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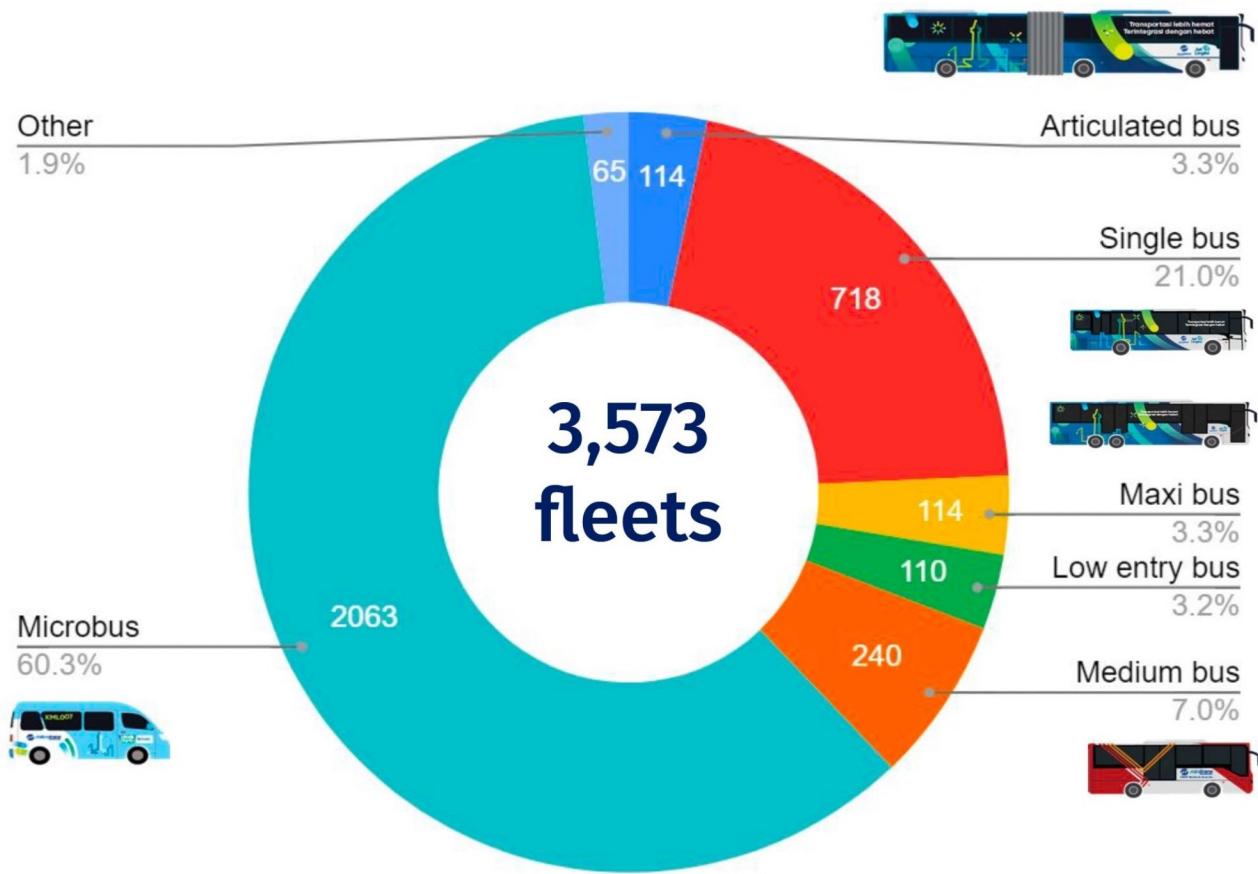
How Jakarta integrated informal microbuses into the public transportation network

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Jakarta's metropolitan area includes the Indonesian capital, Jakarta, as well as five smaller satellite cities and three administrative districts. It is home to 32 million people and connected by the Transjakarta public transport system, which incorporates a recently formalised microbus service called *Mikrotrans*. Recognising the role informal microbus (paratransit) operators could play in strengthening Transjakarta's service, the integration of microbuses – *angkots* – into the city's formal public transport network formed a key part of a long-term reform programme that aims to reduce the city's substantial transport sector emissions, address congestion and air pollution, and expand transit coverage and ridership.¹

The reform programme has supported upgrades to microbus vehicles to improve safety, comfort and access, and to make these services more attractive. It has introduced an integrated fare system across all modes of transport including bus rapid transit (BRT), mass rapid transit (MRT), light rail transit (LRT) and Mikrotrans, allowing easier and cheaper multimodal trips. An effort to electrify bus and microbus fleets is also ongoing – follow the links to read about the e-bus transition from [Acting Secretary of the Jakarta Capital City Government](#), the roll out of [Jakarta's zero emission bus charging system](#), and the [electric microbus pilot](#) that began in 2022. Jakarta is aiming to have a fully electric bus fleet by 2030 across all fleet types, including microbuses.²

Formalisation of paratransit into Transjakarta's system has been a great success, offering English lessons for other cities with large informal transit sectors. It has enabled the city to rapidly double formal public transport coverage, from 42% in 2017 to 82% in 2022, and to increase daily ridership from 300,000 to over a million passengers in the same period.³ The Mikrotrans service now makes up over 60% of Transjakarta's network coverage.



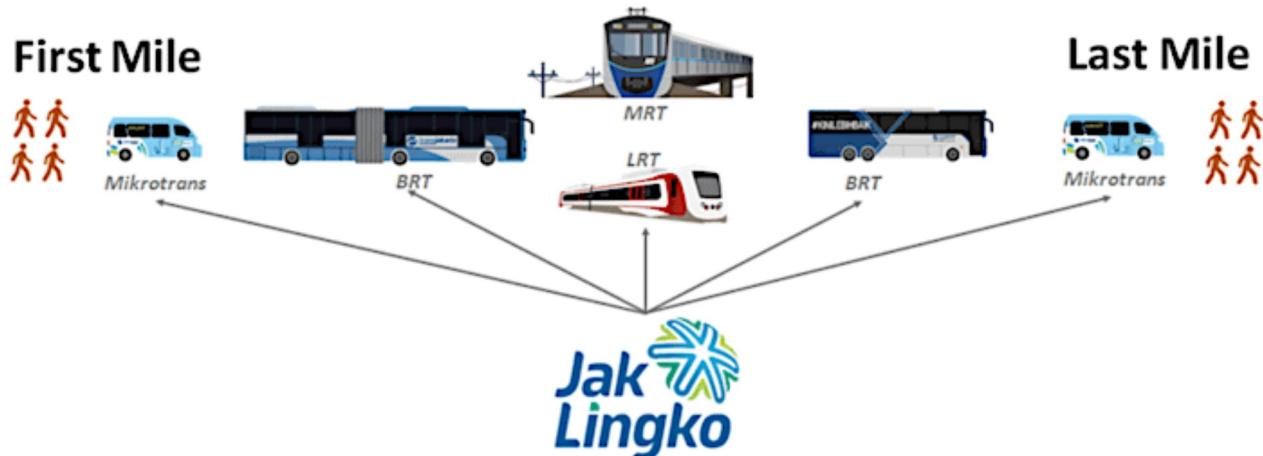
Fleets in the Transjakarta service, as at November 2019. Source: ITDP (2022) [Developing an e-bus roadmap to scale: Jakarta's study on Mikrotrans electrification](#).

What can cities learn from Jakarta's experience?

Take a phased, incremental and long-term approach to integrate learnings as you scale up. Jakarta started with a 10-month pilot programme in 2017, Ok-Otrip, which incrementally integrated part of the city's *angkot* network with the Transjakarta bus network. It began with only two operators covering five routes and managing 76 fleets; by the end of 2017 this had grown to four operators managing 21 routes and 497 fleets. The pilot used a one-ticket-one-trip system, enabling passengers to make trips using *angkots* and/or Transjakarta buses with an integrated, single-fare ticket system (IDR 5,000 or USD 0.3) within a travel time of three hours.

The pilot programme was so successful that, by the end of 2018, *angkot* operators were reaching out to the city to express interest in becoming part of the new scheme, having seen the benefits. The Ok-Otrip pilot was rebranded JakLingko and expanded to provide integrated transport under a unified fare across all

public transit modes, including microbuses.

 English


First-mile, last-mile transportation system mechanisms. Source: Buscardini Communications (2019) Transjakarta project presented in Brussels: Impressive transformation of the public transport in Jakarta.

Engage and collaborate with stakeholders from an early stage. The successful rollout of Jakarta's public transport reform programme, including the integration of microbuses into Transjakarta, hinged on convening regional leaders, paratransit operators, transit agencies, and city government representatives around the table in ongoing consultations and discussions.

The city started by working with existing operators and engaging in intensive discussions, recognising the role operators could play in strengthening Transjakarta's intermodality and expanding coverage. In collaboration with operators, the city ran comparative studies, established a business plan and monitoring and evaluation metrics, and determined routes and standards that participating operators must abide by.⁴ The city also conducted polling and facilitated dialogue on a just transition between the Governor of Jakarta and local transport unions.

Just as critically, province-wide public transportation reform had the support of former Governor Anies Baswedan, who made it a priority during his tenure.^{5, 6}

Jakarta restructured its operating model from independent operators to cooperatives. This restructuring aimed to transition from a system of numerous individual operators running separate routes to a cooperative model, whereby operating companies oversaw multiple individual route drivers. This management structure ensured that operators adhered to a predetermined operating plan, ensuring route access and specific timetables for users.

The switch to cooperatives also created representative structures within the paratransit sector, thereby facilitating better coordination with the city's transportation efforts, and helped to foster collaboration and trust between the city and operators, with the city offering additional guidance to operators, such as how to create sustainable business models. Microbus public transport cooperatives were also encouraged to participate in transport bidding processes initiated by Transjakarta. A key example was the grouping of



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Establish legally binding contracts with microbus operators. Such contracts have important benefits for both the microbus operators and the transport authority, and ultimately result in a better service for customers. It helps to enable fixed microbus service schedules and improved service reliability, for example.

Microbus operators entering into a contract with DKI Jakarta province gain a guaranteed monthly income determined by the number of kilometres travelled rather than revenue based on the number of passengers they pick up.

They are required to comply with certain standard operating procedures and minimum service standards to raise safety, comfort and access standards, enforced through fines or income deductions in cases of non-compliance.⁷ These include a 200km daily cap on the distance driven by operators to minimise excessively long working hours and reduce the risk of traffic accidents. GPS, CCTV and air conditioning requirements on new microbuses improve the passenger experience and enable the monitoring of driver behaviour in real time. Monitoring and evaluation processes have also been introduced, with Transjakarta responsible for enforcing the contract terms and ensuring that Mikrotrans vehicles are maintained to high standards.

Contracts can help to secure financing for vehicle renewal. The government-backed contracts that guarantee a fixed income to drivers have proved to be an important de-risking instrument, enabling microbus operators to secure loans to finance the acquisition of new Mikrotrans vehicles from national banks. The contracts provide confidence that operators will not default on their repayments.



English

Develop inter-modal infrastructure and fare systems that encourage the uptake of microbuses services. Mikrotrans stops are physically, operationally, and financially integrated with the infrastructure of other transport modes, enabling passengers to easily transfer between them. The integration process involved the introduction of a cashless and integrated ticketing solution, removing the friction of different payment mechanisms and multiple payment points across different modes of transport. Passengers can use the JakLingko card to pay on all modes, including Mikrotrans, with a fixed fare for a multimodal trip of up to three hours. A trip paid using a JakLingko card is cheaper than the single MRT or LRT tariff, providing a financial incentive to use the service.

Transjakarta and the provincial government of Jakarta are also implementing other measures to incentivise the use of public transportation, including microbuses. For example, new ‘park and drive’ sites in the vicinity of key peripheral BRT stations encourage people to leave their cars behind and use public transportation to get into the city centre. Travel demand management measures are also in place to reduce car usage, such as the ‘odd-even traffic policy’ (whereby cars can only enter the city on odd or even calendar days depending on their vehicle registration plate).

Prioritise and communicate inclusivity to encourage use of public transportation. To shape public opinion and garner local support the city promoted the improvement, expansion and electrification of public transport, positioning the reform programme as an economic, social, public health and climate solution, with additional inclusivity initiatives including subsidised fares for disadvantaged groups, such as lower-income individuals, public servants, the elderly, and those with disabilities.

The Transjakarta brand was heavily advertised via social media, with a public competition launched to involve the public in the design of the JakLingko logo and help to create a sense of ownership among residents. Public engagement efforts included game-based learning events during Car Free Sundays, the use of outdoor billboards, and city-led campaigns designed to raise awareness about public transport and reach a substantial audience; roadside billboards were estimated to generate over 3 million impressions per month. The city also sought to raise the profile of mass transit and public transport among decision-makers and influential people, with transport ministers, activists and mayors featuring in a CNN documentary, advocating for public transport investments.⁸

For more about Jakarta’s integrated public transport system also read *Lessons learned from Jakarta’s journey to integrated and resilient transport systems*, published by the Institute for Transportation & Development Policy (ITDP), the City of Jakarta and the Transformative Urban Mobility Initiative (TUMI) in 2021.



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