



Image: transjakarta.co.id.

PUBLIC TRANSPORTATION POST-COVID19

BACKGROUND

Currently, the world is being disrupted by a new variant of coronavirus called COVID-19 or Corona Virus Disease 2019. This is a dangerous virus according to WHO because it is (i) **highly transmittable** – can be transmitted through respiratory droplets, directly (through cough or sneeze) and indirectly (through touching surfaces with COVID-19); (ii) **showing delayed symptom(s)**¹ – symptom(s) of COVID-19 usually appear five days (on average) after the person is being infected. So even if the symptom(s) have yet to appear, the person may have already been infected and therefore, could infect others; and (iii) **deadly**, especially to those with underlying conditions, such as diabetes, asthma, or hypertension. As a result, WHO as well as the Government of Indonesia encouraged people to stay at home, use mask (two layers at least), maintain social distancing, and conduct a good hygiene practice – wash hands regularly with soap and running water, take a bath after going outside the house, and regularly disinfect high-touch surfaces. At the macro level, the Government may impose a local/regional lockdown during an outbreak, to break the chain of COVID-19 infection.

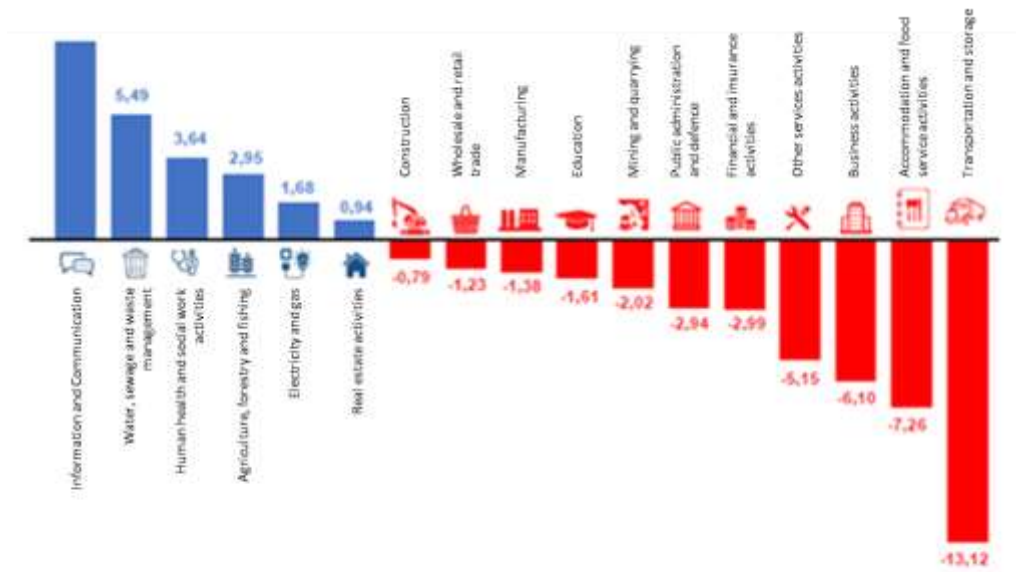
Due to these policies, the citizens are forced to change their lifestyle. Working and studying has been shifted from office/school to home (WFH), which limit travels. This has tremendous effect on the economy, particularly on the transportation and storage sector. Of all Gross Domestic Product (GDP) contributing sectors, transportation and storage is the most affected sector in Indonesia, with a decrease of -13.12% (YoY). The fact that public transportation, which is part of the overall transportation and storage sector, is identical with 3Cs (*close contact situations, crowded spaces,*

¹ Aida, N.R. (2020). "Masa Inkubasi Virus Corona 14 Hari, Rata-Rata Gejala Muncul Pada Hari Ke-5." Available on: <https://www.kompas.com/tren/read/2020/04/02/120300765/masa-inkubasi-virus-corona-14-hari-rata-rata-gejala-muncul-pada-hari-ke-5?page=all>, accessed on 4 June 2021.



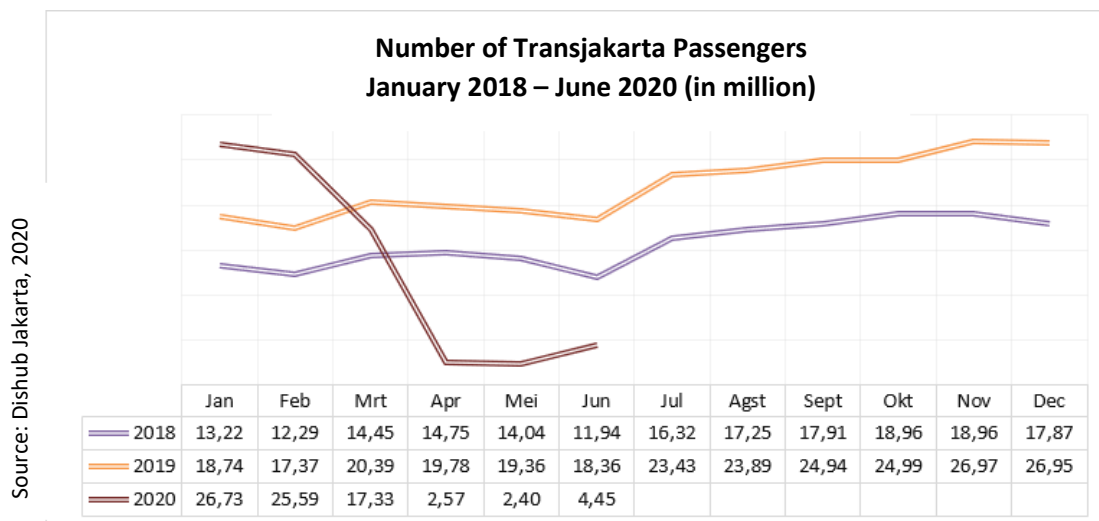
closed spaces)² is contributing to this decrease, making it least preferred as people fear it could be a hotspot for COVID-19 transmission.

Indonesia Economic Growth (%YoY)



Source: BPS, 2021 processed by PT SMI's Economic Research Division

The drop of public transportation is particularly true in Jakarta case. Data from the Transportation and Traffic Department of the Government of Jakarta (Dishub Jakarta)³ shows that there has been a decrease of passengers following the reduction of TransJakarta Bus Rapid Transit (BRT) operational time from 24 to 12 hours since March 2020, and after imposing limits on the number of passengers allowed to enter the bus stop and station. According to Dishub Jakarta, prior to COVID-19 pandemic, the trend showed growing number of public transportation users every year as shown in the graphic below, but after the pandemic, the number of passengers decreased significantly with the biggest drop (around 85% compared to previous month) happening in April 2020. Although there was an increase of passengers in June 2020 during the large-scale social restrictions (PSBB) transition period, the number is 76% lower compared to June in the previous year.



Source: Dishub Jakarta, 2020

² American Public Transportation Association (2021). "Transit Leadership in the Post-COVID-19 Mobility Landscape." Available on: [https://apta.com/wp-content/uploads/Updated Transit Leadership in the Post-COVID-19 Mobility Landscape Part 2 v2.pdf](https://apta.com/wp-content/uploads/Updated_Transit_Leadership_in_the_Post-COVID-19_Mobility_Landscape_Part_2_v2.pdf), Accessed on 3 June 2021.

³ Nisa, K. (2020). "Jumlah Penumpang TransJakarta Tahun 2018-2020." Available on: <https://statistik.jakarta.go.id/jumlah-penumpang-transjakarta-tahun-2018-2020/>, Accessed on 7 June 2021.



The decrease is also happening on MRT Jakarta. In January 2020, the average passengers of MRT reached 85 thousand users and peaking in February 2020 with 88 thousand users. However, after the announcement of PSBB, the MRT Jakarta passengers significantly dropped from 45-thousand users in March 2020 to only 1,405 passengers per day in May 2020. Although the number has gradually risen to 16-18 thousand during the PSBB transition period, this number is still far below from the figure in January-February 2020.⁴



Source: PT MRT Jakarta⁵

On the other hand, car sales have increased by 16.63% in the first quarter of 2021 and motorcycle sales increased by 64.53% according to the information from the Ministry of Industry of Indonesia. This sales boost is due to people opting for private vehicle to travel during pandemic, in addition to the relaxation of sales tax on luxury goods borne by the Government (PPnBM-DTP) for motorized vehicles.⁶ In addition, Mr. Djoko Setijowarno, Head of the Advocacy and Community Affairs of the Indonesia Transportation Society added that another public transportation problem in Indonesia is that most of the public transportation operators are still privately owned, where the drivers must achieve certain target of passengers and deposit their earnings to the operator.⁷ Because of this, it is extremely hard for this type of public transportation to fully obey the health protocol during COVID-19 pandemic as required by the Government, including to limit the passengers up to 50% of the

⁴ Yanwardhana, E. (2021). "Setahun Pandemi, Jumlah Penumpang MRT Jakarta Mulai Naik." Available on: <https://www.cnbcindonesia.com/news/20210422144336-4-240016/setahun-pandemi-jumlah-penumpang-mrt-jakarta-mulai-naik>, Accessed on 7 June 2021.

⁵ Sundoro, D. (2020). "Jakarta PSBB Lagi, Jumlah Penumpang MRT Menurun." Available on: <https://rri.co.id/humaniora/info-publik/905823/jakarta-psbb-lagi-jumlah-penumpang-mrt-menurun>, Accessed on 7 June 2021.

⁶ Susanto, V.Y., (2021). "Menperin: Penjualan mobil meningkat 16,63% di kuartal I 2021 pasca relaksasi PPnBM." Available on: <https://newssetup.kontan.co.id/news/menperin-penjualan-mobil-meningkat-1663-di-kuartal-i-2021-pasca-relaksasi-ppnbm>, Accessed on 7 June 2021.

⁷ Puspa, A.N. (2020). "Pemakaian Kendaraan Pribadi Meningkat, Intervensi Pemerintah Dibutuhkan." Available on: <https://ekonomi.bisnis.com/read/20200618/98/1254712/pemakaian-kendaraan-pribadi-meningkat-intervensi-pemerintah-dibutuhkan>, Accessed on 9 June 2021.



vehicle's total capacity. This has also affected the decline in public interest in using public transportation and contributing to the increasing use of private vehicles during the COVID-19 pandemic.

The increase of private vehicles use in Indonesia can be a boomerang, particularly if COVID-19 really becomes endemic as predicted by healthcare practitioners (see the box below). Not only will it worsen the traffic, but also intensify air pollution which could exacerbate the COVID-19 effects on COVID-19 patients, according to a research done by Harvard.⁸

Food for Thought: Can COVID-19 Be Endemic in Indonesia?

According to a survey done by Nature in February 2021 and done by more than 100 immunologist, virologist, and infectious diseases researchers, 90% of them believed that COVID-19 will become endemic, which means that COVID-19 is here to stay. The survey result is also in line with the WHO prediction in its press conference in December 2020. Vaccine alone can only achieve herd immunity if it reaches almost 67% of the total population. However, if there are new COVID-19 variants or the efficacy rate of the vaccines being used is less than 90%, that means to achieve herd immunity, the vaccine should cover more than 67% of the total population.⁹

In reality, new COVID-19 variants keep on appearing, like B.1.1.7 from UK, B.1.617.2 from India, P.1 from Brazil, and B.1.351 from South Africa¹⁰ with higher rate of transmission compared to the original COVID-19. Three of these COVID-19 variants have been found in Indonesia. With vaccination rate only reaching 9%¹¹ and dominated by Sinovac and Sinopharm vaccines with efficacy rate less than 90%,^{12,13} there is a high chance of COVID-19 staying and becoming endemic in Indonesia. The Government would need to properly rectify the situation and the people should strictly obey health protocols to cut the transmission chain if we want to see declining cases of COVID-19 in Indonesia.

Case in point is China. After it eased its lockdown policy, the pollution levels have rebounded. Based on data from Greenpeace China, the levels of toxic pollutants were higher in April 2020, compared with the same period in 2019, after China rebooted its economy.¹⁴

⁸ Harvard (2020), "Coronavirus and Air Pollution." Available on: <https://www.hsph.harvard.edu/c-change/subtopics/coronavirus-and-pollution/>, Accessed on 15 March 2021.

⁹ Phillips, N. (2021), "The coronavirus is here to stay – here's what that means." Available on: <https://www.nature.com/articles/d41586-021-00396-2>, Accessed on 15 March 2021.

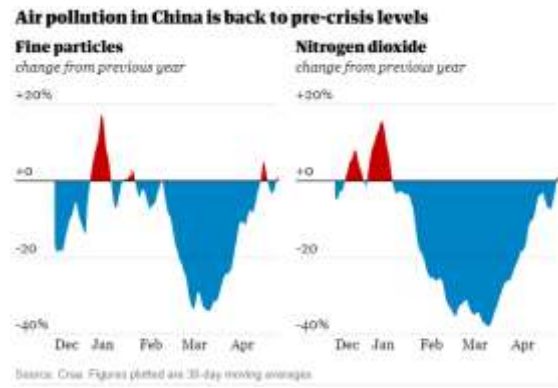
¹⁰ WHO (2021), "The effects of virus variants on COVID-19 vaccines." Available on: https://www.who.int/news-room/feature-stories/detail/the-effects-of-virus-variants-on-covid-19-vaccines?gclid=Cj0KCQjwh_eFBhDZARIsALHjIKcxAGLAidEweyHg28rNXs8xa91D8iU2EWINWqZoSdAQZs1x_Rpat_waAr0EEALw_wcB, Accessed on 8 Juni 2021.

¹¹ Data from: <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/countries-and-territories/indonesia/>, accessed on 9 July 2021.

¹² Herman (2021), "Sinovac dan Sinopharm Diakui WHO, Kesempatan ke Luar Negeri Terbuka," Available on: <https://www.beritasatu.com/kesehatan/781661/sinovac-dan-sinopharm-diakui-who-kesempatan-ke-luar-negeri-terbuka>, Accessed on 8 Juni 2021.

¹³ Afifah, M.N. (2021), "Arti efikasi vaksin Sinovac menurut Penjelasan Ahli." Available on: <https://health.kompas.com/read/2021/01/18/200200568/arti-efikasi-vaksin-sinovac-menurut-penjelasan-ahli?page=all>, Accessed on 8 Juni 2021.

¹⁴ Carrington, D. dan Kommenda, N. (2020). "Air pollution in China back to pre-Covid levels and Europe may follow." Available on: <https://www.theguardian.com/environment/2020/jun/03/air-pollution-in-china-back-to-pre-covid-levels-and-europe-may-follow>, Accessed on 15 March 2021.



Traffic in Beijing. Air pollution is back to pre-pandemic levels after lockdown lifted. Source: Carrington & Kommenda, 2020 Image: Noel Celis/AFP/Getty Images

Similar like Beijing, Jakarta is also seeing a rise in traffic volume as per April 2021, almost reaching pre-pandemic level although there are restrictions on community activities at the micro level (PPKM mikro).¹⁵ With the rise of private vehicles in Jakarta, there is concern that at the end of COVID-19, there will be a shift “from lockdown to gridlock,” as quoted from the UITP (The International Association of Public Transport). In this regard, the Government must pay attention to a more environmentally friendly mode of transportation so as to reduce congestion and air pollution to improve the quality of life of its citizen.

PUBLIC TRANSPORTATION POLICIES DURING AND POST-COVID19

According to a study done by IEA (2020)¹⁶, there are four determinants that influence the demand for public transit, especially during pandemic, namely (i) risk perception; (ii) price; (iii) comfort perception; and (iv) other alternative modes of transport. The following are policies that target these four determinants in order to improve the society’s interest in using public transportation, especially post-COVID19.

A. Use a Whole-Network Approach in Public Transit Planning¹⁷

When doing public transit planning, the government should pay attention to whole-network of public transit, including:

- **Integrated operation:** Ideally, there should be one agency responsible for handling all public transportation system in a city to enable payment integration, as well as to create “one-stop shop” mobile phone application in getting public transit-related information. The same agency could also help in the optimisation of public transit routes, by avoiding overlapping and ensuring public transit coverage throughout the city based on demand. If needed, allocate budget to purchase privately owned public transportation to maximise the optimisation of public transit routes, by fixing the management style, from depositing a portion of drivers’ earnings to the operator to providing monthly salary to drivers, and from target-based, to based on minimum services standards (MSS) and standard operating procedures (SOP).⁶

¹⁵ CNN Indonesia TV (2021) “VIDEO: Jakarta Macet Lagi.” Available on: <https://www.cnnindonesia.com/tv/20210405175636-407-626233/video-jakarta-macet-lagi>, Accessed on 9 June 2021.

¹⁶ IEA (2020). “Changes in transport behaviour during the COVID-19 crisis.” Available on: <https://www.iea.org/articles/changes-in-transport-behaviour-during-the-covid-19-crisis>, Accessed on 15 March 2021.

¹⁷ Adopted from: https://www.c40knowledgehub.org/s/article/How-to-make-public-transport-an-attractive-option-in-your-city?language=en_US, Accessed on 17 June 2021.



- **Physical facilities:** ensure that the public transit routes, the pedestrian and cycling infrastructure intersect with each other so as to facilitate a seamless transfer between different modes of transportation for users to complete their journey. This infrastructure includes supporting facilities like bus stop, park and ride, and feeder transport. Additionally, the agency should ensure that these physical facilities also support health protocols during COVID-19 pandemic.
- **Integrated payment:** the payment system of public transit should be integrated between one another to allow for one-time payment for a journey that requires more than one mode of transportation. This can be made possible by using a smart ticketing system that automatically adjusts the fare charged to each user depending on their type and frequency of journey.

B. Long-term Investment to support Public Transit

During or post-COVID19 pandemic, the Government should not reduce its investment on public transportation, but instead increase it to improve the citizen’s trust in using public transportation. Here are some policies that can be implemented to enhance people’s trust in using public transportation²:

a) Micro policies to reduce the chance of virus transmission in public transit

Goal	Action
Social distancing	<ol style="list-style-type: none"> 1) Signage and barriers to ensure there is only one-way in and out 2) Signage on the floor to show bare minimum of social distancing 3) Place staffs to do passengers headcount in public transport car entrance 4) Display passengers density information for incoming vehicle in advertisement displays in transit areas on a real-time basis. 5) Reconfigure seating to promote social distancing 6) Install passengers temperature screening at the gantry
Touch-free facilities	<ol style="list-style-type: none"> 1) Install automatic fare collection system at the gantry (can use cards/tickets or phone app) 2) Install ticket vending machine for selling public transit tickets/cards 3) Automatic door opening system
Cleaning and Disinfecting surfaces	<ol style="list-style-type: none"> 1) Install hand sanitation stations in entrances and platforms 2) Use anti-microbial or copper coating for high-touch surfaces 3) Self-cleaning devices for escalator handrailing 4) Display date and time of station cleaning log (make it more often and accessible for passengers’ viewing) 5) Install UV sterilization lighting for disinfecting interior spaces



Public Facilities, e.g. toilet, prayer room, nursing room	<ol style="list-style-type: none"> 1) Install touch-free soap and toilet tissue dispenser 2) Install touch-free water faucets 3) Signage on the floor to indicate bare minimum of social distancing while queueing.
Integrating air purifier with HVAC (Heating, Ventilation, Air Conditioning) System	<ol style="list-style-type: none"> 1) Integrating Hydrogen Peroxide (anti-bacterial) in existing HVAC system or install air purifying system and integrate it in the HVAC system both in the station/bus stop and the public transportation to improve the quality of the air 2) Adjust the air flow depending on the density of the passengers in the station/bus stop and the public transportation 3) Add air filter in the HVAC system/tunnel ventilation (for MRT) 4) Coordinate the tunnel and station's ventilation

b) Macro policies to follow the mobility trend post-COVID19 pandemic

Aside from the micro policies as mentioned above, the Government should also condier the following policies in accordance with the mobility trend post-COVID19 pandemic^{15,18,19}:

- **Invest on adding more public transportation vehicles**

With more public transportation vehicles, passengers could avoid congestion inside the vehicle as well as at the station/bus stop, allowing the passengers to conduct proper social distancing.

- **Invest on big data that can provide real-time information**

Create a mobile phone application that allows its users to retrieve real-time information regarding passengers density at the nearest bus stop/MRT station and/or upcoming vehicles, and provides alternative modes of transportation to avoid waiting in crowded places like bus stop/ MRT station (this can help reduce the stress of the users).

Ideally, the same application is also equipped with a rating system where the passengers can rate their risk and comfort perception in using public transportation. This data can in turn be used by policymakers to improve the public transportation service delivery, including developing a more dynamic public transit network – based on passengers’ comfort/risk perception – while reducing traffic and air pollution at the same time.

- **Invest on touch-free mode of payment (such as e-payment using mobile phone application)**

Aside from avoiding the use of cash that is prone to bacteria and virus, using a touch-free mode of payment can also create a more seamless and efficient boarding process. The government can collaborate with an app developer to develop a one-

¹⁸ Adopted from: <https://moovit.com/blog/answering-the-big-microtransit-questions-how-where-and-why-on-demand-works/>, Accessed on 18 June 2021.

¹⁹ Adopted from: https://nacto.org/wp-content/uploads/2015/06/Ralph-Buehler-Virginia-Tech_2012BikeShareWorkshop.pdf, Accessed on 18 June 2021.



stop shop app where passengers can both see real-time information regarding upcoming/nearest public transportation and pay for the selected public transportation.

The following are some public transit applications that can be adopted by the Government:



Case study #1: Moovit, All-in-one app to facilitate a more seamless urban transit

Moovit is a Mobility as a Service (MaaS) service provider and the founder of a multi-modal travel app with 930 million users in more than 3400 cities in 80 countries. This app will guide its users to travel from one place to another by providing the easiest and most efficient options. This app integrates (i) real-time information of incoming trains,

bus, together with route mapping; (ii) nearest bus stop and MRT station; (iii) live navigation; (iv) user report; (v) cycling route; to (vi) e-payment for selected mode of transport. This app also provides step-by-step guide of the most optimum route of bus, train, MRT, bicycle, scooter, or a combination among them. Moovit is collaborating with renowned public transport agencies in the US, such as TriMet and MTA.

Case study #2: Metropia, Gamification of Travel to Optimize Emission Reduction



Just like Moovit, Metropia is also a MaaS service provider and a multi-modal travel application for Austin, Texas, and Tucson, Arizona city in the US. This app has developed an incentive program for users to reduce traffic. Metropia provides route options for travelling and gives incentive for users that use alternative route or users that go in different time to reduce the saturation of certain routes within the city's traffic network. This incentive includes gift cards that can be used in local or online shops. This app can also track the number of carbon dioxide saved by the users, and with its partner company, plant trees based on the saved CO₂ of the users. This app is a great example of gamification that promotes positive behaviour of its users with incentives.

- **Invest on a low-emission/electric public transportation** – by shifting to a low-emission/electric public transportation, not only will this help to reduce the air pollution, but also improve the convenience of the passengers with the modernization of the vehicles.
- **Invest on cycling networks** – due to pandemic, a lot of people have shifted to using bicycle to travel around the city. This positive trend should be encouraged by the Government by facilitating cyclist through creating a cycling network which



integrates with public transportation. This will incentivize cycling trend in the future and enrich options of more sustainable modes of transportation. The following are the examples of integrating cycling with transit:

1. Bicycle parking lot near the bus stop or MRT station.

(Image: bicycle parking lot near Isehara station, Isehara city, Kanagawa prefecture, Japan)²⁰



2. Multi-function bicycle station, equipped with complete facilities for bicycle and cyclists

(Image: Bicycle station equipped with bicycle washing machines in Fahrradfreundliche, Muenster, Jerman)²¹

3. Allow cyclists to bring their bicycle in public transportation

(Image: dedicated space for cyclist in Bus/LRT/MRT in the US)¹⁸



4. Bike rental in or near bus stop/MRT station

(Gambar: app-based bikesharing called Gowes in Jakarta)²²

²⁰ Image from: <https://www.alamy.com/bicycle-parking-lot-near-isehara-station-isehara-city-kanagawa-prefecture-japan-image183026108.html>, accessed on 18 June 2021.

²¹ Image from: <https://nyc.streetsblog.org/2008/10/24/park-ride-and-wash-in-fahrradfreundliche-muenster/>, accessed on 18 June 2021.

²² Image from: <https://metro.tempo.co/read/1361270/jakarta-punya-bike-sharing-tarifnya-rp-3-000-per-15-menit>, accessed on 18 June 2021.



5. Bicycle lane that connects with public transportation stations so as to facilitate bicycle as a transit feeder

(Image: bicycle lane in Toronto, Canada)²³



- **Other policies**

The success of the above macro and micro policies is contingent on:

- i. **Individual and community discipline in implementing health protocols coupled with stricter law enforcement for offenders**

For example, in Singapore, first-time offenders will be given an on-the-spot penalty of SGD 300 (equivalent to Rp3.2 million) up to SGD 10,000 (equivalent to Rp107 million) and/or prison up to 6 months. For second and subsequent offenders can be given a penalty of SGD 20,000 (equivalent to Rp214 million) and/or prison up to 12 months. In addition, there are thousands of enforcement officers and health protocols ambassadors dispatched by the government to conduct regular patrols around the island and an application called “TraceTogether” which is a community-based application where users share proximity with other users anonymously using Bluetooth. Ministry of Health of Singapore will approach users, as needed, for contact tracing.^{24, 25}

- ii. **Equitable distribution of vaccines to all layers of community, as targeted**

According to WHO, vaccination is still the best and safest solution to reduce the number of COVID-19 case within a country, regardless of new COVID-19 variants. COVID-19 vaccination can push down the transmission level by inducing herd immunity, through equitable distribution of vaccines as much as 50-67% of the total population. Even though it could not 100% protect someone from getting infected nor infecting others, but having two dose of vaccines can reduce the chance of developing severe symptoms or complications due to COVID-19.²⁶

- iii. **Other supporting policies that incentivize private vehicle users to use public transportation**, such as (a) existing policy of even and odd numbers depending on the date, (b) electronic road pricing (ERP) like in Singapore or congestion charge like the one in London, UK, where certain road section prone to

²³ Image from: <https://trnto.com/protected-bike-lane-on-yonge-midtown/>, accessed on 18 June 2021.

²⁴ Information from: <https://singaporelegaladvice.com/covid-19-penalties-social-distancing-staying-home/>, accessed on 23 June 2021.

²⁵ Information from: <https://support.tracetgether.gov.sg/hc/en-sg/articles/360043543473-How-does-TraceTogether-work->, accessed on 13 April 2021.

²⁶ Adhi, I.S. (2021). “Orang yang sudah divaksinasi COVID-19 masih bisa terinfeksi dan menularkan virus corona”. Available on: <https://health.kompas.com/read/2021/06/22/103000968/alasan-orang-yang-sudah-divaksinasi-covid-19-masih-bisa-terinfeksi-dan?page=all>, accessed on 24 June 2021.



congestion will be given gantry that charges fee for private vehicle users who passes that road, or (c) increase parking fee; and (d) driving speed limit in certain road to ensure the safety of the cyclists and other road users in general. In addition, this congestion charge and increasing of parking fee can generate new funding for improving public transportation.

Other than that, the Government can also improve the citizen's trust on public transportation by using a behavioural approach to the passengers, such as:

i. **Reach out and involve the passengers** – through, among others:

- Regularly communicate preventive actions taken by the public transportation agency in applying strict health protocols in its operations through its social media account/newspaper/media in transit areas; as well as
- Invite passengers to send their selfie and share experience in abiding health protocols when using public transportation and how public transportation has in turn helped them during pandemic period to public transport agency's email account. The stories of the passengers can be further disseminated publicly to bring positive feelings for potential passengers in using public transportation, even during pandemic.

ii. **Reach out and involve the public transportation employees**

- Public transportation employees should also be involved in adhering to strict health protocols at work. They need to become a role model, and at the same time, ensure the safety of the passengers. The public transit agency can also consider giving recognition/award for best employee in adhering and enforcing health protocols at work.

FINANCING OPTIONS FOR PUBLIC TRANSPORTATION DURING AND POST-COVID19 PANDEMIC

The Government/Public Transit Agencies would certainly need substantial amount of investment to implement the aforementioned policies. In this regard, the Government/Public Transit Agencies may consider the following financing options currently available in Indonesia¹⁶:

1) State/Municipal Budget (APBN/D)

The local government may combine both state and municipal budget to fund their investment on public transportation. The local government could innovate to boost their local revenue through implementing transportation-related policies to enhance their public transportation service delivery, such as using ERP/congestion charge, public transport tax, increase private vehicle tax, parking fee, as well as non-farebox revenue such as TOD using land-value capture (a policy that aims to maximise the land value adjacent to public transit through government investment, activities, and other policies in those areas), naming right, retail, etc.²⁷

²⁷ Definition based on the Ministry of Public Works and Housing (<http://pembiayaan.pu.go.id/news/detail/94/Peluang-Penerapan-Pembiayaan-Infrastruktur-Melalui-Skema-Land-Value-Capture-di-Indonesia>).



Additionally, the local government may explore other options like municipal loan or obligation. For municipal loan, the local government could access it through PT SMI. There are two types of municipal loans provided by PT SMI, namely:

- a) **Regular Municipal Loan** – it is a mid- to long-term loan provided to municipalities to fund their prioritised infrastructure development under their authorities. For this regular municipal loan, the Government should obtain, among other but not limited to, approval from the local parliament, availability of feasibility study, obtain consideration from Minister of Home Affairs, and other terms as stipulated in Government Regulation Number 56 Year 2018 regarding Municipal Loan.
- b) **Municipal Loan under the National Economic Recovery Program (“Municipal PEN Loan”)** – this is one of the alternative instruments or financing modalities for municipalities to fund their prioritised activities, particularly to manage the impact of COVID-19 pandemic, in order to overcome municipal budget deficit and constrained fiscal capacity of the municipalities. There are two types of Municipal PEN Loans, namely Project-based and Programme-based loans. The features of these loans include low credit interest, long tenor (8 years) and require no approval from the local parliament (the municipality would only need to report to the local parliament within 5 working days).

2) Government subsidy

The public transit agency may be given subsidy by the local government to cover operational expenses (OPEX) because in general, public transportation cannot rely entirely on user payment. The public transit agency would need to calculate the fee per passenger by considering the principle of social justice or other considerations as applicable in their area. The fee charged to the passengers must allow the local government to improve rather than only maintain their public transportation service delivery.

3) Assignment to State-Owned Enterprise or Regional-Owned Enterprise (SOE/ROE)

For infrastructure projects crucial for the development of a certain region or local government, economically feasible but not financially viable, the government may assign SOE/ROE to do the infrastructure project(s) through a separate regulation (could be in the form of Presidential Regulation/ Ministry of SOE Regulation/ or Governor Regulation). The financing options for this kind of assignment can be in the form of state capital injection but could also use commercial financing or a combination of both, depending on the financial capacity of the assigned SOE/ROE. For example, Government of Indonesia assigned PT Kereta Api Indonesia (Persero) as the operator and PT Adhi Karya as the contractor of LRT Jabodetabek through Presidential Regulation no. 49 of 2017. The financing of this assignment is obtained from a combination of state capital injection and commercial financing. In the future, the revenue of this project will come from passenger tickets, transit-oriented development (TOD), and subsidies from the government through public service obligations (PSO).²⁸

4) Foreign Loans/Grants from Donor

There are several multilateral development banks and donor institutions which provide financing in the forms of loans/grants to local government in developing countries. PT SMI has been entrusted by the Ministry of Finance to establish SDG Indonesia One, which is an integrated platform for infrastructure provision using blended finance scheme or collecting funds from

²⁸ Biro Komunikasi dan Informasi Publik Kementerian Perhubungan (2017). Available on: <http://www.dephub.go.id/post/read/menhub-skema-pembiayaan-lrt-jabodebek-pt-kai-investor-utama-dan-pt-adhi-karya-investor-pendamping>, accessed on 7 July 2021.



investors, donors, and philanthropies to be distributed to SDG-related infrastructure projects. For information, currently PT SMI is providing a project preparation facility with the funding aid from Green Climate Fund (GCF) for Bus Rapid Transit project in Semarang, Central Java and is also helping with the next stage of the project under the project development facility scheme - Regional Infrastructure Development Fund (RIDF) from the World Bank.

5) Municipal Public-Private Partnership (Muni PPP)

Muni PPP is a cooperation between the local government (municipalities) and business entity in infrastructure provision for the public interest by adhering to the specification previously determined by the Head of the Municipality as the Government Contracting Agency (GCA), which partially or entirely using the resources of the business entity with the risks being shared between the two parties. The Muni PPP is subject to Presidential Regulation Number 38 of 2015 and its implementing regulations.

For Muni PPP projects which are included in the Acceleration Program of National Strategic Projects, the local government could access government support in the form of, among others, project development facility and feasibility support such as availability payments.

PT SMI plays an active role in encouraging the participation of business entities through this scheme. Additionally, PT SMI is providing Muni PPP project preparation and development as well as provide technical assistance in the form of transaction assistance to capacity building for local governments who are interested in using Muni PPP as an alternative to infrastructure financing in their regions.



Disclaimer

All information presented were taken from multiple sources and considered as true by the time they were written to the knowledge of PT Sarana Multi Infrastruktur (Persero). PT Sarana Multi Infrastruktur (Persero) can not be held responsible from any inaccuracy contained in the material.

PT SMI follows all internal and external guidelines and regulations that govern the evaluation process on determining the financing feasibility of an infrastructure project. Every decision to finance or not to finance a project is therefore based on a responsible and thorough due diligence process.

Any complaint in the process of financing irregularities can be submitted to:

Ms. Ramona Harimurti, Corporate Secretary PT SMI

Tel : +62 21 808 252 88

Fax : +62 21 808 252 58

Email : corporatesecretary@ptsmi.co.id

Public complaints on PT SMI service will be kept strictly confidential and handled by a special committee to ensure that complaints are addressed appropriately.