



JAIPUR METRO



JAIPUR



- The capital of the state of Rajasthan
- About 240 km from New Delhi

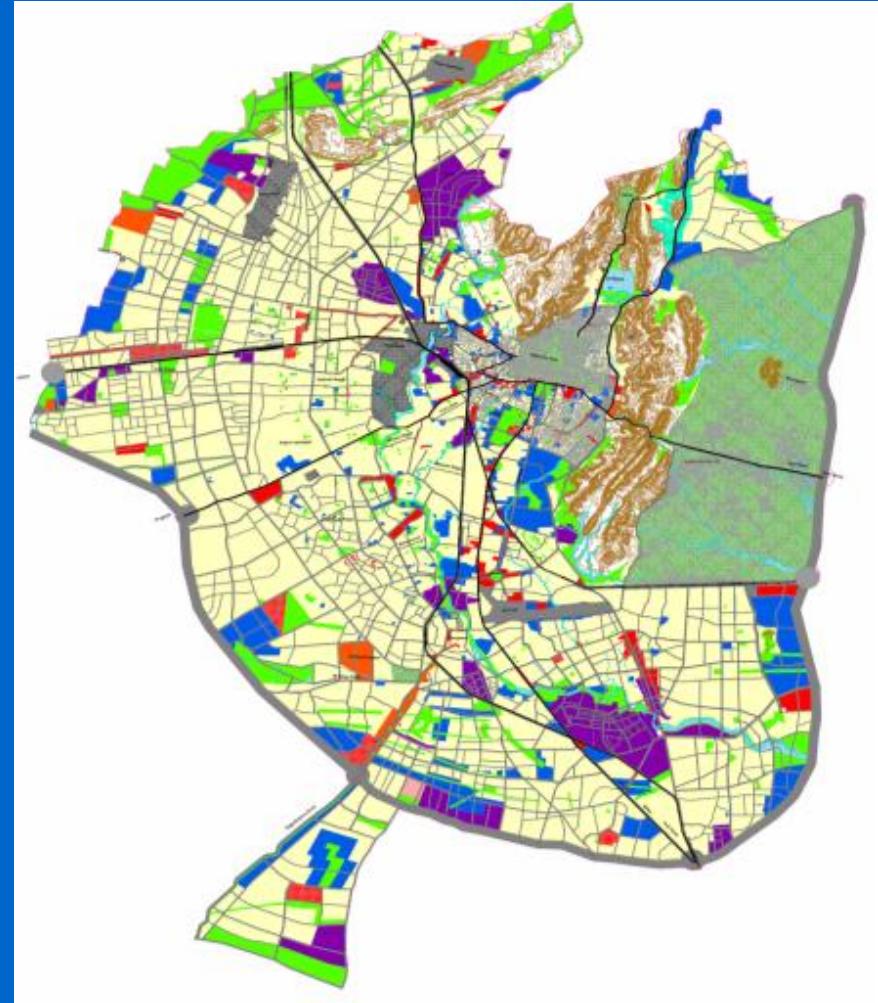
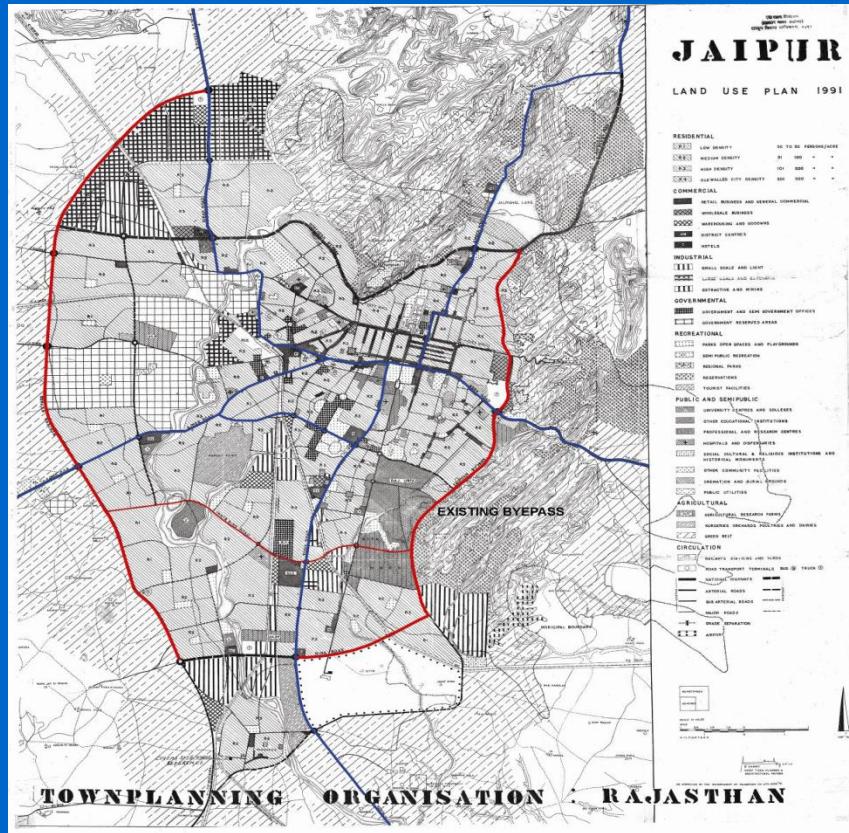


About Jaipur

- A bustling metropolis of 3.1 million people
- Tourism hub
 - One of the most popular tourist destination of India
 - A part of the Golden Triangle of Tourism in India comprising Jaipur-Delhi-Agra
 - A robust tourism infrastructure of hotels
- Industrial hub
 - IT based industries
 - Gems and Jewellery, Textiles, Carpets
 - Handicrafts like Blue Pottery, Sculptures, Handmade papers
 - Has two Special Economic Zones
- Institutional hub
 - Engineering, Management and Medical Institutes
- Exposition hub
 - Conferences and Seminars
 - Trade Fairs
- Well connected by Air, Rail and Road
 - International Airport
 - On the NH-8 connecting Delhi and Mumbai



EXPONENTIAL GROWTH OF THE CITY

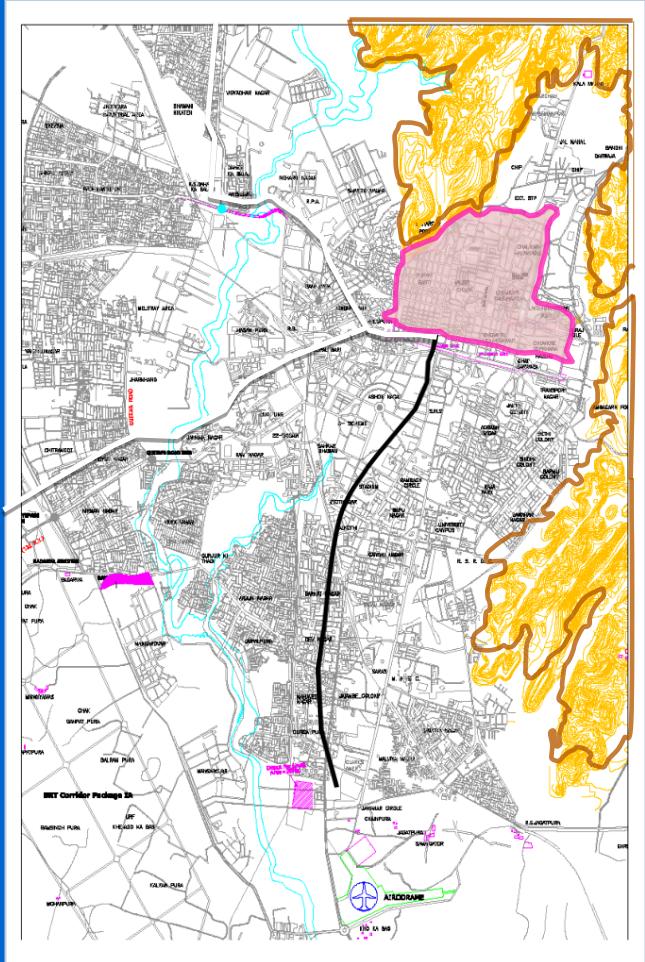


JAIPUR MASTER PLAN – 1991 AN AREA OF ABOUT 200 SQ KMS

JAIPUR MASTER PLAN – 2025 COVERING AN AREA OF ABOUT 3000 SQ KMS



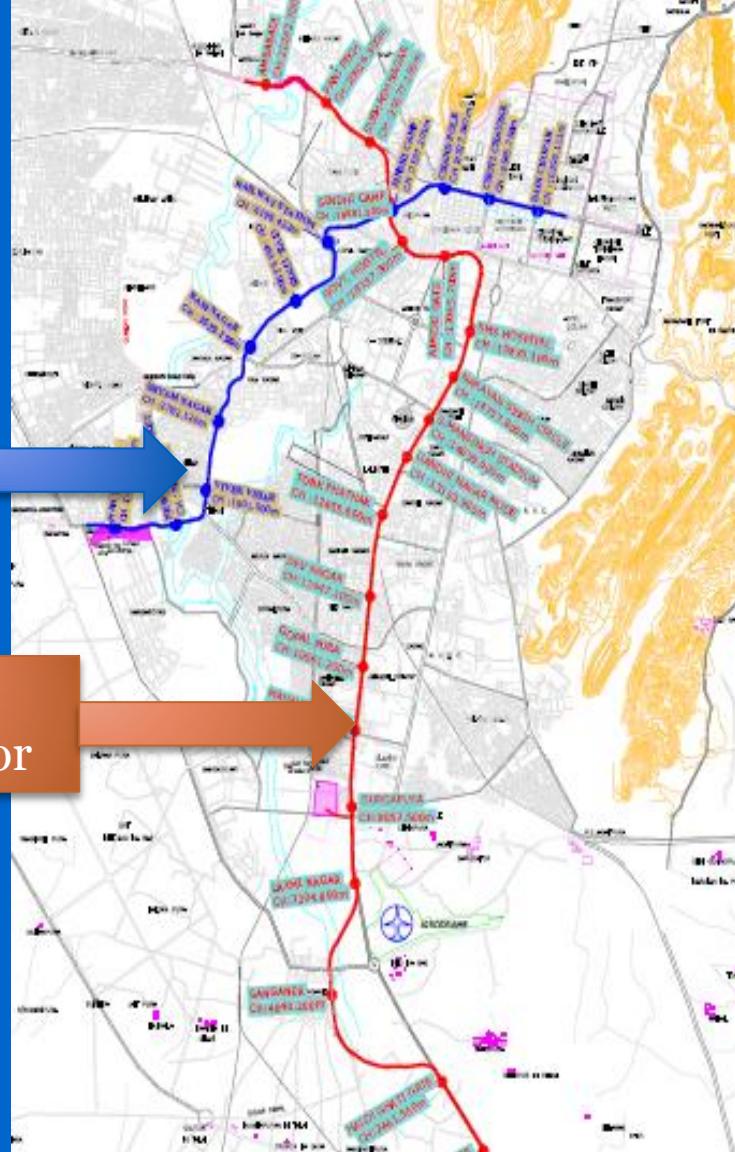
Jaipur Metro route



Jaipur is restricted on two sides by mountain ranges and has grown along three arterial roads

E-W
Corridor

N-S
Corridor



Routes of the Jaipur Metro planned along the major arterial roads



Key Features of East West Corridor (Phase - I)

- 12.067 kms
- Elevated from Mansarovar to Chandpole
- Underground from Chandpole to Badi Chaupar
- 8 elevated and 3 underground stations
 - Mansarovar
 - New Aatish Market
 - Vivek Vihar
 - Shyam Nagar
 - Ram Nagar
 - Civil Lines
 - Metro Railway Station
 - Sindhi Camp Station
 - Chand Pole
 - Choti Chaupar
 - Badi Chaupar

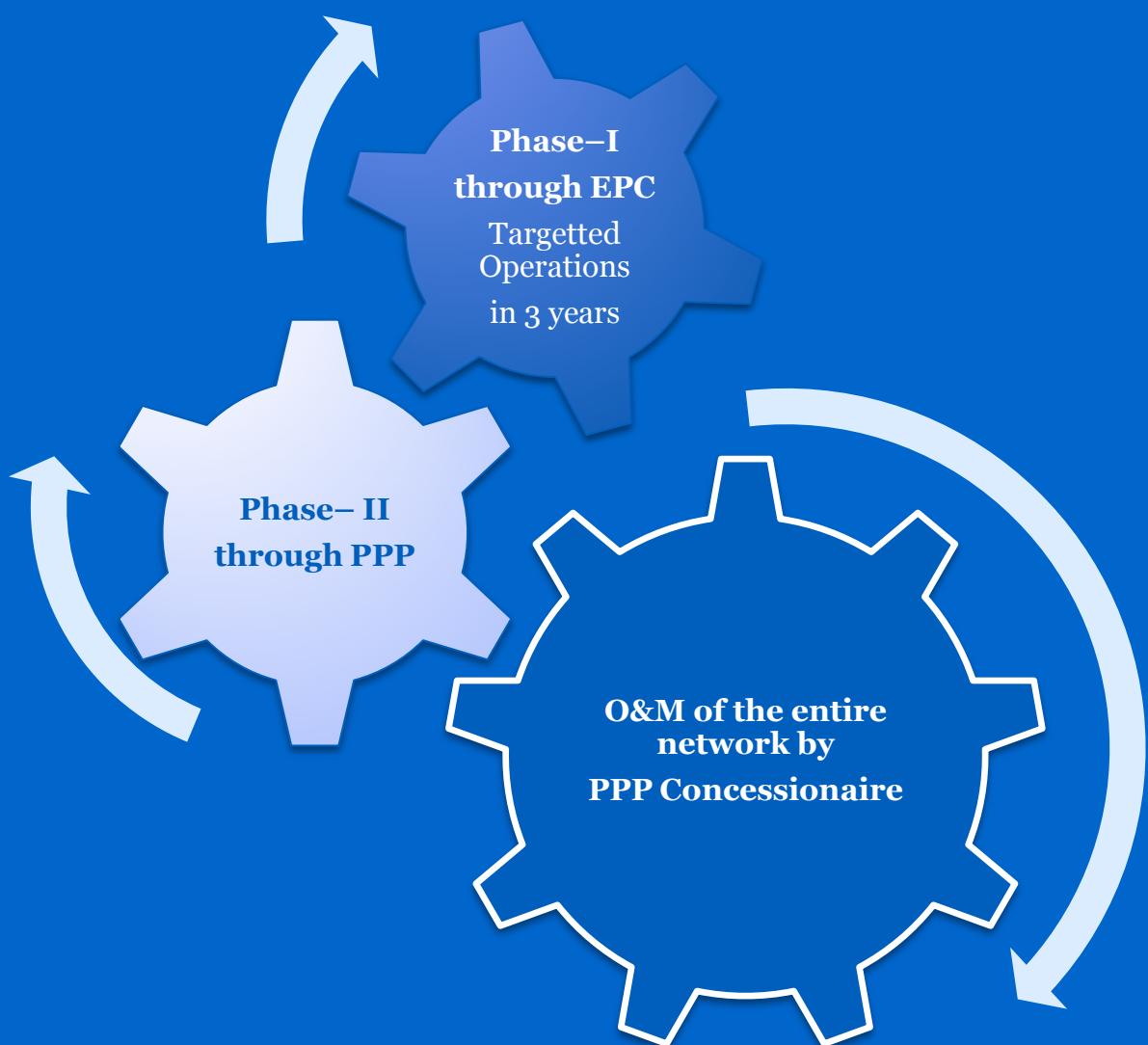


Key Features Of North South Corridor (Phase - II)

- 23. 099 kms length
 - 15 elevated and 5 underground stations
 - Elevated Section from Ambabari to Pani Petch
 - Underground from Pani Petch to Ajmeri Gate
 - Elevated from Ajmeri Gate to Sitapura
-
- Sitapura
 - Pratap Nagar
 - Haldi Ghati Gate
 - Sanganer
 - Laxmi Nagar
 - Durgapura
 - Mahaveer Nagar
 - Gopalpura
 - Dev Nagar
 - Tonk Phatak
 - Gandhi Nagar Mod
 - SMS Stadium
 - Narain Singh Circle
 - SMS Hospital
 - Ajmeri Gate
 - Government Hostel
 - Sindhi Camp Station
 - Subash Nagar
 - Pani Petch
 - Ambabari



Unique Hybrid Project Structure



- Phase I on Engineering Procurement, Contracting (EPC) mode to kick-start the project and forego the procedural delays of a PPP project
- Phase II on Public Private Partnership (PPP) Mode
- Phase I and Phase II to integrate into joint operations



JAIPUR METRO RAIL PROJECT

Phase I

(EPC Mode)

EAST WEST (A) CORRIDOR
UNDER IMPLEMENTATION

CIVIL WORK
60% COMPLETE

ROLLING STOCK,
S&T, AFC ETC.
ORDERED

Operation & Maintenance of EW Corridor for 5 years
with own manpower

Phase II

(PPP Mode)

NORTH SOUTH
CORRIDOR

PRELIMINARY
WORK UNDER
PROGRESS

ENTIRE SCOPE

PPP

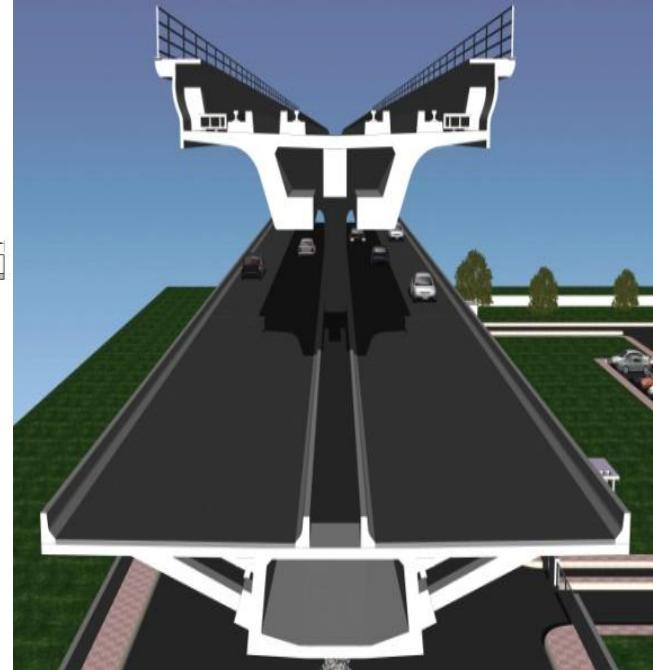
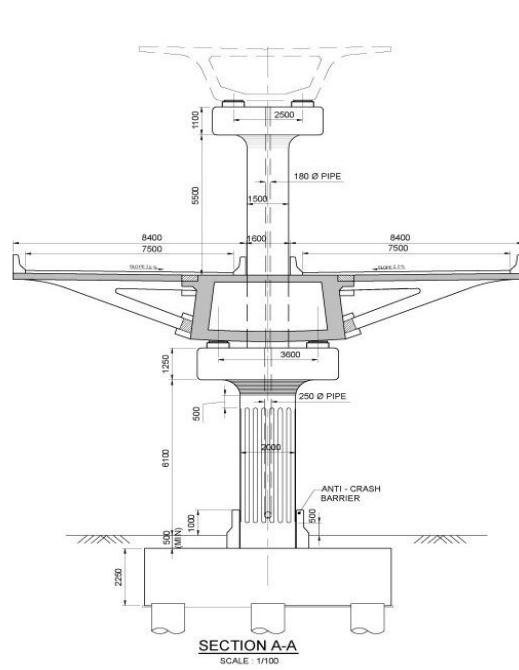
Operation & Maintenance for approx.30 years
(PPP Mode)

PROJECT COST

(at April 2011 Price level)

- CAPITAL COST OF PHASE - I (EW CORRIDOR):- USD 572 million
- CAPITAL COST OF PHASE - II (NS CORRIDOR):- USD 1197 million
- Total Project Cost :- USD 1769 million
estimated @ USD 1=INR 55



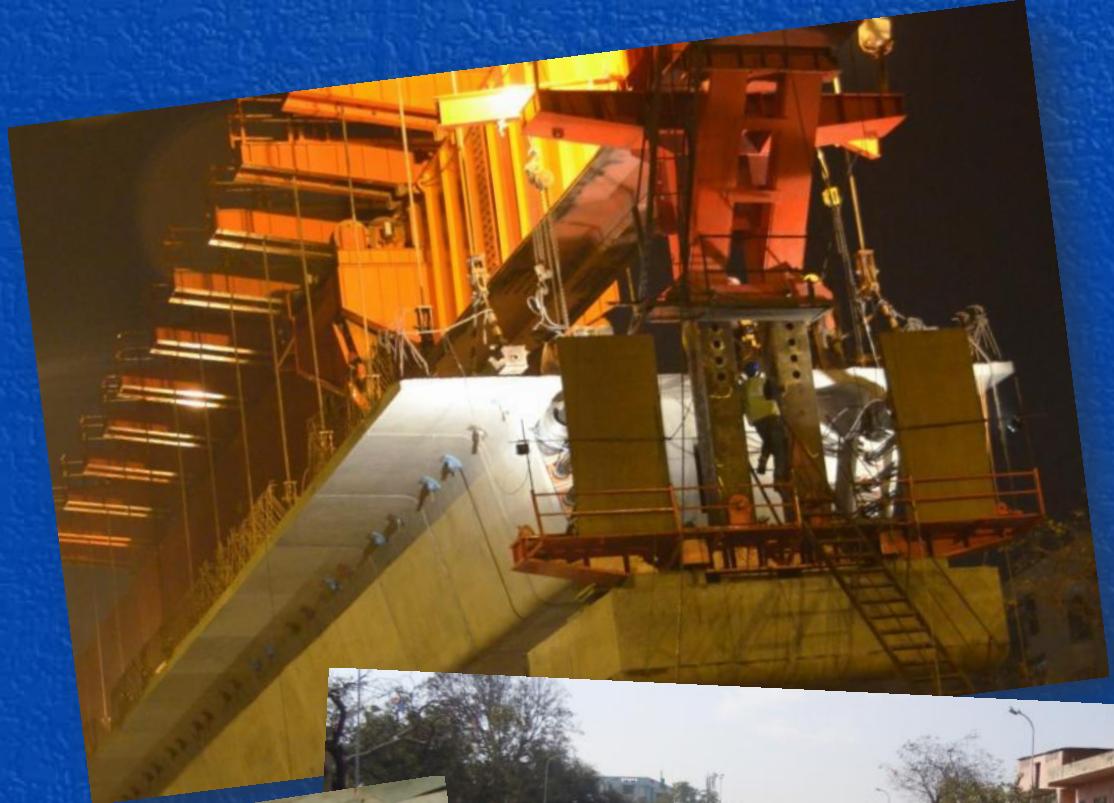


**A PICTORIAL VIEW OF PROPOSED MULTILEVEL
STRUCTURE TO ACCOMMODATE REGULAR TRAFFIC WITH
BRTS AND METRO**



Progress Phase - I

24x7 work



Over 60 % Civil Work completed



Phase - I

- Work Order for Rolling Stock placed
- Work Order for S&T, AFC placed
- Recruitment of manpower underway



Progress Phase - II

- PPP Consultants
 - General & Technical Consultant – Mott MacDonald
 - Financial Consultant – Deloitte Touche Tohmatsu
 - Legal Consultant – Luthra & Luthra Law Offices
- RFQ issued for PPP Concessionaire
- Four Applicants qualified (out of five applications):
 - Reliance Infrastructure Limited
 - Gammon Infrastructure – Iridium Concessions
 - Soma – ICF
 - Essar Projects – Samsung CNT



- RFP is under preparation with following annexures:
 - Draft Manual of Standards & Specifications (MSS) prepared
 - Financial Model being prepared by Deloitte Touche Tohmatsu
 - Technical Schedules, other than MSS are being prepared with assistance from Mott MacDonald
 - Draft Concession Agreement (DCA) is being prepared



Rapid & Cost Effective Implementation

One of the fastest metro projects being
implemented worldwide



Key Processes for rapid implementation

- Policy Level
 - Firm political commitment
 - Initial Support to the Project by budgetary finance to pre-empt delays; followed by other revenue generation measures
 - Kickstart the project with a unique project structure and concurrently attracting partners for the second phase
 - Integration of Development authority and metro rail corporation for day to day coordination
 - Selection of strong implementation agency cutting the procedural aspects - DMRC
 - Ability to adapt to unforeseen obstacles
- Operational Level
 - Parallel Land acquisition and Civil Works
 - Robust Relief & Rehabilitation Mechanism
 - Speedy acquisition of land by negotiations
 - Support of Traffic Control Board
 - Parallel processing of civil works, rolling stock and S&T works
 - Steering Committee for inter-departmental coordination and transfer of government lands of various agencies



Key strategies for rapid implementation

- Technical Level
 - Use of Standard Design Protocols implemented in recent past in similar projects
 - Use of Supply lines of existing contracts for other similar projects
 - Alignment on medians of major roads so as to minimise land acquisitions
- Organisational Level
 - Lean and thin organisation enabling quicker decisions
 - Sourcing manpower from various regulatory agencies to coordinate with issues related to those agencies during implementation
 - Common leadership at the Urban Development Department and Local Authority Level
 - Strong Legal team to address legal issues



Financing

- Dedicated Metro Fund: Sources of finance for the fund :
 - Betterment levy for Premium FAR along the two corridors.
 - Additional taxes/cess/duties/levies by the State Government e.g Green Cess etc.
 - Revenue from sale/lease of land along and beyond the corridor.
 - Revenues from advertisements, parking and other related sources.
- Financing from Multilateral agencies
- Grants/ Equity from Government of India and Government of Rajasthan/agencies of Government of Rajasthan



Challenges ahead

- Integration of EPC Phase with PPP Phase
 - Integration of O&M of both the phases
 - Integration of Systems of both the phases
- Financial Issues
 - Market Borrowings & Debt Servicing
 - Consolidation of the Dedicated Metro Fund
 - Self Sustainability
- Urban Integration Issues
 - Transit Oriented Development
 - Heritage related issues
 - Multimodal Integration
- Streamlined R&R policy
- Public Sensitisation
 - Increased Ridership
- Skilled Manpower
- Timely Implementation and avoiding cost over-runs
- Processes involved in seeking GoI support and funds



THANK YOU.....



FUNDING PATTERN OF PHASE - I

Source of fund	USD Million
Government of Rajasthan and its Entities as equity/grant	89
Government of India as Equity/Grant	89
Subordinate debt from GoI (50% of the central taxes & duties)	25
Subordinate debt and land from GoR (50% of the central taxes & duties & cost of land)	44
Additional Grant by GoR	40
Loans from JICA/Institutions /Banks	285
Total	572

