

 **IBON** TRANSPORT
SERIES **NO.1**

METRO MANILA'S TRANSPORT CHAOS



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LIST OF ACRONYMS

AADT	annual average daily traffic
AusAID	Australian Agency for International Development
BBB	Build Build Build
BOT	build-operate-transfer
BRT	bus rapid system
C	circumferential
Cavitex	Manila-Cavite Expressway
DBM	Department of Budget and Management
DOTC	Department of Transportation and Communications
DPWH	Department of Public Works and Highways
EDSA	Epifanio delos Santos Avenue
EV	electric vehicle
GAA	General Appropriations Act
GCR	Greater Capital Region
GOCC	government-owned and controlled corporation
HOV	high-occupancy vehicles
HPAAC	Healthcare Professionals Alliance Against COVID-19
HPG	Highway Patrol Group
HRT	heavy rapid transit
IRR	implementing rules and regulations
JICA	Japan International Cooperation Agency
JUMSUT	JICA Update on Manila Study on Urban Transport
km	kilometer
kph	kilometer per hour
LEV	light electric vehicle
LRT	Light Rail Transit
LRTA	Light Rail Transit Authority
LRV	light rail vehicle
LTFRB	Land Transportation Franchising Regulatory Board
LTO	Land Transportation Office
MATES	Manila Toll Expressway Systems, Inc.
MCX	Manila Calabarzon Express
MRT	Metro Rail Transit
MMDA	Metropolitan Manila Development Authority
MMETROPLAN	Metro Manila Transport, Land Use and Development Planning Project
MMPTPSS	Mega Manila Public Transport Planning Support System
MMPTS	Mega Manila Public Transport Study
MMTC	Metro Manila Transit Corporation
MMUTIP	Metro Manila Urban Transport Improvement Project
MMUTIS	Metro Manila Urban Transportation Integration Study
MMUTSTRAP	Metro Manila Urban Transportation Strategy Planning Project
MOTC	Ministry of Transportation and Communications
MPIC	Metro Pacific Investment Corporation
MPTC	Metro Pacific Tollways Corporation
MUCEP	MMUTIS Update and Enhancement Project
NCR	National Capital Region
NEDA	National Economic and Development Authority
NLEX	North Luzon Expressway
OBR	organized bus route
ODA	official development assistance
OECF	Overseas Economic Cooperation Fund
OTCA	Overseas Technical Cooperation Agency

P2P	point-to-point
PCU	passenger car unit
PDP	Philippine Development Plan
PEATC	Public Estates Authority Tollway Corporation
PISTON	Pagkakaisa ng mga Samahang Tsiper at Opereytor Nationwide
PNCC	Philippine National Construction Corporation
PNP	Philippine National Police
PNR	Philippine National Railways
PUV	public utility vehicle
PWD	person with disability
R	radial
RBT	rail-based transit
RMC	route measured capacity
ROW	right of way
SCP	Service Contracting Program
SLEX	South Luzon Expressway
SMC	San Miguel Corporation
SOMOCO	Skyway Operations and Maintenance Corporation
SUV	sports utility vehicle
SWS	Social Weather Station
TNVS	transport network vehicle service
TOD	transit-oriented development
UP	University of the Philippines
USAID	US Agency for International Development
UTDP	(Metro Manila) Urban Transport Development Plan
UTSMA	Urban Transport Study in Manila Metropolitan Area
UV	utility vehicle

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Foreword

Investing in transport infrastructure has been imbued with magical properties. The government's infrastructure offensive is overwhelmingly spent on roads, rail, seaports and airports. We are made to believe, if we do not already do so, in the alchemic powers of these transport projects to transform the sector's anarchy into a catalyst for development.

IBON's Transport Series contributes to explaining the misdirection happening. Ordinary Filipinos do suffer the most from the anarchy of the country's transport system. In the cities, commuters deal with interminably long lines for jeepneys, buses and the few trains there are – with those on the road further facing haphazard routes and stygian traffic. The transport system, like the congested cities themselves, have evolved without foresight or regulation.

In the countryside, rural communities deal with exorbitantly priced travel which is few and far between. Unreliable and inconsistent transport options exacerbate the geographical divide where vast sections of the population already have such scant livelihood opportunities and social services. The government should address these travails, immediately and urgently, but how they are addressed matters immensely.

Unfortunately, there are very many reasons to question if the profit-driven privatized way is really the way to go for the people who desperately need better mobility the most. Markets provide only to those who have the purchasing power to make their presence felt, but in the Philippines the vast majority are just getting by. Tens of millions of Filipinos will just be made to pay more for transport out of what little income they have. Privatized transport prioritizes lucrative routes while underserving socially crucial but unprofitable connections.

Even more dubious is the unquestioning belief that transport projects somehow unleash economic miracles by making people and goods move around much faster. Developing agriculture and building Filipino industry, however, involves so much more than mobility and overstating the impact of transport projects is disingenuous. If there is no substantial state support, trade protection and foreign investment regulation for domestic producers, better transport will just reinforce the low value-added, foreign investor-biased, and service-oriented economy behind so much joblessness, informality and backwardness today.

As with most everything about politics, economics and political economy the most important questions to ask to gain clarity are always "for what" and "for whom."

Trillions of pesos have to be spent to develop the transport system but it is critical to ask if the trillions of pesos are not just spent well but also going to their best uses.

The topic is not easy. Transport has to move 110 million Filipinos and support all their economic and other activities. These are spread across over 7,600 islands worth of land and forests, mountains and valleys, and rivers and seas. Moreover, policies are not made *tabula rasa* or in a political vacuum – decisions are made amid accumulating urbanization, corporate investments, and even democratic decline. The transport knot to untangle is only becoming more immense by the day.

This series will take up different aspects of the problem. The National Capital Region (NCR) is the country's undisputed center of economic activity. It is also incontestably the country's prime example of anarchic transport born out of years of neglect and profit-minded pseudo-urban planning. The NCR has tens of thousands of the iconic jeepneys which have become symbols of a sector left to the whims of informal governance and ad-hoc development. Yet after providing decades of affordable service, small drivers and operators nationwide are being displaced in the name of so-called modernization and the environment.

The Philippines' transport infrastructure spanning road and rail, small vehicle and buses, and ports and airports is undeniably growing. Yet systemic disparities still abound and mobility is still unreliable and inaccessible, expensive and burdensome, and unsafe and inconvenient for most of the population. Poor and low-income Filipinos compelled to economize are on the frontlines of active mobility, especially as the government keeps failing to provide reasonable transport options for them – even just the low-hanging fruit of bus rapid transport.

The anarchic and inequitable state of transportation infrastructure demands a comprehensive reevaluation and strategic overhaul. The prevailing market-oriented policy environment is a binding constraint that legitimizes the state's abdication of its responsibility for public transport. This favors profit-centric motives over the general public welfare.

In contrast, responsible public ownership provides a framework to mobilize resources for universal mobility as well as strengthens regulation and oversight in matters of safety, reliability, and efficiency.

Accessibility is intricately linked to public ownership. By strategically planning routes and deploying resources, a publicly-driven transport system ensures connectivity to even the remotest corners of the archipelago as necessary. Affordability, a cornerstone of public welfare, is best guaranteed by public ownership. Fare structures can properly balance operational costs of transport providers with the commuting public's capacity to pay.

A publicly-owned and -operated transport system run responsibly and democratically will constantly develop its technical prowess and financial capabilities to provide more efficient transportation. This immediately improves the welfare of Filipino commuters.

But beyond this, public ownership also enables the sector to be strategically linked to overall economic development. The short-term employment from construction projects is just the beginning, and even quickly fades. Much more important is for the transport infrastructure to support and be part of comprehensive programs for agricultural modernization and national industrialization.

Farms and industrial firms have to be made productive first for improved mobility to mean anything, and for transport infrastructure to contribute to the structural transformation of the economy. Connectivity helps facilitate this but stops being meaningful after a point when input subsidies, protection against imports, and regulating foreign investment for development quickly become more necessary. Industrialization is also be boosted by government-led initiatives that encourage domestic production of the materials, machinery and technology for transport.

IBON's Transport Series seeks to give transport policy stakeholders a better understanding of the sector from the perspective of the people and with a view to the structural economic transformation the country needs. We aim to foster informed discourse on the importance of public ownership as a cornerstone of transport development, and of the steps needed towards this.

For too many Filipinos, morning's breaking light is the prelude to tiring hours of travel that's even repeated at the end of the day. A better transport system that eases this daily burden won't fix all the other troubles people face which will need constant struggle. But it's at least a start.

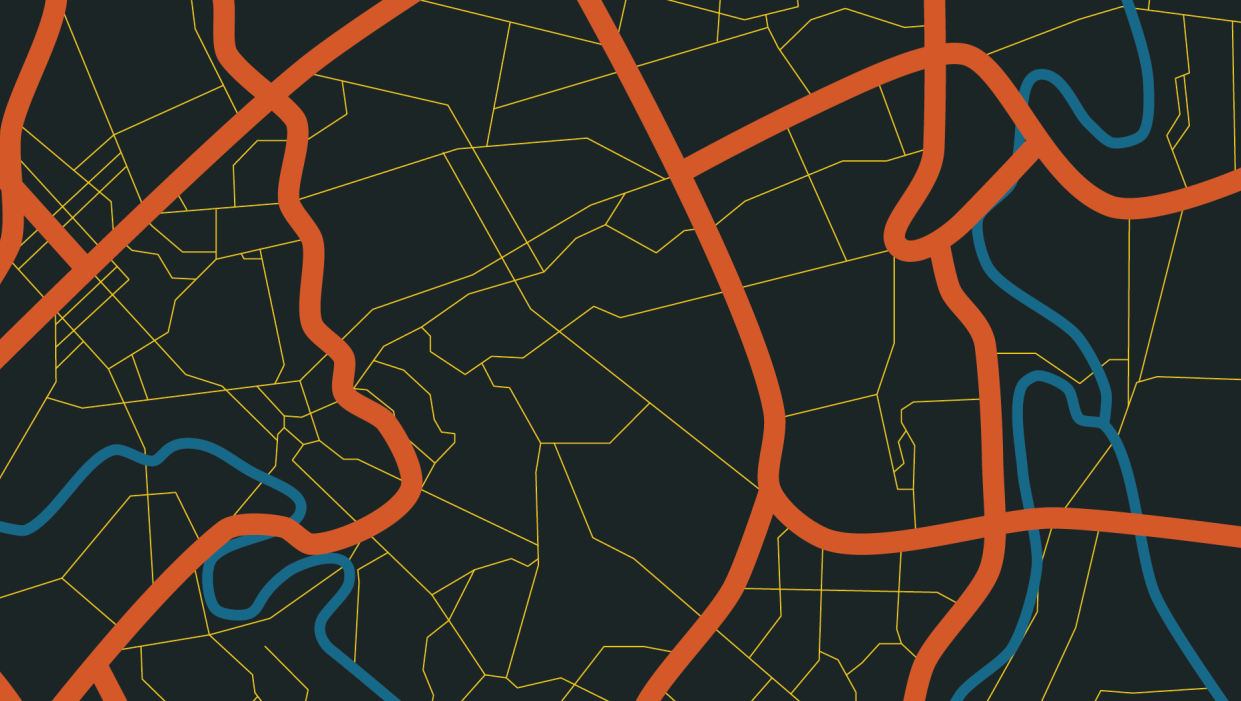
Preface

This is a part of IBON's Transport Series which aims to describe the problems in the sector and come up with viable and sustainable solutions. Each part is focused on one aspect of the transport crisis, especially in Metro Manila and its environs where it manifests. Each part does not aim to be exhaustive but to raise questions for further research and discussion, and hopefully, proposals for meaningful changes.

The Transport Series recognizes that the transport mess is complex and only reflects an economy and economic planning that do not serve the majority of the population. It is framed within IBON's very critique of neoliberalism that has taken over the Philippine government's visioning of so-called Philippine development but has only caused our long-term economic decline.

If the transport crisis has to be resolved in the realm of policymaking, it should be radically and comprehensively placed within the principle of people-centered economics – the kind of policymaking that genuinely promotes sustainable development. The transport crisis, after all, is also just a symptom of a far more deep-seated crisis of Philippine underdevelopment.

This part of the IBON's Transport Series describes the mess, including government's official transport policies.



Introduction

The transport system in Metro Manila, the Philippines' National Capital Region (NCR), is one of the most unsustainable in the world. If it is any indication of the transport mess, the navigation app Waze has identified Metro Manila traffic as the worst on earth.

It is so difficult to get to where one needs to be in Metro Manila. Commuters have to take several modes of transport to get to their intended destination, with an average of two to three transfers.¹ Routes and modes of public transport are not fully interconnected; and commuters have to walk long distances to get to the next stop or terminal, which is also aggravated by the lack of proper walkways and sidewalks.² Public transport has been bad for decades and has reached the point of crisis in recent years.

Yet, authorities have only come up with a hodgepodge of uncoordinated solutions, which only add to the notoriety of Metro Manila's transport crisis. The government, private sector, and even multilateral institutions have proposed transport policy reforms to push for infrastructure projects. They have framed these proposals within the design of 'livable cities', the latest buzzword in the pursuit of rapid economic growth. They have also been quick to repackage these as the 'new normal' in the time of the COVID-19 pandemic. Unfortunately, however, these proposals remain stuck in the neoliberal economic policy framework, which has proven to be quite an unsustainable pattern of production and consumption.

Shape of chaos

Urban and transport planners have focused on Metro Manila and the nearby provinces of Bulacan, Cavite, Laguna and Rizal, dubbed the Greater Capital Region (GCR), as the country's main economic hub. Public transport accounts for 70% of passenger trips in GCR.³ Public transport may be taken by road, rail and river. Despite the feasibility of these modes, the GCR, specifically Metro Manila, is notorious for its chaotic transport system. This is stemming from the rule of commercial and private profit interests instead of a strong and reliable government.

Road shambles

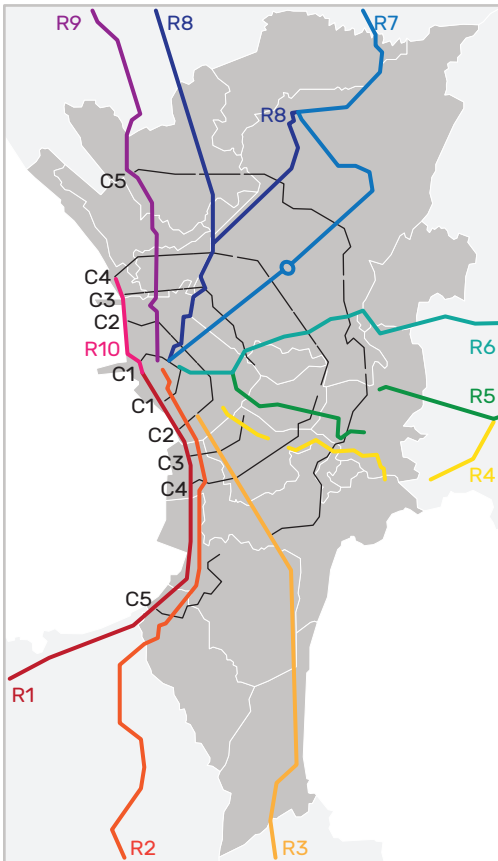
Public commuters rely extensively on the road system composed of buses, jeepneys, regular metered taxis, and garage to terminal or utility vehicles (UV). There are also a handful of point-to-point (P2P) buses, which depart on a fixed schedule and travel directly from the terminal to the drop-off point. At the height of pandemic lockdowns in 2020, the government also started supervising the operation of the EDSA Carousel, a bus rapid transit (BRT) system running on a dedicated right-of-way called the EDSA Busway. Additionally, Metro Manila has seen in recent years the proliferation of mobile applications-based transport network vehicle services (TNVS) and motorcycle hailing services, such as Grab, Angkas, and JoyRide, among others. On secondary roads within barangays, tricycles and 'pedicabs' (cycle rickshaw) operate for the 'last mile' in transporting people.^{4 5}

All of these, however, are commercially or privately operated thus intent on making revenues and profits rather than coordinating with one another for more efficient transport service. The state does not centralize all efforts nor operate its own road transportation. Even the EDSA Carousel is run by the Mega Manila Consortium Corporation and ES Transport and Partners Consortium.⁶

Metro Manila has an arterial road network that is composed of six circumferential (C) roads and 10 radial (R) roads that connect the region's 17 cities and one municipality. The C roads serve as beltways and go around the old city center of Intramuros, City of Manila. The R roads start from Kilometer 0, or Rizal Park in Intramuros. The R roads do not intersect one another and do not intersect the C roads twice. Altogether, they form a semi-weblike arterial road system, much like the Interstate Highway in Washington, D.C. in the United States.^{7 8} **(See Map 1)**

Notice, however, that C-3 is missing a section to connect Sgt. Rivera/G. Araneta Avenue in Quezon City to South Avenue in Makati City. C-5 is broken and continues across the South Luzon Expressway (SLEX) as C-5 Road Extension from West Service Road near Merville Exit in Pasay City. Only the first segment of C-6 (not featured in map) is completed, which runs from the Skyway near the FTI (Food Terminal Inc – now

MAP 1. C and R roads



SOURCE: IBON Foundation, Inc. "Mass transport system in Metro Manila and the quest for sustainability" IBON Policy Study, 2016

government's role. The country's economic oligarchs who dominate the construction of infrastructure, ports, roads and public utilities are also the ones who design, build, operate and/or manage projects. These benefit more their real estate, shopping malls, trading, shipping and logistics and other businesses than public transportation. The government may take a guarantor or regulatory role but has in the process given up its leverage over urban planning.

Meanwhile, there are limited-access toll expressways that connect Metro Manila to Central Luzon (the North Luzon Expressway or NLEX) and to Southern Tagalog (SLEX). NLEX is operated and maintained by NLEX Corporation, a subsidiary of the Metro Pacific Tollways Corporation (MPTC) which is owned by the Metro Pacific Investments Corporation (MPIC).¹¹ On the other hand, the segment of SLEX from Magallanes Interchange (Makati City) to Alabang Exit (Muntinlupa City) is operated

Ayala Land Premiere-owned Arca South) in Taguig City to Ortigas Avenue Extension in Pasig City. The second segment is planned to end at the Batasan Complex in Quezon City.⁹

C and R roads were constructed intentionally to lead traffic in and out of the City of Manila, but the subsequent lack of centralized urban planning has only caused chaos. Business districts are unconnected and constructed liberally; they crowd along the entire length of C-4 (EDSA) and C-5 and make these two C roads super-congested. Zoning rules are also restrictive, with big and gated private subdivisions and sometimes even city boundaries being closed to the commuting public. Lastly, there is no integrated public mass transport system that can take advantage of the benefits of an arterial road network.¹⁰

Worst of all, building primary roads has become increasingly a private construction venture, since the government has allowed private corporations to take over

jointly by the Skyway Operations and Maintenance Corporation (SOMOCO) and San Miguel Corporation (SMC) Skyway Corporation. The South Luzon Tollway segment of SLEX from Alabang to Santo Tomas, Batangas is held by SMC SLEX Inc., which is a concessionaire operated by the Manila Toll Expressway Systems Inc. (MATES) and a joint venture of the Philippine National Construction Corporation (PNCC) and SMC-backed PT Citra Marga Nusaphala Persada Tbk group of Indonesia.¹²

The Manila-Cavite Expressway (Cavitex) on the southwest part of the region runs along the coastline of Manila Bay and connects Roxas Boulevard to Cavite, with two toll plazas, namely Parañaque Toll Plaza and Kawit Toll Plaza.¹³ It is operated and maintained by the Public Estates Authority Tollway Corporation (PEATC), a non-chartered government-owned and controlled corporation (GOCC), in joint venture with the Cavite Infrastructure Corporation, a unit of MPIC.¹⁴

New roads, expressways and links are still being built purportedly to decongest Metro Manila and speed up travel around GCR. But even after the government's grandiose infrastructure program, Build Build Build or BBB (*a discussion for later*), Metro Manila's traffic has remained horrendous.

GCR (counting NCR, Region III and Region IV-A) has a total of 6,117.11 kilometers (km) of roads as of October 2022; this is 17.8% of the national total. This however is an increase of only 95.5 km from the length in 2016, which is only 2.9% of the national total of additional roads built.¹⁵ **(See Table 1)** NCR has the highest road density in the country, i.e. ratio of road length to land area, at 188.2 km per square kilometer (km²) of land area. Region IV-A is second with 15.4 km/km². Region III, owing to its remaining agricultural lands, has a road density of 11 km/km².¹⁶

Yet, based on Land Transportation Office (LTO) data, the number of motor vehicles has continued to increase. In a five-year span, 2015-2019 (note that registration was suspended in 2020), the number of registered motor vehicles in GCR grew from 4.5 million to 6.2 million units, a whopping 38% increase. GCR accounts for half of the registered vehicles nationwide – 71% of all cars and 67% of all sports utility vehicles (SUV's) registered nationwide. **(See Table 2)** Every year, new registrations increase faster (by 14%) than renewals (by 7.2%).¹⁷

Meanwhile, the data on registered public road transport vehicles is outdated. In GCR, there are around 5,000 intracity buses; about 55,000 jeepneys; 6,483 UVs; 16,701 taxis; 18,813 TNVS; and 45,000 motorcycles for ride-hailing services.^{18 19} But these are only estimates based on earlier studies, as the Land Transportation Franchising Regulatory Board (LTFRB) is weak in reporting and consolidating its statistics.

In October 2020, at the peak of COVID-19 lockdowns, the LTFRB launched a Service Contracting Program (SCP), which aimed to pay public utility vehicle (PUV) operators and drivers based on the maximum number of trips made per week, with or

TABLE 1. Comparative regional annual length of national roads, 2016-2022 (in kilometer)

REGION	2016	2017	2018	2019	2020	2021	2022
Philippines*	31,112.97	32,868.06	32,932.71	33,018.19	33,119.57	34,250.97	34,352.40
NCR	1,159.01	1,162.08	1,167.18	1,166.24	1,166.24	1,166.24	1,166.20
CAR	2,247.04	2,257.98	2,257.98	2,257.92	2,269.49	2,265.23	2,309.33
NIR	1,657.30	-	-	-	-	-	-
Region I	1,667.45	1,667.50	1,667.04	1,679.15	1,699.27	1,711.33	1,728.36
Region II	1,919.02	1,951.44	1,984.95	2,009.14	2,018.51	2,018.51	2,021.20
Region III	2,344.91	2,344.77	2,344.77	2,344.48	2,344.48	2,388.53	2,407.08
Region IV-A	2,517.66	2,542.32	2,542.32	2,542.45	2,542.45	2,542.45	2,543.83
Region IV-B	2,297.70	2,297.70	2,297.80	2,297.92	2,297.98	2,297.71	2,297.40
Region V	2,385.66	2,385.69	2,389.23	2,389.23	1,651.66	2,449.14	2,446.78
Region VI	1,928.82	3,028.76	3,028.76	3,053.77	2,417.71	3,064.42	3,064.31
Region VII	1,743.02	2,304.50	2,315.47	2,328.63	3,061.57	2,358.62	2,376.17
Region VIII	2,537.21	2,560.16	2,560.07	2,563.10	2,330.91	2,560.37	2,560.23
Region IX	1,651.12	1,651.66	1,651.66	1,651.66	2,560.37	1,651.66	1,651.66
Region X	1,961.02	1,959.57	1,959.57	1,971.02	1,977.53	1,977.53	1,977.53
Region XI	1,684.98	1,684.98	1,688.69	1,688.69	1,704.27	1,704.27	1,704.27
Region XII	1,547.32	1,547.92	1,556.08	1,556.02	1,556.02	1,530.07	1,503.20
Region XIII	1,521.03	1,521.03	1,521.16	1,518.77	1,521.11	1,526.53	1,530.34
BARMM	-	-	-	-	-	1,038.35	1,064.53

* Includes BARMM but excludes NIR.

BARMM - Bangsamoro Autonomous Region of Muslim Mindanao CAR - Cordillera Administrative Region NCR - National Capital Region NIR - Negros Island Region

SOURCE: Department of Public Works and Highways

without passengers, and also based on agreed-upon performance indicators. There were two types of trips, namely a gross service contract or *Libreng Sakay* (free ride) with additional revenue to the operators and drivers as they provide free rides, and the net service contract which includes an amount for operation and maintenance costs.²⁰

Funding for SCP was originally under the Duterte administration's second-year COVID response, Republic Act 11494 or the Bayanihan to Recover as One Act, with a Php5.58 billion allocation. This was continued under the General Appropriations Act (GAA) of 2021 but with only Php3 billion.²¹ The budget was increased to Php7 billion in GAA 2022, and the LTFRB had to wait for its exemption from disbursements to be approved before it could implement the program during the May 2022 elections.²² But then again, funding was substantially reduced to Php1.28 billion under GAA 2023, with the new president Ferdinand Marcos Jr himself getting confused in his press conference as to whether or not *Libreng Sakay* was being continued.²³ The Metropolitan Manila Development Authority (MMDA) had to field its own buses to make up for the huge reduction.

TABLE 2. Annual motor vehicle registration in the Philippines and Greater Capital Region by vehicle type, 2015-2019

Area and vehicle type	2015	2016	2017	2018	2019
Philippines	8,706,607	9,251,565	10,410,814	11,595,434	12,725,305
Bus	31,943	29,794	34,801	28,613	37,440
Cars	962,365	971,750	1,040,108	1,104,054	1,168,104
Motors	4,877,063	5,329,770	6,174,345	7,162,253	8,014,202
SUV	428,221	493,228	568,997	605,206	674,949
Trailers	44,946	50,315	53,018	55,889	64,935
Trucks	384,570	407,357	430,576	448,684	475,285
UV	1,977,499	1,969,351	2,108,969	2,190,735	2,290,390
Greater Capital Region*	4,478,631	4,680,001	5,223,415	5,653,243	6,177,400
Bus	19,879	19,551	22,815	18,511	20,776
Cars	719,684	719,312	756,481	788,972	829,332
Motors	2,102,405	2,270,857	2,650,253	3,025,192	3,413,372
SUV	302,274	348,007	394,534	411,199	451,112
Trailers	30,447	32,636	34,283	35,156	41,784
Trucks	170,901	180,589	190,436	187,363	190,240
UV	1,133,041	1,109,049	1,174,613	1,186,850	1,230,784

* Covers the National Capital Region, Region III and Region IV-A.
SUV - sports utility vehicle UV - utility vehicle

SOURCE: Land Transportation Office

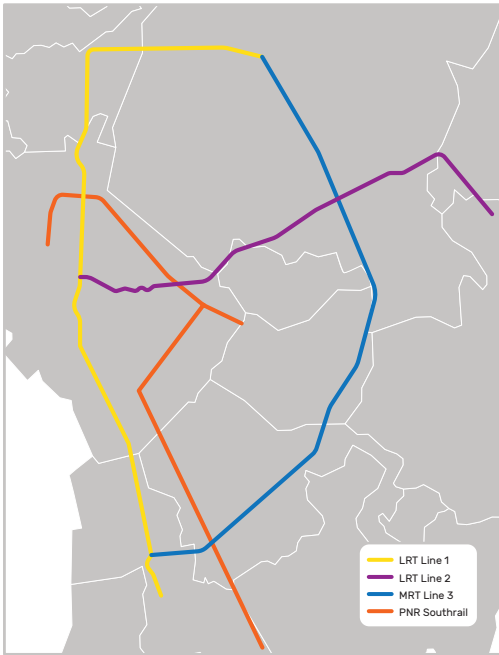
TABLE 3. Summary of railway systems in Mega Manila, 2014

Item	PNR	LRT Line 1	LRT Line 2	MRT Line 3
Guideway & Railway Type	At-grade (HRT, narrow-gauge)	Elevated (LRT, std gauge)	Elevated with UG (LRT, std gauge)	Elevated, with UG (LRT, std gauge)
Route	Tutuban (Manila) - Mamatid (Cabuyao)	Roosevelt (QC) - Baclaran (Pasay)	Santolan (Pasig) - Recto (Manila)	North Ave. (QC) - Taft (Pasay)
Route Length	54.0 km	18.1 km	13.5 km	16.9 km
Number of Stations	25	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
Travel Time	2 hours 26 minutes	27.5 minutes	30 minutes	30 minutes
Headway	30 minutes	2 minutes	4.5 minutes	3 minutes

km - kilometer kph - kilometers per hour UG - underground std - standard HRT - heavy rail transit
LRT - Light Rail Transit MRT - Metro Rail Transit PNR - Metro Rail Transit QC - Quezon City

SOURCE: Japan International Cooperation Agency, Follow-up survey on roadmap for transport infrastructure development for Greater Capital Region (GCR), Final Report, Almec Corporation, August 2019

MAP 2. Railway Lines in Metro Manila



SOURCE: Japan International Cooperation Agency, Follow-up survey on roadmap for transport infrastructure development for Greater Capital Region (GCR), Final Report, Almec Corporation, August 2019

The Department of Transportation (DOTr) claimed to have serviced about 53 million passengers at the height of funding allocation. Still, the agency was found out in 2021 to have disbursed only Php2.3 billion or 41% of the Bayanihan budget and Php540 million or 18% of the GAA 2021, even as it was quoted as saying that it had incurred Php4.7 billion in payables. Underspending caused delayed payments and benefits to PUV operators and drivers.²⁴ The SCP has only disincentivized the transport workers while giving those without service contracts undue competition. From the commuters' point of view, the short-lived *Libreng Sakay* has only remained a band-aid solution to the systemic shortage and dominantly privatized and commercialized road transport system.

Rail nightmare

Metro Manila has rail transport served by the Light Rail Transit (LRT) Lines 1 and 2, the Metro Rail Transit (MRT) Line 3, and the 59-year-old Philippine National Railways (PNR). LRT-1 runs 20.5 km from Baclaran, Pasay City to Roosevelt, Quezon City. LRT-2 travels 13.5 km from Recto, City of Manila to Santolan, Quezon City. MRT-3 has a 17-km route from Taft Avenue, City of Manila to North Avenue, Quezon City.²⁵ (See Table 3 and Map 2)

Only the PNR south commuter line is operational at the moment, albeit erratic, which makes a 29-km trip from Tutuban, City of Manila to Cabuyao City in Laguna. The development of the north commuter line (Tutuban up to Malolos City, Bulacan) has been stalled for years due to the controversial failure of the Northrail project.²⁶

As of 2014, LRT-1 had 139 light rail vehicles (LRVs); LRT-2 had 18 trainsets with 4 LRVs each, a total of 72 LRVs; and MRT-3 had 73 LRVs. The average load factor (line volume divided by seating capacity) increased from 62% in 2006 to 96% in 2014 for LRT-1; 31% to 60% for LRT-2; and 77% to 92% for MRT-3.²⁷

The number of passengers grew to an average of 1.68 million passengers per average weekday for the three light rails and PNR. (See Tables 4 and 5) But the number of passengers started to go down since then. In 2015, there were 341 million passengers, or 1.31 million per day, 14% lower than the volume in 2011. The main issue is the rolling stock – the steep decline since 2014 was caused by a 45% reduction in train availability on MRT-3; 20% on LRT-1; and 16% on PNR. MRT-3 alone recorded more than 10 service interruptions in 2017 due to frequent breakdowns, few operational trains, inappropriate trains, and accidents, among others.²⁸

In 2019 before the pandemic, PNR carried 11.2 million passengers, which was already an 18.2% decrease from the previous year and decreased further to 4.8 million in 2020, then 3.6 million in 2021. The same trends is observed with LRT-1 and 2. Ridership of MRT-3 also declined in 2019 and 2020, but increased in 2021. (See Table 6) In total, the rail lines carried an average of 993,000 passengers on an average weekday in 2019, a decline from the 1.32 million in 2014.²⁹ Ridership per month was already increasing in 2022 from previous numbers in 2021, but it does not change the fact that rail ridership has been generally on the decline.

Like road transport, rail is also generally privatized and commercially operated. LRT-1 and LRT-2 are government assets, but their operation and maintenance, including fare collection, are by the private sector. PNR is government through and through, while MRT-3 is completely private. (See Table 7)

TABLE 4. Number of passengers, load factor and revenues of light rail transits, 2011-2021

Year	Light Rail Manila Corporation (LRT Line 1)			Light Rail Transit Authority (LRT Line 2)			DOTr - MRT3 (MRT Line 3)		
	Total no. of passengers (in million)	Average daily load factor (in %)	Farebox revenues (in Php million)	Total no. of passengers (in million)	Average daily load factor (in %)	Farebox revenues (in Php million)	Total no. of passengers (in million)	Average daily load factor (in %)	Farebox revenues (in Php million)
2011	156.9	77.0	2,274.3	63.8	39.0	856.8	158.8	77.3	1,956.8
2012	170.7	90.2	2,503.9	70.3	48.0	938.3	174.5	90.2	2,136.6
2013	171.8	94.6	2,515.2	71.4	60.0	944.9	176.1	94.7	2,159.9
2014	170.7	98.0	2,512.0	72.8	60.0	968.0	167.8	96.0	2,021.0
2015	141.4	94.3	2,316.2	62.4	59.1	1,246.7	118.2	nda	2,316.6
2016	147.9	89.2	3,015.2	67.0	57.1	1,307.8	133.9	nda	2,681.5
2017	157.0	83.8	3,158.7	66.0	61.2	1,271.5	140.1	90.7	2,779.4
2018	165.2	85.4	3,310.2	64.7	56.0	1,244.5	104.2	98.0	2,068.7
2019	161.3	85.9	3,217.9	57.0	52.6	1,068.6	96.3	98.7	1,907.9
2020*	50.6	34.7	996.3	12.5	25.2	216.0	31.5	40.8	604.5
2021	42.9	28.3	867.5	11.7	30.6	230.1	43.9	26.0	806.9

Details may not add up to totals due to rounding.

* Load factors in 2020 are an average of January to March and June to December monthly values only.

nda – no data available DOTr – Department of Transportation LRT – Light Rail Transit MRT – Metro Rail Transit

SOURCES: Department of Transportation and Light Rail Transit Authority

TABLE 5. Number of passengers and revenues by railways, 2012-2021

Year	Passenger carried by transport service				Total passengers	Total revenue (in Php thousand)
	Metro South Commuter	Metro North Commuter	Bicol Express	Bicol Commuter		
2012	15,143,542	-	79,629	472,946	15,696,117	397,641
2013	19,483,121	-	-	485,663	19,968,784	401,023
2014	24,200,482	-	-	471,474	24,671,956	515,501
2015	18,736,900	-	-	449,775	19,186,675	427,087
2016	21,412,727	-	-	430,236	21,842,963	452,662
2017	15,947,602	-	-	500,435	16,448,037	399,778
2018	13,691,451	329,556	-	686,015	14,707,022	430,684
2019	11,297,747	1,232,522	-	654,828	13,185,097	470,693
2020	3,879,923	902,139	-	284,066	5,066,128	331,193
2021	3,091,425	491,803	-	229,023	3,812,251	68,441

1. Indicative Passenger Report from Operations Department and Revenue Report from Controllorship Division.

2. On May 2020 Bicol transitioned to GCQ from ECQ; BCT Line resumed operation on May 6, 2020.

3. April 2020 MMSC Revenue Data (Php170.00) is an additional short Remittance from the month of January 2020.

4. April 2020 BCT Revenue Data (Php10.00) is an additional short Revenue from the month of February 2020.

5. Operation Cancellation on April 5-11, 2021 due to Enhanced Community Quarantine (ECQ) imposed at NCR.

6. PNR increased its capacity from 30% to 70% last November 4, 2021.

SOURCE: Philippine National Railways

TABLE 6. Ridership by railway system, 2019-2022

Line	2019	2020	2021	2022
LRT 1	161,346,440	50,969,666	44,353,617	19,396,328
LRT 2	57,540,983	12,684,559	11,849,037	8,580,703
MRT 3	97,561,947	31,800,597	44,008,368	33,830,915
PNR	11,226,171	4,782,062	3,580,105	-

LRT - Light Rail Transit MRT - Metro Rail Transit PNR - Metro Rail Transit

SOURCE: Department of Transportation

Forgotten river

Despite the practicality of water transport along the 27-km Pasig River, which meanders through the municipality of Taytay, Rizal and cities of Taguig, Pasig, Makati, Mandaluyong and Manila, it is undeveloped and intermittent. The Pasig River Ferry Service, rather a water bus system, is the only water transport system in Metro Manila. It has 12 stations, from Intramuros in the City of Manila to Pinagbuhatan in Pasig City. It used to be owned and operated by a private company, SCC Nautical Transport Services Incorporated, but was suspended in 2011 as it was operating at a loss. It was reopened in 2014 with four privately owned ferries and is currently operated by the MMDA in cooperation with the DOTr and the Pasig River Rehabilitation Commission.³⁰

There was a program pitched by the Department of Budget and Management (DBM) in 2018 to develop an additional 17 stations in the next four years and to bid out the operation to a private firm. The MMDA also committed to build three more stations: one at Circuit Makati, a riverfront development project by Ayala Land Inc. on the site of what used to be Santa Ana Race Track in Makati City; one at Quinta Market, a public market along Carlos Palanca Street in Quiapo, City of Manila; and one on Kalawaan in Pasig City.³¹

Mayors of both Pasig City and City of Manila committed to donate at least two boats to the ferry service. On 24 March 2020, Pasig City Mayor Vico Sotto led the turnover of two 56-seater vessels to the ferry service. The real estate firm, New San Jose Builders, on the other hand donated to the MMDA a 50-seater ferry in 2021. City of Manila Mayor Isko Moreno's promise did not materialize.³²

TABLE 7. Ownership, operation, maintenance, and fare collection of public transportation modes in Metro Manila, July 2017

Public transportation	Ownership of assets	Operation	Maintenance	Fare collection
Public utility jeep	Various private franchise holders			
Public utility bus	Various private franchise holders			
Point-to-point bus (P2P bus)	Froehlich Tours Inc., HM Transport Inc, Robinsons Malls, RRCG Transport, Lingkod Pinoy Bus Liner Inc, UBE Express			
LRT 1	GPH	Light Rail Manila Corporation	Light Rail Manila Corporation	AF Consortium
LRT 2	GPH	Light Rail Transit Authority	Comm Builders and Technology Phils. Corp. (CB&T), PMP Inc., Gras Sabrocai	AF Consortium
MRT 3	Metro Rail Transit Corp., MRT Holdings	MRT 3 Office (DOTr)	Busan Rail Inc.	AF Consortium
Philippine National Railways	GPH	Philippine National Railways		
Pasig River Ferry	SCC Nautical Transport Services Incorporated			

1. **AF Consortium** - a consortium composed of Metro Pacific Investments Corp. (Pangilinan), AC Infrastructure Holdings Corp. (Ayala), Globe Telecom Inc. (Ayala), Meralco Financial Services Corp., Smart Communications Inc., BPI Card Finance Corporation (Ayala)

2. **Light Rail Manila** - a consortium composed of AC Infrastructure Holdings Corporation (Ayala), Metro Pacific Light Rail Corporation (Pangilinan), and Philippine Investment Alliance for Infrastructure fund (Macquarie Group of Australia)

3. **Metro Rail Transit Corporation** - a consortium composed of Astoria Investment of the Ayala Corp., Anglo Philippine Holdings of the National Bookstore Group, Railco Investments of the RAMCAR Group, Metro Global Holdings Corp., and Sheridan LRT Holdings of the Unilab Group

GPH - Government of the Republic of the Philippines DOTr - Department of Transportation LRT - Light Rail Transit MRT - Metro Rail Transit

SOURCES: Department of Transportation P2P website Sakay.ph; Light Rail Transit Authority; Metro Manila Development Authority; Metro Rail Transit 3 Office; Philippine National Railways

Tangle of issues

The irony of such anarchy is that it is the general public that suffers the consequences. The transport crisis is a tangle of many issues that have only gotten worse over the decades. No solution has been put in place, precisely because it has been government policy to allow private business to dictate how the urban centers are arranged.¹

Chronic shortage of trips

GCR's mobility demand is not only for its population but also for a labor force that makes a daily commute from other surrounding provinces. As of 2014, the total daily passenger trips taken in the GCR, not including walking, was 24.6 million. As already mentioned, public transport accounted for 17.3 million or 70% of these passenger trips. (See Table 8)

There is no data on mobility supply, and we can only assume that the 17.3 million mobility demand is equivalent to the mobility supply. But daily sights of long queues in transport terminals, overcrowding, and stranded masses of passengers are telling of the chronic shortage in Philippine public transportation.

About 39% of the daily passenger trips by public mode (6.8 million) were taken by jeepney, 2.4 million by bus and 5.7 million by tricycle. But the annual average daily traffic (AADT) data of the MMDA in 2019 shows that the trips taken by bus, jeepney and tricycle have fallen by 21% from the figures in 2014. This is equal to a reduction in public transport supply of 10.5% and in turn equivalent to a reduction of 1.6 million trips.^{33 34}

Meanwhile, 1.5 million of the daily passenger trips were taken by rail, served by the LRT Lines 1 and 2, MRT-3, and PNR. As already mentioned, daily passenger trips taken by rail have fallen due to the reduced number of rolling stock, resulting in constant breakdowns and poor maintenance of the existing rail lines. The rail system has failed to keep pace with passenger growth.

Thus, even before the COVID-19 pandemic, there had already been a massive shortage of almost 2 million daily passenger trips in Metro Manila alone, which was only worsened by the pandemic. In a survey by the Social Weather Station (SWS) in 2021 when the government started easing pandemic lockdown restrictions, 69% of adults in Metro Manila with non-home-based work said that going to work had become much harder.³⁵

¹ The latest transport statistics available are the studies made by the Japan International Cooperation Agency (JICA) for the Philippine transportation department – the Metro Manila Urban Transportation Integration Study (MMUTIS) released in 1999; the MMUTIS Update and Enhancement Project (MUCEP) released in 2015, and the JICA Roadmap for Transport Infrastructure Development for Metro Manila and Its Surrounding Areas released in 2014 with a follow-up survey in 2019. There is also a data collection survey on improving road-based public transportation system in Metro Manila conducted by JICA in 2022.

TABLE 8. Trip composition by mode, December 2015

Mode	Number of trips (in '000)	% of Public or Private	% of Total
Public mode	17,337	100.0	48.8
Train	1,485	8.6	4.2
Bus	2,352	13.6	6.6
Jeepney	6,763	39.0	19.0
Tricycle	5,687	32.8	16.0
Utility vehicle/High-occupancy vehicle	261	1.5	0.7
Pedicab	631	3.6	1.8
Others	156	0.9	0.4
Private mode	7,263	100.0	20.4
Motorcycle	2,948	40.6	8.3
Car	2,894	39.9	8.2
Taxi	315	4.3	0.9
Truck	270	3.7	0.8
Others	826	11.4	2.3
Walking	10,913	-	30.7
Total	35,503	-	100.0

SOURCE: Japan International Cooperation Agency and Department of Transportation and Communications, *The Project for Capacity Development and Transportation Planning and Database Management for the Republic of the Philippines, MMUTIS Update and Enhancement Project (MUCEP)*, Technical Report, Almec Corporation, Oriental Consultants Global Co., Ltd., December 2015

The traditional jeepney has been particularly affected by the pandemic lockdowns and government's own decision to phase it out and replace it with modern ones (*a discussion for later*). It may be recalled that in 2020 the Duterte administration suspended public land, sea and air transport and placed the entire island of Luzon under strict quarantine protocols. However, when restrictions eased and limited public transport was resumed, the traditional jeepney was not a priority for resumption.

There were about 900 traditional jeepney routes in the GCR pre-pandemic, but only 651 routes have been reopened as of end-2022. There were about 74,000 traditional jeepneys in the GCR pre-pandemic, but only 49,959 have continued plying their routes.³⁶ Yet, modern jeepneys have been allowed in 59 new routes as early as mid-2020, which confirmed suspicions by drivers' associations that the suspension of the traditional jeepney's routes and trips was actually about the government's contrived modernization program.³⁷

The National Economic and Development Authority (NEDA) has since the pandemic pushed for active transport, i.e., physical activity that is done as a means to transport (*a discussion for later*). Examples are walking, biking and skating. While it is inarguable that these are beneficial to the individuals and communities in terms of economic costs, health and healthy environment, the government has yet to present

a comprehensive plan to improve public mass transportation. Instead, it continues its car-centricity and orientation towards private transport.

Longer waiting and travel times

The collapse of public transport supply has resulted in longer waiting and travel times, causing unimaginable economic and social losses. This wasted time has only gotten worse over the decades. The average travel time for buses lasted more than 90 minutes in 2014 compared to 79 minutes in 1996 and over 50 minutes in 1980. For private cars, travel time exceeded 60 minutes in 2014 from more than 50 minutes in 1996 and more than 30 minutes in 1980.³⁸

Commuting to work also became longer from 37 minutes in 1980 to 51 minutes in 1996.³⁹ No comparable data after 1996 is available to show how much time commuting to work has become longer. But to argue, in an online survey in 2019, for an average distance of 12 km in traveling to work or school in Metro Manila, commuting time by bus averaged at 78 minutes.⁴⁰ A study by the mobility advocacy group, Move As One Coalition, shows that in Metro Manila, vehicle travel time per kilometer has gone from a baseline of 1.83 minutes in 2015 to 2.57 minutes in 2019, a 40% increase in time taken to travel the same distance.⁴¹

The average trip length for Metro Manila residents also became longer from 5.3 km in 1980 to 6.4 km in 1996. The MUCPEP study is no longer comparable as it already includes residents of Bulacan, Cavite, Laguna, and Rizal, and is disaggregated per mode of transport. At any rate, the average trip lengths in 2014 were 25.55 km by bus, 15.47 km by rail, and 14.82 km by UV or high-occupancy vehicles (HOV).⁴²

'Carmageddon'

Metro Manila traffic has been called 'carmageddon', a portmanteau of car and Armageddon, the biblical place where good and evil are destined to have their final battle. Indeed, long hours of traffic jams, heat, rains, floods, and suffocating pollution have reduced citizens to being 'warriors' acting on their basic survival instincts.⁴³ And the war is being won by cars – 70% of GCR road-users take public transportation but are crammed into only 22% of road space.⁴⁴ Government's underlying bias for private car sales and ownership is the culprit for such road inequality.

From 1996 to 2012, passenger trips by car to and from Metro Manila increased by 15%, while those by jeepney and bus declined by about 7 percent. In terms of vehicle trips, car trips shot up by 69% (on average 3.3% per annum), while public vehicle trips increased by 41% (yearly average growth of 2.2%).⁴⁵

From 2012 to 2017, travel demand showed a decline in passenger trips of 2% with car and 28% with public transport (jeepney and bus). Yet, in terms of vehicle trips, car

trips increased further by 4.3% (or on average 0.9% per annum), while public vehicle trips decreased by 8% (or on average -1.6% per annum). Jeepney and bus traffic decreased by 1% and 34%, respectively. In 2012, cars accounted for 32% of the inter-zonal passenger trips but comprised 71% of passenger car unit (PCU)-km. In 2017, these figures increased further to 39% of the passenger trips and 74% of PCU-km. (See Table 9)

TABLE 9. Travel demand in the study area - Inter-zonal trips, 2012 and 2017

Mode	2012				2017				2017/2012	
	Person Trips		PCU		Person Trips		PCU		Person Trips	PCU
	Number ('000/day)	%	Number ('000/day)	%	Number ('000/day)	%	Number ('000/day)	%		
Car	6,170	31.7	3,629	71.3	6,054	38.8	3,784	73.8	0.98	1.04
Public Transport	13,300	68.3	1,463	28.7	9,540	61.2	1,345	26.2	0.72	0.92
Jeepney	7,620	39.1	1,141	22.4	6,652	42.7	1,134	22.1	0.87	0.99
Bus	5,680	29.2	322	6.3	2,888	18.5	211	4.1	0.51	0.66
Total	19,470	100.0	5,092	100.0	15,594	100.0	5,129	100.0	0.80	1.01

PCU - passenger car unit

SOURCE: Japan International Cooperation Agency, Follow-up survey on roadmap for transport infrastructure development for Greater Capital Region (GCR), Final Report, Almec Corporation, August 2019

From 1996 to 2017, the number of passengers increased 1.8 times, while the number of PCU increased 2.7 times, which means that more and more people used private vehicles instead of taking the bus and jeepney. The traffic to and from Rizal, Laguna and Cavite increased about three times.⁴⁶ (See Table 10)

From 2012 to 2019, the AADT of public buses and jeepneys in Metro Manila decreased by 14%, while that of private cars and motorcycles surged by 46%.⁴⁷ From 2019 to 2021, public transport supply continued to collapse by 22% for buses and by a whopping 46% for jeepneys. UV also decreased 64%, from 72,000 to 26,000. Meanwhile, motorcycle traffic increased from 1 million to 1.4 million. Car traffic slightly decreased by 8.3%, but cars singly continued to account for 44% of traffic volume. (See Table 11)

Higher car ownership as well as decline in car occupancy from 2.5 to 1.7 persons per car increased car traffic. Similar declines in vehicle occupancy could be observed on jeepneys (from 15.1 to 10 passengers) and buses (from 46.5 to 35.3 passengers).⁴⁸ The Japan International Cooperation Agency (JICA) - MMUTIS Update and Enhancement Project (MUCEP) 2015 study showed that only 11.5% of households owned a car in Metro Manila, with about 10% of the car-owning households having more than one car.⁴⁹ In a more recent (2020) survey conducted by researchers at the De La Salle University, car-owning households comprised 43.6% of the respondents, with about 11.3% of them having more than one car.⁵⁰

TABLE 10. Changes in daily traffic crossing Metro Manila boundary

Direction	MMUTIS (1996)			MUCEP (2012)			Roadmap 2 (2017)			2017/ 1996
	Public	Private	Total	Public	Private	Total	Public	Private	Total	
North										
Pax No.	126,495	37,581	164,076	74,854	30,628	105,482	76,880	83,691	160,571	1.0
PCU	3,874	19,499	23,374	10,475	11,704	22,179	12,161	32,003	44,164	1.9
North East										
Pax No.	143,560	60,009	203,569	140,157	43,403	183,560	184,668	85,570	270,238	1.3
PCU	3,970	30,152	34,122	16,067	17,723	33,790	16,570	34,526	51,096	1.5
East										
Pax No.	412,199	163,216	575,415	590,220	415,018	1,005,238	562,522	750,962	1,313,484	2.3
PCU	11,442	110,802	122,244	57,604	177,298	234,901	55,256	314,083	369,339	3.0
South (Laguna)										
Pax No.	130,591	36,837	167,428	120,611	82,102	202,713	122,306	148,692	270,998	1.6
PCU	3,355	25,440	28,795	14,457	33,456	47,912	12,850	62,256	75,106	2.6
South (Cavite)										
Pax No.	126,057	27,527	153,584	134,435	52,569	187,004	172,530	118,121	290,651	1.9
PCU	3,240	18,539	21,779	23,363	20,636	43,999	18,438	53,563	72,001	3.3
Total										
Pax No.	938,902	325,170	1,264,072	1,060,277	623,720	1,683,997	1,118,906	1,187,036	2,305,942	1.8
PCU	25,881	204,432	230,314	121,966	260,817	382,783	115,275	496,431	611,706	2.7

MMUTIS - Metro Manila Urban Transportation Integration Study MUCEP - MMUTIS Update and Enhancement Project PCU - passenger car unit

SOURCE: Japan International Cooperation Agency, Follow-up survey on roadmap for transport infrastructure development for Greater Capital Region (GCR), Final Report, Almec Corporation, August 2019

TABLE 11. Metro Manila annual average daily traffic, 2019 and 2021

Vehicle	2019	2021
Car	1,526,667	1,399,242
Public utility jeep	135,417	73,766
Utility vehicle	72,168	25,805
Taxi	129,720	130,855
Public utility bus	31,620	24,693
Truck	86,976	84,738
Trailer	21,553	18,477
Motorcycle	1,065,807	1,421,642
Tricycle	18,052	18,455
Total	3,087,980	3,197,673

SOURCE: Metro Manila Development Authority

The volume of automotive sales has also been continuously increasing due to easier terms and other promotional offers given by banks on their car loans. From 2021 to 2022 alone, another 31% increase in the sales volume was recorded, not as fast as the increase in the length of road construction.⁵¹ Auto loans, reaching a total of Php322 billion in 2022, increased by an average annual of 9.5% from 2016 to 2022, peaking at 31% in 2019. This is despite negative growths of 5.8% and 18.3% in the pandemic years of 2020 and 2021, respectively. (See Table 12)

Yet, as already cited in the LTO data, the number of newly registered vehicles

TABLE 12. Motor vehicle loans, 2015-2022 (in Php billion)

Type of loan	2015	2016	2017	2018	2019	2020	2021	2022
Motor vehicle loans	151.3	203.8	256.6	288.3	377.9	356.0	291.8	326.3
Auto loans	150.2	202.2	254.6	285.8	374.2	352.5	287.9	322.4
Motorcycle loans	1.2	1.6	1.9	2.4	3.7	3.5	3.9	3.9

Data may not add up due to rounding off
Data is as of December of respective years and in the universal and commercial banking system in the Philippines

SOURCE: *Bangko Sentral ng Pilipinas*

in GCR increases yearly by 14%, faster than registration renewals. It is easy to say that since traffic demand has exceeded infrastructure capacity, new roads have to be constructed. But this assumes that the acquisition of private vehicles, especially those occupying too much road space such as cars and SUVs, simply continues to be unrestrained by policy while allowing public transport to continue collapsing. The government has blindsided commuters into thinking that what we need is infrastructure while its car-centricity and bias for private transport goes unscathed. The only policy that has probably been proclaimed although not implemented truthfully is the requisite that car buyers should show a photo of their garage to the car dealers before they are allowed to buy.

Congestion

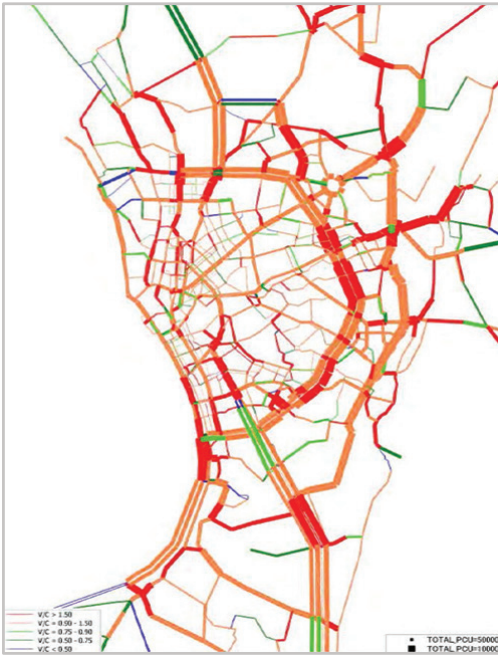
Cars inarguably are the main cause of the awful traffic congestion in the country's capital region. Congestion refers to the excess of vehicles on a portion or length of the roads at a particular time, which results in speeds that are much slower than normal or 'free flow' speeds. A congestion level of 43% means that travel time is 43% longer than the baseline non-congested conditions, say, a 30-minute trip in free-flow condition will take 13 minutes longer.

Most of Metro Manila primary roads – C roads and R roads – are operating at or close to capacity. Almost half (44%) of the roads averaged 10 km per hour (kph) or less, which happens when roads exceed 50% of volume capacity, while an average of 71% of the road sections are at less than 20 kph speed.⁵²

Among the circumferential roads, C-5 carries the highest traffic volume with 3.4 million PCU-km per day (7.7 million person-km), followed by EDSA (C-4) with 2 million PCU-km per day (9.4 million person-km) as of 2017.⁵³ Both C-5 and EDSA reach full capacity in a day, respectively with 89% and 84% of their lengths operating at speeds below 20 kph. Among the radial roads, Quirino Highway (R-7) is the busiest, with traffic at 3.2 PCU-km ratio and 7.9 million person-km a day.⁵⁴ **(See Map 3)**

The traffic/volume ratios on expressways, such as Cavitex (0.33), NLEX (0.07) and SLEX (0.31) are better than on the primary roads. Skyway is a lot higher (0.83) but still lower than most of Metro Manila's primary roads (0.93).⁵⁵

MAP 3. Road traffic volume and V/C ratio in Metro Manila, 2012



SOURCE: Japan International Cooperation Agency and National Economic and Development Authority, Roadmap for Transport Infrastructure Development for Metro Manila and its Surrounding areas Region III & Region IV-A, Final Report, Main Text, Almec Corporation, March 2014

For more updated data on traffic congestion, we may refer to the live updates of the TomTom Traffic Index. Congestion levels in Metro Manila decreased from an average of 71% in 2019 pre-pandemic, 53% in 2020 lockdowns, and 43% in 2021 extended but easing lockdowns.⁵⁶

During rush hours, congestion levels are quite different. In 2019 when the average congestion level was 71% as cited, it was actually 97% in the morning and 125% in the evening. Every 30-minute vehicle trip then was lengthened by 29 minutes in the morning (+97%) and by 38 minutes in the evening (+126%).⁵⁷ The TomTom Index measures vehicle driving speeds, but it does not account for commuter waiting times, which are a crucial measure of sufficiency and efficiency.⁵⁸

The cost of chaos

The impact of such road congestion is severe on public transport. This is composed mainly of single proprietors (the owners) of public utility vehicles, and the bus, jeepney and UV drivers as well as motorcycle riders for hire who have yet to pay the 'boundary' or daily rent to the owners. Underpaid and forced to work long hours, they compete for the curbside for passengers in order to meet the 'boundary' and earn beyond that. With the traffic congestion, they have had less number of trips or have been forced to reduce their daily round trips. Their costs have increased and their productivity has declined.

Jeepney drivers have lost substantial incomes and have been forced to look for other sources of income. This is not to mention that drivers' incomes have also been battered by persistent oil price hikes. The price of diesel more than tripled from Php20.45 per liter in January 2016 to Php68.67 per liter in end-2022. The price of gasoline increased from Php37.59 to Php63.88 per liter in the same period. Jeepney fares increased only twice during those years, cumulatively by only Php2.^{59 60} Ironically, the government even blames jeepneys for the road congestion and targeted them for phaseout by end of 2023 (a discussion for later).⁶¹

Passenger road transport inflation in Metro Manila has reached an average annual of 5% in 2020-2022, coming from only 4.7% the previous three years. The average annual inflation of other passenger transport by road (which includes jeepney and tricycle) reached 6.7% in the pandemic years, which has been more burdensome at 8.1% for the bottom 30% of households.⁶² Transportation eats up about 6% of household expenses and it ranks third in a family's priorities, next to food and housing and utilities.⁶³ Many poor family breadwinners have resorted to walking to work or to their livelihood sources to cope with rising transport costs, but then again the lack of walkways and pedestrian spaces is hazardous to them.

If not walking, commuters have had no choice but to rely on the terrible public transportation system. For the students, the traffic has added stress to an already stressful and unsafe school environment. For the elderly and persons with disabilities (PWDs), mobility has been limited. For the working class, longer waiting and travel times have affected their work, employment status, livelihoods, health, and well-being. The traffic has also given them more reason to aim for private transport such as motorcycles or cars, which motorcycle traders and automotive sellers have taken advantage of through loans and installment plans. The banks are also making a killing from government's bias for private transport. Thus every year, the number of cars and motorcycles continues to rise and lead to a gridlock that is worst on earth.

Road congestion costs the economy some Php2.4 billion a day for Metro Manila and Php1 billion for the adjoining provinces of Bulacan, Rizal, Laguna and Cavite, according to JICA in its 2019 updated study.⁶⁴ This translates to about Php180 per trip of transport cost for GCR, which includes the time spent by people on the road due to long travel times and also the increase in cost for operating vehicles under the present traffic conditions.⁶⁵

Part of the economic losses are the high level of pollution and unhealthy environment (vehicle emissions account for 88% of air pollution in Metro Manila), not to mention the mental and health stresses the transport crisis brings. At one time, a patient carried by an ambulance did not make it to the hospital.^{66 67} The "inadequate and unsafe transport options" have been called by the Healthcare Professionals Alliance Against COVID-19 (HPAAC) a critical public health issue.⁶⁸

In Metro Manila alone, based on calculations by Move As One Coalition in 2020, the economy could lose Php520 million a year if the government does not massively expand active transport and public transport capacity. The amount represents losses from longer commutes, job losses, shutdowns of public transport operators, road crashes, and carbon emissions.⁶⁹ In early 2020, pre-pandemic, traffic congestion landed Metro Manila the second-worst ranking in a global survey of traffic conditions in 416 cities across 57 countries. The survey estimated the cost of lost productivity at Php3.5 billion per day.⁷⁰

Saga of nearsighted policymaking

If we should come up with a comprehensive policy for a sustainable public transport system, the best place to start is to have updated and reliable travel statistics. Unfortunately, even well-meaning studies such as ours are stuck with the government's lack of appreciation and priority for transportation science. History further reveals that the Philippine government has only been following the recommendations of foreign-led studies to serve foreign business, including in infrastructure construction and transportation. Public transport in the NCR would suffer so much from such self-serving policymaking.

Several studies have been made to move people to their destinations in an orderly manner. Two significant ones, both offering master plans on public transport and infrastructure, came in the 1970s – both were only partly implemented. Succeeding studies only made references to the first two studies, utilizing parts but making incongruous assumptions, which only created more confusion. In the late 1990s, a new master plan was crafted but would remain un-implemented.⁷¹

Unrelated studies

The first of the two major studies was the Urban Transport Study in Manila Metropolitan Area (UTSMMA) conducted by the Japanese government's Overseas Technical Cooperation Agency (OTCA), the precursor of today's JICA. The study was done between March 1971 and September 1973, at which time the "metropolitan area" was yet to be formally consolidated and called Metro Manila.⁷²

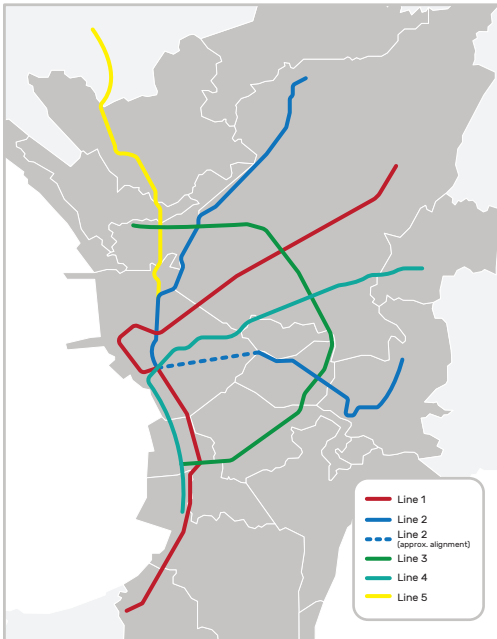
The UTSMMA was a comprehensive plan that prioritized railways, in particular a rapid transit railway network of subways in the inner area bound by EDSA, the main corridor, and elevated in the suburban areas. The study also proposed the modernization of the PNR.

The subway plan envisioned five lines. It was a total of 135.1 km of rail that would fully integrate all the areas that have become the 17 cities of today's Metro Manila and decongest the city center (Manila) by developing then sparsely populated areas near Manila.⁷³ **(See Map 4)**

On the other hand, portions of the PNR system would be elevated rail to avoid clogging the main roads. As a linked portion of the rapid transit railway, PNR would service additional towns outside Manila not serviced by the five subway lines.

The UTSMMA also included road and highway development, such as the planning of a system of circumferential roads. Some of these, such as C-5, were implemented.⁷⁴ The study also envisioned the secondary and important role of buses

MAP 4. Proposed Lines in UTSMMA, 1973



SOURCE: Jose, Ricardo T., et al, *The Mass Transit System in Metro Manila: From Tranvia to MRT, 1879-2017*, University of the Philippines System Emerging Interdisciplinary Research 06-008, n.d.

was the Metro Manila Transport, Land Use and Development Planning Project (MMETROPLAN) conducted from January 1976 to February 1977. The Philippine government commissioned what was to become the Halcrow Fox and Associates, one of the world's leading urban planning and transportation consultancy firms, to do the study. Government officials dealing with transport and planning formed a steering group. The World Bank funded MMETROPLAN.^{77 78}

But MMETROPLAN was not built on the advices of UTSMMA. In fact, it killed the proposal for the rapid transit railway network for Metro Manila. In the opinion of today's urban planners and engineers from UP, MMETROPLAN doomed heavy rail transport by arguing that it would be unviable economically in the long run.⁷⁹ To quote:

“Heavy Rapid Transit (HRT) would provide public transport passengers with much faster journey, but by 1990 would attract only 2.5% of motorists and would have negligible impact on traffic congestion. Partly because of this and partly because of its very high capital cost, it would be hopelessly uneconomic: the annualized capital costs would be higher than the estimated benefits in 1990...passenger flows are not high enough to exploit

and jeepneys to be used for feeder services once the rail systems were operational.⁷⁵

The UTSMMA would have taken 15 years to complete. University of the Philippines (UP) scholars are of the opinion today that the UTSMMA, had it been fully implemented, may well have solved Metro Manila's traffic problems for several years to come. It would have even increased the development potentials of nearby towns.⁷⁶ But only portions of the road plan and a significantly shortened Line 1 would be carried out and under a new plan and based on a quite different set of assumptions.

Instead of fully heeding the UTSMMA, the Marcos dictatorship commissioned the drawing up of another plan. The second study

its full capacity...and the large savings in time for public transport passengers are not given a high value in Manila, and are not high enough to persuade motorists to change mode.

These results are conclusive, and are unlikely to be changed by any circumstances or reasonable assumptions...it is clear that any other fully segregated public transport system, whether light rail or busway, would also be uneconomic. As such systems would require the appropriation of most, if not all, of the available funds for all transport (including highways) in Metro Manila for the foreseeable future, and as there is no other rationale for their implementation, they have been rejected from further consideration.” (MMETROPLAN, 1977)

The World Bank-funded study also did not favor the PNR, arguing that the routes did not correspond to the demand and that it would be expensive eventually. MMETROPLAN obviously preferred road transport modes over an upgraded PNR.

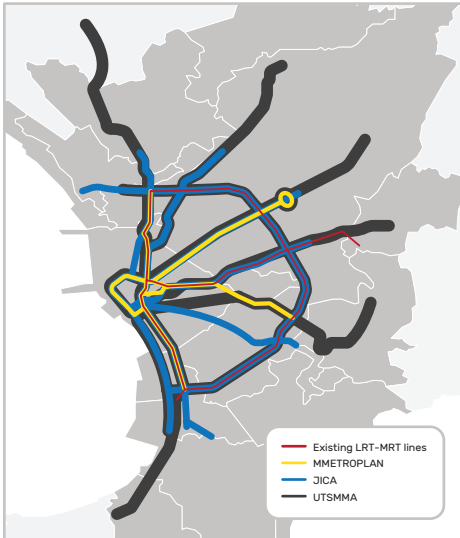
It also did not agree to opening up the Cainta and Marikina areas in the eastern portion of Metro Manila as these would be prone to flooding. Instead, the study recommended developing Tandang Sora/Commonwealth Avenue in the northern portion and Sucat/Parañaque in the southern portion of Metro Manila.⁸⁰

To address traffic congestion, MMETROPLAN made short-term recommendations focused on bus and jeepney operations, such as the use of non-airconditioned buses designed for more standing passengers and charging affordable fare and the use of premium buses designed for seated passengers and charging higher fares. The study also proposed to limit the bus operations of the government-run Metro Manila Transit Corporation (MMTC), which was eventually discontinued. It saw jeepneys as a way to address low demand but high frequency service.⁸¹

The most important recommendations of the MMETROPLAN on road public transport, which would later define a deregulated sector, focused on the issuance of franchises for buses and jeepneys. The franchise period was shortened, and restrictions were loosened to suggest “properly regulated competition”. The study further encouraged small operators for both jeepneys and buses.

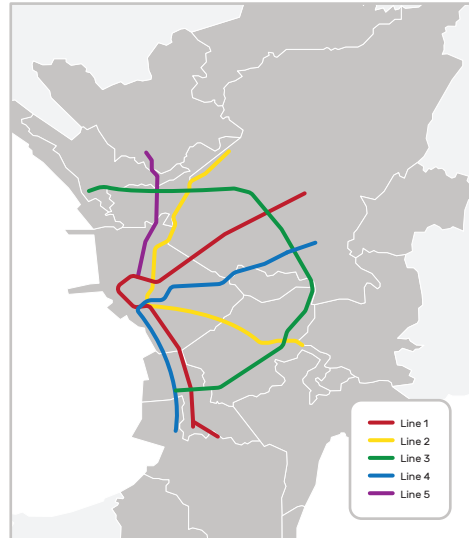
The MMETROPLAN focused on the main strategies of cordon pricing (or charging toll fees) and bus lanes. It finally recommended light rail transit (LRT) of rapid streetcars that would run on road level, not segregated from motor transport and would follow street lights just like cars and buses. Four short lines were proposed, radiating from Manila to Monumento, Quezon City, San Juan and Mandaluyong, and Makati and Pasay.⁸² **(See Map 5)**

MAP 5. Alignment of Proposed and Existing Lines in Metro Manila



SOURCE: Jose, Ricardo T., et al, *The Mass Transit System in Metro Manila: From Tranvia to MRT, 1879-2017*, University of the Philippines System Emerging Interdisciplinary Research 06-008, n.d.

MAP 6. Proposed Lines by JICA, 1976



SOURCE: Jose, Ricardo T., et al, *The Mass Transit System in Metro Manila: From Tranvia to MRT, 1879-2017*, University of the Philippines System Emerging Interdisciplinary Research 06-008, n.d.

Cost could only be the most probable consideration for recommending light rail (with lower capacity) over heavy rail (with more capacity). But MMETROPLAN proved to be more costly as it was shortsighted in projecting overcrowding, which increased by more than 50% from a forecast of 190,000 to 216,000 daily for 1980 to 301,000 to 330,000 for 1990. Construction of the planned lines was targeted between 1980 and 1985. In 2010, the actual passenger volume was already 430,000.⁸³

Meanwhile, JICA's Feasibility Study for Manila Rapid Transit Railway Line 1, an offshoot of the UTSMMA, was completed in June 1976 while MMETROPLAN was being drafted. Despite the ongoing World Bank study, JICA promoted its own study as urgent in light of the anticipated heavy traffic demand along EDSA.^{84 85}

JICA proposed that Line 1 would run from Quezon City through Commonwealth Avenue and Quezon Boulevard; through the Manila university belt, port areas, and Taft Avenue; possibly extending to Baclaran and the airport in Pasay City. The study included five mass transit lines – actually a scaled-down version of the UTSMMA - but some would be elevated instead of underground. **(See Map 6)**

Again, JICA recommended heavy rail based on updated population projections. This is also to integrate the rail system with PNR train services that would be modernized and upgraded to rapid transit as well as bus and jeepney routes to bring people to the train stations. Construction was projected to take 15 years.⁸⁶

Wrong decisions, wrong direction

The Marcos dictatorship adopted MMETROPLAN just the same, including the construction of routes and stations, but with several changes along the way. Instead of a street level light rail system, the government decided that LRT-1 (paralleling part of UTSMMA's Line 1 and MMETROPLAN's Rizal Avenue corridor line) would be segregated from road traffic and would be elevated. This added to the original costing and necessitated the drafting of a supplemental plan.

The Marcos dictatorship took the construction of LRT-1 as a government project and created the Light Rail Transit Authority (LRTA) with the First Lady Imelda Marcos, then governor of Metro Manila, as the first chairperson. From the start, LRTA would oversee operations but a private corporation would handle the day-to-day activities for 10 years.⁸⁷

The PNCC started construction in September 1981 with an official development assistance (ODA) loan from the government of Belgium. The private corporation was Electrowatt Engineering of Zurich. LRT-1 became the first mass transit in Southeast Asia and was also among the world's best financially for some years. The benefit to the commuting public was immediately felt.⁸⁸

But since passenger demand was higher than the capacity of the cars, the trains quickly deteriorated due to overcrowding. This slowed the trains, which years later were rehabilitated with help from the government of Japan. But since LRT-1 is light rail, the modern cars remained limited.

Metro Manila's traffic continued to worsen in the 1980s, with increasing passenger traffic and slowing road vehicle movement to an average of 18 kph. As early as this time and even upholding the MMETROPLAN, The Marcos government's Ministry of Transportation and Communications (MOTC) and Electrowatt were already considering heavy rail or a monorail system (but not LRT). Their study recommended a 20-year time frame to develop around 150 km of mass transit rail, reverting to UTSMMA and JICA but combining with MMETROPLAN.⁸⁹ This seemed to be the beginning of the 'hodgepodge planning' that would prove costly to the commuting public.

The aforementioned UP scholars strongly believe that the UTSMMA could have been a game changer and that the MMETROPLAN was a crucial point in the underdevelopment of Metro Manila's public transport system and its crisis today.⁹⁰ What could have transpired then that made government planners and the World Bank opt for road transport and light rail, while our Asian neighbors were already investing in heavy rail systems at that critical time? The country was under Martial Law, and the systemic plunder and corruption under the Marcos dictatorship

may have been a factor that shunned planners from investing hugely in public transportation. Whatever the reasons, the MMETROPLAN unfortunately set the stage for a deregulated, private-sector-led and road-focused public transportation system.

More studies, no lessons learned

The next study was the Metro Manila Urban Transport Improvement Project (MMUTIP) that was implemented from July 1980 to August 1981 and funded by the Overseas Economic Cooperation Fund (OECF) of Japan. It recommended a new franchising system, additional bus routes and additional units. Additionally, it recommended the control of entry and operations of jeepneys along major bus routes. At the same time, it deregulated the entry and operations of jeepneys outside major thoroughfares that were otherwise served by, or were more suitable for, buses. It also proposed the stoppage of MMTC operations because it was unprofitable to serve missionary routes. Finally, the study encouraged tricycles for feeder services.⁹¹

The MOTC commissioned yet another study, the Metro Manila Urban Transportation Strategy Planning Project (MMUTSTRAP), funded by the Australian Development Assistance Bureau, or what is today's AusAID. The study ran from November 1982 to April 1983 while LRT-1 was already being constructed. The MMUTSTRAP was against deregulation and stressed service over profitability. It also prognosticated that a mass transit rail would have to rely on huge government subsidy to keep it in operation and continued to prefer light rail. Yet, it did not propose new routes or rolling stock. Furthermore, the study produced a prioritization plan for transport projects such as terminals and road development as well as transport policies for Metro Manila.

JICA conducted another two-phase study between November 1982 and March 1985 also while LRT-1 was being constructed: the JICA Update on Manila Study on Urban Transport (JUMSUT I and II). It focused on supporting the implementation of LRT-1 and how to reroute public transport vehicles (buses and jeepneys) along the LRT-1 corridor – Rizal and Taft Avenues – for balanced mode share.⁹²

The government for its part also conducted a study in the decade of 1990-2000. The Metro Manila Urban Transport Development Plan (UTDP) is an inter-agency collaboration among the Department of Transportation and Communications (DOTC), Department of Public Works and Highways (DPWH), MMDA, NEDA, Highway Patrol Group (HPG) of the Philippine National Police (PNP), and MTPC. They aimed to determine what projects could be implemented to improve transportation in Metro Manila.

Among other things, the study compared proposals for a mass transit system along EDSA. One was the Philtrak, a proposed bus system with its own right of way

(ROW), versus a street-level LRT along EDSA. The concept of Philtrak was to use locally made big capacity articulated buses powered by either diesel engines or a tram-like overhead catenary electric system. It had a system capacity of 1,056,000 passengers a day, average speed of 48 kph, 96 units of rolling stock, and 19 stations.⁹³

The study preferred Philtrak over LRT, but an LRT (now MRT-3) was built instead, which is now carrying more than twice the number of passengers it was estimated to carry.⁹⁴ The government set aside Philtrak, as it was saddled with financial difficulties. Meanwhile, municipal transport authorities in Curitiba, Brazil and Bogota, Colombia, followed by Washington, United States and Mexico later on, were copying the Philtrak concept, now called the BRT.⁹⁵

At any rate, it is still clear today that neither Philtrak nor the MRT is the most suitable mass transit along EDSA, as transport engineers insist; and heavy rail system is still the most appropriate.⁹⁶

Neoliberalism steps up a gear

Markedly since the start of the 1990s, public mass transport planning and management has increasingly geared the sector towards the general trend of marketization and profitability. The decade started the refinement and intensification of market-oriented reform policies in the economy that would veer the transport sector away from public service and shape it into another area for profiteering. Even feasibility studies proved to be part of the profitable business.

The MMUTIS would be the last comprehensive study conducted, again by JICA, from 1996 to 1999. It recommended a 15-year master plan for:

1. MRT integration
2. MRT modal interchange facilities
3. MRT Line 2 Extension (Recto Avenue, City of Manila to Masinag, Antipolo City)
4. MRT Line 4 to serve the corridor between Recto, City of Manila and Batasan, Quezon City and eventually Novaliches, running from España Avenue, Quezon Avenue and Commonwealth Avenue – now known as MRT-7 along Commonwealth Avenue and MRT-9 along España Avenue and Quezon Avenue
5. MRT Line 6 to provide a mass transit system between Baclaran in Pasay City and Imus and eventually Dasmariñas in Cavite – now known as LRT Line 1 Cavite Extension
6. PNR Commuter Improvement/Manila Calabarzon Express (MCX) to serve the north-south transport demand along PNR's ROW in the south and connecting the proposed Northrail project.⁹⁷ **(See Map 7)**

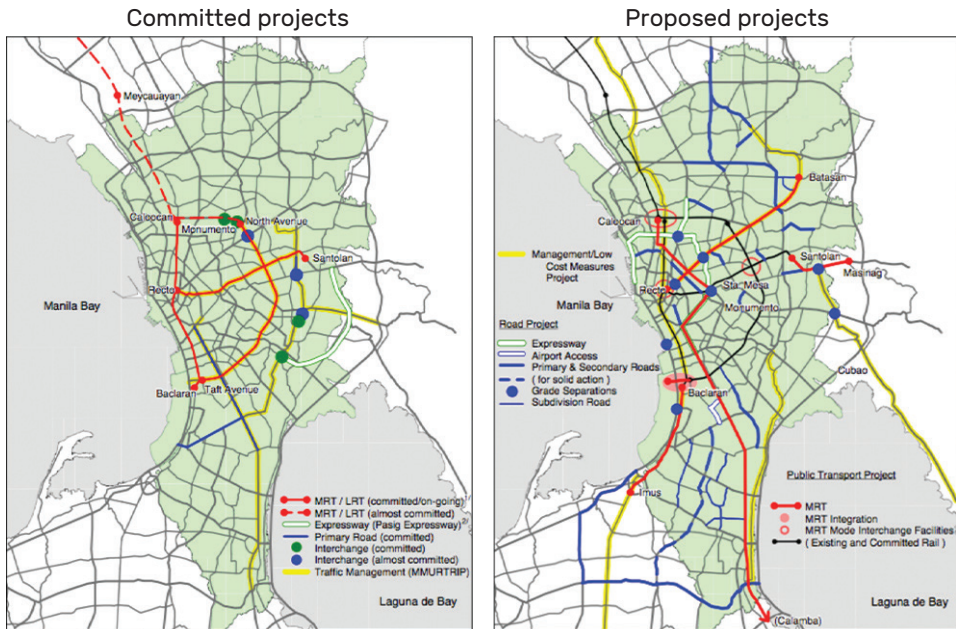
MMUTIS promoted the rail transit system as the center of the public transport system of Metro Manila through private sector participation, effective use of ODA,

and integrated urban development. It made comprehensive recommendations on land use zoning and development, traffic management, establishment of a transport and development planning process, transport terminal development, improvement of the regulatory process, and measures to accelerate infrastructure development.⁹⁸ MMUTIS recommended strengthening the role of the MMDA.

Take note that JICA made a turn-around from its recommendation of heavy rail to planning for a light rail system. MMUTIS, it may be gathered, shifted up neoliberal economic planning in the transport sector by promoting private sector involvement, the attraction of private investments and foreign loans such as ODA, and the use of pricing and road and vehicle taxes. This is while enjoining government to do its part in facilitating the privatization of public transport and infrastructure development.

The Philippine government just passed the build-operate-transfer (BOT) law (Republic Act 6957) at the start of the decade, effectively privatizing infrastructure development, including for public utilities such as public transport. It was the time that the implementation of neoliberal policies would speed up at a ferocious pace, and JICA and its studies such as MMUTIS would make an observed reversal from emphasizing on heavy state investment in the 1970s to promoting private funding in the 1990s.

MAP 7. MMUTIS committed and proposed public transport projects for 1999-2004



SOURCE: Napalang, Ma. Sheilah and Jose Regín Regidor, *Challenges of Urban Transport Development in Metro Manila: A look back at the last 40 years*, n.d.

MMUTIS is explicit on its recommendation for government to improve the investment criteria in the transport sector especially in mega projects and to clear rules and guidelines on private sector participation particularly on BOT projects. When it comes to MRT projects, MMUTIS has also laid down the framework that government would shoulder the construction component while the private sector would take care of the operation component.

Planning for an efficient public mass transport system thus has been transformed from a state responsibility to a private business initiative. Effectively too, public funds for such a much-needed system have been reduced and utilized instead to support private profiteering. Focusing on the attraction of private foreign investments also explains now why feasibility studies could remain without government implementation, for after all, the objective of such studies has been to give the private investors an idea of what is profitable. Not to mention that conducting feasibility studies is also a profitable venture.

More studies for profit

In January 2006, JICA would complete a study on the assessment of bus operations along EDSA, an EDSA bus revalidation survey. It found out that there was an oversupply of bus units along the section where routes overlapped. This time, JICA was looking into the possibility of introducing BRT along EDSA (*a discussion for later*).⁹⁹

JICA funded another study from November 2006 to April 2007, the Mega Manila Public Transport Study (MMPTS), as a follow-up to the EDSA bus revalidation survey. It reviewed franchising issues, such as the proliferation of operating buses, jeepneys and UV express without franchises, known as “colorum” in Filipino slang. It recommended the computerization and synchronization of the databases of the LTFRB and the LTO. The study also called for more studies with the end-view of rationalizing supply-demand, since it also pointed out the ineffectiveness of the route measured capacity (RMC) formulas.¹⁰⁰

In July 2007, with the support from the US Agency for International Development (USAID), a pre-feasibility study for the suitability of BRT was completed. However, it was limited by several premises, as the then DOTC already reserved Commonwealth Avenue for MRT-7 while the MMDA reserved EDSA for its organized bus route (OBR) scheme. Thus, the study recommended BRT lines only along Ortigas Avenue and C-5. This study eventually inspired the feasibility studies for Cebu BRT as well as Davao BRT.¹⁰¹

From 2010 to May 2012, the DOTC and UP developed a Mega Manila Public Transport Planning Support System (MMPTPSS), the first government-to-government project. It emphasized the need to change the basis for determining the

number of bus or jeepney units serving particular routes and to replace the RMC. It recommended for a network-based approach using transport models to assess the impacts of additional units or the introduction of new routes.

For instance, routes with very high passenger demand (more than 160,000 passengers per day) shall be served by rail-based transit or BRT; high passenger demand (100,000 to 160,000 passengers per day) shall be served by BRT; medium passenger demand (10,000 to 100,000) by PUVs with 60 or less passengers/seats but not less than 22 passengers such as buses; and low passenger demand (not exceeding 10,000 passengers per day) shall be served by PUVs with less than 22 passengers/seats such as jeepneys and other paratransit modes.

Results of each feasibility study would feed into government's current planning for investment in the transport sector.

So, where are we?

After more than 40 years, the Philippine government still does not have an institutionalized dataset on the transport sector, which we could be using as basis for intelligent planning. Still, the latest studies are from JICA – MUCEP done in 2015 and the JICA Roadmap for Transport Infrastructure Development for Metro Manila and Its Surrounding Areas released in 2014, with a follow-up survey in 2019. The government relies on these dated studies to plan for the future of the transport sector.

MUCEP indeed aimed to enable the then DOTC to make a public transportation plan for Metro Manila by strengthening the agency's capacity in transportation database management, travel demand forecasting, and urban transportation planning, among others. An updated database of trip information is a requisite in transportation planning, yet the government is still at the stage of capacity building in travel demand forecasting.

The NEDA adopted a National Transport Policy in 2017 under the Duterte administration when the traffic crisis was at its height and undeniable, and also as the Duterte administration was unveiling its ambitious BBB program. But the implementing rules and regulations (IRR) were only released in 2020 at the height of the pandemic. Still, by end-2022 as the NEDA released the Philippine Development Plan (PDP) 2023-2028 under the Marcos Jr administration, the agency admits that the implementation of the National Transport Policy is difficult without a National Master Plan and sufficient data.¹⁰² Most of the existing demand data do not reflect travel patterns and needs.

At any rate, the NEDA is now implementing the recommendations of the JICA

roadmap, which aims to decongest Metro Manila by building corridors of mass transport systems in Southern Tagalog, Central Luzon, and Metro Manila. It aims to create a seamless transportation system from the port of Batangas to the port of Manila and to Clark Green City in Mabalacat, Pampanga and Subic port in Zambales.¹⁰³

The recommendations on the follow-up survey of the JICA roadmap are based on five “building blocks”, namely spatial reconfiguration, investment in infrastructure, new townships and transit-oriented development (TOD), digital infrastructure, and rethinking of institutional arrangements. In order to see a mobile, accessible, inclusive, resilient, vibrant and sustainable Mega Manila, the follow-up survey affirms that the following should be rolled out:

- Inter-connected urban expressways (80 km) and intercity expressways (approximately 400 km);
- A railway network of 6 main lines (approximately 369 km), complemented by 5 secondary lines (75 km);
- Reshaping of a megapolitan footprint in the north-south direction, and away from disaster-prone areas (including relocation of informal settlers);
- Modernization of road-based public transport system into a virtually-integrated fleet of light electric vehicles (LEVs) and electric vehicles (EVs) serving diverse trips (including phaseout of traditional jeepneys);
- Creation of new townships and transit-oriented development (TODs) and development of old zones of existing urban hubs that will be homes to an additional 10 to 15 million people in 20 years;
- Update of several archaic laws on transit and traffic, creation of new entities, and re-modelling of infrastructure-coordinating institutions into a Mega Manila Transport Authority;
- Conduct of researches and in-depth feasibility studies in support of the above measures, as well as efficient program implementation.¹⁰⁴

JICA insists that the establishment of a regional transport authority for GCR should be seriously considered. It projects that if the old pace of expressway development in the last 15 years is doubled, less than 50% of the target expressway will get built by 2035. Likewise in railways, a pace twice faster would only build 1/5 of the desired network.¹⁰⁵ This only emphasizes the need for fast and massive infrastructure development in the next 15 years, which can only be achieved through massive investment.

The main focus of PDP 2023-2028 resonates with this, i.e. a chapter on infrastructure to cover the transport sector instead of a chapter on the transport sector and how it contributes to, as well as reflects, a more sustainable economic plan. “Infrastructure is critical to the economic transformation of the country”, the PDP explicitly says, and the PDP overall has remained in the old framework of attracting foreign investments in private-sector-driven infrastructure development.

For land travel, the PDP recognizes the problems of supply shortage, both of railways and road-based public transportation; the inaccessibility of and lack of safe transport facilities, especially for vulnerable groups; non-viability of active transport; and road traffic fatalities. These are on top of the concerns of lack of development on the following: maritime and airport infrastructure; civil works and utilities installation along roads (e.g. electricity poles, waterworks, among others); port and ancillary facilities; automated logistics processes; movement through digital infrastructure; and addressing the impact of climate change.¹⁰⁶

These are sectors that have been commercialized and privatized over the decades, and being such is actually the root of them being inappropriate to the needs of the commuting public. Still, NEDA is not focused on these sectors being reverted to public hands, rather on continuing to entice private infrastructure corporations to provide the financing and build the transport facilities. The PDP thus is simply a menu of profitable avenues where private investment can go. Public transport is only one sector where private and foreign investors may profit from.

Thus, the plan is focused on PUV modernization, infrastructure and support facilities for active transport, continuation of the service contracting program under private financing, more investments in universally accessible and gender-responsive transport designs, transport corridors to sea and air ports, and digital infrastructure. The plan is the overall gentrification of a poly-centric Mega Manila, and as a postscript, where the traditional jeepneys, the slums and urban poor, and the working class commuting public including farmers in the suburbs are yet to find their place.

Metro Manila's transport crisis stems from government's own policy of commercializing and privatizing public transportation and relying on the private sector to provide the facilities, units, ticketing and fare collection system, garage and terminals, ports, roads, and everything. Neoliberalism has resulted in weak regulatory policies as well as weak state intervention in public mass transport.

Government cannot deny its car-centricity. In NEDA's survey on the aspirations of the Filipino people, the agency reports that among the aspirations of Filipinos is to have at least one car or vehicle. When translated to the vision paper *AmBisyon Natin 2040*, it has been worded as "convenient and affordable" transport. Although it has not specified the bias for having a private vehicle, there is still no mention of transport being mass and public.¹⁰⁷

In reality, government's car-centricity only betrays its bias for private business, such as real estate corporations, infrastructure construction companies, shopping malls, privatized public utilities, transport corporations and service companies to design the national capital according to their business needs and profitability.

Building corridors, on the other hand, eases the mobility of the flow of goods and services to and from the country's special economic zones and serves the import-export economy. In the end, the problem is rooted in government's own vision of a service economy instead of a producing one, which is catered to big local and foreign capitalists.

There are viable solutions to Metro Manila's transport problems (*a discussion for much later*) but in order to be able propose these, identifying the causes of urban blight and economic underdevelopment is a start (*also a discussion for later*). With this proper perspective, we can move forward to visioning an economy for the many and rearranging a transport sector to serve this vision – a discourse that deserves deeper and long-term articulation.

ENDNOTES

- 1 Mijares, Andra Charis, et al. "Enhancing the sustainability and inclusiveness of the Metro Manila's urban transportation systems: Proposed fare and policy reforms." *Transport and Communications Bulletin for Asia and the Pacific*, No. 84, 2014. United Nations Economic and Social Commission for Asia and the Pacific. http://www.unescap.org/sites/default/files/Bulletin%2084_Article3.pdf.
- 2 Chang, Katreena, et al. *The Systemic Shortage in Philippine Public Transportation: The Impact of the Infrastructure Flagship Project Pipeline on the Mobility Needs of the Greater Capital Region and Recommendations to Bridge the Gap*. Move As One Coalition, 26 May 2021.
- 3 Japan International Cooperation Agency and National Economic and Development Authority. *Roadmap for Transport Infrastructure Development for Metro Manila and its Surrounding areas Region III & Region IV-A, Final Report, Main Text*. Almec Corporation, March 2014.
- 4 IBON Foundation, Inc. "Mass transport system in Metro Manila and the quest for sustainability". *IBON Policy Study*, 2018.
- 5 Subingsubing, Krixia. "EDSA 'transformation' now comes with loops, 'carousel'". *Inquirer. Net*, 2 July 2020, <https://newsinfo.inquirer.net/1300500/edsa-transformation-now-comes-with-loops-carousel>.
- 6 Land Transportation Franchising and Regulatory Board. Resolution No. 81 Series of 2020. 30 May 2020, <https://lfrb.gov.ph/wp-content/uploads/2020/07/87-RESOLUTION-NO.081-S.2020.pdf>.
- 7 IBON, *op. cit.*
- 8 Madarang, Catalina Ricci S. "Mapmaker shows Metro Manila's original road system before Skyway construction". *Interaksyon*, 21 June 2021, <https://interaksyon.philstar.com/trends-spotlights/2021/06/21/194155/mapmaker-shows-metro-manilas-original-road-system-before-skyway-construction>.
- 9 Department of Public Works and Highways. *Southeast Metro Manila Expressway (SEMME) (C6 Expressway Phase 1)*. <https://www.dpwh.gov.ph/dpwh/PPP/projs/mme>.
- 10 Madarang, *op. cit.*
- 11 "NLEX Corporation". *Wikipedia*, https://en.wikipedia.org/wiki/NLEX_Corporation.
- 12 "South Luzon Expressway". *Wikipedia*, https://en.wikipedia.org/wiki/South_Luzon_Expressway.
- 13 CAVITEX. "About CAVITEX". <https://www.cavitex.ph/about-us>.
- 14 "Manila-Cavite Expressway". *Wikipedia*, https://en.wikipedia.org/wiki/Manila-Cavite_Expressway.
- 15 Department of Public Works and Highways. *ATLAS 2022, Table 7*. https://www.dpwh.gov.ph/dpwh/DPWH_ATLAS/13%20Table%207.pdf.
- 16 Department of Public Works and Highways. *ATLAS 2022, Table 11*. [https://www.dpwh.gov.ph/dpwh/DPWH_ATLAS/Tables%20&%20Graphs%20\(Roads\)/Road%20Data%202016/ATLAS%202016/Table%2011.htm](https://www.dpwh.gov.ph/dpwh/DPWH_ATLAS/Tables%20&%20Graphs%20(Roads)/Road%20Data%202016/ATLAS%202016/Table%2011.htm).
- 17 Department of Transportation. *Road Sector Interactive Dashboard*. <https://dotr.gov.ph/data-sets/road-sector.html>.
- 18 JICA and NEDA, *Roadmap*, *op. cit.*
- 19 Japan International Cooperation Agency. *Data Collection Survey on Improving Road-Based Public Transport System in Metro Manila, Republic of the Philippines, Final Report*. Almec Corporation, Oriental Consultants Global Co., Ltd., April 2022.

- 20 Land Transportation Franchising Regulatory Board. "PUV Service Contracting Program". <https://ltfrb.gov.ph/puv-service-contracting-program>.
- 21 Luna, Franco. "Less than half of service contracting program funds disbursed by DOTr so far". *PhilStar Global*, 26 October 2022, <https://www.philstar.com/headlines/2021/10/26/2136862/less-half-service-contracting-program-funds-disbursed-dotr-so-far>.
- 22 De Leon, Susan. "DOTr prepares for third-phase of Service Contracting Program". *Philippine Information Agency*, 28 March 2022, <https://pia.gov.ph/news/2022/03/28/dotr-prepares-for-3rd-phase-of-service-contracting-program>.
- 23 Colcol, Erwin. "EDSA Carousel rides will be free again as Libreng Sakay program gets P1.28-B funding". *SPOT.ph*, 12 January 2023, <https://www.spot.ph/newsfeatures/mobility/103398/edsa-carousel-libreng-sakay-to-resume-2023-dbm-a4833-20230112>.
- 24 Luna, *op. cit.*
- 25 Japan International Cooperation Agency. *Follow-up survey on roadmap for transport infrastructure development for Greater Capital Region (GCR), Final Report*. Almec Corporation, August 2019.
- 26 *Ibid.*
- 27 IBON, *op. cit.*
- 28 Japan International Cooperation Agency. *Follow-up survey on roadmap for transport infrastructure development for Greater Capital Region (GCR), Final Report, Summary*. Almec Corporation, August 2019.
- 29 Department of Transportation. *Rail Sector Interactive Dashboard*. <https://dotr.gov.ph/datasets/railways-sector-dl.html>.
- 30 "Pasig River Ferry Service". *Wikipedia*, https://en.wikipedia.org/wiki/Pasig_River_Ferry_Service.
- 31 *Ibid.*
- 32 *Ibid.*
- 33 Metropolitan Manila Development Authority. *Metropolitan Manila Annual Average Daily Traffic (AADT) 2019*. https://mmda.gov.ph/images/Home/FOI/Annual-Average-Daily-Traffic-AADT/AADT_2019.pdf.
- 34 Chang, et al., *op. cit.*
- 35 *Ibid.*
- 36 Land Transportation Franchising Regulatory Board. *Memorandum Circulars issued, 2020-2022*. <https://ltfrb.gov.ph/issuances/memorandum-circulars>.
- 37 Pagkakaisa ng mga Samahang Tsuper at Opereytor Nationwide (PISTON). *Monitoring as of 26 December 2022*.
- 38 Japan International Cooperation Agency, and Department of Transportation and Communications. *The Project for Capacity Development and Transportation Planning and Database Management for the Republic of the Philippines, MMUTIS Update and Enhancement Project (MUCEP), Technical Report*. Almec Corporation, Oriental Consultants Global Co., Ltd., December 2015.
- 39 Japan International Cooperation Agency. *Metro Manila Urban Transportation Integration Study (MMUTIS) Final Report Summary*. Almec Corporation, Pacific Consultants International, Yachiyo Engineering Co., Ltd., March 1999.
- 40 *Traffic in Manila, Philippines*. September 2022, <https://www.numbeo.com/traffic/in/Manila>.
- 41 Suzara, Zy-za Nadine, et al. *Move People, Not Just Cars: Correcting the systemic underfunding in national road-based public transport in the Philippines (2010-2021)*. Move as One Coalition, 26 May 2021.

- 42 Japan International Cooperation Agency, and Department of Transportation and Communications. *The Project for Capacity Development and Transportation Planning and Database Management for the Republic of the Philippines, MMUTIS Update and Enhancement Project (MUCEP), Project Completion Report*. Almec Corporation, Oriental Consultants Global Co., Ltd., December 2015.
- 43 Santos, Ana P. "Carmageddon: The indignity of commuting in Metro Manila". *Reporter's Notebook*, Aljazeera, 24 October 2019, <https://www.aljazeera.com/features/2019/10/24/carmageddon-the-indignity-of-commuting-in-metro-manila>.
- 44 JICA and DOTC, *MUCEP*, *op. cit.*
- 45 JICA and NEDA, *Roadmap*, *op. cit.*
- 46 JICA, *Follow-up survey*, *op. cit.*
- 47 Suzara, et al., *op. cit.*
- 48 JICA and NEDA, *Roadmap*, *op. cit.*
- 49 JICA and DOTC, *MUCEP*, *op. cit.*
- 50 Rith, Monorom, et al. "Towards more sustainable transport in Metro Manila: A case study of household vehicle ownership and energy consumption". *Transportation Research Interdisciplinary Perspectives*, Vol. 6, 10 July 2020.
- 51 "Philippines – Automotive Sales Volume". *Marklines*, 2023, <https://www.marklines.com>.
- 52 JICA, *Follow-up survey*, *op. cit.*
- 53 *Ibid.*
- 54 JICA and NEDA, *Roadmap*, *op. cit.*
- 55 *Ibid.*
- 56 "Manila traffic". *TomTom Traffic Index*, <https://www.tomtom.com/traffic-index/manila-traffic>.
- 57 Chang, et al., *op. cit.*
- 58 *Ibid.*
- 59 Department of Energy. *Oil Monitor*. <https://www.doe.gov.ph/oil-monitor?q=oil-monitor>.
- 60 Land Transportation Franchising Regulatory Board. *Memorandum Circulars issued, 2018-2022*. <https://lfrb.gov.ph/issuances/memorandum-circulars>.
- 61 Department of Transportation. *Department Order No. 2020-021, Omnibus Franchising Guidelines*. <https://drive.google.com/file/d/1qxhL8iP3McdCorM37CGEW5Cr92LMSvCH/view>.
- 62 Philippine Statistics Authority. *OpenSTAT Database Portal*. <https://openstat.psa.gov.ph>.
- 63 Congressional Policy and Budget Research Department. "Consumption patterns among Filipino households, 2021". *Fact in Figures*, No. 71, December 2022. House of Representatives. https://cpbrd.congress.gov.ph/images/PDF%20Attachments/Facts%20in%20Figures/FF2022-71_Consumption_Patterns_Among_Fil_Households_2021.pdf.
- 64 JICA, *Follow-up survey*, *op. cit.*
- 65 JICA and NEDA, *Roadmap*, *op. cit.*
- 66 Santos, *op. cit.*
- 67 Dela Peña, Kurt. "Suffering commuters, higher fare, fewer trips: PH transport woes pile up". *Inquirer.Net*, 15 June 2022, <https://newsinfo.inquirer.net/1611391/suffering-commuters-higher-fare-fewer-trips-ph-transport-woes-pile-up>.
- 68 Chang, et al., *op. cit.*
- 69 Suzara, et al., *op. cit.*
- 70 Sidel, John T. "What are the challenges faced by urban transport in the Global South?". *LSE COVID-19 Blog*, 21 May 2020, <https://blogs.lse.ac.uk/covid19/2020/05/21/what-are-the-challenges-faced-by-urban-transport-in-the-global-south>.

- 71 Jose, Ricardo T., et al. *The Mass Transit System in Metro Manila: From Tranvia to MRT, 1879-2017*. University of the Philippines System Emerging Interdisciplinary Research 06-008, n.d.
- 72 Napalang, Ma. Sheilah and Jose Regin Regidor. *Challenges of Urban Transport Development in Metro Manila: A look back at the last 40 years*. N.d.
- 73 Jose, et al., *op. cit.*
- 74 *Ibid.*
- 75 Napalang and Regidor, *op. cit.*
- 76 Jose, et al., *op. cit.*
- 77 Napalang and Regidor, *op. cit.*
- 78 "MMETROPLAN,1977". *Caught (up) in traffic*, <https://doctrine.com/?s=mmetroplan&submit=>.
- 79 Napalang and Regidor, *op. cit.*
- 80 Jose, et al., *op. cit.*
- 81 Napalang and Regidor, *op. cit.*
- 82 Jose, et al., *op. cit.*
- 83 *Ibid.*
- 84 *Ibid.*
- 85 Napalang and Regidor, *op. cit.*
- 86 Jose, et al., *op. cit.*
- 87 *Ibid.*
- 88 *Ibid.*
- 89 *Ibid.*
- 90 *Caught (up) in traffic*, *op. cit.*
- 91 *Ibid.*
- 92 Napalang and Regidor, *op. cit.*
- 93 Hermoso, Tito F. "Fresh transport ideas: From UBER to PHILTRAK". *Autoindustriya.com*, 28 August 2015, <https://www.autoindustriya.com/inside-man/fresh-transport-ideas-from-uber-to-philtrak.html>.
- 94 *Caught (up) in traffic*, *op. cit.*
- 95 Hermoso, *op. cit.*
- 96 *Caught (up) in traffic*, *op. cit.*
- 97 Napalang and Regidor, *op. cit.*
- 98 *Ibid.*
- 99 *Ibid.*
- 100 *Ibid.*
- 101 *Ibid.*
- 102 National Economic and Development Authority. *Philippine Development Plan (PDP) 2023-2028*. <https://pdp.neda.gov.ph>.
- 103 JICA, *Follow-up survey*, *op. cit.*
- 104 *Ibid.*
- 105 *Ibid.*
- 106 PDP 2023-2028, *op. cit.*
- 107 National Economic and Development Authority. *AmBisyon Natin 2040*. <https://2040.neda.gov.ph>.

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