



# Railways Sector Market Engagement

Projects and Contracts Pipeline,  
Financing, How to Participate

MAP CEO Academy Webinar  
31 May 2021

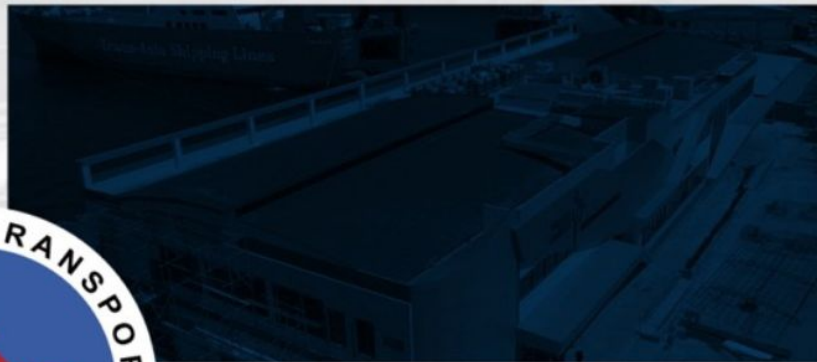


**BCDA**  
Bases Conversion and  
Development Authority

# BUKID

# BUKID BUKID

The Duterte Administration's  
Infrastructure Plan



# DEPARTMENT OF TRANSPORTATION



# Php 1,277 billion

(24.8 billion USD)

Annual Direct Economic Cost  
of Congestion in Greater Capital Region as of 2017

**Php 16,534 billion**

USD 343.45 billion

PHL GDP (2019) = 7%

**1,022,009**

Public School Classrooms

**Php 489.24 billion**

USD 10.16 billion

PHL FDI (2019) = 240%

**2,150**

Provincial Hospitals

**Php 16,705 billion**

USD 347.53 billion

PSE Market Cap (Dec 2019) = 10%

**4.3 million**

Irrigated Land (has.)

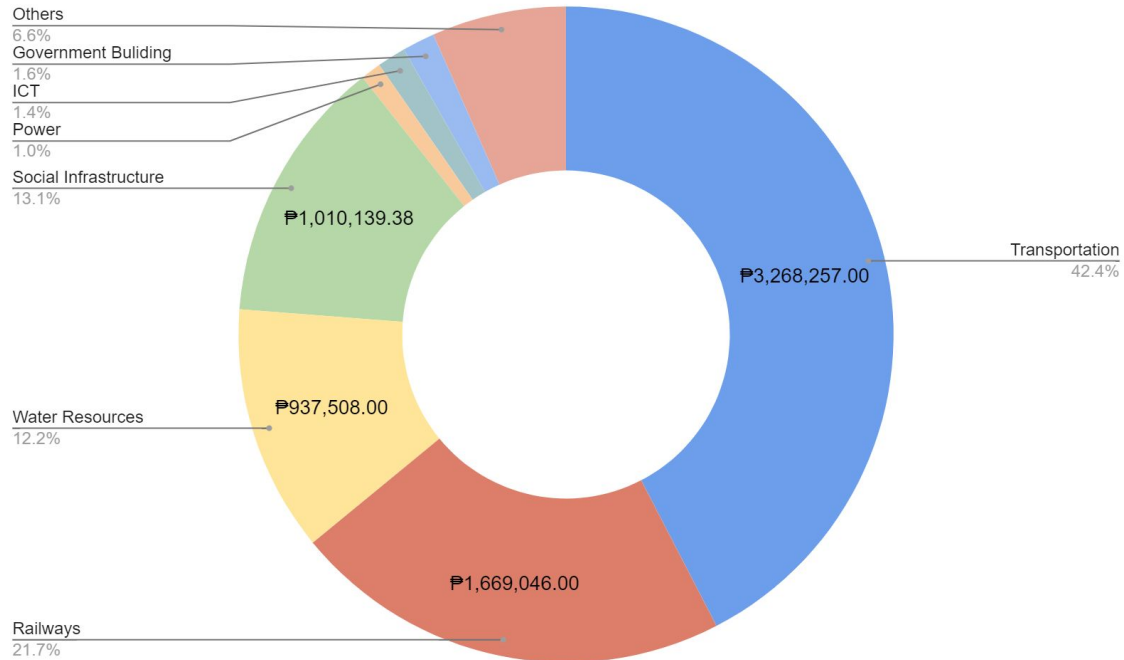


**BUILD BUILD BUILD**

# Php 7.74 Trillion

(USD 160.17 billion)

Infrastructure Programs and Projects under the Build Build Build Program



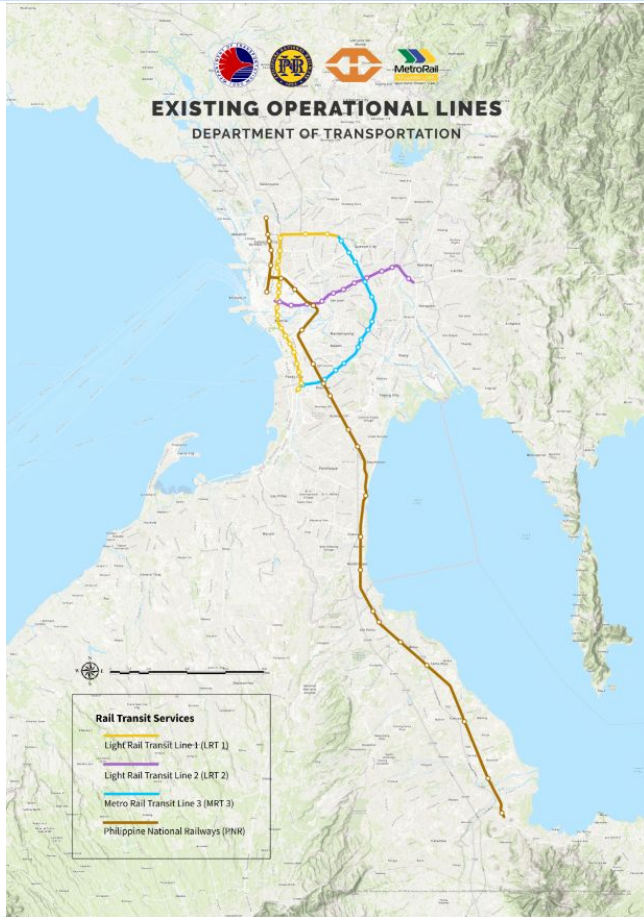
Source: Sector Breakdown of 2017-2022 Infrastructure Investment Targets, Philippine Development Plan 2017-2022



# What are we building

*Rail Network, Assets, and  
Projects Pipeline*

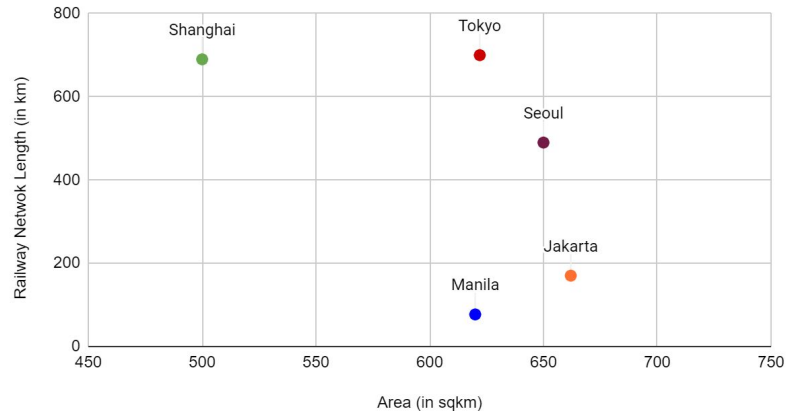
# Railway Density of Metro Manila vs Key Cities



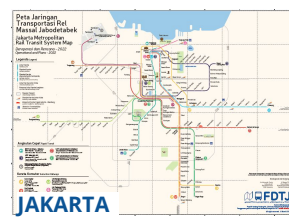
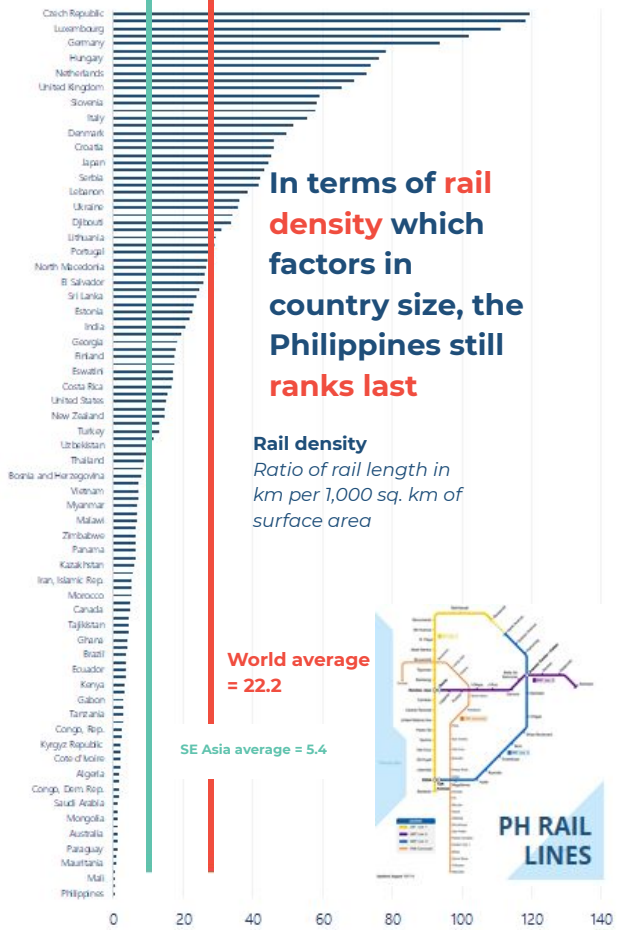
	Manila	Jakarta	Seoul	Tokyo	Shanghai
<b>Area</b>	620 sqkm	662 sqkm	650 sqkm	622 sqkm	500 sqkm
<b>Km Rail</b>	77 km	170.2 km	490 km	700 km	690 km
<b>Rail Density</b>	<b>0.12 km/sqkm</b>	<b>0.25 km/sqkm</b>	<b>0.75 km/sqkm</b>	<b>1.12 km/sqkm</b>	<b>1.38 km/sqkm</b>

Source: Manila Urban Transport Scoping Study by AECOM

## Railway Density in Key Cities



# Railway Density of PH vs Other Countries



Source: World Bank World Development Indicators; <http://wdi.worldbank.org/table/5.10#>





# PHILIPPINE RAIL NETWORK



**LUZON RAIL SYSTEM**  
Commuter, Long Haul,  
and Freight Lines

**MINDANAO RAIL NETWORK**  
and Spur Lines

## LUZON RAIL SYSTEM

- LRT 1
- LRT 1 Ext.
- LRT 2
- LRT 2 East Ext.
- LRT 2 West Ext.
- MRT 3
- MRT 4
- MRT 7
- Subway (MMSP/ Line 9)
- - - PNR Clark 1 (NSCR/ North 1)
- - - PNR Clark 2 (NSCR/ North 2)
- - - PNR Calamba (NSCR Ext./ South Commuter)
- - - SCR
- - - SLH



## MINDANAO RAIL NETWORK













- PHASE 1**
  - Tagum-Davao-Digos
- PHASE 2**
  - Digos-Generals Santos-Marbel
- PHASE 3**
  - Tagum-Butuan
- PHASE 4/5**
  - Marbel-Kabacan-Bukidnon-Ca. gayan de Oro
  - Davao-Bukidnon-Ca. gayan de Oro
  - Butuan-Ca. gayan de Oro
- PHASE 6/7/8/9/10**
  - Ca. gayan de Oro-Iligan-Pagadian
  - Pagadian-Cotabato-Kabacan-Digos
  - Pagadian-Dipolog
  - Pagadian-Zamboanga
  - Butuan-Surigao

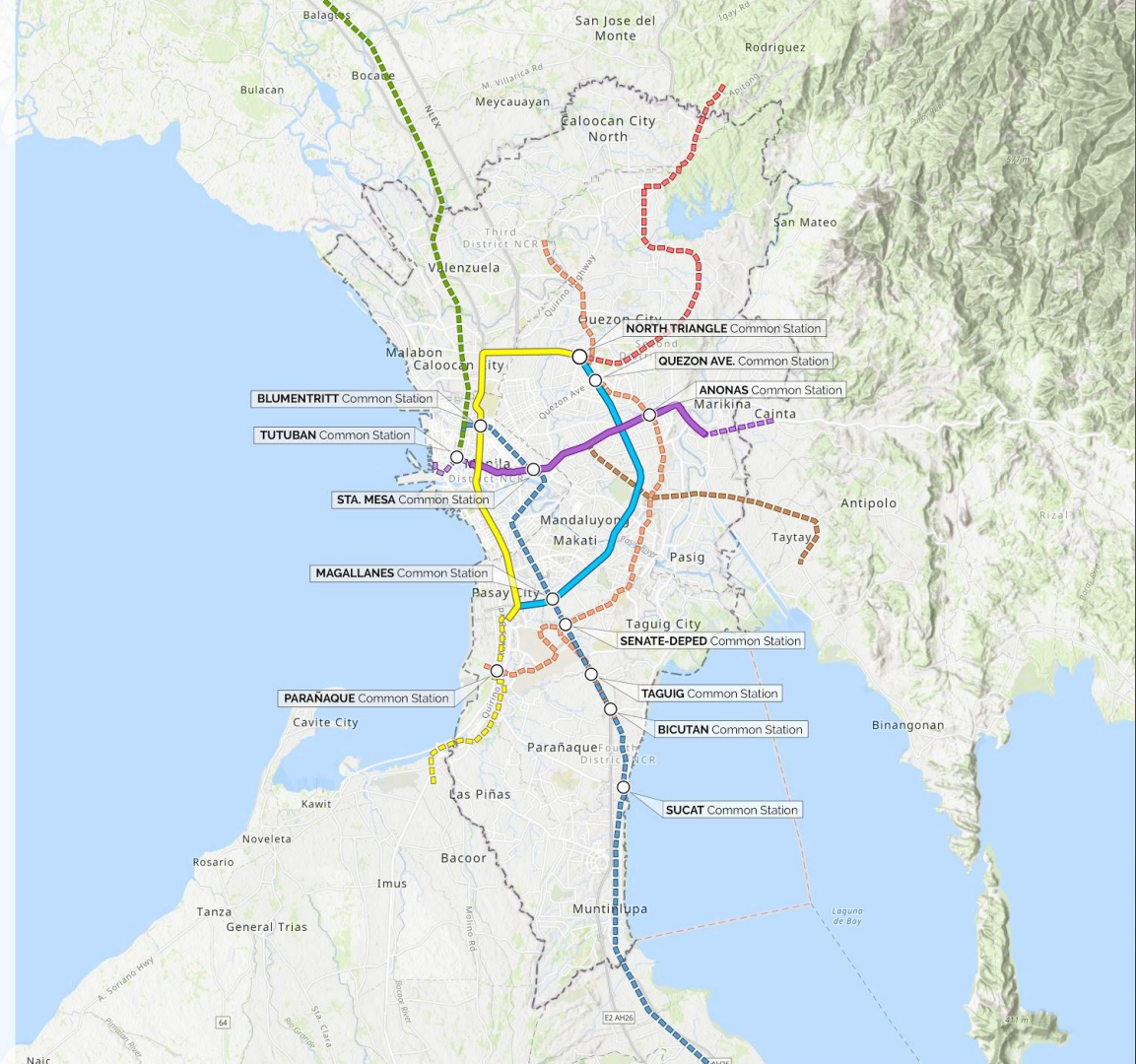




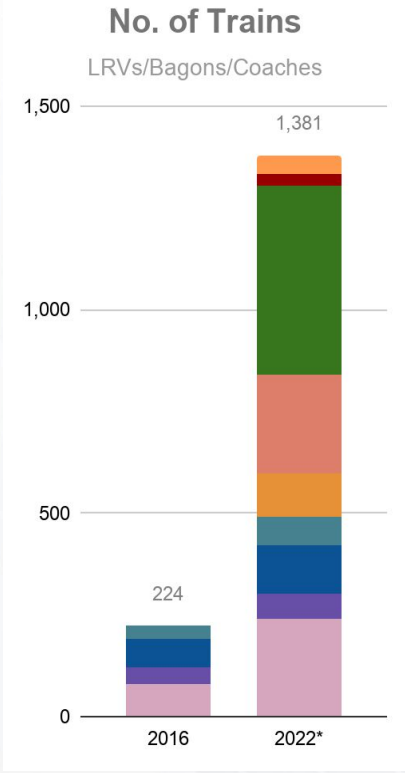
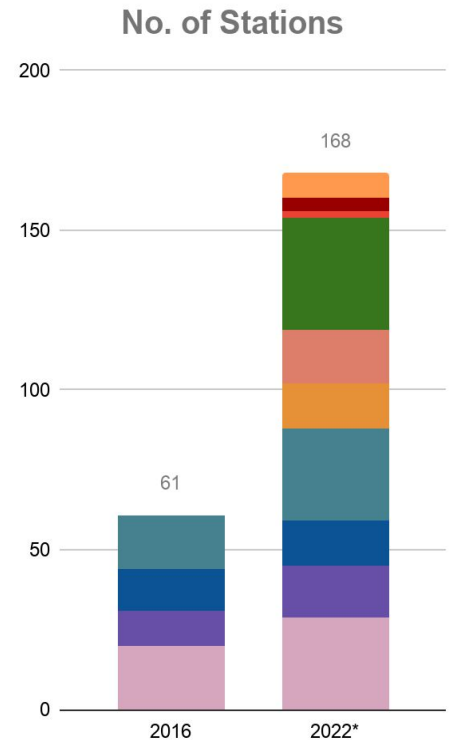
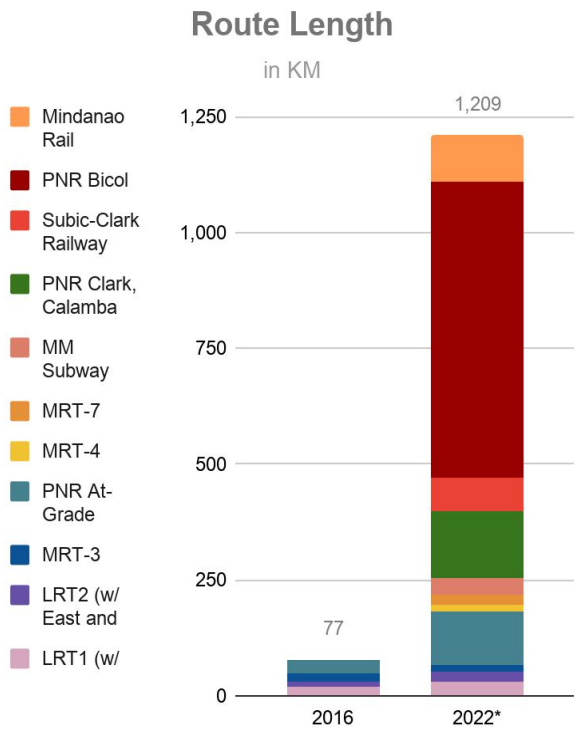
# METRO MANILA RAIL NETWORK

DEPARTMENT OF TRANSPORTATION

-  LRT 1
-  LRT 1 Ext.
-  LRT 2
-  LRT 2 East Ext.
-  LRT 2 West Ext.
-  MRT 3
-  MRT 4
-  MRT 7
-  Subway (MMSP/ Line 9)
-  PNR Clark 1 (NSCR/ North 1)
-  PNR Calamba (NSCR Ext./ South Commuter)
-  12 Common Stations



# What are we building; Assets Build-up



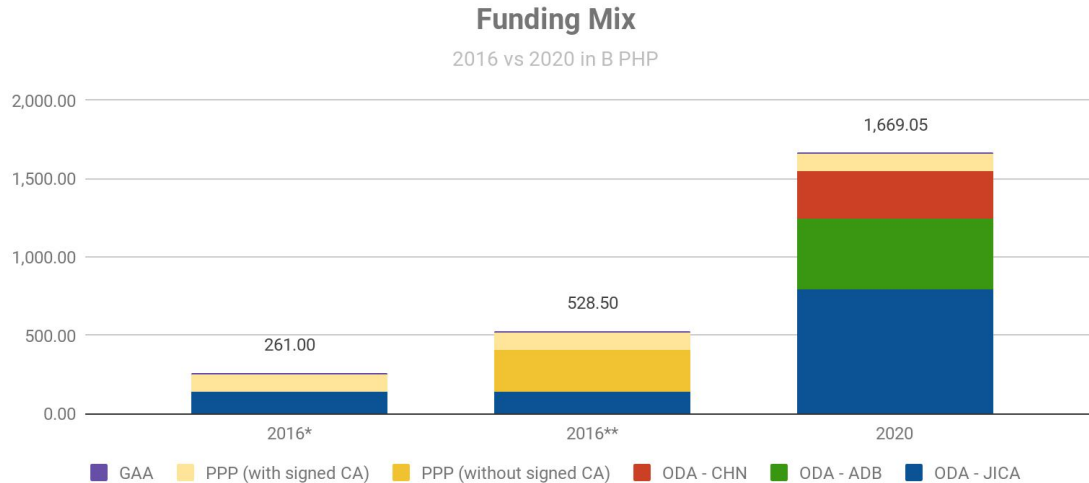
*\*Investment-approved; financed; with contracts awarded; ongoing construction, manufacturing, and/or installation; partially operational; and fully operational.*



# How are we financing

*ODA-PPP-LFP Funding Mix  
and Programmed CapEx  
Spend*

# How are we financing



\*excluding PPP without signed Concession Agreements (CAs)

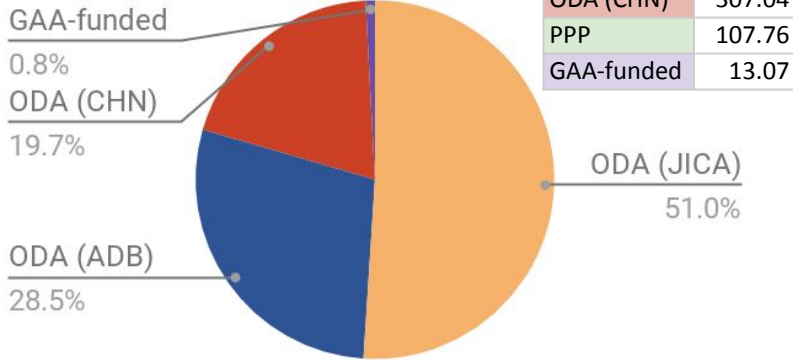
\*\*including total PPP with and without signed CAs

## Total Project Cost of Investment-Approved Rail Projects (in B PHP)

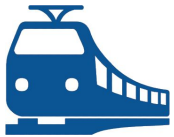
Financing Source	2016	% of total (2016)	2020	% of total (2020)
ODA - JICA	140.17	26.52%	796.58	47.73%
ODA - ADB	0.00	0.00%	444.60	26.64%
ODA - CHN	0.00	0.00%	307.04	18.40%
PPP (without signed CA)	267.50	50.61%	0.00	0.00%
PPP (with signed CA)	107.76	20.39%	107.76	6.46%
GAA	13.07	2.47%	13.07	0.78%
<b>SUBTOTAL (excl. PPP without signed CAs)</b>	<b>261.00</b>			
		<b>100.00%</b>	<b>1,669.05</b>	<b>100.00%</b>
<b>TOTAL</b>	<b>528.50</b>			

# ODA Financing Strategy

## Rail Funding Mix



**Need for public mass transport**



Rail = most efficient form of land-based transport

**Insufficient internally-generated funds**

PHL 2021 Gov't Budget:  
PhP 4.506 trillion (USD 93.06 billion)



Limited fiscal space, especially due to COVID-19

**Access to cheap financing**

Up to 0.10% p.a.; 40 yrs. to pay; 12 yrs. grace period



Lower middle income country



Rail is considered risky = higher cost of equity and debt if pure PPP

**ODA Partners have access to Rail Technology**



Economy	Total External Debt (Debt-to-GNI)		Total External Debt (Debt-to-GDP)		Total Debt to GDP	
	2018	2019	2018	2019	2018	2019
Indonesia	37.49%	37.03%	36.42%	35.93%	30.07%	30.49%
<b>Philippines</b>	<b>19.98%</b>	<b>20.11%</b>	<b>22.8%</b>	<b>22.2%</b>	<b>39.9%</b>	<b>39.6%</b>
Thailand	35.43%	34.07%	35.54%	34.21%	41.96%	41.09%
Vietnam	46.9%	48.9%	46.5%	45.24%	53.85%	54.88%

Sources: World Bank; IMF, ASEAN Integration Report 2019

# ADB Financing Support for PH Rail

ADB Loan No.	Year Signed	Project	Amount (in M USD)	Amount (in B PHP)
Loan No. 257-P HI	1976	Philippine National Railways	24.2	1.21
Loan No. 3796-PHI	2019	Malolos-Clark Railway Project (MCRP)	2,750 (1,300 M signed for Tranche 1)	137.5 (65 B signed for Tranche 1)
	To be signed	South-Comm uter Railway Project (SCRP)	4,300 (estimated)	215 (estimated)

\*ADB's Financing Commitment to PH Rail prior to the 2019 loan for MCRP was from **45 years ago**.

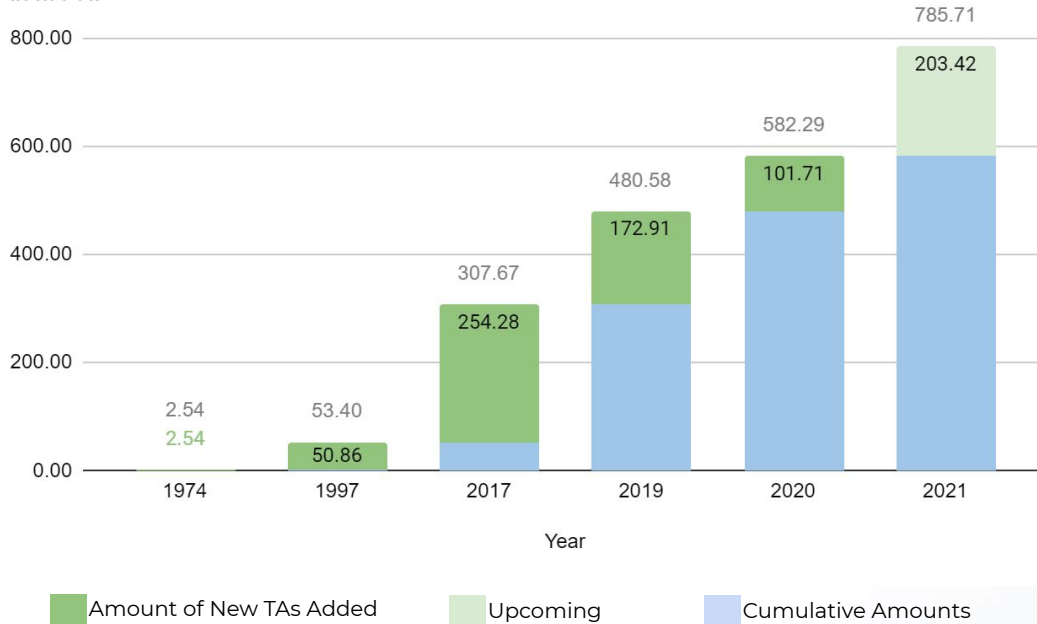
Country	Largest ADB Railway Projects (2000-2019)	Loan Amount (in M USD)	Loan Amount (in B PHP)
Bangladesh	SASEC Chittagong-Cox's Bazar Railway Project, Phase 1 (Facility)	1,500.00	75
PRC	Railway Energy Efficiency and Safety Enhancement Investment Program (Facility)	1,000.00	50
India	Railways Track Electrification Project	750	37.5
Philippines	Malolos-Clark Railway Project (Facility)	2,750.00	137.5
Turkmenistan	HCMC Metro Line 2 (Facility)	540.00	27

\*MCRP is **ADB's single largest infrastructure financing ever**, and MCRP-SCRCP will be even larger

# ADB Grant Support for PH Rail

## ADB Grant Support for PH Rail

in M PHP



\*ADB's grant support to PH Rail **prior to TA9936-PHI (2017)** was **from 10 and 43 years ago**.

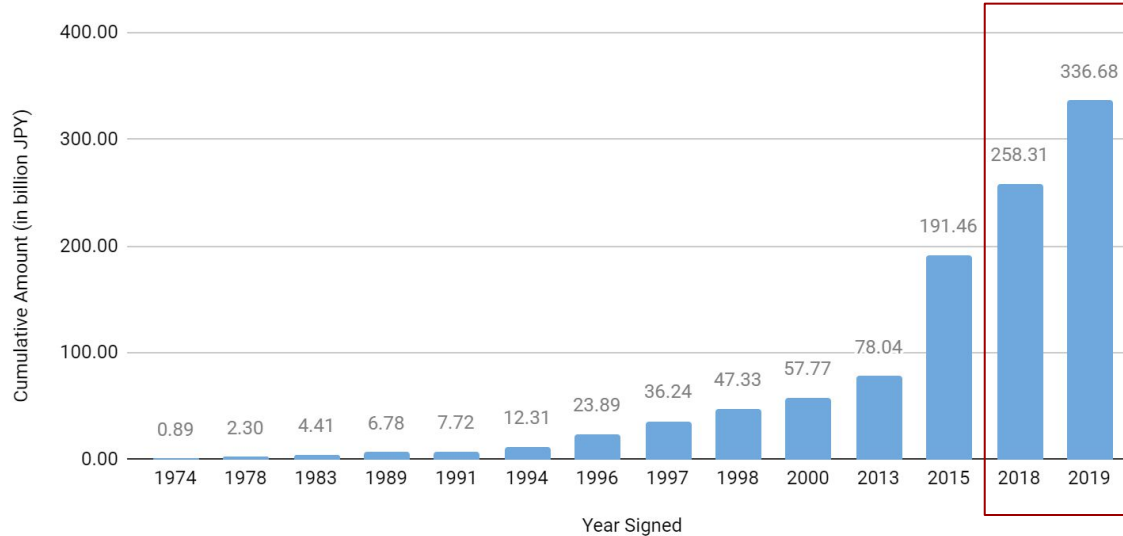
TA	Year	Project	Amount in M PHP
TA0115-PHI	1974	Philippine National Railways	2.54
TA2968-PHI	1997	Transport Infrastructure and Capacity Development	50.86
TA9336-PHI	2017	Strengthening Infrastructure Capacity and Innovation for Inclusive Growth: Technical Assistance Report	254.28
TA9570-PHI	2019	Railway Project Implementation Support and Institutional Strengthening - International Environment Safeguards Specialist	172.91
TA9913-PHI	2020	Strengthening the Transition of Vulnerable Communities Affected by the Malolos-Clark Railway Project	101.71
Proposed for approval together with SC loan	2021-2022	South Commuter Railway Project Implementation Support	101.71
		Support for Poverty Reduction in Communities affected by the South Commuter Railway Project	101.71
<b>TOTAL</b>			<b>785.71</b>



# JICA Financing Support for PH Rail

## JICA's Financing Support for Philippine Railways Sector

Cumulative Loan Amount from 1974-2019 in B PHP



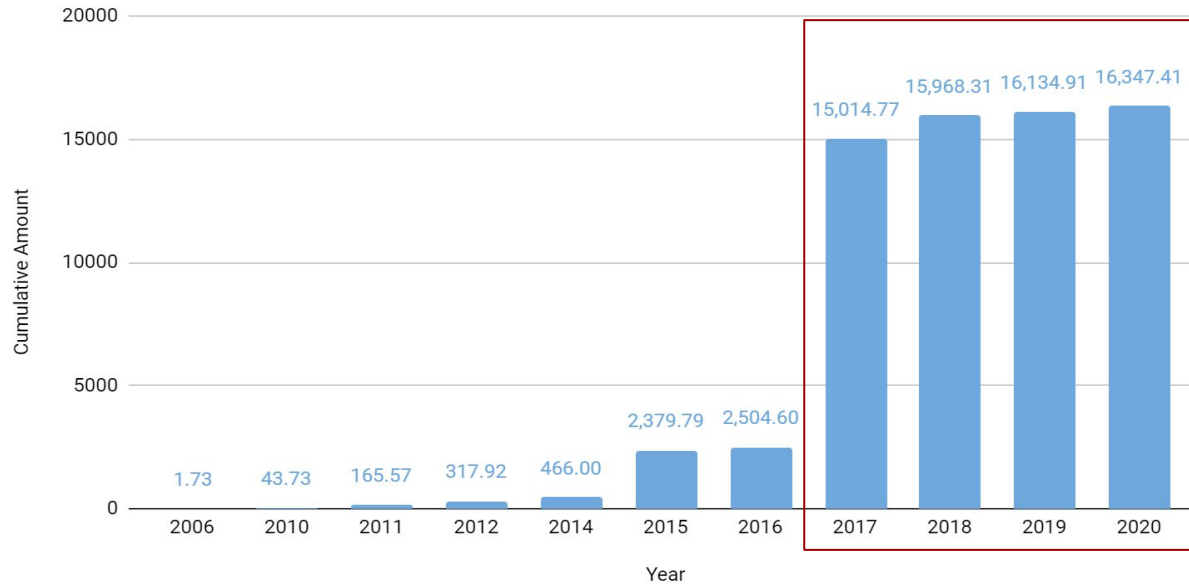
\*JICA's annual financing support for PH Rail **tripled from an average of PHP 15.9 B from 1974-2015 to PHP 48.3 B from 2018-2019** (203% increase).

Project Name	Year Signed	Amount (in B PHP)
Philippine National Railways Commuter Service	1974	0.89
Philippine National Railways Commuter Service	1978	1.41
Railcar Maintenance Depot Construction Project	1983	2.11
Revitalization of Main Line South Project	1989	2.37
Improvement and Modernization of Southern Line Project	1991	0.94
Metro Manila Line 1 Capacity Expansion Project	1994	4.59
Metro Manila Strategic Mass Rail Transit Dev. Project	1996	11.58
Metro Manila Strategic Mass Rail Transit Dev. Project	1997	12.35
Metro Manila Strategic Mass Rail Transit Dev. Project	1998	11.09
LRT Line 1 Capacity Expansion Project (Phase II)	2000	10.43
North - South Commuter Railway Project	2015	20.27
Metro Manila Subway Project (Phase 1)(I)	2018	113.42
Metro Rail Transit Line 3 Rehabilitation Project	2018	66.85
North-South Commuter Railway Extension Project (I)	2019	78.37

# GOJ/JICA Grant Support for PH Rail

## Cumulative Grant Amount for PH Rail

in M PHP



Year	Cumulative Amount (in M PHP)
2006	1.73
2010	43.73
2011	165.57
2012	317.92
2014	466.00
2015	2,379.79
2016	2,504.60
2017	15,014.77
2018	15,968.31
2019	16,134.91
2020	16,347.41

\*GOJ and JICA's grant assistance for PH Rail **significantly increased starting in 2017 (with PHP 12.5 B worth of projects)** when they supported rail projects with planning, DED, and technical cooperation grants, including the train simulators for the Philippine Railway Institute.

# Classification of Grants to PH Rail

## Classification of Grants to PH Rail

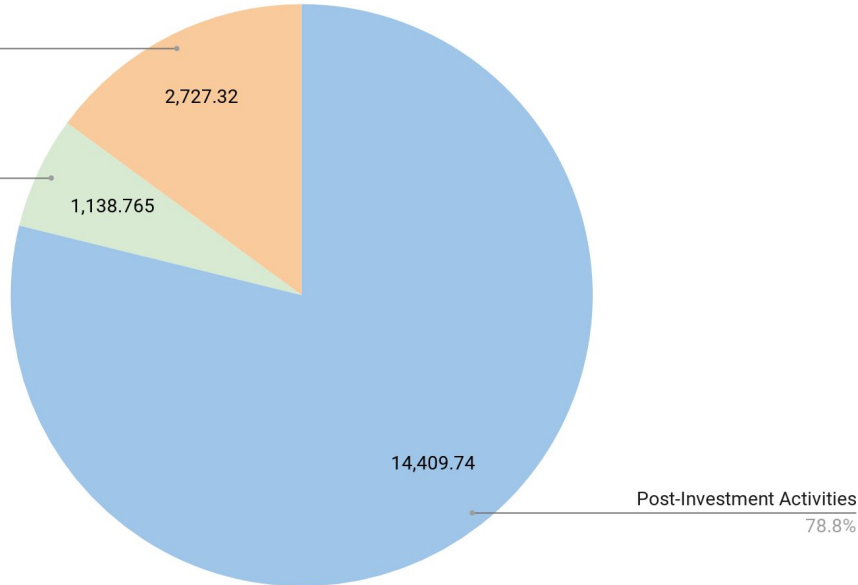
in M PHP

Capacity Building & Org Devt

14.9%

Pre-Investment Studies

6.2%



Classification	Projects	Amount in M PHP
Pre-Investment Studies	Feasibility/Preparatory Surveys, Data Collection Surveys, Transport Roadmap/Master Plan Studies	1,138.77
Post-Investment Activities	Detailed Design Studies, Technical Assistance, Technical Cooperation Projects, Railway Experts Support	14,409.74
Capacity Building & Organizational Development	Establishment of Training Institutions, Implementation Support, Knowledge and Skills Training Programs	2,727.32*
TOTAL		18,725.83

\*including total amount of the 2018 capacity building grant from Australia DFAT's Public Financial Management Program for Institutions and Infrastructure (PFMI) which served different implementing agencies (IAs)

\*

# Funding Source per Project

Project	Total (in PhP)	Financing
LRT1 Cavite Ext.	25,350,120,000.00	ODA - JICA
	39,565,310,000.00	PPP
LRT2 East Ext.	9,510,660,000.00	ODA - JICA
LRT2 West Ext.	10,118,460,000.00	GAA
MRT3 Rehab	21,963,955,665.02	ODA - JICA
MRT4	49,840,620,000.00	ODA - ADB
MRT7	68,191,378,043.24	PPP
MM Subway	356,964,170,000.00	ODA - JICA
Common Station	2,954,250,000.00	GAA
NSCR (JICA)	382,792,580,000.00	ODA - JICA
NSCR (ADB)	394,758,490,000.00	ODA - ADB
Subic-Clark Railway	50,030,918,426.78	ODA - CHN
PNR Bicol	175,318,780,955.07	ODA - CHN
Mindanao Rail	81,686,305,000.00	ODA - CHN
<b>TOTAL</b>	<b>1,669,045,998,090.11</b>	

# Programmed CapEx Spend (2021-2025)

In M PHP

Project	2021	2022	2023	2024	2025
LRT-1 Cavite Extension	2,660.78	5,712.54	32.14	18.41	-
LRT-2 East Extension	1,240.44	22.36	7.34	-	-
LRT-2 West Extension	1,081.52	-	-	-	-
MRT-3 Rehabilitation	3,141.39	1,634.40	353.74	-	-
MRT-4	-	12,157.05	9,968.12	13,857.72	9,968.12
Metro Manila Subway	28,948.02	43,742.43	44,342.17	40,357.85	15,753.93
Common Station	1,357.60	729.65	-	-	-
North-South Commuter Railway	38,628.97	128,796.64	101,200.94	31,134.83	19,757.41
Subic-Clark Railway	6,804.21	11,340.34	27,216.82		
PNR South Long Haul	2,981.99	31,367.43	16,131.37	11,080.23	
Mindanao Railway	3,911.89	42,774.97	23,496.03	7,658.52	
<b>Total</b>	<b>90,756.80</b>	<b>278,277.82</b>	<b>222,748.66</b>	<b>104,107.56</b>	<b>45,479.46</b>
	<b>1,887 M USD</b>	<b>5,785 M USD</b>	<b>4,630 M USD</b>	<b>2,164 M USD</b>	<b>945 M USD</b>

\*Does not include amortization payments for MRT-7 from substantial completion onwards

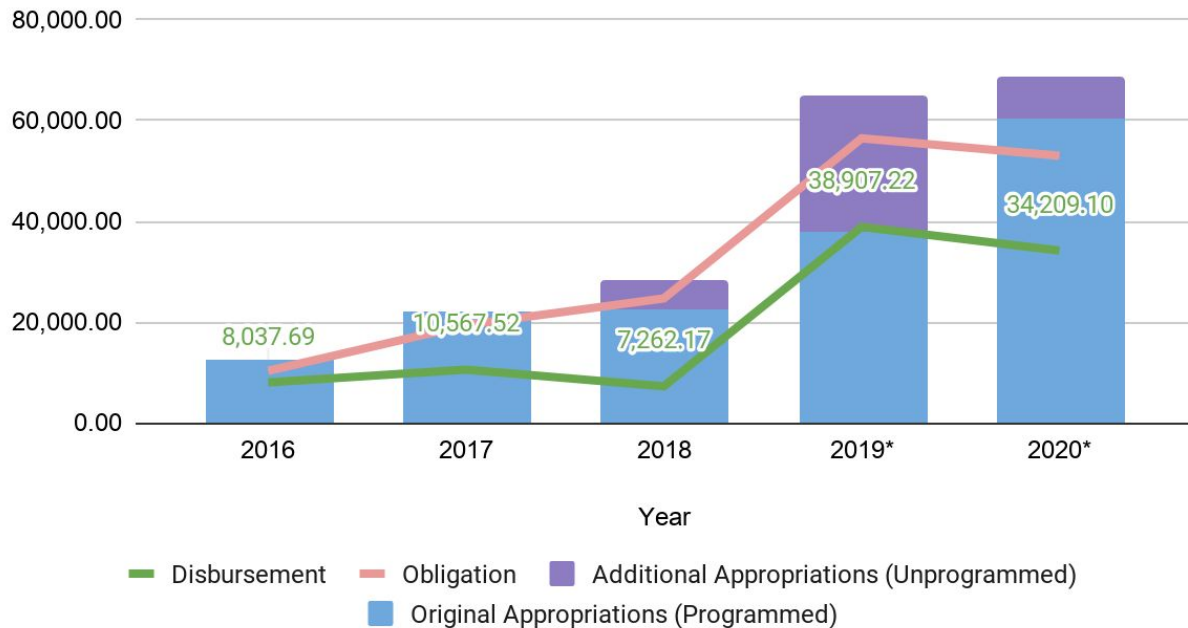


# Authority to Spend

*Appropriations and Disbursements*

# Appropriation and Disbursement Trend

## 2016-2020 DOTr Disbursement in M PHP



Year	Original Appropriations (Programmed)	Additional Appropriations (Unprogrammed)	Obligation	Disbursement
2016	12,458.58	0.00	10,331.64	8,037.69
2017	22,102.35	0.00	19,428.11	10,567.52
2018	22,325.54	6,110.80	24,711.95	7,262.17
2019*	37,861.07	27,157.79	56,494.07	38,907.22
2020*	60,416.11	8,245.01	53,031.54	34,209.10

### NOTES

\*2019 and 2020 include the Payment for Right-of-Way Line Items

\*2020 Appropriations are already net of the amount offered for COVID-19; subject to confirmation with DOTr Finance



# Who are building

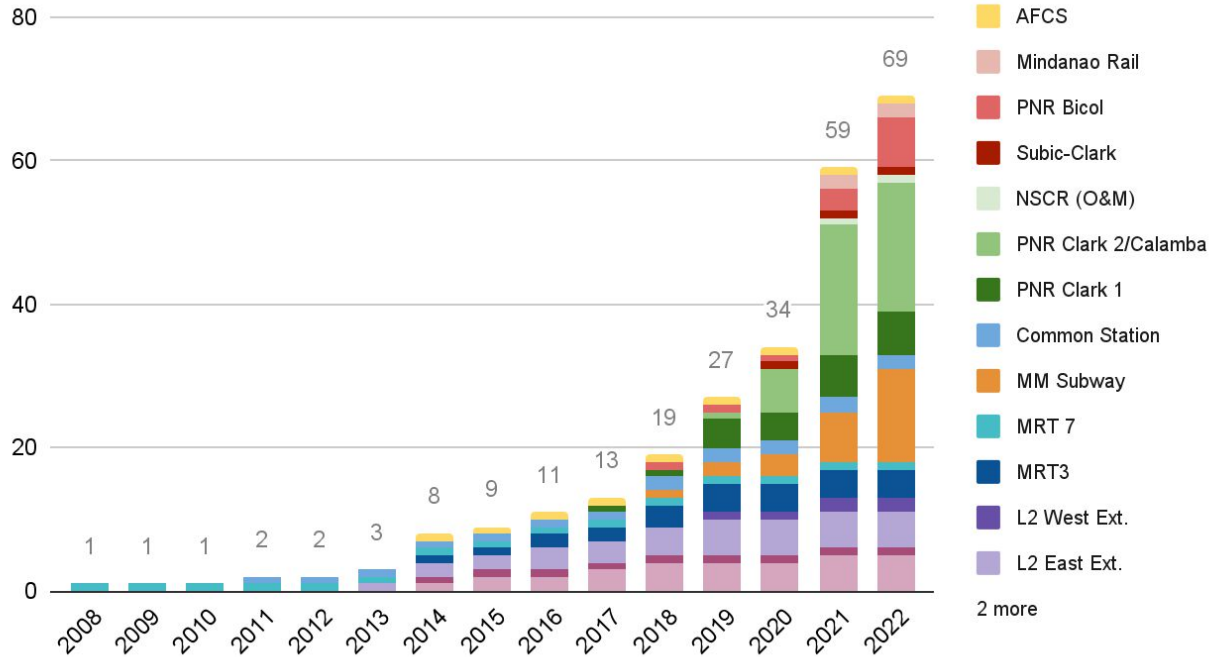
*Contracts Pipeline*



# Who are building

## Awarded Rail Contracts

Cumulative Number of Contracts Awarded



Average Contract Amount of Awarded Contracts as of Dec. 2020:

**Php 16.79 billion**  
(350 million USD)

Average Contract Amount of 63/69 Total Contracts:

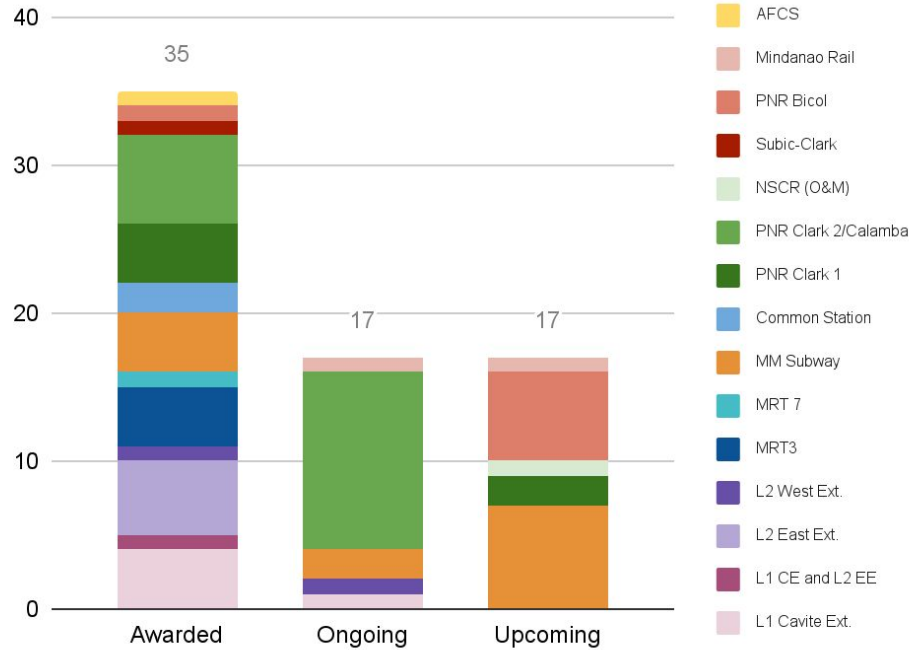
**Php 22.05 billion**  
(590 million USD)

\*Previous versions revised to reflect two (2) additional contracts as of Oct. 2016 and one contract to be awarded in 2021  
 \*\*26 Feb 2018: DOTr-PSDBM MOA designating PS-DBM as DOTr's Procuring Agent, utilizing PS-DBM's 10 Bids and Awards Committees (BAC) for the procurement of DOTr's large-scale infrastructure projects










# Who are building

## Rail Sector Procurement Status

Number of Contracts



Project	Awarded	Ongoing	Upcoming	Grand Total
AFCS	1			1
Common Station	2			2
L1 Cavite Ext.	4	1		5
L1 CE and L2 EE	1			1
L2 East Ext.	5			5
L2 West Ext.	1	1		2
Mindanao Rail		1	1	2
MM Subway	3	3	7	13
MRT 7	1			1
MRT3	4			4
NSCR (O&M)			1	1
PNR Bicol	1		6	7
PNR Clark 1	4		2	6
PNR Clark 2/Calamba	6	12		18
Subic-Clark	1			1
<b>Grand Total</b>	<b>34</b>	<b>18</b>	<b>17</b>	<b>69</b>

<b>Projects and Contracts Status as of July 2016</b>	LICE/L2EE Consultant w/ NEDA Board Approval & Live Contract; No Construction 	L3 Lot 1  w/ Live Contract, Ongoing Implementation	MRT-4 RS No NEDA Board Approval	MMSP EMS No NEDA Board Approval	CS CW EMS w/ NEDA Board Approval, No Live Contract	PNR Clark 2/ Calamba EMS No NEDA Board Approval	PNR Calamba CW CPS01 No NEDA Board Approval	PNR Calamba CW CPS07 No NEDA Board Approval	PNR Bicol DB P4 No NEDA Board Approval
	L2 EE Consultant (CW)  w/ NEDA Board Approval & Live Contract; Ongoing Construction	L3 Lot 2 No NEDA Board Approval	MRT-7 PPP  w/ NEDA Board Approval & Live Contract; Ongoing Construction	MMSP RS No NEDA Board Approval	PNR Clark 1 GC No NEDA Board Approval	PNR Clark 2/ Calamba Commuter RS No NEDA Board Approval	PNR Calamba CW CPS02 No NEDA Board Approval	NSCR O&M No NEDA Board Approval	PNR Bicol RS P5a No NEDA Board Approval
	L2 EE Consultant (Interfacing) w/ NEDA Board Approval, No Live Contract	L3 Rehab No NEDA Board Approval	MMSP GC No NEDA Board Approval	MMSP CW CP108 No NEDA Board Approval	PNR Clark 1 CW CP01 No NEDA Board Approval	PNR Clark 2/ Calamba Airport RS No NEDA Board Approval	PNR Calamba CW CPS03a No NEDA Board Approval	SCR EPCC No NEDA Board Approval	PNR Bicol RS P5b No NEDA Board Approval
	LICE IC  w/ NEDA Board Approval & Live Contract; No Construction	L2 EE CW Viaduct  w/ NEDA Board Approval & Live Contract; Ongoing Construction	L3 Rehab Consultant No NEDA Board Approval	MMSP CW CP101 No NEDA Board Approval	MMSP CW CP109 No NEDA Board Approval	PNR Clark 1 CW CP02 No NEDA Board Approval	PNR Clark 2 CW CPN01 No NEDA Board Approval	PNR Calamba CW CPS03b No NEDA Board Approval	SCR Employer's Representative No NEDA Board Approval
LICE RS w/ NEDA Board Approval, No Live Contract	L2 EE CW Stations w/ NEDA Board Approval, No Live Contract	MRT-4 DEDC No NEDA Board Approval	MMSP CW CP102 No NEDA Board Approval	MMSP AW P1 No NEDA Board Approval	PNR Clark 1 RS No NEDA Board Approval	PNR Clark 2 CW CPN02 No NEDA Board Approval	PNR Calamba CW CPS03c No NEDA Board Approval	PNR Bicol PMC No NEDA Board Approval	MRP DB No NEDA Board Approval
LICE Depot w/ NEDA Board Approval, No Live Contract	L2EE EMS w/ NEDA Board Approval, No Live Contract	MRT-4 Project Management Consultant No NEDA Board Approval	MMSP CW CP103 No NEDA Board Approval	MMSP AW P2 No NEDA Board Approval	PNR Clark 1 EMS No NEDA Board Approval	PNR Clark 2 CW CPN03 No NEDA Board Approval	PNR Calamba CW CPS04 No NEDA Board Approval	PNR Bicol DB P1 No NEDA Board Approval	AFCS PPP  w/ NEDA Board Approval & Live Contract; Ongoing Contract Implementation
LICE PPP  w/ NEDA Board Approval & Live Contract; No Construction	L2WE Consultancy w/ NEDA Board Approval, No Live Contract	MRT-4 CW No NEDA Board Approval	MMSP CW CP104 No NEDA Board Approval	MMSP O&M No NEDA Board Approval	PNR Clark 1 CW CP05 No NEDA Board Approval	PNR Clark 2 CW CPN04 No NEDA Board Approval	PNR Calamba CW CPS05 No NEDA Board Approval	PNR Bicol DB P2 No NEDA Board Approval	IPIF Consultant No Live Contract
LICE Depot Equipment w/ NEDA Board Approval, No Live Contract	L2WE RS CW EMS w/ NEDA Board Approval, No Live Contract	MRT-4 EMS No NEDA Board Approval	MMSP CW CP105 No NEDA Board Approval	CS Consultant  w/ NEDA Board Approval & Live Contract	PNR Clark 2/ Calamba GC No NEDA Board Approval	PNR Clark 2 CW CPN05 No NEDA Board Approval	PNR Calamba CW CPS06 No NEDA Board Approval	PNR Bicol DB P3 No NEDA Board Approval	

# Projects and Contracts Status as of May 2021

Projects and Contracts Status as of May 2021	LICE/L2EE Consultant	L3 Lot 1	MRT-4 RS	MMSPP RS	CS CW EMS	PNR Clark 2/ Calamba EMS	PNR Calamba CW CPS01	PNR Calamba CW CPS07	PNR Bicol DB P4
				ONGOING		ONGOING	ONGOING	ONGOING	
	L2 EE Consultant (CW)	L3 Lot 2	MRT-7 PPP	MMSPP RS	PNR Clark 1 GC	PNR Clark 2/ Calamba Commuter RS	PNR Calamba CW CPS02	NSCR O&M	PNR Bicol RS P5a
			 		ONGOING	ONGOING			
L2 EE Consultant (Interfacing)	L3 Rehab	MMSPP GC	MMSPP CW CP108	PNR Clark 1 CW CP01	PNR Clark 2/ Calamba Airport RS	PNR Calamba CW CPS03a	SCR EPCC	PNR Bicol RS P5b	
	 			 	ONGOING	ONGOING			
LICE IC	L2 EE CW Viaduct	L3 Rehab Consultant	MMSPP CW CP101	MMSPP CW CP109	PNR Clark 1 CW CP02	PNR Clark 2 CW CPN01	PNR Calamba CW CPS03b	SCR Employer's Representative	MRP PMC
		 MRT3 REHABILITATION PROJECT SUPERVISION CONSULTANT	   			 	ONGOING	 	ONGOING
LICE RS	L2 EE CW Stations	MRT-4 DEDC	MMSPP CW CP102	MMSPP AW P1	PNR Clark 1 RS	PNR Clark 2 CW CPN02	PNR Calamba CW CPS03c	PNR Bicol PMC	MRP DB
 		ONGOING			 	 	ONGOING	 	
LICE Depot	L2EE EMS	MRT-4 Project Management Consultant	MMSPP CW CP103	MMSPP AW P2	PNR Clark 1 EMS	PNR Clark 2 CW CPN03	PNR Calamba CW CPS04	PNR Bicol DB P1	AFCS PPP
 	 						ONGOING		
LICE PPP	L2WE Consultancy	MRT-4 CW	MMSPP CW CP104	MMSPP O&M	PNR Clark 1 CW CP05	PNR Clark 2 CW CPN04	PNR Calamba CW CPS05	PNR Bicol DB P2	IPIF Consultant
			ONGOING			 	ONGOING		
LICE Depot Equipment	L2WE RS CW EMS	MRT-4 EMS	MMSPP CW CP105	CS Consultant	PNR Clark 2/ Calamba GC	PNR Clark 2 CW CPN05	PNR Calamba CW CPS06	PNR Bicol DB P3	
							ONGOING		

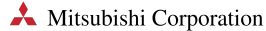
# Increasing Global Rail Attention

## As of July 2016

### Local



### International

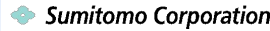


## To Date

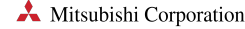
### Local



### International



### International



Egis Rail, Egis International, Gattner Payara, Heilig Tobioli and KP Joint Venture



中国路桥工程有限责任公司 CHINA ROAD & BRIDGE CORPORATION



美しい時代へ 東急グループ

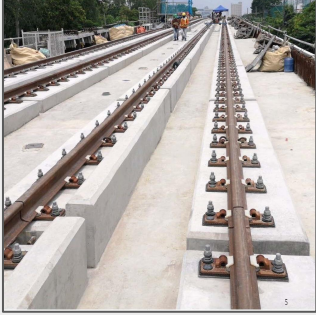
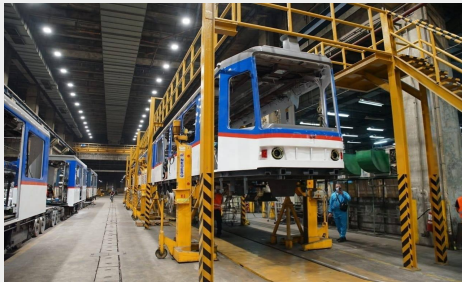




Pi-Girder Span S202  
Wednesday, September 30, 2020 16:04



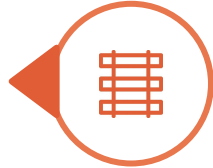
CLUSTER 3 | BATASAN TO MANGGAHAN GUIDEWAY



# Railway Assets Build-up

2016

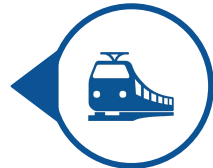
**77 k.m.**  
ROUTE LENGTH



**61 Stations**  
NO. OF STATIONS



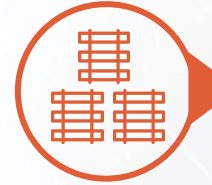
**234 Trains**  
NO. OF TRAINS



**Total Project Cost of NB  
Approved Rail Projects**

Financing	2022
ODA (JICA)	796.58
ODA (ADB)	444.60
ODA (CHN)	307.04
PPP	107.76
GAA-funded	13.07
<b>TOTAL</b>	<b>1,669.05</b>

2022\*



**1,209 k.m.**  
ROUTE LENGTH



**168 Stations**  
NO. OF STATIONS



**1,381 Trains**  
NO. OF TRAINS

*\*Investment-approved; financed; with contracts awarded; ongoing construction, manufacturing, and/or installation; partially operational; and fully operational.*

# Reduction of Road Congestion

## LRT LINE 1



One (1) Train Set



➔ **816 Cars** with 1.70 passengers each



➔ **139 Jeepneys** with 10 passengers each



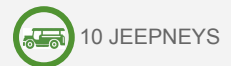
➔ **39 Buses** with 35 passengers each



Train Generation	Cars per Set	Available Train Sets	Ave. Headway
Gen 1	3	18	3-5 minutes
Gen 2	4	6	
Gen 3	4	12	
Gen 4*	4	30	

\*ongoing delivery

LEGEND / SCALE:





# Reduction of Road Congestion

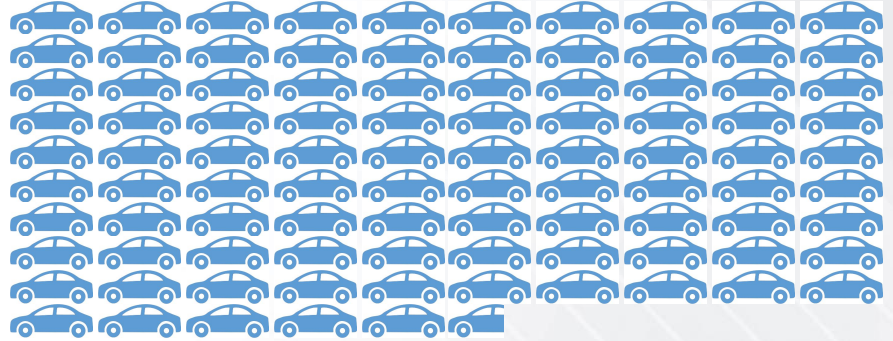
## LRT LINE 2



One (1) Train Set



→ **958 Cars** with 1.70 passengers each



→ **162 Jeepneys** with 10 passengers each



→ **46 Buses** with 35 passengers each



LEGEND / SCALE:



Train Generation	Cars per Set	Available Train Sets	Ave. Headway
Class 2000	4	5	14 mins.

# Reduction of Road Congestion

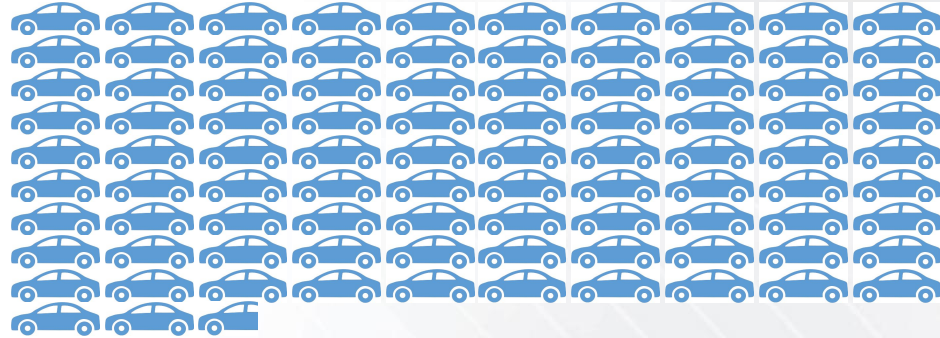
## MRT LINE 3



One (1) Train Set

Train Generation	Cars per Set	Available Train Sets	Ave. Headway
CKD	3	18	4 mins.

→ **927 Cars** with 1.70 passengers each



→ **158 Jeepneys** with 10 passengers each



→ **45 Buses** with 35 passengers each



LEGEND / SCALE:



10 CARS



10 JEEPNEYS



10 BUSES

# Reduction of Road Congestion

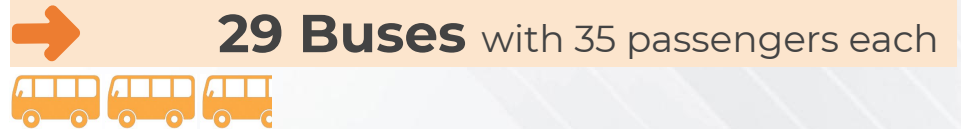
## MRT LINE 7



One (1) Train Set



=



LEGEND / SCALE:



10 CARS



10 JEEPNEYS



10 BUSES

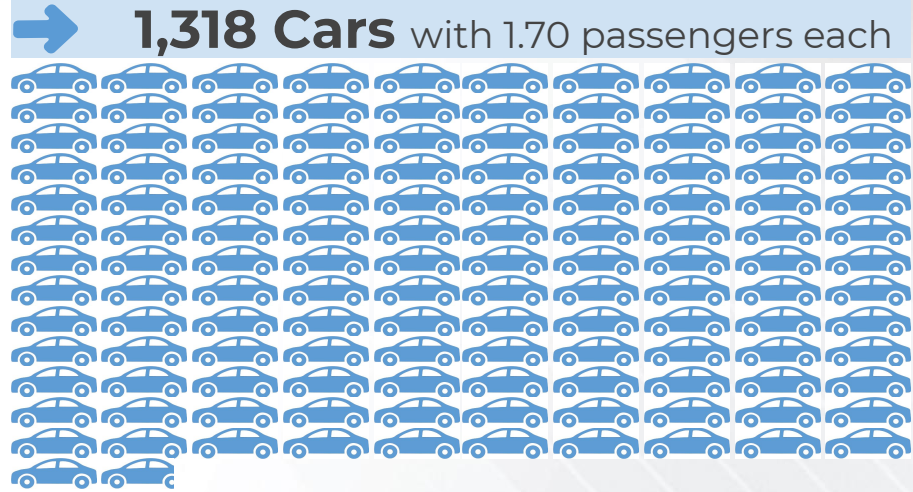
# Reduction of Road Congestion

MMSP



One (1) Train Set

=



LEGEND / SCALE:  10 CARS  10 JEEPNEYS  10 BUSES

# Reduction of Road Congestion

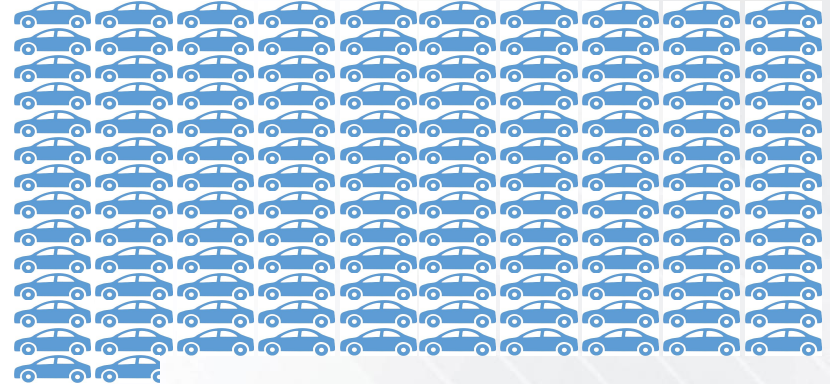
## NSCR SYSTEM



One (1) Train Set

=

→ **1,318 Cars** with 1.70 passengers each



→ **224 Jeepneys** with 10 passengers each



→ **64 Buses** with 35 passengers each



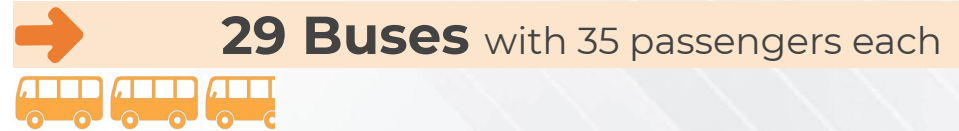
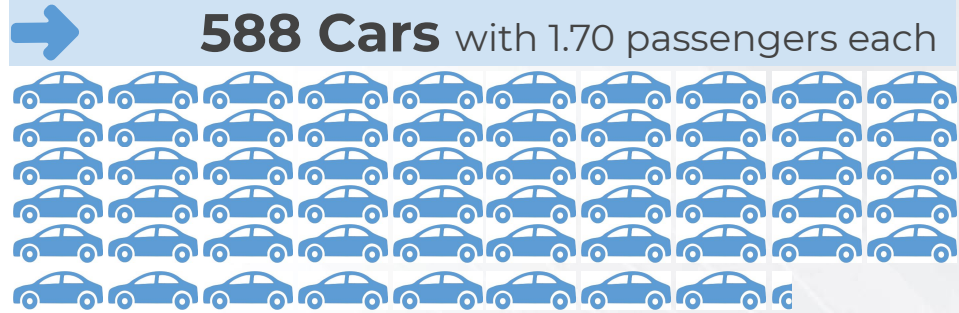
LEGEND / SCALE:  10 CARS  10 JEEPNEYS  10 BUSES

# Reduction of Road Congestion

## PNR INKA TRAINS



One (1) Train Set



Train Generation	Cars per Set	Available Train Sets	Ave. Headway
DMU 8000 Series	3	2	26 mins.
DMU 8100 Series	4	4	
Diesel Hydraulic Locomotive and 5-Car Trailer Coaches	5	3	

LEGEND / SCALE:



10 CARS



10 JEEPNEYS



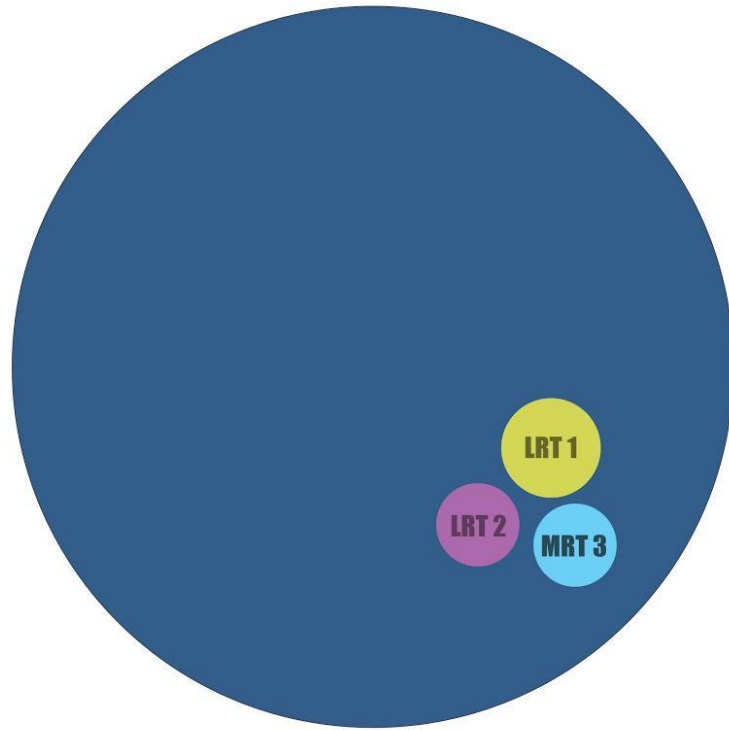
10 BUSES



# Where are we building

*ROWSA Efforts*

# Railway Projects Footprint



844,000 sq.m.

**EXISTING RAILWAY  
FOOTPRINT**



18,545,000 sq.m.

**FUTURE RAILWAY  
FOOTPRINT**



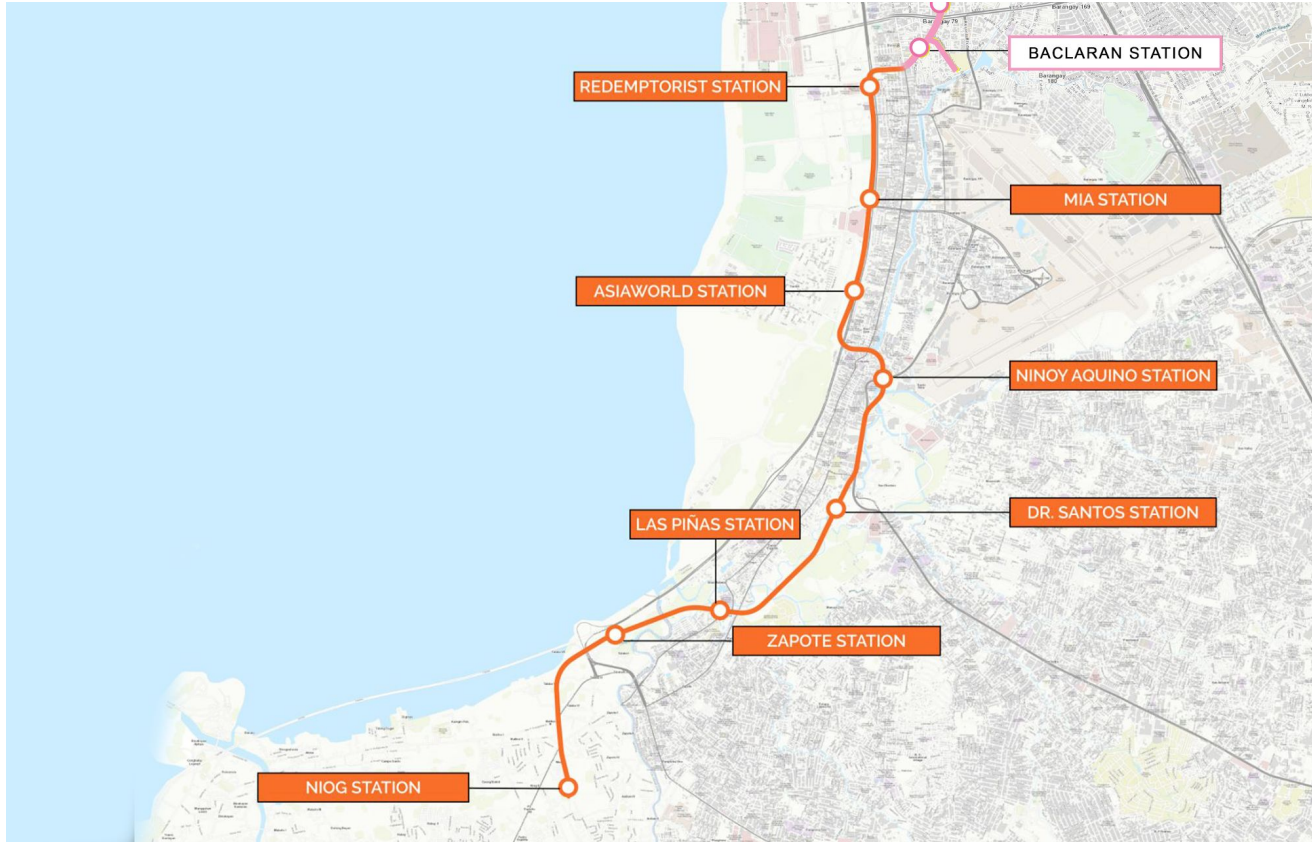


# Project Profile and Photos

## DID YOU KNOW?

LRT-1 Cavite Extension's **first ICC-CC Approval** was received two decades ago on **25 August 2000** and **Right-of-Way Acquisition** started in 2007.

# LRT-1 CAVITE EXTENSION



<b>Route Length</b>	11.7 km
<b>No. of Stations</b>	8 Stations
<b>Rolling Stock</b>	30 Train Sets (4 LRVs per Train Set); Total of 124 LRVs
<b>Ridership</b>	800,000/day in first year of Full Operations
<b>Provinces and Municipalities</b>	National Capital Region Region IVA (Cavite)
<b>Total Project Cost</b>	PhP 64.915 B (27.42% JICA ODA; 11.63% GOP; 60.95% PPP Counterpart Funding)
<b>NEDA Board Approval/s</b>	22 March 2012, 21 November 2013

# LRT-1 Cavite Extension



Arrival of the 1st LRT-1 4th Generation Train Set on 26 January 2021



Train Set 2 coupled in Baclaran Depot

# LRT-1 Cavite Extension



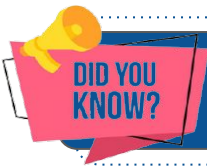
Ongoing Construction



# Breakdown of Contracts and Status - L1 CE

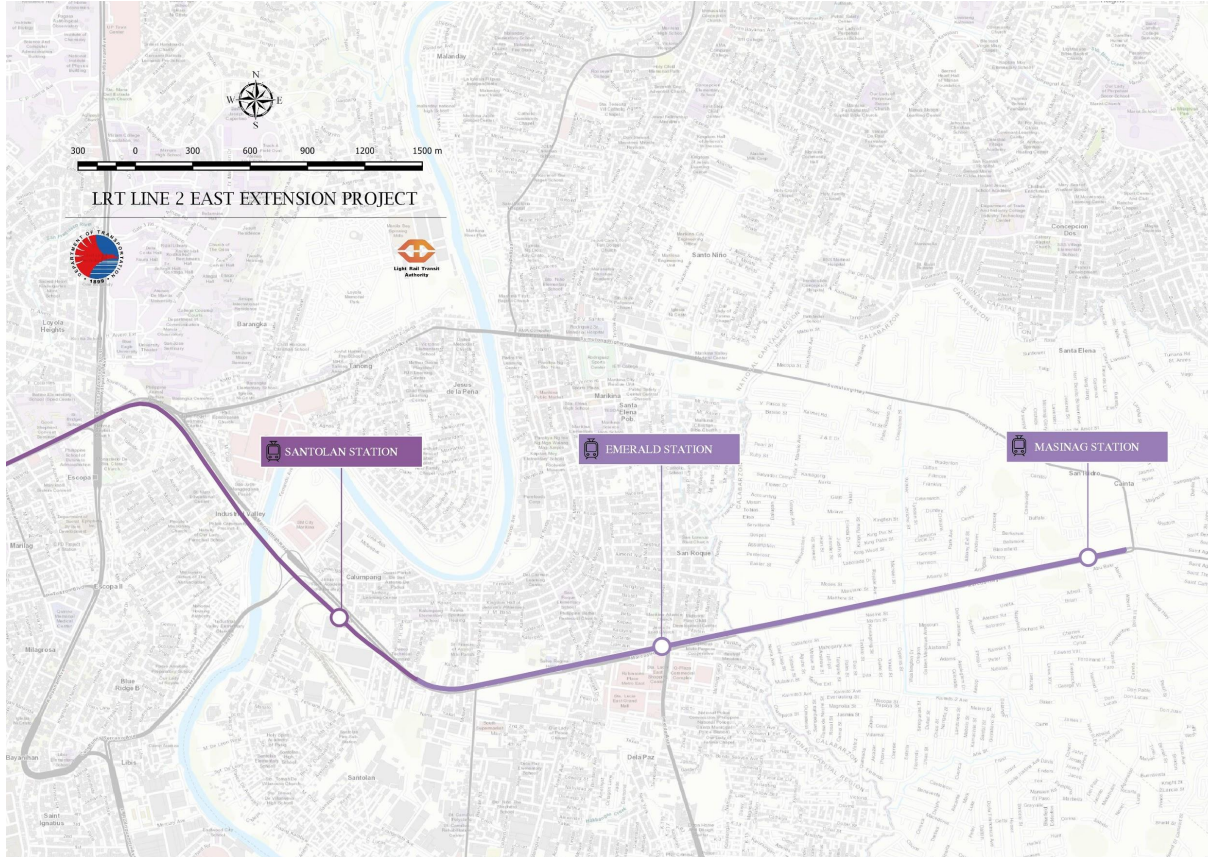
Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Rolling Stock	21 Nov 2013	29 Apr 2014 (MYOA) Note: Updated MYCA issuance is dependent on NEDA Board Re-approval.	27 Mar 2013	✓	✓	28 Dec 2016	07 Nov 2017	01 Mar 2018
Depot Civil Works				✓	✓	05 Jul 2018	27 Dec 2018	24 June 2019
Depot Equipment				N/A	N/A	23 Dec 2019	Jun 2021	Jun-Jul 2021
General Consultant				N/A	N/A	07 Jun 2013	21 Nov 2014	23 Jan 2015
Independent Consultant		N/A	N/A	01 Apr 2015	01 Sep 2015	11 Sep 2015		
Concession Agreement		N/A	N/A	✓	4Q 2021	03 Dec 2013	12 Sep 2014	12 Sep 2015

✓: Actual Date  
Target



The need for LRT-2's extension to the east from Santolan Station to Masinag and Antipolo was **already identified two decades ago as early as 1999** as seen in the Metro Manila Urban Integration Study (MMUTIS)

# LRT-2 EAST EXTENSION

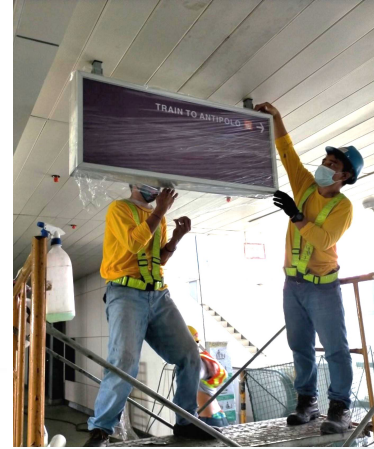


<b>Route Length</b>	3.8 km
<b>No. of Stations</b>	2 Stations
<b>Rolling Stock</b>	14 Train Sets (4 LRVs per Train Set); Total of 56 LRVs
<b>Ridership</b>	Additional 80,000/day in first year of Full Operations
<b>Provinces and Municipalities</b>	National Capital Region Region IVA (Rizal)
<b>Total Project Cost</b>	Php 9,51066 Billion (32.73% JICA ODA; 67.27% GOP)
<b>NEDA Board Approval/s</b>	4 September 2012

# LRT-2 East Extension



Marikina Station (Street Level)



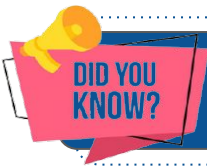
Ongoing Testing and Commissioning

# Breakdown of Contracts and Status - L2 EE

✓: Actual Date  
 Target

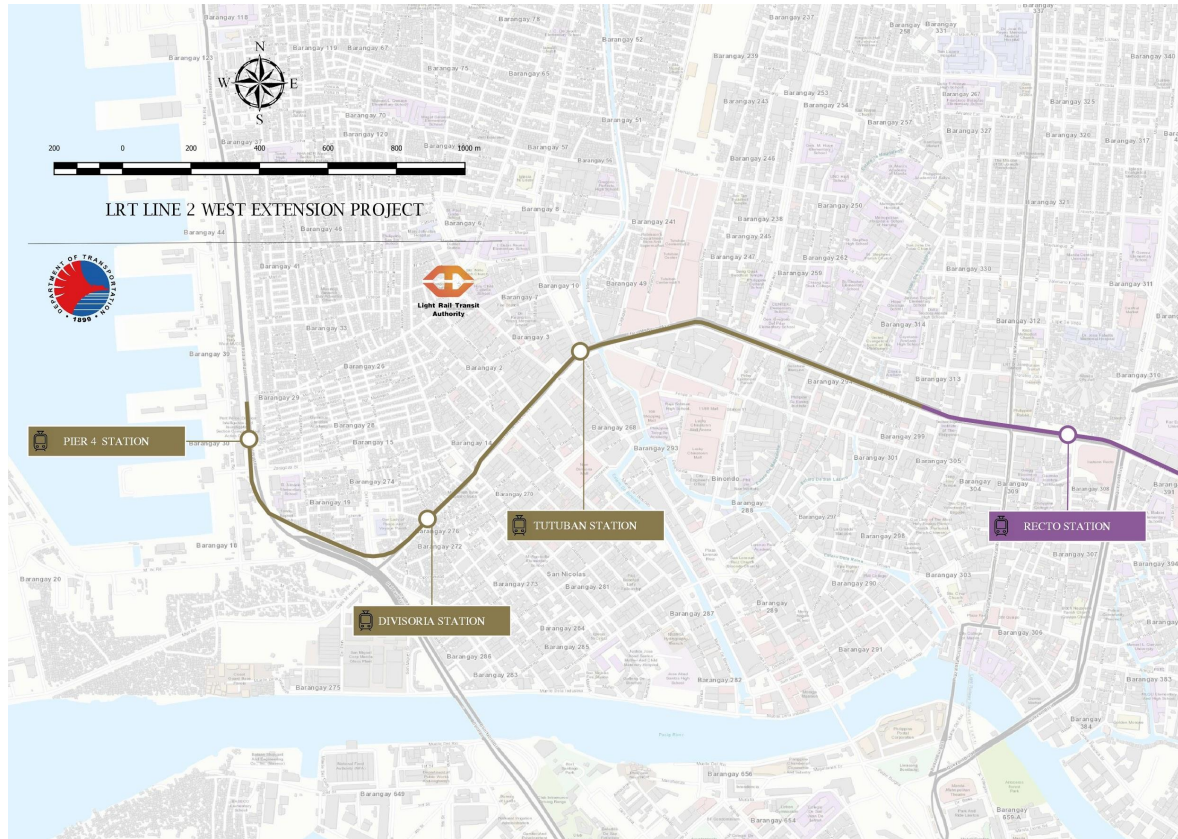
Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Civil Works: Viaduct	4 Sep 2012 ✓	N/A	27 Mar 2013 ✓	✓	✓	29 Sep 2013 ✓	23 Dec 2014 ✓	06 Apr 2015 ✓
CW: Stations				✓	✓	25 Aug 2016 ✓	9 Dec 2016 ✓	20 Feb 2017 ✓
EMS				✓	✓	19 Dec 2017 ✓	14 Dec 2018 ✓	04 Jul 2019 ✓
General Consultant (EMS)				N/A	N/A	07 Jun 2013 ✓	21 Nov 2014 ✓	23 Jan 2015 ✓
Consultancy (CW)				N/A	N/A	26 Feb 2013 ✓	27 Dec 2013 ✓	21 Apr 2014 ✓
Consultancy (Interfacing)				N/A	N/A	31 Oct 2019 ✓	27 Dec 2019 ✓	26 Feb 2020 ✓





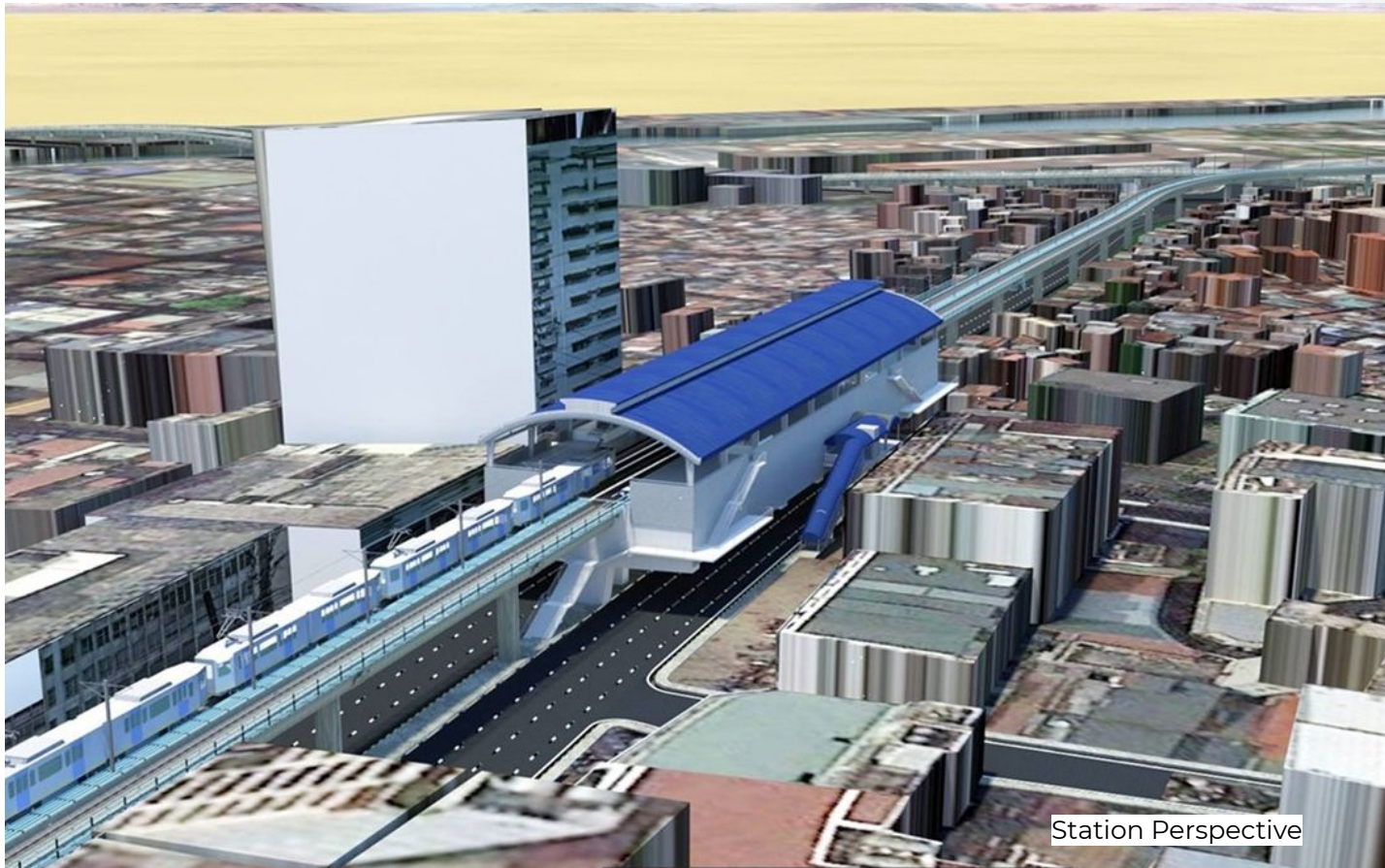
The **LRT Line 2** was **originally intended to extend to the west up to Manila Bay/Port Area** as early as 48 years ago as proposed in the **1973 Urban Transport Study for Metro Manila Area**.

# LRT-2 WEST EXTENSION



<b>Route Length</b>	2.965 km
<b>No. of Stations</b>	3 Stations
<b>Rolling Stock</b>	5 Train Sets (4 LRVs per Train Set); Total of 20 LRVs
<b>Ridership</b>	Expected 124,000/day ridership at 2030
<b>Provinces and Municipalities</b>	National Capital Region (Manila)
<b>Total Project Cost</b>	PhP 10,118.46 Billion (GOP)
<b>NEDA Board Approval/s</b>	14 January 2015

# LRT-2 West Extension



Station Perspective

# Breakdown of Contracts and Status - L2 WE

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Rolling Stock, Civil Works, and EMS	✓ 14 Jan 2015	DBM (Pending)	N/A	✓	DB Contract or	27 Aug 2020	June 2021	TBD
Consultancy (GC)				N/A	N/A	✓ 13 Nov 2018	✓ 19 Jul 2019	✓ 16 Aug 2019

✓: Actual Date  
Target

## DID YOU KNOW?

MRT-3's **Highest Daily Ridership of 622,880** was recorded on 17 August 2012. Average Daily Ridership decreased to 360,379 between July 2016 - July 2018, with the **lowest Average Monthly Ridership of 244,293** recorded in February 2018.

# MRT-3 REHABILITATION

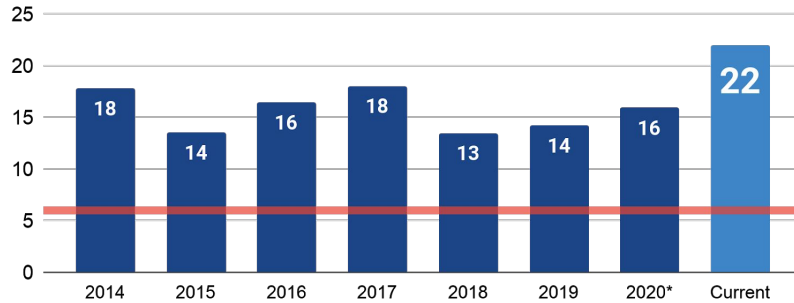
- 1 **North Avenue**  
Located in South of North Avenue
- 2 **Quezon Avenue**  
Located in South of Quezon Avenue
- 3 **GMA Kamuning**  
Located before Kamuning Flyover in front of MMDA and DPWH
- 4 **Cubao**  
Located in South of Aurora Boulevard in front of Farmers Market
- 5 **Santolan - Anapolis**  
Located after Santolan Flyover in front of Camp Crame
- 6 **Ortigas**  
Located in front of ADB Parking Area
- 7 **Shaw Boulevard**  
Located in front of EDSA Central and Shangri-La Mall
- 8 **Boni Avenue**  
Located in front of CV Smithkline Becham and Wheelers Club
- 9 **Guadalupe**  
Located in front of Guadalupe Mall and Our Lady of Guadalupe Seminary
- 10 **Buendia**  
Located in North of Forbes Park Gate
- 11 **Ayala**  
Located in front of Dasmariñas Village
- 12 **Magallanes**  
Located in North of Magallanes Flyover
- 13 **Taft Avenue**  
Located in North of Taft Avenue



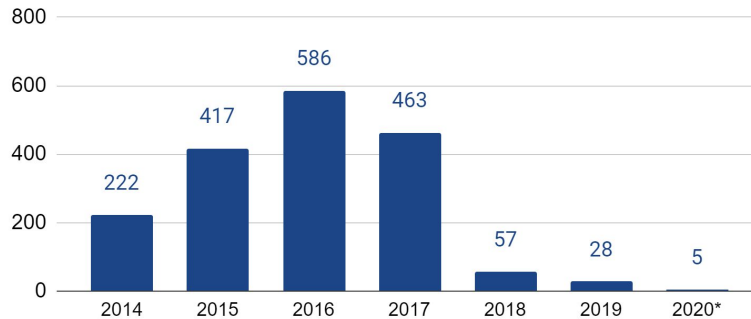
<b>Route Length</b>	16.9 km
<b>No. of Stations</b>	13 stations
<b>Rolling Stock</b>	24 Train Sets (3 Cars per Train Set); Total of 72 Cars (CKD Units)  3 Provisionally Accepted Train Sets; 9 Cars (Dalian Units)
<b>Ridership</b>	600,000 passengers/day
<b>Provinces and Municipalities</b>	<b>National Capital Region:</b> (1) Quezon City (2) San Juan City (3) Mandaluyong City (5) Makati City (6) Pasay City
<b>Total Project Cost</b>	PHP 21.97 Billion (85.45% JICA ODA; 14.55% GOP)
<b>NEDA Board Approval/s</b>	24 August 2018

# MRT-3 Rehabilitation Progress

## Average Train Sets Running



## Passenger Unloading Incidents



\*2020 figures are for January to 13 September

\*\*excludes non-operating months of April and May 2020

## Ave. Train Sets Running

**22** Highest number in the history of the MRT-3

**6** Lowest number recorded in recent years (20 February 2018)

## Ave. Monthly Unloading Incidents

**45** January 2016 to November 2017  
Maintenance service provider: BURI

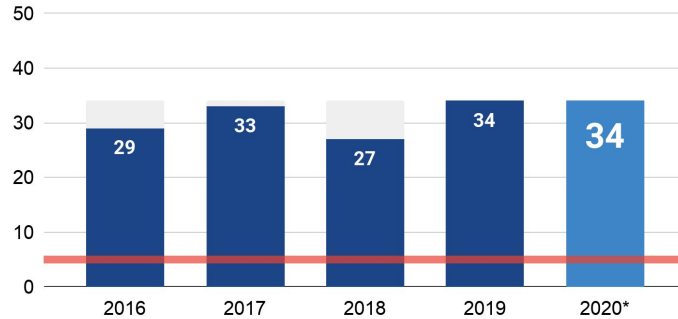
**5** December 2017 to April 2019  
Maintenance service provider: MTT

**1.6** May 2019 to present\*\*  
Maintenance service provider: Sumitomo

# MRT-3 Rehabilitation Progress

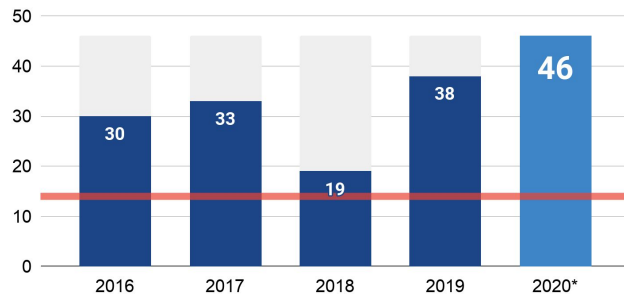
## Operational Elevators

as of end of period



## Operational Escalators

as of end of period



## Operational Elevators

Currently Operational

100%

Lowest Recorded

4 May 2016

5

## Operational Escalators

Currently Operational

100%

Lowest Recorded

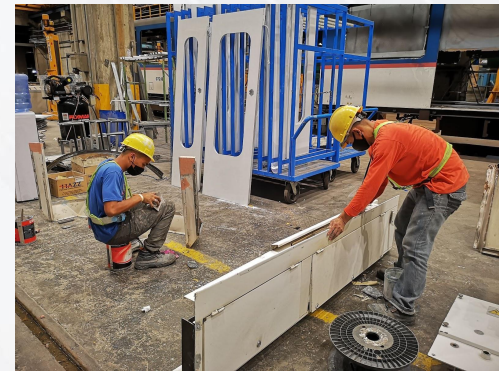
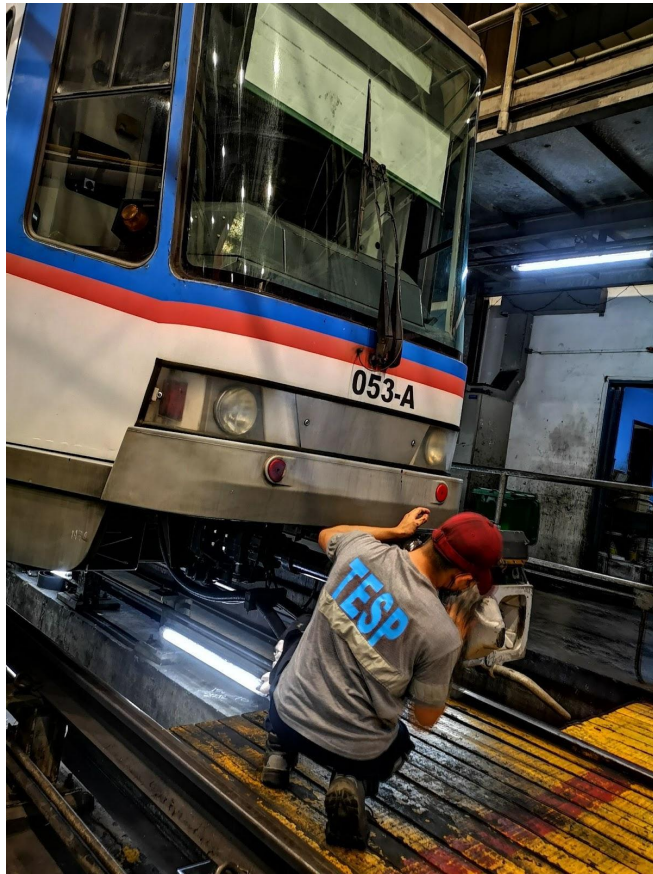
2 Jan 2019

14

\*2020 figures are for January to 13 September

\*\*excludes non-operating months of April and May 2020

# MRT-3 Rehabilitation



LRV General Overhauling

# Breakdown of Contracts and Status - L3 RM

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Rehabilitation & Maintenance Agreement	✓ 22 Aug 2018	✓ 3 Dec 2018	✓ 08 Nov 2018	N/A	N/A	✓ 18 Dec 2018	✓ 27 Dec 2018	✓ 01 May 2019
Supervision Consultant				N/A	N/A	✓ 17 Apr 2019	✓ 18 Dec 2019	✓ 12 Mar 2020

✓: Actual Date  
 Target







Ongoing Procurement of DEDC Consultant

# Breakdown of Contracts and Status - L4

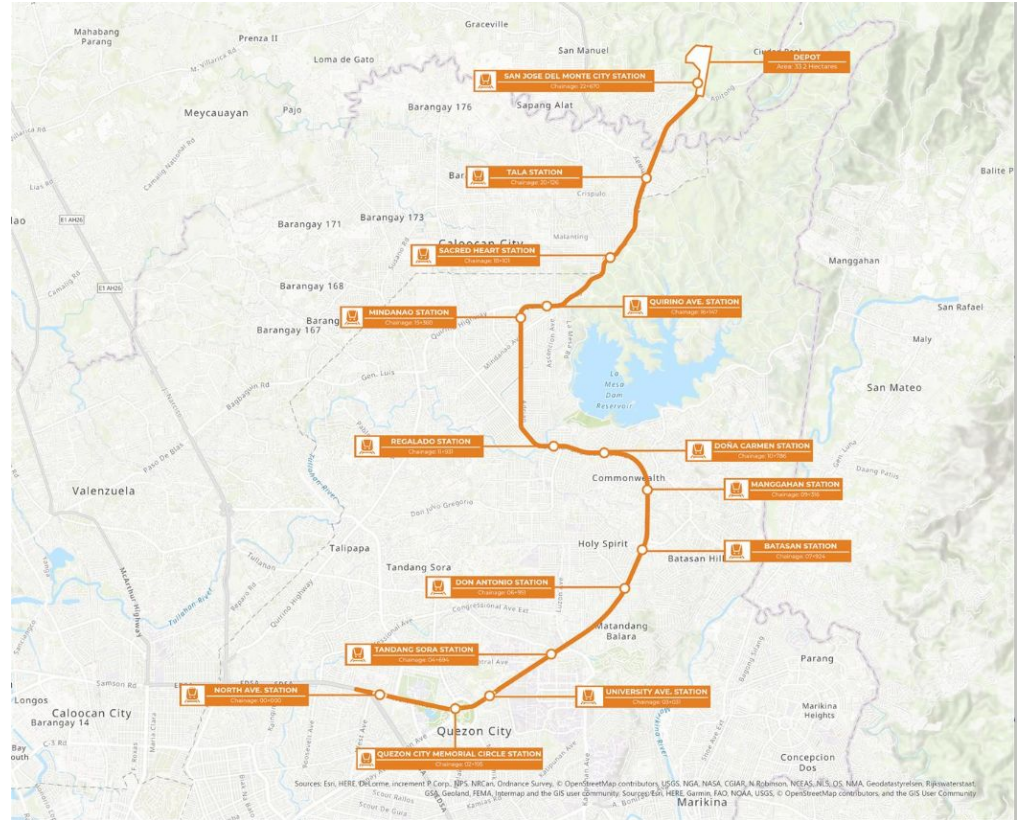
<b>Contract Package</b>	<b>NEDA Board Approval</b>	<b>Issuance of MYCA</b>	<b>Loan Agreement</b>	<b>Basic Design</b>	<b>Detailed Design</b>	<b>Procurement (Bid Publication)</b>	<b>Contract Award</b>	<b>Commencement of Works</b>
TBD	✓		Included in ADB Country Operating Plan (COP)	TBD	TBD	TBD	TBD	TBD

**DID YOU KNOW?**

Unsolicited Proposal for MRT-7 Project was submitted on **27 August 2001** and Concession Agreement was signed on 18 August 2008.

# MRT-7

<b>Route Length</b>	22 kms
<b>No. of Stations</b>	14 Stations
<b>Rolling Stock</b>	108 cars
<b>Ridership</b>	300-800,000 passengers per day
<b>Provinces and Municipalities</b>	National Capital Region Region III (Bulacan)
<b>Total Project Cost</b>	PHP 77 Billion (PPP)
<b>NEDA Board Approval/s</b>	July 2009 21 November 2013 (Re-approval)



# MRT-7



Ongoing Construction



Trains ready for delivery

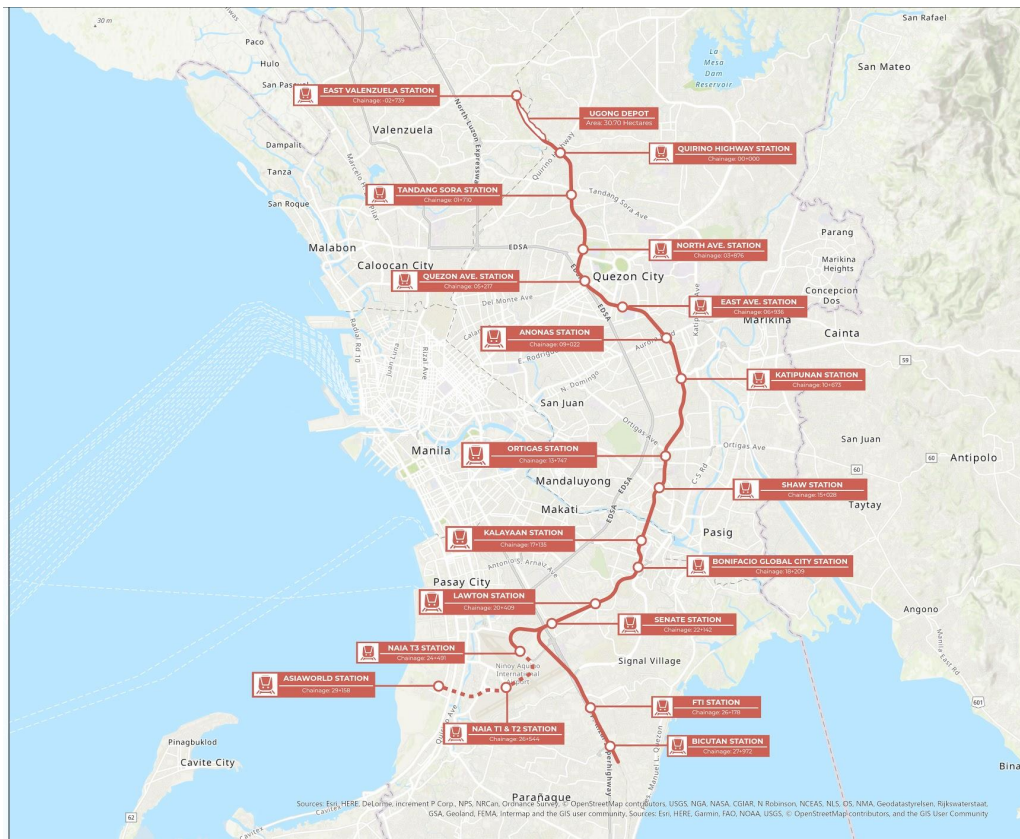
# Breakdown of Contracts and Status - L7

<b>Contract Package</b>	<b>NEDA Board Approval</b>	<b>Issuance of MYCA</b>	<b>Loan Agreement</b>	<b>Basic Design</b>	<b>Detailed Design</b>	<b>Procurement (Bid Publication)</b>	<b>Contract Award</b>	<b>Commencement of Works</b>
Concession Agreement	✓	N/A	N/A	✓	✓	✓	✓	✓

**DID YOU KNOW?**

The idea of a **Subway** in Metro Manila was **first proposed almost half a century ago in 1973** in the Urban Transport Study in Manila Metropolitan Area.

# METRO MANILA SUBWAY



<b>Route Length</b>	36 km
<b>No. of Stations</b>	17 stations (2 of which are combined stations with NSCR Line)
<b>Rolling Stock</b>	30 Train Sets (8 Cars per Train Set); Total of 240 Cars
<b>Ridership</b>	370,000 passengers per day in first year of Full Operations
<b>Provinces and Municipalities</b>	<b>National Capital Region:</b>  (1) Valenzuela (2) Quezon City (3) Pasig (4) Makati (5) Taguig (6) Parañaque (7) Pasay
<b>Total Project Cost</b>	PHP 356.96 Billion (ODA) (74.36% JICA; 25.64% GOP)
<b>NEDA Board Approval/s</b>	17 September 2017

# Metro Manila Subway



05 February 2021, TBM 1 "Kaunlaran" Arriving Ceremony at Manila Harbour, Manila City



# Metro Manila Subway



TBM Stockyard at Tandang Sora



Transport of TBM Parts from Port to Stockyard

# Metro Manila Subway



MMSP Depot at Valenzuela



North Avenue Station

# Breakdown of Contracts and Status - MMSP

✓: Actual Date  
Target

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
General Consultant				N/A	N/A	✓ 16 Aug 2018	✓ 19 Nov 2018	✓ 6 Dec 2018
CP101 (Civil Works)				✓	DB Contractor	✓ 27 Dec 2018	✓ 14 Feb 2019	✓ 8 Mar 2019
CP102 (CW)				✓	✓ Oct 2020	Jun 2021	Nov 2021	Jan 2022
CP103 (CW)				✓	✓ Oct 2020	Jun 2021	Nov 2021	Jan 2022
CP104 (CW)				✓	✓ Sep 2020	✓ 09 Oct 2020	Aug 2021	Oct 2021
CP105 (CW)				✓	Aug 2021	Nov 2021	Sep 2022	Oct 2022
CP106 (EMS)	✓ 12 Sep 2017	✓ 18 Jun 2018	✓ 16 Mar 2018	✓	DB Contractor	✓ 23 Dec 2019	Jun 2021	Aug 2021
CP107 (Rolling Stock)				✓	DB Contractor	✓ 19 Dec 2019	✓ 17 Dec 2020	✓ 08 Feb 2021
CP108 (CW)				✓	July 2021	Oct 2021	Aug 2022	Sep 2022
CP109 (CW)				✓	Aug 2021	Nov 2021	Sep 2022	Oct 2022
AW P1				N/A	N/A	Jul 2021	Oct 2021	Oct 2021
AW P2				N/A	DB Contractor	✓ 12 Nov 2020	✓ 26 May 2021	Jun 2021

## DID YOU KNOW?

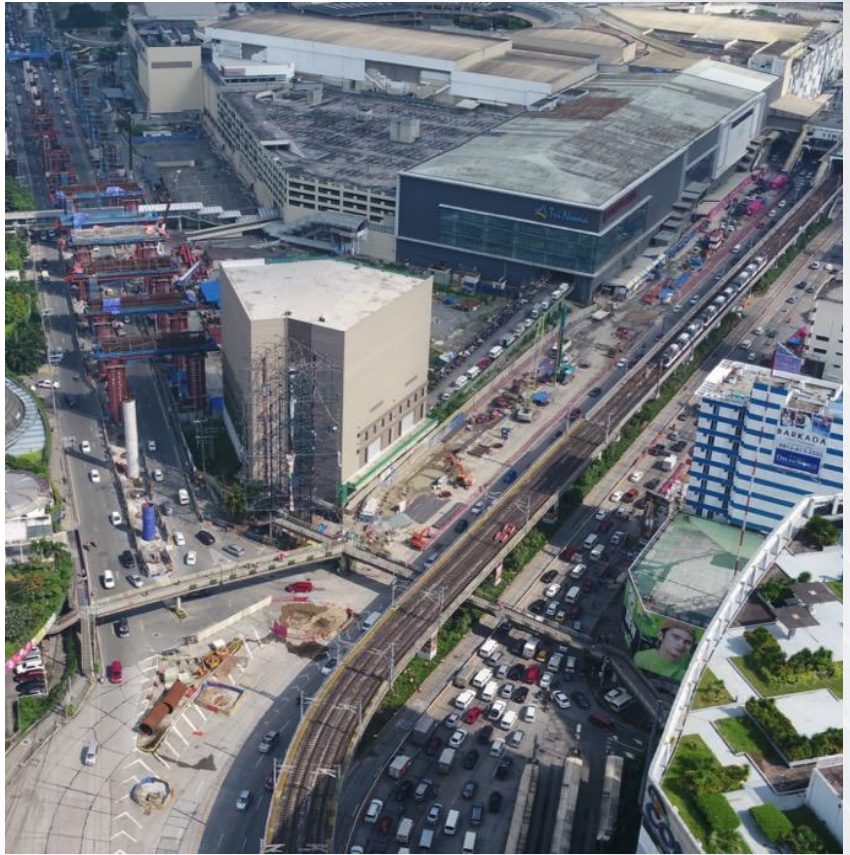
Common Station project was originally **approved** by the **NEDA ICC-CC** on **13 December 2006** as part of LRT-1 North Extension Project.

# COMMON STATION



<b>Project Area</b>	13,700 sqm concourse connecting LRT-1, MRT-3, MRT-7, and MMSP
<b>Provinces and Municipalities</b>	National Capital Region (Quezon City)
<b>Total Project Cost</b>	PHP 2.783 Billion (GOP)
<b>NEDA Board Approval/s</b>	July 2009 21 November 2013 (Re-approval)

# Common Station



Ongoing Construction

# Common Station



Ongoing Construction

# Breakdown of Contracts and Status - CS

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Civil Works and EMS	✓ 27 Jun 2017	N/A	N/A	✓	✓	✓ 26 Jun 2018	✓ 17 Dec 2018	✓ 16 May 2020
Consultancy (GC)				N/A	N/A	✓	✓ 30 May 2011	✓

✓: Actual Date  
Target

# NORTH SOUTH COMMUTER RAILWAY SYSTEM

DEPARTMENT OF TRANSPORTATION PHILIPPINE NATIONAL RAILWAYS



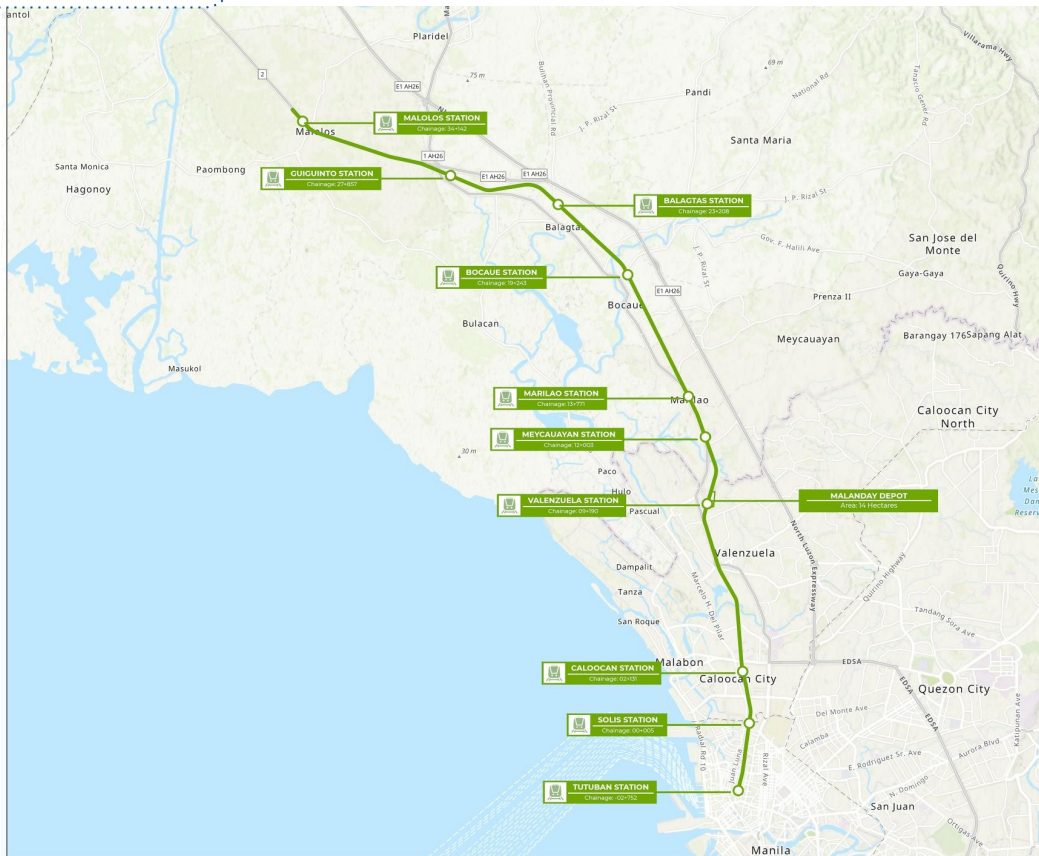


## DID YOU KNOW?

Formerly known as Northrail, this project **started** decades ago **in 1994** under former President Fidel Ramos's term, when a MOA was signed with King Juan Carlos of Spain to build the Manila-to-Clark rail system.

# PNR CLARK 1

<b>Route Length</b>	37.9 km
<b>No. of Stations</b>	10 stations
<b>Rolling Stock</b>	13 Train Sets (8 Cars per Set)
<b>Ridership</b>	300,000 passengers per day
<b>Provinces and Municipalities</b>	National Capital Region Region III (Bulacan)
<b>Total Project Cost</b>	PHP 149.13 Billion (JICA ODA)
<b>NEDA Board Approval/s</b>	8 July 2015 15 November 2018 (Re-approval)



# PNR Clark 1



Ongoing Construction

# PNR Clark 1



Ongoing Construction



# PNR Clark 1



Site Inspection by DOTr Sec. Art Tugade and other officials, PNR GM Junn Magno, Cong. Henry Villarica, and Valenzuela City Mayor Rex Gatchalian in Malanday Depot and Meycauayan Construction Yard on 26 May 2021

# Breakdown of Contracts and Status - PNR Clark.1

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
General Consultant				N/A	N/A	✓ 19 Jul 2017	✓ 10 Nov 2017	✓ 22 Jan 2018
CP01 (Civil Works)				✓	✓	✓ 18 May 2018	✓ 20 Mar 2019	✓ 03 Dec 2019
CP02 (CW)				✓	✓	✓ 18 May 2018	✓ 3 Jan 2019	✓ 2 Jul 2019
CP03 (Rolling Stock)	✓ 15 Nov 2018	✓ 1 Aug 2019	✓ 27 Nov 2015	✓	N/A	✓ 26 Jul 2018	✓ 5 Jul 2019	✓ 27 Aug 2019
CP04 (EMS)				✓	N/A	May 2021	Aug 2021	Sep 2021
CP05 (CW)				✓	Jun 2021	Jun 2021	Nov 2021	Dec 2021

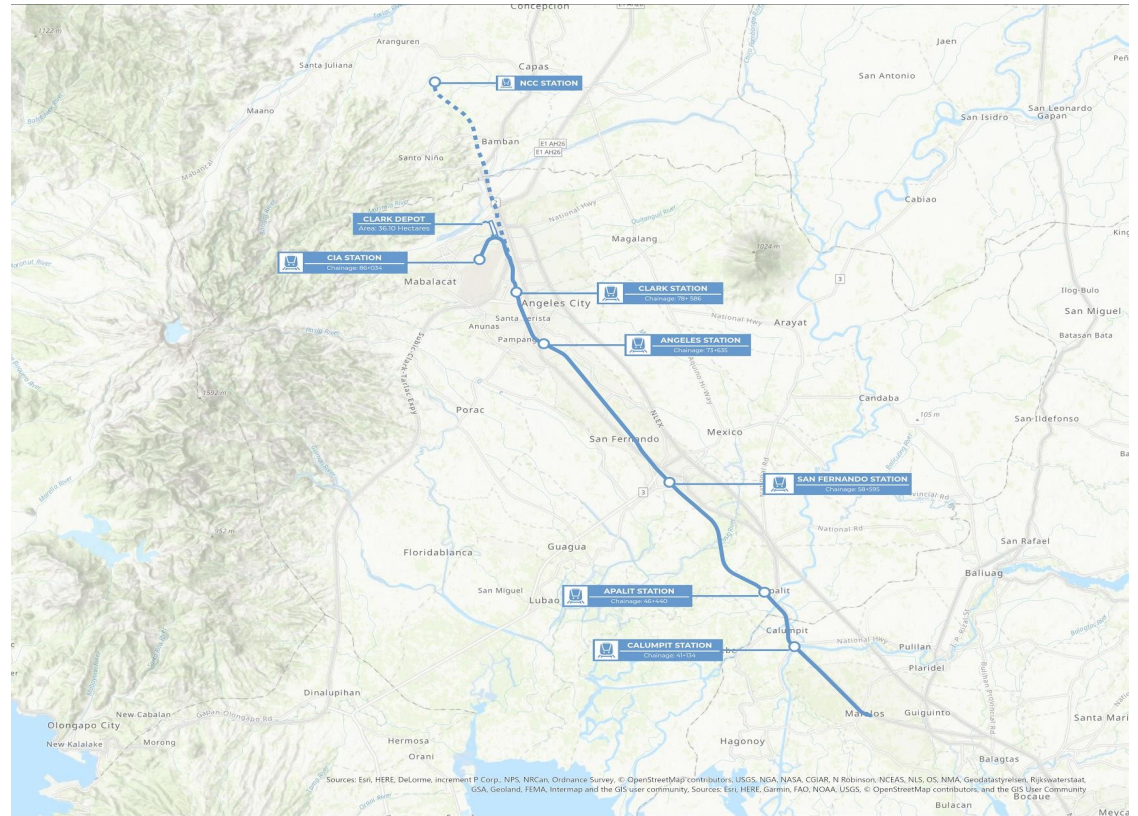
✓: Actual Date  
Target

**DID YOU KNOW?**

Formerly known as Northrail, this project **started** decades ago **in 1994** under former President Fidel Ramos's term, when a MOA was signed with King Juan Carlos of Spain to build the Manila-to-Clark rail system.

# PNR CLARK 2

<b>Route Length</b>	53 km
<b>No. of Stations</b>	6 Stations
<b>Rolling Stock</b>	19 Commuter Train Sets 7 Airport Express Train Sets
<b>Ridership</b>	340,000 passengers per day
<b>Provinces and Municipalities</b>	Region III (Bulacan and Pampanga)
<b>Total Project Cost</b>	PHP 283.8 Billion (JICA and ADB ODA)
<b>NEDA Board Approval/s</b>	12 September 2017 15 November 2018 (Re-approval)



# PNR Clark 2

All civil works packages awarded



Virtual Contract Signing for the CPN-04 to CPN-05 of the PNR Clark Phase 2 attended by heads and representatives from DOTr, PNR, ADB, and winning bidders (Acciona-EEI Joint Venture and Posco E&C)

# PNR Clark 2



CPN01 Batching Plant





# PNR Clark 2



Ongoing Pre-Construction Works; Temporary Facilities and Workers' Area

# Breakdown of Contracts and Status - PNR Clark.2

## PNR Clark 2

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
CPN01 (Civil Works)	✓15 Nov 2018	✓1 Aug 2019	ADB: ✓11 Jul 2019	✓	✓	✓ 30 Jan 2019	✓ 18 Sep 2020	✓ 07 Dec 2020
CPN02 (CW)				✓	✓	✓ 30 Jan 2019	✓ 18 Sep 2020	✓ 07 Dec 2020
CPN03 (CW)				✓	✓	✓ 30 Jan 2019	✓ 18 Sep 2020	✓ 07 Dec 2020
CPN04 (CW)				✓ 6 May 2019	✓ 08 Jul 2020	✓ 30 Oct 2020		
CPN05 (CW)				✓ 6 May 2019	✓ 08 Jul 2020	✓ 28 Oct 2020		

✓: Actual Date  
Target

## DID YOU KNOW?

The PNR was originally a **2,000 km** line which served as the transport backbone of the Luzon island from 1892-1938, spanning San Fernando, La Union to Legaspi Albay, and several branch lines. Most of the rail network were lost during World War II.

# PNR CALAMBA



Source: Esri, HERE, DeLorme, increment P Corp., NPS, NRCAN, Ordnance Survey, © OpenStreetMap contributors, USGS, NGA, NASA, OGN, N, Robinson, NCEAS, NLS, OS, NMA, Geodatasystemen, Rijkswaterstaat, OSA, Geonames, Esri, HERE, DeLorme, and the GIS user community. Source: Esri, HERE, DeLorme, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS user community.

<b>Route Length</b>	56 km
<b>No. of Stations</b>	19 Stations
<b>Rolling Stock</b>	19 Commuter Train Sets 7 Airport Express Train Sets
<b>Ridership</b>	340,000 passengers per day (opening day) Up to 550,000 on full-system operation
<b>Provinces and Municipalities</b>	National Capital Region Region IVA (Laguna)
<b>Total Project Cost</b>	PHP 344.6 Billion (JICA and ADB ODA)
<b>NEDA Board Approval/s</b>	12 September 2017 15 November 2018 (Re-approval)

# PNR Calamba



Station Perspective: Blumentritt Common Station (LRT-1 and PNR Calamba)



# Breakdown of Contracts and Status - PNR Calamba

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works	
CPS01 (Civil Works)	✓15 Nov 2018	✓1 Aug 2019	ADB: ✓ 11 Jul 2019	✓	✓	✓ 10 May 2019 (failed bidding) ✓ 04 Dec 2020	Oct 2021	4Q 2021	
CPS02 (CW)				✓	✓	✓ 04 Dec 2020	Oct 2021	2Q 2022	
CPS03A (CW)				✓		✓ 24 Mar 2021	Dec 2021	2Q 2022	
CPS03B (CW)				✓		✓ 08 Apr 2021	Dec 2021	2Q 2022	
CPS03C (CW)					ADB: 3Q 2020	✓	✓ 24 Mar 2021	Dec 2021	2Q 2022
CPS04 (CW)						✓	✓ 23 Nov 2020	Oct 2021	4Q 2021
CPS05 (CW)						✓	✓ 23 Nov 2020	Oct 2021	4Q 2021
CPS06 (CW)						✓	✓ 23 Nov 2020	Oct 2021	4Q 2021
CPS07 (CW)						✓	✓ 23 Nov 2020	Oct 2021	4Q 2021

✓: Actual Date  
Target

# Breakdown of Contracts and Status - PNR Clark 2 & Calamba

## PNR Clark 2 and Calamba

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
CPNS01 (EMS)	✓15 Nov 2018	✓1 Aug 2019	JICA: ✓ 21 Jan 2019	✓	N/A	✓ Apr 2021	Sep 2021	4Q 2021
CPNS02 (Rolling Stock)				✓	N/A	✓ 15 Sep 2020	Jun 2021	3Q 2021
CPNS03 (Limited Express RS)				✓	N/A	✓26 Feb 2021	Sep 2021	4Q 2021
General Consultant				N/A	N/A	✓ 5 Mar 2019	✓ 2 Aug 2019	✓

✓: Actual Date  
Target

# MMSP & NSCR as North-South Backbone Corridors

## MMSP and NSCR

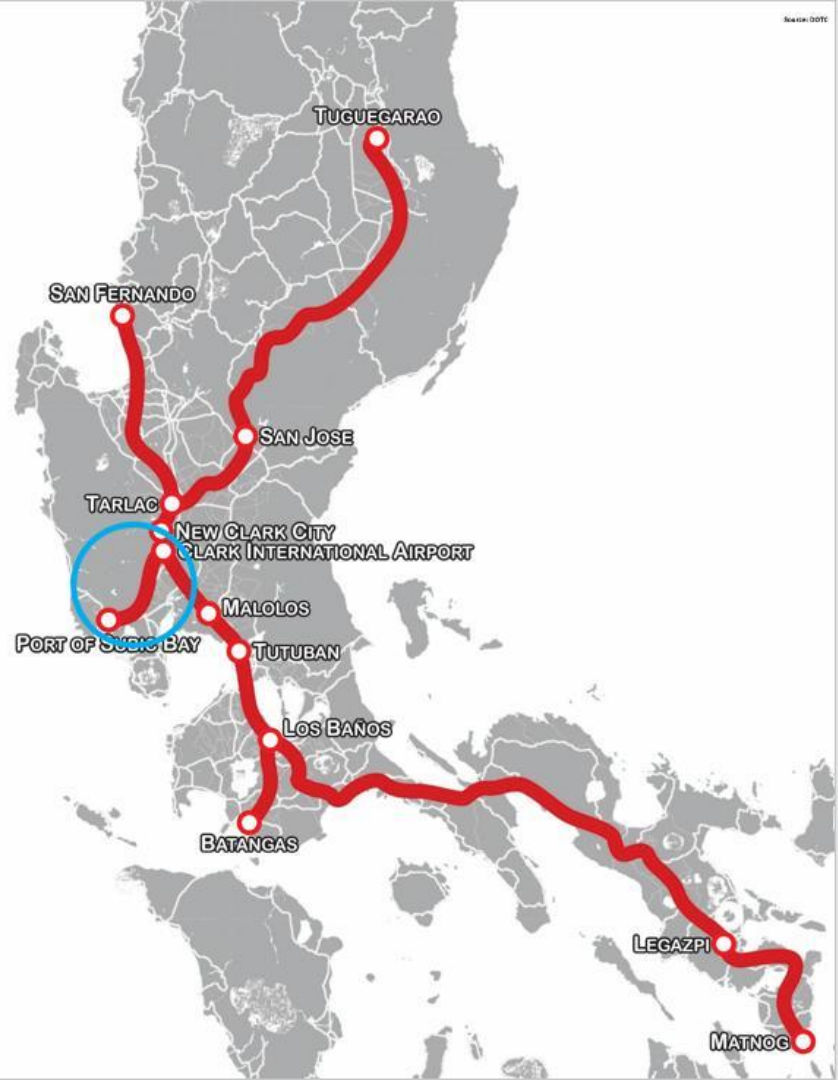
Will serve as major North-South Transport Backbone which will strengthen connectivity of existing and planned urban and east-west railways (Lines 1, 2, 3, 4 7).



# PNR Luzon System Development Framework

- Component of PNR Luzon System Development Framework

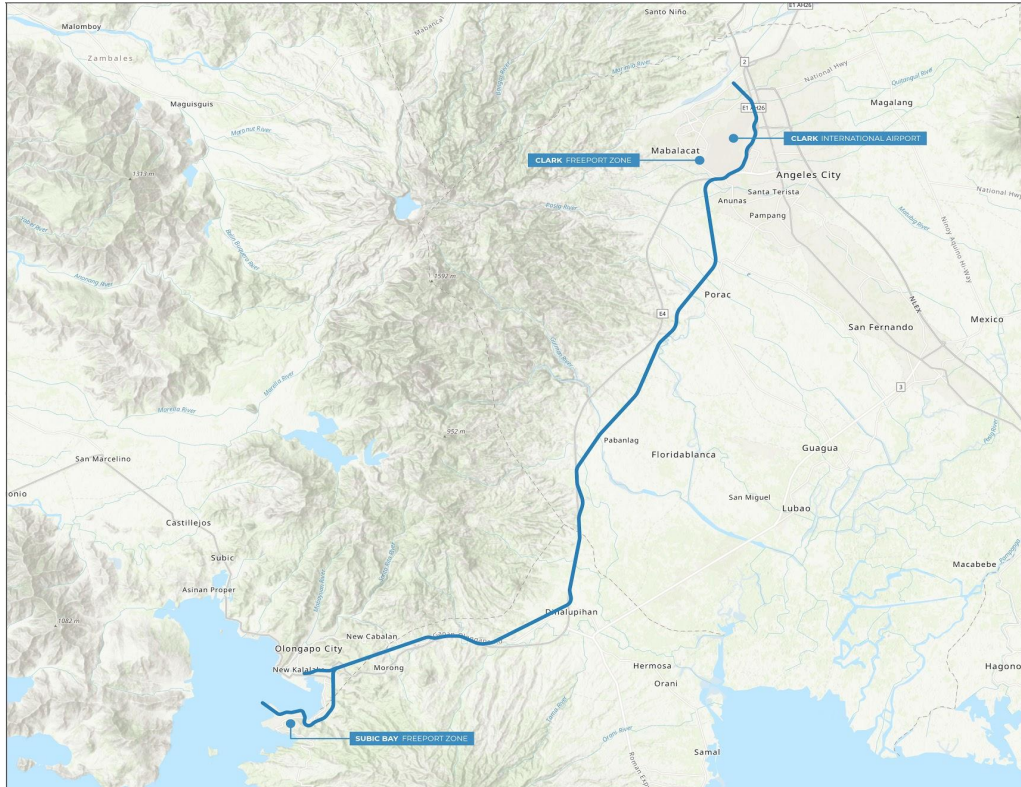
Line		Alignment	Length (km)
PNR North	PNR North Commuter 1 (aka NSCR Phase 1)	Tutuban-Malolos	38
	PNR North Commuter 2 (aka CMRP)	Malolos-CRK-NCC	69
	PNR North Long Haul	NCC-Tarlac-San Fernando	159
		Tarlac-San Jose-Tuguegarao	309
Subic-Clark Railway		PSB-CRK-NCC	80
PNR South	PNR South Commuter (aka NSCR Phase 2)	Tutuban-Los Baños	72
		Los Baños-Legazpi	406
	PNR South Long Haul	Legazpi-Matnog	117
		Los Baños-Batangas	58





## DID YOU KNOW?

The Subic-Clark corridor is envisioned to evolve into a competitive **logistics mega-hub in SE/Asia in the early 2000s**. Currently, the **Subic Bay Port** operations holds up to **600,000 TEUs of Containerized Cargo** and **10 million MT of non-containerized cargo** yearly while the **Clark Airport** is expected to increase its capacity to **12 MPPA**.



# SUBIC-CLARK RAILWAY

<b>Route Length</b>	71.13 km
<b>Provinces and Municipalities</b>	Region III (Pampanga and Zambales)
<b>Total Project Cost</b>	PHP 50.03 Billion (CHN ODA)
<b>Project Impact</b>	Aims to further develop the Subic-Clark corridor as an industrial and logistics hub
<b>NEDA Board Approval/s</b>	25 April 2018

# Subic-Clark Railway

EPCC Contract signed on 16 January 2020



04 September 2020. Opening of Bids for the Engineering, Procurement, Construction, and Commissioning (EPCC) Contract Procurement

# Breakdown of Contracts and Status - SCR

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Turnkey / EPCC Contract	✓ 25 Apr 2018	DBM Legal	Jun 2021	✓	Turnkey Contractor	✓ 20 Dec 2019	✓ Dec 2020	Jul 2021

\*Assuming loan negotiation to signing takes 3 months.

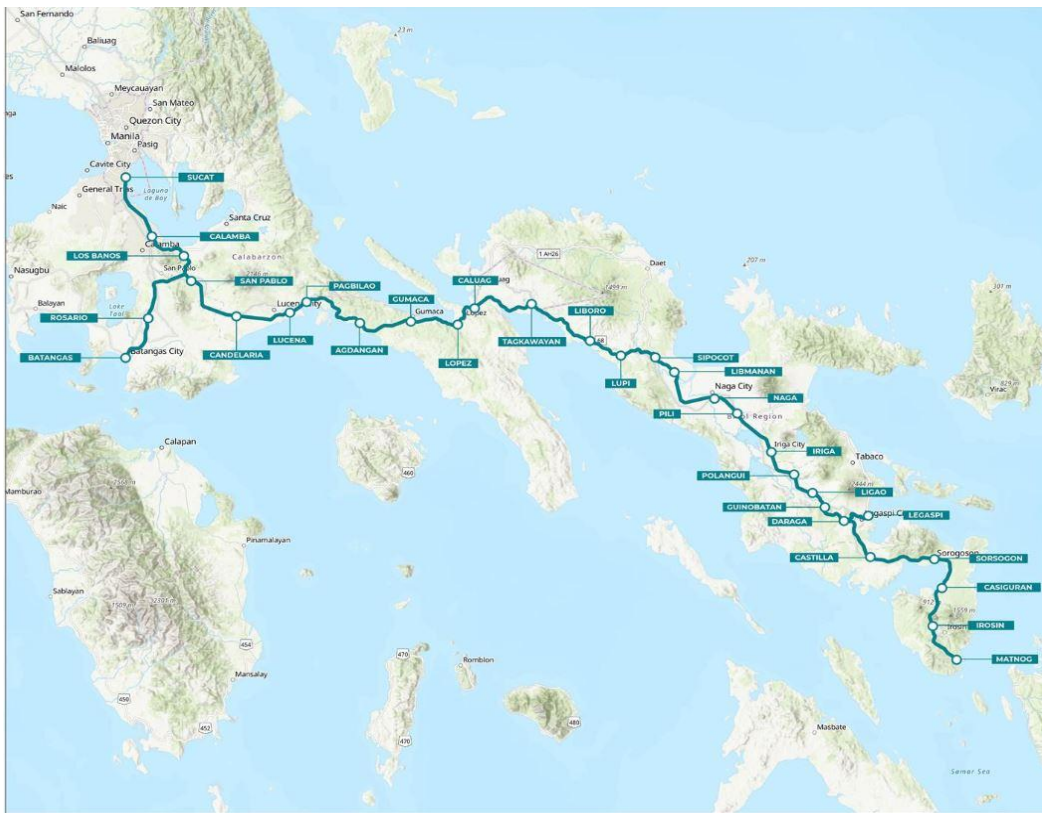
\*\*Per CHN Side, winning contractor will undertake Advance Works (e.g., detailed engineering design, site preparation) after Contract Signing and in parallel with Loan Negotiations.

✓: Actual Date  
 Target

**DID YOU KNOW?**

The PNR was originally a **2,000 km** line which served as the transport backbone of the Luzon island from 1892-1938, spanning San Fernando, La Union to Legaspi Albay, and several branch lines. Most of the rail network were lost during World War II.

# PNR BICOL



<b>Route Length</b>	639 km
<b>No. of Stations</b>	34 Stations
<b>Ridership</b>	100,000 passengers per day
<b>Provinces and Municipalities</b>	National Capital Region Region IVA (Laguna, Quezon, Batangas) Region V (Camarines Norte, Camarines Sur, Albay, Sorsogon)
<b>Total Project Cost</b>	PHP 175.32 Billion (CHN ODA)
<b>NEDA Board Approval/s</b>	12 September 2017

Source: PNR Website; Railroads and Regional Devt in the Philippines: Views from the Colonial Iron Horse by Arturo Corpuz (1989)

Awaiting procurement of DB Contractor





Soil Sampling activities for the preparation of EIA



Water Sampling activities for the preparation of EIA



Geohazard observation and interview at the existing PNR Line

# Breakdown of Contracts and Status - PNR Bicol.

✓: Actual Date

Target

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement*	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Project Management Consultant			✓ 29 Aug 2019	N/A	N/A	✓ 26 Jul 2018	✓ 5 Nov 2018	✓ AW: 17 Nov 2018 ✓ NTP: 10 Aug 2020
CP1 (Design-Build)			Jun 2021	✓	DB Contractor	Jul 2021	Aug 2021	Aug 2021
CP2 (Design-Build)			May 2022	PMC	DB Contractor	Jan 2022	Mar 2022	Jun 2022
CP3 (Design-Build)	✓ 12 Sep 2017	✓ 13 Apr 2016	May 2022	PMC	DB Contractor	Jan 2022	Mar 2022	Jun 2022
CP4 (Design-Build)			May 2022	PMC	DB Contractor	Jan 2022	Mar 2022	Jun 2022
CP5a (Rolling Stock)			Jul 2021	PMC	DB Contractor	July 2021	Sep 2021	Sep 2021
CP5b (Rolling Stock)			Mar 2022	PMC	DB Contractor	Jan 2022	Mar 2022	Jun 2022

\*Assuming loan negotiation to signing takes 3 months.

\*\*Per CHN Side, winning contractor will undertake Advance Works (e.g., detailed engineering design, site preparation) after Contract Signing and in parallel with Loan Negotiations.

## DID YOU KNOW?

Interest in the Mindanao Railway Project was raised in the **1950s** after the rehabilitation of Agus River Hydroelectric Power Plant, when cheap power was intended to electrify the railway line. This was **manifested in RA 2012 approved in 1957**, An Act Increasing the Capital Stock of the Manila Rail Road Company, **providing Php 40 M for a railway project in Mindanao.**



# MINDANAO RAILWAY

<b>Route Length</b>	100 km
<b>No. of Stations</b>	8 Stations (Tagum, Carmen, Panabo, Mudiang, Davao, Toril, Sta. Cruz, Digos)
<b>Ridership</b>	122,000 passengers per day
<b>Provinces and Municipalities</b>	Region XI (Tagum, Carmen, Panabo, Davao, Sta. Cruz, Digos)
<b>Total Project Cost</b>	PHP 81.7 Billion (CHN ODA)
<b>NEDA Board Approval/s</b>	12 September 2017 29 November 2019 (Re-approval)



# Mindanao Railway

Ongoing procurement of Project Management Consultant



Validation of Parcellary Plans

# Breakdown of Contracts and Status - MRP

Contract Package	NEDA Board Approval	Issuance of MYCA	Loan Agreement	Basic Design	Detailed Design	Procurement (Bid Publication)	Contract Award	Commencement of Works
Project Management Consultant	✓ 29 Nov 2019	-	Jun 2021	N/A	N/A	✓ Sep 2020	Jun 2021	Jul 2021
Design-Build Contractor			Jun 2021	✓	DB Contractor	Jun 2021	Jul 2021	Aug 2021

\*Assuming loan negotiation to signing takes 3 months.

\*\*Per CHN Side, winning contractor will undertake Advance Works (e.g., detailed engineering design, site preparation) after Contract Signing and in parallel with Loan Negotiations.

✓: Actual Date  
Target



# How to Participate?

# How to Participate



## JICA-FUNDED

Lead has to be Japanese  
30% minimum Japanese content  
Relatively low requirements for Joint Venture Members  
Subcontractor qualifications depend on whether nominated for qualifications compliance



## ADB-FUNDED

Any ADB Member Country  
No minimum content required  
Relatively high requirements for Joint Venture Members  
Same for Subcontractor



## CHN-FUNDED

Lead has to be Chinese  
25% minimum Chinese content  
Any Subcontractor



## LOCALLY-FUNDED

60-40 Filipino-Foreign requirement for Infrastructure Contracts  
Goods Contracts open to Foreign, provided there is reciprocity

## PPP

Private Proponent selects Partners and Subcontractors

## OPERATIONS AND MAINTENANCE

Since involves operation of a “Public Utility”, requires Concessionaire to be a Philippine Entity  
Options are to be Minority Partner and/or Technical Service Contractor

# Useful Links

- [Handbook for Procurement under Japanese ODA Loans](#)
- [Main Eligibility Requirements for bidding under ADB-financed projects](#)
- [ADB Guide on Bid Evaluation](#)
- [PS-DBM PHILGEPS Website](#)
- [DOTr Website](#)

# Railway Assets Build-up; Only the Beginning

2016 → 2022\*

77 k.m.  
ROUTE LENGTH



61 Stations  
NO. OF STATIONS



234 Trains  
NO. OF TRAINS



## Total Project Cost of NB Approved Rail Projects

Financing	2022
ODA (JICA)	796.58
ODA (ADB)	444.60
ODA (CHN)	307.04
PPP	107.76
GAA-funded	13.07
<b>TOTAL</b>	<b>1,669.05</b>

1,209 k.m.  
ROUTE LENGTH



168 Stations  
NO. OF STATIONS



1,381 Trains  
NO. OF TRAINS



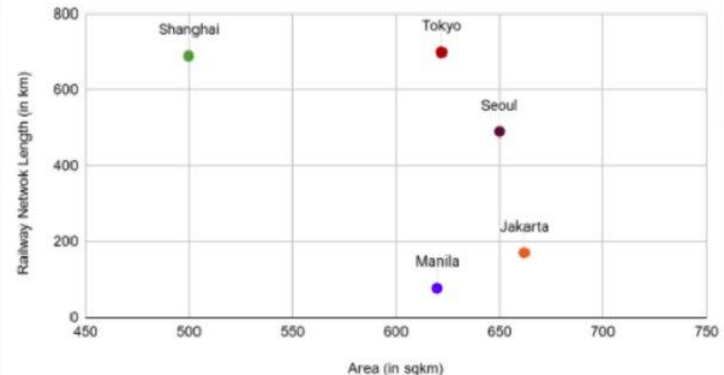
\* All railway projects identified in the 2014 and 2017 Transportation Infrastructure Roadmap for the Greater Capital Region (GCR) are investment-approved, financed, and mostly procured and already ongoing construction / production.

**x4-5** more similarly sized railway pipelines needed

	Manila	Jakarta	Seoul	Tokyo	Shanghai
Area	620 sqkm	662 sqkm	650 sqkm	622 sqkm	500 sqkm
Km Rail	77 km	170.2 km	490 km	700 km	690 km
Rail Density	0.12 km/sqkm	0.25 km/sqkm	0.75 km/sqkm	1.12 km/sqkm	1.38 km/sqkm

Source: Manila Urban Transport Scoping Study by AECOM

## Railway Density in Key Cities

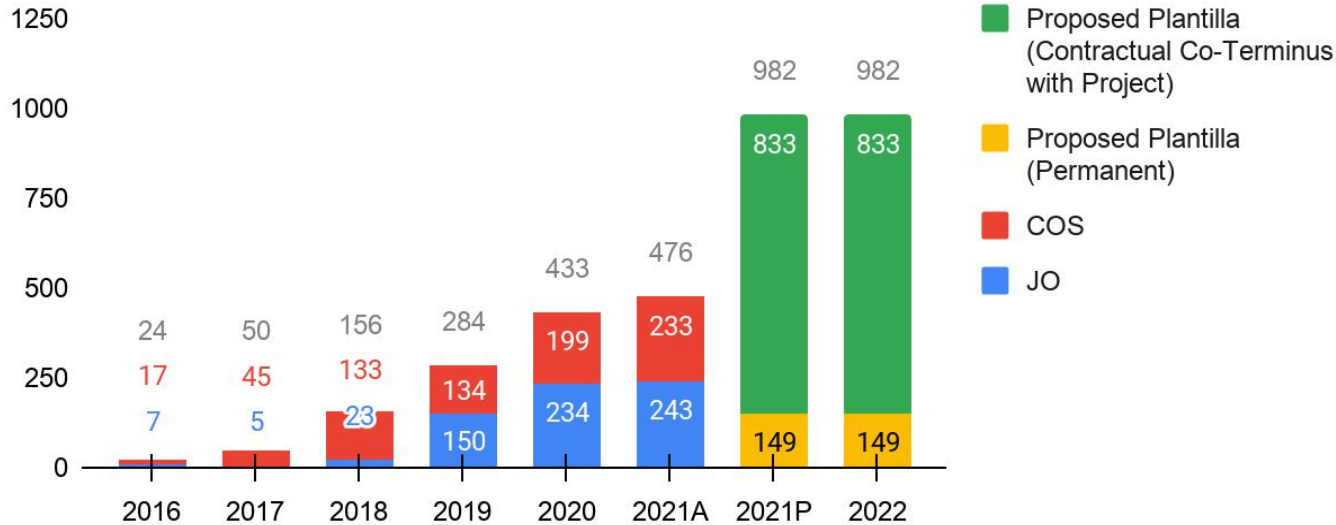


# “Pipeline 1” Projects Ongoing, Preparing “Pipeline 2”

Line	1999 Metro Manila Urban Transportation Integration Study	2014 Roadmap for Transport Infra Devt for MM and its Surrounding Areas (Region III and Region IV)	2017 Follow-up Survey on Roadmap for Transport Infrastructure Development for Greater Capital Region (GCR)	Status To Date
Line 1	South Extension (Imus)	North Extension (Malabon)		Ongoing Construction
	South Extension (Dasmariñas)	South Extension (Dasmariñas)	LRT-1 Cavite Extension	
Line 2	East Extension (Antipolo and Masinag)	East to Antipolo	LRT-2 East Extension	Ongoing Testing and Commissioning
	West Extension (North Harbor)	West (North Harbor)		Ongoing Preparation for DB Procurement
	Southeast Extension (Taytay) Southeast Extension (Binangonan)			
Line 3	Northwest Extension (Navotas)			Under Planning -LGU and PPP
	South Extension (Reclamation)			
Line 4	Recto-Batasan		MRT-3 Capacity Expansion	For completion by Dec 2021
	Phase 2 (Novaliches)			Ongoing procurement of DED Consultant
	Branch Line (San Mateo)			
Line 7		Recto-Commonwealth Ave. - Banaba	Stage 1 - Quezon Ave. - Commonwealth Ave.)	Ongoing Construction
Mega Manila Subway		Mega Manila Subway	Mega Manila Subway	Ongoing Construction
Common Station			Common Station for LRT-1, MRT-3, and MRT-7	Ongoing Construction
PNR Line	Northrail & MCX Meycauayan (Caloocan)	Mega Manila North-South Commuter Railway (Malolos-Calamba)	Mega Manila North-South Commuter Railway (Malolos-Calamba)	Ongoing Construction
	Caloocan- Sta. Mesa			Ongoing PNR operations
	Sta. Mesa - EDSA			
	EDSA-Alabang Alabang - Sta. Rosa			Ongoing procurement of contractor

# Increasing Implementation Capacity\*

## Rail Sector Personnel



\*Supported by ADB Technical Assistance grants:

TA No.	TA	Amt (in M USD)
TA 9570 PHI	Railway Project Implementation Support and Institutional Strengthening	3.4
TA 9913-PHI	Strengthening the Transition of Vulnerable Communities Affected by the Malolos-Clark Railway Project	2
TA 9336-PHI	Strengthening Infrastructure Capacity and Innovation for Inclusive Growth	0.7
TOTAL		6.1

	2016	2017	2018	2019	2020	2021	2022
Cumulative No. of Contracts	11	13	19	27	34	59	69
Cumulative Contract Amount (B PHP)	119.47	140.20	194.43	349.93	547.83	1,345.72	1,490.72
No. of Rail Personnel	24	50	156	284	433	476	982
Contract Amount per Rail Personnel (in B PHP)	4.98	2.80	1.25	1.23	1.27	2.83	1.52



# Trust: Key to Solving Large Scale Problems with Large Scale Infrastructure

PROBLEM

**Php 1,277 B/ USD 24.8 B**

Annual Direct Economic Cost of Congestion which could have funded other social welfare services

**Hours spent in traveling/ delays passengers/ long waiting times**

Depriving people of time spent with loved-ones

SOLUTION

	What are we building	How are we financing	Authority to Spend	Who are building	Where are we building	Who are Implementing	Coordination
<b>DOTr</b>	Project Development (Master Plan, FS)	Loan Agreement	Appropriations	Contracts	Right-of-Way and Site Acquisition	Personnel	Coordination
<b>Earn Trust</b>	Investment Decision	Lending	Appropriations	Contracts	Sale/Relocation	Positions	
<b>Approver</b>	RDC, ICC-TB, ICC-CC, NEDA Board	Development Partners	Congress	Contractors (through procurement process, industry-standard contract forms, CFP processes standing dispute boards)	Landowners, Utility Companies, Informal Settler Families	DBM	National Govt, Local Govt Units (through One Government approach)



**Large-Scale Infrastructure**



**End**