

### Cost Benefit Analysis (CBA)

Ahmedabad – Gandhinagar Metro rail project is being promoted with the objective of providing safe, fast and eco-friendly transportation services to the public at affordable rates while simultaneously reducing the congestion on the roads. The metro rail project will promote integration with AMTS, BRTS, Railways and other modes of public transit system. Metro Rail will provide safe, fast and eco-friendly rail-based mass transit services to the public at affordable rates while simultaneously catalysing dense and orderly urban growth.

The growing demand for public transport in mega cities has serious effects on urban ecosystems, especially due to the increased atmospheric pollution and changes in land use patterns. An ecologically sustainable urban transport system could be obtained by an appropriate mix of alternative modes of transport resulting in the use of environmentally friendly fuels and land use patterns. The introduction of CNG in certain vehicles and switching of some portion of the transport demand to the metro rail have resulted in a significant reduction of atmospheric pollution in Ahmedabad-Gandhinagar.

Sr. No.	Parameters	Metro Rail & strength
1	Increase in productivity attributable to specific project	<p>The Ahmedabad Gandhinagar Metro provides multiple productivity:</p> <ol style="list-style-type: none"><li>1. reduction in air pollution, time saving to passengers, reduction in accidents, reduction in traffic congestion and fuel savings. There are incremental benefits and costs to a number of economic agents: government, private transporters, passengers, general public and unskilled labour.</li><li>2. The social cost-benefit analysis of Ahmedabad-Gandhinagar Metro encompasses to measure all these benefits and costs from Phase I (39.259 km) and Phase II (40.593 km) projects covering a total distance of about 81 kms in Ahmedabad-Gandhinagar. Estimates of the social benefits and costs of the project are obtained using the recently estimated shadow prices of investment, foreign exchange and unskilled labour as well as the social time preference rate for the Indian economy for a study commissioned by the Planning Commission, Government of India and done at the Institute of Economic Growth. The financial internal rate of return on investments in the Metro is estimated as 17 percent while the economic rate of return is 24 percent. Accounting for benefits from the reduction of urban air pollution due to the Metro has increased the economic rate of return by 1.4 percent.</li></ol>

PLACE- GANDHINAGAR  
DATE - 30.11.21

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Sr. No.	Parameters	Metro Rail & strength
2	Benefits to economy	Very much as Transportation plays an important role in development of industries and for people to speeds up growth in overall economy
3	No. of population benefited	Entire Gujarat in general and the district in particular
4	Employment potential	2000-man days approx.
5	Cost of Acquisition of facility on non-forest land wherever feasible	Not applicable
6	Loss of (a) Agricultural and (b) Animal Husbandry production due to diversion of forest land	Not applicable
7	Cost of rehabilitation of the displaced persons as different from compensatory amounts given for displacement	No displacement and hence no rehabilitation (C2 Pkg, Phase -II)
8	Cost of supply for free fuel-wood to workers residing in or near forest area during the period of construction	Not applicable

For, Gujarat Metro Rail Corporation (GMRC) Ltd.,



Authorised Signatory

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