodies (ULBs) would require a total investments of Rs. 1,20,000 crores

To fructify these investments, a national level initiative is required to bring together the State Governments and enable ULBs catalyse investment flows in the urban infrastructure sector.

JNNURM fund for attaining the goal of creating economically productive, efficient, equitable and responsive cities

The Context of JNNURM

- **JNNURM seeks to develop cities that are aligned with citizens' interests**
- **JNNURM will**
 - **Support financial investments required by the city**
 - **Seek reform commitments to ensure sustainability**

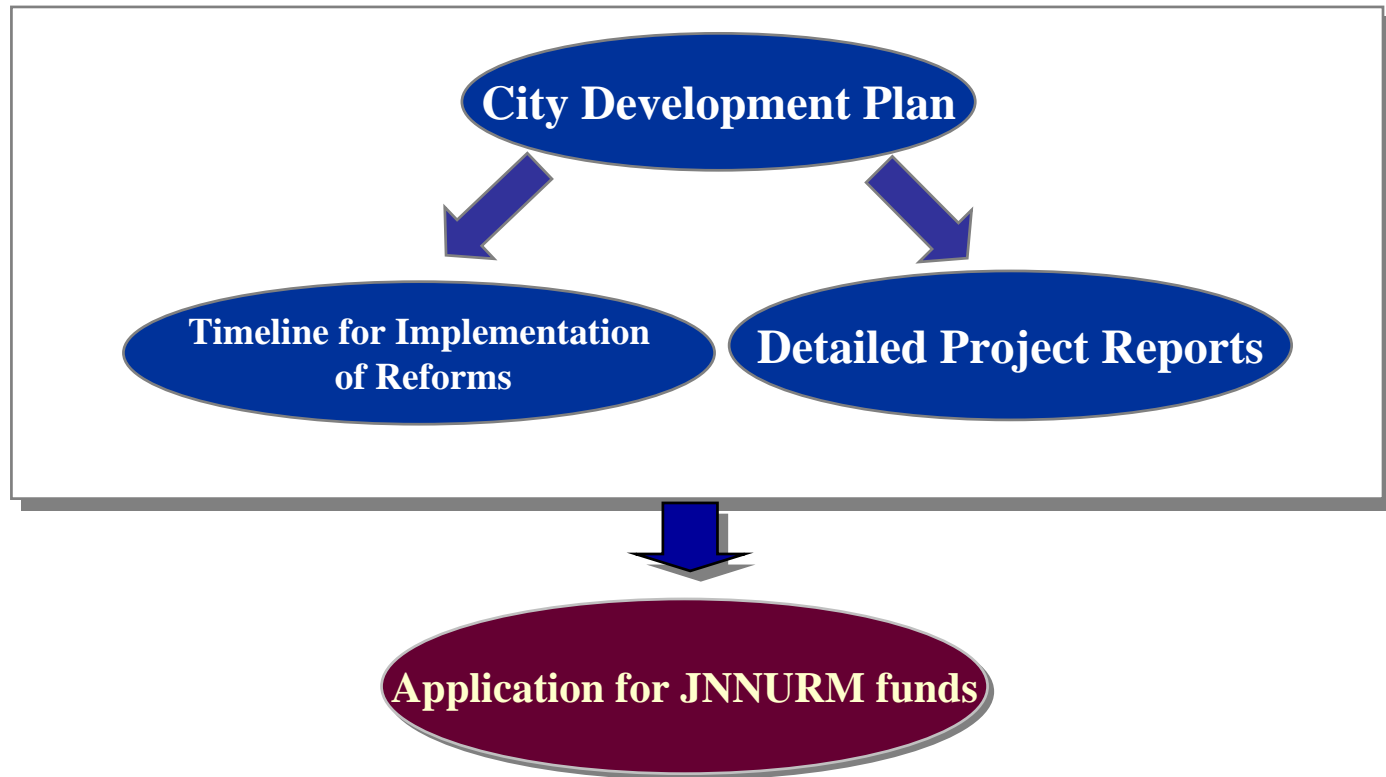
Key features of JNNURM

- **Around 60 cities**
- **Will fund**
 - Infrastructure investments
 - Capacity building and preparatory activities
 - Optional reforms
- **Duration of Mission** **7 Years**
- **Grant under JNNURM**
 - Cities with >4 million population will get 50 %
 - Cities with 1-4 million population will get 70 %
 - Cities with <1 million population will get 90 %

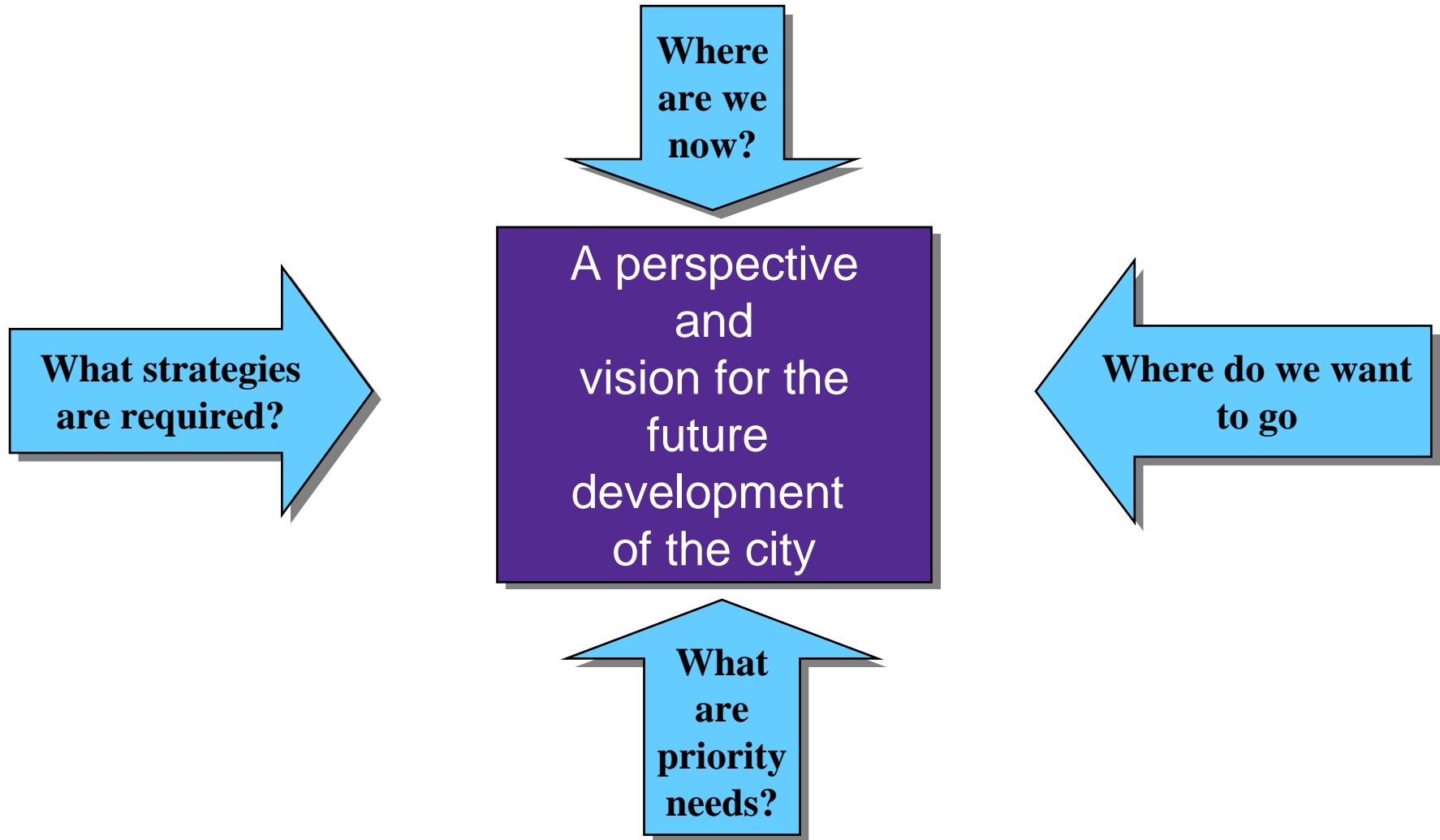
Key Reform Outcome & Responsibilities

Desired Outcome	ULB Responsibilities	State Responsibilities
Financially self-sustainable cities	<ul style="list-style-type: none"> • Adoption of accrual based accounting system • Property Tax reforms • E Governance • Levy user charges to achieve full cost recovery • Explore VRS scheme to reduce establishment cost 	<ul style="list-style-type: none"> • Devolve revenue sources • Transparent, predictable framework for transfers of grants
Well functioning, efficient and equitable urban land market	<ul style="list-style-type: none"> • Professionalise property mgmt • Simplify rezoning, construction • Computerize land titles • Earmark 20-25% land for EWS and LIG 	<ul style="list-style-type: none"> • Repeal ULCRA • Reform Rent Control Act • Rationalize stamp duty • Devolve land management
Transparent accountable governance and service delivery	<ul style="list-style-type: none"> • Introduce Area Sabhas and Ward Committees • Publish Performance Reports • Introduce service scorecards • Monitor service quality 	<ul style="list-style-type: none"> • Public disclosure law • Community participation law • Integrate all civic infrastructure agencies under ULB

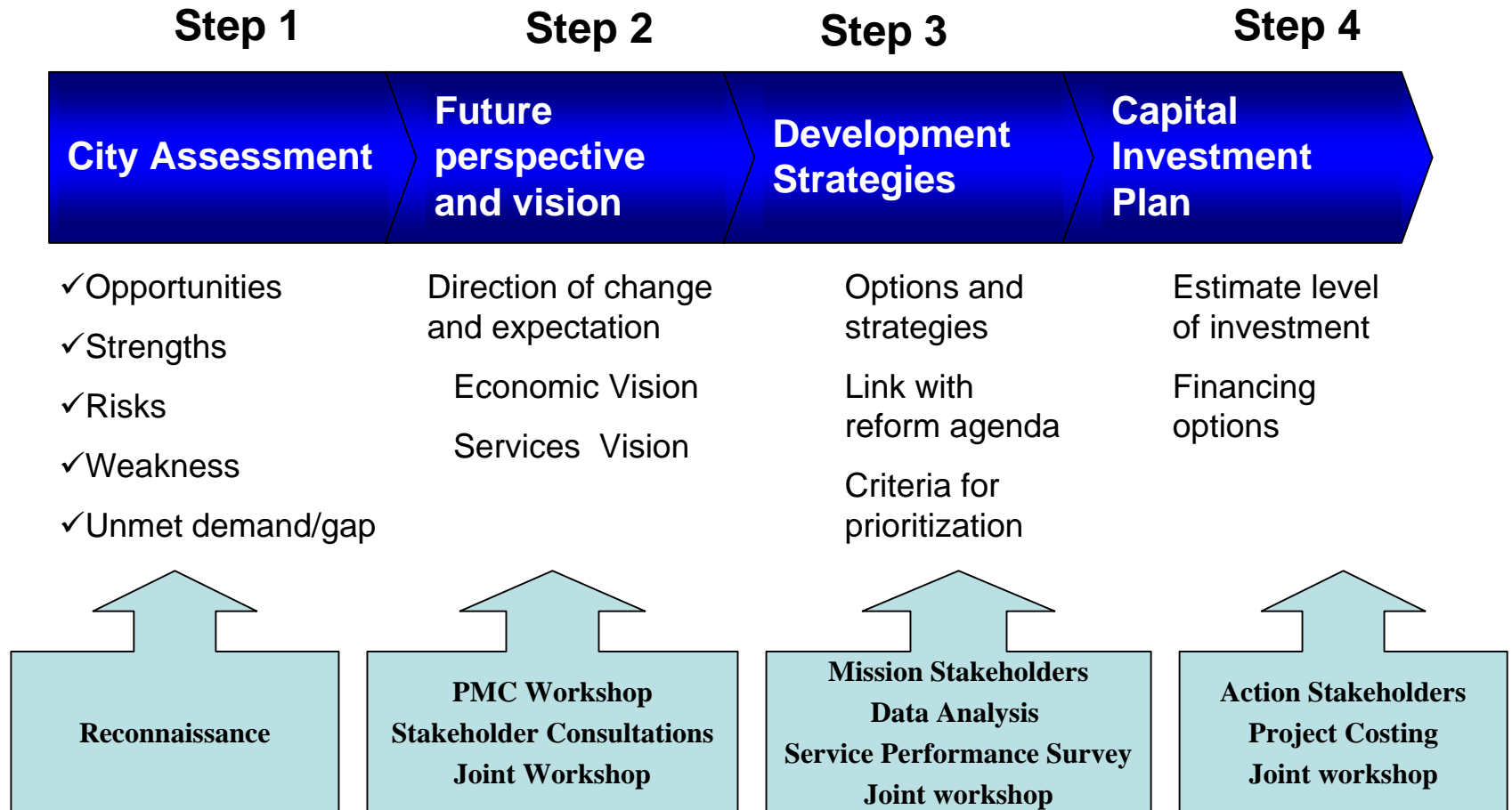
City Development Plan shall be the base document to apply for JNNURM



City Development Plan- The Approach



PMC formulated its City Development Plan through



PMC – Key Facts & Figures

Key Facts

- Demography
 - Population growth over 3.5% p.a. (National average is 2.1% p.a.)
 - Current Popl over 30 Lakhs
 - Migration accounts for 50% of the growth during 1991-2001
 - 71% of popl. below 35 years - A Young City
 - 2021 population estimates – about 57 lakhs

Key Facts

- Economy
 - Strong and diverse economy (Auto, IT, Education, Agro and Emerging BT)
 - 1st city to have Software TP
 - Software exports - Rs. 6,500 Cr and employing over 54,000 professionals
 - UNIDO - Dynamic City Region (Auto & IT)
 - Per Capita Income Rs.30,000 (Bangalore: Rs. 33,000/-, Hyderabad Rs. 23,000/-, Mumbai Rs. 43,000/-, Delhi Rs.39,000 and Kolkata 33,000/-)

PMC – Key Facts & Figures

Key Facts

- Urban Poor/ Slums
 - 353 Declared & 211 undeclared slums
 - Slum Popl. - 10.25 Lakhs
 - Slum population accounts for about 33% percent of City popl. and occupies about 4 % of the City area
 - Inadequate infrastructure
 - Over 50,000 hutments at critical locations (Rivers, Hills, Major roads etc)

Key Facts

- Environment
 - Rivers – *Mula, Mutha, Mula-Mutha, Bhima*
 - Encroached river beds
 - Untreated sewerage inflow
 - CPCB category of 'Class F' – Highly polluted
 - Air
 - Carbon emissions – very high
 - Contributed mainly by 2-wheelers
 - Noise
 - High decibel levels due to 2-wheelers

PMC – Key Facts & Figures

Key Facts

- Water Supply
 - 260 lpcd of gross supply (30% T&D Losses)
 - Inequitable distribution (low pressure, additional areas, old distribution network)
- Sewerage
 - 75-80 % of Popl have access to UGD
 - Treatment capacity falling short by 150 MLD
- Roads
 - 1800 Km of Roads (70% Surfaced)
 - Only 25% of roads with width > 24 mt.

Key Facts

- Street Lighting
 - Well lit city – poles @ 18 mt spacing
 - 100% High power lamps
- Storm Water Drains
 - Only 44% of Road length have drains
 - Poor maintenance
 - Mixing of sewage with storm water
- Solid Waste Management
 - 1100 Tons generation (360 Gm per capita)
 - Source segregation in place
 - Scientific disposal (EM Technology)

PMC – Key Facts & Figures

Key Facts

- Urban Transport/ Transportation
 - 12 Lakh private vehicles
 - Vehicles increase by 87 times against Popl increase by 4 times (4 decades)
 - 30% of Popl own 2-wheelers
 - Public Transport – only 15% of Vehicle Km.
 - Current bus load factor – 51%
 - PMT – 847 buses (shortfall by over 200 No.s) – only 673 buses on road
 - PMT – 50% fleet over 10 years old
 - PMT – about 20% average operating loss each year

Key Facts

- Municipal Finances
 - Over 35% revenue surplus and Low debt burden of Rs. 19 Cr (o/s)
 - Per-capita Income of Rs. 2620 pm
 - 29% of Revenues spent on Salaries
 - 43% revenue contribution by Octroi
 - 94% revenues from own sources
 - CAPEX mostly met from internal surpluses
 - PT Collections at 72%
 - 7 persons per PT Assessment (Scope for increasing Tax Base)

SWOT for PMC

Strengths

- Adequate service delivery of core services
- Strong financial strength
- Integrated responsibility

Opportunities

- Availability of land for expansion
- Ability to leverage financial position
- Potential for revenue growth in P Tax and user charges

Weaknesses

- Traffic and transportation
- Financing rehabilitation of slums

Threats

- Corporation a provider of services, not beneficiary of growth
- Increasing need to serve migrant population and growth centres
- Influence of large number of external players like MIDC, PCMC

City Vision

An economically vibrant city of diverse opportunities with a rich culture in which all the citizens enjoy a safe, livable environment with good connectivity

Stakeholders' Vision for their City

- **Vibrant Economic growth**
- **Well planned & sustainable development**
- **Better roads and traffic regulations**
- **Efficient public transport**
- **Free from pollution**
- **Better services for Urban Poor**

- **Clean and Beautiful City**
- **Global City**
- **Slum Free City**
- **IT/ ITES City**
- **Cultural City**
- **Safe City**

A city of its citizens with diverse economic opportunities, rich culture and access to services for Urban poor.

Strategies to achieve Vision

- **Economic Development** : Improving infrastructure, service delivery, governance, attracting PPP and creating coordination for implementing economic policies in the urban region, *Develop Collaborations between Industries and Institutions to further establish Pune as Dynamic City of the Region*
- **Governance** : Redefining the roles of administration & citizens in order to achieve citizen empowerment
- **Land Use** : Land use provisions and DC rules to promote diverse economic activities and create self sufficient suburbs that are well linked with the other parts of the city
- **Urban Poor** : Affordable housing, tenure security, integrated service provision, access basic infrastructure needs and social amenities,

Strategies to achieve Vision

- **Core Municipal Infrastructure** : Adequacy, reliability and accessibility to core municipal services for all citizens. PMC to be the prime service provider
- **Traffic & Transportation** : Road widening, dedicated bus lanes, cycle tracks and improve public transport system in the short run. Explore the possibility of BRTS, MRTS in the long run.
- **Urban Environment** : Conservation of rivers, water bodies, natural environment of city and make environment an integral part of every decision making process
- **Culture & Heritage**: Preserve cultural character and encourage tourism appropriate to the city environs

Investment Requirements

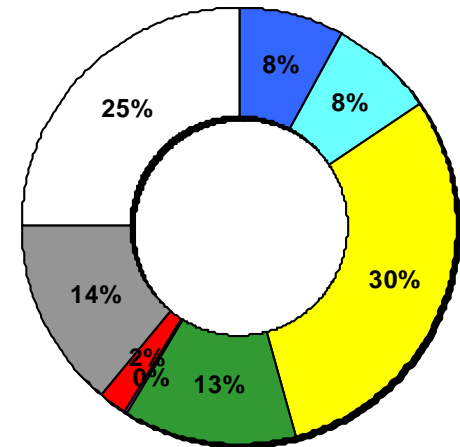
Note: One Crore Rupees = 10 Million Rupees)

- Identified Investment – Rs. 6122 Crores (Rs. 7765 Crs incl. contingencies & Cost escalation)
- Maximum investment of 25% in Transportation/ Traffic Mgmt, upgradation, strengthening and new constructions of Roads including HCMTR Project

Sector		Base Cost	Escalated
1	Water Supply	432.12	574.17
2	Sewerage & Sanitation	677.25	913.76
3	Roads	1709.87	2045.87
4	Drains	722.83	939.54
5	Street Lights	14.56	19.45
6	Solid Waste Management	161.35	214.60
7	Urban Poor/ Slums	789.30	933.02
7	Others	1614.37	2124.35
Total		6121.66	7764.76

Prioritised investments in Roads, River Conservation and Slums' improvement over the next 3 Years

Share of Investments (2006-12)



- Water Supply
- Sewerage & Sanitation
- Transportation & Traffic Mgmt
- Drains
- Street Lights
- Solid Waste Management
- Urban Poor/ Slums
- Others

Key findings

- Satisfaction levels are 65 %
- Citizens' preference is for PMC vis a vis private service providers
- Citizens seem to prefer a PMT/ public transport solution for traffic problems
- Citizens wish to have a two way interface with PMC (through ward offices, 24 hour telephone lines)
- Citizens expect PMC to share information through press releases and local cable channels
- Preferences of slum dwellers and non slum dwellers match
- Citizens wish to cross subsidise services for urban poor
- Key priorities
 - **Roads and transport**
 - **Slums**
 - **Drainage and riverfront development**
 - **Water supply**
 - **Culture and heritage**

Project Salient Features – Road Improvement Project

Widening of existing roads (50 Nos.) and construction of new roads(26 Nos.) :	945
Flyovers and ROBs (4 Nos.)	42
Bridges and Subways (13 Nos.)	138
HCMTR	
Flyovers and ROBs (9 Nos.)	50
Tunnels (3 Nos.)	38
Elevated Roads on HCTMR (2 Nos.)	156

** Note :Above cost excludes contingencies, escalations, land acquisition and implementation charges*

(Part I) Project Salient Features – BRT Network Development Project

Project Components	
Cost of High Capacity Bus Rapid Route (HCBRR) along 34 km ring route.	400.00
Cost of infrastructure development for BRT on other corridors	542.12
Cost of developing BRT terminals and parking.	25.97
A) Total - A (Original Core Developments)	968.09
B) Contingencies and Project Management Consultancy Charges @ 5%	48.40
C) TOTAL (A + B)	1016.49
Note- BRT Pilot Project & Phase I project approved by Government of India	538.00

OBJECTIVES OF BRT

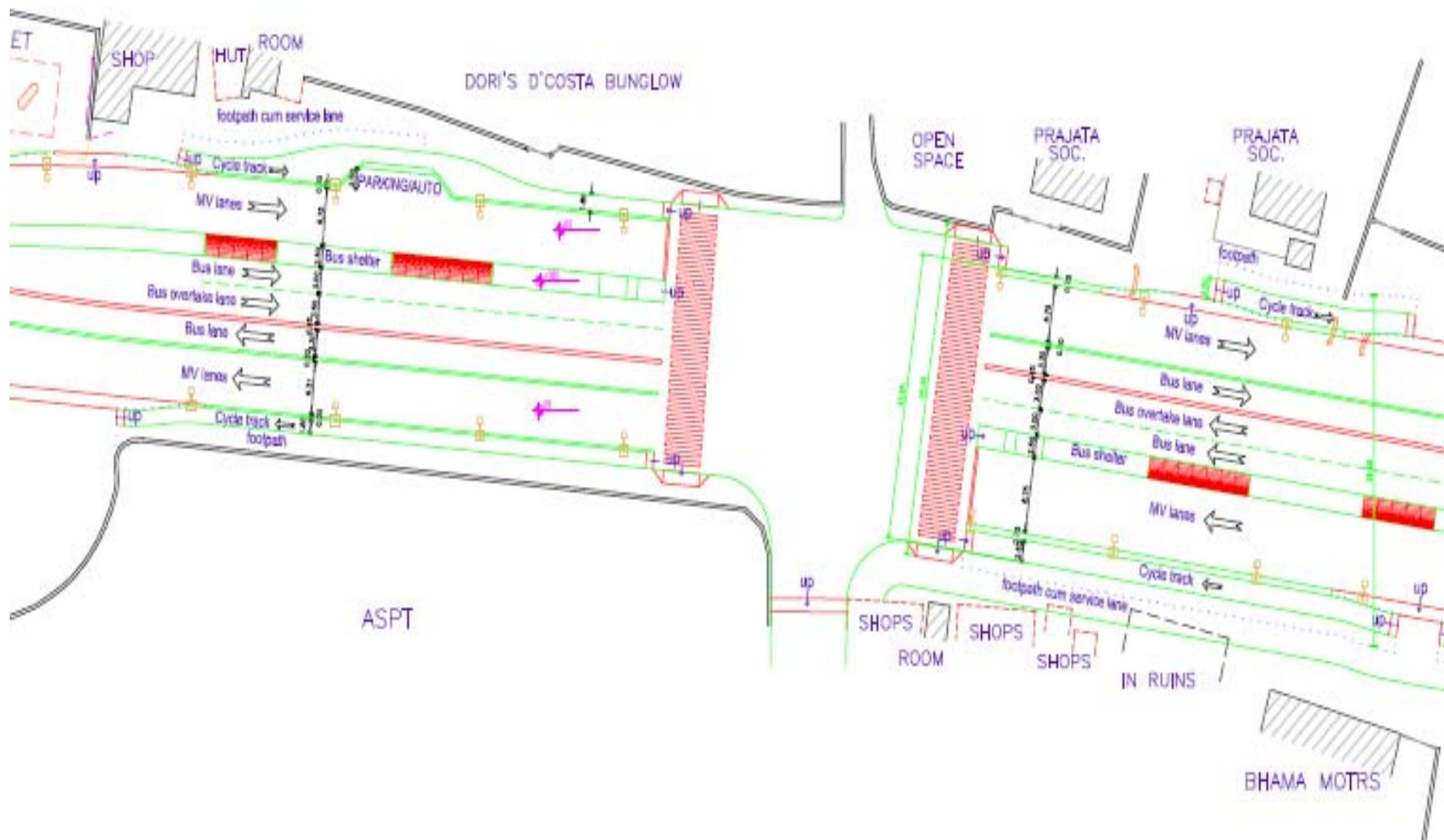
- **The main objectives are to balance the demand for transport and supply in terms existing and proposed infrastructure**
- **Preparation of improvement proposals**
- **To achieve substantial modal shift to public transport BRT.**
- **To have a ‘people friendly’ and ‘environmentally friendly’ system that serves the mobility needs for all.**

What is **B**us **R**apid **T**ransit **S**ystem...?

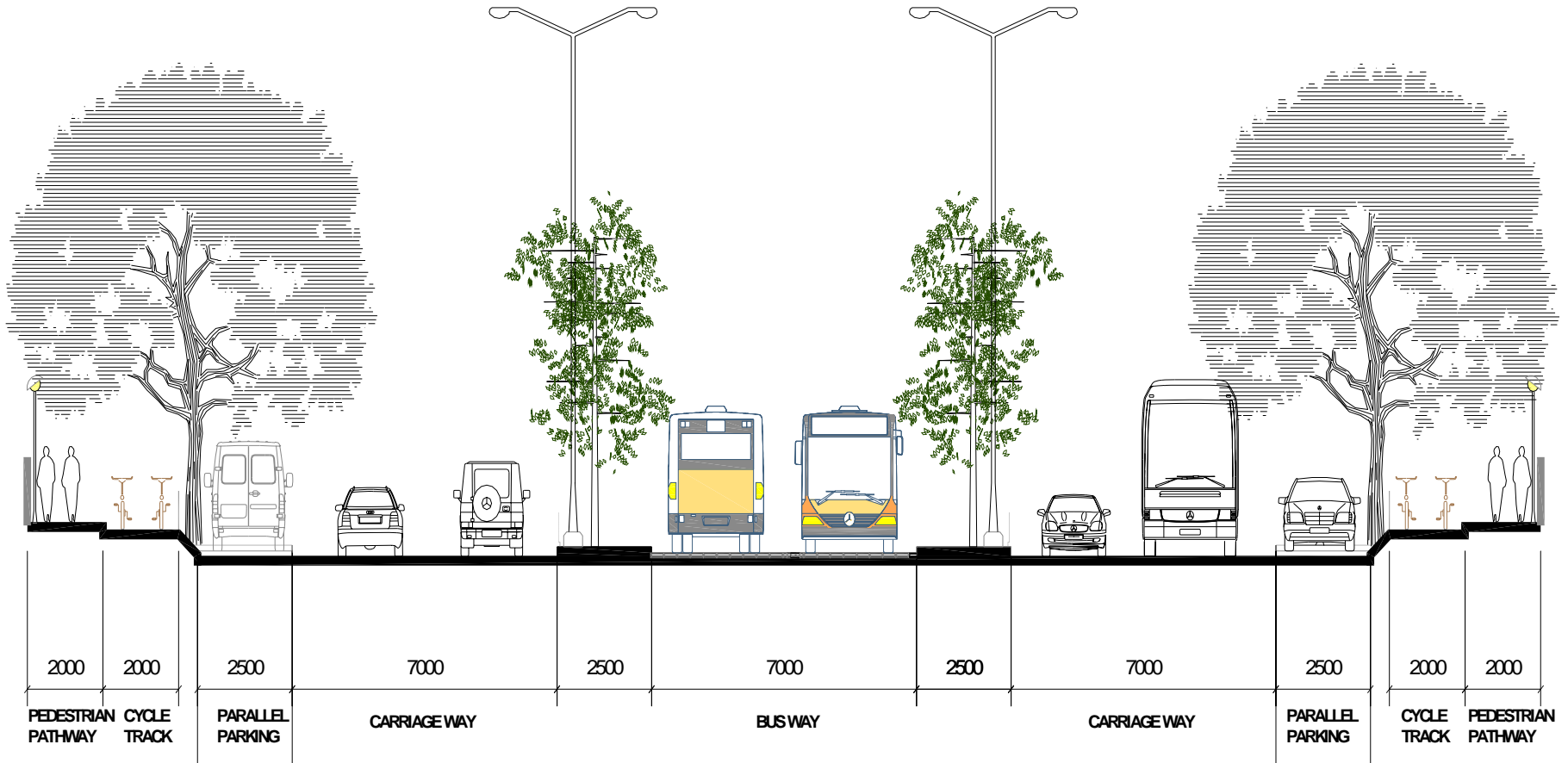
CAR VS BUS



PLAN OF INTERSECTION AT 45.0m WIDTH ROAD



TYPICAL CROSS SECTION OF BRT ROAD



River Improvement Project

(All Projects Approved by Government of India)

Project Components	Amt. (Rs. Crs.)
1) River Improvement Schemes (Environmental, Restoration. Preservation of Mula Mutha River ecosystems in Pune)	99.96
2) Preservation of lakes and nalas and improvement (augmentation of weirs, restoration of lakes bioremediation and landscaping of nalla and rivers)	97.67
3) Augmentation Up gradation of Sewage Treatment Plant and Pumping Stations in City of Pune	97.95

1) River Improvement Schemes (Environmental, Restoration. Preservation of Mula Mutha River ecosystems in Pune)

Sr.no.	Particulars	Cost in Cr.
1	Dredging work in Mutha and Mula Mutha rivers	33.70
2	Channelization in river bed	49.42
3	Lake formations in river bed	2.91
4	Retaining walls along river bank	11.97
5	Total cost	98.00
	(Miscellaneous Charges 2%)	1.96
	Total Cost	99.96

2) Preservation of lakes and nallas and improvement (augmentation of weirs, restoration of lakes bioremediation and landscaping of nalla and rivers)

Sr.no	Particulars	Cost in Cr.
1	Weirs - a) Bund Garden b) Mundhwa	10.23 12.25
2	Lake Improvement – a) Katraj b) Pashan	17.96 16.71
3	Nalla Improvement	25.86
4	Bio remediation and Landscaping – a) Nalla b) River	8.65 6.00
	Total Cost	97.67

3) Augmentation Up gradation of Sewage Treatment Plant and Pumping Stations in City of Pune

Sr.no	Name of treatment Plants	Capacity (MLD)	Cost in Cr.
1	Baner	30	10.97
2	Mundhwa	45	15.29
3	Naidu	25	27.00
4	Kharadi	40	14.23
5	Vithalwadi	32	12.99
		Total	80.48
Pumping Station and Rising Main			
1	New Kasba	1000m DI K-7	8.62
2	Topkhana	1000m DI K -7	8.85
		Total	17.47
		Grand Total	97.95



Project Salient Features – Slum Rehabilitation Project

Slum Rehabilitation Project :

Rs.660 crores

Project Components	Amt. (Rs. Crs.)
Integrated rehabilitation project for the urban poor staying in slums in dangerous locations in city of Pune	660.00

SLUMS IN PUNE

DECLARED SLUM 
UNDECLARED SLUM 



TOTAL SLUMS	- 564
DECLARED SLUMS	- 353
UNDECLARED SLUMS	- 211
THE SLUMS UNDER PROCESS OF DECLARATION	- 129
(OUT OF ABOVE 211)	

WARDWISE MAP OF PMC SHOWING

MASHAL



COMPREHENSIVE SLUM REHABILITATION PROJECT OF PMC.

- **NEED FOR PARTICIPATION**

- **REHABILITATION OF SLUMS ON BUILDABLE LANDS UNDER SRA THRO' PPP.**
- **SLUMS ON LANDS ON NON-BUILDABLE ZONES, ECOLOGIALLY DANGEROUS LOCATIONS & VITALLY REQUIRED LANDS NEEDED TO BE REHABILITATED BY PMC.**
- **SUCH SLUMS CANNOT BE REHABILITATED IN-SITU & REQUIRED TO BE EVICTED ON ACCOUNT OF DANGER, ECOLOGICAL & ENVIRONMENTAL CONCERNS.**
- **WHERE IN-SITU REHAB IS NOT POSSIBLE & LAND CANNOT BE USED AS CAPITAL/ASSET REHAB ON OTHER SITES IS NEEDED.**
- **OUTCOME OF PRIMARY SLUM SURVEY IN CITY CATEGORISES:**

SLUMS IN PUNE



DETAILS OF SLUMS IN ECOLOGICALLY SENSITIVE AREAS

- Total number of slums falling under Riverbed **5142**
- Total number of slums falling under Nallas, canals **19670**
- Total number of slums on Hill-Top Hill-Slopes **11604**
- Estimated number of slums under required vital purpose lands like roads. **3584**
- Total number of slums considered under JNNURM **40000**
- Out of the above about 14000 families have been identified under this first five projects which are staying on slum lands falling under Road widening, Hill Top Hill Slopes.
- So far projects worth **Rs.244.00Cr** have been approved by Government of India.

EPILOGUE

REHABILITATION PROGRAM FOR SLUMS IN DANGEROUS LOCATIONS IN THE CITY.

PROVIDING AFFORDABLE, SAFE, SELF-OWNED, ADEQUATE SHELTER TO URBAN POOR.

MASTER PLAN FOR INTEGRATED BASIC SERVICES & CIVIC AMENITIES.

KEEPING ECO-FRIENDLY CITY ENVIRONMENT .

PMC TO INTRODUCE LAND AS CAPITAL ASSET.

PROJECT FINANCING THROUGH JNNURM FUNDS + PMC BUDGET PROVISION + BENEFICIARIES CONTRIBUTION .

GENERATING AFFORDABLE HOUSING STOCK FOR FUTURE INFLOW OF MIGRANTS.

Funding Pattern

Capital Grants to be made available under JNNURM Framework

50% Grants from GoI	20% Grants from GoM	30% Funding from Own Sources/ Debt
<ul style="list-style-type: none"> ▪ <i>Funding proposed over the next 6 Years</i> ▪ <i>2006-07 to 2011-12</i> ▪ <i>Rs. 3197 Crores (escalated) proposed JNNURM Grant from GoI</i> 	<ul style="list-style-type: none"> ▪ <i>in the form of GoM share/ contribution in Debt raised by PMC</i> 	<ul style="list-style-type: none"> ▪ <i>own resources through reforms in functional areas</i> <ul style="list-style-type: none"> ▪ <i>Property Tax reforms/ unassessed properties</i> ▪ <i>Regular revision of user charges, improving collections</i> ▪ <i>Introduction of Sewerage Charges</i>
<ul style="list-style-type: none"> ▪ <i>Rs. 6400 Cr (escalated) proposed under JNNURM Funding</i> 		
<ul style="list-style-type: none"> ▪ <i>Revolving Fund to be created equivalent to 25% of JNNURM Funding</i> 		<ul style="list-style-type: none"> ▪ <i>Debt funding (HUDCO etc) @ 7.5% interest & 20 Year repayment period (Moratorium of 5 years)</i>

Sustainability

6122 Crores (100%)

BASE CASE

46% without JNNURM	52% with JNNURM
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IMPROVED CASE

89% without JNNURM	113 with JNNURM
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- Identified Investment of Rs. 6122 Crores (Rs. 7764 Crores – escalated cost)
- 52% Sustainability in BASE CASE (Rs. 3183 Cr)
 - Minimal growth rates
 - PT Collection Performance at 78%
 - No revision of User charges
 - User charges collection performance at 65%
 - Pay commission revisions at 15%
- 113% Sustainability in IMPROVED CASE (Rs. 6197 Cr)
 - Higher growth rates
 - PT Collection Performance at 85%
 - Identification of Unassessed properties
 - Regular revision of User charges
 - User charges collection performance improve to 90%
 - Pay commission revisions at 25%
- Creation of 25% of grant as revolving fund

Assuming Grants from GoM

% Sustainability are w.r.t to Base Cost

Reform Action Plan- Mandatory Reforms

Reforms	Remarks
Introduce accrual accounting system	Tenders have been called, expected to have Balance Sheet by March' 2007
Property tax reforms	Identification of un-assessed properties of about 1.5 lakhs and achieving the target of 85% collection during 2005-06
Levy of user charges	<p>1)Cost recovery for Water supply and UGD is already 100% in form of taxes and charges.</p> <p>2)New STPs will be constructed in the year 2006 07 and 2007 – 08. Hence the O&M cost for these STPs is going to increase. These charges will be recovered from the year 2008 – 09 by levying service charges.</p> <p>3) The total expenditure incurred on SWM will be recovered through tax in the fifth year of implementation (I.e.2009 – 10).</p>
Services for Urban Poor	Already basic services have been provided. Schools, hospitals, family welfare centres maintained by PMC mostly cater to Urban Poor
E- governance	<p>Interactive website for information on property tax dues, tenders of all depts., info. on birth and death registration is in place.</p> <p>Fully automated building permission, property tax collection through ICICI Infinity internet.</p> <p>Citizen facilitation centre for Tax Collection and issue of certificates</p>

Reform Action Plan- Optional

Reforms	Remarks
Revision of bye-laws to streamline the approval process for construction of buildings and sites	2006-07
Earmarking at least 20-25% in all housing projects for EWS and LIG	From 2009-10 (fifth year) & thereafter in phases
Revision of byelaws to make rainwater harvesting mandatory in all buildings and adoption of water conservation measures	2006-07
Byelaws for reuse of recycled water	2007-08
Administrative Reforms and adopting VRS and Structural reforms	2008-09
Public Private Partnership	In place for SWM, Octroi, Citizen facilitation Proposed for BRTS/ MRTS (2007-08)

Implementation Action Plan

- **The Current capital Implementation capacity is in range of Rs. 250 crores per annum**
- **The CDP investment will enhance this capacity to about Rs. 1000 crores an annum, in order to achieve the targets of CDP PMC Need to:**
 - **upgrade the skills of Municipal Staff and motivate to implement the Action Plan and Strategies within the time frame**
 - **prepare innovative contract management documents with quality parameters and maintenance guarantee etc.**
 - **Involve Technical Consultants to prepare DPRs**
 - **Involve Consultants for Project Management and Implementation of Reforms Action Plan**



Thank You