The Mumbai Trans – Harbour Link:
Summary of Travel Time Savings and Benefits, as per the 2004 Report by MSRDC:

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This report is the latest one prepared by MSRDC, based on which they had called for bids. The data in this has not been revised since, and is summarized below:

The Mumbai Trans Harbour Link (MTHL) is proposed to be developed as an Expressway link with a six lane dual carriageway road bridge connecting Sewri on the Mumbai side with Nhava on Navi Mumbai side. The MTHL is proposed to commence at grade from the east side of Sewri Railway Station on the Harbour Line of Central Railway, proceed to Timber Pond Depot along Sewri Container Depot and terminate at the north of Chirle Village near Nhava through an interchange to National Highway 4B on the mainland.

Phase I of the MTHL would be a six- lane (28m wide), 22 km road link from Sewri in Mumbai to Nhava in Navi Mumbai.

Benefits of the MTHL:

The benefits of this project comprise direct benefits associated with usage of the Trans Harbour Link as well as indirect benefits arising out of contribution towards economic development. The direct benefits are:

1. The MTHL will provide shorter, high speed, unrestricted and direct connectivity between the Island City and the Mainland.
2. When completed, the MTHL will reduce the distance between the above by 15 kms.
3. This will result in savings in Vehicle Operating Cost (VOC), both due to reduction in distance as well as reduced levels of congestion.
4. Travel time between the Island City and Mainland will reduce by 50 minutes
5. It will accelerate growth in the area under MTHL influence, resulting in new traffic generation
6. It will strengthen the connectivity between Mumbai Port and industrial areas located in the southern section of the Island City with JNPT, NH4B and the Mumbai – Pune Expressway, thereby improving logistics and turnaround time for commuters.

The indirect benefits of the MTHL will be:

1 Increase in demand for land and improvement in land prices due to improved accessibility in the influence zone
2 Accelerated economic development of Navi Mumbai and nearby regions
3 Dispersal of population from Mumbai Island to Navi Mumbai, thereby resulting in appreciation in property values in Navi Mumbai

4 Faster and shorter connectivity for traffic bound for Goa, Pune and the South, resulting in greater economic integration
5 Environmental improvement and reduced pollution levels
6 Improved safety due to reduction in accidents
7 Improvement in trade and trade competitiveness through faster and improved logistics

Benefit to stakeholders:

The key beneficiaries of the project, apart from the commuters, will be Mumbai Port Trust, JNPT, MMRDA, CIDCO, Navi Mumbai SEZ, MIDC, Navi Mumbai Municipal Corporation and industries in the hinterland.

Decongestion:

It is estimated that nearly 750 trucks originating / destined to JNPT will use the MTHL daily in the first year itself. Likewise, about 3000 trucks originating from Mumbai Port Trust (from Dockyard, Masjid & Port areas) will use MTHL daily in the year 2011.
Better and speedy access and reduced turnaround times will contribute to additional traffic for the two ports in their hinterland.

Catalytic Role:

MTHL will also play a catalytic role in boosting the development of Navi Mumbai as it will improve connectivity with Greater Mumbai, resulting in appreciation of land value and associated revenue realization for CIDCO.

Employment Growth:

For the State Government, based on normative parameters, a project of this magnitude can generate direct employment of 17,000 during the construction (assuming construction cost of Rs. 26,000 mn and considering a norm of 1 job created per 1.5mn investment). By adopting the same norms, the project is also likely to generate indirect employment of 17,000 during the construction period.

Likewise, the capital in circulation during the operation period would generate further direct and indirect employment over the project life time.

GDP Contribution:

The above, when added to the quantified value of savings in Vehicle Operating Cost and Value of Time saving as given below, could potentially result in a contribution ranging from 0.17% to 0.35% of the Net State Domestic Product (NSDP) of Maharashtra

Time and Cost Savings:

The estimated time and Vehicle Operating Cost (VOC) savings for the whole transport network system in the influence area of the MTHL is estimated at Rs. 7,960. million in 2011. The time and VOC benefits estimated for various horizon years are given below.

Year	Estimated Savings (Rs. Million)
2011	7, 960
2021	17, 600
2031	29, 310

The above savings result in an Economic Internal Rate of Return (EIRR) of 26% on the project

(The components of Fuel Savings and VOC Savings are given at the end of the document)

Growth Dispersal:

Further, the influence zone of the project could cover and extend to the following geographical areas (over 100 sq. kms influence area) covering a total population and workinhg population of over 12 million and 3.5 million respectively.

- Greater Mumbai
- Navi Mumbai
- Alibaug, Panvel, Pune and Goa
- Golden triangle comprising of Mumbai – Pune – Nashik

The spin- offs of this project will be felt across a wider area, as discussed above, thereby contributing to economic development in a significant way.

Components of Fuel savings:

Cars

OD pair	Distance Savings (Kms)	Fuel savings (Rs)		Toll Savings (Rs)	Total (Rs)
		Due to Distance savings	Due to Speed differential		
NH4 Jn-Sewri	14.4	30.9	4.9	40	75.8
Panvel-Sewri	6.6	14.2	6.0	40	60.2
Nhava-Sewri	15.3	32.8	4.7	40	77.5
Nhava-Sion	9.9	21.8	4.8	20	46.6

Trucks

OD pair	Distance Savings (Kms)	Fuel savings (Rs)		Toll Savings (Rs)	Total (Rs)
		Due to Distance savings	Due to Speed differential		
NH4 Jn-Sewri	14.4	66.9	17.9	78.0	162.8
Panvel-Sewri	6.6	30.7	21.4	78.0	130.0
Nhava-Sewri	15.3	71.1	16.9	78.0	165.9
Nhava-Sion	9.9	48.0	17.0	38.0	103.0

Buses

OD pair	Distance Savings (Kms)	Fuel savings (Rs)		Toll Savings (Rs)	Total (Rs)
		Due to Distance savings	Due to Speed differential		
NH4 Jn-Sewri	14.4	84.4	43.2	78.0	205.7
Panvel-Sewri	6.6	38.7	49.1	78.0	165.7
Nhava-Sewri	15.3	89.7	39.8	78.0	207.5
Nhava-Sion	9.9	61.4	40.1	38.0	139.5

Components of VOC savings

Cars

OD pair	Distance Savings (Kms)	VOC Savings (Rs)		Toll Savings (Rs)	Total (Rs)
		Due to Distance savings	Due to Speed differential		
NH4 Jn-Sewri	14.4	99.5	50.5	40	190.0
Panvel-Sewri	6.6	45.9	54.6	40	140.4
Nhava-Sewri	15.3	106.6	44.8	40	191.4
Nhava-Sion	9.85	70.6	46.1	20	136.7

Trucks

OD pair	Distance Savings (Kms)	VOC Savings (Rs)		Toll Savings (Rs)	Total (Rs)
		Due to Distance savings	Due to Speed differential		
NH4 Jn-Sewri	14.4	176.2	78.8	78	333.0
Panvel-Sewri	6.6	81.2	86.8	78	246.0
Nhava-Sewri	15.3	188.9	70.1	78	337.0
Nhava-Sion	9.85	125.3	72.7	39	237.0

Buses

OD pair	Distance Savings (Kms)	VOC Savings (Rs)		Toll Savings (Rs)	Total (Rs)
		Due to Distance savings	Due to Speed differential		
NH4 Jn-Sewri	14.4	181.7	102.2	78	361.8
Panvel-Sewri	6.6	83.9	112.5	78	274.3
Nhava-Sewri	15.3	195.2	90.9	78	364.1
Nhava-Sion	9.85	130.5	94.2	39	263.7