Service Contracting Program for Public Transportation in the Philippines during the COVID-19 pandemic: Initial Evaluation and Policy Implications

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Abstract: The COVID-19 pandemic resulted in unprecedented impacts on public transport operations globally. As a result, public transport authorities rolled out programs to address these impacts and improve public transport operations' safety, reliability, and viability despite the pandemic. This study evaluated the initial implementation of the Service Contracting program as a COVID-19 response intervention in the Philippines from the perspective of public transport service providers, particularly those members of Transport Service Cooperatives (TSCs). The results revealed that most concerns of the TSCs are related to the onboarding process, delays in the processing of payrolls, issues with the online monitoring system, and subsidy-related issues. Meanwhile, key recommendations from the TSCs were related to the expansion of the covered beneficiaries, expediting the processes and procedures, authorization of more routes previously prohibited from operation due to the COVID-19 lockdown, and intensified communication efforts. Policy implications were also presented based on the results of the study.

Keywords: Public Transport, Service Contracting, COVID-19, Transport Service Cooperatives, Policy Implication

1. INTRODUCTION

1.1. Impacts of COVID-19 on Public Transport Operators / Service Providers

The COVID-19 pandemic caused unprecedented impacts on public transportation worldwide, leaving public transport operators vulnerable to the increasing costs of low ridership and strict implementation of safety protocols to prevent virus transmission (Tirachini and Cats, 2020). These two factors synergistically caused an overall decline in transportation demand. Low transport ridership was, and continues to cause a reduction in transportation demand due to remote working arrangements and the cancellation of most leisure activities (Lima, Carvalho, and Figueiredo, 2020). Physical distancing measures to minimize human interactions and ensure safety measures reduced allowable capacities of transportation vehicles, thereby

reducing land, sea, and air travels across domestic and international scales (Betarelli Junior et al., 2021).

As a result of reduced transportation demand, operations and revenue generation have also significantly dropped. Bankruptcy is a significant challenge for transportation service providers due to a lack of revenue (Tirachini and Cats, 2020). In the United States, the overall losses of the Metropolitan Transportation Authority (MTA) were estimated to be US\$7–8.5 billion from March to June 2020 and reached US\$12 billion in September 2020 (Rothengatter et al., 2021). While high-income countries can provide significant aid to reduce financial risks, this may not be true in developing countries where the public transport sector lacks proper support from the government through subsidies and regulations to protect the transportation workforce (Tirachini and Cats, 2020; Gwilliam, 2003). Lockdowns with restricted movements and decreased public transport also reduce profits for the private sector, including small and medium enterprises.

In Brazil, the drop in passenger demand and the reduction in revenues for urban public transport had accumulated losses of around US\$ 2.35 billion during the period covering March 2020 to February 2021 (NTU, 2021). The latest edition of the Brazilian survey, carried out by the National Transport Confederation (CNT), shows that 86.7% of the road transport sector companies believe they will close 2021 at a loss (CNT 2021). According to the National Association of Urban Transport Companies (NTU) (2020), public transport companies are becoming bankrupt in Brazil because of the crisis. Although Brazilian transportation companies have implemented certain adjustments to stay profitable, these involved suspending employment contracts and reducing wages (NTU, 2021).

Other studies accounted for relationships among drops in passenger demand, public transport disruption, and additional transportation costs, although results vary. In San Francisco, USA, a 5% disruption of public transport operations resulted in a 51% increase in transportation costs. In comparison, a similar level of disruption in Los Angeles resulted in a 9% increase in costs (Kurth et al., 2020). Faced with patronage reduction, reducing the fleet and the frequency of transportation services would be common options for transportation companies and government regulators (Lima, Carvalho, and Figueiredo, 2020).

Despite periods of recovery, both road transport (8.82%) and air transport (31.94%) accumulated losses in 2020 in terms of revenue and volume of service (NTU, 2020). Firms with financial hardship may declare bankruptcy during such scenarios or be swallowed up by larger firms with significant financial capacity (Lima, Carvalho, and Figueiredo, 2020). Fixed costs and lack of operating revenues may even persist post-COVID-19 or under the "New Normal" and may continue posing financial difficulties on transportation service operators, causing efforts to down-size operations (Lima, Carvalho, and Figueiredo, 2020; Rothengatter et al., 2021).

In the Philippines, the public transport system has also suffered severe blows. Within the first six months of community quarantine (i.e., March to September 2020), transit stations experienced the most significant decrease in ridership, reaching -63 (with the national average being -42.4). The sharp decline was also due to the sudden and strict lockdown regulations, which further prevented commuters from taking mass transit (Hasselwander et al., 2021). The land transport sector was significantly affected by the community quarantines in the Philippines, especially since 2.4 million commuters are estimated to use land public transport post-COVID. One thousand four hundred twenty-nine (1,429) employed drivers (3.47% of total employed Filipinos) were estimated to be displaced as a result (Ugay et al., 2020).

1.2. Behavioral Implications of COVID-19 on Transportation

In addition to lost revenues, social perceptions of risks of infection from public transportation have also been observed. In a survey conducted in Japan, more than 60% think that infection risk is higher when riding congested public transport vehicles (Ding and Zhang, 2021). In China, 80% consider public transport and taxi or taxi-hailing associated with high infectious risk (Tan and Ma, 2021). In Poland, 40% of people who minimized their use of public transportation pointed out fear of infection due to their decision (Przybylowski et al., 2021). In Canada, perceived risks to health and safety, peace of mind, and travel experience were determinants of decisions to reduce the use of public transportation (Labont'e-LeMoyne et al., 2020).

It is essential to point out that scientific evidence of viral transmission in enclosed spaces may influence negative perceptions about public transit safety (Rothengatter et al., 2021). For instance, Shen et al. (2020) examined existing evidence and reported several cases suggesting a strong association between COVID-19 transmission and air/train travel. It was also discussed in the same study that individuals in the exposed bus (Bus #2) were 41.5 (95% CI, 2.6–669.5) times more likely to be infected with COVID-19. An antithesis to the results, Ramirez et al. (2021) presented that of 15 buses involving 462 student passengers, no cases of COVID-19 were related to transmission during travel despite biweekly and then weekly asymptomatic screening in the first seven months of the 2020-2021 school year, and while community transmission was at its peak. However, it emphasized the use of simple mitigation on buses, including ventilation with open windows, mandatory masking, and students were allowed to sit in every row if necessary. Due to the above, the implementation of protective measures such as the enforcement of wearing personal protective equipment (mainly facemasks), physical distancing regulations, no-contact transactions, among other state-sanctioned strategies, may also affect risk perceptions for using public transportation (Rothengatter et al., 2021).

Public transportation restrictions have led to increased reliance on private vehicles. Private car ridership increased during the pandemic, which mainly included the modal shift of individuals who previously relied on public transport before lockdowns (Hasselwander et al., 2021; Rothengatter et al., 2021). This is prevalent among countries with limited transport options and active mobility infrastructure. Private car trips have also significantly increased due to lessened public transportation options worldwide, such as Turkey (Shakibaei et al., 2020), India (Pawar et al., 2020), Greece (Tarasi et al., 2021), Hungary (Bucsky, 2020), Pakistan (Abdullah et al. 2021), among other countries.

Apart from private vehicles, a marked shift to non-motorized transport was also observed. In Germany, people felt safer using a bike, in addition to using their private vehicles, for mobility concerns compared to pre-COVID-19 times (DLR, 2020). A similar phenomenon was observed in Canada, where most commuters intended to increase the use of cars and bikes and reduce other travel modes (especially subway, bus, and taxi) after stay-at-home orders were lifted (Labont'e-LeMoyne et al., 2020). Worldwide, a significant shift from public transport to walking (42.3%), using a bicycle (35.6%), or private cars (64.8%) occurred due to the pandemic (Zhang et al. 2021).

1.3. COVID-19 Programs Implemented for Public Transport Operators / Service Providers

To overcome the uncertainties and disruptions caused by the pandemic, a collaborative relationship between the private and public sectors needs to be established (Lima, Carvalho, and Figueiredo, 2020). The role of science, community-based planning, and technological

innovations are also highlighted, especially in capturing regular public transport users who may switch to application-based transport services (Lima, Carvalho, and Figueiredo, 2020). Most importantly, mitigating the rise in private ridership would entail building trust in public transport (Shokouhyar et al., 2021) and providing better infrastructure for active mobility and non-motorized transport (Arellana, Márquez & Cantillo, 2020).

Implementing transportation-related issues, however, requires inevitable trade-offs. For example, transportation mode efficiency and variety need to be considered to account for the quality and quantity of transportation services. Meanwhile, compliance with physical distancing measures resulting in reduced vehicle capacity, solutions involve not only accounting for inefficiency from an operator's perspective (i.e., expected less frequency adjustments for trips, longer waiting times in the post-crisis phase, etc.) but also the allotment of additional resources to maintain a certain quality of service dependent upon available transportation demand (Tirachini and Cats, 2020).

A common approach for helping improve public transportation outcomes during the pandemic involved economic stimulus programs. The use of stimulus funding packages, such as indirect fiscal support measures (e.g., tax reductions or deferrals) or direct financial aids for improving the attractiveness of public transportation modes could restore confidence in more sustainable transport modes and contribute to higher resilience of the transportation systems. (Rothengatter et al., 2021). In Russia, nearly US\$ 1.82 – 2.03 million were spent on the functioning of the Tyumen CPPT system during April–May 2020. The government financial aid supported the high quality of the transport service in Tyumen in the period of the COVID-19 pandemic and allowed the city administration to overcome the crisis. (Petrov and Petrova, 2020).

In New York, USA, government subsidies helped prevent a reduction in passenger services within the city by 40% and by 50% for commuter rail lines. In contrast, a US\$ 25 billion package in 2020 helped the public transport service maintain its operations (FTA, 2020). In Japan, a review by Rothengatter et al., (2021) estimated about US\$ 11 billion was allotted by the government to support transportation-related activities. In the European Union, the European Commission approved around US\$ 7 billion to cover for losses (70-90% decline of ridership) of regional and local public transport services incurred between 1 March and August 31, 2020 (Rothengatter et al., 2021). In London, United Kingdom, around US\$ 2 billion was allotted as economic aid for the transportation sector (Flores Filho, 2021). For South America, the Chile government has agreed to compensate bus operators for the loss in demand (up to 80%) in its capital city, Santiago (Department for Transport United Kingdom, 2020), while a Special Emergency Regime for Urban and Metropolitan Public Transport to reduce the taxes levied on transportation services and a Guarantee Fund of Operations (GFO) for micro and small businesses by the Brazilian government granted a credit amount of US\$ 6 billion with a special interest rate for all sectors of the economy, including the passenger transport sector (Schiochet, 2020).

Since the magnitude of financial problems facing most of the transportation agencies and firms during this COVID-19 pandemic is beyond their ability to deal with, transportation system services may not survive as usual if there is no special government financial assistance (Rothengatter et al., 2021). However, the COVID-19 pandemic has also negatively impacted the availability of public funds, given that governments face a large number of social needs requiring financial support (e.g., unemployment, risk of bankruptcy for small businesses, hospitals, and health care) while expecting a reduction in tax intakes for the national treasury. In this context, public transportation must compete against several other urgent social needs for financial support (Tirachini and Cats, 2020).

Moreover, the disparities in economic resources across countries reveal differing

approaches by national governments in supporting transportation issues during the pandemic. Some countries may have the means to provide some form of financial support to maintain public transport, while other countries may not (Tirachini and Cats, 2020). For Betarelli Junior et al. (2021), governments could provide subsidized credit to concessionary companies to maintain the payment of employees' payroll and mitigate layoffs in the sector, and establish emergency renegotiation of government contracts with concessionaires that provide transport services for certain operational adjustments.

Although used by various countries for quite some time to operate bus services, transportation service contracts have been especially highlighted during the COVID-19 pandemic to maintain economic activity through transportation services. In Sweden, the practice of tendering bus services has been carried out since the late 1980s (Alexandersson, Hulten, and Jardon 2020). Other countries such as Brazil, Germany, Malta, Russia, the USA, and among others also implement public transportation service contract schemes (Attard, 2012; Bajada and Titheridge, 2016; Dementiev, 2018; Lima, Carvalho, and Figueiredo, 2020; Sarriera, Salvucci, and Zhao, 2018).

As a social service, the transportation sector is usually run by government entities or private companies ensured with revenues through public service contracts (Rothengatter et al., 2021). Several lessons should be noted, however, in order to maximize the efficiency of service contracting agreements, especially during a pandemic. Lima, Carvalho, and Figueiredo (2020) propose the following strategies learned from Brazil to guarantee bus operations during pandemic situations: (a) accountabilities of operators should be detailed and agreed upon by involved parties, (b) transparency of negotiated agreements and financial support given by or received by involved parties (primarily the transportation service provider and the government regulatory body) should be ensured, (c) data-driven processes should be present to determine whether a reorganization of services are needed (such as redistributing costs or capturing ridership demands through an increase of running vehicles) or a financial and economic balancing of contracts should be observed. Attard (2012) and Bajada and Titheridge (2016) further add lessons learned from Malta's service contracting experience: (a) Timing and public support are crucial; (b) Set achievable targets to gain public trust; (c) Cooperation between stakeholders is important, and; (d) Monitoring the performance of contracted entities should be conducted. Finally, Papaioannou et al. (2014) and Alexandersson, Hultenm and Jardon (2020) suggest tendering by route or bundles of routes to create a more competitive environment and improve productivity and performance of transportation services.

This has been supported by Wallis and Hensher (2007), concluding that competitive tendering often reduced the service cost by 10%-50%, depending on the efficiency of the previous monopoly operator. This was based on the study of Gulibon (2006), stating that during the past decades, European cities such as London, Copenhagen, Stockholm, and Helsinki have increased cost-savings exceeding 20% while similar gains in productivity.

Public transportation services are mostly reliant on government funding and frequently run at a loss, and there is a need to study efficiency and cost. Transport operators may need to restructure their service and financial structures to achieve higher efficiency while keeping in mind the social ramifications of such action. (Gutierrez et al., 2020).

Reformation in transportation may also consider the study by Henscher and Houghton (2003), with key finding of the literature that incentive payments and bonuses (or their inverse, penalties and abatements) are especially effective and better than fixed payment schemes in ensuring good performance in terms of outcomes. Outcomes, such as improved access, mobility and service, are what any contract should aim for. Inputs such as increased spending or outputs such as more trains and buses, by themselves, are not desirable. Obviously, the details of incentives must be carefully worked out and, if poorly designed, can lead to substandard

outcomes.

1.4. Service Contracting in the Philippines to Aid Transportation Operations during COVID-19

Considering reduced profit brought about by various circumstances during the COVID-19 pandemic, government intervention is needed to support public transportation. The imposition of limited passenger capacity, paired with decreased demand due to restrictions in people's movements and business operations, and the additional costs in implementing other health and safety protocols, the Service Contracting Program was included in the various crisis response programs of Republic Act (RA) 11494 or the "Bayanihan to Recover As One Act." Through RA 11494, also known as the Bayanihan II, a Service Contracting program fund of Php 5.58 billion (1 US\$ = \sim 50 Php) was allotted. Through the said Program, public transport operations were subsidized by the Philippine government, through the Department of Transportation (DOTr) and the Land Transportation Franchising and Regulatory Board (LTFRB) to (1) provide economic relief and (2) raise and improve the level of service of road-based public transport services.

The Service Contracting Program aims to benefit around 60,000 drivers by considering two shifts for around 30,000 Public Utility Vehicle (PUV) units in Metro Manila and nearby areas, Metro Cebu, and Metro Davao (San Juan, 2020). Later on, however, the program was expanded to other regions in the country.

The government implemented two types of service contracting schemes: gross cost service contracting and net cost service contracting. Under the gross cost scheme, public transport drivers and operators are paid the full amount covering all expenses and the assured revenue on a per kilometer basis. Under this scheme there is no fare collection and passengers enjoy free public transport rides. Meanwhile under the net cost service contracting, drivers and operators are partially subsidized to cover the reduced passenger capacity in public transportation and the increased operational expenses due to the imposed COVID-19 related protocols. Under this scheme, fare collection is allowed.

The program targeted drivers pursuant to the Bayanihan II Act, in which LTFRB laid out guidelines (LTFRB MC Nos. 2020-079 and 2021-008) for the profit-sharing between drivers and operators, considering that drivers may be a member of a TSC, an employee of a corporation, or a driver renting an individual public transport operator's unit under the "boundary" system. Pursuant to LTFRB Memorandum Circular (MC) No. 2020-079, drivers acquire weekly payouts based on the actual kilometer run recorded and additional incentives based on service performance; these will be credited directly to their Landbank of the Philippines (LBP) bank accounts or e-wallet accounts. As an online system is used for monitoring, driver-participants received a subsidy amounting to Php 4,000 to aid them in acquiring smartphones. Further, in a bid to grow the program's membership base, the LTFRB, through the MC No. 2021-030, announced new rounds of incentives for drivers under the program, specifically onboarding incentives amounting to Php 20,000.00-Php 25,000.00 and weekly incentives for constantly using the system amounting to Php 7,000.00 (Rey, 2021a).

Before drivers can participate in the program and before receiving these benefits and incentives, they must undergo an onboarding process pursuant to LTFRB MC 2020-059. This process includes participation in a training session facilitated by the LTFRB, execution of a Service Contract Agreement, submission of all the documentary requirements, and uploading of driver and vehicle information in the online monitoring system.

The validity of Bayanihan II funds was until 30 June 2021. Upon expiration of the funds, the LTFRB was able to contract around 19,000 drivers nationwide who received initial payouts.

Around 8,347 drivers, meanwhile, have received their P25,000 and P20,000 onboarding incentives in different regions (Ragasa, 2021). Based on the clarificatory statement released by the LTFRB Chief on the Annual Commission on Audit (COA) Report, around P1.25 billion or over 26% of the total funds was already disbursed by the agency upon expiration of the Bayanihan II funds and that a request from the agency was submitted to the Department of Budget and Management (DBM) to release the accounts payables to program beneficiaries amounting to P3.4 billion (Federez, 2021; Ragasa 2021; Rey 2021b).

However, various reports by the press have cited issues regarding the implementation of the Service Contracting Program under the Bayanihan II. Primarily, delays in payments to participating drivers and operators have been a constant and persistent issue. Move as One Coalition, an advocacy group composed of different individuals and organizations has called on the need to promptly and efficiently release payments to drivers and operators (Luna, 2021). In the Philippine Senate, Senator Grace Poe proposed Resolution No. 727 to clarify several TSCs' issues that affect the delays in implementing the Service Contracting Program (Terrazola, 2021). Apart from delays in payments, technological glitches from the mobile application used to monitor drivers participating in the Service Contracting Program were allegedly observed by participating drivers (Rey, 2021a). Issues regarding registration processes have also been reported, in which a certain portion of the total drivers and operators who have registered or signified to be part of the program have completed the necessary requirements to be onboard (Cerrudo, 2021; Rita, 2021b).

Given these reports, and as an additional budget amounting to Php 3 Billion under RA 11518 (General Appropriations Act for Fiscal Year 2021) was allocated for the Service Contracting Program, an evaluation of the program is needed before its next phase of implementation using the FY 2021 funds. Evaluating implemented programs has always been a key step for improving organizational performance. Fundamentally, an evaluation assesses results, determines unintended consequences of desired changes, identifies the applicability of an intervention to a situation at hand, identifies lessons learned from success and failures, and increases accountability and transparency for good governance (Persaud and Dagher, 2021). In the context of this paper, a preliminary evaluation of the Service Contracting Program would help implement necessary changes for better public transportation outcomes in the Philippines during this COVID-19 pandemic.

1.5. Objectives of the Study

This study focused on assessing the implementation of the Service Contracting program in the Philippines from the perspective of public transport operators and service providers, particularly those who are members of TSCs. Specifically, the study had the following objectives:

- To determine the key issues and challenges encountered by TSCs in participating in the Service Contracting program.
- To determine key recommendations from TSCs on how to further improve the implementation of the Service Contracting program.
- To identify the policy implications of the issues, challenges, and recommendations raised by TSCs.

1.6. Limitations of the Study

The data and information generated and presented in this study were limited to the results of desktop research and the survey conducted with TSCs. The data collected during the survey

was also limited to those TSCs who voluntarily participated in the survey. There is also no guarantee that the result of this study is reflective of all the TSCs nor public transport operators and providers in the Philippines.

The accuracy of data presented is also limited to the time when the survey was being conducted. It may not reflect the effect of new policy issuances and program adjustments implemented after the survey was conducted.

Human bias, subjectivity, and prejudice of TSCs who participated in the survey were also considered as a limitation in this study.

2. METHODOLOGY

An exploratory sequential mixed method research design was used to explore and understand challenges encountered by the public transport sector, specifically jeepney drivers and operators, in participating in the national government's Service Contracting Program. In the context of the ongoing PUV Modernization Program and COVID-19 related restrictions, duly recognized TSCs by the Office of Transportation Cooperatives (OTC) were given further focus. However, perspectives from drivers and operators who were not members of TSCs or were in the process of finalizing the establishment of and or their membership in TSCs, have been considered in the exploratory stages of the research.

A preliminary exploration of driver and operator sentiments was identified through a content analysis of posts in the social media platform Facebook. The Facebook Page "Service Contracting" (https://www.facebook.com/servicecontractingph) and the Facebook Group "Service Program PUV" Contracting for (https://www.facebook.com/groups/562525861265267/) were selected since these online platforms were used by the Program Implementation Unit (PIU) of the Service Contracting Program for disseminating information about the Service Contracting Program. The Facebook Page "Service Contracting" was created on 25 November 2020 with a total of 3,379 followers as of 7 August 2021, while the Facebook Group "Service Contracting Program for PUV" created on 21 November 2020 currently has 4,695 members. A Facebook Page provides an avenue for a particular Facebook user(s) to post updates about a certain topic, while a Facebook Group allows users to communicate with one another as long as they are members of the Group.

Observing social media platforms allows the observation of emotions and thoughts, analyze public opinion, and even determine strategies for improving products and services, as used by Parsons (2013), Schwartz and Ungar (2015), Hamad et al. (2016), and Mansor and Awang (2021). As of 2019, Facebook has almost 74 million users in the Philippines, indicating around 69% of its population accessing the social media platform (Statista, 2021). Since the platform facilitates user-generated contributions, it presents a highly influential source of information and social support. Silver and Matthews (2017) also identify Facebook Groups, a Facebook service that allows members of the social media platform to organize into a distinct online community, as a strategic avenue for public administrators to engage with Facebook Group members. Similarly, an exploration of user sentiments posted from the date of establishment of the Facebook Page and Group until March 2021 were observed for relevant themes that will be essential for improving the delivery of government social services. In order to facilitate data extraction, the software Next Analytics (<u>https://nextanalytics.com/</u>) was used to tabulate comments and reactions.

To further validate qualitative social media sentiments regarding the Service Contracting Program, an online survey was created and directly sent to the e-mail addresses of 948 TSCs. The survey (https://forms.gle/bTAjdpRyseLNn7AX7), titled "Service Contracting

for Modern PUVs Survey" used Google Forms to identify the profile of TSCs who are participating or intending to participate in the Service Contracting Program. The survey also quantified key issues and challenges encountered by the TSCs in the program.

In order to facilitate the participation of drivers and operators, an introductory statement was written in select major languages used in the Philippines, namely English, Tagalog, Binisaya, and Ilocano, while survey questions were phrased in both Tagalog and English. Responses were gathered from 26 March 2021 to 07 April 2021. Aside from collecting background information on TSCs, the researchers also asked respondents to give their recommendations on the processes or set-up of the Service Contracting Program that the respondents perceived as "difficult or in need of change", or "difficult to comply with or in need of change." Answers obtained from these questions were compiled and categorized based on recurring themes. The count per theme was then calculated to determine the most frequent among the categorized answers.

3. RESULTS AND DISCUSSIONS

3.1 Social Media Sentiments

From January 2021 to March 2021, the Facebook Group and Page were primarily used for posting concerns regarding the mobile application utilized for the Service Contracting Program. As shown in Figure 1, the most frequent words cited in posts and comments refer to mobile application and subsidy payment issues ("app" and "apps", 73 times in 1,398 words). These include errors encountered in using the mobile application, such as unregistered ("wala" at 56/1,398 and "hindi" at 34/1,398) distance run during the service contracting period, errors associated with registering vehicle plate numbers ("number" 29/1,398), and other questions ("bakit" 39/1,398) related with the mobile application. The mobile application was developed to monitor distance and time run by drivers and vehicles of TSCs participating in the program. Several users have also asked for details and instructions for downloading and installing the mobile application.

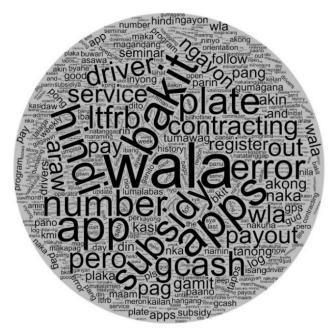


Figure 1. Word cloud of social media user sentiments regarding Service Contracting

The participating TSCs who were able to install the application on the mobile phones of their respective drivers raised concerns about user experience ("register", "service", "hindi"), such as errors regarding logging in, perceived inaccuracies of recorded time and distances run, and queries on payment updates as released through a digital wallet (GCash). The TSCs also asked for updates about the initial pay-out ("subsidy") amounting Php 4,000.00 (1 USD = \sim 50 Php) intended for their drivers upon the completion of orientation and paper requirements to participate in the program. While issues were raised most frequently, however, other users have also posted comments and screenshots of successful payments.

The multitude of concerns raised showed how information regarding the Service Contracting Program was deliberately sought through the Facebook Group and Page. In terms of post engagement, frequently "Liked" posts belonging to the upper quartiles (Max = 58 "Likes") involve announcements of mobile application use. Posts involving initial pay-outs have the most comments, with one post roughly translated as an announcement to remind drivers to use their initial pay-out to buy a mobile phone to help monitor their weekly service contracting run, having the most comments (n=69) among social media users. The platform helped determine issues and concerns raised by participants of the program and for disseminating updates about the program. For the Facebook Group, posts by the Group administrator garnered relatively higher reactions (through the number of "likes" and comments) compared with other posts. Posts on the Facebook Page also showed how users raised follow-up comments and concerns, forming a thread of conversation regarding a particular issue. While a number of concerns could be extracted from the contents of user comments and posts, further validation through an online survey was deemed necessary.

3.2 Summary Profile of the Respondents

A total of 105 or 11.08% of the total, duly accredited TSCs (n = 948 during the time of the study) answered the online questionnaire (Table 1) within the survey period. Although no formal random selection was conducted, the respondents answered the questionnaire voluntarily and without external nudges from the researchers. As such, the responses used in the study are representative of their respective views.

Further, the current sample size of 105 respondents will generate a margin of error (MOE) of 5.02% within the 90% confidence interval, which is considered an acceptable MOE for survey analysis (Taherdoost, 2017).

The majority of respondents were from the National Capital Region (NCR), Calabarzon (Region 4A), Central Luzon (Region 3), and Western Visayas (Region 6). The Table also shows interregional operations of some TSCs, in which one (1) TSC respondent operates within the Cordillera Administrative Region (CAR) and Cagayan Valley (Region 2), and another in Caraga (Region 13) and Northern Mindanao (Region 10).

The 105 TSCs covered in the study own and operate 6124 PUV units as specified in the same table. These PUV units operate in 846 routes.

	Number of	Number of PUV Units			Number of	Number
Region	TSCs	Modern	Traditional	Total	Routes	of Drivers
NCR	14	67	324	391	21	1099
Region 4A	13	44	210	254	35	1493
Region 3	12	20	123	143	18	651
Region 6	11	0	254	254	25	697

Table 1. Summary Profile of the Respondents

Region 10	8	0	265	265	53	279
Region 2	8	21	186	207	35	364
Region 8	7	30	0	30*	29	267
Region 5	5	0	700	700	103	823
Region 12	5	3	247	250	9	556
Region 4B	4	0	60	60	14	355**
Region 7	4	52	0	52	23	269**
Region 1	4	6	108	114	22	183
CAR	3	0	106	106	8	329
Caraga	2	2	218	220	16	267
Region 9	2	245	2817	3062	425	7887
Region 11	1	NI***	NI***	NI***	3	85
Inter-Regional						
Region 10 - Region						
13; Region 2 -						
CAR	2	0	16	16	7	117
Total	105	490	5,634	6,124	846	15,721

* Number of units might be understated for number of routes and drivers

** Number of drivers might be overstated versus the total number of PVs

*** NI = Not Indicated

Given that Table 1 summarizes the responses as indicated in the survey results, some values have been marked for possible discrepancies. For Region 8, the total number of PUV units might be understated when compared against the total number of routes and drivers. For Region 4B and Region 7, the number of drivers might be overstated vis-a-vis the total number of PUV units. Lastly, the lone TSC respondent in Region 11 did not indicate the exact number of PUV units within their cooperative.

Although these marked values will need to be double-checked, the remaining responses are still sufficient to generate substantial insights from public transport operators regarding the Service Contracting Program.

Table 2 summarizes the number of TSCs who were part of the study. Among all respondents, 46 of them (43.8%) are part of the Service Contracting Program. The responses of these 46 respondents will be focused on in the next section on Key Issues and Challenges in the Implementation of Program, while the total 105 responses will be discussed in detail in the section on Recommendations from Public Transport Operators.

	Part of Service	Not Part of Service	
	Contracting Program	Contracting Program	Total
No. of TSCs	46	59	105
Percent of TSCs	43.8%	56.2%	100%

Table 2. Summary of Respondents in Service Contracting Program

3.3 Key Issues and Challenges in the Implementation of the Service Contracting Program

From the 105 TSCs that answered the survey, 46 (forty-six) responses were received. After filtering out comments unrelated to the program and those without any issues or challengers,

38 were left. It is noteworthy that a response can cover multiple topics and thus must be counted for each classification. Of the 38 responses, 15 (40%) cited concerns with the onboarding process, 12 (31%) mentioned the delays in payroll, 8 (21%) discussed the issues with the online monitoring system, and 3 (7%) mentioned subsidy-related problems. Table 3 summarizes these responses.

Tiogram					
No.	Issue / Challenge	Number of Responses			
1	Issues on the Onboarding Process	15			
2	Payroll Issues	12			
3	System Issues (Developed by the System's Manager of the Program)	8			
4	Subsidy Issues	3			
	Total	38			

Table 3. Key Issues and Challenges in the Implementation of the Service Contracting Program

3.3.1 Issues on the Onboarding Process

More than half of the TSC respondents in the study are yet to be officially part of the SC Program. One of the possible reasons for this is the concerns on the onboarding process (e.g., late processing and/or strenuous requirements), which was raised by 15 TSCs in their responses when asked about issues in the program implementation. While one TSC raised the lack of consistency with the list of documentary requirements, some TSCs mentioned difficulties in complying with the requirements considering varying lockdowns, restricted mobility, and safety issues (e.g., compiling original signatures from all drivers and submitting hard copies of documents personally).

3.3.2 Payroll Issues

Majority of those who named payroll issues narrated experiences on the late release of weekly payouts. Further, while others mentioned the receipt of payment, most TSCs insisted that there are no payouts released to them yet; one TSC mentioned that they have been waiting for months and still yet to receive the promised 'weekly' payouts. Other responses also discuss the lack of updates on the status and expected timeline for the release of the said payout.

While the Net Cost SC scheme just provides additional revenue for every kilometer run (Php 11.00 for jeepneys which was increased in mid-April to Php 27.00), any additional subsidy was deemed important by TSCs to sustain their daily operations. The same sentiment was raised with the expansion of the Gross Cost SC scheme to various modes in early April 2021 (i.e., government wholly subsiding operations providing free rides to passengers) and the expiration of the funds under Bayanihan II last 30 June 2021.

3.3.3 System Issues (Developed by the System's Manager of the Program)

Similar to the topics of interactions in the Facebook Group and Page, and considering that the generated data from the system shall be the primary basis for the payout, many of the TSCs raised concerns on the facilitation of the use of the online monitoring system. Many TSCs mentioned that a number of their drivers face difficulties in logging in to their application, hence faced with concern on inaccurate registered/calculated kilometer run. Many cited poor internet connectivity, while others raised frequent occurrence of errors when trying to access the

application.

3.3.4 Subsidy Issues

Some TSCs mentioned that, despite constant follow-ups, there were delays in receiving (or are yet to receive at the time of the study) the subsidy for their drivers to be used to acquire smartphones for the system. Meanwhile, one TSC mentioned receiving the subsidy for half of its drivers only. With this, one TSC raised as a concern the lack of smartphones to be used for the program.

3.4 Recommendations from Public Transport Operators / Service Providers Relative to the Implementation of the Service Contracting Program

For the sustainability of the program, it is essential for feedback on the program from the actual operators to be incorporated in the analysis. The last question on this survey addressed this matter, and received 58 (fifty-eight) responses. From this, 36 (62%) were classified as "recommendations", while the remaining had no issues to raise. Of the 36 valid responses, 12 (33%) tackled the expansion of coverage of the Service Contracting Program, 9 (25%) focused on expediting the processes, 8 (22%) involved the authorization of routes previously prohibited from operation due to lockdown, and the remaining 7 (19%) each requested for intensified communication efforts. Table 4 summarizes these responses.

No.	Recommendations	Number of Responses
1	Inclusion of other modes of PUVs, drivers, etc. in the	12
	Program	
2	Expedite and streamline the process of application and	9
	onboarding for the Program	
3	Authorize other PUV routes which were prohibited from	8
	operating during the initial phases of lockdown	
4	Expand the coverage of information campaigns, seminars,	7
	etc. related to the Providers Relative Program	
	Total	36

 Table 4. Key Recommendations from Public Transport Operators / Service Providers Relative to the Implementation of the Service Contracting Program

It should be noted that responses collated here were collected up to 07 April 2021. Hence, changes in the program as a result of the release of subsequent reforms after this date and their start of implementation were not considered. Actions taken by public transport authorities will also be discussed in the succeeding subsections.

3.4.1 Inclusion of other Modes of PUVs in the Service Contracting Program

There was a prevalent request from the TSCs for the program to be expanded to other modes of public transportation, with others specifically indicating Filcab and UV Express services. Together with jeepneys and buses, these services are the most commonly used means of transportation in some areas and are currently highly dependent on ridership for revenue. Further, Filcabs have similar characteristics to that of jeepneys carrying up to 18 passengers (pre-pandemic, without physical distancing; Vergel et al., 2015). Heading to various petitions, the LTFRB released MC No. 2021-034 in late May, finally including the Filcabs as an

additional mode covered by the Service Contracting Program (Trozo, 2021). On the other hand, modern UV Express units are already included in early April 2021 in the modes eligible for the Service Contracting Program under the gross SC scheme (free rides), but traditional UV Express units are still excluded.

3.4.2 Expedite and Streamline the Process of Application and Onboarding for the Service Contracting Program

Among the recommendations of the respondent-TSCs are reforms adapting to the current pandemic situation (e.g., streamlining the requirements, adjusting the timeline of compliance, and allowing online submissions). Considering that TSCs are the respondents of the studies, One TSC suggested a fixed weekly payout while another one recommended usage of service plan for faster computation and release of payouts. Further, it was requested by the TSCs to have more efficient and more prompt processing and approval of documentary requirements for both onboarding and payment. These recommendations are in line with the COA's suggestion to the LTFRB in their 2020 Annual Audit Report to review and streamline the process to ensure timely distribution of funds to the intended beneficiaries (Federez, 2021).

As a response, the LTFRB issued Board Resolution No. 043, partially decentralizing the processing of payout to regions and providing for the process flow with a corresponding timeline for preparing payouts and the documentary requirements to be submitted by the regional franchising and regulatory offices to the Central Office of LTFRB.

3.4.3 Authorize other PUV routes which were prohibited from operating during the initial phases of lockdown

Since the beneficiaries are limited to drivers in routes already allowed to resume operations amidst pandemic, various TSCs call to authorize the other routes for them to also be able to generate revenue and be eligible to enroll in the Service Contracting Program. According to the DOTr, around 99,000 PUVs in Metro Manila (around 80% of those franchised), and more than 230,000 PUVs nationwide have been allowed to resume operations in mid-April 2021. The LTFRB has since then continued to allow additional routes to operate in Metro Manila and nearby cities (MC Nos. 2021-033, 2021-036, 2021-038, 2021-039, 2021-045, 2021-049) and in other regions, and to allow more units in routes already authorized to resume (MC No. 2021-044).

3.4.4 Expand the coverage of information campaigns, seminars, etc. to discuss the Service Contracting Program

To address questions involving processes and requirements, mostly from interested TSCs yet to be part of the Service Contracting Program, calls for intensified communication efforts (e.g., seminars, orientations, etc.) and prompt responses to inquiries. To further encourage participation and to solve the inconsistencies of information on requirements raised by various TSCs, which was also revealed in this study, the LTFRB conducted a mass registration and orientation activity for jeepney drivers in Metro Manila and nearby areas from 02-04 June 2021.

4. POLICY IMPLICATIONS

The results of this study allowed the authors to present policy implications that could provide adequate information and guidance for public transport authorities. These policy implications

could be considered when developing further policies, plans, and programs related to pandemic response and the "new normal."

The policy implications are 1.) ensuring that public transportation remains operational during pandemics; 2.) ensuring that public transport operators / service providers keep sufficient levels of service; 3.) ensuring that public transport policies are flexible and adaptive; 4.) improving and institutionalizing the Service Contracting Program while modernizing the public transport system.

4.1 Ensure that public transportation remains operational during pandemics

In compliance with the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF) guidelines, public transportation operations were suspended in Metro Manila and other areas in the Philippines during the first lockdown or the imposition of the Enhanced Community Quarantine (ECQ). This resulted in the loss of the source of revenue of public transport service providers for months, and limited or restricted the mobility options of "captive riders" or those essential workers who do not have an alternative mode of transportation other than public transport. These adverse effects were recognized, thereby adjusting policies to allow public transport operations in the later imposition of ECQ (i.e., August 2020, March 2021, and August 2021).

Still, the resumption of public transport operations was directed to be in gradual and calibrated phases, the same with the reopening of the economy. According to the DOTr, only around 80% of the PUV units in Metro Manila were allowed to resume as of last April 2021. Reduced access to public transport can exacerbate socio-economic inequalities (Hasselwander et al., 2021). Transport costs increased by 17.9 percent compared with 2020, as reported by the Philippine Statistics Authority (PSA) in its April 2021 report on inflation, implying a shortage in public transport (Siy, 2021). If not all routes are opened or allowed to operate, socio-economic inequalities cannot be avoided, especially for captive riders.

Further, during these times, when PUVs operate at reduced capacities, the government has to ensure the operational requirements for public transportation are still met (Raissa et al., 2021). This then calls for the deployment of all public transport vehicles or non-drastic reduction of public transport supply, even with the risks of losses as a certain level of service needs to be observed (De Vos, 2020) and reinforces the need for Public Transport Authorities to ensure that all PUVs are operational and that the operational requirements are ensured or subsidized through programs like the Service Contracting Program. The opening of all routes will also address the equity issues for those non-operational PUV routes where transport service providers are willing to participate in the program.

In line with the above propositions, the DOTr Secretary, during a radio interview, released a statement on the route expansion plan. The Secretary announced the opening of more traditional and provincial PUV routes amid reports of colorum vehicles transporting people to circumvent quarantine restrictions (Rita, 2021a). In addition, various measures to prevent long queues in transportation hubs have been made public by the DOTr and LTFRB. On the measures provided, the DOTr Secretary and the LTFRB directed public transport operators and service providers to deploy the maximum number of authorized bus units under their contracts and permits to serve more commuters, especially during rush hours (Devio, 2021).

4.2 Ensure that public transport operators / service providers keep sufficient levels of service

While the DOTr reported in April 2021 that around 230,000 PUV units are already allowed to

operate, the number of actual operating PUV units usually ranges from one-third to one-half of those units with permits (Siy, 2020). In the EDSA Busway alone, less than 400 buses of the 428 units with permits (and 550 units authorized) are operating daily (Galvez, 2021).

As Lima, Carvalho, and Figueiredo (2020) emphasized, mutual support is needed, especially during this pandemic. To guarantee that mobility requirements are met while ensuring that public transport service providers will not suffer any losses, the public transport authorities shall "shoulder most, if not all, of the financial risks" (Siy, 2021). On the other hand, the public transport service providers should first treat public transport as a public service before as a revenue-generating scheme.

This collaboration is evident in the implementation of the Service Contracting Program, in which public transportations are partially or wholly subsidized by the Philippine government, and a certain service level is maintained by the service providers (Siy, 2020). To maintain trust between the parties, the DOTr and LTFRB shall ensure timely and accurate payments, and the public transport service providers shall strictly follow the service plan. As both parties have encountered concerns such as delayed payouts (Rey, 2021a) and fewer PUV units being deployed compared to those with permits or enrolled in the program (Galvez, 2021), reforms in the payment processes and monitoring mechanisms should be enacted, and communication links must be strengthened in the next phase of the implementation. Once these program implementation concerns are addressed, the DOTr and LTFRB should carefully consider the possibility of imposing penalties on public transport operators whenever they fail to deliver the agreed-upon levels of service.

Once these policy and program issues are addressed, public transport operators and service providers must prioritize service delivery over income and fare revenue, especially during pandemics.

4.3 Ensure that public transport policies are flexible and adaptive

As the Service Contracting Program is relatively a new initiative in the Philippines, policies and guidelines, while anchored on best practices of the other countries, should allow flexibility to address concerns and immediately adjust during the early phase of implementation. Policies should also be reviewed constantly, even after the transition phase of the program, based on feedback from public transport service providers and commuters, among others. Like any legislation, it should evolve in alignment with practicality and broader strategies (EMTA, 2021). This highlights the importance of transportation planning and governance as an iterative process.

Peripheral to transport policy flexibility, the provisions on utilization of funds under Bayanihan II require drivers as the program's primary beneficiaries. Considering the current setup in the transportation industry in the country in which all maintenance and operating expenses, including the drivers' salary, are being shouldered by the operator, contracting drivers exclusively is considered a challenge to the implementation of the program. Future legislation and policies must be flexible and adaptive enough to ensure smooth implementation and actualize the program's goals and objectives.

Further, in the Philippines, considering the slow digital adaptation (World Bank, 2020) and technology disparity across provinces, the introduction of the use of new technologies shall come with a firm transitory mechanism from an offline or manual monitoring system to a technology-assisted one. While the data generated from the online monitoring system is the primary basis of computation for payouts, manual certifications shall be allowed, at least for the first few months, especially in instances in which the system fails or in areas where there are challenges in connectivity. This was recognized by the LTFRB Board Resolution No. 043

in which submission of certified manual monitoring forms is accepted for payout computation in certain areas.

4.4 Improve and institutionalize the Service Contracting Program while modernizing the public transport system

The results of this study imply that the Service Contracting Program shall not be just seen as just a COVID-19 crisis response program but as an essential program to further improve the public transportation system even after this pandemic. The Service Contracting Program addresses the main issues of the current transportation system, which is highly dependent on fares and ridership, hence, remains vulnerable to disruptions. It is the best time to institutionalize the program as one of the flagship projects in the country (Siy, 2021).

The Service Contracting Program can also improve the "creditworthiness" of the public transport service providers due to stable cash flow. Hence, it may help modernize their fleet (Siy, 2020), which is in line with the goal of the PUV Modernization Program. The benefits of this program, paired with route efficiency due to proper route planning and operation efficiency brought by efficient fleet management, will surely improve the viability and reliability of public transport operations.

On the other hand, the commuters will benefit as the level of service is expected to be improved through the Service Contracting Program. Since the payment is based on kilometerrun and not on ridership, operators are expected to be encouraged to deploy more units and have more roundtrips, hence, improving reliability and predictability of service. This is aligned with the key findings of Wallis and Bray (2014) in Australian cities where improvements in service quality and delivery were evident in the increase in passenger satisfaction rate and has been primarily achieved through procured and contracted bus services with the private sector.

5. CONCLUSION

The results of this study revealed that the Service Contracting Program is an important measure to address COVID-19 related operational issues of public transportation in the Philippines. The program not only allows PUV operators to veer away from the long-standing reliance on fare collection and revenues, but also allows public transport authorities to impose and ensure compliance with performance standards based on service plans. This is a win-win arrangement for public transport operators, commuters, and regulators. On one hand, public transport operators are ensured of income based on kilometer-run, while commuters enjoy free public transport rides (on selected routes), safer and more reliable transportation services.

This is consistent with the commentaries of Welle and Avelleda (2020), citing that public transportation will require reliable assistance in order to provide high-quality service and restore passengers' confidence. The authors point out that national and state governments may need to continue adopting fiscal measures to ensure that public transportation is reliable and of good quality and ensure that systems remain operational once regular demand returns. Such a strategy would also ensure that captive riders can continue to rely on public transportation.

The COVID-19 pandemic also accelerated the implementation of the first-ever Service Contracting Program for road-based public transportation in the Philippines. Issues and challenges are expected in the initial implementation, but public transport authorities are expected to adjust and adapt. This highlights the importance of planning and governance as an iterative process.

The results of this study highlighted the concerns of TSCs related to the onboarding

process, delays in the processing of payrolls, issues with the online monitoring system, and subsidy-related issues. The DOTr and LTFRB, both in charge of managing and implementing the project, have so far implemented policies and activities to address these issues. These public transport authorities need to ensure that succeeding policies and interventions remain flexible and adaptive.

Meanwhile, key recommendations from the TSCs relative to the continuous implementation of the program were related to the expansion of the covered beneficiaries, expediting the processes and procedures, authorization of more routes previously prohibited from operation due to the COVID-19 lockdown, and intensified communication efforts.

Lastly, this study presented policy implications, which could provide adequate information and guidance for public transport authorities when developing further policies, plans, and programs related to pandemic response and for the "new normal."

It is recommended that public transport authorities 1.) ensure that public transportation remains operational during pandemics; 2.) ensure that public transport policies are flexible and adaptive; 3.) ensure that public transport operators / service providers keep sufficient levels of service; 4.) improve and institutionalize the Service Contracting Program while modernizing the public transport system.

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