



Northrail Project:

Spurring development in *North and Central* Luzon

Instead of being a facilitator of growth and development, Luzon's old railway system is regarded as a symbol of urban blight, poverty and government indifference. The country forgoes a lot of development opportunities because of its outdated and poorly-maintained rail line. Government hopes to correct this.

Diffusing growth and development through a new rail system

The Northrail hopes to spread the benefits of growth to Central and Northern Luzon by providing a fast, safe, efficient and reliable mass transport service for people and goods to and from Metro Manila. It will help achieve government's goal of decongesting Metro Manila, create new centers of development, and develop Clark and Subic as a competitive international service and logistics hub in East Asia.

The project is divided into four Phases; Phase 1 covers Caloocan to Malolos (Section 1) and Malolos to Clark (Section 2); Phase 2 is the branch line to Subic; Phase 3 is extension to Fort Bonifacio; and Phase 4 is extension to San Fernando in La Union.

The whole length of the track will be fenced to allow the line to operate smoothly. After the

project is completed, the trains will run at an average speed of 50 km/hr. Aside from transporting people, it can likewise carry heavy cargo, thus helping extend the lifespan of roads. It will also provide an important link to the sprawling Diosdado Macapagal International Airport in Clark as well as the port and airport in Subic.

The US\$503 million Northrail Project Phase 1 Section 1 shall reconstruct and convert the existing 32.2 km single track line into a double track using the long abandoned PNR line between Caloocan City up to Malolos City in Bulacan. It shall also construct six stations, acquire lands for areas where existing tracks are narrow, divert utilities, procure 21 four-car train sets and provide a train control and signaling system. Distances between the stations are: Caloocan to Valenzuela at 4.3 km, Valenzuela to Marilao at 6.9 km, Marilao to Bocaue at 4.9 km, Bocaue to Guiguinto at 9.2 km, and Guiguinto to Malolos at 6.2 km. Once completed, operation and maintenance will be bid out to a contractor.

Investment Costs	Supplier's Credit		Borrowed Equity		Total US\$
	% of Total Cost	Cost in US\$	% of Total	Cost in US\$	
Civil and Track Works	95%	266.85	5%	14.04	280.90
Right of Way (Land Acquisition and Utilities Diversion)	95%	16.63	5%	0.88	17.50
Signaling and Communications	95%	28.35	5%	1.49	29.84
Rolling Stock	95%	83.40	5%	4.39	87.79
Other costs (Project Management, Taxes and Others)	0%	-	100%	87.02	87.02
Total	79%	395.22	21%	107.82	503.04

Table 1: Breakdown of estimated total cost of Northrail Phase 1 Section 1

As of February 2008, temporary offices for the contractor have been completed. Construction drawings for the 21.30 km embankment and retaining wall structures have also been approved, while designs for road crossings, stations, bridges and viaducts are currently being revised in accordance with project requirements.

Northrail Project Phase 1 Section 2, on the other hand, is a 48-km, double track rail line between Malolos to Clark, Pampanga. It also involves the construction of double track line and five rail stations, procurement of 41-four car train sets, acquire right of way (ROW), as well as develop signaling, communications and ticketing systems.

Costs and Benefits

On the financing side, 79 percent of Section 1 was funded by China while the rest were sourced from commercial borrowings. BCDA's North Luzon Railway Corporation (NLRC) manages the project. The China National Machinery and Equipment Corporation Group (CNMEG), meanwhile, is the official conduit of Chinese funds. Loan interest is only at 3 percent, with a 20-year repayment inclusive of 5-year grace period.

The Chinese offer does not require clearing of right-of-way before loan signing, thus giving government the opportunity to pursue the project while facilitating right-of-way clearance and resettlement of informal settlers. The Japanese funding required at least 50 percent of the ROW before loan signing which procedurally cannot be done since a loan agreement is required before the release of funds for ROW acquisition.

Some call the project overpriced, but they fail to note that Northrail is a double-line track system built over the existing Luzon rail system. This is the first time that such a track system will be built in the country. Hence, there is value for money. Also, compared with MRT-3, the cost-per-track kilometer is much cheaper. MRT-3 costs US\$20.9 million while Northrail only costs US\$6.54 million.

Government expects to earn about PhP2 billion from Phase 1 Section 1 after completion, based on an NLRC estimate of 164,745 passengers a day with an average fare of PhP33.70. Boarding fee is set at PhP10, with an additional PhP 1 per kilometer of travel.

Meanwhile, ChinaEXIM Bank has already allocated US\$500 million for Section 2, with the loan agreement signed on January 15, 2007. The Development Bank of the Philippines has also committed a US\$90 million loan for the local counterpart fund, as well as miscellaneous costs for Sections 1 and 2. The NLRC is still complying with

Rail system	Heavy rail, surface type
Number of tracks	Double track system throughout
Traction power system	Diesel
Track gauge	Narrow gauge
Rail system design	Inter-urban commuter service
Train control and signaling	Semi-automatic
	Central traffic control
	Moving block system and continuous vehicle detection and data gathering capability
	With automatic train protection feature
	With signaling system that will permit inter-working among airport, interurban and Metro service

Table 2: Technical specifications of Phase 1 Section 1

preconditions to loan drawdown for Section 2. The NHA is also facilitating works related to the relocation of affected families.

Relocation for affected families

To facilitate upgrading of Luzon's rail line, government is helping relocate the roughly 40,000 families living along the tracks. The relocation project, funded by the Philippine government, is touted as the biggest and most expensive relocation project of the Philippine government to date. The National Housing Authority (NHA), in partnership with local governments, serves as overseer.

Affected families will build their own houses through an interest-free loan, which covers expenses on construction materials, labor and food. The Department of Budget and Management has so far released over PhP5 billion to finance the relocation.

Strengthening RP-China ties

Being China's first major undertaking of its kind in Southeast Asia, Northrail is expected to boost economic and diplomatic relations between the Philippines and the emerging superpower.

Chinese mainland is now the third biggest trading partner of the Philippines. If trade with Hong Kong and Taiwan is included, this makes the whole of China as the country's biggest partner. In Asean, the Philippines is the Chinese mainland's fourth biggest trading partner. Tourism between the two countries has likewise grown significantly over the past five years.¹

¹ http://www.chinadaily.com.cn/bizchina/2008-01/25/content_6421890.htm