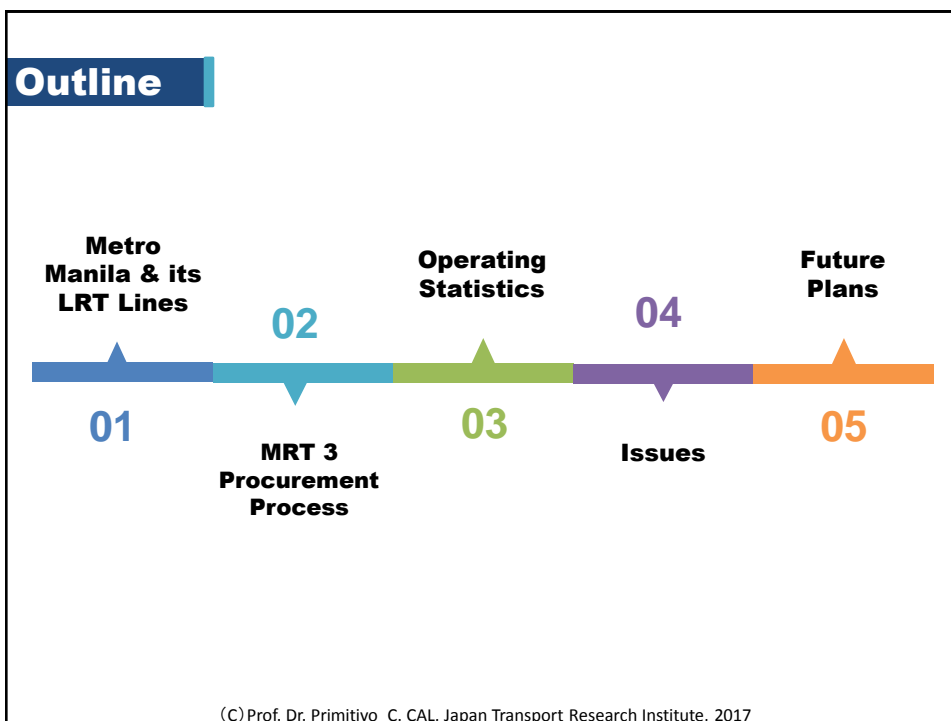


# Metro Rail Transit 3: A Case Study on PPP

**PRIMITIVO C. CAL, PH.D.**  
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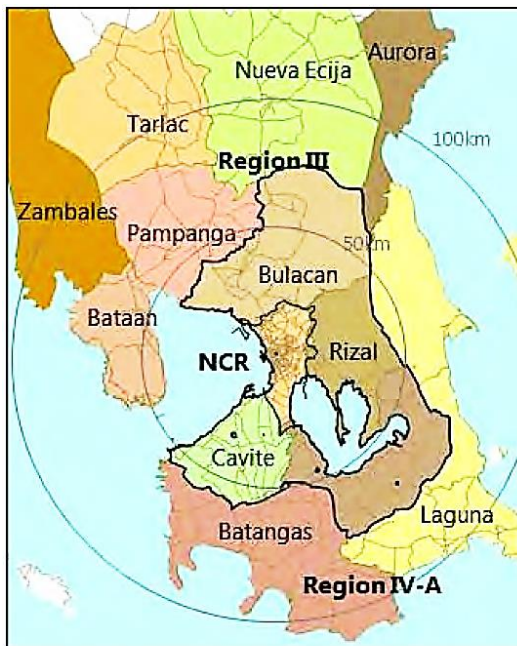
Presented at JTRI Symposium, Tokyo, 20 February 2017

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## Study Area

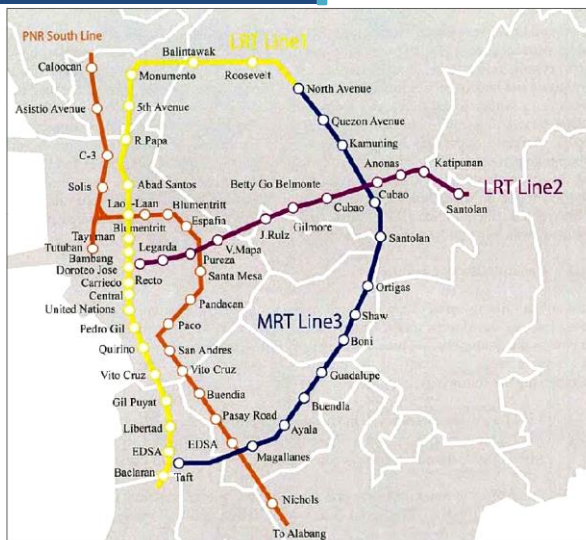
Item		Metro Manila	
Area	Sq Km	620	
	% of Total Phils.	0.2	
Population	In Thousands	11,856	
	% of Total Phils.	12.8	
	Ave. Growth Rate (2000-2010: %)	1.79	
GRDP	PhP Billion (2011: current)	3,460	
	% of Total Phils.	35.8	
	% by Sector	Primary	0.5
		Secondary	17.0
Tertiary		82.5	



Source: JICA Study Team.

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## Existing Rail Network in Metro Manila



Source: RTID, 2014

Source: High Standard Highway Network Development in the Republic of the Philippines. JICA-DPWH, 2010 (as taken from LRTA website).

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### Main Features of the Existing Urban Rails in Metro Manila

Item	Line 1	Line 2	Line 3
Structure Type	Elevated track w/ PC-I beams	Elevated PC concrete box girder	Elevated & underground track with PC-I beams
Route Length	13.9 kms+5km (north loop)	13.52 kms	16.9 kms
No. of Stations	20	11	13
Capacity	1,358 pax / train	1,628 pax / train	1,182 pax / train
Max Speed	60 kph	80 kph	65 kph
Scheduled Speed	38 kph	32.8 kph	30 kph
Fare	Distance-wise; min PHP12; max PHP20	Distance-wise; min PHP12; max PHP15	Distance-wise; min PHP10; max PHP15
Travel Time	27.5 minutes	30 minutes	30 minutes
Headway	112 sec. after Capex 2 projects	Min. 1.5 minutes	Min. 3 minutes
Cost (USD Mil)	USD375, or USD25 per km (PHP3.5 billion as of 1982)	USD850 or USD61.6 per km	USD698 or USD41.3 per km

Source: Preparatory Study for LRT Line 2 Ext. Project, JICA-LRTA, 2011; Updates for Line 3 from 2012 Metro Rail Transit Index.

Source: RTID, 2014

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## Two Modes of PPP

- Build Operate & Transfer & its Variants, pursuant to Republic Act No. 6957, as amended by Republic Act No. 7718
- Joint Venture, pursuant to Executive Order No. 423, dated 30 April 2005

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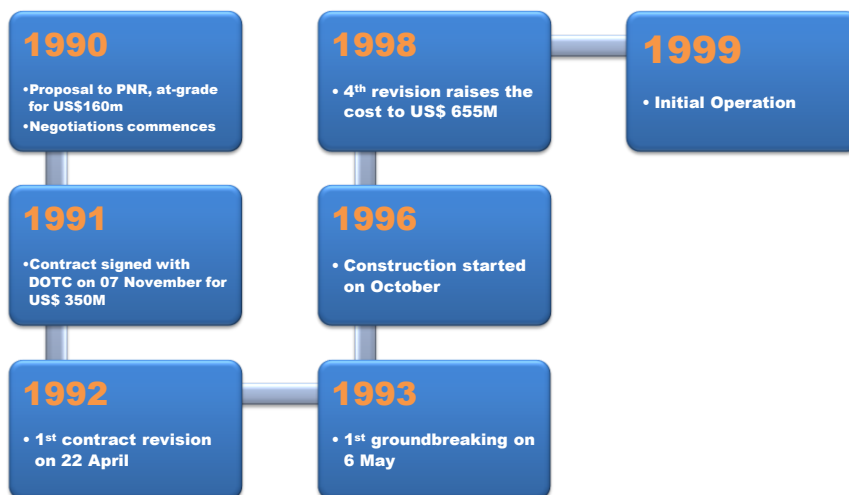
## BOT Variant Adopted

### Build-Lease & Transfer (BLT):

- **The project proponent finances and builds the infrastructure facility**
- **Upon completion, the project proponent turns over to the government agency concerned under a lease arrangement for a fixed period**
- **After the lease period, ownership of the facility is automatically transferred to the agency concerned.**

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## Chronology of Events to Start of Operation



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## Selection of Concessionaire

# 1990

**November: Preliminary negotiations between PNR and EDSA LRT 3 consortium**

# 1991

**February – March: Advertisement of invitation to bid, with deadline for submission of prequalification documents set to 1 April 1991 (25days)**

**Five submitted PreQ documents:**

- **ABB Trazione**
- **Hopewell Holdings LTD**
- **Marsteel International Corp**
- **Mitsui and Co. Ltd with GEC Alsthom**
- **EDSA LRT Consortium**

**May 9, 1991: DOTC PBAC disqualified ALL, except EDSA LRT Consortium**

**Contract signed 7 Nov 1991, revised on 28 Nov 1991, 27 Dec 1991, 9 Jan 1992, 28 February 1992, 22 April 1992, 06 May 1993, etc**

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## MRT 3 BLT Terms and Conditions

- **Concessionaire to lease the facility to the DOTC (now DoTr) for a period of 25 years, extendible for another 25 years before its ownership is transferred to the DoTr**
- **Concessionaire to be responsible for repair and maintenance**
- **Government to pay rental to the concessionaire**

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## Risks Allocation

**Risk = any activity, event or action which tends to cause a negative impact to the planned goals of project scope, quality, performance, execution time, or cost**

TYPE OF RISKS	CONSORTIUM	GOVERNMENT
<b>Market (ridership) – revenue sources and stability</b>	<b>None, because of the B-L-T scheme; can earn extra from property developments</b>	<b>DOTC as operator absorbs market as well as common carrier risks</b>
<b>Completion risk or project execution delay</b>	<b>Performance bond of US\$ 15 million, plus penalty</b>	<b>Was lenient in effective date of start</b>
<b>Foreign Exchange</b>	<b>Minimal</b>	<b>Repatriation assurance as well as payment in US \$ values</b>
<b>Financing Guarantees</b>	<b>Added assurance of revolving Letter of Credit for \$50m</b>	<b>Loans were guaranteed by the government</b>
<b>Technical standards</b>	<b>Provided the technical specs of LRVs, and can change the same</b>	<b>DOTC can object to changes within 14 days of notice</b>

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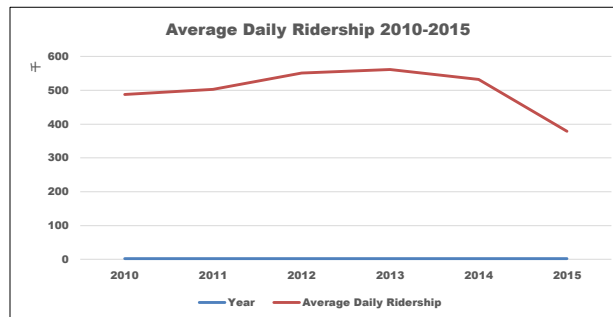
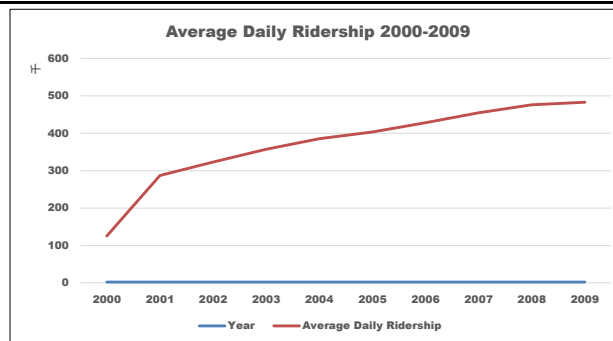
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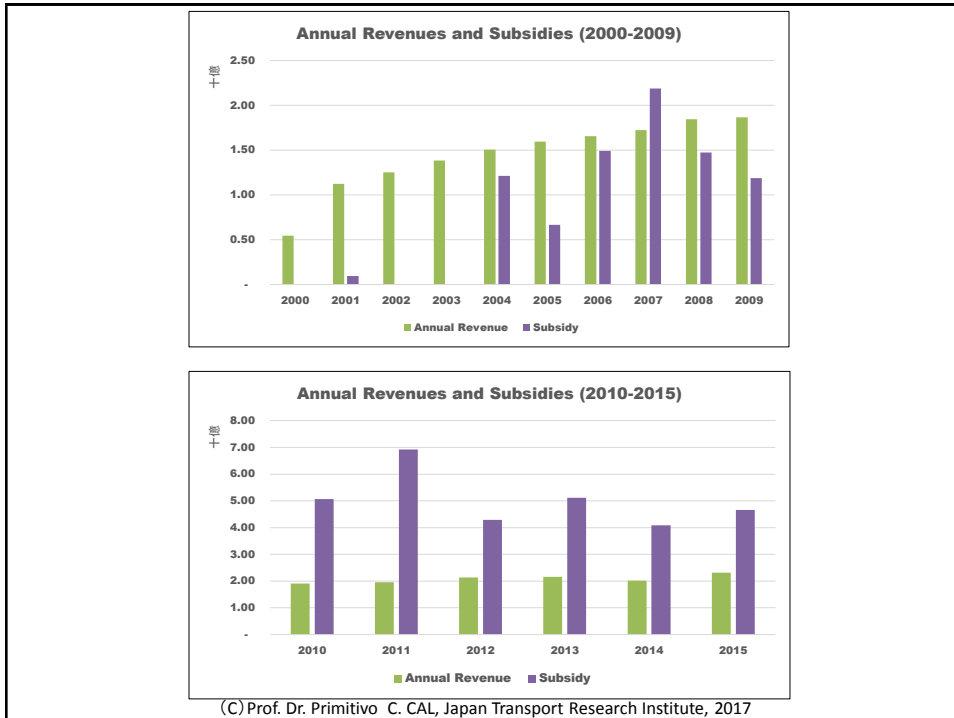
## Fares

<b>MRT3</b>	<b>P1.65/km</b>
<b>Bus (No air conditioner)</b>	<b>P1.90/km</b>
<b>Bus (With air conditioner)</b>	<b>P2.26/km</b>

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## Existing Contractual Dispute

- **Concessionaire has filed an arbitration case before the SIAC**
- **In the meantime, the government has taken over repair and maintenance responsibility**

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## Future Plans

- **An upgrade of the system is proposed at a cost of \$170 Million**

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## Metro Rail Transit III: A Case Study on PFIs

**Thank you!**

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