

Report No: ISR3685

Last Modified Date: 15-Jun-2011

Status: ARCHIVED

# Implementation Status & Results India Mumbai Urban Transport Project (P050668)

mullibal orball fransport i roject (i 030000)

Operation Name: Mumbai Urban Transport Project (P050668) Project Stage: Implementation Seq.No: 19

Country: India Approval FY: 2002

Product Line: IBRD/IDA Region: SOUTH ASIA Lending Instrument: Specific Investment Loan

Implementing Agency(ies): Mumbai Railway Vikas Corporation, Mumbai Metropolitan Region Development Authority

## **Key Dates**

Board Approval Date	18-Jun-2002	Original Closing Date 30-Jun-2008	Planned Mid Term Review Date	Last Archived ISR Date 27-May-2011
Effectiveness Date	06-Nov-2002	Revised Closing Date 15-Jun-2011	Actual Mid Term Review Date	

## **Project Development Objectives**

Project Development Objective (from Project Appraisal Document)

### No change in PDO. Change in PDO Indicators

Has the Project Development Objective been changed since Board Approval of the Project?

# Component(s)

Component Name	Component Cost
RAIL TRANSPORT COMPONENT	654.27
ROAD-BASED TRANSPORT COMPONENT	183.02
RESETTLEMENT AND REHABILITATION COMPONENT.	100.08
PPF REPAYMENT	3.00

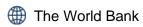
# **Overall Ratings**

	Previous Rating	Current Rating
Progress towards achievement of PDO	Moderately Satisfactory	Moderately Satisfactory
Overall Implementation Progress (IP)	Moderately Satisfactory	Moderately Satisfactory
Overall Risk Rating		

# **Implementation Status Overview**

This ISR is the result of a full implementation support mission carried out during January 31 - February 11, 2011 and partial implementation support mission during May 23-28, 2011.

The benefits of the project are already visible especially for rail component, Resettlement & Rehabilitation (R&R), Bus component, Jogeshwari Vikhroli Link Road (JVLR) and Area Traffic Control (ATC). The rail capacity has been significantly increased and the overcrowding decreased. Improvement in transport service in terms of quality and comfort is also

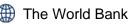


noticed as a result of the replacement of 644 old buses. The quasi totality of the people and shops to be displaced has been relocated in a satisfactory manner. The JVLR is now carrying large number of users. The new traffic signal system under ATC has already reduced delays at junctions. The regional strategic transport Plan TRANSFORM is serving as basis for the development program that Mumbai Metropolitan Region Development Authority (MMRDA) has started to implement.

The overall disbursement is 98.73% for IDA and 77.05% for IBRD. Most of the activities are expected to be completed by June 15, 2011. The major works which are not likely to be completed by June 15, 2011 are Santacruz Chembur Link Road (SCLR), Some works on JVLR especially of road safety, few cases of land acquisition and R & R, the completion of post-resettlement support activities followed with formal handing over of resettlement colonies to Municipal Corporation of Greater Mumbai (MCGM), procurement of Railway new bogies, some of the civil works in Virar Car Shed and few locations of traffic signals under ATC. While most of these works have a good possibility of getting completed in next few months, the completion of SCLR, remaining land acquisition and R & R in a time bound manner remains uncertain and it may take more than one and a half years to get completed.

#### Results

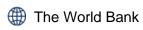
Indicator		Baseline	Current	End Target
Indicator Name		Value	Value	Value
To reduce peak hour overcrowding - average loads in trains reduced		4500 to 5400	4016	about 3700
		Date	Date	Date
		15-Feb-2002	09-Jun-2011	15-Jun-2011
ype Unit of Measure		Comment	Comment	Comment
Custom Indicator	Text		Target partially achieved. Despite the increase in train services, the reduction in overcrowding has not been completely achieved due to the increase in number of passengers.	
dicator		Baseline	Current	End Target
ndicator Name		Value	Value	Value
o reduce working ra come) for suburbar	atio (costs excluding depreciaition and interest/	0.88	0.88	0.85
icome, for suburbur	Trailway services	Date	Date	Date
		15-Feb-2002	09-Jun-2011	15-Jun-2011
уре	Unit of Measure	Comment	Comment	Comment
Custom Indicator	Text		Target not achieved. The non reduction of working ratio results from the absence of any change in fare in last several years and significant increase in operating cost during the project implementation period.	



Indicator Baseline Current **End Target** Indicator Name Value Value Value To increase peak hour average frequency of suburban train services 13 16.1 16 Date Date Date 15-Feb-2002 09-Jun-2011 15-Jun-2011 Unit of Measure Comment Type Comment Comment **Custom Indicator** Text Target achieved. More trains put in service. Indicator Baseline Current **End Target** Indicator Name Value Value Value To reduce journey times on JVLR 29 min 30 min 24 min Date Date Date 15-Feb-2002 31-Jan-2011 15-Jun-2011 Type Unit of Measure Comment Comment Comment **Custom Indicator** Text Target not achieved. The works are still going on along the JVLR whilst traffic volume has substantially increased during the project implementation period. Indicator Baseline Current **End Target** Indicator Name Value Value Value To increase cost recovery of bus services (income/cost) < 90% 73.6% >100% Date Date Date 15-Feb-2002 31-Jan-2011 15-Jun-2011 Type Unit of Measure Comment Comment Comment **Custom Indicator** Text Target not achieved. The value is for year 2009-10 and it is low because establishment cost increased on account of increase in dearness allowance to employees and increased Voluntary Retirement Scheme payments due to reduction of 530 staff positions. As per the budget estimate document, it is expected that the target will be 85% for 2010-11.



Indicator Baseline Current **End Target** Indicator Name Value Value Value To increase percentage of PAH living in houses of at least 225 sq feet 9% 98% 100% Date Date Date 15-Feb-2002 31-Jan-2011 15-Jun-2011 Unit of Measure Comment Comment Type Comment **Custom Indicator** Text Target essentially achieved. Few cases still not completed Indicator Baseline Current **End Target** Indicator Name Value Value Value To reduce journey time on SCLR 20 min 38 min 16 min Date Date Date 15-Feb-2002 31-Jan-2011 15-Jun-2011 Comment Type Unit of Measure Comment Comment **Custom Indicator** Text Target not achieved. As the work is still in progress, the current time is through alternate route Indicator Current **End Target** Baseline Indicator Name Value Value Value To increase the technical capacity in MCGM to manage traffic as per No Traffic Management Unit (TMU) Review completed by MCGM TMU completely staffed and the modified MCGM act. in MCGM functional of its own Date Date Date 31-Jan-2010 14-Dec-2001 15-Jun-2011 Type Unit of Measure Comment Comment Comment Target essentially achieved. The **Custom Indicator** Text technical capacity increased



Indicator		Baseline	Current	End Target	
Indicator Name		Value	Value	Value	
		Project R&R unit created with few staff in MMRDA.  Date  14-Dec-2001	New position of Chief (R&R) created in MMRDA Livelihood cell established in MMRDA for resettled people	Reasonably well functional R&R division in MMRDA with procedures in place. Various implementation procedures	
Type Unit of Measure  Custom Indicator Text		Comment	MMRDA continues to manageR&R implementation for non-MUTP projects Date 31-Jan-2010 Comment Target achieved.	adopted for non-MUTP projects.  Date  15-Jun-2011  Comment	
Indicator		Baseline	Current	End Target	
Indicator Name  To reduce incidence and severity of pedestrian road traffic accidents		Value 100.00 Date 21-May-2002	Value	Value 90.00 Date 15-Jun-2011	
Туре	Unit of Measure	Comment	Comment	Comment	
Custom Indicator	Percentage		Target not achieved. During the project restructuring this component substantially reduced to only two pedestrian crossings which have been completed. This number was 30 as per the PAD.		
Indicator		Baseline	Current	End Target	
Indicator Name To increase train availability at peak		Value 91.00 Date 21-May-2002	Value 91.50 Date 09-Jun-2011	Value 94.00 Date 15-Jun-2011	
Туре	Unit of Measure	Comment	Comment	Comment	
Custom Indicator	Percentage		Target not achieved. Some of the old train sets are still operating in the system requiring more maintenance. The value should improve once these old train sets are replaced.		

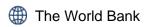


Indicator Baseline Current **End Target** Indicator Name Value Value Value To reduce delays at ATC controlled junctions 617 pcu hrs/hour (phase I) Avg 23.4% reduction in delays in Reduction by 25% pc hours/hour 2900 pc hrs/hour (phase 2) the new adaptive traffic control Date system for the 116 intersections Date 15-Jun-2011 already functioning (total delay: morning peak, off peak and Unit of Measure Type Comment evening peak) Comment **Custom Indicator** Text Date 09-Jun-2011 Comment Target essentially achieved. Indicator Baseline Current **End Target** Indicator Name Value Value Value To increase the technical capacity of transport planning, road **Limited Capacity** Transport planning and road Fully functional Transport Planning maintenance and road safety safety: technical capacity section with trained staff in Date increased: 15 qualified full time transportation planning and road 21-May-2002 professionals and technical safety. Road maintenance study Unit of Measure assistance consultancy in place. recommendations implemented Type Comment Road Maintenance Management Custom Indicator Text Date System installation and training in progress Comment Date 09-Jun-2011 Comment Target partially achieved. Indicator Baseline Current **End Target** Indicator Name Value Value Value To increase % of PAH having access to individual tap water and toilets 1.00 98.00 100.00 Date Date Date 21-May-2002 31-Jan-2010 15-Jun-2011 Unit of Measure Type Comment Comment Comment **Custom Indicator** Target essentially achieved. Few Percentage cases are still not completed.



End Target Indicator Baseline Current Indicator Name Value Value Value To strengthen the ambient air quality monitoring and reporting system No reliable reports Study on air quality monitoring Plan implemented as per study completed recommendations Date Date Date 21-May-2002 31-Jan-2010 15-Jun-2011 Unit of Measure Type Comment Comment Comment **Custom Indicator** Text Target partially completed. The study completed and implementation in progress.

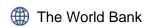
Indicator		Baseline	Current	End Target
Indicator Name		Value	Value	Value
Complete DC to AC conversion in the suburban railway system (line km)		Nil	645	645
		Date	Date	Date
		15-Feb-2002	09-Jun-2011	15-Jun-2011
Type Unit of Measure  Custom Indicator Text		Comment	Comment	Comment
			of it	
Indicator		Baseline	Current	End Target
Indicator Name		Value	Value	Value
Increase size of train	n fleet	200 x 9 car rakes	285 x 9 car rakes	251 x 9
		Date	Date	Date
		15-Feb-2002	09-Jun-2011	15-Jun-2011
Туре	Unit of Measure	Comment	Comment	Comment
Custom Indicator	Text		Target exceeded. More train sets procured.	



Indicator Baseline Current **End Target** Indicator Name Value Value Value Increase in number of dual voltage trains Nil 196 179 Date Date Date 15-Feb-2002 09-Jun-2011 15-Jun-2011 Unit of Measure Comment Comment Type Comment **Custom Indicator** Text Target exceeded. More train sets procured. Indicator Baseline Current **End Target** Indicator Name Value Value Value Increased length of suburban railway tracks (line km) Nil 93 kms added 93 kms to be added Date Date Date 15-May-2000 09-Jun-2011 15-Jun-2011 Type Unit of Measure Comment Comment Comment **Custom Indicator** Text Target achieved. Indicator Baseline Current **End Target** Indicator Name Value Value Value Increase length of urban arterial roads 0 lane km 43 lane km 45 lane km Date Date Date 15-Feb-2002 09-Jun-2011 15-Jun-2011 Unit of Measure Type Comment Comment Comment **Custom Indicator** target essentially achieved. Work Text is in progress Indicator Baseline Current **End Target** Indicator Name Value Value Value Construct new pedestrian grade seperators schemes 0 2 schemes implemented 2 schemes implemented Date Date Date 15-Feb-2002 09-Jun-2011 15-Jun-2011 Unit of Measure Type Comment Comment Comment **Custom Indicator** Target achieved. Text



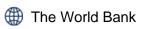
Indicator Baseline Current **End Target** Indicator Name Value Value Value Equip Area Traffic Control in about 250 junctions 0 junctions 217 + 33 junctions 250 junctions Date Date Date 15-Feb-2002 09-Jun-2011 15-Jun-2011 Unit of Measure Comment Comment Type Comment **Custom Indicator** Text Target essentially achieved. 217 junctions equipped with adaptive mode which are operational (53 in milestone 1 and 164 in milestone 33 junctions have beeninstalled under fixed time mode and in operation. 3 junctions are under calibration (currently working on fixed mode). Indicator Baseline Current **End Target** Indicator Name Value Value Value Procure new low emission, user friendly buses for Mumbai under the 0 644 644 project Date Date Date 15-Feb-2002 31-Jan-2010 15-Jun-2011 Unit of Measure Type Comment Comment Comment **Custom Indicator** Text Target achieved. Indicator Baseline Current **End Target** Indicator Name Value Value Value Provide permanent houses/shops with adequate amenities to the 400 19420 families permanently 2,071 commercial shops and project affected households 17,420 families permanently rerehoused Date housed (revised) Date 30-Aug-2002 Date 31-Jan-2011 Unit of Measure Type Comment 15-Jun-2011 Comment **Custom Indicator** Text Comment Target essentially achieved. Few cases are still not completed.



Indicator		Baseline	Current	End Target
Indicator Name		Value	Value	Value
Ensure that housing	societies are registered and functioning	0	181 societies registered so far	188 societies functioning
		Date	Date	Date
		15-Feb-2002	31-Jan-2011	15-Jun-2011
Туре	Unit of Measure	Comment	Comment	Comment
Custom Indicator	Text		Target essentially achieved. Few cases are still not completed.	
Indicator		Baseline	Current	End Target
Indicator Name		Value	Value	Value
Improve signaling and telecom systems for the suburban railways		0.00	3.00	3.00
systems		Date	Date	Date
		21-May-2002	09-Jun-2011	15-Jun-2011
Туре	Unit of Measure	Comment	Comment	Comment
Custom Indicator	Number		Target achieved.	
Indicator		Baseline	Current	End Target
Indicator Name		Value	Value	Value
Construct new maint	Construct new maintenance facility for suburban train fleet		7.00	8.00
		Date	Date	Date
		21-May-2002	09-Jun-2011	15-Jun-2011
Туре	Unit of Measure	Comment	Comment	Comment
Custom Indicator	Number		Target essentially achieved. The work at 8th upgradation at Virar Car Shed is in advanced stage of completion	
Indicator		Baseline	Current	End Target
Indicator Name		Value	Value	Value
Increase technical capacity through implementation of the results of 12 studies		0 Date	11 studies undertaken and results completed	11 studies undertaken and results completed
		21-May-2002	Date	Date
Туре	Unit of Measure	Comment	09-Jun-2011	15-Jun-2011
Custom Indicator	Text		Comment	Comment
			Target achieved.	



Indicator Baseline Current **End Target** Indicator Name Value Value Value Implement separate accounting and financial management systems 0 Separate systems for MRVC Separate systems for MRVC established for MRVC established established Date Date Date 21-May-2002 09-Jun-2011 15-Jun-2011 Unit of Measure Type Comment Comment Comment **Custom Indicator** Text Target achieved. Indicator Baseline Current **End Target** Indicator Name Value Value Value Develop annual business plan for BEST No annual Business Plan Final report submitted; Business Business Plan developed as part of plan developed and utilized annual budget process Date Date Date 21-May-2002 31-Jan-2010 15-Jun-2011 Type Unit of Measure Comment Comment Comment **Custom Indicator** Text Target achieved. Indicator Baseline Current **End Target** Indicator Name Value Value Value Establish satisfactory maintenance management system in MCGM by No management systems in Road maintenance management System established 2005 **MCGM** system under use by MCGM. Date Training in progress. Date 15-Jun-2011 Date 21-May-2002 Type Unit of Measure Comment 09-Jun-2011 Comment **Custom Indicator** Text Comment Target essentially achieved. Baseline **End Target** Indicator Current Indicator Name Value Value Value Upgrade CTS in MMRDA Nil CTS upgraded CTS upgraded Date Date Date 21-May-2002 31-Jan-2010 15-Jun-2011 Type Unit of Measure Comment Comment Comment **Custom Indicator** Text Target achieved.



Indicator Baseline Current **End Target** Indicator Name Value Value Value Implement MMRDA communication strategy Strategy does not exist Strategy implemented Strategy implemented Date Date Date 21-May-2002 31-Jan-2011 15-Jun-2011 Unit of Measure Type Comment Comment Comment **Custom Indicator** Text Target achieved.

# Data on Financial Performance (as of 14-Jun-2011)

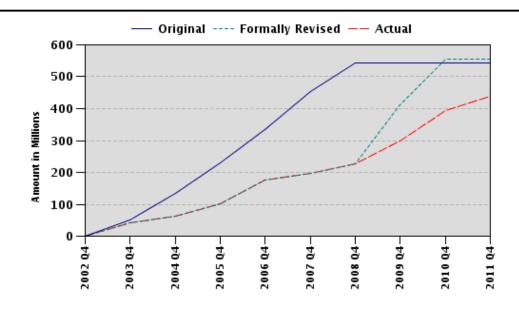
## Financial Agreement(s) Key Dates

Project	Loan No.	Status	Approval Date	Signing Date	Effectiveness Date	Closing Date
P050668	IBRD-46650	Closed	18-Jun-2002	05-Aug-2002	06-Nov-2002	15-Jun-2011
P050668	IDA-36620	Closed	18-Jun-2002	05-Aug-2002	06-Nov-2002	15-Jun-2011

## **Disbursements (in Millions)**

Project	Loan No.	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P050668	IBRD-46650	Closed	USD	463.00	461.30	1.70	355.41	105.89	77.00
P050668	IDA-36620	Closed	USD	79.00	70.82	8.18	82.89	1.17	117.00

## **Disbursement Graph**





**Key Decisions Regarding Implementation** 

The loan is closing on June 15, 2011 and this will be the last ISR update.

# **Restructuring History**

Board Approved on 30-Sep-2008, Level two Approved on 29-Apr-2011

# **Related Projects**