UK PACT

This document will explain the institutional landscape of stakeholders related to public transports management in Metropolitan Jakarta Area

Public Transport Institutional Integration Roadmap in Metropolitan Jakarta - Current Landscape and Best Practices

Clean Mobility for Metropolitan Jakarta

21/01/2023

UK PACT

Table of Contents

List of Figures

List of Tables

1. Introduction

This report would discuss the current institutional integration status in Metropolitan Jakarta, including the role of related stakeholders who have been given the mandate to carry out the integration in Metropolitan Jakarta. Stakeholder analysis would also be conducted further to see each stakeholder's function and authority, as well as the relationship between stakeholders in Metropolitan Jakarta.

However, there are currently some problems that arise due to the current institutional setup. These are the problems that aimed to be addressed by integrating the institutions relevant to public transport planning and management. This report will elaborate further on the current problems resulting from the current institutional landscape.

Furthermore, to see how the institutional setup should be from the global perspective, examples from developing and developed countries would also be analysed. The hundred years of their efforts will be documented in this report to learn more about the best approaches to enable institutional integration in Metropolitan Jakarta. This report would also encompass the data obtained from the stakeholder consultation meetings, one of which with the Greater Jakarta Transport Authority (BPTJ).

UK PACT

2. Metropolitan Jakarta's Public Transport Administration Landscape

This section will explain the existing condition of public transport administration in Metropolitan Jakarta. It will explain the government landscape, which focuses on the administration hierarchy from the national level to the city/regency (municipality) level and the distribution of authority to carry out regional autonomy.

The public transport landscape in Metropolitan Jakarta will also be discussed in this section. This includes types of public transport used in Metropolitan Jakarta, including the mode used and the operational area. In this section, the public transport modes will be divided into two categories, which are road-based transports and rail-based transports.

2.1. Government Landscape

Metropolitan Jakarta consisted of three different provinces, namely the Special Capital Region of Jakarta Province, West Java Province, and Banten Province. Although Metropolitan Jakarta covers three provinces, it does not cover entire cities and regencies under each of the provinces. It only covers cities and regencies, as shown in Table 1 below.

Table 1 Metropolitan Jakarta Overview

No	Province	City/Regency	Population (people)	Area (sq.km)	Density (people/sq.km)
1	Special Capital Region of Jakarta	West Jakarta City	2,440,073	124.44	19,608
2		Central Jakarta City	1,066,460	52.38	20,360
3		South Jakarta City	2,233,855	154.32	14,475
4		East Jakarta City	3,056,300	182.70	16,729
5		North Jakarta City	1,784,753	139.99	12,749
6		Thousand Islands Regency	28,240	10.18	2,774
7	West Java	Bogor City	1,052,360	118.50	8,881
8		Bogor Regency	5,489,540	2,710.62	2,025
9		Depok City	2,085,940	200.29	10,415
10		Bekasi City	2,564,940	206.61	12,414
11		Bekasi Regency	3,157,960	1,224.88	2,578
12	Banten	Tangerang City	1,911,914	153.93	12,421
13		South Tangerang City	1,365,688	147.19	9,278
14		Tangerang Regency	3,293,533	1,011.86	3,255

In total, there are 14 cities/regencies under the Metropolitan Jakarta area. Along with the provincial transport agencies and their yearly budget allocation, those cities and regencies also have their own transport agency and budget allocation for each year, except for cities in Jakarta. Jakarta Province has a transport agency and budget which encompasses all the cities and regencies under the administrative area. This is governed further by Law No. 23 of 2014 on Regional Autonomy.

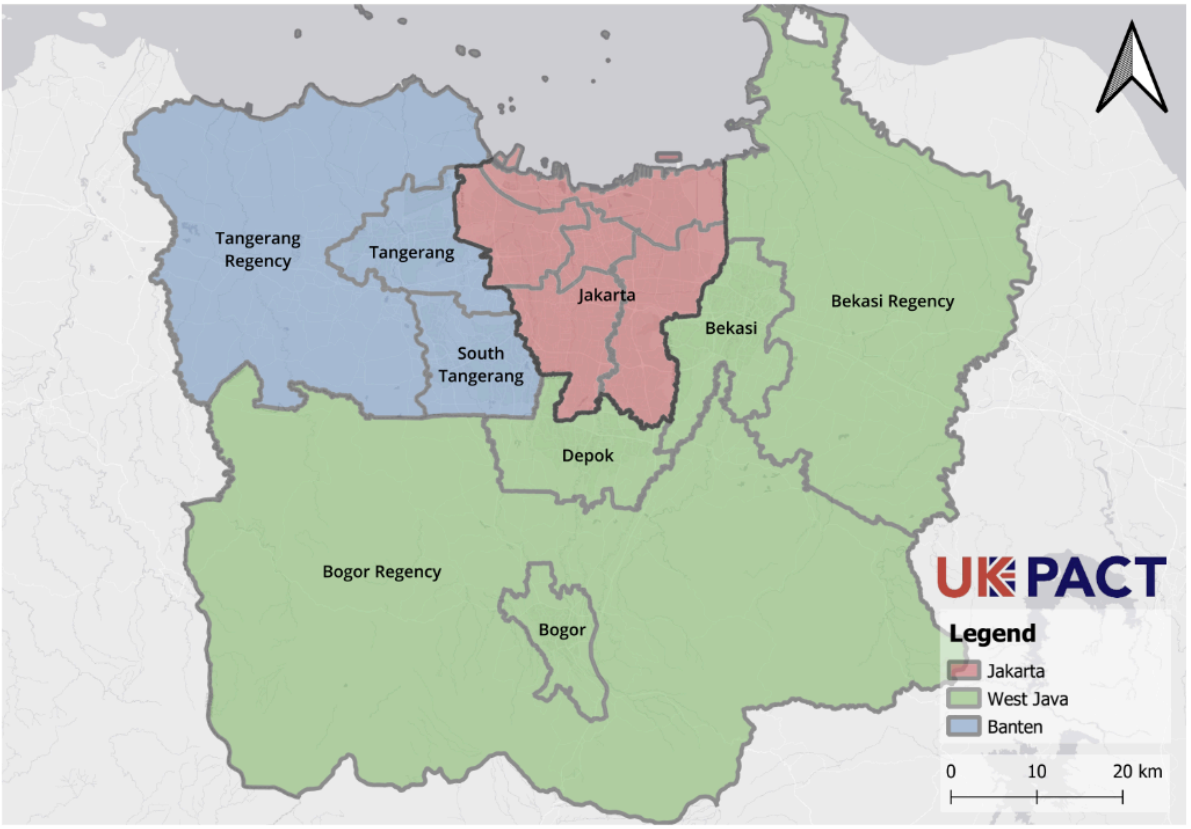

Figure 1 Metropolitan Jakarta Area

Apart from those city/regency and provincial governments, there is also the Ministry of Transportation (MoT) who was mandated to manage the transportation sector at the national level. MoT consisted of multi-sector roles represented by each Directorate General, such as Secretariat General, Inspectorate General, Directorate General of Land, Directorate General of Railway, Directorate General of Air, Directorate General of Sea, Research and Development Agency, Human Resources Agency, and Greater Jakarta Transport Authority (BPTJ).

Furthermore, Law No. 23 of 2014 not only specifies the obligation of the local, provincial and national government, but also the separation of the government if there are any cross-boundary arrangements. If there is a government affair that occurs inside a city/regency, then it will be administered by the city/regency government. If it involves two or more cities/regencies inside a province, then it will be administered by the provincial government. Lastly, if it involves two or more provinces, then it will be administered by the national government. In the context of

Transportation, the national government will be represented by the MoT. Specifically, the Administrative of Metropolitan Jakarta will be handled by BPTJ. While other administrative areas will be handled by the Directorate General of Land, Railway, Air, or Sea accordingly.

2.2. Public Transport Landscape

There are multiple types of public transport operating inside the Metropolitan Jakarta area. This section will touch briefly on what are the types of public transport used in Metropolitan Jakarta, including the mode used and the operational area. The administration landscape of those public transports will also be elaborated further to give an introduction on who are the stakeholders involved in the public transports of Metropolitan Jakarta and will be divided into two subsections, which are road-based public transport modes and rail-based public transport modes.

Table 2 Summary of Public Transport Landscape

Service Type		Service Area		
		Intracity	Intercity	Interprovince
Road-Based	Angkot	Jak 10a (Jakarta), K03 (Bekasi)	T16 (Banten), D05 (West Java)	D01 (Banten - Jakarta), T20 (Jawa Barat- Jakarta)
	Bus	Trans Patriot (Bekasi), Trans Anggrek (South Tangerang), Trans Tangerang Ayo (Tangerang), Trans Margonda (Depok)	Transjakarta BRT and Non-BRT services	Transjabodetabek, JR Connexion, JA Connexion, Royaltrans, Swoop
Rail-Based		-	LRT Jakarta, MRT Jakarta	KRL Commuter Rail, LRT Jabodebek (July 2023), Railink
On-Demand		Conventional Taxi (Bluebird, Taxiku, Express), ride-hailing (Gojek, Grab, Maxim)		

Administered by Municipal Government
Administered by Provincial Government
Administered by BPTJ

In general, public transport administration in Indonesia is based on the service area of the mode. Public transport operating inside a city or regency boundary will be under the responsibility of the respective city or regency government. Those operating between two or more cities, but not crossing provincial borders, will be under the responsibility of the provincial government. Lastly, those operating between two or more provinces will be under the responsibility of the Ministry of Transportation. As there are multiple cities, regencies, and provinces across the Metropolitan

Jakarta, all those three schemes are applied. This has resulted in many government institutions having authority over different public transport services in Metropolitan Jakarta.

Public transport system in Metropolitan Jakarta is built upon the following services:

- Road Based (Government Regulation No. 74 of 2014): Looking at the mode used, road based public transport in Metropolitan Jakarta could be divided into two, Minibuses and Buses.

    - Minibuses (Angkot)
      Angkot is essentially the basic form of public transport in Indonesian cities. The vehicles being used in this type of service are 4-metre minibuses with a capacity of up to 12 people and can go through smaller roads that are usually found in residential areas. They are operated by private business entities, usually in the form of cooperatives. There are many cooperatives operating Angkot in Metropolitan Jakarta, such as KWK, Kopamilet, etc. Angkot's fare structure varies between each governing body, some use distance based, while some use flat fare. However, they are usually deemed to be the most affordable, where they have the minimum fare (vary between cities, from IDR 3,000 to IDR 5,000) for short distances. In Metropolitan Jakarta there are 3 types of Angkot, as below:

        - **Intracity Angkot**: This type of Angkot operates solely inside the city boundaries. Examples include the Angkot route of JAK10A (Jakarta) and K03 (Bekasi). As this type of service does not cross city boundaries, the city government has full authority over this mode, including the level of service, ticket fare, and subsidy where applicable. Specifically in Jakarta, there is an Angkot service called "*Mikrotrans*" under the management of Transjakarta who gives a high level of services compared to other Angkot services. Mikrotrans uses a flat fare system collected electronically. Since 2018, Mikrotrans still does not charge any fare and entirely relies on the subsidy from the provincial government. However, as of the creation of this report, there are still some of Angkot's routes in Jakarta that have not been integrated with Transjakarta yet. The aim is for all of the Angkot services in Jakarta to be under the management of Transjakarta with a gross-cost contractual basis.
        - **Intercity Angkot**: This type of Angkot operates between two cities inside a province. Examples include Angkot route T16 (Banten) and D05 (West Java). In this type of service, the provincial government has full authority over them.
        - **Interprovinces Angkot**: This type of Angkot operates between two provinces. Examples include Angkot route D01 (Banten - Jakarta) and T20 (West Java - Jakarta). As this type of service runs through two provinces, it will be under the authority of the Ministry of Transportation. In

Metropolitan Jakarta cases, this should be handled by the Greater Jakarta Transport Authority (BPTJ).

Figure 2 Angkot (left) and Mikrotrans service (right) (Source: Kompas.com)

- Bus

  Apart from Angkot, there are also public buses operating within the Metropolitan Jakarta area. Bus services usually cater to the high-demand section which passes through wider roads compared to Angkot routes. They use various types of buses, from minivan (5 m), medium buses (8 m), single buses (12 m), maxi buses (13.5 m), and articulated buses (18 m). There are numerous bus operators in Metropolitan Jakarta, consisting of privately-owned operators and state-owned operators. The applied fare is subject to each of the bus services. Those who got subsidised are generally more affordable than those who do not. In general, there are 3 kinds of bus services in Metropolitan Jakarta as follows:

  - **Intracity Bus**: This type of bus operates solely inside the city boundaries. Examples include Trans Patriot (Bekasi), Trans Anggrek (Tangerang Selatan), Trans Tangerang Ayo (Tangerang), and Trans Margonda (Depok). As this type of service does not cross city boundaries, the city government has full authority over this mode, including the level of service, ticket fare, and subsidy where applicable. The only exception to this is Trans Pakuan (Bogor), as this service is under the national program called "*Teman Bus*". This is a Buy The Service (BTS) subsidy mechanism by the MoT, which, in this case, is under the BPTJ.
  - **Intercity Bus**: Transjakarta is a bus service operating within the Jakarta province, except for one of its recently added corridors, namely corridor 13 which runs between Ciledug (Banten) and Tendean (Jakarta). As they are only operating within the provincial boundary, they are solely administered by the Jakarta Provincial Government. This includes route permission, fare, and service level agreement, implementation, and evaluation. The BRT and

Non-BRT services of Transjakarta are operated by PT Transportasi Jakarta, which is a regional-owned enterprise of Jakarta. They are currently operating on a flat fare structure with 3 different schemes. The first scheme is the regular fare which is IDR 3,500 per trip. The next scheme is the morning fare (prior to 7 AM daily) which is IDR 2,000 per trip. And lastly, they also have an integrated fare scheme using JakLingko card which is capped at IDR 5,000 for unlimited Transjakarta trips within a 3-hour duration. Recently they are also incorporated into the JakLingko integrated fare scheme, which is a distance-based fare structure with IDR 2,500 boarding fee and IDR 250 per kilometre if they were using other modes of public transport (limited to LRT Jakarta and MRT Jakarta) within 3 hours, capped at IDR 10,000.

- **Interprovincial Bus**:
  - Transjabodetabek is a bus service that could be classified into three types: regular, business, and premium. The difference is on the level of service between each service. The facilities of the premium and business are considerably better compared to the regular one, which includes WiFi, wider seats, USB charging, etc. The fare for the regular bus is IDR 3,500 flat, while for the premium and business it costs around IDR 15,000 - 20,000. Transjabodetabek Premium and Business services do not receive any subsidy, but the regular service is supported by a subsidy from the government. There are several operators of Transjabodetabek which is generally divided by each route, Transjakarta itself operates a few of the buses, while most are operated both by private and state enterprises. Transjabodetabek is administered by BPTJ. Operators include DAMRI, Mayasari Bakti, Perum PPD, and Bayu Holong Persada.
  - Jabodetabek Residence (JR) Connexion is a service provided by BPTJ to facilitate demand outside Jakarta (Bogor, Depok, Tangerang, Bekasi) to the Central Business District in Jakarta and vice versa. With the point-to-point services, JR Connexion was designed to be more accessible from the residential area and to avoid overcrowding at the terminal area. Furthermore, JR Connexion is equipped with an air conditioner and WiFi to maintain passengers' comfort. JR Connexion does not receive any form of subsidy and it uses a flat fare system. It costs vary, between IDR 15,000 - 25,000, specific for each route. PPD, Sinarjaya, and Dewi Sri are some of the JR Connexion bus operators that have been registered to BPTJ.
  - Jabodetabek Airport (JA) Connexion is a bus service to accommodate the needs of accessing the Soekarno-Hatta International Airport in Tangerang. JA Connexion mainly uses single buses and is operated by Blue Bird, Damri, and Sinar Jaya. However, there is a small portion of

the bus under the operator of Damri who provides the service from Hotels to the Airport which uses the minivan (5 m) fleets. JA Connexion does not receive any form of subsidy and it uses a flat fare system. It costs vary, between IDR 25,000 - 85,000, specific for each route.

- Royaltrans is a premium bus service managed by Transjakarta to cover the interprovince's demand. Its fare structure does not follow the rest of Transjakarta services. It costs IDR 20,000 and, as a consequence, Royaltrans services does not receive any subsidy to cover the supply cost. Royaltrans service uses medium buses and its payment could only be done through the Transjakarta Mobile apps.
- Swoop is a shuttle bus service using 6-metre buses which serves Metropolitan Jakarta. This service is brought by a private enterprise that aims to connect residential areas (mainly outside Jakarta) to the transit hub in Jakarta. The fare is based on the distance, which varies starting from IDR 10,000. Since the service area is not crossing Metropolitan Jakarta boundaries, the route permit is under BPTJ authorisation.

Figure 3 Trans Patriot (left), Transjakarta (middle), and JR Connexion (right) (Source: Redigest.web.id; Kompas.com; Haltebus.com)

- Rail Based (Government Regulation No. 72 of 2009): Rail-based networks could be divided into two services, interprovincial and Intracity services.
    - Interprovincial rail services
        - **KRL Commuter Line**: The rail network serves Metropolitan Jakarta and some cities bordering Metropolitan Jakarta. It provides several lines, such as Bogor line, Cikarang line, Rangkasbitung line, Tanjung Priok line, Tangerang line, and Merak line. KRL Commuter line is managed by PT Kereta Commuter Indonesia (KCI) which is one of the subsidiaries of PT Kereta Api Indonesia (KAI) who manages the rail network and services on the national level. The level of service is determined by the Ministry of Transportation through the Minister of Transport Regulation No. 63 of 2019. KRL Commuter line uses a distance-based fare structure, where it costs IDR 3,000 for the first 25 kilometres, and an increment of IDR 1,000 for each 10 kilometre thereafter.

- **LRT Jabodebek**: This service is not yet to be operated, although it is expected to be operated by the first half of 2023. This service includes the line of Cibubur - Cawang, Bekasi Timur - Cawang, and Cawang - Dukuh Atas. Through the Presidential Regulation No. 65 of 2016, it designates PT Kereta Api Indonesia (KAI) as the operator of LRT Jabodebek.
- **Railink**: This is an airport train service operated on a single route from Manggarai to Soekarno-Hatta International Airport which runs 20 trips daily. The MoT, which in this case is the Directorate General of Railway, issues the permit, regulates the fare, and monitors the level of service. Railink is operated by PT Railink, a subsidiary of PT KAI and PT Angkasa Pura II. The fare of a single trip from Manggarai to Soekarno Hatta Airport is IDR 70,000.

- Intercity network
  - **LRT Jakarta**: At the moment, this rail service covers only 1 line (Velodrome - Pegangsaan Dua) and is expected to be expanded in the upcoming phases. LRT Jakarta is operated by PT LRT Jakarta, which is a subsidiary of PT Jakarta Propertindo, a regional-owned enterprise in Jakarta. LRT Jakarta uses a flat fare of IDR 5.000 for a single trip. LRT Jakarta is currently also included in the JakLingko integrated fare scheme.
  - **MRT Jakarta**: This rail service covers only 1 line (Lebak Bulus - Bundaran HI) and is currently under construction for its phase 2 (Bundaran HI - Kota - Ancol Barat). MRT Jakarta is operated by PT Mass Rapid Transit Jakarta with majority shares owned by the Jakarta Provincial Government. MRT Jakarta uses a distance-based fare scheme. The level of service is determined by the Jakarta Provincial Government through the Governor Regulation No. 95 of 2019. The cost varies between IDR 3,000 and IDR 14,000, depending on the distance travelled.

Figure 4 From Left to Right: Commuter Rail, MRT Jakarta, LRT Jakarta, and Railink (Source: Detik.com)

- On-Demand Transports (Minister of Transport Regulation No. 117 of 2018): There are two forms of on-demand transportation in Metropolitan Jakarta, which are Taxi and Ride Hailing services. Unlike taxis which only use cars, ride hailing services are available in the form of cars and 2 wheelers as well. Both of the services provide point-to-point service and could be used almost anywhere and anytime throughout the day. To access those on-demand transports, passengers need to order through the service provider such as Blue Bird, Gojek,

Grab, Maxim, etc. The MoT administered the regulation on these services, including the fare establishment and adjustment. The fare system uses the distance-based system. Compared to other public transportation services, on-demand transports are deemed to be more expensive.

Figure 5 Bluebird (left), Gojek Two-Wheelers Ride Hailing (middle), and Grab Car Ride Hailing (right) (Source: Kompas.com; Detik.com)

3. Institutional Integration in Metropolitan Jakarta

This section will explain the context of the situation in Metropolitan Jakarta related to institutional integration to the readers. This includes the efforts of integrating public transport administration, stakeholder analysis, and barriers that prevent the integration of public transport administrators in Metropolitan Jakarta.

3.1. Institutional Integration Status and Issues

3.1.1. Transit Infrastructure Planning Coordination

Coordination of public transit system planning, design, and operation in Jakarta has improved significantly since the start of the Reformation era in 1999, and the advent of regional autonomy in 2001.

Prior to the end of the Soeharto regime, plans for a metro (roughly along the corridor where the MRT now operates) and two LRT lines, one as part of a triple-decker elevated toll road, were mooted by different national government public authorities with the backing of individuals closely connected to President Soeharto. The national Directorate General of Land Transport and BAPPENAS (The National Development Planning Agency), which coordinated international donor support, tried to promote some coordination of plans and sponsored some bus priority plans of their own, but they were largely reactive to decisions made in a non-transparent manner at the Presidential level. Presidential control was a major bottleneck. During this time the bureaucracy was extremely weak. None of these projects ever reached the implementation stage.

In 2001, most of the powers to plan and develop rapid transit in Jakarta were devolved down to the Jakarta Provincial Government as part of the regional autonomy law. Starting around 2000, JICA, hosted by BAPPENAS, produced the Study on Integrated Transportation Master Plan in Jabodetabek (SITRAMP) which finally published in 2004. This study did not have any formal legal status. It was also produced under the auspices of the national government, while the implementation powers rested with the Jakarta Provincial Government. However, it remained a guideline loosely followed by the Jakarta Provincial Government. A formal transport master plan was signed by Governor Sutiyoso in 2004 and revised in 2007, but it was quite minimal and focused only on toll roads and the regional rail network.

Nonetheless, Sutiyoso made the implementation of Transjakarta BRT a political promise on the basis of which he was re-elected to the Governorship, despite being a hold-over from the Soeharto era. The SITRAMP study basically identified the corridors for rapid transit development that have been implemented. It identified the current MRT Line 1, part of which is implemented (from Lebak Bulus to Bundaran HI), as MRT, and it identified most of the 14 other corridors as BRT, though there were plenty of changes.

In practice, most of what was developed has followed SITRAMP. The Transjakarta corridors were primarily led by the Jakarta Transport Agency. Jakarta did not have the money to build the MRT on its own and the financial agreement between Jakarta Provincial Government and the national government was not approved until 2014, so part of the original MRT corridor became Transjakarta Line 1 (Blok M to Kota).

In the planning and design of the BRT Transjakarta system, the process was far from the ideal condition. There was a Coordination Team that consisted of heads of relevant Jakarta Provincial Government Agencies and international experts to provide technical support. However, the workstream was not working well so the critical decision sometimes neglected the recommendations from the team. Moreover, the contracting process also became an issue, as the contract clause and the selected firms were sub-optimal.

For these reasons, ITDP began advocating for the creation of a regional-owned enterprise (BUMD) under the Jakarta Provincial Government that would be independent of the Jakarta Transport Agency. This would allow fare revenue to be routed directly through Transjakarta and would not have to pass through the Jakarta Transport Agency. The situation improved marginally in 2006 when Transjakarta was created. However, it was created only as a “public service agency” under the Jakarta Transport Agency, which significantly undermined its independence and capacity, as its budget was entirely controlled by the Jakarta Transport Agency. While it secured independent offices and improved staffing, very significant planning and procurement problems continued. They still did not have control over procurement and contract management, and so operational problems remained. Some Transjakarta corridors did not even connect to each other, and connections to the commuter rail lines were almost non-existent.

The management of Transjakarta improved significantly after 2014 when Transjakarta finally became a full-fledged BUMD. Transjakarta gained control over their contractors, hired more qualified leadership, and the quality of the service on Transjakarta improved. Ridership began to increase significantly. Ridership increased from 103 million annual trips in 2015 to 192 million trips by 2019 just before the pandemic.

In the 2000s, there were also initiatives to build two monorail lines, a circular monorail and a roughly East-West monorail connecting to the planned MRT at Dukuh Atas. Part of the route overlapped with Transjakarta Route 6, which was delayed as a result. Before the agreement was finalised, the initiating company began to construct the pillars for this system. The project fell apart in 2008, was revived temporarily in 2013, and was dead again in 2015 due to various reasons. This project has now been transformed into the Jabodetabek LRT project being sponsored by the National Railway (KAI). These projects were not part of the master plan but emerged from unsolicited private sector bids.

A second master plan was produced by JICA called JUTPI (Jabodetabek Urban Transport Policy Integration) 1 in 2012, followed by JAPTraPIS (Jabodetabek Public Transport Policy Implementation Strategy) also in 2012. This plan, which was also produced primarily by the national government,

did not differ significantly from SITRAMP, but it also proposed various alignments for a Phase 2 East-West Metro line.

When the MRT was finally financed in 2014, Transjakarta line 1 remained operational as a local service that overlaps MRT line 1 from Blok M to Bundaran HI. It required the intervention of advocacy groups and experts within the Jakarta Provincial Government to ensure that Transjakarta line 1 and the MRT were physically integrated but this was ultimately successful.

The MRT was also incorporated as a BUMD, a joint stock company that is 99.98% owned by the Jakarta Provincial Government and 0.02% owned by a regional-owned enterprise that manages public markets.

In 2018 another master plan was produced by JICA under the auspices of the National Coordinating Ministry of Economic Affairs. With relatively little justification, this new master plan proposes 5 MRT lines and 7 LRT lines to be built by 2029, while Transjakarta lines are to be reduced from 124 lines to 100 lines, and later to only 40 lines as these are superseded by MRT or LRT lines.

While this new master plan mentions many integration stations between the planned MRT and LRT stations, there is no planned integration with any Transjakarta services mentioned.

It is unclear the degree to which the new master plan has support from the Jakarta Provincial Government. What is clear is that due to Covid-19 and other factors it is unlikely to be realised. JICA was projecting MRT ridership of 204,500 daily passengers and a 23 km system on 1 line by 2024, and a ridership of 1.45 million daily on 5 lines by 2029. Just before the pandemic, in 2018, according to KPMG, the MRT was carrying only 92,000 daily passengers on 15km. Costs to complete the line from Bundaran HI to Kota have ballooned. As of 2022 the completion of the first MRT line 1 to Kota is only expected to be completed by 2027, and the extension of Line 1 to Ancol is not likely before 2029. Plans for the East-West corridor have stalled.

They also projected that there would be 4 LRT lines carrying 300,000 daily passengers by 2024. In 2019, just before the pandemic, 6 km of LRT lines were finally completed. The Jakarta LRT company is a subsidiary of another BUMD, PT JakPro (Jakarta Propertindo), a regional-owned property development company. It was carrying only 3,740 daily passengers in 2019, and fell sharply during the pandemic. Speed and performance were also below expectations. Discussions with Jakarta indicate that due to the poor performance of the LRT, no further LRT is being planned by the Jakarta Provincial Government at the time of writing.

In general, if Jakarta had a single integrated public transit authority, it could integrate the planning process and take charge of its own long term planning, rather than outsourcing the development of long term transportation investment plans to a foreign government with a vested interest in promoting its own industry.

In the meanwhile, two additional governmental bodies were created to improve coordination. The national government created BPTJ to coordinate road-based transit services between Jakarta and

surrounding municipalities, and the MITJ, which is a joint venture between the MRT and KCI. These are discussed further below.

3.1.2. Badan Pengelola Transportasi Jabodetabek

Badan Pengelola Transportasi Jabodetabek (BPTJ) or the Greater Jakarta Transport Authority, is an agency under the Ministry of Transportation of the Republic of Indonesia. This agency was set up to develop, manage, and improve transportation services in an integrated manner in the areas of Jakarta, Bogor, Depok, Tangerang, and Bekasi. This broad mandate might make it appear that it plays a significant role in transit planning and coordination in the Jabodetabek region. However, the presence of BPTJ is deemed to be not too significant in the formulating masterplan in Metropolitan Jakarta as most of the decisions are taken by Jakarta Provincial Government and the National Government. BPTJ has a significant role to initiate and manage road-based transit services that cross municipal boundaries. It was created in response to Presidential Regulation No. 103 of 2015 which called for its creation. The MoT has determined the organisational structure of the BPTJ which is specified in the Minister of Transportation Regulation No. 110 of 2018 concerning the Organisation and Work Procedure of BPTJ.

BPTJ has the task of developing, managing, and improving transportation services in an integrated manner in the areas of Jakarta, Bogor, Depok, Tangerang and Bekasi by implementing good organisational governance. It also had a remit to sanction violations of master plans, and to coordinate transit-oriented development. It appears that they are still in their best efforts to fulfil the expected role.

BPTJ is supposed to coordinate and synchronise the preparation of general plans and activity program plans of Ministries/Institutions and Regional Governments in the context of developing and improving integrated transportation services in the Jakarta, Bogor, Depok, Tangerang and Bekasi areas based on the Master Plan for Urban Transportation for Jakarta, Bogor, Depok, Tangerang and Bekasi.

They are also supposed to coordinate and synchronise budget requirements for developing and improving integrated transportation services in the areas of Jakarta, Bogor, Depok, Tangerang and Bekasi. This has been interpreted to mean only those road-based trans-boundary services, and not the overall coordination of such services, nor the transboundary rail services.

The organisation of BPTJ as per their web site is shown below.

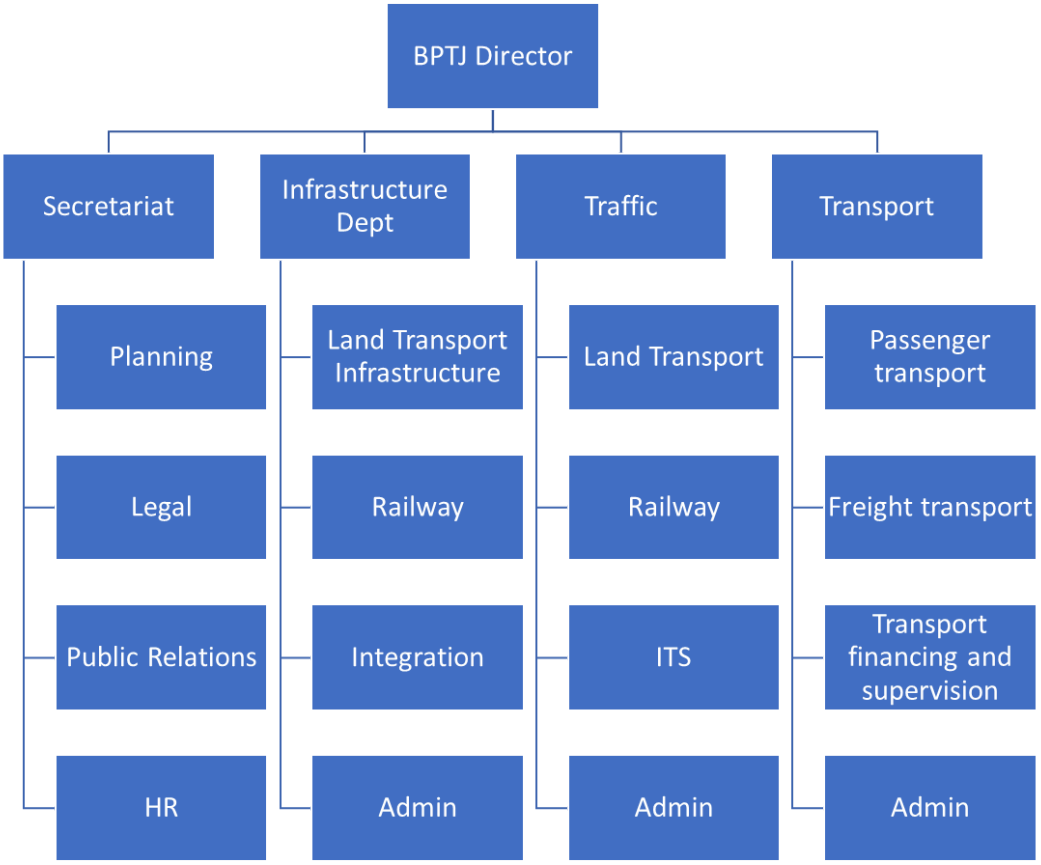

Figure 6 BPTJ Organogram

BPTJ's role is limited to the regulation of road-based (bus) transportation between Jakarta and the surrounding municipalities. These services, since about 2018 have been branded as Transjabodetabek if they go between the centres of surrounding municipalities and a major hub in central Jakarta, and JR Connexion (Jabodetabek Residence Connexion) if they travel between large residential estates in the surrounding municipalities and central Jakarta. They also nominally regulate the buses from Central Jakarta to the Soekarno-Hatta International Airport, as it is in Tangerang.

Currently, it does not appear that BPTJ plays any other significant role in the coordination of land transportation services in Metropolitan Jakarta. Regional rail transportation services are operated and managed by a branch of the National Railways (KAI, Kereta Api Indonesia, or Persero) known as KCI (Kereta Commuter Indonesia), which will also be operating the planned regional LRT Jabodebek system. They are also being regulated by the Directorate General of Railways instead of BPTJ, despite being in the Metropolitan Jakarta area.

3.1.3. Moda Integrasi Transportasi Jabodetabek

MITJ stands for Moda Integrasi Transportasi Jabodetabek. It is a public enterprise registered under the Jakarta Provincial Government (BUMD). It is 51% owned by PT MRT Jakarta and 49% owned by PT KAI, the national railways.

It was initiated in 2019 as a joint venture between the MRT and KAI primarily to work on infrastructure connections between the MRT and KAI properties, and to implement transit-oriented development projects at locations where both the MRT stations and KAI stations have land available for development. It appears to have been at the initiative of President Jokowi in January of 2019. By December of 2019 it had been accepted by the Minister of Transport, the Minister of State Owned Enterprises and the Governor of Jakarta. It was formally incorporated in January of 2020.

MITJ is intended to specifically focus on the integration of public transit modes in the Jabodetabek region, with a particular emphasis on rail integration. As integration of the fare collection systems is an important element of transit integration, MITJ is a 40% shareholder in JakLingko, a BUMD under the Jakarta Provincial Government. The rest of JakLingko is owned 20% by Transjakarta, 20% by JakPro, and 20% by MRT. As MRT also owns a 51% share in MITJ, MRT is the main power behind both MITJ and JakLingko.

MITJ initially contracted some studies about integration between MRT and KCI/KAI. In addition, the MITJ pioneered one high profile pedestrian connection between the Dukuh Atas MRT station, the Sudirman KCI station, the airport railways, and the new LRT Jabodebek station (currently under construction). This piece of infrastructure is innovative in that it is using the development of commercial properties by private sector partners on and around the pedestrian facilities to finance the construction. Private developers paid for the infrastructure in exchange for 20 year lease rights to the properties in and around the new pedestrian connections. This project is moving and the pedestrian facilities are on pace with the LRT system development. Similar plans are being developed at Kota Tua and Tanah Abang. They are also working on the installation of CCTV cameras at various KCI rail stations. A lot of land was given to the MRT at various stations, and this land is what will be used to create the possibilities for PPP financing of integration facilities.

3.1.4. JakLingko Indonesia

In 2017 the Government of Jakarta introduced the integrated payment system for public transport systems under the Transjakarta management, called the JakLingko fare payment system. This card allows Transjakarta fares to be capped at IDR 5,000 within 3 hours allowing unlimited transfers within all of its bus systems. In 2020, an entity was created to integrate the fares between those different transport services in Jakarta, called PT JakLingko Indonesia (JLI). This new regional-owned enterprise (BUMD) is 20% owned by Transjakarta, 20% by Jakpro, 20% by MRT Jakarta, and 40% owned by PT Moda Integrasi Transportasi Jabodetabek (MITJ), as shown by Figure 7 below.

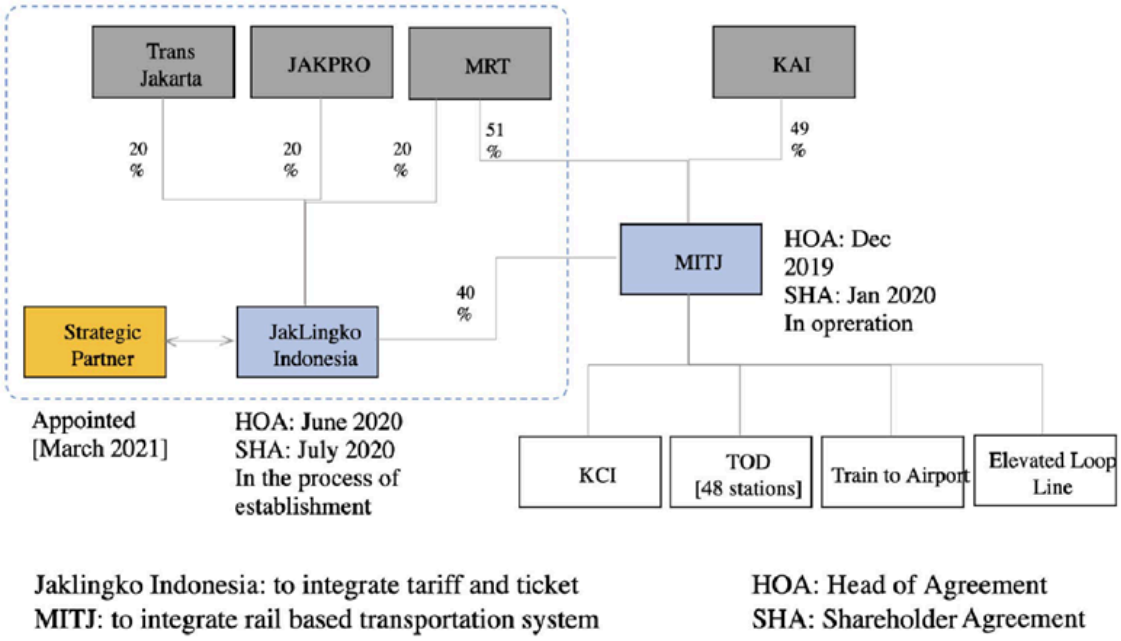

Figure 7 JakLingko's Governance Structure

MITJ owns a 40% share of JLI. All together JLI is about 79.5% owned by Jakarta and about 20.5% owned by the Government of Indonesia's national railway, KAI.

Unlike the previous effort in 2017, JLI is not planning to introduce another smart card. Rather, they established the card standards so that the banks and other smart card suppliers (such as the KCI and MRT Jakarta) are enabled to provide the integrated fare payment. To get the smart card, the passenger needs to establish a prepaid account from a bank or other supplier. This card will need to be linked to the JLI central clearing house. The other option the passengers will have is to use the JakLingko phone-based app. The new phone-based payment app has been in testing since the fall of 2021, and became operational in August of 2022.

The new JakLingko integrated fare only applies to intermodal trips. Passengers who are taking only the MRT, only the LRT, or only Transjakarta, will continue to pay using their current fare media at the current fare rates. In this case the entire sum would be credited to the account of the service provider which provided the service.

If, on the other hand, the passenger then taps into other transit services within the stated period of time (3 hours), then the central clearing house would charge them the JLI integrated fare after tapping out, and route the revenues according to the JLI revenue distribution agreement. The new fare structure that has been proposed by JLI for inter-modal trips is a base fare plus a per kilometre fare. Upon boarding the MRT, LRT, or Transjakarta, regardless of which mode a passenger originally boarded, passengers will pay a base fare of IDR 2,500. They will tap on and tap off each mode that they take. When they finally complete their trip, the central clearing house calculates the fare

based on this formula (IDR 2,500 plus IDR 250 per km). The fare is then capped at IDR 10,000, which has been approved by the regional people's representative council.

The new system will be account-based, which means that when users sign up to use the app or link their app-based account to a smart card, they will register their user information and any evidence they need to produce to prove they are eligible for one of the discounts. Moving to an account-based ticketing system managed through cell-phone based apps is the direction that many systems are moving towards.

3.1.5. Transjakarta and KAI Agreement

In mid-2022, a Memorandum of Understanding (MoU) was signed between Transjakarta and KAI. The objective of the signing of this MoU is to allow both parties to work together on improving public transport services, which includes intermodal integration, integrated business development, and transit oriented developments. However, as of the writing of this report, there are still no initiatives seen from both parties on these aspects. Nonetheless, this agreement is deemed to be important as KAI, who own KCI, and Transjakarta are the two operators with the highest number of passengers in the Metropolitan Jakarta area.

To summarise, the Figure 8 below shows Metropolitan Jakarta's effort towards the public transport development and integration since 2004.

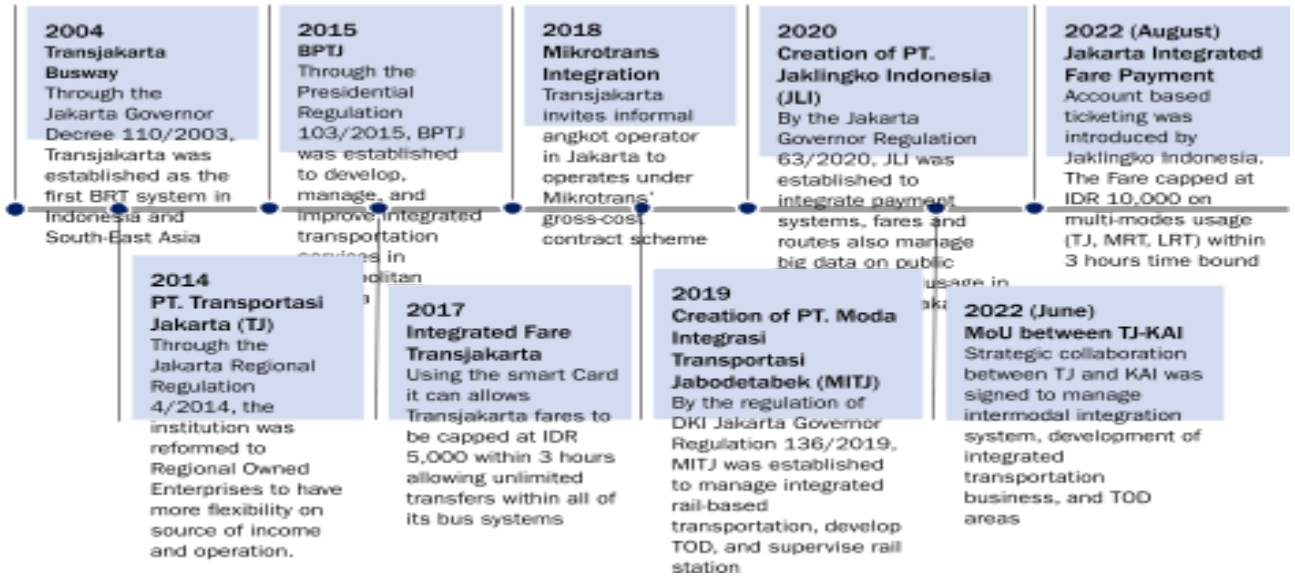

Figure 8 Metropolitan Jakarta's timeline for Public Transport Integration

3.2. Stakeholder Analysis

This section will explain the role and responsibilities of related stakeholders on public transport's administration landscape in Metropolitan Jakarta/Jabodetabek (Jakarta, Bogor, Depok, Tangerang, and Bekasi). This section will also summarise the relationship between stakeholders through a mapping diagram.

3.2.1. List of Related Stakeholders

This section will explain most of the related stakeholders and each of their relations with other institutions. This section will be kept concise by only including institutions deemed to have more relevance based on their influence and interest. In total, 13 stakeholders will be discussed including stakeholders from government institutions, State-Owned or Regional-Owned Enterprises, and Private Companies, that play a role in public transport's administration landscape in Metropolitan Jakarta. Stakeholders discussed in this section are BPTJ, Directorate General of Railways, Provincial and Municipal Governments Transport Agency, Jakarta Transport Agency, Highways Agency, City Transportation Council, Transjakarta, JakLingko, MITJ, KCI, Operators of Rail-Based Public Transport in Jakarta, as well as Operators of Road-Based and On-Demand Public Transport. Apart from that, the other stakeholders will not be discussed because they are considered to have less influence and interest in public transport's administration landscape in Metropolitan Jakarta.

Greater Jakarta Transport Authority (BPTJ), Ministry of Transportation (MoT)

Regarding public transportation in Indonesia, the MoT has the authority to establish regulations at the national level and for inter-provincial transportation. As for transportation within the province and within the city, it is regulated through detailed regulations made by local governments to be applied in their respective regions.

Under the Greater Jakarta Transport Authority (BPTJ), they play a role in developing, managing, and improving land and rail transportation, as well as integrated transportation services in Metropolitan Jakarta. Based on Presidential Regulation No. 103 of 2015, BPTJ reports to the MoT and coordinates the general plans and program plans, as well as their budgets, between the MoT and Regional Governments in Metropolitan Jakarta in the context of developing integrated transportation based on the Metropolitan Jakarta Transportation Master Plan (RITJ). BPTJ has the authority to impose sanctions on violations of RITJ committed by agencies, operators, and other parties. In addition, BPTJ has the authority to issue permits for public transportation that exceeds provincial boundaries in the Metropolitan Jakarta area. BPTJ also proposes regulations and policies related to the implementation of integrated transportation, provides recommendations for spatial planning oriented to mass public transport, and provides recommendations for feeder services in

the Metropolitan Jakarta area. Since its formation in 2016, BPTJ has continued to increase the use of public transportation in Metropolitan Jakarta. BPTJ also began to provide premium bus services in Metropolitan Jakarta called Transjabodetabek Premium, JR Connexion, and JA Connexion. In addition, based on MoT Regulation No. 110 of 2018 concerning the Organization and Work Procedures of BPTJ, BPTJ has the authority over railways in Metropolitan Jakarta. In the organisational structure of BPTJ, there is also a sub-directorate for railway infrastructure, a sub-directorate for railway traffic, a section for railway transportation of people, and a section for freight transportation for railway transportation. However, in practice, the railways in Metropolitan Jakarta are still under the management of the Directorate General of Railways.

Related stakeholders: Transport Agency, Jakarta Transport Agency, Operators of Road-Based Public Transport (inter provincial public transport), Operators of On-Demand Public Transport (inter-provincial on-demand public transport and Ride-hailing using cars)

Directorate General of Railways (DJKA), Ministry of Transportation (MoT)

MoT is responsible for the governance and regulation of transportation in Indonesia, including railways regulation. Under the Directorate General of Railways (DJKA), they have the task of formulating, implementing, and evaluating policies in the field of rail transportation traffic management, rail transportation facilities, and infrastructure, as well as improving rail transportation safety. DJKA has the role of coordinator in the fields of railways between the MoT and nationally or regionally owned enterprises that build and operate railway facilities and infrastructure. In Metropolitan Jakarta, the business entities involved are KAI, MITJ, PT KCI, and operators of rail-based public transport in Jakarta (MRT-J and LRT-J). But, operators of rail-based public transport in Jakarta are under the Jakarta transport agency. However, The railways in Metropolitan Jakarta at this time should have become the responsibility of BPTJ, not DJKA.

Related stakeholders: Transport Agency, Jakarta Transport Agency, MITJ, KCI

Transport Agency

The Transport Agency has the responsibility to formulate local level policies, guidelines, and technical standards, as well as monitor and evaluate the implementation of land, railway, water and sea transportation in their respective area. The Transport Agency has the authority to issue operational permits for public transportation in its area. They also calculate and supervise fares and manage the network of public transport routes, implement provisions, secure and maintain transportation infrastructure (park and ride, parking, and traffic) and public transportation facilities. The Transport Agency is also implementing transportation integration and supporting Transit oriented development (TOD). Regarding local public transport fares, the Transport Agency must obtain approval from the respective Regional People's Representative Council (DPRD). This is

because it relates to the DPRD's authority to approve the use of the Regional Revenue and Expenditure Budget (APBD), which is related to the provision of subsidies including Public Service Obligation (PSO). The Transport Agency focuses on transportation services, while the Highways Agency focuses on transportation infrastructure (roads and bridges).

In the public transport administration landscape in Metropolitan Jakarta, the Transport Agencies involved are the Transport Agency at the provincial level of Jakarta, West Java, and Banten, as well as the Transport Agency at the district/city levels of Bogor, Depok, Tangerang, and Bekasi. The Transport Agency for each region is based on their respective regional autonomy. The Provincial-level Transport Agency is responsible for public transportation across district/city boundaries in its administrative area, and the district/city-level transport agency is responsible for public transportation within the district/city boundaries in its administrative area. Meanwhile, cross-provincial public transportation in Metropolitan Jakarta is the responsibility of BPTJ for road-based public transport and DJKA for rail-based public transport. For example, Transjabodetabek which operates across provinces in Metropolitan Jakarta is the responsibility of BPTJ, Transjakarta is the responsibility of the Jakarta Provincial Transport Agency, and Tayo Buses in Tangerang City are the responsibility of the Tangerang City Transport Agency.

Related stakeholders: BPTJ, DJKA, Highways Agency, DTK (Depok and Bekasi), Operators of Road-Based Public Transport (local public transport), Operators of On-Demand Public Transport (local public transport)

Jakarta Transport Agency

Jakarta Province has 5 administrative Cities, but there is no city-level Transport Agency, only a sub-department under the Jakarta Provincial Level Transport Agency. Jakarta, the centre of Metropolitan Jakarta, has the most complex transportation structure. In general, the Jakarta Transport Agency has the same responsibilities and functions as other transport agencies. But the Jakarta Transport Agency also has other responsibilities with the existence of several Jakarta Regional Owned Enterprises (BUMD) in the transportation sector. These Regional Owned Enterprises include JakLingko, MITJ, Transjakarta, and Operators of Rail-Based Public Transport in Jakarta (LRT-J and MRT-J). In addition, the Jakarta Transport Agency also regulates and grants permits to Operators of Road-Based and On-Demand Public Transport operating in the Jakarta area.

Related Stakeholder: BPTJ, DJKA, Highways Agency, DTK Jakarta, MITJ, JakLingko, Transjakarta, Operators of Rail-Based Public Transport in Jakarta, Operators of Road-Based Public Transport (Jakarta public transport), Operators of On-Demand Public Transport (Jakarta public transport)

Highways Agency

Under the Directorate General of Highways, the Ministry of Public Works and Public Housing (MoPWPH) has the task of formulating and evaluating policies in the field of road and bridge development and implementing these policies for national roads and bridges, and which are included in the national development program. As for roads and bridges belonging to the regions, they are the responsibility of the respective regional Highways Agency. The Highways Agency has the main task of carrying out government affairs in the fields of planning, construction, maintenance, and monitoring of roads and bridges, including flyovers and underpasses, busways, pedestrian, pedestrian bridges, frontage roads, and others, in their regional area. In the public transport administration landscape in Metropolitan Jakarta, the Highways Agencies involved are the Highways Agency at the provincial level of Jakarta, West Java, and Banten, as well as the Highways Agency at the district/city levels of Bogor, Depok, Tangerang, and Bekasi. Just like the Transport Agency, the Highways Agency for each region is also based on their respective regional autonomy. The provincial-level Highways Agency is responsible for the transportation infrastructure belonging to the province, while the district/city-level Highways Agency is responsible for the transportation infrastructure belonging to the regency/city.

Related stakeholders: Transport Agency, Jakarta Transport Agency (Jakarta Highways Agency)

The City Transportation Council (Jakarta, Depok, and Bekasi)

The City Transportation Council (DTK) is an independent institution based in the Region as a forum for consultation and coordination between the community and the Regional Government (Transport Agency). It reports and is responsible to the governor. The City Transportation Council is in charge of accommodating the aspirations of the community and providing considerations on regional policies in the field of public transportation management. DTK also often holds joint discussions with Organda (Land Transport Organization), especially regarding the imposition of public transport fares. Organda itself is an organisation made up of entrepreneurs in the transportation sector (operators of road-based public transport). The City Transportation Council's members consist of 1) university academics; 2) Transportation experts; 3) Transport Agency; 4) The Police; 5) Transportation entrepreneurs; 6) Non-governmental organisations engaged in transportation; 7) Transport crew; and 8) transportation service users. However, not all regions have DTK. In Metropolitan Jakarta, the only three regions that have DTK are Jakarta, Depok, and Bekasi.

Related stakeholders: Transport Agency (Jakarta, Depok, and Bekasi), Operators of road based public transport (Jakarta, Depok and Bekasi), Operators of on-demand public transport (Jakarta, Depok, and Bekasi).

Transjakarta

Transjakarta is a Regional Owned Enterprise (BUMD) under the Jakarta Provincial Government and is responsible to the Governor of Jakarta. Transjakarta is responsible for coordinating the improvement of road-based public transport in Jakarta. Transjakarta started as a stand-alone manager of the BRT system but has grown to be responsible for managing most of Jakarta's road-based public transport systems, and aims to bring them all under its umbrella. Transjakarta is also responsible for the operation and maintenance of the facilities and infrastructure of the BRT system, including BRT stops and refuelling stations (SPBB). Transjakarta carries out its duties based on the minimum service standards that have been agreed upon with the Jakarta Provincial Government. Although Transjakarta is only responsible for road-based public transport in Jakarta, Transjakarta has also operated in several parts of the Jabodetabek area outside Jakarta, such as in Serpong (South Tangerang) and Summarecon (Bekasi). Transjakarta also actively continues to develop BRT public transportation in Jakarta such as by providing women's buses, premium buses, and additional facilities such as lockers, portable power banks, and free WiFi on Transjakarta buses.

The Jakarta Provincial Government has established the Transjakarta BRT System as a public service obligation (PSO) with economic tariffs. Therefore, Transjakarta has the right to receive subsidies for the implementation of these public service obligations, provided that the provision of subsidies is regulated in a performance-based contract. Transjakarta only operates a small portion of its fleets. Most of their buses are contracted out to bus operators, including privately owned and state-owned enterprises. These entities enter into contracts with Transjakarta to operate buses on a gross cost contract. They are generally paid for by the bus kilometres operated and bear no risk of revenue from declining demand. These entities cooperate with PT Transjakarta to support the operational implementation of the BRT system, including fleet operators, ticket operators, and others.

Related stakeholders: Jakarta Transport Agency, Operators of Road-based public transport (TJ Operators), JakLingko

PT JakLingko Indonesia

PT Jaklingko Indonesia is a joint venture between PT MRT Jakarta (MRT-J), PT Jakarta Propertindo (Jakpro), PT Transport Jakarta (Transjakarta), and PT Moda Integrasi Transportasi Jabodetabek (MITJ). JakLingko is responsible for the Integrated Transportation System (JakLingko system) implementation. The implementation of the JakLingko System is an integrated system that supports the policy of increasing the use of mass public transportation and the restriction of individual motorised vehicles. The increase in the use of public transportation includes the integration of infrastructure and operation of public transportation, as well as the determination of bundling tariffs. But the authority to regulate service schedules and public transport routes in

Jakarta belongs to the Jakarta Transport Agency and not JakLingko. However, JakLingko has passenger data obtained from the payment system they manage so that they could help provide the data and give advice to the Transport Agency. Public transportation included in the JakLingko integrated payment system is LRT, MRT, and Transjakarta, while the commuter Line is still in the planning stage.

Related stakeholders: Jakarta Transport Agency, Transjakarta, MITJ, Operators of Rail-based Public Transport in Jakarta

PT Moda Integrasi Transportasi Jabodetabek (MITJ)

MRT Jakarta was assigned by the Jakarta Provincial Government to cooperate with KAI in integrating Public Railways (Railways of public trains used to transport passengers and/or goods for a fee: MRT, LRT, Commuter line, Railink) in Metropolitan Jakarta by forming MITJ, a Regional Owned Enterprise (BUMD) under Jakarta Provincial Government. According to Governor Regulation 136/2019 article 9, MITJ is obliged to report on the implementation of its duties to the governor through the Regional Owned Enterprise Development Agency (BPBUMD). MITJ is in charge of providing public railway infrastructure, supporting its integration with other modes, developing TOD at around 72 stations in Jakarta, and supervising the stations. In 2022, MITJ cooperates with Urban Renaissance (UR) Japan to create an integrated transportation solution based on intermodal connectivity in Metropolitan Jakarta. MITJ also established a joint venture company called PT JakLingko together with PT MRT Jakarta, PT Transportasi Jakarta, and PT Jakarta Propertindo (Jakpro). In the company, MITJ holds 40 percent of the shares while MRT-J, Transjakarta, and Jakpro each hold 20 percent. However, at the moment, there is a discourse that MITJ will merge with PT KCI.

Related stakeholders: DJKA, Jakarta Transport Agency, JakLingko, KCI, Operators of Rail-Based Public Transport in Jakarta

PT Kereta Commuter Indonesia (KCI)

PT Kereta Commuter Indonesia (KCI) is a subsidiary of Indonesia National Railway Company, PT Kereta Api Indonesia (KAI), which manages the Commuter Line (KRL). KCI was originally established as a Jabodetabek commuter line operator under the company name PT Kereta Commuter Jabodetabek (KCJ). But along with the development of the commuter line in Central Java (Solo-Yogyakarta), the company changed its name to KCI. KCI is responsible for the commuter rail system and several local rail systems in Indonesia, including providing, operating, and maintaining the facilities and infrastructure (lines). KCI started modernising Commuter Line in 2011 by simplifying existing routes into five main routes, eliminating express KRL, implementing women-only trains, and changing the name of economy-AC KRL to Commuter Line train. On July 1,

2013, KCI started to implement an electronic ticket system (E-Ticketing) and a progressive fare system. The implementation of these two policies is the next stage in the modernization of the Jabodetabek Commuter Line. Until now, there have been plans for the commuter line to join the JakLingko integrated payment system. In addition, to determine commuter line tariffs, approval must be obtained from the People's Representative Council (DPR) because there is the use of PSO subsidies from the State Revenue and Expenditure Budget (APBN).

Related stakeholders: DJKA, MITJ

Operators of Rail-Based Public Transport in Jakarta (MRT-J and LRT-J)

The MRT (Mass Rapid Transit) system is run by PT MRT Jakarta, a Regional Owned Enterprise (BUMD) owned by the Jakarta Provincial Government, without direct intervention from the national government. PT MRT Jakarta is responsible for the construction, operation, maintenance, and procurement of MRT facilities and infrastructure (lines, stations, etc.). MRT carries out its duties based on the minimum service standards that have been agreed upon with the Jakarta Provincial Government. In addition, the existence of the MRT opens opportunities for the development of the TOD area, therefore the Jakarta Provincial Government assigns and gives rights to MRT-J to design and manage the TOD area at a radius of 350-700 metres from the centre of the MRT station (13 stations) or as specified. To fulfil this, PT MRT Jakarta formed a subsidiary, PT Integrasi Transit Jakarta (ITJ) as the TOD Area Manager.

The LRT (Light Rail Transit) system is run by PT LRT Jakarta, a subsidiary that is 99% owned by PT Jakarta Propertindo (Jakpro). Jakpro is a regionally-owned company (BUMD) engaged in property, infrastructure, utilities, and information and communication technology owned by the Jakarta Provincial Government. Jakpro received an assignment from the Jakarta Provincial Government to carry out several affairs such as the construction of 6 inner-city toll roads, acceleration of the construction of the Jakarta LRT, and others. LRT-J has the duty and authority to run and operate the LRT in the Jakarta area. In addition, LRT-J is also actively developing LRT integration, such as by collaborating to form a park-and-ride system at Summarecon Mall Kelapa Gading and integration with the Transjakarta Feeder.

In addition, there is also LRT development in the Jabodebek area (Jakarta, Bogor, Depok, and Bekasi), and it is planned to be operational starting June 2023. But for the Jabodebek LRT, the company appointed as the operator is PT KAI, not LRT-J. PT KAI is responsible for the Jabodebek LRT facilities, including procuring, operating, maintaining, and operating the facilities, administering the automatic ticketing system, and organising the operation and maintenance of the infrastructure. Meanwhile, the infrastructure development was carried out by PT Adhi Karya, a State Owned Enterprise in the field of construction.

Based on Jakarta Governor Regulation No. 34 of 2019, the Government has the authority to regulate the determination of MRT and LRT tariffs. Therefore, MRT-J and LRT-J have the right to

receive public service obligation (PSO) subsidies from the Regional Revenue and Expenditure Budget (APBD) to ensure the continuity of their services. Fare determination is made with the approval of the Regional People's Representative Council (DPRD).

Related stakeholders: Jakarta Transport Agency, JakLingko, MITJ

Operators of Road-Based Public Transport

In this case, the operators in question are all operators involved in road-based public transport operations, both for public transport across the Jabodetabek area and public transport within the city. Operators have a role to carry out public transportation operations such as those related to fleet operations, ticket operations, pool operations, and others. Operators involved in road-based public transportation operations in Metropolitan Jakarta include modes such as Transjakarta, Transjabodetabek, JR Connexxion, JA Connexxion, shuttle buses, city transportation (Angkot), and others. For example, Transjakarta is operated by several operators including public companies PPD, as well as private companies such as Mayasari Bakti, PT Bianglala Metropolitan, and others. JR Connexxion is operated by operators such as PPD, PT Sinar Jaya Megah Langgeng, and others. Operators running road-based public transport operations within the city and the province must have permission from the local transport agency. Meanwhile, operators operating inter-provincial road-based public transportation in Metropolitan Jakarta must have permission from BPTJ.

Related stakeholders: Transport Agency (for operators of public transport within the province/city/regency), Jakarta Transport Agency (for operators of public transport within Jakarta), DTK (for operators of public transport within Jakarta, Depok, or Bekasi), Transjakarta (for Transjakarta Operators), BPTJ (for operators of public transport across province boundaries in Metropolitan Jakarta)

On-Demand Public Transport Operator

The company or operator of on-demand public transport is responsible for procurement, operation, and maintenance of its on-demand transportation facilities based on the minimum service standards. On-demand public transportation in Jabodetabek includes taxis, two wheelers ride hailing, and others, and it is divided into online (ride-hailing) and offline (conventional) based. On-demand public transport is included in non-route public transport. Based on MoT regulation 117/2018 on non-route public transport, non-route public transport needs to obtain a permit from the Transport Agency for local public transport, and BPTJ for cross-provincial public transport in Metropolitan Jakarta. For online-based on-demand public transport (ride-hailing), companies that provide ride-hailing services, such as Gojek, Grab, Maxim, and others, are not categorised as transportation companies but as technology companies. Based on that, they do not need to have a public transport licence to operate and are not under the supervision of MoT but the Ministry of

Communication and Information Technology (MoCIT), except for setting minimum service standards and fare calculation formulas for ride-hailing services which will still be regulated by the MoT. However, ride-hailing using four-wheeled vehicles or cars (Go-car, Grab-car, and others) requires a special rental transport permit for each vehicle. The permits for that in Metropolitan Jakarta can be obtained from BPTJ because it is considered a cross-regional public transportation. Meanwhile, for ride-hailing using two-wheeled vehicles or motorbikes (Go-Ride, Grab-Ride, and others) no permit is required because it is not yet legally recognized as public transport. This is based on the Traffic and Road-based Transportation Law which states that two-wheeled vehicles or motorbikes cannot be used as public transport. Even so, ride-hailing by motorbikes can currently operate for the time being and the MoT has set service standards to guarantee the use of motorbikes as a ride-hailing mode, based on MoT Regulation No. 12 of 2019 concerning Safety Protection for Users of Motorbikes Used for the Benefit of the Community. Ride-hailing operator companies must have Standard Operating Procedures based on the minimum standards listed in the law and provide sanctions if driver-partners violate them. This was done under the supervision of the MoT.

Related Stakeholders: BPTJ (Cross-provincial on-demand public transport and ride-hailing using cars), Transport Agency (local on-demand public transport), Jakarta Transport Agency (for operators of on-demand public transport within Jakarta), DTK (on-demand public transport within Jakarta, Depok, or Bekasi)

3.2.2. Stakeholder Mapping Diagram

This section will summarise the relationship between each stakeholder through a mapping diagram. Each stakeholder will be differentiated by the colour code which corresponds to the form of the institution, e.g. National Government, Local Government, State Public Enterprise, Regional Public Enterprise, and private company. In addition to that, an arrow will be used to represent the relationship between stakeholders.

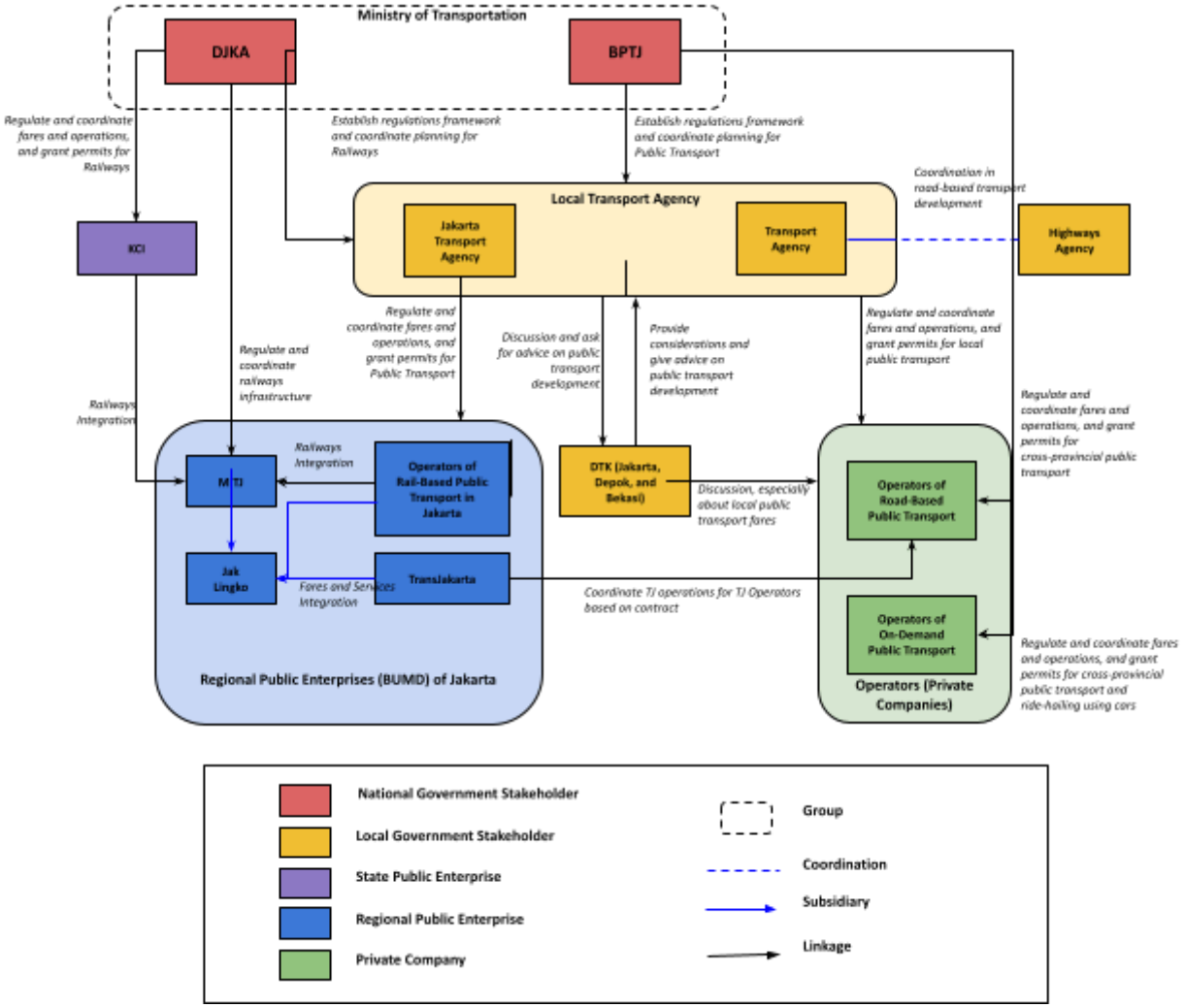

Figure 9 Stakeholder Mapping Diagram

3.3. Issues Due To Current Institutional Setup

This section will explain all the issues which had occurred as a result of the current institutional setup in Metropolitan Jakarta. It will be divided and further elaborated into three perspectives, that are physical, fare and payment, and operational problems.

This section will explain all the barriers currently present for integrating public transport's institutions in Metropolitan Jakarta. It will be reviewed both from a regulatory perspective and from an operational perspective

3.3.1. Physical Issues

3.3.1.1 *Transit Hubs Connectivity*

Transit hubs are the location where various public transport services meet one another. Physical connectivity and the presence of signage/wayfinding are a few aspects that need to be considered carefully when it comes to the transit hub. Insufficient provision of signage and wayfinding could be confusing for passengers as there are numerous public transport services available on the transit hub. This could lead to potential passengers abandoning public transports as they might not know the presence of services that could meet their travel demand. Considering this, Lebak Bulus area is one of the significant transit hubs in Metropolitan Jakarta that still shows these problems.

Figure 10 Poor Physical Connectivity in Lebak Bulus

In Figure 10 above, it shows poor connectivity between the exit gate of MRT Lebak Bulus Station and South Tangerang's Angkot. People from MRT station have no other option but to jaywalk to reach Angkot, which in rush hour they have to compromise their safety aspect as the traffic is very high. The Angkot is unable to approach the curb-side bus stop near MRT Station as this space is exclusively dedicated to Transjakarta services. As South Tangerang's Angkot is not under Transjakarta services yet, this poor connectivity is becoming a consequence that could be avoidable.

Figure 11 Lack of Wayfinding at Lebak Bulus

On the other hand, the lack of wayfinding on transit hubs also becomes a notable issue. Each public transport operator usually only provides information on their specific service. Once people exit the system, there is no information on the public transport available in the area. MRT Lebak Bulus station has decent physical connectivity with the Transjakarta Lebak Bulus station and yet the information on how to transfer to TJ is hard to be seen.

3.3.1.2 *Lack of High Quality Mass Transit Service*

High quality mass transit system could be one of the attractions for people to use public transport. Not only that, it also benefits city officials by enabling them to initiate a transport demand management policy to better manage the city. The terms of high quality mass transit mentioned are limited to the entire rail-based transport and the selected road-based transport, such as BRT and Non-BRT systems. Regular Bus, Angkot, and any other informal public transport modes are not counted as high quality services as these modes are often do not comply with the service level agreement set by their respective transit agencies.

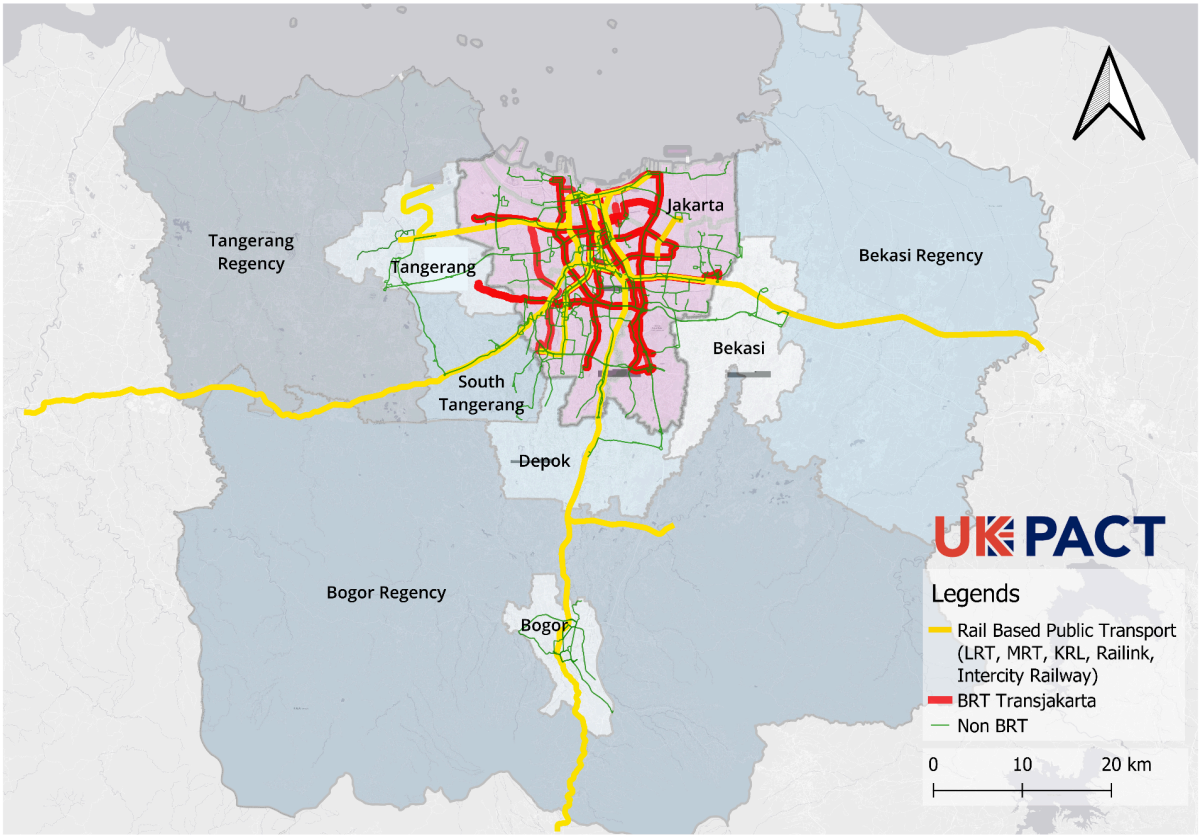

Figure 12 High Quality Mass Transit in Metropolitan Jakarta

Figure 12 indicates the distribution of high quality mass transit in Metropolitan Jakarta. It shows that the high quality mass transit development is still concentrated in Jakarta and only has a small part in other cities/regencies. Commuter Rail service which is under the national government is the only mode that can cover all the administrative areas within Metropolitan Jakarta while the other modes are typically serving one administrative area.

3.3.2. Fare and Payment Issues

3.3.2.1 *Fare Structures*

Fare cost and structure is essentially one of the basic information that should be well informed to the passengers. Jakarta already has a better sense to mitigate the problem, by providing the information physically on the station and in their digital media publication. This is true for public transport modes managed by the Jakarta regional-owned enterprises. However, there is still uncertainty on informal public transport, like Angkot and regular buses. Even though the fare is regulated by the regional government, yet the final fare is up to the driver and passengers could negotiate with the drivers if they think the fare is unacceptable.

DISHUB KOTA BOGOR

LAMPIRAN KEPUTUSAN WALI KOTA BOGOR

NOMOR : 551.2/KEP.280-DISHUB/2022

TANGGAL : 3 September 2022

TENTANG : TARIF ANGKUTAN UMUM JENIS PELAYANAN ANGKUTAN KOTA TIPE BUS KECIL KELAS EKONOMI DI WILAYAH KOTA BOGOR.

TARIF ANGKUTAN UMUM JENIS PEYANAN ANGKUTAN KOTA:

No.	Kode Trayek	LINTASAN TRAYEK	BESARNYA TARIF (Rp)	
			UMUM	PELAJAR
1	01 AP	Cipinang Gading – Perum. Yasmin	5.000	4.000
2	02 AP	Warung Nangka – Bogor Trade Mall	5.000	4.000
3	03 AP	Cimahpar – Bogor Trade Mall	5.000	4.000
4	05 AP	Ciheuleut – Bogor Trade Mall	5.000	4.000
5	07a AP	Ciparigi – Terminal Merdeka	5.000	4.000
6	08 AP	Taman Pajajaran – Bantar Kemang – Terminal Merdeka	5.000	4.000
7	09 AP	Baranangsiang Indah – Pasar Baru Bogor	5.000	4.000
8	13 AP	Mutiara Bogor Raya – Bogor Trade Mall	5.000	4.000
9	14 AP	Sukasari – Pasir Kuda – Terminal Bubulak	5.000	4.000
10	15 AP	Terminal Merdeka – Situ Gede	5.000	4.000
11	17 AP	Salabenda – Pasar Anyar	5.000	4.000
12	18 AP	Villa Mutiara – Pasar Anyar	5.000	4.000

dishub.kotabogor.go.id dishubkotabogor Dinas Perhubungan Kota Bogor

Figure 13 Bogor Fare Regulation (Source: Bogor Mayor Regulation No. 551.2/KEP.280-DISHUB/2022)

Sometimes the fare was deemed too low from the driver's perspective, so they decide not to follow the fare and apply their own fare to the passengers. Drivers could also adjust the fare if the passengers just take a short trip along the route because the regulated fare is mainly flat-fare.

3.3.2.2 *Limited Use of Smart Payment System*

Having multiple payment methods available for passengers is one of the approaches to increase the passenger's convenience on the public transport system. Currently, there are multiple payment systems available on public transports in Metropolitan Jakarta, such as conventional cash payment, smart payment system using an e-wallet platform, and electronic money card issued by Indonesian banks. Transjakarta and commuter rail service were the pioneers of the electronic payment system in Metropolitan Jakarta, by introducing the electronic money payment system in 2013 as an alternative to cash. By enabling smart payment, it can serve the passengers quicker, and make each transaction more trackable compared to using cash. The usage of smart payment systems has gradually increased since its first introduction as a result of operators' policy to only accept smart payment on their system.

Figure 14 Multiple Payment Options in MRT Jakarta (Source: MRT Jakarta)

However, when we look in a broader view, there are numerous public transports that could still only accept cash payment methods. Angkot and regular buses in Metropolitan Jakarta heavily rely on the cash payment method, as they are poorly managed by the public transport authorities. These two modes are unable to take advantage of the smart payment system because they are not operating with a firm contract with the public transport authorities, which leads to Angkot and regular bus operators being free to choose what is best for them with the minimum effort. This situation potentially becomes a hurdle for the passengers as they need to prepare the right amount of cash for every trip they need and be prepared if the driver does not give them enough change.

3.3.2.3 *Increasing Need for Subsidies*

Transport sector in general and especially in Metropolitan Jakarta undeniably needs subsidies to cover the cost of production, because the revenue stream is not sufficient to cover it yet. In Jakarta, the Jakarta Transport Agencies are giving subsidies in the form of Public Service Obligation (PSO) to the LRT Jakarta, MRT Jakarta, and Transjakarta to cover the production cost.

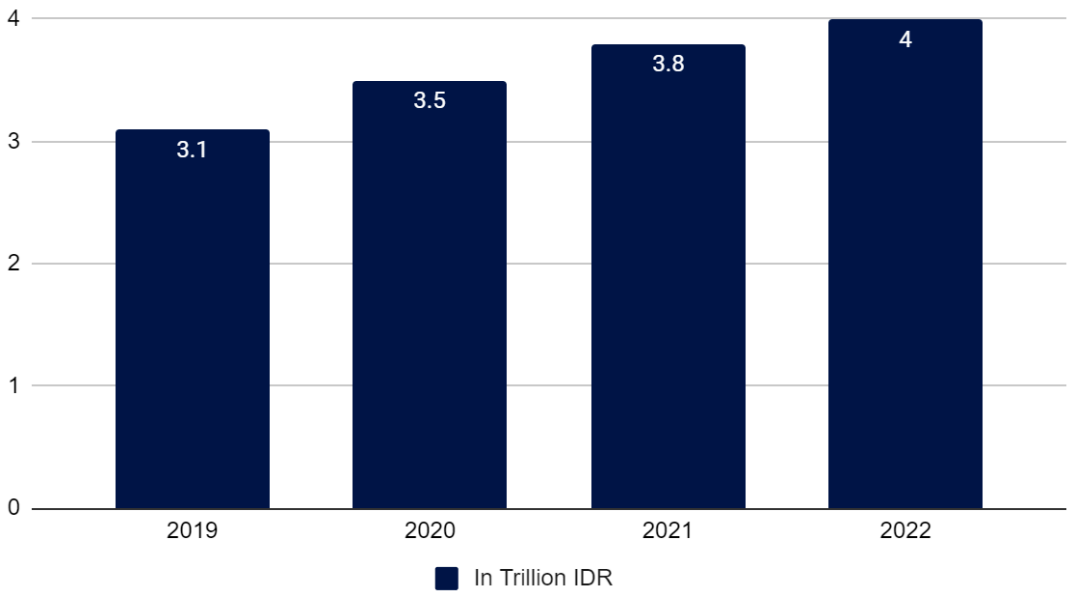

Figure 15 Jakarta Public Transport Subsidies

From the Figure 15 above, there is an increasing trend of subsidy throughout the past four years. This amount reached its peak point in the year of 2022, where it reached IDR 4 Trillion. Transjakarta took the biggest portion of it, by getting IDR 3.2 Trillion or 80% of the total subsidy and followed by MRT Jakarta and LRT Jakarta by getting IDR 600 Billion and IDR 200 Billion, respectively.

The Integrated Fare policy should look at increasing annual farebox revenue at least to cover increases in expenses and the institutional integration should look at reducing costs and improving efficiencies. If this fails to happen, the public transport might become not sustainable at some point, and this condition was not very ideal because not all the cities or regencies in Metropolitan have the discretion to provide the subsidy like what has been applied in Jakarta.

3.3.3. Operational Problems

3.3.3.1 *The disparity of Level-of-Service (LoS)*

Compared to other cities and regencies in Metropolitan Jakarta, Jakarta is the most advanced in providing high quality transit modes. Lebak Bulus area, which is located at the borderline adjacent to South Tangerang, still provides reliable public transport options like MRT Jakarta and BRT Transjakarta. In contrast, when we look at the public transport modes in South Tangerang, it only have informal public transport (Angkot and regular bus) and it is considered a low quality transit indicated by their level of services.

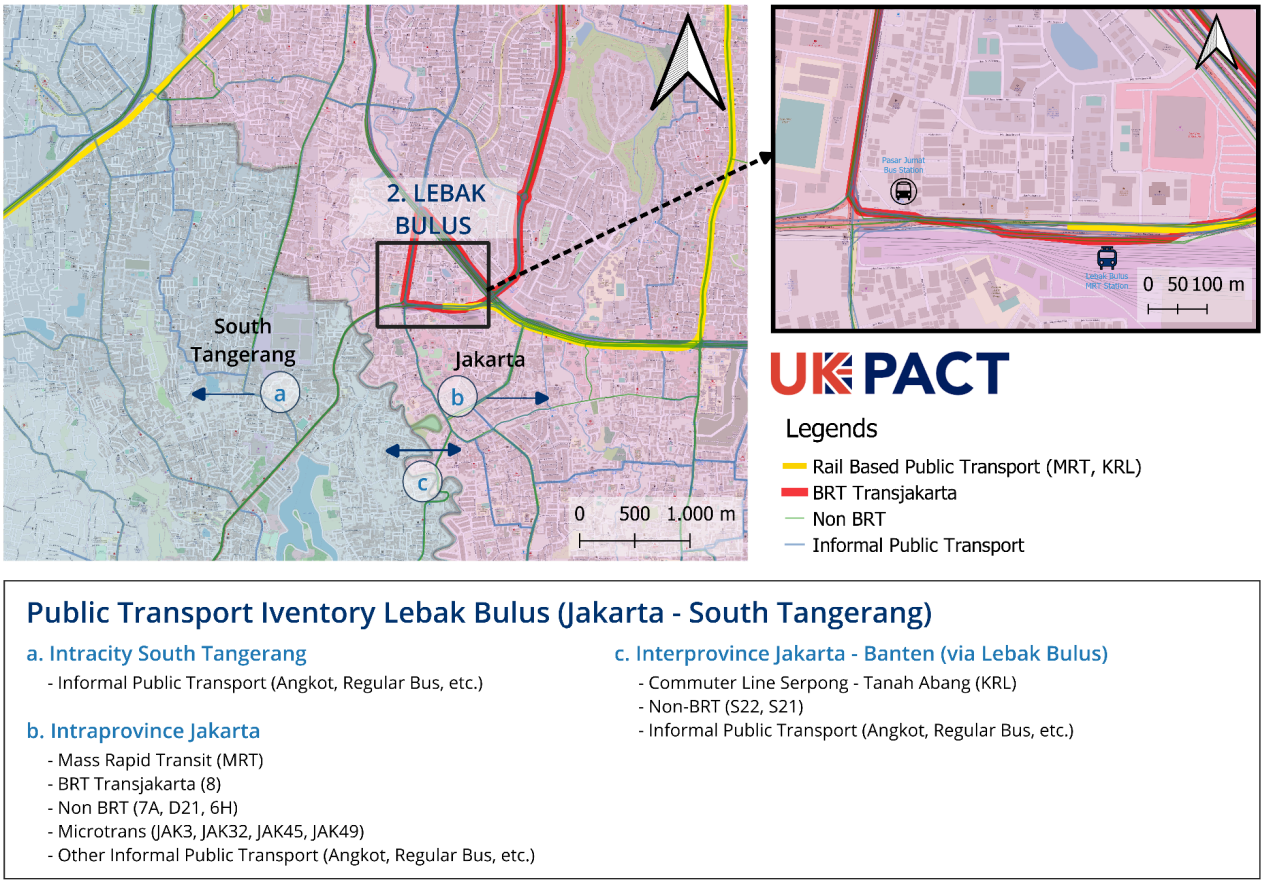

Figure 16 Public Transport Services on Border between Jakarta and South Tangerang

There is a significant difference in the level of service perceived by the passengers from Jakarta to South Tangerang. The punctuality, fare transparency, compliance with service level agreement, and onboard/station comfort level are some of the things that are incomparable. The experience from using the BRT Transjakarta and MRT Jakarta is supposed to be on the same level when transferring to other public transport heading to South Jakarta. It will create a seamless mobility experience for passengers as the modes available are operating with a slight deviation level of service.

Figure 17 Level of Service Disparity in Lebak Bulus: Public Transport in Jakarta (bottom) and South Tangerang (top) (Source: Kompas; Shutterstock; MRT Jakarta; Tempo)

4. Best Practices of Institutional Integration

This section reviews the degree of institutional integration of transit systems from other metropolitan areas across the globe. Some of these cities have managed to integrate the institutions that manage public transport in their metropolitan area, and this has arguably facilitated integrated fare systems, physical infrastructure, and planning.

The pattern of institutional organisation of transit varies between developing and developed countries, and between the car-oriented metropolitan areas of the West and the more transit-oriented cities of East Asia.

4.1. Evolution of Public Transport Institutions in Developing Countries

While the creation of large integrated urban transit authorities is frequently recommended by development banks and their consultants, based on their experiences in the developed world, such entities have rarely, if ever, been implemented in the developing world. It is possible that more may evolve in the coming years.

In the developing world, integration tends to work best when a single level of government manages a large part of the metropolitan area, though plenty of cities where different levels of government are active have managed to integrate their services effectively.

In the developing world, private, often informal bus and minibus operators began to operate often with little or no regulation. Eventually, most cities began to regulate these services either at the municipal, state, or national government departments of transportation. Usually this took the form of issuing route licences or franchises to private bus or minibus operators. There was a period of time in the 1960s and 1970s when a number of developing countries tried to launch public bus enterprises.

Starting in the 1960s a few of the wealthier cities like Mexico City, Sao Paulo and Seoul developed metro systems, usually operated by publicly-owned metro companies. Starting in the 1970s and 1980s, a few cities in Brazil such as Curitiba, built BRT systems instead. In the 2000s, a second wave of new BRT systems were developed all over the world, following on the success of Bogota's TransMilenio. The emergence of a new round of public authorities emerged at this time, linked to managing these BRT systems. These authorities were created as a way of avoiding municipal departments of transportation where there tended to be governance irregularities in the issuance of route permits, but also as a way of avoiding the problems of inefficiency associated with large public enterprises.

In this section, the journey from the selected developing countries will be documented to see the process, from the very beginning of formulation of the institution, until it reaches the current state. Three examples cities from the developing countries will be comprehensively explained, which are Bogota, Santiago, and Cape Town

4.1.1. Bogota, Colombia

In Bogota, the city that inspired Transjakarta, the Municipality is relatively wealthy compared to the surrounding municipalities, and it covers most but not all of the urbanised area. There are regular buses, informal buses, a BRT system, cable cars, a metro in the advanced stages of planning, and a commuter rail in the early stages of planning.

Background

Prior to the creation of the TransMilenio BRT system, public transit services in Bogota were provided by private bus enterprises who received route licences from the Municipal Department of Transportation. Those licences were then, in turn, leased to individual bus owners and their drivers. There was no significant route planning. If a bus enterprise requested a new route, the Department of Transportation would evaluate the route, approve or deny the request, and accept a fee for the licence. This way of operating had a lot of problems: First, private bus operators would overcrowd the main arterials during peak hours and compete aggressively for passengers, while less desirable routes went underserved. Second, the route structure was haphazard with a lot of redundancy. And finally, the Department of Transportation did not regulate the businesses other than setting the fare. As a result, the businesses were not very profitable and the buses were old and polluting.

Today's Management Entity

In 2000, as the BRT system was being constructed, the Municipality of Bogota created TransMilenio to plan and manage the operations of the BRT. TransMilenio is a public authority that reports to the Mayor of Bogota. It has a Board of Directors composed of different related branches of the Bogota government, and as of the 2nd Mockus Administration, the board also includes one civil society representative. The Mayor is the Chairman of the board and de facto, controls the organisation.

TransMilenio was created as a way to go around the Department of Transportation. The Department of Transportation (DOT) earned both licit and illicit revenue from the issuance of route licences, and as such became an obstacle to the implementation of the BRT system and its required service changes. The problem was deeply entrenched inside the institution and the replacement of the DOT leadership multiple times did not solve the problem.

Responsibilities

TransMilenio has a number of responsibilities which include:

- **Route planning**: Within the BRT system, TransMilenio proactively determines where demand is being unmet; where a route might need to be changed or shortened; or where a route is being overserved and makes changes to optimise the system.
- **Scheduling**: The operators under contract to TransMilenio (see below) are paid primarily based on the number of kilometres they operate. It is TransMilenio's responsibility to schedule these kilometres on a monthly basis, determining which operator should operate which service.
- **Contract management**: TransMilenio staff must manage the various contacts that it signed to operate the services. This includes activities such as:
    - **Monitoring kilometres operated:** As the operators are paid by the kilometre, TransMilenio must monitor how many kilometres of service each operator provided each day and pay them accordingly.
    - **Quality-of-Service Monitoring:** The TransMilenio contracts are designed to elicit a high quality of service from its operators. TransMilenio monitors all of the quality-of-service metrics for each operator and applies penalties and bonuses as specified in the contracts.
- **Planning for future phases**: As additional phases of service continue to roll out, it is TransMilenio's responsibility to plan for the future phases, both in terms of service and infrastructure. They also must prepare any new tenders, both for future phases as well as when it is time to re-tender an existing contract.

Service Providers

While TransMilenio is tasked with planning the system and monitoring the quality of operations, a number of contracted service providers carry out the key functions of operating the transit system. All were brought in via a tendering process.

Operators

At the start of BRT operations, the Mayor forced the Department of Transportation to cancel the route licences operated by individuals that overlapped with BRT Services, and BRT services were tendered to a few big private bus companies. The operating contracts were a form of gross cost contract (payment by the kilometre rather than by the passenger) that also had an element of profit sharing.

Rather than operate specified routes, the BRT operating companies are guaranteed a minimum number of kilometres and TransMilenio programs them. This gives TransMilenio more flexibility to change routes as demand shifts without requiring new negotiations.

Fare Collection/Station Management/Control Center

TransMilenio also tendered out operation of the fare collection system, management/maintenance of the BRT stations, and management of the control centre to separate companies. Tendering out of the fare collection system and operational controls

gave them the opportunity to bring in state-of-the-art fare collection and control centre equipment which would be operated by companies with specific expertise in that technology. Contracting out station management and maintenance also allowed TransMilenio to keep its own in-house staff small while getting the best price for this service.

Fund Management

TransMilenio also pioneered the concept of tendering for a "fund manager". A fund manager is responsible for depositing the revenues from the BRT system into a bank account and approving distribution of funds to the various contractors. The fund manager tends to be a bank. The idea to hire a fund manager allowed Bogota to reduce the risk of revenue seepage which is common in transit systems, especially where cash is handled.

Integration between BRT and Other Modes

Once TransMilenio built up the administrative capacity to plan and manage the BRT system, they were the obvious choice to manage the rest of the bus system, the cable car system, and also the metro system.

Buses

From 2001 when TransMilenio started, until 2012, the old system of route licences continued to operate on the non-BRT corridors under the Department of Transportation. In 2012 TransMilenio's mandate was expanded by the Mayor to include managing the contracts for the remainder of the bus system. It took control of most of the regular bus services in the city. It did this by tendering gross cost contracts within zones of control. These routes are sometimes redundant with TransMilenio routes, and the two networks of service have yet to be rationalised despite some preliminary efforts.

At this point, the role of the Department of Transportation in managing route licences de facto ended. Of the 12 zone-based contracts signed, 3 of them eventually failed and the operations in those zones reverted to informal operations using their former routes but their licences are in legal limbo.

The new contracts with regular bus routes also introduced a new electronic smart card ticketing system, and eliminated the use of cash within the system, though this ticketing system was separate from that of the BRT system.

Cable Car

In 2018, under the 2nd Penalosa Administration, TransMilenio also implemented and began managing TransMiCable, a cable car system serving poor communities on the hillsides around the municipality. It is operated by TransDev, a private international company.

Metro

In 2020 Bogota launched a new Metro system. The system had been planned for many years but moved towards implementation under the second Penalosa administration. Under his administration, the metro was made elevated, which reduced its construction cost, allowing more funding to expand the BRT system. The plan was to further expand the authority of TransMilenio to also manage metro operations. However, the project stalled under the Lopez administration due to financial problems related to the Covid-19 pandemic. With the election of President Petro, the project has been further delayed as Petro wants to reconsider the decision to make the metro elevated. At this time, it is not clear which entity will manage the Bogota Metro, or when it will be implemented.

Regional Integration

The TransMilenio system runs beyond the borders of the Municipality of Bogota into Soacha, a nearby municipality that is relatively low income. This extension was relatively unproblematic because initially TransMilenio was not subsidised, and Soacha wanted the service. Soacha still does not pay anything for the service and has no representation on the TransMilenio board of directors.

Ticketing System Integration

The system still faces challenges with integrating its ticketing system between the BRT system and the zone-based regular bus routes. Though both are now managed by TransMilenio, both the contracts with the operators and the technology being used for fare collection in each system are incompatible and both would need to be replaced to integrate the system.

4.1.2. Santiago de Chile

Background

Public transit in Santiago de Chile has been under the national Ministry of Transport and Telecommunications (MTT) since the 1950s.

Until the 1980s, there was a national municipal bus monopoly in Santiago, the *Empresa Nacional de Transportes Colectivos*, that had a fleet of over 800 municipal buses, and there were also thousands of individual owners operating with licences issued by the MTT. Fares and licences were tightly regulated. The result was a shortage of buses, old buses, and a quality of service that was quite low. In the 1980s under Pinochet, the bus industry was privatised and fully deregulated. The *Empresa Nacional de Transportes Colectivos* was abolished, and private bus operators were allowed to enter the market with minimal regulatory oversight. Fares were also set by the private bus operators rather than by the MTT. Hundreds of small private operators jumped into the market, so the supply of services went up significantly, the fares also went up by over 140% over a 5-year period. During this period the role of the MTT was scaled back.

In 2005, the Transantiago bus system was introduced, following on from the model created by Bogota for its TransMilenio system. It included a full redesign of the bus network and a modernisation of operations, tendering out routes to the private sector. Some elements of BRT infrastructure were also developed as part of the new system. In 2019, a new branding for the system was introduced, to include not only the bus system but also the metro and commuter rail systems. The full public transport system became known as Red Metropolitana de Movilidad.

Today's Management Entity

Starting in 2004 and implemented in 2006 and 2007, the role of the MTT in managing the public transit system in Santiago was radically altered. The MTT reasserted control over bus transportation in Santiago, dividing the entire bus market into different investment packages which were then tendered out to large private bus operators.

In 2013 the MTT spun off the regulation of public transport to a special department, known as the DTPM (Directorio Transporte Publico Metropolitano), to manage the public transit operations. It rests fully within the MTT but is an independent and more specialised public body. This allowed staff to remain focused entirely on the regulation of the metropolitan transit system rather than to get pulled off onto other MTT priorities. This change was instituted in 2012 by President Piniero. These changes required more specialised skills within the government and a staff fully focused on public transit regulation.

Responsibilities

DTPM has a number of responsibilities with regard to management of the bus system which include[1]:

- **Tender preparation and management:** DTPM prepares public tenders related to public transport operations, and manages the tendering process.
- **Planning for future phases**: While it is not DTPM's responsibility to develop the Master Plan for Public Transport – this is instead the responsibility of SECTRA, the national level department responsible for regional planning – DTDP does review, update, and confirm the Master Plan for Public Transport. DTPM must then conform to that plan. DTPM must also ensure the availability of budgets to conform to the urban transport plan.
- **Operational planning**: DTPM proactively determines where demand is being unmet; where a route might need to be changed or shortened; or where a route is being overserved and makes changes to optimise the system. The bus operators are also involved in this process: they can propose new routes or route changes to the DTPM which then has a period of time to make a determination.
- **Scheduling**: The operators under contract to DTPM (see below) are paid, in part, by the number of kilometres they operate. It is DTPM's responsibility to schedule these

[1] https://www.codatu.org/wp-content/uploads/Governance-LATAM-ENG.pdf

kilometres on a monthly basis and determine which operator should operate which service. In practice, for political reasons, the DTPM rarely changes the programming of service kilometres downward even if there is a loss of ridership.

- **Contract management**: DTPM staff must manage the various contacts that it signed to operate the services. This includes activities such as:
    - **Monitoring kilometres operated and revenue received and distributing payment:** As the operators are paid in part by the kilometre, DTPM must monitor how many kilometres of service each operator provided each day and pay them accordingly. The other part of the payment comes from the number of passengers carried. As all fares are paid electronically, DTPM must monitor the revenues and distribute them according to the number of passengers carried by each operator.
    - **Quality-of-Service Monitoring:** The DTPM contracts are designed to elicit a high quality of service from its operators. DTPM monitors all the quality-of-service metrics for each operator and applies penalties and bonuses as specified in the contracts.
    - **Enforcing fare evasion**: Monitoring and enforcing fare payment is the joint responsibility of the contracted bus operators and the government. DTPM therefore supplies fare inspectors, to supplement those supplied by the bus operators.

Service Providers

While MTT is tasked with planning the system and monitoring the quality of operations, a number of contracted service providers carry out the key functions of operating the bus system. All were brought in via a public tendering process.

Operators

The process of contracting bus operators was modelled on TransMilenio in Bogota, but it covered the entire city so that it was not limited only to the corridors with BRT-style investment. All operators that won a competitive tender were paid based on a formula linked to kilometres of operation and projected passengers carried. The route network was fundamentally altered.

From 2007 until 2011, the Transantiago system was losing a lot of money and passengers were sometimes left stranded at bus stops because the bus operating contracts did not expose the bus operators to any demand risk. In 2011 and 2012 the contracts with the Transantiago bus operators shifted more of the demand risk onto the bus operators, and various other elements of the contracts were changed, most notably the system of quality-of-service penalties changed, which required more specialised and ongoing monitoring by DTPM.

DTPM also holds a contract with the state-owned company, Empresa de Transporte de Pasajeros Metro S.A., which operates the metro system. The level of DTPM oversight of the metro company is quite minimal.

Unlike in TransMilenio, where TransMilenio hires third party contractors to run the control centre, in Santiago, each bus operator is responsible for managing its own operational control centre. This can result in some lack of operational coordination on trunk routes with services provided by multiple operators.

Fare Collection

The fare collection system for both the bus and metro system is operated by a private company under contract to DTPM. All revenue goes into accounts controlled by the DTPM and redistributed to the system's operators based on the terms of their operating contracts.

Integration between BRT and Other Modes

From a branding perspective, in 2019, all public transport modes came under a new name – Red Metropolitana de Movilidad. Fares are also integrated, as will be described in a later section. Additionally, the bus system, the metro, and the commuter rail are all under the oversight of DTPM.

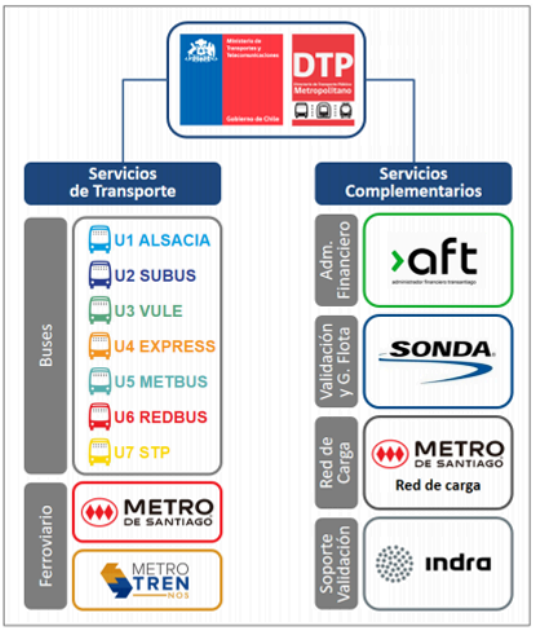

Figure 18 DTPM oversees Transantiago, Metro de Santiago, and MetroTren Nos (Source: DTPM)

Buses

Unlike TransMilenio which began by modernising only the bus operations on the BRT corridors, Transantiago reformed the entire Santiago bus system at once. As a result, all bus

routes were placed under the Transantiago structure – not only those routes on corridors with BRT-style investment. This means that full integration between the BRT and the bus system took place when the current structure was formed.

Metro

Santiago also has a metro system, known as Metro de Santiago. It was initially managed out of the National Department of Public Works but in the 1990s, the Metro was spun off and became a limited liability corporation owned by the Corporation for the Promotion of Production and the Department of the Treasury. As with the bus system, the Metro has an operating contract with DTPM, but contract oversight is minimal as they are both national government entities.

Integration between the BRT system and the metro system is limited mainly to fare integration (addressed in the fare integration section below).

Commuter Rail

MetroTren Nos, the commuter rail of metropolitan Santiago, was inaugurated in 2017. It is operated by a company known as TrenCentral. Like with metro, integration between MetroTren Nos and the bus system is also limited to fare integration as addressed below.

Regional Integration

The fact that all of the public transit services in Santiago are managed by a national government department means that jurisdictional boundaries have not caused any problems at the planning or operational level.

Regional public transport planning, as well as planning of public transport for other cities around Chile, is carried out by the Division of Planification of the Department (SECTRA). SECTRA is responsible for all master plans in the various regions around Chile. As a result, integration of public transport across the region is overseen by SECTRA. All urban transit services are under the jurisdiction of the DTPM.

Ticketing System Integration

Red Metropolitana de Movilidad employs an integrated ticketing system and smart card fare media, known as the Bip! system. There is additionally a contactless smart card option known as Multivia.

The fare system is applicable across the bus system, the metro and the commuter rail. Fares are integrated in that with a single fare payment, a passenger can transfer within or between modes for up to two hours or two transfers. However, given the higher cost of the metro and commuter rail than bus, if a passenger transfers from the bus to either the metro or commuter rail within

those two hours, the balance of the price between the bus and the metro/commuter rail will be charged. The increment is very modest.

4.1.3. Cape Town, South Africa

Background

Cape Town, South Africa, has three levels of government involved in the delivery of public transit services in the Western Cape: the City of Cape Town, Western Cape Province, and the national government. Most of the urbanised metropolitan area is under the jurisdiction of the City of Cape Town. Until 2010, public transit in Cape Town was provided by bus services provided by Golden Arrow bus company under contract to and subsidised by the Provincial Government. Informal minibus taxis that are nominally the regulatory responsibility of the Municipal Department of Transportation in practice are weakly regulated by the Western Cape Province. There is also an extensive commuter rail system in Cape Town. Commuter rail is the responsibility of PRASA, the Passenger Railway Authority of South Africa. PRASA has been a poorly managed national government institution, and the system has declined dramatically. Much of the infrastructure was looted during the Covid-19 pandemic, and many of the lines remain out of operation.

Starting in 2010, the Municipality of Cape Town began the MyCiTi Integrated Rapid Transit (IRT) System. The Provincial Government of the Western Cape had been promising to develop a BRT system on the Klipfontein corridor between Khayalitscha, Mitchell's Plain and the city centre for many years, but the project never progressed. With the coming of the World Cup, the Municipality of Cape Town took the initiative, supported by the National Government Department of Transportation. The IRT system, Phase 1, was a BRT system which ran up the West Coast to Atlantis Township, and a formalised bus system for downtown Cape Town.

Today's Management Entity

Until recently, the MyCiTi BRT system was run by Transport for Cape Town (TCT), which is theoretically modelled on Transport for London, but is in fact a municipal government department. The same department was recently renamed The Urban Mobility Transport Directorate ("Directorate") but has not changed much functionally. As a municipal government department, salaries are lower than they would have been for a municipal public enterprise, so staff turnover has been high and retaining skilled staff is difficult. The department directly contracts private operators composed of former minibus taxi associations and the Golden Arrow Bus company.

Responsibilities

The Directorate's responsibilities extend beyond management of the bus system and include[2]:

- **Transport planning:** Overall transport planning

[2] https://www.tct.gov.za/en/about-us/the-transport-directorate/

- **Investment management:** Managing budgets and revenue streams
- **Network operations management:** Management of the efficiency of the transport network, including management of the public transport control centre
- **Contracting:** Management of contracts with bus operating companies, including monitoring of quality-of-service metrics.
- **Transport enforcement:** Enforcement of the laws of traffic and public transport
- **Urban planning:** Planning for transit-oriented development
- **Communications:** Stakeholder outreach
- **Human settlements:** Provision of affordable housing
- **Infrastructure management:** Management and maintenance of road and public transport infrastructure

Service Providers

While the Directorate is tasked with planning the system and monitoring the quality of operations, a number of contracted service providers carry out the key functions of operating the public bus system.

Operators

Before the start of BRT operations, a number of minibus taxi associations, as well as formal bus companies, were already operating along the BRT corridors. As part of the reforms, it was decided to sign contracts with modern bus companies whose shareholders were made up of the existing operators on those same corridors. A declaration that “no one would be worse off than before” was made and a very long negotiation process took place. Ultimately, three bus operating companies were formed and signed contracts with the city to operate in three distinct areas of the planned service.

The operating contracts were a form of gross cost contract (payment primarily by the kilometre but with some payments linked to demand and others fixed payments linked to capital goods expenditures). They also include a list of quality-of-service elements, all of which are monitored by the Directorate, in exchange for penalties and bonuses each month.

Fare Collection/Station Management

The City of Cape Town also tendered out operation of the fare collection system, and management/maintenance of the BRT stations. The fare collection system tender was won by a bank and has been successful. An important innovation in the myConnect system in Cape Town is that the money stored on the smart card is held in an account controlled by the City of Cape Town and not by the bank, which allows it to be used for public purposes rather than accruing interest for the bank. Tendering out of the fare collection system gave them the opportunity to bring in state-of-the-art fare collection.

Station management and maintenance are also contracted out.

Fund Management

Because the fare collection system is directly managed by a bank, the fund management role is handled by the same bank that controls the fare collection system.

Integration between BRT and Other Modes

Though the Directorate is tasked with a variety of functions in the transport sector, it is currently only responsible for the MyCiTi system, which is made up of a combination of BRT and formalised bus services.

Buses

As the management of transit services by the City of Cape Town has been much superior to the regulation of the minibus taxi industry by the Western Cape, there have been calls to devolve the management and regulation of the minibus taxi industry and the regular bus system (Golden Arrow buses) from the Western Cape Province to the City of Cape Town. The Golden Arrow bus services are subsidised by the Western Cape Province, so to take over their regulation would require the willingness of the Western Cape Province to devolve management of the subsidy funding down to the municipal level. The regulation of the minibus taxis by the Provincial government is currently weak. There is a national fund for taxi recapitalization managed by the provincial government. Devolving these functions to the City of Cape Town is a good idea but requires the agreement of the national and provincial governments, and as such this has not yet happened.

Metro

There is no metro system operating in Cape Town.

Commuter rail

As the management of transit services by the City of Cape Town has been much superior to the management of the commuter rail line by PRASA, there have also been calls to devolve responsibility for the management of the commuter rail system from Western Cape Province down to the Municipality. Due to the large financial problems at PRASA, the City of Cape Town cannot easily take over this service without the financial support of the national government.

Regional Integration

The Cape Town city limits tend to encompass most of the built-up area within the metropolitan area. No major urban agglomerations in the Cape Town metropolitan area lie beyond the city's boundaries. While regional rail services and longer distance Golden Arrow bus services are anyway under the national government and the provincial government, there would be no significant

jurisdictional issues if the rail and longer distance bus services were devolved down to the Municipality of Cape Town. This is not true in Johannesburg where the metropolitan area extends significantly beyond the administrative boundaries of the City of Johannesburg; a fact which has made the national government hesitant to devolve more urban transit down to the municipal level of government as a general principle.

Fare Integration

Thus far, the smart card ticketing system being used by MyCiTi is only usable inside the IRT system managed by the City of Cape Town. The rail system has its own ticketing system, and the minibus taxis remain cash only, though this may change in coming years.

4.2. Evolution of Public Transport Institutions in the Developed World

In the developed world, it is more common for a single public authority to have administrative control not only over buses, metros, light rail and commuter rail, but also sometimes over traffic management, taxi regulation, bicycle and pedestrian infrastructure, congestion charging schemes, and other activities. Some of these administrative bodies were created by regional or state levels of government. Some directly operate these transit services in house and others contract them out to private contractors under public service contracts.

In the United States, most public transit systems are run by public transit authorities. These authorities manage to operate between different municipalities usually because they are created by the state government and have a board of directors which represents the different municipalities served by the system. State governments tend to control funds received from the federal government in the United States. Municipal governments in the US tend to be poorer than state governments due to the suburbanization of the upper income populations and hence the tax base.

The level of municipal influence over the transit authority varies significantly by metro area, with the Chicago CTA dominated by the City of Chicago; Los Angeles having a powerful influence over the LAMTA; New York City, Boston, and Baltimore, dominated by state governments. Washington DC is a complicated transit authority because its powers are shared between the State of Maryland, the State of Virginia, the City of Washington DC government, and the Federal Government.

Many metropolitan areas in the United States have services operated by more than one transit authority. In California, the duplication of transit agencies is particularly problematic, and consolidation is frequently discussed. In San Francisco, the BART metro system is operated by one transit authority, and the buses, trolley, and light rail systems are all operated by the San Francisco Municipal Transit Agency (SFMTA). San Francisco County also has a separate planning body, SFCTA, which has some planning and regulatory control over county-wide transit. In Chicago, CTA is

controlled by the City of Chicago and runs the metro and city buses, but regional rail is run by METRA, a state agency. In Washington DC, WMATA, is a regional transit authority that runs the DC Metro and many of the regional bus services, but various county governments run their own complementary bus services. Commuter rail is run by state agencies. In New York City, all subway, bus, and commuter rail services operating within New York City and part of Connecticut are run by the MTA; subway and bus services running between New York City and New Jersey are run by the Port Authority of New York and New Jersey; commuter rail between New York and New Jersey is run by New Jersey Transit; and many of the surrounding counties, such as Westchester County, Nassau County, etc., also run bus services that operate within the county to some point on the border.

These inter-modal transportation agencies did not get created from scratch. Rather, they were generally created initially as planning and oversight bodies for private operations. Over time, usually because private investors were unwilling to raise the capital necessary for major transit works, or because the original private investors became financially insolvent, the state role gradually increased, moving into direct operations. In the European Union, Australia, and Singapore, the state's role clearly shifted towards public sector regulation and management of private sector companies that provide public transit services under increasingly sophisticated public service contracts. In the US, the trend towards contracting out of public transit services was initiated in the Reagan Administration, but it never materialised.

4.2.1. New York City, The United States of America

Background

New York City's public transportation system evolved over almost 200 years. Until the 1830s, all collective transport in New York City was managed by a large number of competing private horse-drawn stagecoach companies. Starting in the mid-1830s, horse-drawn omnibuses on rail tracks were introduced between lower Manhattan and Harlem. They operated in mixed traffic, but the tracks made it much easier for horses to pull larger vehicles through the muddy streets, and the ride was much smoother for passengers. These were converted to steam locomotives in the 1850s which belched black smoke and had terrible environmental impacts on the surrounding neighbourhoods. Starting in the 1850s, numerous plans from private companies for elevated railways built over New York City streets were proposed but none of them came to full fruition until the 1870s. A few began construction, operating cable-drawn trains, and they were granted concessions by the city, but this technology proved impractical.

In 1875, for the first time, the New York City government stepped in. The Mayor created the New York City Rapid Transit Commission, a board of experts appointed by the Mayor who were charged with selecting routes for elevated trains, and if necessary to commission companies to construct and operate the services. The commission defined four routes, up 3rd and 4th avenue, and up 6th and 9th Avenues, one for each major company interested in investing in these lines. In case the private concession holders didn't move forward with their investments, which was probable given

the ongoing financial panics in the 1870s, the commission created its own company, the Manhattan Elevated Company, whose shares were bought by the two companies that already held concessions. At this point, the elevated railway companies attracted a lot of venture capital, including the “robber barons” Jay Gould and Russell Sage. By 1879, the elevated lines were built for steam locomotive operation. By 1886, the monopoly capitalist Jay Gould had seized control of the shares of the New York Elevated Company and the Manhattan Elevated Company, giving him monopoly control of the entire mass transit system in New York City. On city streets, the horse-drawn omnibuses were replaced in some areas with cable cars like in San Francisco. They ran over the Brooklyn Bridge and up the Bowery and expanded to other streets.

In 1889, there was growing resentment of monopoly capitalists, and New York City created a Board of Rapid Transit Railroad Commissioners which was intended to offer subway concessions. They also directly commissioned the construction and operation of subways, but it did not happen until much later.

While Gould initially raised the fare from USD 0.05 to USD 0.10 once he established the monopoly, political pressure eventually convinced them to reduce the fare back to USD 0.05. The elevated lines continued to operate into the early 20th Century. By 1903, the Manhattan Elevated Company had been acquired by another robber baron, August Belmonte, who founded the Interborough Rapid Transit Company (IRT). New York City concessioned the rights to build subways starting in 1900, and the first concession was won by another August Belmonte company. The first subway line was the IRT that ran under 9th Avenue. A second company, the BMT (Brooklyn Manhattan Transit Company) built a second line. The concessions granted by the New York Railroad Commission capped the fare at USD 0.05 for 40 years, and by the early 1900s this was no longer sufficient to attract private investment for system expansion, so new subway lines after that were constructed with capital from New York City and operated by the IRT and BMT.

In 1907 the role of the Rapid Transit Railroad Board was replaced by the New York State-run Public Service Commission which regulated the private subway concessions. Subways gradually began to replace the elevated railways as they were less polluting and had other advantages. The BMT also expanded its streetcar network in Brooklyn and Queens, and introduced bus services for the first time.

In the 1920s, New York City created its own New York City Board of Transportation (NYC BOT) that was under the Mayor. The State Board of Transportation continued to regulate the private operators (IRT and BMT), while the NYC BOT initiated the construction of a city-financed subway line (the IND) but only a short section was finished. Throughout the Great Depression (1933 - 1940) little progress was made expanding the system.

In the 1930s, several private bus companies began operating in Manhattan (Comprehensive Omnibus Corporation and East Side Omnibus Corporation). These services survived on the same USD 0.05 fare until 1948.

In 1940, the BOT took over control of the BMT and IRT which were in financial trouble, so the entire system was brought under a single municipally-controlled operator. The BOT also took over the BMT streetcar and bus lines. It shut down the remaining elevated railway lines. The BOT then took over the omnibus corporations in 1947 and 1948, at which point it controlled almost all public transportation in New York City. They introduced free transfers within the system and maintained the USD 0.05 fare until 1948 when it was increased to USD 0.10.

In the early 1950s, the BOT began losing money for the first time, at a time when New York City was losing its revenue base due to suburbanization, and there were increasing complaints about political interference into the operation of the BOT. In 1953, the New York State Legislature created the New York City Transit Authority which took over for the BOT and the BOT was abolished. Its Board included appointees of both the Governor and the Mayor but was dominated by the Governor. The structure of the authority was based on the Port Authority of New York and New Jersey and the Triboro Bridge and Tunnel Authority (TBTA). After removing the setting of fares from the influence of city politics, the new public authority increased the fare to USD 0.15 and stabilised its finances.

Today's Management Entity

By the mid-1960s, with a major fiscal crisis in New York City and continued suburbanization, the rolling stock of the subway system was ageing and the commuter railways owned by the Pennsylvania Railroad were facing disinvestment due to the loss of profitability. The TBTA, which financed the construction and maintenance of the bridges and tunnels, was running a surplus. Governor Rockefeller took control of the commuter railways, and with the support of Mayor Linsey, created a new Metropolitan Transit Authority (MTA). The MTA put the NYCTA, the commuter railways, and the TBTA all under one roof. This allowed the surpluses of the TBTA to be used to cover part of the deficits of the NYCTA and the commuter rail lines. The Board of Directors expanded to include the counties outside of New York City that the commuter rail lines passed through.

The MTA faced significant financial problems again in the 1980s. To rescue the system, a large package of New York State government dedicated tax revenues were earmarked to support the MTAs finances. Most of the money to subsidise operations comes from specialised state taxes like the Petroleum Business Tax, various real estate registration taxes, and a ¼ cent additional sales tax. New York City only pays a small portion of the operating subsidy which is required to match one of the state government sources of operating funds. Since then, ridership first stabilised and then began increasing until the Covid-19 pandemic.

The MTA and its predecessors did not emerge in a vacuum. The MTA grew out of the BOT which took over existing private companies and the regulatory powers of the Public Service Commission. These in turn grew out of the Rapid Transit Railway Commission which started in the 1870s. Institutional capacity was built up over more than 150 years.

Responsibilities

The MTA is responsible for the management and operations of the New York City subway system, the New York City bus system, the Long Island Rail Road, the Metro-North Railroad, and several of New York City's bridges and tunnels. All drivers and maintenance staff are direct employees of the MTA. The MTA is also responsible for managing construction on MTA properties, though it is typically contracted out.

Traffic, bus lanes, bus shelters, and the CitiBike bike sharing system are controlled by the New York City Department of Transportation, and the regulation of taxis and car services is controlled by the Taxi and Limousine Commission of the City of New York.

Service Providers

Operators

The MTA does not contract out any of its bus operations (except paratransit services for the disabled) and as such, all transit services within New York City are operated directly by the MTA.

Fare Collection

The MTA has recently implemented a new contactless fare medium, known as the One Metro New York (OMNY). This was done via a contract with a fare collection company called Cubic. Cubic was responsible for the design, integration, supply, implementation, and ongoing customer support for the OMNY system.

Integration with Other Modes

Buses

The MTA manages all bus services within the limits of New York City, under its MTA Regional Bus Operations division. It does so under a brand, fare structure, and fare collection technology with the rest of the system.

Subways

The MTA manages all subway services within the limits of New York City, under MTA's affiliate agency New York City Transit Authority. It does so under a common brand, fare structure, and fare collection technology with the rest of the system.

Commuter Rail

The MTA manages commuter rail services between New York City and points north within New York State and Connecticut, under its division, Metro-North Railroad. The MTA also

manages commuter rail services between New York City and Long Island, under its subsidiary, Long Island Railroad.

Regional Integration

While the Metro-North Railroad and the Long Island Railroad cross beyond New York City boundaries into other municipalities and even into Connecticut, no MTA bus or subway services travel beyond city lines. Nor do any services – rail or bus – travel into New Jersey. Two separate agencies manage rail and bus travel between New York City and New Jersey: New Jersey Transit and the Port Authority of New York and New Jersey. Additional bus operators, usually operated by separate municipalities or counties beyond the New York City limits, operate bus services between New York City suburbs and New York City. This tends to result in forced transfers at the City's borders, particularly in Long Island and Westchester County.

Between this multitude of transit operators, very little official integration has taken place. There is no common brand between services. There are several transit terminals in New York City which house these various services. The MTA farecard, known as the MetroCard, is usable on one service between New York and New Jersey – the PATH Train – but there is no fare integration: passengers must pay a separate fare to the Port Authority to ride the PATH. It is anticipated that the OMNY system will be rolled out on the PATH Train, the Metro-North, and the Long Island Railroad, as well as on the Bee Line bus services which travel between New York City and Westchester, but it has not been implemented yet. No fare integration is planned for these services.

Fare Integration

Across the MTA's bus and subway services, fares can be paid using a MetroCard or with a new contactless fare payment, the OMNY. A single fare allows passengers to travel throughout the bus and subway system with unlimited transfers for up to two hours. As mentioned above, beyond the MTA bus and subway services, only the PATH Train accepts the MetroCard and soon the OMNY system. No other service provider accepts the MTA's fare media, nor is there any transfer discount between the MTA services and any other services.

4.3. Summary

Table 3 Summary of Institutional Integration Best Practices

Institutions Responsible for Urban Transport Services						
City	**Metro Rail**	**BRT**	**Regular Bus**	**LRT/Trolley /Tram**	**Commuter Rail**	**Integrated Smart Card**
Developing Countries						
Bogota, Colombia	TransMilenio	TransMilenio	TransMilenio	None	None	None
Santiago de Chile	Metro Company	Natl Dept (DTPM)	Natl Dept (DTPM)	None	None	Metro Company

Institutions Responsible for Urban Transport Services						
City	**Metro Rail**	**BRT**	**Regular Bus**	**LRT/Trolley /Tram**	**Commuter Rail**	**Integrated Smart Card**
Cape Town, South Africa	None	City Dept	Province Dept	None	PRASA	None
Jakarta, Indonesia	MRT Jakarta	Transjakarta	Transjakarta	LRT	KCI	Jaklingko
Developed Country						
New York City	MTA	None	MTA	None	MTA	MTA

Administered by **Municipal** Government
Administered by **Provincial** Government
Administered by **National** Government

When the administration of public transit is looked at across a large number of cities, certain patterns emerge. It is rare for cities in developing countries to have all public transit systems managed by a single government agency or department. In the table above, the systems discussed have been listed, together with the government agency or department responsible for the mode, and the level of government responsible for the mode. Santiago has all modes managed by a single government entity. Santiago's transit is also all managed by the national DTPM. Although the Metro company reports to DTPM, it is largely autonomous. Both cities have managed to introduce integrated ticketing systems and reasonable planning coordination.

Otherwise, most developing country cities have multiple public authorities or government departments responsible for managing different transit modes. Often this is because when a new system is introduced, governments often do not want to put the new system under the control of an entrenched bureaucracy with a poor track record of competence and non-transparent governance, and may be facing financial problems. They may not want the new system to be compromised by an institutional leadership geared towards a different mode with different interests. A metro or LRT company, for instance, may not prioritise a BRT system if it is focused on the huge financial and managerial needs of a metro or LRT system. A department of transport managing small private bus operators may try to block a new BRT because it threatens the revenue they receive from route licences.

Despite lacking a fully integrated transit authority, many developing country cities have managed to integrate their ticketing systems and provide good physical integration of their systems. Even when all transit systems are under the same municipal government, the lack of administrative integration has impeded the introduction of integrated fares. Bogota controls most transit in its metropolitan area, yet they have not managed to fully integrate the fare systems. The main obstacles tend to be **poorly negotiated operating contracts with private sector contractors that foreclose or make very expensive integration options.** These problems can be avoided by carefully negotiating operating contracts with key system players.

In the developed world, on the other hand, it is quite common for all transit in a metropolitan area to be under a single transit authority or government entity. In the US this is most commonly under a transit authority created by a state-level government, with a Board of Directors that includes representation of multiple municipalities in the greater metropolitan area. This is true for most of the transit agencies in the United States on the East Coast (SEPTA in Philadelphia, MTA in Baltimore, MTA in New York City, Boston's MBTA, etc). In US cities, where the cities generally lack the tax base for supporting transit investments and subsidies, if the transit authority is under the municipal government, it is likely that some element of the regional transit system has not been integrated. Chicago's CTA does not include the commuter railway METRA, and San Francisco's MTA does not include the BART subway system.

Another factor to consider is when a government creates a separate public authority to manage one or more transit modes. Governments usually create public authorities in order to manage a public service on a more commercial basis and with less interference from politics. Often this is driven by problems of corruption in municipal government. These public authorities are often able to retain control of fare revenue raised without it disappearing into the overall municipal budget, allowing fare and other revenue to back bonds sold on the bond markets that can accelerate investment into critical infrastructure. Another key factor is that public authorities are often, though not always, able to pay higher salaries if they are exempt from civil service rules and other encumbrances that apply to municipal or state government employees.

In the US, the municipal governments of the late 19th and early 20th Century were controlled by political machines that used government jobs to distribute patronage more than to deliver quality public service. Many public authorities grew out of "commissions". The main purpose of which was to ensure that some critical public services were managed properly by taking control away from corrupt municipal governments. In other cases, they emerged because municipal governments were facing a financial crisis, and in order to secure the financial support of state governments new institutions needed to be created that were primarily under state control.

South Africa opted to have municipal departments of transport contract out BRT services to private companies without creating a public authority. These authorities had a bad reputation under the apartheid regime and are viewed with suspicion by the ANC. As a result, these government departments are more subject to political interference, there have been problems of corruption, and they have a hard time retaining qualified staff.

ANNEX A. Institution Transportation Matrix in Metropolitan Jakarta

Notes:

- Colour coding indicates that more than 1 regulations are applied to the relevant institutions in regard to their authority in transportation integration
- The color coding will correspond to the same color of the designated regulation.

Institution		DJKA (Directorate General of Railways, MoT)	KCI	MITJ	Jakpro/LRT Jakarta	KAI/LRT Jabodebek
Legal Basis		Ministry of Transportation Regulation ("Permenhub") No. PM 6 of 2017	Presidential Instruction No. 5 of 2008 and Decree of the Minister of SOEs No. S-653/MBU/2008 Ministry of SOE Decree No. S-653/MBU/2008 of 2008 *(Notes: indicated in KCI webpage, but consultant does not have access to the regulation)*	DKI Jakarta Governor Regulation No. 136 of 2019	DKI Jakarta Governor Regulation No. 154 of 2017 as amended by DKI Jakarta Governor Regulation No. 45 of 2020	Presidential Regulation No. 98 of 2015 Presidential Regulation No. 65 of 2016 Presidential Regulation No. 49 of 2017
Authority	**Plan**	-	KCI as a subsidiary of KAI is authorized to serve commuter rail transportation services using KRL facilities in Jabodetabek, as well as	The DKI Jakarta Provincial Government assigns PT MRT Jakarta to cooperate with PT KAI in forming a Business Entity, namely MITJ, to integrate Public	The Governor of DKI Jakarta assigned Jakpro to organize LRT in Jakarta which includes the implementation of infrastructure, facilities, and integrating LRT	"The government assigned PT Adhi Karya (Persero) Tbk, to build an integrated LRT infrastructure which includes: a. track, including elevated track construction;

Institution		DJKA (Directorate General of Railways, MoT)	KCI	MITJ	Jakpro/LRT Jakarta	KAI/LRT Jabodebek
			non-passenger transportation businesses.	Railways in the Jabodetabek area.	infrastructure built with LRT facilities so that they can function optimally. Including integrating Jakarta LRT services with Jabodebek LRT and other mass public transportation in Jakarta.	b. stations; c. operation facilities; d. depot."
				Cooperation between PT MRT and PT KAI, which is intended to form a new business entity, PT MITJ.	In carrying out certain tasks so that LRT Infrastructure and Facilities can be operated, a subsidiary company was formed, namely LRT Jakarta.	In the implementation of integrated Light Rail Transit infrastructure development, PT Adhi Karya (Persero) Tbk. may cooperate with other business entities.
					Assets in the form of LRT infrastructure belong to PT Jakarta Propertindo during the construction period of the LRT Infrastructure.	
	Implement	-	-	"Integration of Public Railways includes: a. the implementation of Public Railways infrastructure and facilities in accordance with the	Jakpro is given the authority to manage the TOD area including being able to develop and manage, among others, shopping centers/malls	"The government assigns KAI to: a. organize facilities which include: procurement of facilities, operation of facilities, maintenance of

Institution		DJKA (Directorate General of Railways, MoT)	KCI	MITJ	Jakpro/LRT Jakarta	KAI/LRT Jabodebek
				provisions of laws and regulations; b. provision of supporting systems for the implementation of Public Railways including integration systems with other modes of transportation; and c. exploitation and development of Transit Oriented Areas."	and other commercial buildings including underground locations, advertising and retail, by cooperating commercially with other business entities and other businesses which in detail will be regulated in a separate agreement or contract with prior approval from the Governor.	facilities, and exploitation of facilities; b. organize the automatic fare collection system; and c. organize the operation and maintenance of infrastructure." In the event that payment for the construction of infrastructure built by PT Adhi Karya (Persero) Tbk. is made through PT Kereta Api Indonesia (Persero), the Government assigns to PT Kereta Api Indonesia (Persero) which includes, organizing the operation of infrastructure, maintenance of infrastructure, and exploitation of infrastructure including funding the construction of integrated Light Rail Transit infrastructure.

Institution		DJKA (Directorate General of Railways, MoT)	KCI	MITJ	Jakpro/LRT Jakarta	KAI/LRT Jabodebek
	Monitor & Evaluate	"Engineering Center: a. Preparing materials for improving railway infrastructure b. Preparing materials for supervising the implementation of railway infrastructure and facilities c. Preparing materials for supervision of railroad traffic safety d. Preparing materials for monitoring the feasibility of infrastructure and facilities"	-	Supervision and control are carried out by BPBUMD and DKI Jakarta Transportation Agency DKI Jakarta Transportation	"Supervision and control is carried out through: a. on-site supervision; b. consultation c. coordination d. monitoring and evaluation, and e. reports."	In order to carry out the assignment of PT Adhi Karya (Persero) Tbk, the Minister of Transportation formed an Oversight Committee consisting of elements of ministries / institutions and professionals.
		"Testing Center (Balai Pengujian): a. Carrying out the testing of railway facilities and infrastructure b. Carrying out the testing of train crews and officers"		"Supervision and control is carried out through: a. on-site supervision; b. consultation c. coordination d. monitoring and evaluation, and e. reports."		

Institution		DJKA (Directorate General of Railways, MoT)	KCI	MITJ	Jakpro/LRT Jakarta	KAI/LRT Jabodebek
		"Maintenance Center: a. Carrying out maintenance of state-owned railway facilities and infrastructure b. carrying out quality control of state railroad facilities c. preparing employment, finance, legal, and public relations affairs d. evaluating the maintenance activities of state-owned railways."				
Supervision		-	The Ministry of Transportation	BPBUMD and DKI Jakarta Transportation Agency	DKI Jakarta Transportation Agency	The Ministry of Transportation

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
Legal Basis		DKI Jakarta Governor Regulation No. 53 of 2017	Presidential Regulation No. 103 of 2015	DKI Jakarta Regional Regulation No. 5 of 2014	DKI Jakarta Governor Regulation No. 63 of 2020	DKI Jakarta Regional Regulation No. 4 of 2014
				DKI Jakarta Regional Regulation No. 10 of 2014	DKI Jakarta Regional Regulation DKI Jakarta No. 68 of 2021	DKI Jakarta Regional Regulation No. 10 of 2014
				DKI Jakarta Governor Regulation No. 53 of 2017		
				DKI Jakarta Governor Regulation No. 154 of 2017 as amended by DKI Jakarta Governor Regulation No. 45 of 2020		
Authority	Plan	The DKI Jakarta Provincial Government assigned PT MRT Jakarta to provide MRT infrastructure and facilities.	coordination and synchronization of the preparation of plans in the development and improvement of integrated transportation services in the Jabodetabek area.	The Regional Government prepares a Transportation Master Plan that is integrated with the spatial plan and integrated intermodal transportation.	The planning, management and/or development of the Jak Lingko System is based on the Jakarta Transportation Master Plan.	Planning for the construction and/or development of BRT System Infrastructure refers to the Transportation Master Plan (Rencana Induk Transportasi).
			coordination and synchronization of budget planning needs for the development and improvement of	The Transportation Master Plan is a reference document for plans to build and/or develop the Transportation system for		Construction and / or development of BRT System Infrastructure is carried out by the Regional Work Unit.

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
			integrated transportation services in the Jabodetabek area.	a period of 20 (twenty) years.		
			technical facilitation, financing, and/or management in order to improve the provision of public transportation services.	"The Transportation Master Plan sets targets: a. 60% (sixty percent) of population trips using Public Motor Vehicle facilities and an average speed of the Road network of 35 (thirty-five) km/h for Road Transportation; and b. safe, comfortable, and affordable for Railway Transportation, Water Transportation, and Air Transportation."		Preparation of development planning and/or Infrastructure development must be carried out after prior coordination with the Regional Work Unit or Transjakarta (Satuan Kerja Perangkat Daerah).
				Local governments establish programs and/or work plans for the prevention of traffic accidents that are		

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
				implemented in a coordinated manner.		
	Implement	"Infrastructure (Development): a. tracks; b. stations; c. operating facilities; and d. other supporting facilities."	technical facilitation, financing, and/or management in order to develop and improve facilities and infrastructure supporting the provision of urban public transportation services.	"The Regional Government builds and provides: a. intermodal integration infrastructure and facilities; b. integrated operational systems including travel schedules and ticketing systems."	integration of Transportation infrastructure and facilities.	operating a BRT system business.
		"Infrastructure (Operation): a. railroad system; b. bridge/overpass system; c. tunnel system d. station system e. signaling equipment system f. telecommunication equipment system;	technical facilitation, financing, and or management in the context of implementing traffic demand management in the Greater Jakarta area.	The implementation of Road Transportation in direct service activities to the community is carried out by the Regional Government, legal entities, and / or the community.	integration of Transportation operational systems.	operate and maintain the BRT System infrastructure.

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
		g. electrical installation system h. ticketing system; and i. other supporting systems/facilities."				
		"Infrastructure (Maintenance): a. periodic maintenance; and b. repair to restore its function."	implementation of other activities determined by the Minister of Transportation.	Parking is a means of controlling traffic, the development of which is fully authorized by the Regional Government and its management can cooperate with third parties and / or building owners.	Bundling Tariff (penetapan Paket Tarif). Supervision and control are carried out by BPBUMD and DKI Jakarta Transportation Agency DKI Jakarta Transportation "Monitoring and evaluation of the Jak Lingko System includes: a. fulfillment of technical, administrative, and operational requirements of facilities; b. achievement of the number of users of transportation services c. the number of trip frequencies achieved;	manage and utilize the infrastructure and facilities of the BRT system whose operation and maintenance are carried out by Transjakarta, as well as other Transjakarta assets to generate non-ticket revenue.
		"Infrastructure (Operation): a. revenue from ticket sales (farebox); b. revenue from other than ticket sales (non-farebox); and c. fulfillment of tax obligations. "		"The Local Government provides safe and comfortable Pedestrian facilities on every road section. in accordance with the provisions of laws and regulations."		organize and supervise the provision and operation of the Fleet.
		"Facilities (Procurement): a. carts; and		Conducting motor vehicle testing		managing integration services of public buses

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
		b. special equipment."			d. the number and condition of infrastructure and facilities e. load factor on cross-service transportation services; f. revenue reports and realization of transport operating costs; g. cross service of transport services; h. cross distance and kilometer achievement of Jak Lingko System transport service operations; and i. assessment of service standards."	and other modes of transportation into the BRT system.
		"Facilities (Operation): Operation of MRT Facilities must fulfill the feasibility of operating the Facilities in accordance with the provisions of laws and regulations."		The Local Government implements Traffic management and engineering to optimize the use of the Road network and Traffic movement in order to ensure the security, safety, order, and smoothness of Road Traffic and Transportation.		manage and control the Ticket System.
		"Facilities (Maintenance): a. periodic maintenance; and b. repair to restore its function."		Coaching in the field of Road Traffic and Transportation is carried out by the DKI Jakarta Transportation Agency.		build and operate a Refueling Station business to support the operation of the BRT System.
		"Facilities (Concession): a. revenue from ticket sales (farebox); and b. revenue from other than MRT train ticket sales (non-farebox)."		Planning, construction, and operation plans for Roads and Road complementary buildings carried out by SKPD whose duties and functions are in		development and business management of BRT system assets operated and maintained by Transjakarta, such as bus stops.

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
				the field of public works must coordinate and implement the plan. carried out by the SKPD whose duties and functions are in the field of public works must coordinate and obtain technical recommendations from the DKI Jakarta Transportation Agency.		
		PT MRT owns assets in the form of MRT Infrastructure during the construction period.		The paid Road Traffic control system is implemented by the DKI Jakarta Transportation Agency and can cooperate with Regional-Owned Enterprises.		development and property and/or business management of Transjakarta's asset.
		PT MRT Jakarta is also given the right to manage the PT MRT Jakarta TOD area to be developed and managed, including shopping centers / malls		Determination of the number of public transport is carried out by the Head of the DKI Jakarta Transportation Agency.		utilization, operation and maintenance of BRT System Facilities.

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
		and other commercial buildings including underground locations, advertising and retail, by cooperating commercially with other business entities, as well as other exploitation which in detail will be regulated in a separate agreement or contract with prior approval of the Governor.				
		PT MRT Jakarta can cooperate with other business entities and also establish subsidiaries in connection with the construction, operation, maintenance and / or operation of rail-based mass public transportation systems in accordance with statutory provisions.		Requirements for the operation of public freight transport must obtain a recommendation/approval from the Head of the DKI Jakarta Transportation Agency.		operation and maintenance of bus stops, and gas stations (Stasiun Pengisian Bahan Bakar (Stasiun Pengisian Bahan Bakar /SPBB).
				Every entrepreneur of transportation of people with public motorized vehicles not on a route is required to have a a Road Transport operation		development, operation and maintenance of the Support Management System.

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
				permit from the Head of the DKI Jakarta Transportation Agency.		
	Monitor & Evaluate	"Supervision and control is carried out through: a. on-site supervision; b. consultation c. coordination d. monitoring and evaluation, and e. reports."	preparation of implementation plans, planning of budget requirements, and implementation of transportation activity programs in the Jabodetabek RIT that are not included in the general plan and transportation activity program plan.	Guidance on the implementation of Transportation is the duty of the Head of the DKI Jakarta Transportation Agency.	Supervision and control are carried out by BPBUMD and DKI Jakarta Transportation Agency DKI Jakarta Transportation	
			preparation of proposals for regulations and policies in relation to the implementation of integrated transportation in the Jabodetabek area	Guidance on the implementation of Transportation, including: a. provide technical guidelines; b. guidance and counseling to the organizers of transportation infrastructure and facilities and the community;	"Monitoring and evaluation of the Jak Lingko System includes: a. fulfillment of technical, administrative, and operational requirements of facilities; b. achievement of the number of users of transportation services	

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
				c. guidance on technical planning; d. empowering the community in the field of Transportation; and e. technical guidance on the implementation of transportation infrastructure and facilities, traffic, and transportation	c. the number of trip frequencies achieved; d. the number and condition of infrastructure and facilities e. load factor on cross-service transportation services; f. revenue reports and realization of transport operating costs; g. cross service of transport services; h. cross distance and kilometer achievement of Jak Lingko System transport service operations; and i. assessment of service standards."	
			providing recommendations for mass transit-oriented spatial planning.	The DKI Jakarta Government is responsible for: a. setting policies and conducting law enforcement; b. determining the public transportation routes that are not part of the BRT System that intersect and/or overlap with the BRT System Service Network;		

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
				c. organizing traffic management with BRT System priority; and d. establishing regional development policies that are oriented towards transit access (transit-oriented development).		
			licensing of public transportation that crosses provincial boundaries in the Jabodetabek area, and providing recommendations for feeder services.	Supervision of the implementation of MRT Infrastructure and Facilities is carried out by the DKI Jakarta Transportation Agency.		
			monitoring, evaluation, and reporting on the implementation of general plans and programs for integrated transportation development and services in the Jabodetabek area.	Supervision of the implementation of Infrastructure and Facilities is carried out by the DKI Jakarta Transportation Agency.		

Institution		MRT	BOTJ	Provincial Government/Jakarta Transportation Agency (City/Regency)	Jaklingko	Transjakarta
			correcting and sanctioning violations of the Jabodetabek RIT committed by agencies, operators, and other parties.			
Supervision		DKI Jakarta Provincial Government	The Ministry of Transportation	-	BPBUMD and DKI Jakarta Transportation Agency	Provincial Government of DKI Jakarta (as a shareholder)

UK PACT

UK PACT

HYPERLINK "http://www.ukpact.co.uk/" www.ukpact.co.uk

For any enquiries, please get in touch via email at
communications@ukpact.co.uk