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# Transportation policy potholes: analyzing Metro Manila's COVID-19 response

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Before the COVID-19 pandemic, the Philippine government was already implementing policies and building infrastructure aimed at improving the country's road-based public transportation system and alleviating impacts of traffic congestion, especially in Metro Manila. However, with the pandemic, new priorities emerged. Public transportation now plays a vital role in controlling the spread of the disease while, at the same time, ensures that essential services are accessible, and public transport providers are sufficiently supported. This paper analyzes the road-based public transportation policies of the government during the pandemic using a multi-dimensional framework. In general, and in principle, we see that the government policies issued are consistent with the recommended transport policies that must be implemented during such crisis. However, there are some strategies that are untimely implemented, such as the mandatory utilization of the integrated terminals, the forced consolidation of transport providers, and the continuing modernization of jeepneys.

**JEL classification:** L90, L91, R40, R42

**Keywords:** Road-based public transportation, transportation pandemic response, PUV consolidation and modernization, integrated transport terminals

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## 1. Introduction

Before the pandemic, Metro Manila traffic was a nightmarish experience. In 2019 it was the second most congested metropolitan area in the world, next to Bengaluru, India [TomTom 2019]. The congestion level was at 71 percent which means that during congested hours, travel time increased by 71 percent [TomTom 2019]. The traffic in Metro Manila translated to a societal cost of around USD 20 billion annually. This cost includes lost working hours, additional fuel consumption, health costs caused by air pollution, and loss of investment opportunities [Mettke, Guillen, and Villaraza 2016].

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A significant majority of land trips in Metro Manila rely on buses and jeepneys. About 5,000 intra-city buses operate in the capital. In addition, there are 3,300 provincial buses plying the northern region-Metro Manila corridor and 4,000 provincial buses plying the southern region-Metro Manila corridor. Poorly maintained jeepneys also remain one of the most important transport modes. There are about 35,000 jeepney franchises issued in Metro Manila alone in 2014. Aside from buses and jeepneys, there are utility vehicles (UVs) with almost 9,000 operational franchises in the Metro in 2019 (JICA [2014]; Siy [2019]). The overlaps in some routes of buses, jeepneys, and UVs, the high road occupancy rate of private vehicles, the insufficient and ineffective urban transport planning and traffic management, and the inadequacy of urban road networks cause the unnecessary traffic congestions in the capital (ADB [2012]; JICA [2014]). With this, proposals to rationalize their respective routes, and develop and improve their infrastructure emerged. Table 1 shows the national and local road densities in Metro Manila and the adjacent Regions III and IV-A. Table 2 presents the traffic demand, public transport share in the transport demand, and private vehicle road occupancy rate in the Metro. Finally, Table 3 shows some major roads and road-based public transport improvement projects of the government [JICA 2014].

**TABLE 1. National and local road densities in GCR, 2010**

Region/ Road Classification	National Road Vehicle Density (Vehicle/km)	Local Road Vehicle Density (Vehicle/km)
Metro Manila	1,952	541
Region III	476	67
Region IV-A	415	108
Total, GCR	728	145

Source: JICA, 2014.

**TABLE 2. Traffic demand, public transport share in traffic demand, road occupancy rate of private vehicles, 2012**

	Traffic Demand (mil. trips/day)	Public Transport Share in Traffic Demand (%)	Private Vehicles Road Occupancy Rate (%)
Metro Manila	12.8	69%	78%

Source: JICA, 2014.

**TABLE 3. Some major roads and road-based public transport improvement projects**

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C3 Missing Link (San Juan - Makati)
C5 Missing Link Southern Section
Global City to Ortigas Center Link Road
Skyway-FTI-C5 Connector
Other Interchanges/Flyovers
Other Urban Roads
Mega Manila (Secondary Roads Package)
Region III (Sec Roads - Approx.)
Region IV-A (Sec Roads – Approx.)
Integrated Provincial Bus Terminal System
Jeepney Fleet Modernization
Urban Bus Fleet Modernization
Modernization of traffic signaling system

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Source: JICA, 2014.

In 2020, congestion levels dropped by 18 percentage points to 53 percent congestion level [TomTom 2020]. The reduced congestion in Metro Manila is the result of travel restrictions imposed during the pandemic. At the onset, the Philippine government imposed an enhanced community quarantine (ECQ) in Luzon from March 16, 2020 to May 15, 2020. The ECQ is a lockdown that restricted peoples' movement by implementing strict home quarantine measures and prohibiting all forms of public transportation. Government employees and the private sector were forced/advised to work from home. Schools were shut down.

Metro Manila and some parts of Luzon remained under modified ECQ (MECQ) from May 16, 2020 to May 31, 2020, as stipulated in IATF Resolution No. 37 s. 2020. This allowed some industries to operate at full operational capacity. Peoples' movement is still severely restricted, but mass gatherings limited to five individuals were allowed. Eventually, on June 1, Metro Manila and some regions shifted to general community quarantine (GCQ), while the rest of the country to modified GCQ (MGCQ), in accordance with IATF Resolution No. 41 s.2020.

In June, during the GCQ, only a handful of public utility buses (PUBs) and minibuses were allowed back on the road. It was only on July 3, or four months after jeepneys were told to cease operations, that they could operate again in the Metro. The jeepneys, however, ceased operations again from August 19 to September 3, when Metro Manila reverted to a stricter community quarantine. Eight months after the lockdown, only 70 percent of jeepneys in Manila were operating in a limited capacity as of end-November [Alegado and Calonzo 2020]. At present, the country remains under varying levels of community quarantine, imposing varying restrictions on public mobility and business operations.

When the pandemic hit Metro Manila, the government was in the middle of building new infrastructures and implementing new transportation policies to address the worsening traffic problems in the Metro. The government, with the support of various international agencies, devised two important public transportation plans before the pandemic, that aim to improve transport

conditions. One study supported by the Japan International Cooperation Agency (JICA) focused on developing the transport infrastructure in the Greater Central Region (GCR)<sup>1</sup> to facilitate urban growth and expansion of Metro Manila [JICA 2014]. The other study, published by the Department of Transportation (DOTr), presented a plan to modernize the jeepney fleet [Mettke et al. 2016].

With the pandemic, new transportation issues emerged. The government must ensure that the public transportation sector operates at least at the minimum to meet the basic societal needs. It is necessary to bring essential workers who do not have private transportation to their workplace. Moreover, it is utilized by the public to access essential services and medical facilities. However, public transportation is a high-risk environment for spreading the disease during a pandemic. This is due to the high volume of people confined in a space with limited ventilation, no mechanism to identify potentially sick people and a variety of common surfaces to touch [UITP 2020]. Hence, there is a need to limit movement to essentials and to impose public health protocols that will reduce the spread of the disease in various modes of public transportation. In doing so, a significant number of individuals who are employed in the sector may be adversely affected. There are about 55,000 jeepney drivers in Metro Manila alone in 2016 [Mettke et al. 2016] and about 40,000 individuals<sup>2</sup> employed in the public bus sector.

As we can see, public transportation plays an important role even in the context of a pandemic. Government priorities must be realigned to address the emerging concerns. Particularly, the government must ensure that the public transportation system continuously transports goods and people while simultaneously ensuring that the disease does not spread, and families that rely on the sector for a living are sufficiently supported. In this paper, we examine the appropriateness of the road-based public transportation policy responses of the government implemented in Metro Manila during the COVID-19 pandemic using a multi-dimensional framework that will look at the economic, social, environmental, and health dimensions of the public transportation system.

## 2. Public transportation and the pandemic

A sustainable public transportation system is multi-dimensional. The economic, social, environmental, and health dimensions of the society must be carefully taken into account when planning for a public transportation system especially during the pandemic [Ibold, Medimorec, Wagner, and Peruzzo 2020]. The economic aspect deals with the productivity, operational activities, and efficiency of the sector and the society. The social aspect is concerned with

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<sup>1</sup> National Capital Region (NCR), Regions III and IV-A

<sup>2</sup> If we assume that there are 3 employees hired for a single public bus - the driver, conductor, and a support staff - with around 13,000 buses plying in the capital, the public bus sector already employs around 40,000 people in Metro Manila alone.

the promotion of equality, accessibility, cultural and historical values of the society, inclusive mobility, and connectivity, among others. The environmental aspect deals with the management of emissions, climate change, biodiversity, ecosystems, and even noise pollution. Lastly, the health aspect deals with the promotion of public health such as the management of a pandemic, prevention of its future occurrence, and the management of air quality due to particulate matter emissions [Pitsiava-Latinopoulou and Iordanopoulos 2012].

To achieve a socially desirable mix and degree of economic, social, environmental, and health dimensions in public transportation, the sector's demand and supply factors are accordingly managed. During this pandemic, ways to control the sector's demand and supply became more prominent. Demand factors include the imposition of lockdowns and travel restrictions, adoption of social distancing measures, promotion of work-from-home arrangements and distance learning, promotion of active modes of transportation, adoption of appointment systems, and shift to online shopping, among others (ADB [2020]; Ibold et al. [2020]; Muley, Shahin, Dias, and Abdullah [2020]; Tirachini and Cats [2020]). Supply factor includes the management, creation, abolition of transport terminals and routes, determination of service frequencies and capacities of public transport, scheduling of transport services, allocation of bike lanes, and imposition of measures to prevent the spread of diseases in public transportation. This may include the use of queuing strategy, proper layout, and spacing in terminals to manage crowds, disinfection, physical distancing, contact tracing, testing of passengers, disinfection, health check-ups of employees, among others (Cani [2020]; Gkiotsalitis and Cats [2020]; Ibold et al. [2020]; Rubiano and Darido [2020]; Tirachini and Cats [2020]).

Government response during a pandemic can usually be divided into three phases: response, recovery, and rejuvenation [ADB 2020]. The response phase will largely consider the health and social dimensions in public transportation. Government wants to contain the spread of the virus while making sure that essential services are still provided, and public transport providers are supported. During this phase, government must ensure that essential services are accessible and essential workers are able to access public transportation while, at the same time, protects passengers and public transport service providers alike by imposing public health protocols such as the mandatory wearing of protective equipment, implementation of social distancing, disinfection, contact tracing, and constant health monitoring [ADB 2020]. Governments may also include provisions of alternative modes of transportation to move people and goods effectively [Rubiano and Darido 2020]. Some countries encouraged active transport/non-motorized transport, increasing access to bikes through financing and bike-sharing programs [Pardo 2020]. And just like other sectors that are badly hit by the pandemic, policies to support the financial recovery of public transport operators may be adopted. This may include liquidity support (supply-side subsidies or adjustment

of fares), low interest loans to support short-term financial needs, assistance to informal transport service providers including formalization or exit strategies, restructuring of fare structure and booting of complementary/non-fare sources of funding like real estate, advertising or parking charges, review/renegotiation of contracts according to new financial reality of companies (including policy on upgrading fleets), among others [Rubiano and Darido 2020].

In the recovery phase, when health conditions have improved, the health and social dimensions are complemented with some economic and environmental aspects. Aside from the continued monitoring, evaluation, and improvement of response measures, government may already start to relax several mobility restrictions and further promote active modes of transportation to cater to the increasing transportation needs of people. In the rejuvenation phase, all dimensions are now more equally considered. This phase includes the further improvement of the quality of operations and services of public transport, redesigning the public transport system, mainstreaming of effective measures in standard operating procedures, among others [ADB 2020].

### **3. Transportation policies before COVID-19**

The current transportation modernization plan of the government is guided by two important documents which were crafted before the onset of the COVID-19 pandemic. One is the report from JICA and the National Economic Development Authority (NEDA), discussing the comprehensive plan for transport development in Metro Manila and the adjoining regions of Central Luzon and CALABARZON. It was intended to guide the short-term and medium-term transport investment priorities to properly manage urban growth in Metro Manila [JICA 2014]. The other report was published by the DOTr, discussing the modernization plan for the jeepney industry [Mettke et al. 2016].

The JICA-NEDA paper assumed the continuous expansion of Metro Manila to become the Greater Capital Region (GCR), which will include Regions III and IV-A. The plan is guided by both regional-level and Metro-level sustainable development strategies. Regional-level development strategies include the promotion of a balanced development of agriculture, manufacturing, and services in the regions, prevention of urban sprawl, development of regional growth centers, and the improvement of connectivity and public transport services within and between regions, among others. Metro-level development strategies on the other hand, include the guided expansion of the Metro, improved access to affordable housing and improved living environment especially for low-income groups, development of a multi-modal public transport system, and the implementation of better traffic and demand management, among others. Since the transport sector plays an important role in these development strategies, the JICA-NEDA study crafted a transport development plan which includes the decongestion of Manila seaports,

development of new gateway airports, and the reorientation of Mega Manila's road network structure through the construction of connector expressways and suburban railways and the rehabilitation of existing radial-circumferential road systems. Moreover, it proposes the improvement of road-based public transport and traffic management, which will include the need to rationalize terminals and interchange facilities "to improve the accessibility and mobility of road-based public transport modes and lessen the traffic congestions" [JICA 2014]. The report noted the huge number of bus companies, and their individual bus terminals, and jeepneys in Metro Manila and recommended a comprehensive approach in modernizing the bus and jeepney systems and their services [JICA 2014]. Some components of the JICA plan are currently implemented, such as the LRT 2 East Extension Project, MRT 3 Capacity Expansion, MRT 7 Transit Line (North Ave. to San Jose Del Monte), South Integrated Transport Terminal, Southwest Integrated Transport Terminal, Skyway Stage 3, among others [JICA 2019].

The jeepney modernization plan of the DOTr, on the other hand, aims to establish a modern, sustainable, and climate-friendly road-based public transport fleet to realize short- and medium-term mitigation effects, complement the existing improvements in the mass public transportation system, and limit the motorization trend of the country [Mettke et al. 2016]. This plan will be realized by implementing structural changes in the public transportation sector and renewing the existing jeepney fleet to higher capacity vehicles. Structural changes in the sector includes the introduction of joint fleet management, franchise consolidation and reform, re-organization of public transport planning and regulation, and utilization of technology to manage public transport operation. Renewal of existing fleet to higher capacity vehicles include the imposition of age limit and vehicle standards for jeepneys and the introduction of financial incentives to modernize and consolidate fleets. The implementation of the modernization plan consists of four components, namely: 1) creation of a National Transport Policy, 2) reorganization of transport institutions, 3) development of a consolidated public transport network and service plan for Metro Manila, and 4) consolidation and modernization of the jeepney fleet [Mettke et al. 2016]. Some components of the plan were already completed, such as the formulation of the National Transport Policy (NTP), which was approved in 2017 [NEDA 2018], and the development of a consolidated public transportation plan for Metro Manila (e.g. JICA-NEDA study). On the other hand, there are components that are still ongoing, such as the consolidation and modernization of jeepney fleet, as ordered in the Department Order (D.O.) No. 2017-011 of the DOTr, which is also known as the Public Utility Vehicle Modernization Program (PUVMP) [DOTr 2017a; 2017b].

The 7,700 provincial buses entering Metro Manila motivated the government to fast track the establishment of common provincial bus terminals to replace the individually-owned terminals within the metropolis [JICA 2014]. This undertaking started during the Aquino Administration with the issuance of Executive Order



(E.O.) No. 67, s.2012 and Administrative Order (A.O.) No. 40, s.2013, which both stipulate the establishment of integrated terminals in the north and south of Metro Manila. Currently, Public-Private Partnerships (PPP) have already commenced for the Southwest Integrated Transport System (Paranaque Integrated Terminal Exchange), South Integrated Transport System (Taguig Integrated Terminal Exchange), and North Integrated Transport System (North Luzon Express Terminal) [Public-Private Partnership Center 2019a; 2019b]. With D.O. No. 2017-011 of the DOTr, all provincial buses bound for Metro Manila should end their routes at these integrated transport terminals when already available.

D.O. No. 2017-011 of the DOTr also laid out a transportation policy geared towards “environmentally-sound mobility solutions.” The Department wanted to promote high quality public transportation systems, including non-motorized transport,<sup>3</sup> and prioritize the movement of goods and people, instead of vehicles, guided by the principles of reliability, safety, accessibility, environmental soundness, and comfort. To realize this feat effectively and efficiently, the Department taps the local government units’ (LGUs) local knowledge. Under the D.O., LGUs are mandated to craft their respective local public transport route plan (LPTRP), which shall contain lists and maps of existing and proposed public transportation routes and available transport facilities. These LPTRPs shall focus on the movement of people, not vehicles, and shall be the minimum requirement for the issuance of franchises.

In the same year, 2017, the government also approved the National Transport Policy (NTP), which will serve as a comprehensive guide to all elements of the transport system in developing, managing, operating, and utilizing the national transportation system. With a vision of safe, secure, reliable, efficient, integrated, intermodal, affordable, cost-effective, environmentally sustainable, and people-oriented national transport system, the NTP provides guidance on the following policy focus areas of transportation: a) resource generation, allocation and cost sharing, b) program and project selection, c) cost recovery and subsidies, d) regulation of passenger transport services, e) transportation management in urban and regional areas, f) support to other economic services, and g) governance and institutions. The NTP ensures the effective and efficient inter-government and local government coordination in providing or promoting intermodal connectivity among transport infrastructures, good governance in the transport sector, green and people-oriented transport systems, and new economic growth centers and transport infrastructure investments [NEDA 2018].

In realizing these plans, international development partners, such as the Asian Development Bank (ADB), Australian Agency for International Aid (AusAID), JICA, and World Bank, among others, provide support in developing the country’s

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<sup>3</sup> The policies for the use of non-motorized vehicles are embodied in a Joint Circular issued by the Departments of Health (DOH), Transportation (DOTr), Local Government (DILG), and Public Works and Highways (DPWH). See Joint Administrative Order 2020-001 (August 19, 2020).

transport sector. The support of these institutions aims to address the problems brought by insufficient financing, weak institutional capacity of transport institutions, low productivity in road administration, weak governance, and low private sector participation in the sector. For one, ADB's strategy for the Philippine transport sector makes sure to support inclusive and sustainable growth and the government's priority investment program. ADB does this by undertaking four key areas of intervention: 1) improving the national highways, 2) developing urban transport, 3) strengthening sector governance, and 4) facilitating private sector infrastructure development [ADB 2012].

#### 4. Pandemic response

The pandemic altered the national government's transport policies through the IATF Resolution No. 101, s.2021. The national government, through the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF), approved the "minimum travel protocols for land, air, and sea" and adopted public health standards, which include social distancing and some basic hygienic practices (e.g. wearing of masks and face shields, proper hand hygiene, etc.), and the guidelines on testing for travelling. The IATF resolution also reiterated the mandatory utilization of the Integrated Terminal Exchange to all buses bound for the provinces from NCR, and vice-versa, instead of their respective private terminals, to serve as the central hub of transportation.

The Land Transportation Franchising and Regulatory Board (LTFRB) also issued the specific Guidelines for Public Transportation for Areas Under General Community Quarantine (GCQ), through LTFRB Memorandum Circular (M.C.) No. 2020-017, effective May 1, 2020. With the M.C., capacities of different modes of public transport are reduced to observe social distancing. PUBs and public utility jeepneys (PUJs) are allowed to load only half of the vehicle's capacity, while UV express services can load only up to 2 passengers per row. Safety and sanitary measures, for both passengers and drivers before and after using the public transport system, are also implemented such as the wearing of face masks, safe fare collection protocols, mandatory temperature monitoring, disinfection, installation of non-permeable transparent barriers between seats, and contact tracing protocols, among others. Moreover, the M.C. stipulates that the operation of a public transport must first be approved by the DOTr, where PUBs will be the most preferred mode, followed by tourist buses, OFG-compliant PUJs,<sup>4</sup> UV express, traditional PUJs, and lastly, tourist vans. The guidelines also indicate the minimum fare for PUBs and PUJs.

With respect to PUBs, the LTFRB issued Memorandum Circular No. 2020-019. The order was issued in preparation for the shift of the National Capital Region (NCR) from ECQ to GCQ. The policy rationalized routes that need to be served

<sup>4</sup> The Omnibus Franchising Guidelines (OFG) specify the requirement for modern jeepneys.

under GCQ and identified the technical requirements necessary to meet the health and safety requirements under the existing public health emergency [LTFRB 2020]. The order also indicated the preference towards an area-based fleet-managed single operator who can provide all the required number of compliant units. If there is no single operator that qualifies, the area-based operators must consolidate, as only one operationally consolidated group shall be allowed per route. The qualified operator must have a fleet management system and must meet the specifications for the bus units. The buses must be registered and have a valid Personal Passenger Insurance Policy. They must be equipped with global navigation satellite system (GNSS) to ensure monitoring of movement of units. Automatic Fare Collection System (AFCS) is encouraged for cashless transaction. The units must not be more than fifteen (15) years old. Also, units that are given special permits for EDSA Loop Service must also be low floor, low entry airconditioned bus with two doors. LTFRB also issued Memorandum Circular Nos. 2020-023 and 2020-026 to prepare the operations in the Metro of OFG-compliant jeepneys and traditional jeepneys, respectively. Under these two Circulars, preference has been granted as well to consolidated operators to ply the identified routes.

In supporting public transport providers adversely affected with the new guidelines due to the pandemic, IATF Resolution No. 69 s.2020 and Republic Act No. 11494, also known as Bayanihan to Recover as One Act, contain policies to support public transport operations. The policies stipulate the implementation of a service contracting scheme for PUVs to partially subsidize public transport operations, incentivize PUV operators to return to service, and restore the livelihoods of the transport workers. In the contracting scheme, in exchange for providing transport services during the pandemic, the government will be paying operators and drivers of PUVs based on vehicle-kilometers travelled [DOTr 2020]. The total amount allotted for the support is nearly ₱5.6 billion.<sup>5</sup>

Government also issued guidelines promoting the use of some active modes of transportation. DOTr Department Order No. 2020-14 and DOH, DOTr, DILG, and DPWH Joint Administrative Order No. 2020-001 identify policies that govern how vehicles should share the road with cyclists, provide safety protocols for active transport users, direct the construction of bicycle lanes, walking paths, and other

<sup>5</sup> Under Section 10 of the Bayanihan to Recover as One Act (Republic Act No. 11494 [2020]), the funds raised shall be used for the response and recovery interventions for the COVID-19 pandemic authorized in this Act and the following...

- (g) Nine billion five hundred million pesos (₱9,500,000,000.00) to finance the following programs of the DOTr:
- (1) Two billion six hundred four million pesos (₱2,604,000,000.00) to assist the critically impacted businesses in the transportation industry;
  - (2) Five billion five hundred eighty million pesos (₱5,580,000,000.00) to provide temporary livelihood to displaced workers in the industry through service contracting, regardless of quarantine levels, of public utility vehicles, as provided in this Act, as follows:
    - (i) Three billion pesos (₱3,000,000,000.00) for public utility jeepney drivers; and
    - (ii) Two billion five hundred eighty million pesos (₱2,580,000,000.00) for drivers of other public utility vehicles.
  - (3) One billion three hundred sixteen million pesos (₱1,316,000,000.00) to develop accessible sidewalks and protected bicycle lanes, procurement of bicycles and related safety equipment for bicycle distribution, sharing and lending programs, and procurement of bicycle racks.

support infrastructure, among others. In the Bayanihan to Recover as One Act, around ₱1.3 billion is allocated to develop accessible sidewalks, protected bicycle lanes, and other active mode transport support infrastructure.

Even with the pandemic, the government continued to pursue its ‘Build Build Build’ (BBB) program notwithstanding the lower budget for the projects. This is to help boost the still feeble economy by creating jobs and attracting investments, while at the same time, improving connectivity and mobility, assisting in containing the pandemic, and facilitating balanced development across the country. In doing so, the government reprioritized the infrastructure investment program and added projects that are adapted to the ‘new normal’, which include the enhancement of internet connectivity, digital economy, health care systems, and non-motorized transport infrastructure in the country [Malindog-Uy 2020]. Some BBB projects that are ongoing, or even completed, this pandemic, include the construction or renovation of several bike lane networks (in Metro Manila, Metro Cebu, and Metro Davao), expressways and roads (e.g. Tarlac-Pangasinan-La Union Expressway Rosario Exit, Laguna Lake Highway, Skyway Stage 3, BGC-Ortigas Center Link Roads, Alabang-Sucut Extension, Urdaneta City Bypass Road), bridges (e.g. Binondo-Intramuros Bridge, Estrella-Pantaleon Bridge), railways (e.g. LRT2 East Extension, LRT1 Cavite Extension), and airports (Malindog-Uy [2020]; Patinio [2021a; 2021b]; Rey [2021]). The government reiterated that existing health protocols must strictly be observed to prevent the spread of the disease, to seamlessly continue the infrastructure program [de Vera 2021].

## 5. Policy analysis/discussion

The government-issued transport policies during this pandemic, in general and in principle, are consistent with the recommended transport policies, based on the literature, that must be implemented during such crisis. Health and social aspects were given top priority, especially during the onset of the pandemic. Health protocols which are consistent with WHO’s standards in public transportation were implemented. Assistance was given to public transport providers to support them and ensure their continuous services. Moreover, alternative modes of transportation have been promoted (i.e. walking and cycling) to accommodate additional transportation demand and promote environment-friendly solutions. The actual implementation of these policies, however, may be ineffective. For instance, a progress report submitted by the DOTr to Congress indicated that only 0.72 percent of the 5.58-billion-peso budget allotted to assist the transport sector has been utilized as of April 15, 2021 [Office of Senator Francis Pangilinan 2021]. The budget is for the Service Contracting Program which was intended to aid PUV drivers during the pandemic.

The government's decision to reprioritize and push through with its BBB program, particularly for transportation infrastructure, is also a welcome development since it helps alleviate the social and economic problems of the country by providing employment and by attracting investments. The success of this program, however, is conditional on the strict implementation of the health protocols, improved capacities of implementing agencies, and the enhanced safeguard against corruption for these projects (de Vera [2021]; Laforga [2021]; Rivas [2020]).

Aside from trying to meet the huge health, economic, and social demand of the pandemic for safe and sustainable public transportation services, the government took the pandemic as an opportunity to implement other transportation modernization policies which are better implemented after the pandemic or in the recovery or rejuvenation phase. The implementation of these is a bit ill-timed, considering the operational limitations, and the health and economic challenges everyone is experiencing, even though these projects and policies are consistent with the government pre-pandemic transportation plans. These modernization policies include the mandatory utilization of the integrated terminals, the consolidation of public transport operators, and the modernization of jeepneys.

### *5.1. Mandatory utilization of integrated transport terminals*

Integrated terminals are envisioned to provide effective and efficient interconnections between different modes of transportation to improve travel time and travel experience of road users, and reduce overall network transport costs (MMDA [2014]; Pitsiava-Latinopoulou and Iordanopoulos [2012]). Currently, only the Southwest Integrated Transport System (Paranaque Integrated Terminal Exchange) and North Integrated Transport System (North Luzon Express Terminal) are operational, where the latter was just recently completed. It must be noted that these projects are consistent with the aforementioned JICA-NEDA study, NTP, and other government policy issuances (e.g. D.O. No. 2017-011 of the DOTr) that aim to improve the transport system. However, the rush to implement the utilization of these terminals during the pandemic, especially the North Luzon Express Terminal (NLET), nullified their supposed benefits. The haste to utilize NLET defeated the intermodality aspect of an integrated terminal since the only option of passengers to enter Metro Manila from NLET is via P2P buses [Provincial Bus Operators Association of the Philippines (PBOAP) 2021]. This translates to various additional costs incurred by the commuting public and transport providers. The case is different for the Paranaque Integrated Terminal Exchange (PITX), where buses and jeepneys connect the Terminal to the Metro.

The mandatory use of the integrated terminal has cost implications for passengers who require multiple transfers towards their destinations. Table 4 illustrates the increase in fare to passengers coming from the north if PUBs are required to use the NLET. From this table, we see an increase in transportation

cost ranging from 22 percent to 96 percent due to the mandatory use of NLET and subsequent multiple modes of transportation to reach their destination. Aside from the cost of transportation, the travel time of passengers will be greatly altered. This arrangement will approximately increase the travel time of a passenger by four hours [Provincial Bus Operators Association of the Philippines (PBOAP) 2021].

The inconvenience brought about by the mandatory utilization of the integrated terminals by the provincial buses has pushed passengers to switch to unregulated “colorum” vans or private vehicles that charge three to seven times the fare of a regular bus trip, as shown in Table 5. Colorum vehicles do not require the usual health protocols. They also need not use the integrated terminals. Hence, they can transport passengers directly to Metro Manila, which reduces the number of transfers to reach their destinations. This translates to a more convenient and shorter travel time. However, colorum vehicles put passengers and the community at greater risk by increasing the possibility of spreading the disease and forcing passengers to use vehicles that are inefficient and less safe on the road [Kennedy 2002].

**TABLE 4. Estimated additional fares (in pesos) of a passenger bound for Cubao due to mandatory utilization of NLET**

Route	Original Fare to Cubao (1)	Add: Fare from ITX to Trinoma (North EDSA) (2)	Add: Fare from North EDSA to Cubao (3)	Subtotal of Additional Fares (4 = 2 + 3)	% Increase in Fare (5 = 4/1)
San Fernando	111	90	16	106	96%
Angeles	148	90	16	106	72%
Dau	152	90	16	106	70%
Tarlac	218	90	16	106	49%
Cabanatuan	202	90	16	106	52%
Gapan	163	90	16	106	65%
Olongapo	226	90	16	106	47%
Guagua, Pampanga	128	90	16	106	83%
San Miguel, Bulacan	144	90	16	106	74%
Dagupan	381	90	16	106	28%
San Carlos	361	90	16	106	29%
Baguio	485	90	16	106	22%

Source: Provincial Bus Operators Association of the Philippines (PBOAP), 2021.

**TABLE 5. Comparison of bus fares and colorum private vehicles fares (in pesos)**

Route	Bus Fare	Colorum Fare
Manila - San Fernando, Pampanga	150	500-1000
Manila - Dau, Mabalacat, Pampanga	163	500-1000
Manila – Dagupan, Pangasinan	392	1200
Manila - SM Rosales, Pangasinan	316	1500
Manila - Alaminos, Pangasinan	438	1,800
Manila – Cabanatuan, Nueva Ecija	213	1000
Manila - Gapan, Nueva Ecija	174	800
Manila - Santiago City, Isabela	437	2000
Manila – Tabaco, Albay	900	2500
Manila - Legazpi, Albay	950	2500
Manila - Sorsogon	1050	3500
Manila - Masbate	1300	3500

Source: Data gathered by researchers through queries to various carpool service providers

Another detrimental health implication of imposing the mandatory utilization of the integrated terminals during this pandemic is the higher degree of congregation and interaction between passengers during travel, increasing the risk of spreading COVID-19. For example, passengers from the north, who will congregate at NLET will be from Ilocos Norte, Ilocos Sur, La Union, Benguet, Pangasinan, Zambales, Bataan, Pampanga, Bulacan, Nueva Ecija, Nueva Vizcaya, Aurora, Benguet, Ifugao, Mountain Province, Kalinga, Abra, and Apayao. These passengers will then take multiple ride transfers using the Metro Manila buses, or worse, the more confined and less regulated public utility vehicles or vans to travel in and out of the Metro. These pose greater risk of rapid and more widespread transmission of the COVID-19 virus within Metro Manila and to the provinces with significantly lower and more contained infection rates. This contrasts with the safety and convenience by instead allowing provincial buses to temporarily use their terminals within Metro Manila during the COVID-19 pandemic.

Finally, requiring the bus companies to use the NLET also has cost implications for the transport providers. These must set up maintenance bays and offices in or near the new terminal. Furthermore, bus companies will pay a terminal fee for utilizing the facility. This transport policy is ill-timed considering the imposition of routes rationalization and the required reduction in passenger capacity by 50 percent due to the pandemic. Moreover, the number of provincial buses plying the Metro as of January 2021 is reduced to 1,803 buses, which is significantly lower than the pre-pandemic level of around 7,000 buses [Esmael 2021]. The bus industry is already suffering from income losses and the imposition of the mandatory utilization of integrated terminals makes it worse. As a result of the policy separating buses from their existing maintenance bays, road accidents may

be more likely because pre-departure inspections will be done less frequently and less intensely.

### *5.2. Forced consolidation of public transport operators to qualify for special permits*

The requirement of consolidating public transport operators before providing them with permits this pandemic is also consistent with the pre-pandemic transport plans and policies of the government, such as the DOTr jeepney modernization plan [Mettke et al. 2016] and D.O. No. 2017-011. NTP subtly supports this policy by promoting the implementation of a suitable business model for public transport that ensures passenger welfare and safety [NEDA 2018]. This forced consolidation policy, however, may go against the economic and social dimensions of public transportation, especially when implemented this pandemic. This requirement essentially replaces existing franchises with new ones. Moreover, the policy requires acquisition of new PUVs with new features.<sup>6</sup> This consolidation will create additional costs to transport providers, who are already severely affected by the pandemic. While the intent of this policy is good because it will streamline the management of public transportation, these are unnecessary policies during this pandemic that will only result in further loss of livelihood for the transport providers and their workers.

Forced consolidation of bus companies to qualify for special permits to ply transportation routes also raises legal questions. A State directive to compel private corporations to consolidate may violate their rights to liberty and due process. Article X, Section 16 of the Constitution also prohibits Congress to pass specific laws that “provide for the formation, organization, or regulation of private corporations.” Private corporations are created only by general law and in relation to this, the Revised Corporation Code does not grant the State the power to compel the consolidation of private corporations. The Revised Corporation Code grants the power to merge and consolidate to the private corporation themselves [Revised Corporation Code 2018].

### *5.3. Modernization of the jeepney fleet*

LTFRB M.C. No. 2020-017 stipulates that DOTr will prefer buses, modern jeepneys, and UVs more than traditional jeepneys in granting approval to public transport providers to operate in a certain route. This modernization plan is again consistent with the pre-pandemic transportation plans and policies of the government that aims to improve the transport system (i.e. JICA-NEDA study, DOTr jeepney modernization plan, D.O. No. 2017-011, NTP). However, implementing this modernization policy now is ill-timed, considering the economic, social, and health challenges that transport providers, and even commuters, experience.

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<sup>6</sup> For EDSA Loop Service must also be low floor, low entry airconditioned bus with two doors.



Jeepney drivers have expressed their concerns on this government's preference for the so-called modern jeepneys over the traditional jeepneys, even during this pandemic [Pazzibugan 2020]. This policy can be understood as a subtle way of the government to eventually phase out traditional jeepneys amidst this crisis. Prior to the pandemic, the jeepney modernization plan of the government has already been criticized because jeepney drivers and operators cannot afford the modern jeepneys. Since this sector is mostly operated by small-scale operators, government subsidy is necessary to implement the modernization scheme [JICA 2014]. Legislators already questioned the readiness of the government to implement such plan [ABS-CBN News 2017]. Moreover, a recent study by UP Center for Integrative and Development Studies (UP CIDS) identifies the high price of modern jeepneys as the 'blind side' of the government jeepney modernization plan. This high price per unit of the said vehicles translates to a higher yearly payment for the drivers and operators, which might have a domino effect of higher jeepney fares that are detrimental to society. It is then suggested that traditional jeepneys and modern jeepneys must instead co-exist in the short-term, where the former is subjected to rigid quality standards [Mendoza 2021]. However, the government chose to push through with this jeepney modernization plan and gave preference to modern jeepneys to operate during this pandemic. It is already unlikely for small operators to afford the modern jeepneys and to force this now is even more unbearable.

## 6. Conclusion

Overall, the imposition of public transportation health protocols, provision of assistance to transport providers, and the promotion of non-motorized transport shall continue. This will enable the industry to effectively carry out its function during this pandemic. Moreover, the construction of transportation infrastructure should continue as this will help create employment and livelihood during this health crisis. However, aspects of the modernization and rationalization plan should be put on hold. While the intent of the three transportation policies mentioned in the preceding section were good and noble, the government forcing the implementation of these during the pandemic makes the industry and the public worse off in many ways. What the government should prioritize instead is the effective implementation of health protocols to stop the spread of disease, ensure public transport for essential goods and services, and minimize the losses of the sector by providing support. Forcing them to transfer their terminals, upgrade their vehicles, and consolidate into one legal entity now, will only incur the industry additional costs which they cannot absorb having been operating at a loss during the pandemic. The riding public, consequently, will have less transport services available, further restricting their mobility, and will bear greater transportation and health costs as well. The use of central terminals now may

also go against the health protocols imposed to reduce the spread of the disease. Again, these modernization and rationalization policies have good intentions and are consistent with various medium and long term government transport plans. However, it will be better to implement these when the country has seen through the pandemic and the sector has recovered from economic losses brought about by the health crisis.

To prevent and effectively manage the future occurrence of such health crisis, it is now vital to include the public health criterion in the planning of the transport system. In the NTP, land use and urban transport planning are mandated to be integrated to effectively manage growth in urban areas while, at the same time, ensuring adequate capacity of transport services and facilities [NEDA 2018]. With the COVID-19 pandemic, it is now imperative to incorporate the public health dimension in these integrated plans to prepare us for these health crises, if not prevent them from happening at all. The same public health criterion must be added to the project selection guidance of the NTP. With this in mind, the cost implications of a possible future pandemic must now be considered in the cost-benefit analyses of every transport project and policy.

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