





Embracing Informal Transport: A New Paradigm for Urban Mobility

Transforming Challenges into Opportunities with Practical Tools and Strategies

Fatima Arroyo-Arroyo Brendan Finn Philip van Ryneveld





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Transforming Challenges into Opportunities with Practical Tools and Strategies

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List of Specialized Terms

| Boda-boda | Motorcycle-taxi in East Africa |
|---|---|
| Branch | A division of an IPT association, mostly in Freetown |
| Hybrid approach | A 'hybrid' approach to IPT focuses on complementarity between scheduled services and unscheduled minibus operations; IPT is seen as an integral part of a public transport system, and may for example provide feeder services to trunk services in a BRT system. |
| Informal Public Transport (IPT) | The term is used loosely, without an agreed-upon, exact definition. IPT appears in many forms, most typically as smaller, individually owned vehicles, with low-paid drivers working on a daily rental basis, and operations organized through unions or associations. Informal does not mean illegal. |
| Loading chart | A numbered list of drivers that determine the order in which vehicles queue in a stage at a taxi park to fill their vehicles with passengers (usually determined the previous evening in a lottery. |
| Poda-poda | Bus-based IPT in Freetown |
| SACCO (Savings and Credit Cooperatives) | A SACCO is a financial cooperative owned and managed by its members; it is a non-profit and enables members to save money and access loans. |
| Target system | The 'target' system refers to a daily rental approach, whereby a driver rents a vehicle from an owner and pays a fixed daily return, keeping profits after costs. |
| Taxi park | A taxi rank |
| Taxi stage | In Freetown, a taxi-stage is a taxi "rank" on the street (on-street parking). In Kampala, the stage is the most important structure in the organization of the sector. Each stage serves a specific route (corridor) to/from one of the major city center taxi parks. Minibus-taxi stages are grouped in taxi parks. Every stage has a leadership (typically elected among drivers, and highly hierarchical), security staff (also known as defense), welfare staff, and a liaison officer (also known as a mobilizer, in charge of contact and meetings with stage workers). |
| Taxi station | A taxi "rank off the main streets |

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Mustapha BENMAAMAR SSATP Program Manager

FOREWORD

Embracing and enhancing the Informal Public Transport (IPT) sector is at the center of the SSATP Fourth Development Plan strategy (SSATP-DP4). This SSATP technical report assesses the IPT sector reforms in 14 African cities, highlighting successes and challenges. The report identifies a set of reform levers, including regulation, organization, vehicle financing, operations and maintenance, and supporting infrastructure and systems. It stresses the importance of a collaborative and phased approach to IPT reforms, with strong leadership and capacity building at its core.

The report findings show that reform strategies that build on the advantages of IPT—such as demand-responsiveness and operational flexibility—are more effective and sustainable than those aiming to replace IPT entirely with formal structures. Today IPT is absent or negligible in the urban mobility policies of most African cities. The paradigm shift for which this report advocates calls for IPT to take the central position in these urban transport policies, which also need to propose a clear purpose and outcomes for the IPT sector. This clarity will guide necessary reforms and framework changes, including regulatory, institutional, and operational adjustments, and determine the required investments and support.

List of Abbreviations and Acronyms

| AFCS | Automated Fare Collection System |
|-------------|--|
| AFTU | Urban Transport Funding Association (Association de financement des professionnels du transport urbain de Dakar) |
| AMCO | Metropolitan Agency in Pereira, Colombia |
| AMM | Maputo Metropolitan Area |
| AMT | Maputo Metropolitan Transport Agency (Agência Metropolitana de Transporte de Maputo) |
| ATGWU | Amalgamated Transport and General Workers Union (Uganda) |
| ATROMAP | Associação dos Transportadores Rodoviários de Maputo |
| ATT | Land Transport Agency Madagascar |
| BNDE | National Economic Development Bank (Senegal) |
| ВОТОА | Bus and Taxi Owners Association of Zambia |
| BPTU | Bureau Professionnel des Transports Urbains (Antananarivo) |
| BRT | Bus Rapid Transit |
| c. | Circa (approximately) |
| Captrans | Support Centre for Transport Professionalization (Dakar) |
| CBD | Central Business District |
| CCRDT | Crédit Conseil pour le Redressement et le Développement des Transports (Antananarivo) |
| ССТ | City of Cape Town |
| CETUD | Conseil Exécutif des Transport Urbains de Dakar (Senegal) |
| CFA | Communauté Financière Africaine (African Financial Community) |
| CUA | Commune Urbaine d'Antananarivo (Antananarivo |
| DGSR | Direction Générale de la Sécurité Routière (General Directorate of Road Safety) (Antananarivo) |
| DoT | Department of Transport |
| EIG | Economic Interest Group (Senegal) (GIEs in French) |
| FCC | Freetown City Council |
| FDTU | Urban Transport Development Fund |
| FEMATRO | Federação Moçambicana dos Transportadores Rodoviários (Mozambique) |
| FERWACOTAMO | Rwanda Federation of Taxi-Moto Drivers |
| FMA | Fitaterana mirindra ho an'Antananarivo |
| FPE | The Fund for Economic Promotion |
| FTAR | Fikambanan'ny taxi eto Antananarivo Renivohitra (Association des taximen de la capitale) (a Union of Urban Transport Cooperative, Antananarivo) |
| FTC | Fundo de Desenvolvimento dos Transportes e Comunicações (National Transport Fund) (Mozambique) |
| GABS | Golden Arrow Bus Services (Cape Town) |
| GAPTE | Greater Accra Passenger Transport Executive (Accra) |
| GIE | Groupements d'Intérêt Economique (see EIG, above) (Dakar) |
| GKMA | Greater Kampala Metropolitan Area |
| GPRTU | Largest IPT union in Ghana |
| GRTCC | Ghana Road Transport Coordination Council |
| IPT | Informal Public Transport |
| IRUMP | Sierra Leone Integrated and Resilient Urban Mobility Project |
| IT | Information Technology |
| ITS | Intelligent Transport Systems |
| KAMBE | Boda-boda association in Uganda |
| | |

| KCCA | Kampala Capital City Authority |
|-------------|---|
| KOTSA | Kampala Operational Taxi Stages Association |
| LaMATA | Lagos Metropolitan Area Transport Authority (Nigeria) |
| LCC | Lusaka City Council |
| LoS | Level of Service |
| LRT | Light Rail Transit |
| MASLOC | Microfinance and Small Loans Centre (Ghana) |
| MHID | Ministry of Housing and Infrastructural Development (Zambia) |
| MINIFRA | Ministry of Infrastructure Rwanda |
| MITTD | Ministry for Infrastructure and Transport (Senegal) |
| MoTA | Ministry of Transport and Aviation (Sierra Leone) |
| MoTC | Ministry of Transport and Communications (Lusaka) |
| MoWT | Ministry of Works and Transport (Kampala) |
| MRT | Mass Rapid Transit |
| NaMATA | Nairobi Metropolitan Area Transport Authority |
| NAPSA | National Pension Scheme Authority (Zambia) |
| NCP | National Commission for Privatization (Sierra Leone) |
| NMS | Nairobi Metropolitan Services NMT |
| NRFA | National Road Fund Agency (Lusaka) |
| NRFA | National Road Fund Agency (Zambia) |
| PAMU | Urban Mobility Improvement Program (Antananarivo, |
| PAMU | Programme d'Amélioration de la Mobilité Urbaine (Antananarivo) |
| PPDA | Public and Private Drivers Association of Zambia |
| PPTMPC | Public Passenger Transport Multipurpose Cooperative (Zambia) |
| PRASA | Passenger Rail Agency of South Africa |
| PRE | Provincial Regulatory Entity (South Africa) |
| PSV | Public Service Vehicle |
| PT | Public Transport Public Transport |
| QBS | Quality Bus Service |
| QR (code) | Quick Response (code) |
| RDA | Road Development Agency (Lusaka) |
| RFTC | Rwanda Federation of Transport Cooperatives |
| RTD | Rwanda Transport Development Agency |
| RTSA | Road Transport and Safety Agency (Lusaka) |
| RURA | Rwandan Utilities Regulatory Authority |
| SACCOs | Savings and Credit Cooperatives (Kenya) |
| SANTACO | South African National Taxi Council |
| SLPTA | Sierra Leone Public Transport Authority |
| SLRSA | Sierra Leone Road Safety Authority |
| SLRTC | Sierra Leone Road Transport Corporation |
| SSA | Sub-Saharan Africa |
| SSA(TP) | Sub-Saharan Africa Transport Program |
| SYSTRAMORWA | Syndicate of Taxi-Motos of Rwanda |
| TOCs | Taxi Operating Companies (Cape Town) |
| UCTS | Union of Suburban Transport Cooperatives Fanavoazana (Antananarivo) |
| UCTU | Union of Urban Transport Cooperatives (Antananarivo) |
| UTODA | Uganda Taxi Operators and Drivers Association |
| UTOF | Union of Transport Development Agency |
| UTRADA | Uganda Transport Development Agency Vehicle Operating Companies (Cape Town) |
| VOCs | Vehicle Operating Companies (Cape Town) |



01

Executive Summary

The report advocates for a paradigm shift that positions the Informal Public Transport (IPT) sector as a central component of urban transport policy and planning, recognizing its potential to meet the growing mobility needs of rapidly expanding Sub-Saharan African cities. The report also develops five categories of reform levers, and provides practical examples for each of these categories. The toolkit and report are designed for local and state actors, private-sector operators, and urban transport practitioners involved in the IPT sector, particularly in Sub-Saharan African cities. The report aims to guide these stakeholders in integrating IPT into urban transport frameworks, building capacity for engaging in public transport reforms, and making informed decisions about regulatory and operational changes. It emphasizes the importance of sustained trust and communication between the government and the IPT sector, encouraging a collaborative approach to improving urban transport quality and accessibility.

Understanding Informal Public Transport (IPT)

Informal Public Transport (IPT), often also called paratransit, is a term that covers an extremely wide range of mobility services. The term is used loosely, without an agreed-upon, exact definition. IPT appears in many forms, most typically as smaller, individually owned vehicles, with low-paid drivers working on a daily rental basis (the target system), and operations organized through unions or associations.

IPT is often considered to be everything other than formal, large-capacity buses on fixed or scheduled routes, but this overlooks its diverse characteristics. In practice, in Sub-Saharan Africa (SSA), there is no clear distinction between formal and informal transit.

Instead, it exists on a continuum of industry organization within what is characterized as IPT. This continuum ranges from fully atomized free market operations to formal collective control over fleets and formal contracting with authorities. Most IPT in Africa operates in a highly atomized manner, with some experiments in collective fleet control.

It is important to note that informal does not mean illegal. Much of the IPT sector operates with permits, even if many fleets exceed what is permitted. Informality pertains to issues of organization, ownership, and operation, as much as it does to regulation. In this report the different dimensions of informality are therefore framed as: (1) informality of service; (2) informality of authorization; and (3) informality of organization.

IPT is currently the backbone of mobility and the primary form of passenger transport in almost all SSA cities, carrying large numbers of people daily; IPT reaches almost all parts of a city, employs many people, and provides an essential service without any state or government support. It is generally stable in form, widely available, and understood by users. In most cases, IPT has emerged in response to the rapid growth in travel demand in expanding cities, either parallel to or replacing organized public transport such as formal bus and rail systems.

In all the SSA urban agglomerations analyzed in this technical report (Accra, Antananarivo, Bamako, Cape Town, Dakar, Freetown, Gaborone, Kampala, Kigali, Lusaka, Maputo, Maseru, Nairobi, and Nouakchott), IPT is dominant (Table 1). Even the few cities that have established—or re-established—large-bus operations and mass transit (Cape Town, Dakar, Kigali) still rely on IPT to carry much of the daily demand for

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FIGURE 1. Three broad dimensions of informality of IPT— (1) informality of service; (2) informality of authorization; and (3) informality of organization.



Informality of service

- Route-based services in the style of public transport
- Shared use of small vehicles along loosely-defined routes
- 2 and 3-wheelers for individual hire that go anywhere
- And everything in-between

Informality of authorization

- Services with permits issued for specific routes
- Services with general permits to go anywhere in a defined area
- Services that operate without any authorization
- Services that intentionally disregard the regulations

Informality of organization

- Services that are strongly organized by consolidated or networked unions/associations
- Individualistic operators with minimal affiliation to any association, terminal, or stand

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travel, especially in the suburban and developing areas. In SSA, the classic and primary form of urban IPT is based on minibuses seating 12–16, and to a lesser extent 26–25 seats. The use of sedan cars as shared-taxis is also widespread, especially in suburban and outer areas. Motorcycle-taxis have become increasingly evident, although often not permitted, and are now displacing both minibus-taxis and shared-taxis in many settings. Motorcycle-taxis are the dominant form of IPT in some West African countries. There are also local forms of IPT using vans, open-back trucks, or micro-vehicles.

IPT has achieved dominance in Africa and many other regions because it does not require sophisticated organizational and institutional arrangements. Individual operators can enter the market as long as they have access to a vehicle. Typically, drivers rent vehicles from owners and earn income from passenger fares, while covering fuel costs and limited maintenance expenses. This model incentivizes drivers to work diligently and creatively at an individual level, exploring new markets and responding to user needs. They often work longer hours than formal bus drivers, incorporating offpeak idle periods into their workday, and are willing to accept these working conditions.

TABLE 1. The available formal and informal public transport (IPT) modes in the case cities

| City | Formal Publ | ic Transport | | Informal Publ | ic Transport | |
|--------------------------------------|------------------|-----------------|--------------|---------------------------|------------------------|------------------------|
| (Agglomeration, Population 2024)* | Commuter rail | BRT | Formal bus | Minibus | Shared-taxi (sedan) | Motorcycle- taxi |
| Accra (5.4 million) | No | No | Yes | Yes, primary | Yes | Yes, but not permitted |
| Antananarivo (3.5 million) | No | No | No | Yes, primary | Yes | Yes, not permitted |
| Bamako (4.2 million) | No | No | No | Yes, primary | Yes | Yes, but not permitted |
| Cape Town (4.4 million) | Yes | Yes | Yes | Yes, primary | Yes | No |
| Dakar (4.4 million) | Yes | Yes | Yes | Yes, primary | Yes | Yes |
| Freetown (2 million) | No | No | Yes | Yes, primary | Yes | Yes |
| Gaborone (0.42 million) | Yes (intercity) | No | Yes | Yes, primary | Yes | No |
| Kampala (6.1 million) | No | No | Yes | Yes, primary | Yes | Yes |
| Kigali (3.6 million) | No | No | Yes, primary | Not permitted in the city | No | Yes |
| Lusaka (3.2 million) | No | No | Yes | Yes, primary | Yes | Yes |
| Maputo (2.9 million) | Yes | In development | Yes | Yes, primary | No | Yes, but not permitted |
| Maseru (0.5 million) | No | No | Yes | Yes, primary | Yes | No |
| Nairobi (15.9 million) | Yes | In construction | Yes | Yes, primary | No | Yes |
| Nouakchott (1.4 million) | No | No | Yes | Yes | Yes, primary | Yes |

^{*} OECD/SWAC (2024), Africapolis (database), www.africapolis.org (accessed 29 November 2024).

The vehicles used, often mass-produced and second-hand imports, are relatively inexpensive. When a vehicle can no longer operate, there are always others to take its place. The rise of motorcycle-taxis in particular is due to their ability to navigate congestion and poor roads more effectively, and partly due to their low cost and the availability of financing.

Yet the strengths of IPT also contribute to its weaknesses. The ease of market entry leads to over-trading, especially on lucrative routes, which worsens congestion and leads to insufficient supply elsewhere. Competition for passengers and the desire to maximize earnings during peak times result in reckless driving, which incentivizes unsafe driving behavior, increases fuel consumption, and reduces the driver's already tight daily margins. Low accountability and poorly paid, insecure working conditions are common characteristics of the sector. Over-supply results in low surpluses, leading to poor vehicle maintenance and aging fleets, which in turn lowers the quality of vehicles. The individualized business model limits the ability of operators and drivers to cooperate, hindering the effective matching of fleet supply to user demand.

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FIGURE 2. Most common IPT modes in African cities



Example of minibus-taxi, photographed in Lagos, Nigeria.



Example of sedan shared-taxi, photographed in Dakar, Senegal.



Example of midibus, photographed in Dakar, Senegal.



Example of motorcycle-taxi, photographed in Lagos, Nigeria.

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A Paradigm Shift is Needed: From Replacing to Enhancing IPT

African cities are grappling with the immense challenge of responding to the increasing demand for mobility driven by rapid population growth. By 2050, these cities are expected to accommodate an additional 900 million people. Many African cities are addressing this demand by investing in much-needed formal mass transit systems. Among the cities examined in this technical report, Cape Town has complemented its commuter services with the initial phases of a Bus Rapid Transit (BRT) network. Dakar and Kigali have enhanced their formal conventional bus system, and Dakar has put in operation its first BRT line. Nairobi is constructing a BRT service, while Maputo has recently approved a BRT project. Kampala and Bamako have plans to develop BRT. Lagos and Dar es Salaam have made significant investments in BRT infrastructure (but are not part of this technical study).

Yet IPT is likely to remain significant for the next decades, while cities work to develop their formal public transport systems. Even where substantial investments have been made in formal public transport, the proportion of trips served by IPT has remained much the same—or even grown over the last decades. Investments in urban mass transit are essential, but they are complex and have proven difficult to implement successfully and quickly. The challenges include not only constructing substantial infrastructure within highly contested roadway spaces but also developing and consolidating the necessary organizations and institutions to operate them effectively and sustainably. Thus even with optimistic projections of financial and human resources available for developing mass transit, the time required to implement these systems means that, for a considerable period, they are likely to serve only a limited proportion of urban trips. Consequently, whether IPT continues to be the primary provider of personal mobility or is complementary to conventional public transport, it will continue to have a highly significant presence.

IPT consistently accounts for a substantial share of public transport usage in Sub-Saharan African metropolises, typically operating without subsidies. This contrasts sharply with publicly operated bus services and mass transit systems, which often have significant financial support for both capital and operational expenses. Even in cities that have engaged IPT for decades, such as Dakar, the subsidies allocated to IPT enhancement through AFTU program remain negligible compared to those provided to public bus operators (Dakar Dem Dikk) and the capital investments directed towards mass transit projects (such as urban rail and BRT). In the face of constrained budgets and limited public resources, enhancing the efficiency of IPT emerges as the most cost-effective strategy for governments. This underscores the necessity of improving and integrating IPT into the broader transport system, making it a vital component of public transport planning and dialogue.

Given this likely endurance of IPT—and the goal of improving the quality and reliability of public transport for the greatest number of people in SSA—it is crucial to plan and collaborate with the IPT sector to enhance its functionality. To achieve this, the traditional approach—which advocates for replacing IPT with conventional, formal modes—must shift. Enhancing IPT should not be driven solely by a desire for control

and to mitigate the negative aspects of the industry's business model. Instead, efforts should be directed toward working with the industry to enhance its productivity and improve service and safety standards. This requires a sophisticated understanding of the business and its variations. With these insights, it becomes easier to develop effective strategies for reform.

IPT should become much more central to urban transport policy and planning; cities need to be clear about what IPT's role in urban mobility. Urban transport policy in SSA should follow two tracks, one to develop the formal modes, and the other to raise the standard of IPT. Significantly more effort should therefore be directed toward understanding, supporting, and developing the IPT sector. This report documents some of the initial efforts SSA cities have made to enhance IPT.

Building on SSA Experience with IPT

IPT reform does not need to start from scratch, but can build on existing efforts in SSA cities. Although still in their early stages, these efforts offer valuable opportunities for learning and reflection.

This report documents in detail eight IPT reform programs in SSA cities—in Accra, Antananarivo, Cape Town, Dakar, Freetown, Kampala, Kigali, and Lusaka—and provides a less detailed description of cases from Accra, Bamako, Gaborone, Maseru, Nairobi, and Nouakchott.

Of the 14 case cities examined in this report, Cape Town, Dakar, and Kigali have been broadly successful in at least some of the IPT reforms they attempted. "Success" is defined not necessarily as the transformation of the whole industry, but as being able to achieve and sustain planned initiatives of varying impact. Each has succeeded in bringing about some change within the IPT sector, generally achieving what they had set out to do; these changes have mostly been sustainable or have shown positive results, and have mostly overcome the challenges encountered.

Less successful or unsuccessful experiences can broadly be categorized as: (1) efforts at reform that were never fully implemented (Accra, Antananarivo); (2) reforms that did not get beyond a pilot phase, had only limited take-up, or were discontinued (Antananarivo, Bamako, some initiatives of Cape Town, Kampala, Nairobi); and/or (3) reforms that were implemented but either did not achieve their intended outcomes, or failed to sustain their initial achievements (Accra, Bamako, Maputo).

Regarding motorcycle-taxis, there are a few efforts at reform, and in most cases these are focused on safety and on restricting their use. Motorcycle-taxis are illegal in many cities, including Antananarivo, Accra, Bamako, Cape Town, and Maputo. Kigali has made a major effort to improve the quality, safety, and traceability of motorcycle-taxi riders—this has had sustained success. Kampala has attempted to limit the numbers of motorcycle-taxis and restrict them to specific types of service—these measures have not been effectively implemented.

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Thus far, the purpose of most of the reform efforts in SSA has been to transition the IPT sector into one operating formal, large-capacity buses, or to establish the basics for regulation and compliance. The implementation of BRT systems are examples of the former. Few cities have approached IPT reform as a way of responding to current shortfalls in the urban transport system and strategically developing IPT's overall modal capacity. Dakar is one exception, having sought from the outset to develop the IPT sector in its own right. Similarly, national initiatives in South Africa in the late 1990s introduced better regulation of the sector overall, and improved its functioning. More recently, in a change of thinking from the approach to transition to BRT, Cape Town has shifted to a hybrid approach in which IPT is viewed as an integral part of the public transport system, complementary to large-bus operations. As part of this, the Mitchells Plain 7th Avenue project sought to pilot a shift to collective organization, although this was disrupted by COVID-19 and other factors, and has yet to be resurrected; a similar project is now underway elsewhere in South Africa (in Tshwane, Gauteng province).

To date, despite the vast size of the midibus or minibus-taxi industry in SSA, the private sector has generally not been a significant source of new funds for development and reform, beyond the traditional purchase of aged, imported vehicles. Commercial banks have only got involved at any scale for government-supported schemes, although the subsequent phases in Dakar indicate that transition to more commercial arrangements is possible. South Africa is a notable exception, where the private-sector financier SA Taxi has provided some 35,000 loans to approximately 28,000 minibus-taxi operators nationally.¹ Collectively generated financing is seen in the SACCO (Savings and Credit Cooperatives) model, especially in Nairobi and to a lesser extent in Accra, but these are generally on the smaller scale compared to the volume of vehicles that need replacing.

The experience is different in the motorcycle-taxi sector, where private-sector finance has been readily available for the purchase of new motorcycles, from lenders and through hire-purchase schemes facilitated by vendors. Ride-hailing apps and cashless payment schemes have appeared in a number of cities (for example, Kampala, Kigali, Nairobi), initiated by private-sector actors including telecoms companies and international ride-hailing companies. These have done so entirely of their own initiative, seeing market opportunity.

Appendix 1 provides a synopsis for each of the eight case study cities, including each city's context, the organization of the IPT sector, and the efforts on IPT reform. Chapter 8 categorizes the experiences by reform level type.

This financier has recently experienced financial challenges attributable to a range of different factors and is in the process of restructuring the business.

12 Lessons Learned from the SSA Experience with IPT



IPT helps broaden the service offering, which is an important dimension in the success of ITP. Strategies that build upon the advantages of IPT—such as their demand-responsiveness and operations flexibility—are likely to be much more effective and sustainable than those that strive to supplant the sector entirely with formal, centrally planned structures (McCormick et al. 2016). The evidence from different cities suggests that in toto replacement of IPT is neither achievable nor desirable. Despite spending significant amounts on implementing formal services, IPT is still the dominant mode. But part of the reason for this is that IPT often can broaden service offerings and provide services that users prefer, or at least accept. This is because of the flexibility of the service, combined with the incentives faced by the driver and operator to serve market demand and also generate an income after paying all costs.



Reforms that permit a more differentiated and incremental approach are likely to better integrate and enhance IPT. There is a need to differentiate between levels of formalization and develop strategies accordingly. Experience has shown that a big jump in the formalization pathway toward complex formal services tends to leave out local operators who do not have the organizational sophistication to respond to the needs in the short term. An incremental approach that supports phased improvements and a focus on building capacity are key ingredients for success.



The dynamics of the informal sector are complex, with many stakeholders in competitive tension with each other. An increased sensitivity is needed to the range of stakeholder interests and perspectives. The divergence of interests among different stakeholders in the sector, and market variations within increasingly complexities, must be understood. The views expressed by each of these groups, and their motivation to support an informal sector reform program, can be very different. When considering the logic, attitudes, and aspirations of operators in the IPT sector, its hierarchical, often coercive structures cannot be ignored; nor must the differential be overlooked between the powerful union leaders at its summit and the mass of individual operators barely surviving at its base (Vasconcellos 2014).



The public sector has a critical role in giving direction to and enabling or driving ITP reforms. A capable, strong, legally empowered institution carrying out planning, monitoring, and regulation/oversight functions for all modes is required. Such an institution must have the scope of responsibilities, authority, and capacity to develop and drive strategy and ensure alignment with that strategy amongst all relevant public—and, if possible, private—sector bodies (Arroyo-Arroyo et al 2024). As an example, the successes of Dakar public transport reform could not have happened without the well-organized, professionally strong authority, CETUD, directing implementation and management of the process. The positive aspects of reform in Cape Town, Kigali, and Freetown have also required strong public transport institutions in the respective places.

12 Lessons Learned from the SSA Experience with IPT (continued)



Sustained trust and communication are essential in the process of IPT reform. It requires committed engagement from both the public and the private sector, a willingness to understand the needs and constraints of the other, and to be flexible and patient in making progress. It also requires a willingness to reset and re-engage in the face of setbacks. Setting platforms for communication between the public and IPT actors, such as in Dakar, Freetown, and Kampala, has proved to be an essential ingredient in building a culture of trust and communication.



Bottom-up initiatives tend to be more successful, but there is significant potential for transformation where these are encouraged and supported by top-down initiatives. Reform initiatives can be those initiated by state actors (top down), or by IPT actors (bottom up). Top-down initiatives tend to be structural and can be truly transformative. However, the experience has been one of limited success and durability. Bottom-up initiatives seem to be more successful, such as mutual financing (e.g. SACCOs in Nairobi), driver training, or app-based booking and mobile payments—these tend to be at smaller scale due to resource constraints, however. Each has its strengths so both should be pursued—in combination they can be highly transformational.



Committed, knowledgeable political leaders are needed to champion reform. Almost every SSA IPT sector reform case highlights the political issues associated with reform. The number of people directly and indirectly employed by the industry is very large and often represents a substantial share of the employment available to people with lower education levels. In addition, owners of licenses and vehicles inevitably include a large number of powerful political and administrative officers. Both of these factors create inertia that prevents change, irrespective of the mobility issues that people face every day due to IPT's poor quality, cost, and performance. Even where significant numbers of users demand change, it takes skillful political leadership to convert this into actual reform. The successful reforms of Lagos, Freetown, and Dakar happened in large measure because of the strength and capacity of relevant institutions and the support of a powerful, engaged, well-informed leader. In Lagos there was strong leadership at both political (Lagos State governors) and managerial/technical (Managing Director of LaMATA).



To attain IPT reform, multiple intersecting aspects of financing must be addressed in the sector. The IPT sector is inherently a low-cost, low-margin sector with thousands of loosely affiliated stakeholders. It typically has neither a corporate form nor a strong capital base, and is run on a membership maximization basis rather than on a resource-optimization basis. The many intersecting aspects of finance cannot be resolved individually, and instead require a structured program of measures. Government can assist at multiple levels through leadership, support for vehicle financing schemes, support for cost-reduction measures such as bus priority and maintenance facilities, and by improving road conditions on bus/minibus routes.

12 Lessons Learned from the SSA Experience with IPT (continued)



Access to affordable vehicle financing can be a key enabler for IPT reform. The informal transport sector is characterized by a lack of the collateral demanded by lending institutions to securitize any finance needed for fleet acquisition, and its inability to provide a credible business plan. A viable bus financing scheme needs to be structured such that it gives access to lower interest rates, provides security to financiers, and addresses the problem of deposit affordability for the operators. Both the transition to large bus operations in Cape Town, Kigali, and Maputo, and the extensive minibus renewal in Dakar included support for vehicle financing. In the case of Dakar, the financing modal evolved for subsequent phases, and was able to tap into commercial finance, with suitable structures put in place. In Maputo, government mobilized loans from commercial banks and put backstopping in place for repayments in case the operators could not do so. Government can play an important backstopping role, even if it does not get directly involved in the financing of assets.



The impact of reforms on the business models, viability, and margins of the various stakeholders need to be adequately considered. There are multiple business models at play within the IPT sector—those of the associations, the vehicle owners, the drivers, financiers, etc. The power balance among the stakeholders also needs to be considered, particularly when a reform would shift the flow of funds (e.g. under route-level contracting, electronic payment schemes), or would shift the burden of costs or risk (e.g. employment contracts, shift from daily target to salaried system). Most stakeholders have limited personal financial capacity or resilience, especially drivers and other workers. They will be understandably reluctant to move away from the established arrangements, however marginal or low-paid, to ones that involve financial uncertainty or where they could lose their livelihood. For reforms that could negatively impact some of the stakeholders, finance needs to be available for support, backstopping, market exit or permit buyout, retraining, etc.



Reform initiatives need to include financing to strengthen government's capacity to fulfill its role in IPT reform. IPT reform often overlooks the need to provide the finance to strengthen the public sector. Many cities are unable to recruit or retain the caliber of staff required to develop the public transport sector, and especially those needed to plan and lead IPT reforms. Cities often do not have the funds to support the essential enablers of reform, including incentives and enforcement. In some cases, cities view the IPT sector as a source to be tapped, and this attitude often carries through to the regulatory and enforcement staff.



If reform/improvement of the informal public transport sector is to succeed, there needs to be a focus on building the capacity of actors in both government and the private sector—individual owner/operators, officers of their representative associations, government, and labor. A comprehensive capacity-building program covering all relevant audiences, starting with policy and technical leadership, must be planned and put into operation in the run-up to planning and implementing of any reform effort.

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The Way Forward

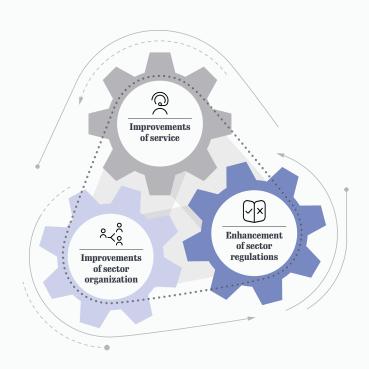
Experience has shown that the process of enhancing IPT in SSA cities will require: (1) defining the role of IPT in urban transport policy and planning, to give clear purpose and required outcomes for the IPT sector; (2) carefully considering strategies for implementing reforms, building on lessons learned; and (3) moving from strategy to practical measures for implementing reforms in the IPT sector.

A Clear Purpose and Required Outcomes:

Defining the Role of IPT in Urban Transport Policy and Planning

Currently IPT is absent or negligible in the urban mobility policies of most SSA cities. The paradigm shift for which this report advocates calls for IPT to occupy a central space in urban transport policy, and with a clear purpose and outcomes for the sector. This clarity will guide necessary reforms and framework changes, including regulatory, institutional, and operational adjustments, and determine the required investments and support. The minibus-based IPT sector, as a primary service provider, will need to adapt to new forms of organization, business models, operations management, maintenance, finance, and staffing. Different pathways of reform may coexist, with some parts of the sector transitioning to larger vehicles. For the motorcycle-based IPT sector, the focus should be on compliance, safety, and traceability, given their suitability for local and connector roles and challenging terrains.

FIGURE 3. IPT enhancement should be seen as a phased or programmatic process, geared toward improving services while encouraging a shift towards more sophisticated industry organization. Working towards improving the informal sector includes tackling in parallel the three dimensions of informality shown here.



Strategies for Implementing Reforms:

A Programmatic View of IPT Enhancement

IPT enhancement should be seen as a phased or programmatic process, geared toward improving services while encouraging a shift towards more sophisticated industry organization. Working towards improving the sector includes tackling in parallel the three dimensions of informality shown in figure 3. These dimensions are interlinked: improvements in service should go hand in hand with improvements in sector organization and enhancement of sector regulations.

Reform can happen step by step or leapfrog several steps at once. The different steps are presented in figure 4, below. A jump from a fragmented industry to one with highly sophisticated levels of organization has rarely been successful, however; experience suggests that more gradual, phased transitions are a more effective way to enhance the existing IPT sector.

The minibus-taxi sector is already at level 2 (associations or unions) in almost all larger SSA cities. Only the motorcycle-taxi and occasional modes operate in the atomized or stand-centric mode of level 1.

Most current public transport improvement strategies in SSA, especially where BRT has been introduced, seek an immediate shift from level 2 to level 5. While initiatives wish to include informal operators in running the new service, these operators tend to lack the

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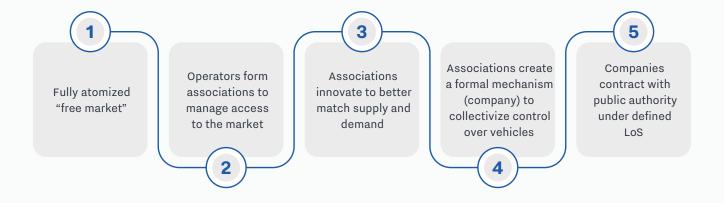
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FIGURE 4. A continuum of advancement in the IPT industry organization

Steps in Advancing IPT Sector Organization

This report presents five levels of advancement in the IPT industry organization, from a fully atomized free market (level 1) to companies contracted by public authorities (level 5). The diagram below illustrates the continuum against which strategies for engagement and enhancement need to be developed.





capabilities to do so, as their existing abilities suit a very different environment. In most cases current operators are then displaced by new, larger formal operators. The former then end up in competition with the new operators—to the detriment of both. If the new formal operators are not equipped to run formal, large-bus operations, these services deteriorate and struggle to run effectively—a number of BRT projects in Sub-Saharan Africa have struggled to match expectations for this reason.

The Dakar AFTU (Association de Financement des Professionnels du Transport Urbain de Dakar) and the Maputo cooperative programs provide key examples of a shift from level 2 to levels 3 and 4. In Dakar, operators formed Economic Interest Groups (EIGs) to participate in a financing scheme for minibus renewal. This collective effort to operate concessioned routes has significantly improved fleet and service quality. However, operators continue to own their vehicles individually and compete with one another, which limits the extent to which services can be rationalized. In Maputo, many minibus operators formed new cooperatives to operate large buses on core designated routes under specific service levels. Despite this, operations remained fragmented and based on a one-individual-one-vehicle approach, with contract service conditions not fully enforced. Both cases aimed to achieve collective use of vehicles on routes (level 4), but reached a level between 3 and 4 as there was no pooled use of vehicles.

The Mitchells Plain pilot in Cape Town sought a shift to level 4 by pooling vehicles under a jointly owned company to run the fleet as a single enterprise. While the pilot demonstrated what could be achieved through a collective approach, the municipality was unable to follow through with its intended commitments and the process was disrupted by COVID-19.

Examples of a shift to level 5 include Cape Town BRT and Kigali. In Cape Town, the authorities facilitated company formation by minibus-taxi operators for the BRT services, and contributed substantial financial, managerial, and other resources. In Kigali, the minibus operators restructured into two new companies to operate the new large-bus network, operating with a pooled fleet and resources. The suburban taxi fleet modernization program in Dakar reached level 5, with a new form of organization based on the pooling of revenue, the management of operations, and the profitability of the operation.

Moving from Strategy to Practical Measures:

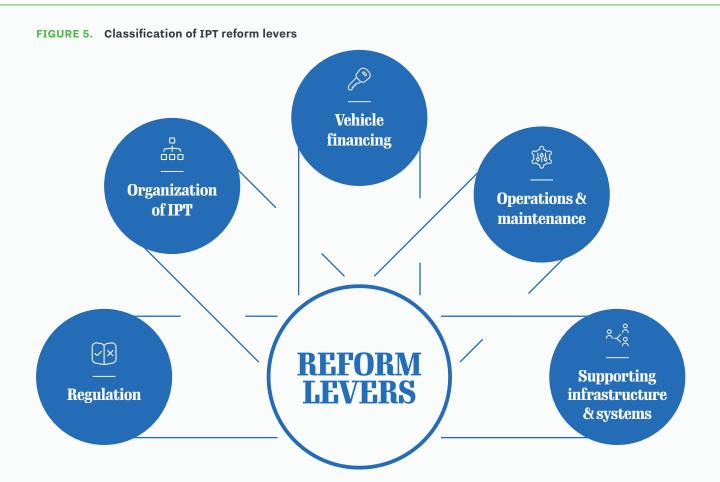
A Reform Levers Toolkit

IPT can be enhanced through a package of interventions or reform levers that work better when implemented in an integrated manner, since so many factors are interlinked. Interventions will also work best when they are tailored to the specific role the IPT is expected to play in the city's transportation (i.e. the purpose) and the type of transformation sought in industry organization.

Based on the existing experiences, this report develops five categories of reform levers, and provides practical examples for each of these categories. The reform levers are: (1) regulation; (2) organization; (3) vehicle financing; (4) operations and maintenance; and (5) supporting infrastructure and systems. Figure 5, below, presents a set of reform levers for each of these five categories, drawn from those observed or attempted in the case cities.

There may be different reform packages in the same city and even within the same mode. For example, minibus-taxis may be required to play different roles on arterial routes (formal PT style, perhaps also switching to larger buses), as feeders, and as local connectors in the periphery—each with different levels of organizational adaptation

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required. In the same city, the shared-taxis and motorcycle-taxis may also be accorded a specific role and require their own form of adaptation. The authorities will also need to adapt as organizational modes change—for example, at lower levels of industry organization, licenses will usually be issued to individual operators, and the authorities will need to have the capacity to manage this. As the industry shifts to more collective levels of organization, the authorities will work more with the collective entities and issue licenses to the collective body for specific routes or areas.

TABLE 2. Toolbox of reform levers for minibus-based IPT observed in practice

| Category | Available reform levers | | |
|---------------------------------------|--|--|--|
| Regulation | Introduce route-based licenses Strengthen contracts/service agreements Align permit numbers with actual need, but avoid creating an illegal market for permits Effectively enforce operations and vehicles Root out corruption Strengthen the capacity of transport authorities (or establish them, if needed) | | |
| Organization of the IPT sector | Change the corporate form of IPT groupings Strengthen the business model with organizational and operational capability Professionalize the people, processes, and systems Establish standards, with incentives to achieve them (positive and negative) Move to centralize revenues Move workers onto employee contracts | | |
| Vehicle financing | Develop vehicle purchase schemes, including versions with revolving funds Develop vehicle scrappage schemes Implement operating lease schemes, with maintenance, and asset transfer after time Shift to larger, newer vehicles | | |
| Operations and maintenance | Optimize resources and consolidate Reduce over-supply and idle time Reduce fuel consumption through better driving and vehicle maintenance Provide/improve basic maintenance facilities, in particular more preventive maintenance, less run-to fail | | |
| Supporting infrastructure and systems | Develop/improve terminals, customer, and staff facilities Manage activities for better flow Improve road conditions, traffic management, and enforcement, alleviate congestion, including providing prioritization infrastructure for public transport Map and quantify services, routes, terminals, stops Measure demand/supply patterns to assist in service planning and resource optimization Use IT, ITS for data gathering, tracking, customer information, etc Implement cashless payment systems, including smart cards, mobile phones, apps, etc. | | |

Final Reflection

Every SSA city is unique, but based on experience and analysis, the authors of this report have identified key success factors in IPT reforms. While there is a clear, positive cost-benefit to enhancing IPT in SSA cities, the extent of the required enhancements and the potential challenges should not be underestimated. The role of governments in providing direction and support for these changes is critical.

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BOX 2

Success Factors of IPT Reforms Based on Case Studies

- A strong public sector exists, with a clear purpose:
 - o A lead institution brings together other state actors.
 - o There is clarity and consistency of reform purpose.
 - o There is a regulatory base for the foreseen reforms.
 - o Public-sector or state actors are technically competent.
- There is commitment and relationship building between state actors and IPT actors:
 - o Public-sector/state actors are committed to reform and a partnership approach.
 - o Time is taken for consultation, and re-engaging if/as needed.
 - o Relationships are built with the IPT stakeholders.
- · Reform measures benefit IPT stakeholders:
 - o Measures respond to the needs of the operators and not only to the wishes of the authorities.
 - o IPT stakeholders have access to new vehicles and/or financing channels that they would have had little prospect of accessing otherwise.
 - o Incentives and assistance in the procurement of vehicles act as a catalyst for operating sector consolidation and hence operations efficiency and effectiveness.
 - o There is visible financial advantage for IPT stakeholders—while operators may be skeptical at first, they are likely to become convinced over time.
 - o There are benefits for those working within the system, such as employment contracts and shorter hours.
- The implementation process helps the IPT sector to develop:
 - o Opportunities exist for IPT stakeholders to operate inside rather than outside the system, with better security of tenure.
 - o Measures and funding for capacity building and improved professionalization of IPT entities and workers are included in the process.
 - o Clear expectations of the required standards are set out in service contracts (or equivalent).
- A strong understanding of the current operating sector underpins reform strategies:
 - o This is critical when developing and then implementing a support package for it.
- Longer-term financial sustainability is highly likely:
 - o Long-term financial issues are considered and addressed within the financing mechanisms.
- · During implementation, stakeholders and actors are able and willing to adjust as and if required:
 - o Lessons learned (including unsuccessful aspects) are built on for subsequent phases.



02

Introduction

2.1

Context

Sub-Saharan African cities are growing at an extraordinary rate—many are growing so fast that national, provincial, and city governments cannot manage how they develop, or ensure the provision of the services that people need. This has many negative consequences for national and city economies, and for the people who live there.

Urban mobility is one of the key challenges for African cities. The urban population needs to travel to get to work, school, markets, and all the other activities of a city, but sprawling development and limited road infrastructure is often unable to cope. This results in traffic congestion, long travel times, noise, pollution and intrusion, and crowded or unsafe means of transport. Congestion has been exacerbated by the rapid increase in motorization, and the rise of informal transport which makes use of large numbers of small vehicles.

Many people in SSA cities walk to their places of work, school, or market, but this has become increasingly dangerous and unpleasant given that vehicles have taken over the streets while sidewalks are absent or in poor condition.

The prospects are alarming for most cities, based on the current situation and the established patterns of urban growth. These challenges will not rectify themselves, and conditions will only get worse without intervention.

But predicted outcomes are not inevitable. A clear vision can reverse anticipated trends, and enable alternative pathways to succeed. This will require leadership and sustained commitment from national, regional, and local governments.

2.2

The Role of Informal Public Transport in Sub-Saharan Africa

Despite their large populations and high travel demand, Sub-Saharan African cities rarely provide large-bus public transport. For the most part, formal bus services have ceased, and efforts to reintroduce them have either failed or the new iterations have not grown beyond the initial phases and then have themselves collapsed. Commuter rail once thrived in South Africa, but these services have all but collapsed in the past decade. Only a handful of cities still have substantial large-bus networks in operation—such as Addis Ababa, Cape Town, Dar es Salaam, Johannesburg, Kigali, Lagos, and Maputo. Even among these cities, there are few— if any—where formal public transport is the primary mode, providing day-long citywide coverage.

Informal public transport (IPT), often also called paratransit, is the dominant form of public transport in most or all Sub-Saharan African cities, in terms of both mode share and coverage. Walking is the primary form of mobility in most or all African cities, although this is increasingly challenged as cities grow ever larger and trip distances become longer. IPT appears in many forms, but most typically entails smaller, individually owned vehicles with low-paid drivers working on a daily rental basis (target system); operations are organized through unions or associations. In SSA, the classic and primary form of urban IPT is based on minibuses seating 12–16, and to a lesser extent 26–25 seats. The use of sedan cars as shared-taxis is also widespread, especially in suburban and outer areas. Motorcycle-taxis have become increasingly widespread, although often not permitted, and are now displacing both minibus- and shared-taxis in many settings. Motorcycle-taxis are the dominant form of IPT in some West African countries. There are also local forms of IPT using vans, open-back trucks, or micro-vehicles.

In most cases, IPT emerged in response to rapid growth in travel demand in expanding cities, either parallel to or replacing more formally organized public transport, which had failed to invest in maintaining and expanding formal bus and rail systems.

There is a broad spectrum in the degree of informality. At one end, IPT is regulated through a permit system with route assignment and compliance with technical regulation; at the other, it is characterized by rough competition with minimal operational organization, low compliance, low-grade vehicles, and unqualified drivers. Over the past decade, minibuses and buses are increasingly being displaced by even larger numbers of smaller vehicles (e.g. motorcycle-taxis, microvans, and 3-wheelers).

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IPT poses many complex challenges for policy makers and regulators. On the upside, in many cases IPT is the primary form of passenger transport, carrying large numbers of people daily, reaching all parts of a city, employing many people, and providing an essential service without any government support. It is generally widely available and understood by its users. On the downside, in most cases the low barriers to entry lead to lower-quality vehicles and low-paid and unskilled drivers, poor maintenance, unsafe operations, lack of scheduled or integrated service, low accountability, and insecure working conditions in the sector. There is often an excessive supply of vehicles jostling for business, contributing to or worsening congestion, and a disproportionate focus on already busy routes, with insufficient supply elsewhere. The relationship between the IPT sector and state actors is often conflictual and politically sensitive, characterized by low compliance, a poor image, unethical controls (in a few contexts, extreme violence), and distrust and unwillingness to engage. The IPT sector is a cash-driven business situated outside the taxation net. While authorities seek to formalize the affairs of the sector, associations and organizers want to retain control of revenue. The formalization of employment would benefit workers but would also increase costs and reduce owner/ organizer margins.

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Challenges Facing Leaders in SSA

- African cities are growing fast. Most will double or even triple in size within the next 25 years.
 Mobility challenges will get even tougher. National and city governments have neither the resources nor the capacity to build mobility infrastructure fast enough to keep pace.
- 2. Formal public transport is limited or absent in most African cities (primary and secondary). In large part, this is due to lack of government commitment, weak institutional frameworks, and business and operating conditions that are incompatible with viable services.
- 3. Efforts are now being made in many cities to address these issues and expand or re-establish bus services on a larger scale. However, this is a slow process, not least because what is first needed are the essential institutional reforms to enable these efforts—and it will be many years before comprehensive bus and mass transit networks can become widespread.
- **4.** For all its many faults, IPT is what is currently available in all African cities. It is the only form of transport that can be adapted, transformed, and expanded in a relatively short space of time, to ensure universal coverage and to the level required by growing travel demand—if the enabling conditions are put in place.
- 5. However, IPT invariably sits outside urban mobility policy, strategy, programs, and master plans—other than planning how to replace, marginalize or eliminate it. Cities will depend on IPT for the foreseeable future, like it or not. It is more rational to include IPT within the policy, planning, and organizational frameworks than to exclude it.
- **6.** In turn, this will require transformation of IPT to be a major, reliable, and accepted element within planned mobility systems.

There is already a widespread rethinking of the role IPT can and should play in SSA cities, even in cities that had previously been focused on mass transit. It is also accepted that IPT needs to transform at many levels to become the quality, trusted, and viable mobility provider that cities and their people require, to be able to reinvest in suitable and safe vehicles, and to professionalize its staff and offer better salaries and conditions.

However, IPT is a highly diverse and complex sector, with multiple stakeholders and its own dynamics (which are radically different from those of formal transport). IPT is also a major employer of lower-skilled workers and a locus of investment for a wide array of individuals. It is a sectorally and politically sensitive domain in which efforts to bring about change should not be taken lightly. Thus, it is essential to first understand what IPT is, what transformation may be needed and why, and what experiences from elsewhere in Africa suggest as approaches that could achieve desired outcomes.

2.3

Scope and Structure of this Report

This report seeks to examine the potential for developing and transforming the informal urban public transport sector in Sub-Saharan Africa—especially in relation to the ability to finance vehicles, improve quality and safety, and use digital technologies for further formalization, building on experiences and lessons that can create conditions for successful implementation. Such outcomes may be achieved through changes in corporate form and capacity and improved operational methods—underpinned by changes in policy, regulation, and state/IPT sector relationships. Chapter 7 presents the range of reform levers and chapter 8 presents practical experience in African cities.

The report builds on a set of city case studies (Antananarivo, Cape Town, Dakar, Freetown, Kampala, Kigali, Lusaka, and Maputo) that provide insights into the nature, scale, and diversity of the IPT sector in Sub-Saharan Africa, as well as initiatives that have been taken to reform or improve it. A synopsis of each case study city is provided in appendix 1. These have been supplemented with available material from other cities (Accra, Bamako, Gaborone, Maseru, Nairobi, and Nouakchott) to broaden the information base and range of experiences.

Going beyond simply documenting actions, this report seeks to examine the purpose of reforms, what transformation is required from the IPT sector to achieve desired outcomes, what levers may be used, and what has been the experience in practice. The report focuses on IPT in the style of public transport, primarily on the minibus-taxis that are the dominant form of public transport and are best suited to the development of planned transport networks. However, attention is also paid to reforms in the motorcycle-taxi sector, as these are increasingly widespread.

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UNDERSTANDING INFORMAL PUBLIC TRANSPORT IN SSA CITIES

- **03** Overview of Informal Public Transport
- 04 State and Private-Sector Actors in IPT



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03

Overview of Informal Public Transport

Informal Public Transport (IPT) covers an extremely wide range of mobility services. The term is used loosely, without an agreed-upon, exact definition, which can lead to some confusion. IPT is often considered to be everything other than formal, large-capacity buses on fixed or scheduled routes, but this overlooks its diverse characteristics.

In practice, in SSA there is no clear distinction between formal and informal transport—instead, it exists on a continuum of industry organization within what is characterized as IPT. This continuum ranges from fully atomized free market operations to formal collective control over fleets and formal contracting with authorities. Most IPT in Africa operates in a highly atomized manner, with some experiments in collective fleet control.

This chapter presents details of the IPT sector in the case cities and a number of other cities, and includes organizational and operating models and the vehicles used. It distinguishes between informal and illegal operations, noting that much of the IPT sector in Africa does have authorization, even if the bar is set quite low. A cross-city comparison is made of regulations and licensing in the case cities and other cities, for minibus-taxis and for the other main IPT mode (where available).

The chapter also presents a typology of levels of informality and services. Informality pertains to issues of organization, ownership, and operation as much as it does to regulation. In this report the three dimensions of informality are framed as: (1) informality of service; (2) informality of authorization; and (3) informality of organization.

- Informality of service: IPT spans route-based services in the style of public transport, through to the shared use of small vehicles along loosely defined routes,
 2-wheelers for individual hire that go anywhere, and everything in-between.
- Informality of authorization: IPT spans services with permits issued for specific routes, through to services with general permits to go anywhere in a defined area, and services that operate without any authorization or that intentionally disregard the regulations.
- 3. Informality of organization: IPT spans services that are strongly organized by consolidated or networked unions/associations that ensure conformity of service and manage co-existence, through to diffuse groupings each organizing the members of their own parking area or stand, and to individualistic operators with minimal affiliation to any association, terminal, or stand.

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This report analyzes IPT in 14 African cities, with a reasonable geographic coverage of primary cities. Table 3 (below) provides a summary of main modes of formal and informal transport in each city:

- Accra, Ghana
- > Antananarivo, Madagascar
- > Bamako, Mali
- > Cape Town, South Africa
- Dakar, Senegal
- > Freetown, Sierra Leone
- > Gaborone, Botswana

- > Kampala, Uganda
- Kigali, Rwanda
- Lusaka, Zambia
- Maputo, Mozambique
- Maseru, Lesotho
- Nairobi, Kenya
- > Nouakchott, Mauritania

Across 13 of the 14 case cities, IPT is the dominant form of urban passenger transport in terms of both mode share and coverage. Only in Kigali is the large-bus sector the primary public transport mode, but this is largely due to minibuses being effectively banned from the city as the new bus services commenced under contract. In Cape Town, formal public transport was dominant until a decade ago due to the extensive commuter rail system complemented by city buses—the minibus-taxi sector has now filled the market vacated by the deteriorating rail system, and IPT is thus currently the dominant service. Formal public transport has moderate—to—minimal mode share in most of the case cities.

- Substantial large-bus networks exist in Cape Town, Dakar, Kigali, and Maputo. Of
 these, Cape Town and Dakar have long-established and extensive bus operations.
 In Kigali and Maputo, the established public bus operators have been supplemented
 in recent years by large-bus companies formed from the IPT sector. More limited
 bus services are available in Accra, Freetown, Kampala, Lusaka, and Nairobi. In all
 cases, the large-bus network is insufficient to meet the current or growing mobility
 needs of the city.
- Commuter rail had been a major mode in Cape Town (as well as other South African cities), but its role has greatly diminished over the past decade. It was effectively shut down during the COVID-19 pandemic lockdowns and has only been partially restored since. It exists but plays a minor role in Dakar, Maputo, and Nairobi. Plans for expansion in these cities, as well as for its development in Antananarivo and Kampala, have not yet moved into implementation phases.
- BRT currently operates only in one of the case cities—Cape Town. BRT lines are
 under construction in Dakar and Nairobi (where multiple lines are planned). BRT
 projects are in preparation in Freetown and Maputo, in planning in Kampala, and
 under consideration in Bamako. Elsewhere in Africa, BRT is operational in Dar es
 Salaam, Johannesburg, and Lagos.
- Other forms of mass transit, such as Light Rail Transit (LRT) or Mass Rapid Transit (MRT), do not currently operate in any of the cities, but are planned for Kampala and Nairobi—should funding become available. Addis Ababa is the only SSA city with an operational LRT or metro system.

TABLE 3. Modes of formal and informal public transport available in the case cities

| | Informal Public Transport | | | | | |
|--------------|------------------------------|----------------------------------|---|---|--|--|
| City | Minibus-taxi | Shared-taxi (sedan) | Motorcycle (moto)-taxi | Other | | |
| Accra | Primary PT mode (tro-tro) | Yes | Yes, substantial, but not permitted (okada) | 3-wheelers | | |
| Antananarivo | Primary PT mode (taxi-be) | Yes, substantial (taxi-ville) | Yes, substantial, but not permitted | No | | |
| Bamako | Primary PT mode (sotrama) | Yes, substantial | Yes, substantial and growing, but not permitted | 3-wheelers Pick-up trucks (dourouni) | | |
| Cape Town | Now the primary PT mode | Not substantial | No | No | | |
| Dakar | Primary PT mode | Yes, substantial | Yes, limited but growing | Some present but illegal | | |
| Freetown | Primary PT mode (poda-poda) | Yes, substantial | Yes, substantial (okada) | 3-wheelers (keke) | | |
| Gaborone | Primary PT mode | Yes, limited but growing mode | No | No | | |
| Kampala | Primary PT mode | Yes, limited | Yes, substantial | | | |
| Kigali | Not permitted in the city | No | Yes, substantial (moto-taxi) | Bicycle | | |
| Lusaka | Primary PT mode | Yes, limited | No (some for deliveries) | No | | |
| Maputo | Primary PT mode (chapa) | No | Present in outer areas but not permitted | Open trucks (mylove) 3-wheelers | | |
| Maseru | Primary PT mode | Yes, substantial ("4+1") | No | No | | |
| Nairobi | Primary PT mode (matatu) | No | Yes, substantial (boda-boda) | 3-wheelers (tuk-tuk) | | |
| Nouakchott | Yes, substantial | Primary PT mode | Yes, limited | 3-wheelers | | |

| | Formal Public Transport | | |
|--------------|---------------------------------|---------------------------------|--|
| City | Commuter rail | BRT | Formal bus |
| Accra | No | No | Yes, limited |
| Antananarivo | No | No | No |
| Bamako | No | Planned | Not for general use— large buses serve universities |
| Cape Town | Yes, but now greatly diminished | Yes | Yes, substantial |
| Dakar | Yes | In construction | Yes, substantial |
| Freetown | No | No | Yes, limited |
| Gaborone | Intercity only | No | Yes, substantial |
| Kampala | Limited LRT planned | BRT in Transport Master Plan | Yes, limited |
| Kigali | No | No | Yes, substantial |
| Lusaka | No | No | Yes |
| Maputo | Yes, limited | In development | Yes, substantial |
| Maseru | No | No | Minimal |
| Nairobi | Yes, limited | Under construction | Yes, substantial |
| Nouakchott | No | No | Yes, limited |

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There are limited, largely unlicensed shared-taxis within townships, but not to a significant extent.

3.1

Informality of Service

A broad typology of urban IPT services observed in African cities is presented in the table below. This typology is general, in that by its nature, IPT is informal and mostly internally controlled. Thus, in practice, there can be all kinds of deviations, irregularities, illegal behavior, irregular vehicles, etc. continuing side-by-side with the main IPT. There are also emerging and innovative forms of IPT, not least ride-hailing and app-based services, some of which may succeed in becoming established while others may fail to gain market share and disappear.

Minibus-taxis that operate in the style of public transport are the most widespread mode throughout African cities. They are well established, despite usually having begun as marginal or illegal services, and for many cities serve the majority of non-walking trips every day. Minibus-taxis go by many local names, as shown in figure 6 below. They follow a broadly common organizational, operational, and business model, which is described later in this chapter.

While IPT covers a broad range of modes and service types, as reflected across the 14 case cities, four modes dominate:

- 1. Minibus-taxis, which exist in all cities except Kigali. They are the primary public transport mode in all the cities except Maseru and Nouakchott, and to a diminishing extent in Maputo. The term minibus is rather flexible as it spans the typical 12-16 seaters, 16-18-seaters, the larger 22-25 seaters and occasionally something larger.
- 2. Shared-taxis (sedans), which exist in most cities (but not in Cape Town,² Kigali, Lusaka, or Nairobi). They nominally carry four passengers excluding the driver ("4+1"), but in practice often exceed this. They are the primary public transport mode in Nouakchott, second only to minibus-taxis in Antananarivo and Maseru, and a significant mode in Bamako, Freetown, and Gaborone.
- 3. Motorcycle-taxis, which have emerged as a significant and rapidly growing mode, especially over the past decade. They are already substantial modes in Accra, Freetown, Kampala, Kigali, and Nouakchott, and mode share is rapidly growing in Bamako (where there is already a high level of personal motorcycle ownership). Motorcycle-taxis are present but not yet significant in Antananarivo, Maputo, and Nouakchott. Only in Cape Town, Gaborone, and Maseru are they not yet established. Motorcycle-taxis are not (yet) legal in Accra, Antananarivo, or Maputo, but they operate anyway.
- 4. Three-wheelers, which are present in Accra, Bamako, Freetown, Maputo, Nairobi, and Nouakchott. They are always a minority mode, serving niche markets such as women with shopping or schoolchildren, who are unwilling or unable to use motorcycle-taxis or public transport.

In addition, there are various local forms of IPT. Pick-up/open-back trucks are used in Bamako (dourouni) and in Maputo (myloves), while bicycle-taxis are still used in Kigali.

It is notoriously difficult to determine the true scale of IPT in African cities. Nevertheless, the best available estimates are presented here, categorized as lower, substantial, or high. For minibus-taxis, while the reported numbers are unlikely to be very accurate,

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FIGURE 6. Local names for minibus-taxis across Africa



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the order of magnitude is credible and is based on evidence. For motorcycle-taxis, the figures are less accurate, especially where motorcycle-taxis are either not permitted or not regulated (those marked * are the authors' estimate of scale).



In the minibus-taxi sector:

- Lower (c. < 5,000): Bamako, Freetown, Maputo, Maseru
- Substantial (c. 8-12,000): Accra, Antananarivo
- High (>15,000):Cape Town, Kampala, Nairobi



In the motorcycle-taxi sector:

- Solution Lower (c. < 10,000): Freetown, Maputo*
- Substantial (c. 20,000): Accra*, Kigali,
- High (>50,000):
 Kampala

In the sedan shared-taxi sector, for the few cities where the mode is substantial and estimates are available (Antananarivo, Bamako), the range is 4,000 to 9,000. These are the figures for those officially operating as shared-taxis. There may also be many other private vehicle owners who operate opportunistically, once the mode, its service norms and typical price are established.

In the 3-wheeler sector, for the cities where the mode is established (Freetown, Maputo), the scale is moderate, usually in the hundreds of units. Freetown is notably higher, with 1,900 units.

TABLE 4. Typology of IPT service types

| Category | Service type | Practice in SSA cities | | |
|--|---|--|--|--|
| Services in the style of public transport | Route-based services with defined terminals and stops, operated with larger buses | This is the closest to formal public transport. IPT of this type is rare in Africa, seen only in Dar es Salaam (dala-dalas) with a mix of standard urban buses and midibuse | | |
| | Route-based services with defined terminals and stops | This is widespread throughout SSA cities, and these services are operated by minibuses and midibuses. | | |
| | Terminal-to-terminal services that follow a broadly defined route | This is the most common service type, and is widespread throughout African cities. Stops are made at the discretion of the association or the individual operator. | | |
| | Terminal-to-terminal services without (authorized) stops | This is most typical for services originating outside the main city. These services are not authorized to pick up passengers along the city element of the route. | | |
| Services in the style of shared vehicles | Shared-taxis (sedans) on pre-determined routes | In Antananarivo, Bamako, and Maseru, these are significant modes, and in Nouakchott the primary mode. These typically operate between terminals/stand with drop-off on request and pick-up along the route. | | |
| | Shared-taxis to destinations determined by the passengers | This is common but is not significant in terms of overall share of the transport market. | | |
| Services in the style of on-command hire (go anywhere) | Motorcycle-taxi (okada, boda-boda, etc.) | This is now widespread throughout Africa. The service has grown rapidly over the past decade despite not being permitted in several cities. | | |
| | 3-wheeler (tuk-tuk) | These services have become widespread throughout African cities, but not on a large scale. They frequently serve the market of women and children who are reluctant or unable to use motorcycle-taxis or public transport. | | |
| | Shared-taxis (sedans) | These are conventional taxis used for individual/group hire. This is universal throughout African cities but is expensive compared to other modes. | | |

3.2

Informality of Authorization

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3.2.1. Types of IPT Regulation Seen in Practice

Informal should not be equated with illegal. Much of the IPT sector operates with permits, even though many fleets exceed what is permitted. That said, in most African settings, the bar is set rather low due to the lack of an appropriate regulatory or licensing framework, or to the lack of institutional capacity or interest to manage the sector. When there are so many other pressing needs and limited resources, some governments may accept that the sector takes care of itself.

IPT is fully bound by the first two categories, as these apply to all vehicles and traffic nationally and are enforceable by national and local agencies. Willful violation or non-compliance are already designated offenses with defined processes and penalties. The third category, regulation of services, is specific to the service types, the interest/capacity of authorities to regulate them, and whether various types of IPT have been defined and provided for in applicable regulations and processes.

BOX 4

What is Regulation of Public Transport?

There are three main categories of regulation that apply to urban passenger transport. The first and second apply to all motorized vehicles, and the third is specific to the provision of services:





Basic permits

Licenses for vehicles and drivers

- All vehicles are required to be registered and to obtain a renewable license for that vehicle class.
- · Among other things, the vehicle's unique identity and the owner of the vehicle are to be identified.
- · All drivers of motor vehicles are required to obtain a renewable license for the classes of vehicles they will drive. Tests may be required for the highest vehicle class.



Safety-related

Roadworthiness and traffic

- · Vehicles are required to hold a current certificate of roadworthiness, issued after a periodic technical inspection. This may apply to all vehicles, or to vehicles of certain classes (PSVs, goods vehicles, etc.). Regulations will also require vehicles to be kept in roadworthy condition when on the public road.
- · Traffic law regulates driving behavior on a range of issues such as speed, safety, driving behavior, movement within traffic, stopping/parking, etc.





Regulation of services

Permits/licenses to operate

- · General permits/licenses are required to provide a particular type of passenger transport service within a designated area.
- Permits/licenses are required to provide passenger transport services on a designated route, between specified points, which may also include conditions of service.
- · Permits or other authorizations are required to operate a terminal, stand, or other service area for public transport services, which may also include provision of ancillary services.

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3.2.2 Overview of Regulatory Status in the Case Cities

IPT is often double regulated. The internal organization mandated by a union or association, or by the terminal/stand, may impose far greater restrictions than the license issued by the authorities. This may include the route operated, the mode of operation, the fares, the number of trips, or the sequencing during the day. In some cases, where licenses are very general, the sector is self-regulating.

Regulatory issues concern the following:

- The type of license/permit issued for different types of IPT, if any
- · Whether the license/permit defines the permitted area of operation
- The effectiveness of the regulatory regime, in terms of compliance and level of services being operated without authorization or flouting the conditions

Table 13 in appendix 2 provides a cross-city comparison of the characteristics of the licensing regimes in the case cities.

3.2.3 Licensing Regimes for the Minibus-taxi Sector

Most cities have some formal licensing for the minibus-taxi sector. The exceptions are Kigali, which has effectively banned minibus-taxis since 2013, and Lusaka, which only requires compliance with general motor vehicle requirements. Bamako has nominal licensing, but in practice the sector self-regulates.

To date, the minibus-taxi sector has made very limited use of service contracts or licenses that specify service and/or quality conditions.

- Only in Dakar is there substantial use of service contracts, dating back to the fleet renewal projects and overall reforms. Service contracts include vehicle specifications, routes and stops, service frequency and fares, services standards, and driver training.
- In Cape Town, one association in Mitchells Plain implemented a pilot project
 whereby operators drove according to an agreed collective operational plan;
 unfortunately, this collapsed at the start of the COVID-19 pandemic. Separately, the
 Blue Dot pilot scheme provided financial incentives for improved reliability and safer
 driving. (The examples exclude the system whereby minibus-taxi operators became
 participants in BRT services.)
- In Accra, the regulations provided for service and quality conditions for all license types, to be applied at the route-level and assured by the license-holding route organizer. However, this has never been implemented in practice.
- There are no reported cases of an operator or route organizer's previous
 performance being taken into account when seeking to renew their license or apply
 for an additional license.

3.2.4 Licensing Regimes for the Motorcycle-taxi and Shared-taxi Sectors

The licensing regimes for other forms of IPT (motorcycle-taxis, sedan shared-taxis and 3-wheelers) vary from city to city, in particular for motorcycle-taxis, which are not permitted in some places.

Among the case cities, three types of regimes are evident for shared sedan-taxis: area permits; general permits; and prohibition.

1. Area permit issued to individual operators: in Antananarivo, licenses are issued to individuals for specific areas. The number of available licenses has been limited, which has led to many clandestine taxis in operation. In Freetown, area licenses are issued to individual operators. In Maseru, open area licenses are issued to individuals. These areas are sufficiently large that it equates to general permission to operate.

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BOX 5

Types of licensing regimes in SSA cities

Of the 12 cities with some form of licensing for minibus-taxis, four types of regime are evident:

1.

License for the route

issued to a route-organizing entity (company, association, cooperative)

 In Antananarivo, route licenses are issued to cooperatives. In Nairobi, route licenses are issued to SACCOs, which are required to register all members and vehicles that operate on that route. The cooperative or SACCO may operate more than one route.

2. __F

License to operate on a specified route

issued to the individual

- In Accra, a Type A permit is issued to the individual. Operators are
 required to be members of a union or association, who validate the
 application. When the regulation was implemented in 2011, the intention
 was to move to route-level licenses issued to the organizing entity, but
 this has not been implemented in practice.
- In Cape Town, licenses for specific routes are issued to the individual, but they are required to belong to the authorized route association.
- In Maputo, route-specific licenses are issued to the individual, and the application should be supported by the association that organizes the route.
- Maseru has route-based licenses with a limitation on the number of licenses available on each route.
- Nouakchott also has route-based licenses.



License to operate within a specific area or zone

issued to the individual

• In Freetown, licenses are specific to a zones (East, West), which are then organized by association.



General license to operate

- In Bamako and Gaborone, general licenses to operate are issued to applicant individuals. In practice, the sector then self-regulates as it sees fit.
- In Kampala, general PSV licenses are issued without formal route allocation. The sector is strongly organized by association, and operators apply to stage leaders, who allocate the licenses.

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- 2. General permit issued to individual operators: in Bamako and Gaborone, general licenses are issued, and operators organize themselves as they see fit. In Lusaka, only technical registration of vehicles and driver licenses is required, which effectively allows them general permission to provide services. In Nouakchott, general licensing applies.
- 3. Prohibited: shared-taxis are not permitted in Cape Town.

Only in Kigali are there effective service conditions set by the regulatory agencies. License holders for motorcycle-taxis are required to ensure that their operators wear helmets and bibs with identifiers, and that they have helmets for their passengers. While some of this is a matter of general traffic law, the point is that the license holder is required to ensure compliance. Other than in Kigali, there are no reported cases of an operator or route organizer being at risk of sanction against its license, either over the course of the license period or on renewal.

In contrast to the minibus-taxi sector, there are two types of internal quality regulation in the motorcycle-taxi sector:

- Internal efforts made by unions/associations in driver training and customer care.
 These are largely geared towards improving driving skills and reducing the risk of injury to drivers and passengers and/or to reduce the negative image of the sector.
- 2. A limited but growing use of ride-hailing apps aimed at clients for whom safety and customer care are important. Affiliated members are required to receive training and meet performance standards.



3.2.5 Use of Technical and Quality Standards to Manage the IPT Sector

Technical standards are provided for in national laws and regulations. Some apply to all vehicles and drivers, while others apply to specific classes of vehicles and their drivers, or to vehicles and drivers when providing passenger transport services (e.g. for hire and reward).

These standards include:

- · Age and quality controls on imported used vehicles
- · Vehicle registration and periodic licensing
- · Vehicle roadworthiness certification
- In-service vehicle roadworthiness inspection
- Driver testing and licensing
- Traffic law, about all aspects of operation and driver behavior
- Traffic law, about the maximum number of passengers permitted

From a regulatory perspective, technical standards can be very powerful instruments. They already have a legal basis, with defined offenses and defined penalties, and specified authorities are mandated to enforce their provisions (vehicle licensing agencies, national police, city police). Thus, even where the regulatory framework for IPT services is light or ineffective, national regulations still provide strong frameworks that require vehicles to be registered and roadworthy and drivers to be licensed, properly qualified, and compliant with traffic law, and prohibit behaviors that obstruct other traffic and disrespect the dignity and safety of users. However, the case studies and other studied cities indicate that these tools are not used to any appreciable extent.

3.2.6 Compliance, Non-Compliance, and Illegality

The regulatory framework and licensing regime provides a structure within which passenger transport services can be provided. Much of the IPT sector is (reasonably) compliant with prevailing regulations. As with other factors, there is a significant difference between minibus-taxis and motorcycle-taxis.

3.2.6.1 Compliance in the Minibus-Taxi Sector

Minibus-taxis are present and formally recognized in all of the cities presented in this report, other than in Kigali (they are authorized in the periphery of Kigali and elsewhere in Rwanda). These cities can be broadly clustered into three types:

- 1. Close regulation of routes and services (Accra, Cape Town, Dakar, Maputo)
- 2. Light regulation of routes and services, through route organizers (Antananarivo, Kampala, Nairobi, Nouakchott)
- 3. Laissez faire approach (Bamako, Freetown, Gaborone, Lusaka, Maseru)

This distinction is made because what is permitted and compliant in one city may be non-compliant or even illegal in another.

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BOX 6

Categories of IPT Compliance in SSA Cities

Observed level of compliance in SSA cities can be clustered in four categories:

1. |



Compliant with licensing requirements, but lax on service or vehicle attributes.

- a. In Dakar, there is broad compliance with licensing, vehicle and service requirements, but reported non-compliance on fares.
- b. In Freetown and Maputo, there is broad compliance with licensing and on-route operation but reported non-compliance with vehicle fitness certifications or vehicle conditions.
- c. In Nouakchott, there is good compliance with licensing requirements, but the overcrowding of vehicles is standard (also in Maputo).

2.

Many operators are compliant, but there is a high level of unlicensed/ illegal operators.

- a. In Accra, the new system commenced with a very high level of registration and compliance. However, in recent years, the system has been undermined by the behavior of the authorities themselves. As a result, now up to half of the minibus-taxi operators are non-compliant (also in Kigali).
- b. In Cape Town, about one third of minibus-taxi operators are believed to be without a license (c. 6,000 out of 16,000).
- c. In Maseru, there is a high level of unlicensed operations.

3.

Nominally compliant, but various illicit practices.

a. In Antananarivo, where licenses are limited, there is a large market in illegal licenses, with duplication of old licenses for illegal operators.

4.

Lax system overall.

 a. In Bamako and Lusaka, there is minimal enforcement of regulations, allowing a laissez-faire system.

3.2.6.2 Compliance in the Motorcycle-Taxi and Shared-Taxi Sector

The motorcycle-taxi sector differs in compliance from the minibus-taxi sector. For example, the sector is not permitted in some cities, whether through non-provision in regulations or the outright desire of authorities to ban or restrict them in the central areas (Accra, Kampala, Maputo). In either case, they operate anyway, other than in Cape Town.

Permits are for general "go anywhere" operation, so they are broadly unrestricted in where and how they operate. The focus of regulation (where it is present) tends to be on safety and customer care. In Kigali, there are strongly enforced requirements for driver behavior, training, and traceability. There is a small-but-growing market for reliable and safe services, with traceability, spurring commercially driven internal controls in the sector.

The sedan shared-taxi sector appears to be broadly compliant with respect to vehicle and driver licensing. Exceptions include Antananarivo, where there are reported to be many clandestine taxis. In Bamako, there is minimal enforcement of regulations. In Nouakchott, many private vehicles are used as informal taxis outside of the licensed system.

3.2.7 External and Internal Forms of Enforcement

Transport is an inherently regulated environment, even where the provision of commercial transport services is only loosely regulated or left entirely to the market. Enforcement in the IPT sector usually involves the following actors:

- 1. Mandated regulatory and enforcement agencies, external to the IPT sector
- 2. Internal enforcement actors of the IPT sector
- Commercial actors, external to the IPT sector, without mandate but with some influence

3.2.7.1 External Forms of Enforcement

In every case city, all vehicles are subject to a wide range of laws and regulations on vehicle and driver licensing, roadworthiness, road traffic laws, insurance and duties, levies, etc. This results in a wide range of regulatory and enforcement actors, each with a specific remit that deals with just one of the many regulated aspects. This leads to a diffuse regulatory framework, which can easily become fragmented and disconnected in the absence of overall coordination. Regulating the provision of commercial passenger transport services brings additional regulatory and enforcement functions, including issuing permits or licenses, monitoring whether operators have current permits valid for where they operate, and monitoring non-compliance (e.g. off-route operation, unsafe vehicles, etc.). These functions are typically carried out at the local level, either by the city's own administration and city guards or by a national passenger licensing agency and the national police.

3.2.7.2 Internal Forms of Enforcement

In most SSA cities, the main enforcement actors are internal to the sector. The IPT sector typically consists of tens of thousands of individual actors, especially the vehicle owners and drivers who must each make a living from the day-to-day operations. It is a highly competitive environment with low margins and no safety net.

Although the margins are low, the sheer volume of the sector means that the overall revenues of the system are high, offering lucrative income to whoever can control it. In most cities, internal entities quickly emerge to bring a degree of organization and control to the individual operations, and then establish unions, associations, or cooperatives. This is in part a matter of illicit/unauthorized operators being able to endure and protect their turf through strength of numbers, but it is also about collective organization. These entities are invariably based around terminals or stands, which gives them a strategic advantage for the business of the area, and which gives them a locus for organization. Over time, the local entities either affiliate through a consolidated union or a federation, or they find a less structured arrangement for mutual coexistence and common action if required. The way in which organizational form evolves is discussed in chapter 7.

3.2.7.3 Potential Enforcing Influence of Commercial Actors

Commercial actors can bring about a different type of enforcement within the IPT sector. These are external stakeholders with which the IPT actors engage voluntarily. They have no mandate, but they can require their IPT partners to comply with regulations or set conditions that parallel the objectives of regulators and enforcement

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agencies. Financiers, lenders, and hire-purchase firms are in a strong position to require compliance from organizing entities or individual operators. This can include proper registration and certification of the vehicle, sufficient insurance, vehicle maintenance, proper operations licenses, and staffing requirements. In return, they can make finance available with less onerous conditions.

App-based booking and ride-hailing companies are emerging commercial actors that partner with the motorcycle-taxi sector and sett compliance and quality standards. The typical model is to offer a reliable, safer service with pre-booking and pre-payment options; fares are collected through a mobile payment or other app. Drivers are usually vetted, required to undergo driving and customer care training, and have helmets and bibs. App/ride-hailing is seen in Kampala, Kigali, and Nairobi, but has limited market penetration to date. It remains to be seen whether these service and business models endure and expand.



3.3

Informality of Organization

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3.3.1 Organizational form

Despite the great diversity in IPT, there are three main types of sector organization. These are presented in the table below.

TABLE 5. Observed IPT organizational models

| Туре | Features | Where | | | | |
|---|--|-------|--|--|--|--|
| Comprehensive centralized or affiliated unions and associations | They establish a common model across the city (and in many cases across the region or even nationally). This is invariably based on the control of terminals managed by union or association officers, a high level of membership among operators (in some cases mandatory), fee structure, citywide association structure, and clear mechanism for dialogue with the government. These structures establish common processes across the city so the IPT functions like a system. They organize the operators and their daily allocation of work, maintaining the calm and resolving disputes, avoiding turf wars where there are multiple unions/associations. They often arrange mutual financial issues such as vehicle purchase/lease and welfare, and at times organize training for drivers. This format is more typical in the minibus-taxis sector. | | | | | |
| Locally based unions and associations | • These are invariably based on the control and management of a specific terminal or stand, | | | | | |
| Individualistic operations | | | | | | |

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3.3.2 Business Models in the IPT Sector

Daily rental (the target system) is the dominant business model. This consists of individual owners who acquire a vehicle and rent it out daily to a driver, either directly or through an association. In the minibus-taxi sector, the vast majority of owners have one or sometimes two vehicles. Owning more than five vehicles is rare in most cities (although there are a few exceptions such as Cape Town where some owners are reported to have fleets of up to 30 minibuses). The majority of owners in most cities are people with some spare funds who seek a simple investment. They make their vehicles available to the system but are not actively involved in the daily operations or business. This creates the space for unions and associations to become the primary organizers of the IPT system and set the norms.

TABLE 6. Characteristics of the main IPT modes in the case cities

| | Minibus-based IPT | | | | |
|--------------|-------------------------------------|--|-----------------------|--|---|
| City | Number | Level of owner-drivers | Bu | siness model | Average vehicle age |
| Accra | c. 11,000 | Fairly small minority | <u>~</u> | Daily rental Daily salary plus share of surplus | >20 years |
| Antananarivo | Urban: 5,500 Suburban: 3,000 | 6% (estimate from survey) | $\overline{}$ | Daily rental | >20 years, possibly 25 years |
| Bamako | est. 3,000 | Fairly small minority | | Daily rental Work-to-own | >15 years |
| Cape Town | 15–16,000 | Fairly small minority | $\overline{}$ | Mostly daily rental | <10 years, due to scrappage scheme |
| Dakar | 3,000 | Fairly small minority | ₹→ | Mostly daily rental; still only a few owner-driver contracts | 9 years (new scheme) 42 years (old type) |
| Freetown | 5,500 | Low | $\overset{r}{\smile}$ | Daily rental | >20 years |
| Gaborone | | Minority. Drivers are often owner's family members | <u>~</u> | Daily rental Own vehicle | 16 years |
| Kampala | 20,000 | Low | ${\vdash}$ | Daily rental | 10–15 years |
| Kigali | n/a | n/a | n/a | | n/a |
| Lusaka | 3,500 | Low | <u>~</u> | Daily rental Work-to-own | 10 years |
| Maputo | c. 2,000 | Low | <u>~</u> | Daily rental Employed | 10-15 years |
| Maseru | 2,600 | Minority. Drivers are often owner's family members | <u>~</u> | Daily rental Own vehicle | 18 years |
| Nairobi | c. 20,000 (may be an underestimate) | Low/rare | <u>~</u> | Daily rental Limited use of contracted waged employees | >15 years |
| Nouakchott | | | ₹ | Written contract of employment with daily rental | Quite aged, >20 years on arrival |

TABLE 6. Characteristics of the main IPT modes in the case cities [continued]

| | Shared-taxi or mot | orcycle-taxi bas | ed | | |
|--------------|---------------------|-----------------------------|--|--------------|---|
| City | Туре | Number | Percentage of owner-drivers | Bu | siness model |
| Accra | Shared-taxi | c. 4,000 | c. 10% | √ | Daily rental |
| | Motorcycle | c. 60,000 | c. 10% | ightharpoons | Daily rental |
| Antananarivo | Shared-taxi (sedan) | Urban: 4,000 | | ightharpoons | Daily rental |
| Bamako | Shared-taxi (sedan) | est. 9,000 | Substantial | ightharpoons | Daily rental |
| Cape Town | n/a | n/a | n/a | n/a | |
| Dakar | Shared-taxi (sedan) | 20,000 | Very few | ightharpoons | Daily rental |
| Freetown | Motorcycle | est. 1,900 | Majority owner-drivers (c. 70%) | <u>~</u> | Own vehicle Daily rental |
| | 3-wheeler | est. 1,700 | | | |
| | Shared-taxi (sedan) | | Majority owner-drivers | <u>~</u> | Own vehicle Daily rental |
| Gaborone | Shared-taxi (sedan) | | Majority owner-drivers | <u>~</u> | Own vehicle Daily rental |
| Kampala | Motorcycle | 200,000 | Moderate but growing minority | <u>~</u> | Own vehicle Daily rental |
| Kigali | Motorcycle | 21,500 | c. One quarter, number of renters increasing | <u>~</u> | Own vehicle Daily rental |
| Lusaka | Shared-taxi | 400 | Majority owner-drivers | <u>~</u> | Employed Work-to-own |
| Maputo | Open-backed trucks | Unknown, but substantial | Unknown; many used for cargo outside peak | ightharpoons | Daily rental; opportunistic use of employer's truck |
| Maseru | Shared-taxi (sedan) | | Majority owner-drivers | <u>~</u> | Own vehicle Daily rental |
| Nairobi | Motorcycle | | | | |
| Nouakchott | Shared-taxi (sedan) | | Low to moderate for formal taxis Informal taxis are owner-drivers | <u>~</u> | Own vehicle Daily rental |

These non-participating owners arrange the vehicle financing, whether through their own funds or borrowing. They are usually responsible for the regulatory costs such as permits, roadworthiness certification, insurance where applicable, and major repairs. The driver is responsible for all aspects of the operation and daily finances, such as fuel, the cost of a fare collector (if used), terminal fees, bribes to police/officials, minor repairs, and the daily rental. The driver receives all the collected revenue, pays all the daily costs, and retains the surplus as salary. Detailed information from the case studies shows driver salaries ranging from about US\$ 2–3 per day in some cities, US\$ 5–10 per day in others (higher in Cape Town). In all cases, drivers are faced with uncertainty, risk and long hours in the field.



There are some variations in the model in which drivers receive a salary and share of the daily surplus (e.g. in the cooperatives in Accra), or where the drivers have contracts with salaries (most notably Dakar and Nairobi). But even in these cases, these salaried individuals are only a small proportion of the total staff.

The main alternative model is the owner-driver model, in which the vehicle owner also drives the vehicle. This is not a particularly common model, other than in Freetown.

In contrast, owner-drivers are far more prevalent in both the motorcycle-taxi (e.g., Freetown, Kampala) and sedan shared-taxi sectors (e.g., Bamako, Freetown, Gaborone, Maseru). This is largely due to three factors: (1) the lower vehicle cost for a motorcycle or sedan car, which reduces the barrier to entry; (2) the availability of finance, both hire-purchase schemes for new motorcycles offered by vendors, and work-to-own schemes where drivers pay more for daily rental and ownership is then transferred after an agreed payment amount is met (this allows the initial investor to exit in less than 12 months with full recovery of capital plus significant returns); and (3) people who already own a motorcycle or car switch to using it commercially, in some cases just at peak times to supplement their other incomes.

3.3.3 Vehicles

The minibus-taxi sector generally uses smaller (12–15 seat) or larger (16–18 seat) minibuses. Larger minibuses of up to 25 seats are also used in some cities. Midibuses of 25 seats and upwards are also used by IPT in some cities. For many years, new minibuses have only been present in Cape Town, where there has been a long-running scrappage scheme to incentivize vehicle replacement, backed by effective enforcement of vehicle condition, and in Dakar, which has had ongoing vehicle replacement programs supported by the World Bank.

Other than in Cape Town and Dakar, minibuses are second-hand imports from either Europe or Japan, corresponding to whether they drive on the right or left side of the road. Imports are invariably 10 years or older. In general, minibuses arrive in reasonable condition with many useful years remaining. However, the low standard of maintenance, poor road conditions, rough driving, and ineffective inspection/roadworthiness regimes quickly take their toll. Nevertheless, vehicles continue to operate for many years in ever-worsening conditions. These deteriorated body and interior conditions, together with poor general roadworthiness and the resultant fear for personal safety, repeatedly came up in the case studies as major concerns of minibustaxi passengers. It is a broadly similar situation for the sedan cars used for shared-taxi services, except the vehicles are even older.

Some countries have from time to time put age limits on imported vehicles' maximum age when first registered as a passenger service vehicle or for license renewals. However, experience is that these limits are later relaxed or abandoned, allowing an influx of older vehicles or allowing vehicles that should be scrapped to continue in service. Even where age restrictions or roadworthiness regimes exist, they are frequently circumvented throughout the system.

In contrast, the motorcycles used as motorcycle-taxis are often new. The cost is much lower (as low as c. US\$ 500), financing can be readily obtained (including through vendors eager to sell them), and investment in a new motorcycle can usually be fully recovered in less than a year. In many cities, motorcycle-taxis are used for shorter trips, and during the day by working people willing to pay higher fares for the convenience and speed. This gives the potential for earning higher revenues to finance new vehicles. However, the case studies show that while the investors get repaid, motorcycle drivers have little surplus at the end of the day, and many have only a marginal income.

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04

State and Private-Sector Actors in IPT

This chapter examines the various actors relevant to the IPT sector. This consists of state actors, who have various statutory and de facto roles that shape the environment within which IPT works, and of private actors, primarily those who own, organize, and operate the IPT.

Building on the case cities and other studied cities, this chapter identifies the types of state and private actors, their roles, and the relationships between them. State is used in a generic and collective sense for all levels and forms of government, whether at the national, regional, or local government levels, as an authority or agency, as internal units of a ministry/city, or as a free-standing entity under their remit.

Table 14 in appendix 3 shows the main state and private-sector actors relevant to IPT in the case cities and other cities. These are shown separately for the minibus-taxi sector and the other main IPT mode in the city, and cover the licensing authority, or regulator if there is no formal licensing for that type of transit, state actors that are relevant to the IPT sector, the main internal actors within the IPT sector (e.g., unions/associations, federations), and other relevant non-state actors that are external to the IPT sector (e.g., financiers, apps).

4.1

Types of State Actors Relevant to IPT

Overall, there are numerous state actors relevant to the IPT sector and responsible for many different roles. There are few, if any, SSA cities wherein these functions are coordinated and consolidated. This leaves many gaps and disconnects in the framework within which urban passenger transport sits, and this is especially evident in relation to IPT. Among other things, this means that the state does not "speak with one voice" in the urban transit sector and that different agencies may follow different agendas.

Transport is an extensively regulated sector, but weak enforcement often undermines the effectiveness of such regulation. This section reflects on six categories of state actor relevant to IPT:

- 1. Statutory bodies
- 2. Regulatory bodies
- 3. Policy making
- 4. Financial decision makers
- 5. Urban planning and transport planning
- 6. Actors relating to infrastructure

A wide range of state and local agencies have statutory roles in developing, administering the requirements of, and enforcing regulations and traffic laws. These state actors have general roles covering all forms of vehicles, transport, and traffic. They include vehicle and driver licensing authorities, vehicle inspection agencies, and traffic police.

Those who regulate the provision of passenger transport services form a second category of state actor. These consist of the passenger transport regulators and licensing authorities, which may sit within a national regulatory agency, or the function may be devolved to the regional or city government.

The following four categories of state actor can be more central to the development and potential reform of the IPT sector than those above. They are classified here in terms of functionality. Section 4.3 below and table 14 in appendix 3 present the relevant actors in the case study and other cities. As with other factors, the situation may differ in the same city for minibus-taxis and other IPT.

Policy setting is a core function of national government, usually the ministry that is responsible for transport. In a few cases, policy-setting functions may be devolved to or split with city-level government. Transport policy sets the overall government direction and goals, which would typically include how the sector is expected to grow and develop, which modes are to be supported, and the scope and scale of investment and expenditure programs. Policy may also deal with changes to the institutional or regulatory frameworks.

Decisions by state actors in the financial sector impact on the IPT sector. For example, the Ministry of Finance (or equivalent) will determine such matters as: duties and other levies applied to imported vehicles, vehicle sales, and spare parts; whether VAT or other tax is applicable on public transport fares and at what rate, and the rates of duty on fuel; and the price of fuel.

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Financial ministries will also set fares, and determine investment and operational spending programs, and the expenditure allocation for the various ministries/agencies and their activities. Financial matters also involve whether subsidy or support funding is available for public transport (it is never allocated to support IPT, but its support to formal PT—for example to maintain below-cost tariffs—always impacts on the prices IPT can charge). In most cases, some arm of the state seeks to control fare setting, either by mandate or by negotiation with the public transport and/or the IPT sectors.

Urban planning and urban transport planning are usually the mandate of city government and then incorporated within the development plans of the city. The plans themselves may be developed by consultants or institutes. In most cases, the planning function is conducted by separate agencies or units to those that regulate and deal with the formal public transport and IPT.

BOX 7

Types of Licensing Authorities in the Minibus-taxi Sector in SSA Cities

In the minibus-taxi sector, four types of licensing authorities are observed:

- 1. National-level unit of the Ministry of Transport (or equivalent): In Bamako, Gaborone, Kampala, Lusaka, and Maseru, licenses are issued by departments or units under the national ministry. In Kigali, licenses are issued by the national regulator, but minibus-taxis have effectively been banned in the city.
- 2. National-level agency under the remit of a national ministry: In Dakar, the Conseil Exécutif des Transport Urbains de Dakar (CETUD) sits under the national ministry, but to date has been almost entirely focused on transport services in Dakar and is to all intents and purposes the Dakar transport authority. Of late, it is becoming more involved in other cities of Senegal but retains its Dakar focus.
- 3. City-level or city-focused agency under the remit of a national ministry: In Freetown, the Sierra Leone Road Transport Corporation (SLRTC) has been transformed from a public-sector operator to being the licensing authority. Although nominally a national entity, the focus is on Freetown. In Nairobi, the mandate was transferred from a national agency to the municipalities. Recently, the city authorities passed the functions back to the national level, for which Nairobi Metropolitan Services (NMS) was established. Dakar is also de facto of this type, and Maputo is intended to be (unless the mandate is transferred to municipal governance).
- 4. City government: In Accra, the municipalities are the licensing authority, under their own bylaws since 2011. At this time, the minibus-taxi sector agreed to move from self-regulation. However, the municipalities have become increasingly fragmented by sub-division, and the foreseen coordinating framework has failed to materialize. In Antananarivo, the city-based services are licensed by the city administration. However, services in the surrounding suburban areas fall under the Land Transport Agency of the national Ministry of Transport. In Maputo, the mandate for regulating local passenger transport sits with the individual municipalities. Nominally, inter-municipal services are inter-city services that should be licensed by the province or nationally. The Maputo Metropolitan Transport Agency (AMT) was established as a metropolitan transport authority, but to date sits under the national ministry and has not yet issued licenses, although it holds the contracts for the Cooperatives that operate large bus routes.

Cape Town represents a combination of some of these. An independent provincial level regulatory entity issues licenses but based on the recommendation of the city government, which is designated the planning authority.

For most cities, the regulator for motorcycle-taxis and sedan shared-taxis is the same as that for the minibus-taxis. The exceptions are:

- · Motorcycle-taxis are not permitted or are banned outright in Accra, Cape Town and Maputo
- · Motorcycle-taxis in Kigali are licensed by the national-level Rwandan Utility and Regulatory Authority (RURA).

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Two significant institutional issues arise in relation to the actors involved. First, most African cities have spread out over multiple local government areas, but lack an overall metropolitan authority that is authorized or motivated to develop comprehensive areawide urban or urban transport plans. Thus, a fundamental state actor is absent, with major consequences. Second, in many African cities, in the absence of internal capacity and process, the main initiative for urban and transport planning comes from international development partners. Quite often this centers on the planning, financing, and delivery of mass transit systems—and the scope reflects their priorities. As a result, non-state actors have had a major influence in shaping urban transport planning and projects over the past two decades.

There are two main categories of state actors with regard to infrastructure.

The first includes those who construct and maintain the urban roads. Construction of the primary road network is usually in the domain of national infrastructure agencies, which are often under a different ministry than the one with responsibility for transport. Construction of local urban roads is more typically a local responsibility, either with the city authority or a decentralized unit of a national agency. Road maintenance broadly follows these arrangements, although in some cases roads constructed under national agencies are then transferred to local government for management and maintenance. From the IPT perspective, the main issues are: (1) for existing roads are kept in a state of good repair; and (2) for roads in the emerging suburban areas to be paved so passenger transport can implement new services without risk of damage to their vehicles.

The second category is that of state agents who provide passenger transport infrastructure facilities, including terminals, stands, and lorry parks. Other than some major transport hubs, this is invariably a local government mandate. It varies greatly from city to city whether local government provides such facilities, especially in the case of IPT, or at least facilitates the private sector to provide its own.

4.1.1 Overview of State Actors in Case Study Cities

4.1.1.1 Licensing Authorities and Regulators of Passenger Transport Services

The licensing authority or regulator is usually the primary official point of contact for the IPT actors, although in practice other state actors may wield more influence over them. This is the state actor that authorizes the IPT services, whose regulations they circumvent through non-compliance, or outright does not recognize them or refuses them authorization. Observed practice in African cities is shown in Box 7.

4.1.1.2 Other National-Level State Actors

As already noted, there are many other state actors that have an active or passive role in the sector. They are important for establishing constructive development conditions in the IPT sector.

For the most part, however, the experience in SSA cities is that while there are many relevant state actors that influence their context, they are mostly either passive or hostile towards IPT in the sense that they do not actively engage with the sector. Further, they are usually disconnected from each other and are unable to provide a shared constructive purpose.

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There are just a few cases where national-level state actors collectively or individually support or develop the IPT sector either by policy or through programs.

- In Dakar, CETUD has supported the development of the IPT sector over two decades, and could have only done so with the backing of other state actors.
- In Kigali and Maputo, and a failed effort in Accra, national-level state actors have supported IPT actors to transition into becoming large bus actors. However, they have not supported those who remain in the IPT sector.
- In South Africa, the national government funds a minibus-taxi recapitalization
 program which covers approximately 20% of the cost of a new vehicle and is
 available to licensed operators when old taxis are scrapped. This has contributed
 significantly to fleet quality in Cape Town as well as elsewhere in the country.

4.1.1.3 Other City-Level State Actors

In a few cities (Cape Town and Kampala), the licensing or regulatory function sits at the national or provincial level, but the city government has a role in defining the minibustaxi routes.

Apart from any licensing or regulatory role, the city government is the main city-level state actor relevant to the IPT sector. At a general level, they are responsible for the maintenance of some or all of the roads and usually for traffic management schemes, signage, parking, etc. In a few cities (e.g., Accra), the city guards/police are responsible for traffic operations and enforcement, but this function is mostly carried out by local units of the national police. Parking management is invariably a city function.

More specifically for IPT, city government usually has responsibility for public transport infrastructure. They are usually the entity that authorizes terminals, stands, lorry parks, and other locations from which IPT operates. Some city governments (e.g., Accra, Cape Town, Kampala, Maputo, Nairobi) have constructed the main permanent terminals from which minibus-taxis operate, while leaving it to the IPT sector to establish local terminals.

4.1.1.4 Metropolitan Transport Authorities

None of the case cities or other studied cities have a comprehensive metropolitan transport authority, in the sense of an entity that is responsible for the planning, regulation, and management of all modes of passenger transport including IPT, for the effective metropolitan area.

A few cities have arrangements that may approach that of a metropolitan transport authority, but with limitations:

- The City of Cape Town has much of the functionality of a metropolitan transport
 authority and covers most of the metropolitan reforms discussed later in chapter
 However, the Province of Western Cape is the licensing authority and channels
 much of the operational subsidy to the formal passenger transport sector.
- Kigali could be considered to have a de facto arrangement broadly similar to a
 metropolitan authority, due to a strong and effective coordination of the various
 national and city-mandated entities.
- In Nairobi, the Nairobi Metropolitan Area Transport Authority (NaMATA) is in development. To date, its focus has been on planning for mass transit modes, and it does not (yet) have a role in the licensing or regulation of IPT services.

Overall, of the case cities, only Cape Town has a metropolitan authority that explicitly provides for and works with the IPT sector (in this case, the minibus-taxi sector). Elsewhere in Africa, for example in Lagos, LaMATA has the institutional capacity and works with the minibus-taxi sector, but to date has focused on their transition to large bus operations and not on the development of the minibus-taxi mode itself.

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4.2

Types of Private-Sector Actors Within the IPT Sector

The IPT sector consists entirely of private-sector actors. The vast majority of these are the owners, drivers, conductors, and ancillary workers who provide the capital, assets and labor for the IPT services. However, despite their numbers, they are relevant only through the entities to which they belong.

The entities that organize the sector and control facilities are the key actors within the IPT sector. Five main categories of actor are discussed below, escalating in the sense that the entities further down the list would typically also perform the tasks of those earlier in the list:

- 1. Controllers and organizers of terminals or stands
- 2. Organizers of individual routes or small areas
- 3. Organizers of groups of routes or larger areas
- 4. City or nationwide unions/associations
- 5. Federations of unions/associations

4.2.1 Controllers and Organizers of Terminals or Stands

These entities control one or more terminals or stands. Their primary interest is to gain fees from providing facilities for transport providers in the area, and perhaps also from ancillary activities such as traders, mechanics, etc. They are not directly involved in day-to-day operations but may control the departures as a way of collecting fees. They are small scale but there may be many across the city. This is a standard model for the motorcycle-taxi sector in many cities, but is far less common in the minibus-taxi sector.

4.2.2 Organizers of Individual Routes or Small Areas

These entities are based on individual routes rather than the terminal/stand. They typically consist of the owners or drivers associated with the route, who have self-organized as a means of establishing and protecting their route. They may evolve their organizational structure but, for various reasons, they do not grow beyond a few routes. There are many loosely affiliated individual route-entities coexisting in the city (e.g. Antananarivo, Gaborone, and to some extent Cape Town and Nairobi).

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4.2.3 Organizers of Groups of Routes or Larger Areas

These entities establish control of a more significant area with multiple routes. The scale allows them to organize at a larger level, set norms, and be more significant in dealings with state actors. They may be fully consolidated entities or route-level entities may affiliate with them (e.g. Dakar, Maseru, Maputo).

4.2.4 City or Nationwide Unions/Associations

These entities have coverage and membership across the whole urban area, and may even operate at regional or national level. They may have exclusive control (e.g. Lagos), or coexist with other city/national entities (e.g. Accra and South Africa).

4.2.5 Federations of Unions/Associations

These entities are more representative in nature. Their membership consists of associations of the various types listed above rather than owners or operators (e.g. Bamako, Freetown, Kampala, Maputo, and to some extent the "mother bodies" in South African cities). For the most part, there are separate federations for minibustaxis and motorcycle-taxis. They do not control routes or get directly involved in the daily operations, but they may facilitate among their members in the coordination of areas, services, and tariffs, in settling disputes, in organizing bulk purchase of parts or services, in training programs, etc. They are often the recognized interface between the IPT sector and the state actors, and sometimes the state has facilitated their establishment (e.g. the Ghana Road Transport Coordinating Council, or GRTCC, in Accra, Federação Moçambicana dos Transportadores Rodoviários, or FEMATRO, in Maputo, and the Union of Transport Operators Forum, or UTOF, in Kampala).

These entities consist of the organizers, owners, and operators of the IPT assets and services. Sometimes there are background entities or persons that can also wield influence in the sector, not necessarily from any authorized position and not necessarily visible.

4.2.5.1 The Private Sector: Nature and Roles of Unions/Associations of Operators

The different types of unions and associations were identified above. This section examines the nature and roles played by the unions/associations in the case cities and other studied cities.

The attributes described here are highly relevant to the capacity of the sector to work in a collective way for reforms, for three linked reasons: (1) to work with state actors; (2) to bring their membership along with whatever is agreed; and (3) to deliver reforms at the technical and operational levels.

Note that some unions/associations comprise owners, while others comprise drivers/operators. This can have a large bearing on their role and their main interests.

Three main types of roles were identified and are observed in all forms of IPT. These roles are not mutually exclusive.

TABLE 7. Roles of unions and associations in the IPT sector in SSA cities

| Type of role | Observed practice in SSA cities | | | | |
|--------------------------------|--|--|--|--|--|
| Control of the | The primary roles of IPT unions/associations are operational in nature. | | | | |
| business and operations | They bring order and consistency of operational mode across many hundreds or even thousands of individual owners and operators. They maintain peace among route or area factions (perhaps after a period of intense turf wars). These are universal functions. | | | | |
| | • In some cites (Accra and Cape Town), the unions have strong control over operations and memberships. They impose internal discipline, and they bring a level of operational structure close to that of organized public transport. | | | | |
| | In Nairobi, the SACCOs match drivers to the vehicles that owners make available. | | | | |
| Development and mutuality | Over and above the daily operations, some unions/associations strive to develop the sector and improve conditions for their members. | | | | |
| | • In Nairobi, SACCOs help to arrange financing for vehicles, as do some unions in Accra. | | | | |
| | • In Dakar, the minibus-taxi sector was restructured as Economic Interest Groups (EIGs), which were then able to access vehicle financing. | | | | |
| | • In Maputo, some associations restructured as cooperatives that could then access large buses and develop route operations. | | | | |
| | • In Kampala and Kigali, the motorcycle-taxi associations help train drivers. | | | | |
| | Mutuality is common within the IPT sector, where the unions/associations organize contributory funds to support members in case of death or serious accident. | | | | |
| | In Accra, a cooperative has established a land purchase and housing development scheme so that members are able to own their own properties. | | | | |
| Representation and negotiation | Federations, inter-entity councils, etc. are often formed so that the sector can interact with state actors in some unified way. | | | | |
| with state actors | • In some cases, the state negotiates and reaches agreements at the sector level. In other cases, the sector uses its collective strength in bargaining. | | | | |
| | • In Accra, the Ghana Road Transport Coordination Council (GRTCC) is government-initiated, with limited effectiveness and sometimes only lukewarm support from the largest union, Ghana Private Road Transport Union (GPRTU). | | | | |
| | • In Maputo, FEMATRO was government-initiated, but it has clearly been the main interlocutor with government on matters related to vehicle acquisition, financial support, and operations. | | | | |
| | In Kampala, the recently formed Union of Transport Operators Forum (UTOF) brought together the different unions to negotiate with the government on pathways forward for the IPT sector in light of the upcoming BRT. | | | | |
| | • In Bamako, the Malian Council of Road Transport Operators is the recognized sector interface with government. | | | | |
| | The arrangements in Cape Town are more ad hoc, based around mother bodies that allow the minibus-taxi associations to work together in government-recognized associations. A body called the South African National Taxi Council (SANTACO) is recognized by the national government as the key institutional mechanism with which to engage with the minibus-tax industry nationally, and there are also provincial sub-councils to this body for more local engagement. | | | | |



4.3

Relationships Between State and IPT Actors

In general, relationships between state actors and IPT actors range from neutral to outright hostile.

The IPT sector has usually developed through structured non-compliance with all sorts of regulations. The sector usually exploits weak institutional capacity to enforce against it, especially where there is rapid growth in demand for transport. In many cases, the IPT sector has brought about or accelerated the demise of the formal bus services, and thwarted efforts to restore formal public transport. The power base of the IPT leadership is often derived from system dysfunctionality and the fragmentation of all other actors, so it is in their interest to maintain divisions. Strikes, protests, and disorder can be mobilized whenever the interests of the sector are threatened. This invariably leads to accumulated ill-feeling and antagonism between the state actors whose authority is constantly challenged and the IPT actors who wish to avoid constraints.

The low quality, poor safety, reckless driving, and low level of customer care across the IPT spectrum lead to a negative perception of the sector. Public-sector or state actors invariably view the sector as unsuited and undesirable as a main mode of passenger transport in their city. Plans and public statements usually talk in terms of transforming, replacing, marginalizing, or eliminating IPT. This may be backed up from time to time by crackdowns, attempted bans, etc. Naturally, the IPT sector actors view such sentiments and actions as clear signals that the state actors have no good intentions towards them. Over the years, a deep level of distrust has developed. This has been exacerbated where there is widespread extractive behavior of the state's own officials.

As will be seen in chapter 8, efforts to transform or reform the IPT sector invariably require the establishment of some structure to enable working relationships, and then the building of trust between the state and IPT actors. This has been visible in Accra, Cape Town, Dakar, Freetown, Kampala, and Maputo, among others. Even then, the state actors' focus is usually on a specific intervention, such as preparing for a BRT project, network restructuring, or vehicle renewal and scrappage. This can favor some IPT actors and leave out others, risking further distrust by the latter and even splits within the IPT sector.

There are no cases among the cities where the state and IPT actors have established sustainable positive working relationships across their sector or built up extensive trust. This is an important aspect to be considered in any discussions on reform.

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4.4

The Private Sector: Financing and Other External Actors

In some cities, some additional actors are neither from the state nor the IPT sector. In the studied cities, these are observed in: (1) structured vehicle financing; (2) vehicle manufacturing; and (3) app/ride-hailing and mobile payment services.³

- In Accra, the Ministry of Transport arranged concessionary loans for vehicle purchase under the Microfinance and Small Loans Centre (MASLOC).
- In Antananarivo, a taxi call center company is enabling a wider range of sedan taxis to access customers.
- In Cape Town, the national taxi recapitalization scheme in complemented by strong private-sector financing participation, through financier SA Taxi.
- In Dakar, Senbus, a Senegalese bus manufacturer, has been an integral part of the vehicle-renewal program for the minibus-taxi sector. The EIGs formed from the IPT sector established their own micro-finance company, Mectrans.
- In Freetown, several app/ride-hailing companies have been established for the motorcycle-taxi sector. Some of these companies also lease vehicles to riders.
- In Kampala, several app/ride-hailing companies have been established. Separately, several entities make vehicle financing available (lease-to-own) and lease vehicles.
- In Kigali, a technology firm provide intelligent fare meters and payment solutions to the motorcycle-taxi sector.
- In Maputo, buses have been financed through bank loans mobilized and
 underwritten by the Transport Fund, then provided to operator companies under
 operating lease with contracted maintenance from vendor-nominated firms. While
 this scheme has only been for the large buses made available to cooperatives
 formed from the minibus-taxi associations, it shows the possibilities available.
- In Nairobi, both national and international firms are providing ride-hailing and
 e-payment services to the motorcycle-taxi sector, and to a lesser extent to the
 minibus-taxi sector. Mobile phone companies are offering mobile payment services
 (especially MPesa) and have extensive networks of agents who sell mobile money.

For the most part, there is a low-to-modest uptake and market penetration rate of these external actors. Only in Dakar is vehicle financing an integral and significant part of the system. The ride-hailing and e-payment actors in Kampala, Kigali, and Nairobi have a high profile (perhaps due to strong promotion) but still only a low uptake rate among niche markets.

Nevertheless, these developments indicate that new, non-traditional actors are interested in entering the IPT landscape. They may become more significant in the coming years.

3

Normal providers of lending, such as vendors of vehicles and equipment, maintenance providers or mobile phone providers, are not included here.





TRANSPORT IN SSA CITIES

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05

Purposes of Reforms in the IPT Sector

This chapter examines the purposes of reforms in the IPT sector. It begins by identifying the key strengths and limitations of the IPT sector. It also identifies the typical goals and scope of IPT sector reforms undertaken to date. It then looks at the perspectives and assigned roles for IPT within policy and planning which rarely, if ever, seek to develop the sector and harness its potential, despite the overwhelming need for increased transport capacity.

5.1

Strengths and Limitations of IPT

IPT poses many challenges for policy makers and regulators. On the upside, IPT is the primary form of passenger transport in most SSA cities, carrying large numbers of people daily, reaching all parts of the city, employing numerous people, and providing an essential service without any government support. It is generally stable in form, widely available, and understood by its users. It has undeniable strengths coupled with undeniable limitations, as shown in Table 8.

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5.2

Motivations for Reform and Change

Attitudes towards change in the IPT sector are typically based on perceptions that these transport services are backward and lawless, use poor-quality vehicles, engage untrained drivers barely on subsistence wages, have poor safety records with reckless disregard for regulations, and in some cases, have quite violent internal enforcement and turf wars. This perspective sees IPT as a necessary evil, performing an essential function but in very undesirable ways. Without visible alternatives, the public and local politicians would like to see improvements to basic quality, safety, and customer care. Agencies would like to see improved compliance and accountability in the sector.

As they seek to improve their cities, economies, and societies, many transportation planners and decision makers consider that there is little from this sector worth keeping. From this perspective, the IPT sector should be systematically replaced by mass transit, formal bus services, and commuter rail, in the style of cities with more developed economies. In this view, the IPT services should be reduced, marginalized, or eliminated, with the IPT actors perhaps being given the choice to participate in the new arrangements or to exit the market. However, this approach is not universal.

TABLE 8. Strengths and limitations of the IPT sector

Strengths

- Across SSA cities the IPT sector has provided essential urban mobility services where state actors have been unwilling or unable to do so.
- The volume of passengers carried is in many cases more than that of large urban rail systems in other countries.
- The sector can penetrate every corner of complex metropolitan areas.
- > It can provide service where all other forms of transport fail.
- It can upscale and/or adapt services rapidly to changing demand.
- It can organize thousands, sometimes tens of thousands, of untrained, poorly educated, and lowly paid workers into a fairly effective and stable transportation mode.
- The sector can mobilize investment from thousands of individual owners.
- It can be self-financing, operate without subsidy, and generate profit, albeit often at the absolute margin.
- Market entry is easy for new participants, who can upscale rapidly if required.

Limitations

- In most cases, the informality and the low barriers to entry lead to lower quality of vehicles and drivers, poor maintenance, unsafe operations, lack of scheduled or integrated serwvice, low accountability, and low-paid insecure working conditions.
- There is often an excessive supply of vehicles jostling for business, contributing to or worsening congestion, and an excessive focus on the busy routes with insufficient supply elsewhere.
- In many cases, there is low compliance, a poor image, and unsavory controls of the sector, distrust and unwillingness to engage with authorities, and a high degree of political sensitivity.
- The IPT sector is a cash-driven business outside the taxation net. While authorities seek to formalize the sector, IPT associations and organizers seek to retain control of revenues.
- Workers are frequently poorly paid, working very long hours in tough conditions, with minimal job security or benefits. Formalized employment would benefit workers but would increase costs and reduce the margins for owners and organizers.

A more constructive approach is visible in Kochi, India, where individual operators of long-standing were impacted by the new Metro (see box 8).

In practice, in SSA cities, state actors have six main motivations for reforming the IPT sector. All but one are related to the minibus-taxi sector:

- Related to a BRT project, transform IPT actors into operators within the system, as a means of absorbing those who would be displaced
- 2. Related to a BRT project, move IPT actors off their traditional routes on the primary corridor (to allow replacement by large bus operators), either to become providers of feeder services to the BRT or to move to emerging and underserved areas
- 3. Re-establish or expand the large-bus network, through the transformation of part of the IPT sector
- 4. Improve the general condition of the IPT fleet by investment in new(er) vehicles and the removal of the worst-grade vehicles
- 5. Bring IPT actors inside the regulatory and taxation framework
- 6. Improve safety and security for motorcycle-taxi users, including the traceability of riders

The motivation for change on the part of IPT sector actors is less clear, most probably as IPT leadership sees their position and benefits as dependent on maintaining the status quo. Where the IPT sector is motivated to implement changes, these usually relate to the motorcycle-taxi sector, and show a desire to:

- 1. Improve the professional and technical skills of riders, their health and safety conditions, and the general public image, which in turn may attract more business.
- 2. Improve the working conditions, benefits, job security, and safety nets for drivers and other workers.
- 3. Enable drivers/riders to acquire their own vehicle and gain greater benefits from their daily operations.

Within the minibus-taxi sector, there are indeed actors who wish to invest and renew their fleets, and in some cases to migrate to larger vehicles, but this is seldom a stimulus for change or reform that is initiated by the sector itself.

5.3

Current Perspectives and Assigned Roles for IPT in Urban Transport Planning

As already noted, the various forms of IPT are the primary providers of passenger transport in the cities of SSA. It could be expected that developing the IPT as a key instrument in urban transport planning would be a leading motivation for change. However, this is visibly not the case. It is important to understand why this is not happening and whether different approaches are possible.

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In general, urban planning and urban transport planning are weak in African cities. Most African cities lack an effective framework for planning, delivering, and controlling urban development, which would in turn serve as the reference framework for planning and developing sectors such as transport. This can be attributed to four main factors:

- 1. Most SSA countries lack national policies, frameworks, and programs for urban planning and urban transport.
- 2. Almost all African cities have greatly increased in size, outgrown their original city boundaries, and spread into multiple contiguous administrative areas. Only a handful of African cities have recast their boundaries to cover the metropolitan area (e.g., Cape Town), or established an effective metropolitan-wide urban planning or transport authority that has endured (there are no current examples, but Maputo and Nairobi are endeavoring to do so).
- 3. There is a lack of institutional capacity and funding to perform planning tasks and/or to control urban development and land use.
- 4. There is a dearth of basic data required for planning, exacerbated by widespread non-compliance with providing any (true) data about its activities.

These factors are often linked to weak human resource capacity and the lack of specialist skills in urban planning and urban transport within the national and city institutions. This is all too often exacerbated by a lack of urban mobility departments or units even in the primary line ministries, a lack of staff and support resources, and a lack of capacity-building.

Due to such gaps, in practice, most comprehensive urban transport planning has been sponsored and managed through international development partners, NGOs, or other donors. These are typically one-off activities that develop an urban transport master plan for the city or metropolitan area and take a long-term perspective with some nearer-term actions. The focus of these is invariably on mass transit, its infrastructure, and the significant investments required (e.g. Cape Town, Kampala, Maputo, Nairobi). Their primary concept is invariably that mass transit will be developed, corridor by corridor, providing high-capacity transit and systematically displacing the current IPT. The secondary concept is invariably that the IPT will be displaced from its current main areas of operation and have alternative roles as feeder services or local services in areas away from the mass transit corridors. IPT stakeholders are presumed to transform into the mass transit system, move to the alternative routes, or exit the industry. In practice, there are long timelines and much uncertainty to plan, commit finance, and deliver even one mass transit corridor. However, such plans do not make provision for these interim periods in which IPT continues to be the mainstay of the city's mobility system.

To date, none of the studied cities have developed a comprehensive network and service plan for IPT, neither in cities where IPT is the primary or sole mode of passenger transport, nor as a side-by-side form of transport with mass transit. None of the cities have developed a comprehensive enhancement plan for the IPT sector, endorsed by the city and with a committed implementation plan.

That said, several cities—including Cape Town and Dakar—are seeing stronger roles for IPT but have not yet fully incorporated them into their urban transport plans.

5.4

Placing Minibus-based IPT at the Center of Urban Transport Strategies

A new perspective is required about the role and organization of minibus-based IPT in Africa's cities, and how this is reflected in policy and planning. The perspective and potential roles for motorcycle-taxis (okadas, boda-bodas) are somewhat different and are discussed in section 5.5.

Africa's population will double by 2050. The greatest increases will be in the main cities, which will expand, leading to longer travel distances. This will lead to an enormous increase in the need for motorized transport. The experience of the past two decades has shown that while mass transportation (BRT, LRT, metro, etc.) and large-capacity bus services can be implemented, the lead-time and costs limit the scale of what can be achieved. The mobility needs of Africa's cities—already seriously underserved—will continue to grow faster than conventional transport can be developed.

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BOX 8

Reorganization of traditional private-sector operators in Kochi, India

Kochi, India, is a city of about 2 million people with 1,397 private buses that cater for 73% of passenger traffic. There is also a state-owned bus operator. The private buses are mostly individually owned, with licenses to operate on specified routes and regulated fares.

The Kochi Metro system became operational in 2017, in direct competition with the bus services on the same corridor. The Metro gained half its patronage from existing public transport users, thus undermining or 'poaching' the revenue base of many long-established bus operators.

In response, there was a restructuring of the bus system, along with creation of a Unified Metropolitan Transport Authority (KMTA) and a dedicated Urban Transport Fund (provided for in national policy). Following stakeholder meetings, a total of 987 of the private buses (about 70% of the sector) aggregated into seven companies, of which five are limited liability partnerships, one is a private limited entity, and one is a cooperative.

One of these entities is Kleen Smart Buses Ltd (KSBL), into which 193 buses were aggregated. The stakeholding of KBSL is interesting and complex, being 51% by private operators, 26% by state-owned bodies, 20% by an ex-pat trust, and 3% by general public. The stake by government bodies makes KBSL eligible for public funds and subsidies.

KMTA provides a framework for integrating all transport modes in Kochi and for infrastructural financing. KSBL has entered gross cost contracts with government for redesigned bus routes connecting to the metro stations and demand centres. Operator restructuring was identified as a significant barrier, but it has been overcome, not least because the combination of loss of business to metro and the impacts of the pandemic had put them in serious financial predicament, for which the new arrangements offered a way out. There is now a clearer structure for public transport in Kochi, in which KMTA provides the modal integration, bus services complement metro on the corridors it services, and the restructured companies (including KBSL) aggregate the individual bus operators and deliver the services under contract.

Jose and Joseph (2022):

"Organizing the unorganized: barriers and enablers in formalising private bus service operators: case study of Kochi, India"



For all its many faults, IPT is the mainstay of mobility in almost every African city. Even the few cities that have (re)established large-bus operations and mass transit still rely on IPT to carry much of the daily demand for travel, especially in the suburban and developing areas. The reality is that most African cities are IPT cities, in which IPT (in all its forms) reaches every part. Although informal, these modes already have a very large ridership base, vehicle and operator resources, terminals, and organizational structures. This can be built on.

Until now, IPT has generally been viewed from a laissez-faire perspective (it provides a vital service, and spares government from having to do so in the face of so many other pressing needs), or as a necessary evil to be tolerated until something better comes along. Reform initiatives are often about tidying it up, limiting its scope, or converting it to something else.

Faced with this current and deepening crisis, developing IPT is actually the most rational course in urban transport over the next two decades—perhaps the only feasible course for most cities. Rather than marginalizing, sanitizing, or ignoring IPT, it should instead be repositioned at the center of urban transport policy and strategy. It needs to take its place alongside the conventional mass transit and bus services (to the extent they exist or are in development). Thus, transport strategy needs to position and develop IPT as the baseline citywide mode, into which mass transit and bus routes are inserted on key corridors to which they are better suited, with all modes developed to reach their full potential. This would be a major shift from current strategies, in which key corridors served by mass transit and bus routes are viewed as the system to be developed, while the rest of the urban area is viewed as ancillary, with vague definition of how they should be served.

In turn, this perspective would also require significant change in the IPT sector. The extent and the potential difficulty are not underestimated, but if given a formal role, a clear direction, a sustainable future, and committed backing from government, major change is far more likely. The case studies have shown that changes in the IPT sector can be achieved (described in chapter 8), and there is a limited but growing toolbox of reform levers and practices (described in chapter 7). However, they have mostly been about improvements to the existing model, such as vehicle-renewal or compliance with standards.

What is needed is a defined purpose for IPT—a role that it is mandated to achieve — which in turn sets requirements and obligations that the sector will need to meet, backed by enablers and support that will enable them to do so. In this way, what is currently informal becomes formal, in ways that are appropriate both for the specific city and the various forms of IPT.

5.5

Policy Perspective and Roles of Motorcycle-Taxis

The policy perspective for motorcycle-taxis is likely to be quite different to that of minibus-taxis.

Motorcycle-taxis have proliferated throughout African cities over the past decade, and have become the dominant mode in a number of West African cities. Their numbers, behavior, and safety record have given serious cause for concern (even more so than for minibus-taxis).

Whereas the number of minibus-taxis is a multiple of the number of buses that would be required to carry the same number of people, they are still in the order 10–20,000 in most African cities (as a megacity, Lagos is exceptional with about 100,000). In contrast, motorcycle-taxis are numbered in the hundreds of thousands with many hundreds of stands. For the most part, they carry one passenger or two at most (which is often illegal), compared to minibuses that each carries 10–20 times more people per vehicle. Whilst fares may be reasonably competitive for shorter journeys, fares tend to be unaffordable for many people for longer journeys such as commutes. Further, they are not accessible or suitable for many people, including traders, and many will not use them from fear of safety or personal security. Where motorcycle-taxis take business away from route-based public transport (bus or minibus), they undermine the services that are available and generally affordable to all.

In this context, the role for motorcycle-taxis within a public transport system would be as local services for short trips and errands, as last-mile connectors to the bus and minibus routes, and for areas where the topography is unsuited to bus or minibuses (e.g. in hilly cities such as Kigali).

However, containing the sector to any specified role is much easier said than done, due to their large numbers, and culture and history of non-compliance. Bus and minibuses would need to first regain their market position by offering sufficient quantity, quality, and speed of service, thereby reducing the business for so many motorcycle-taxis.

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Strategies for Reform in the IPT Sector

This chapter examines strategies for reform in the IPT sector by first considering what is needed from the sector and the strengths and weaknesses of the current model. It examines potential pathways of evolution in organizational and corporate form, based on the proposed progressive set of five levels—from a fully atomized free market (level 1) to companies contracted by public authorities (level 5).

The chapter then considers the adaptation needed by the IPT sector to reach the level required in a reform strategy, including adaptation in financial models and vehicle financing. The chapter concludes with a consideration of how the state and IPT sectors can work together for change.

6.1

Nature of Changes Required from the IPT Sector

It is unrealistic to envisage in toto replacement of IPT in most SSA cities. Despite spending significant amounts on implementing formal services, IPT remains the dominant mode. Often this is because IPT services prove more convenient to users, given the current environment and their set of needs.

Table 8 in section 5.1 listed the strengths and limitations of the IPT sector. This report acknowledges the need to improve public transport by improving the IPT sector rather than seeking to replace it, and thus identifies a range of improvements that transport authorities and others might consider:

- Sectoral capacity to participate within a formal urban passenger transport system, working within roles that they have helped to define
- Sectoral capacity to be a reliable partner and provider of passenger transport services
- Organizational capacity to deliver agreed service levels, on networks they have helped to define, providing spatial and temporal coverage in line with the mobility needs of the people

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- Use of vehicles of reasonable age, quality, and emission levels, with due regard to circumstance—and capacity to maintain the vehicles to an acceptable condition
- Consistent adherence to agreed service and performance standards that are acceptable to users, recognizing what is feasible and affordable given the circumstance
- · Adherence to safety, roadworthiness, and driving regulations and norms
- · Acceptable employment conditions for those working in the sector
- Sectoral capacity to ensure its members comply with all agreements, regulations, and standards, including education, capacity-building, monitoring, and internal enforcement

These are high-level objectives. The needs in any specific city will vary according to the type, scale, organization, and quality of current IPT, to whatever conventional transport exists, and to the ability and willingness of transport authorities to lead, support or just passively regulate the sector.

The roles and requirements for the various IPT modes would also be quite different. Minibus-taxis are already a natural part of organized, route-based public transport. Shared-taxis may also play such a role in markets of lower or more diffuse demand. In contrast, motorcycle-taxis and 3-wheelers are more suited to individual hire and may be dissuaded from direct competition with route-based modes.



6.2

The Strengths and Weaknesses Inherent in the Dominant IPT Model

To a substantial degree, the characteristics of any IPT service—and therefore the scope for change—are driven by the operator's business model.

The most common IPT business model has proven highly resilient within the SSA context, with some key strengths that enable its relative success. It does not require sophisticated organizational and institutional arrangements. As long as individual operators have access to a vehicle, they can enter the market. Drivers mostly rent the vehicle from the owner and earn according to the number of passengers they carry, while paying for fuel and limited maintenance. They are thus incentivized to work hard and creatively at an individual level, finding new markets and responding to user needs. They work much longer hours than formal bus drivers, absorbing the off-peak idle periods into their workday.

The mass-produced vehicles used—which are often second-hand imports—are cheap in relation to their technological sophistication. When a vehicle can no longer operate, there are always others to take its place.

But IPT's strengths are also the roots of its weaknesses. Ease of entry results in over-trading, especially on the more lucrative routes. Competition for passengers and a desire to earn as much as possible in the peaks leads to reckless driving. Over-supply results in low surpluses and a resultant deterioration in vehicle maintenance together with aging fleets. The individualized business model limits the ability of operators and drivers to cooperate to better match fleet supply to user demand.

Strategies for change must recognize this inherent contradiction, where the very factors that underpin IPT strengths are also a root cause of their weaknesses.

6.3

Evolution in Organizational and Corporate Form

Many reform efforts are characterized as formalizing the informal, but the nature of this shift is often not well understood. Firstly, as has been noted earlier, there is not a binary distinction between informal and formal. Even within informal systems there are formal arrangements, and vice versa. Secondly, current outcomes reflect a whole ecosystem of institutions and relationships. Significant change therefore requires addressing a wide set of systemic issues.

The figure below shows the shift from generally informal arrangements and highly individualized businesses to formal, more collectively organized ones—not as a single step but as a continuum. In many cases the shift occurs naturally, driven by the industry itself as it organizes itself better to address the challenges it faces.

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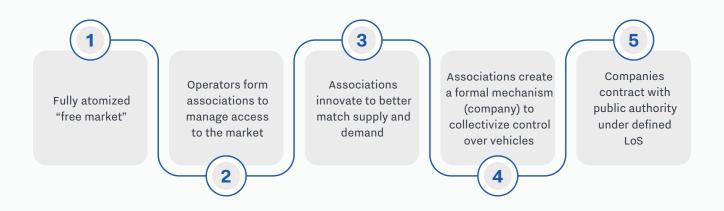
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Level 1 is the totally free market in which operators act and operate as they choose, without any collective organizational form. In practice, most IPT in SSA cities has moved beyond this stage, especially in the minibus-taxi sector. Exceptions include Bamako and Gaborone, where the minibus-taxi operators still operate in a very individualistic and loosely organized way. Elsewhere, it is mostly the illegals and "floaters" who continue to operate in this way, piggybacking on the main service type while acting outside any structure and usually paying penalties or bribes as necessary during the day. In some cities, motorcycle-taxis also operate in this way, being loosely associated with one or more stands.

Level 2 is where the vast majority of IPT sits. The sector has organized itself into associations or unions, usually based around terminals and routes. Actors maintain their position through their presence, force of will, and ability to protect their turf against others. Invariably an equilibrium is reached with other associations, often through a broader structure that maintains peace and mediates any disputes. This provides stability and relative uniformity in the sector, but it also makes for an entrenched format that has little incentive for change. The business models of the associations are invariably based on membership levels, in part for the joining and daily fees, in part for strength through numbers. Associations stick with this tried and trusted model, which is designed to benefit association officials and vehicle owners, and do not move beyond it on their own accord.

Level 3 is where an association seeks to better match supply and demand. Although this may look like level 2, it embodies a fundamental shift in both approach and business model. It moves from a model based on fees from members towards a model based on the business generated from customers. While drivers already have this perspective in levels 1 and 2, the shift is that the associations themselves now recognize the commercial potential. The significance is that such associations may improve the spatial and temporal service offer in a structured way, and would also be better positioned to work with authorities for service planning.

FIGURE 7. A continuum of advancement in the IPT industry organization



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Level 4 represents a major shift in how services are organized. This entails a high-level internal discipline, to recognize the formal role IPT plays in the public transport system, and the formation of some form of company or cooperative where control over vehicles is exercised collectively instead of by each individual owner and driver. This may mean transferring vehicle ownership to a company or collective organization in which operators now become shareholders. This creates conditions for resource optimization where fleets can be right-sized. Inefficient operations are avoided, and the service vehicles operate in a more cooperative way, in less direct competition with each other. This model also provides the basis to move away from the fill-and-go system and toward regular service intervals offering some capacity along the route. It also requires a move from aggressive competition for passengers, with associated reckless driving and wasted fuel (known as the "penny war"), towards more training, and attention to collective facilities (e.g. for vehicle maintenance). The creation of companies significantly enhances the scope for vehicle financing.

Level 5 is the shift towards a formal relationship with the transport organizing authority for the provision of passenger transport services. This may be through a contract, service agreement, or concession. At this level, the association will need to have a corporate form (typically a company, but possible as a cooperative) that enables it to enter contracts and be bound by them, to have the internal structures and methods to be able to deliver the services and honor the obligations, and to be able to satisfy public requirements on administration, taxation, and access to public sources of finances. This level of organization further advances the scope for accessing vehicle financing, whether through government-sponsored programs or commercial channels.

A good example of level 5 can be seen in Pereira, Colombia, where the IPT operators became the operators of trunk and feeder routes for the Megabus BRT. The IPT operators transformed from loose associations of *collectivos* into companies with the capacity to enter long-term contracts to finance the bus fleet and to operate BRT services. This is described in box 9.

The minibus-taxi sector is already at level 2 (associations or unions) in almost all larger SSA cities (only the motorcycle-taxi and occasional modes operate in atomized or stand-centric mode of level 1). The case studies show that the sector has primarily been shifting from level 2 to either level 3 or level 4; level 5 has only been achieved in a few cases, and associated with the replacement of minibus services with large formal bus services and BRT through substantial external funding.

Dakar offers an important example of a shift to level 3. Here operators formed into EIGs to participate in a financing scheme for minibus renewal. This has significantly improved fleet and service quality; although operators continue to own their vehicles individually and thus compete with one another, limiting the extent to which services can be rationalized.

The Mitchells Plain pilot in Cape Town sought—but ultimately did not achieve—a shift to level 4. As a precursor to formal company formation, all existing operators agreed to relinquish individual control over their vehicles and run the fleet as if it were a single enterprise, with drivers being paid a salary. This enabled a better level of service to be provided with about half the fleet, leading to lower fuel consumption and other costs; further, drivers worked shorter, shift-based hours, and were paid salaries roughly equal

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to previous earnings. While the pilot demonstrated what could be achieved through a collective approach, the municipality was unable to follow through with its intended commitments and the process was disrupted by COVID-19. Thus, the shift in ownership structure was not achieved, with the result that the collective approach could not be sustained and most of the new efficiencies were subsequently lost.

The Mitchells Plain example is significant because it represented a shift in ownership and operations-driven and led by current operators while remaining, in essence, a minibus-taxi operation. Most existing examples of a shift by informal operators to a corporate-style form occur in projects driven externally by authorities—accompanied by substantial material contributions and seeking to replace legacy services. An example of this is found in Accra, where the three main unions each formed a company to operate large buses branded as Aayalolo Services. In Kigali, the minibus operators restructured into two new companies to operate the new large-bus network. In Maputo, many of the minibus operators formed new cooperatives to operate large-buses on core designated routes.

BOX 9

IPT transformation in Colombia

IPT operators in Pereira, Colombia, transformed into companies to operate BRT trunk and feeder services.

Megabus BRT was implemented in 2005 in the city of Pereira, Colombia. By 2010 it was carrying 140,000 passengers per day. Megabus SA is the lead entity, under agreement to the metropolitan agency Área Metropolitana Centro de Occidente (AMCO). The responsibilities of Megabus SA include planning, system management, procurement of operators, and administration of contracts.

Megabus operates a trunk and feeder system. There are three trunk routes, operated with 53 articulated buses, and 27 feeder routes, using 94 smaller 40-passenger buses. The feeder routes serve the districts outward from Cuba and Dosquebradas, and more recently a further set at La Virginia.

Before Megabus, public transport in Pereira was provided by midibuses as collective transport (collectivos) in the IPT style, with about 1,100 vehicles. Ownership was fragmented, although owners did work together through associations. There was significant oversupply, with problems of congestion due to buses competing in the street, pollution due to low-quality engines, and dangerous behavior due to the "penny war" style.

The agreed approach was for the IPT sector to transform to become the operators of the Megabus services. Interested owners should join together to form new companies, and they would receive the operating contracts for 15 years (equivalent to bus lifetime). The formula was that eight collectivos would be removed for each Megabus trunk bus. Two companies formed from this process. The two companies carry about 43% of the passengers in the AMCO area. The remaining collectivos carry the rest, away from the Megabus routes.

When Megabus was established, AMCO cancelled a number of routes. Operators on those routes could bring good quality vehicles to the new companies to work on the feeder routes. For the rest, their buses were scrapped and AMCO compensated them. It was then their choice whether to pocket the money, or to use it to buy into one of the companies.

The participating former collectivo owners transferred their capital from the small vehicles into investment in the new companies. The companies own the buses. Participation in the new companies was opened to all collectivo owners in the Pereira area, not just to those displaced by the Megabus routes. A few owners chose to take shares in one of the new companies, and still keep some collectivos on the road elsewhere.

A shift to level 5 involves moving to contracted services. To date, amongst the case cities this has only been achieved in Cape Town (for the BRT services, where the authorities facilitated company formation by minibus-taxi operators and contributed substantial financial, managerial, and other resources) and in Kigali. In these cities, the operating companies formed from the IPT sector have transformed to the required level. There are contracts for the Aayalolo companies in Accra and the cooperatives in Maputo, but the entities have not really transformed in the style of level 5 and the contract service conditions are not fully enforced.

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6.4

Strategies for Improvement

This conceptualization of a continuum of improvement can help understand what strategies for IPT enhancement might entail. A well-crafted strategy for IPT improvement should understand where the sector is on the continuum and develop approaches accordingly. This may entail improving the environment for the given level at which the industry finds itself, or enabling a shift to higher levels of industry organization—or both.

For example, in most cities there is some form of permit required by operators. Developing these to better define routes—maybe shifting from area-based to route-based permits—and limiting over-trading by placing scientifically determined limits on how many permits are issued, could significantly improve the function of the industry even while it remains at level 2. This was, for example, what the national IPT reforms in South Africa—from which Cape Town also benefitted—were aimed at in the late 1990s.

Strategies must understand the range of areas where intervention might be made that affect the organizational and institutional environment, including, for example,

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regulation, competition, agreements, organization/control of operating entities, asset ownership, asset financing, system viability, customer rights, staff engagement and protection, public-side enablers and support, and many other things.

These elements are highly interlinked, making it difficult to address them individually or piecemeal. Ideally, they require the framework, the regulator, and the IPT actors to move together to an agreed path—with trust. However, the IPT sector is not homogeneous. It consists of multiple actors each with very different interests (associations, owners, drivers, terminal operators, background players, extractive officials, etc.), who exist in a state of competitive tension for which an equilibrium has emerged. Disturbing this equilibrium carries significant risks, not least being undermined by IPT actors who fear for their position.

The more IPT is expected to become a core part of the formal urban public transport system, the more the required degree of adaptation. When the focus is on basic quality and safety improvements to existing service types, the adaptation centers on strengthening the operational methods, internal discipline, and work organization. When the focus is on organized routes with performance standards, with better quality vehicles, the adaptation will invariably require developing a corporate form that can commit to contracts, raise capital finance, and optimize resources collectively.

The chapters that follow examine in some detail a range of reform levers that can be used in developing appropriate strategies, summarize findings and lessons learned, and offer a high-level framework for a way forward.

6.5

Adaptation in the Financial Model and Vehicle Financing

Vehicle financing can be a serious barrier to reform and development of the minibus-based IPT sector. Fragmentation of the sector is a key constraint on financing, which is why financing on reasonable terms becomes increasingly possible as operations shift from atomized arrangements at level 1 to more corporate arrangements at levels 4 and 5. Corporatization not only consolidates revenues but generally makes revenue flows much more transparent, especially if these are supplemented by an electronic fare system.

By contrast, it is not a barrier in the motorcycle-based IPT sector, where finance is readily available even for new vehicles (indeed, it is part of the problem as this has enabled rapid proliferation). There are four main aspects of vehicle financing for the minibus-based IPT sector (which also apply to those seeking to invest in large buses):

1. Access to finance on reasonable terms: IPT actors face difficulties accessing vehicle finance on reasonable terms, if it is available to them at all. Finance is usually available only over a short period with high interest rates (due to high-risk weighting), and with requirements for significant own-contribution and personal collateral. The resulting high monthly repayments are a major deterrent to taking on the loans needed for buying new vehicles at scale. IPT actors need access to affordable finance at the scale required for planned reforms.



- Corporate capacity to engage finance: IPT actors are invariably associations without
 corporate form, lacking an asset base, audited accounts, and/or established credit
 ratings. Formal financiers are understandably reluctant to lend to such entities. IPT
 actors who seek access to finance need to adjust their corporate form to engage
 with lenders.
- 3. Operating margins: The operating margins in the IPT sector are invariably very tight, making it difficult or impossible to meet financing obligations in the scale required for new or larger vehicles. The typical IPT model is based on a heavily oversubscribed sector where revenues are low for individual operators. Assets lose productivity due to much idle time when awaiting turns to operate and as a result of traffic congestion. Fuel consumption is poor, driving up costs. More rational models are required that optimize resource allocation and improve productivity (such as the Mitchells Plain pilot in Cape Town—see city synopsis in appendix 1).
- 4. Security of business over the loan period: Borrowers need to be able to commit to their repayment schedule over several years (typically five years for a new vehicle). They need security of tenure on their route for such a period and to maintain their margins. They need protection from encroachment and the erosion of the value of their revenues. This requires a more formal relationship with transport authorities than current licensing.

These are framework issues that require the cooperation of both the state and the IPT actors. There are practical examples in Africa, as seen in the case studies (and elsewhere) and which are discussed below. They invariably require a comprehensive set of actions, beyond vehicle financing itself (for example, as seen in Dakar and Kigali). However, no African city has yet established an enduring model that has been sufficient to meet all the transport demand in the city.



6.6

How do State and IPT Actors Work Together for Change?

In developed countries, it is invariably the state (at the national, regional, or city level) that has the initiates reforms in policy, planning, regulations, market opening/entry, and the general direction of the urban transport sector. The operators work within that space, either responding to the state's requirements for services or proposing services of their own. In SSA, for the most part, the institutions do not have comprehensive, consolidated, and well-aligned mandates, and have less capacity and resources for investing in or providing financial support to operations. Traditionally, planning and investment concerned only the formal mass transit and bus sectors, and even then, typically only concerning longer-term projects that may or may not have been financed. IPT has been viewed as a sector to be licensed, controlled, or tolerated, and left to its own devices to finance and organize itself.

It takes a change in perspective on the part of the state actors to assign a role for IPT, develop initiatives for constructive reform, and commit managerial and financial resources to support them. Mostly, such change is linked to broader projects (e.g., BRT), other initiatives from donor partners, or the current political or executive leadership. The structures for IPT reform are rarely embedded in policy and have committed budget lines, which leaves them at a real risk of dwindling support and abandonment when leaders change or projects end. Only in Dakar, Cape Town, and Lagos—which have established permanent urban transport authorities—could reform actually be said to have endured, and even these authorities have gone through phases where they could have been disbanded.

In general, the state is actually not a "reliable actor" in which the IPT sector can have sufficient trust if asked to commit to major changes (not to mention accumulated distrust and existing antagonism). This is a fundamental but overlooked challenge that needs to be resolved.

In many cases, the IPT sector has a greater continuity of organizational form and consistency of purpose than state actors do. The sector also often has reasonable continuity with transitions of key personnel. However, three major challenges are often overlooked or even not understood:

- 1. There are often many unions/associations, so the challenge is how to choose who to talk to without creating other problems and rivalries.
- 2. The strength of unions usually comes from the current model, in which they have established their power base. Reforms may unravel that power base, and indeed may open divisions, in-fighting or breakaways, with serious consequences.
- 3. Unions and their leaders can maintain and enforce current models based on customs and the general acceptance of members (and sometimes by strong action). However, it cannot be presumed that they have sufficient authority or command to make reform agreements with state actors, and then require their members to make the agreed changes.

These factors can make it rather difficult to either get IPT sector-wide agreements or sustained IPT sector-wide delivery on any commitments made.

A further complication is the fundamental disconnect between the inherent informalities of the IPT sector and the bureaucratic requirements of the state. Even IPT sectors that have route-based licenses and are reasonably compliant at the technical level remain quite informal at the corporate, administrative, and taxation levels. This can be a major barrier to formal agreements between the state and IPT sectors, especially if public funds are to be made available.

In sum, the state and IPT actors do not naturally work together towards the development of the sectors. There are few cases where reforms have been agreed between them, successfully delivered, and endured.

Top-down approaches are those initiated by state actors (sometimes with significant input from the IPT sector). They are structural and formally empowered—and are potentially transformative. However, such approaches have seen limited success in the minibus-based IPT sector and virtually no success in the motorcycle-based IPT sector.

Bottom-up approaches are those initiated by the IPT actors themselves, sometimes with other private-sector entities, without necessarily any input from state actors. These include internal organization, vehicle financing, app-based reservations, safety and quality training, etc. These are rarely structural and might not be considered as reforms. However, they demonstrate a willingness within the sector to innovate and adapt, based on their awareness of existing opportunities and potential benefits.

The fact that, in most cases, the state in SSA cannot dictate outcomes makes it imperative to seek to create a partnership between the state and the IPT sector, where initiatives are possible that advance both sectoral interests as well as the public interest.⁴

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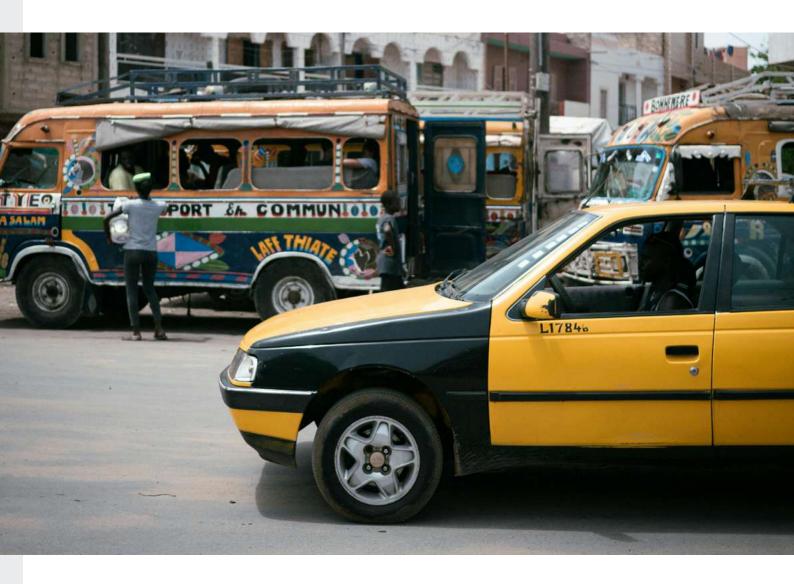
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A companion publication to this report, about mobility institutions for SSA cities, deals with these issues in greater detail. But it is clear that the mode of engagement between the state and IPT sectors needs major work. The publication is: Arroyo-Arroyo, F., P. Van Ryneveld, and B. Finn. 2024. Institutions in Motion: Learning from the Experience of Urban Mobility Organizing Authorities in Sub-Saharan Africa. Washington, DC: SSATP.



07

Reform Levers in IPT

Reform levers are a means to bring about desired changes and outcomes. There is a wide range of such levers, from major sectoral transformation to more targeted adjustments. This chapter provides a synthesis of reform levers observed in the IPT sector. These are (1) regulation; (2) organization of the IPT; (3) vehicle financing; (4) operations and maintenance; and (5) supporting infrastructure and systems.

This categorization provides a starting toolbox for policy makers and practitioners. Although they overlap in some ways, the reform levers for the minibus-taxi and the motorcycle-taxi sectors are quite different—or are applied quite differently—so they are shown separately. Reforms in the sedan shared-taxi sector were not evident in the case cities and are not covered here.

Reform levers work best if they are packaged, due to so many factors being interlinked. They also work best when tailored to the specific role the IPT should play in a city's transportation system (i.e., the purpose) and the type of transformation sought (i.e., the adaptation) (See the figure captioned "A continuum of advancement in the IPT industry organization").

There may be different reform packages in the same city and even within the same mode. For example, minibus-taxis may be required to play different roles on arterial routes (formal PT style, perhaps also switching to larger buses), as feeders, and as local connectors in the periphery—each with different levels of adaptation required. In the same city, the sedan shared-taxis and motorcycle-taxis may also be accorded specific roles and require their own form of adaptation.

There is no assurance that using the levers presented here will be successful if implemented, that they can be deployed widely beyond a pilot phase or niche markets, or that they will endure beyond the initial period. The experiences from the case studies and other cities are reported in chapter 8 and discussed further in chapter 9. Specific examples from case study and other cities are contextualized in the case study synopses in appendix 1. These give practical insights into what has worked, what has had only limited success, and what has not succeeded or not endured.

7.1

Reform Levers Observed in the Minibus-Taxi Sector

The table above presents reform levers observed in practice in the minibus-taxi sector.

TABLE 9. Reform levers for minibus-based IPT observed in practice

| Category | Available reform levers, observed in practice |
|------------|--|
| Regulation | Transitioning from self-regulation to a regulated system Transitioning to route-based licenses, in place of a general permit to operate |
| | Transitioning to route licenses issued to the organizer of the route, in place of licenses on the route issued to individuals |
| | Implementing contracts or service agreements, linked to licenses |
| | Aligning numbers of permits issued with the actual need. This includes a cap on the number of permits, reduction of numbers through non-renewal, etc. However, authorities must avoid creating a black market in licenses, false documents, etc. |
| | Improving compliance with regulations related to operations, driving, driver licenses and on vehicles, including roadworthiness, through effective enforcement |
| | Rooting out corruption, bribe-taking, shakedowns, etc |
| | Strengthening capacity of transport authorities (or establishing them, if needed). |

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TABLE 9. Reform levers for minibus-based IPT observed in practice

| Category | Available reform levers, observed in practice | | | | |
|----------------------------|--|--|--|--|--|
| Organization of the IPT | • Establishing a citywide federation or collaborative forums so that the industry sector has a consolidated basis to work together and interface with state actors | | | | |
| | • Implementing changes to the corporate form of IPT groupings, including transition to companies and other formal trading entities | | | | |
| | Strengthening the business, organizational, and operational capability of IPT companies, cooperatives, unions/associations, operators and owners | | | | |
| | Professionalizing the people, processes, and systems | | | | |
| | Establishing standards for service coverage, service quality, safety, customer care, etc., with incentives to achieve them (positive and negative) | | | | |
| | Centralizing revenues | | | | |
| | Transitioning workers to contracted employees, thereby improving earnings and benefits. | | | | |
| Vehicle | Introducing vehicle purchase schemes, including schemes with a revolving fund | | | | |
| financing | Introducing vehicle scrappage schemes | | | | |
| | Operating lease schemes, with maintenance and asset transfer after time | | | | |
| | Shifting to larger, newer vehicles | | | | |
| | Facilitating financing by improving risk profile and scale through corporatization. | | | | |
| Operations | Optimizing and consolidating recourses | | | | |
| and maintenance | Reducing over-supply and idle time | | | | |
| | Reducing fuel consumption through better driving and vehicle maintenance | | | | |
| | Providing and improving basic maintenance facilities | | | | |
| | Introducing more preventive maintenance, less run-to-fail. | | | | |
| Supporting infrastructure | Developing or improving terminals, customer and staff facilities | | | | |
| and systems | Managing terminal activities for better flow | | | | |
| | Improving road conditions, traffic management and enforcement | | | | |
| | Alleviating congestion, including providing prioritization infrastructure for public transport | | | | |
| | Mapping and quantifying services, routes, terminals, stops, etc | | | | |
| | Providing customer information | | | | |
| | Measuring demand/supply patterns, to assist in service planning and resource optimization | | | | |
| | Using IT/ITS for data gathering, tracking, customer information, etc. | | | | |
| | Introducing cashless payment systems, including smart cards, mobile phones, apps, etc. | | | | |

Examples of reform levers from other parts of the world (Kochi, India, and Pereira, Colombia) have been provided earlier in this report; these are examples of substantial transformation of the industry sector. A simpler case is that of the jeepney sector in Manila, Philippines, in which service contracts were used to motivate better service performance. This is presented in box 10.



BOX 10

Service Contracting for Jeepneys in Manila, Philippines to Improve Performance Outcomes

The Philippine Service Contracting Program focused on jeepney routes in Metro Manila. The objective of the program was to upgrade the jeepneys, not to phase them out. Pre-COVID-19 efforts were made to move jeepneys to service contracting to improve both their service quality and their financial stability. The lack of a means to track and monitor vehicles was an inhibiting factor.

As restrictions linked to the pandemic led to a drastic reduction in operators' incomes, the Philippine government implemented a mix of gross-cost and net-cost contracting as a support measure to the sector. Participating operators accepted the service contract arrangements and the associated monitoring technologies. Payments to the operators are linked to the measured performance. On some routes, operators consolidated into a single cooperative; other routes are serviced by several unconsolidated operators.

Evaluation of the scheme suggests that the service contracting resulted in positive outcomes in the form of increased supply, as indicated by more kilometers operated and shorter headways. However, there are mixed results for metrics associated with performance, as indicated by tendencies among unconsolidated operators to irregularity of headways and longer dwell times at stops (waiting to gain more passengers); and non-completion of some trips ("trip cutting") by operators of both types.

Source: Sunio, V. et al. "Service contracting of paratransit as a pathway for public transport reform and a policy response during the pandemic" (2012)

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7.2

Reform Levers Observed in the Motorcycle-Taxi Sector

As with the minibus sector, there is a growing body of practical experience in efforts to reform the motorcycle-taxi IPT sector, much of this being in Africa. These are summarized in the table below. Specific experiences from the case studies and other cities are presented in chapter 8 and appendix 5.

Experience from South-East Asia shows that the greatest transformations come from third parties harnessing the sector and reimagining the traditional product, albeit at a price (see box 11).

TABLE 10 Reform levers applicable to motorcycle-based IPT in African cities

| Category | Available reform levers, observed in practice | | | | | |
|-------------------------|--|--|--|--|--|--|
| Regulation | Establishing and enforcing requirements for owners and riders to comply with basic registration and licenses | | | | | |
| | Requiring associations to register and be more transparent about their members | | | | | |
| | Establishing new or enforcing existing regulations to cover motorcycle-taxis, including safety, training, helmet-wearing, and helmets for passengers | | | | | |
| | Requiring and enforcing limitation of one passenger per motorcycle-taxi | | | | | |
| | Excluding motorcycle-taxis from designated areas, including CBD/central areas, and in some cases, introducing citywide bans | | | | | |
| | Increasing enforcement and allocating resources for the purpose | | | | | |
| Organization of the IPT | Establishing a citywide federation or collaborative forums so that the industry sector has a consolidated basis to work together and interface with state actors | | | | | |
| | Strengthening the business, organizational, and operational capability | | | | | |
| | of motorcycle-taxi unions/associations, organizers, owners, and operators | | | | | |
| | Professionalizing the people, processes, and systems in the sector | | | | | |
| | Providing training, support, and mutualization services for members | | | | | |
| Vehicle | Establishing lease-purchase schemes, arranged by vehicle suppliers or financiers | | | | | |
| financing | Introducing work-to-own scheme in which the rider pays a higher rental to the owner, | | | | | |
| | and then becomes the owner once the agreed amount has been paid | | | | | |
| | Organizing collective financing schemes through associations | | | | | |
| Operations | Training riders in driving style, safety, customer care, and personal health | | | | | |
| and maintenance | Requiring riders to have helmets (self and passenger) and hi-viz vests | | | | | |
| | Providing numbers for passengers to call in case of problems, incidents, | | | | | |
| | inappropriate behavior, etc., and internal capacity to deal with them | | | | | |
| | Improving traceability of riders | | | | | |
| Supporting infrastruc | ture • Designating and gazetting approved motorcycle-taxi stands | | | | | |
| and systems | Developing or improving stands and facilities | | | | | |
| | Introducing the use of booking apps | | | | | |
| | Using data, IT, and ITS for tracking, mapping, demand/supply assessment, customer information, etc. | | | | | |
| | Introducing cashless payment systems, including smart cards, mobile phones, apps, etc. | | | | | |



BOX 11

Turning the Traditional Ojek into a Megabrand in South-East Asia

Ojeks are the traditional motorcycle-taxi in Indonesia, including in the capital Jakarta. They first emerged in the 1970s and had become a ubiquitous mode of transport by the late 1990s. In addition to the transport function, they provided a major source of employment for the masses within the informal economy, and over time ojeks became a recognized part of Indonesian culture.

Ojeks were locally organized around stands and territories, in small-scale clusters that looked after their own territory, and without an overall organizational or association structure. Legally, ojeks are viewed as informal transport but are allowed to operate due to their importance in meeting mobility needs.

In 2010, a new app-based start-up called Gojek entered the market. It targeted courier delivery and motorcycle ride-hailing services. Initially with just a small group of riders, Gojek launched its app in 2015 which offered a simpler way to use the traditional ojek service. In particular, it provided a fixed prepaid price, removing the hassle of haggling with riders every trip, as well as traceability of riders and thereby a better feeling of personal safety, visible branding, and a better image.

Within a decade, Gojek has developed into a megabrand, with a wide range of delivery and passenger transport offerings and payment services. It has expanded operations beyond Indonesia, to Singapore and Vietnam. It claims over 2 million riders in 203 cities in Indonesia, and 900,000 food merchants across all its countries of trade. The company also claims a vetted recruitment process with safe driving and anti-sexual harassment training for riders.

Despite its success, Gojek is not universally accepted. People without technology, especially older people, are left behind by a system that now dominates the sector. As in many other countries, riders who initially had done well found their earnings dwindling as more riders entered the system, and also found they had less autonomy.



08

Experience and Findings from Practice of IPT Reforms

This chapter presents a synthesis of practice in IPT reform in the case cities. Most of the reform efforts had some degree of success. However, some did not endure, were very limited, or failed, while others were never even started due to resistance from the IPT sector. On the premise that one can learn from both success and failure, all serious efforts are presented here.

This chapter begins with a brief synopsis of each of the case cities, to provide a reference point. Appendix 1 provides a longer synopsis of each of the eight main case studies (synopses are not provided for the additional six cities). This chapter then clusters the experiences according to the five reform lever categories presented in chapter 7. The chapter then draws findings from the full set of 14 cities, considering the intended purpose of the reforms, the experiences of successful and less successful cases and their contributing factors, and the role of financing.

8.1

Case Study Profiles

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Antananarivo





Antananarivo is the capital and main urban center of Madagascar. The population of the Commune Urbaine d'Antananarivo (CUA) was 3.5 million in 2024. Institutional responsibilities relevant to the urban passenger transport sector are spread across multiple agencies at national and local levels. The CUA is responsible for organizing transport within its territory, while the National Land Transport Agency (ATT) under the Ministry of Transport is responsible for organizing transport in the surrounding suburban and hinterland areas. Urban public transport in Antananarivo is provided by two main modes, taxi-be, and taxi-ville:

- Taxi-be: These are midibus/minibus operating on fixed routes, in typical informal style. They are broadly categorized as urban lines, under the control of the CUA, in which about 5,500 vehicles ply on 73 routes, organized through 52 urban taxi-be cooperatives; and suburban lines, under the control of ATT, in which about 3,000 vehicles ply on 98 routes, organized by 31 suburban taxi-be cooperatives.
- Taxi-ville: These are saloon-car taxis, officially 4-seaters, operating on-demand transport without fixed routes or stops. About 4,000 such taxis operate in the CUA urban area.

An Urban Mobility Improvement Program (PAMU) was designed and implemented from 2009 to 2016. Phase 1 implemented improved infrastructure along four pilot lines, including upgraded terminals and associated amenities such as small restaurants and sanitary blocks, improved bus stops (some of them with bus shelters), improved sidewalks, and drainage. The PAMU also implemented several studies and training activities. Phase 2 was not implemented due to lack of funding availability.

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OECD/SWAC (2024), Africapolis (database), www.africapolis.org (accessed 29 November 2024).

Cape Town





Cape Town is the capital of the Western Cape Province, with a current population of about 4.4 million in 2024. The city is governed by a single-tier municipality, which extends across most of the metropolitan region. Responsibility for urban transport is shared across different layers of government and their agencies. A decade ago, most passenger trips were made by formal modes of transport. In recent years, the commuter rail has declined drastically. IPT has captured the business, so informal modes now carry more passengers than formal transport.

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OECD/SWAC (2024), Africapolis (database), www.africapolis.org (accessed 29 November 2024).

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The main modes are:

- Minibus-taxis (known simply as taxis), numbering about 16,000, of which about 6,000 are unlicensed
- Commuter rail, which had been the backbone of public transport in Cape Town and its hinterland, but has greatly declined due to poor management, criminality, asset theft, and closure of much of the network during COVID-19
- Conventional commuter buses, of which Golden Arrow Bus Services (GABS) is the largest operator with a fleet of more than 1,000 buses
- Bus Rapid Transit, which commenced operation in 2011 and has a fleet of 372 buses
- Sedan taxis

The 10,000 licensed taxis are organized into 102 local associations, which form the core of taxi organization in the Cape Town area. These associations are organized into six regions and elect the leadership for their region. The South African National Taxi Council (SANTACO) is the key channel through which government at a national level engages with the minibus-taxi industry.

Three main reform efforts specific to the Cape Town minibus-taxi sector are reported in the case study (there have been other national initiatives, in particular the National Taxi Recapitalization Program):

- 1. The development of BRT operating companies from minibus-taxi stakeholders
- 2. A new contracting and operating model at Mitchells Plain
- 3. The Blue DOT scheme to incentivize improved driving quality and safety

Dakar Senegal 4.4M

7

OECD/SWAC (2024), Africapolis (database), www.africapolis.org (accessed 29 November 2024). Dakar is the political and economic capital of Senegal. The Dakar region is a peninsula, with a population estimated at 4.4 million in 2024. The Dakar region comprises five departments subdivided into 14 districts. In 1997, an urban transport coordination agency (CETUD) was created, responsible for implementing and monitoring urban transport sectoral policy in the Dakar region. The objective of the transport policy is to organize and regulate public transport to improve public transport operations from both the operator and user perspectives.

Dakar has a wide range of public transport, of which minibuses are the major form, followed by various types of taxi. A World Bank–supported BRT project is currently under development, with operations starting in early 2024. The minibus-taxi sector in Dakar now is made up of two sub-sectors—the AFTU bus sub-sector, and the car rapide sub-sector. The AFTU bus sub-sector consists of 14 Economic Interest Groups (EIGs, or GIEs in French), which consolidated 900 operators holding about 2,000 vehicles. They operate in a more formalized way, under quality contract in which routes are negotiated between the operators and CETUD.

Major reform of the minibus-taxi sector in Dakar has taken place over the past 20 years. It covered a large part of the minibus-taxi sector, and this reform has been sustained. It had three main interlinked aspects: (1) restructuring of a substantial portion of the minibus-taxi sector into economic entities, building up both their financial capability and their professionalization; (2) a multi-phase fleet program in which about 2,000 vehicles were purchased; and (3) the transition from loose permits to quality-based contracts and institutional oversight.

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Freetown





Freetown is the capital and commercial center of Sierra Leone, with a population of 2 million in 2024.8 Multiple government ministries and departments are responsible for planning, financing, management, implementation, and enforcement in the urban transport sector. The IPT sector is the major provider of transport services in Freetown, accounting for nearly 90 percent of the market share. The public transport sector is composed of:

- Private-sector large-bus operators, about 12 in total with fleets of less than 20 vehicles
- A public-sector large-bus operator, the Sierra Leone Road Transport Corporation (SLRTC), which nominally operates 10 routes with an aged fleet and with deteriorating output (c. 20 buses daily)
- Mini/midibuses (poda-podas), of which 5,500 are registered
- Sedan shared-taxis
- Motorcycle-taxis (okadas), c. 1,900 vehicles
- 3-wheelers or auto-rickshaws (kekes), c. 1,700 vehicles

A World Bank-supported urban mobility project has recently commenced, which aims to:

- Develop the Passenger Transport Authority for Freetown
- Move operators to a contractual basis for services
- · Support financing for fleet renewal
- Improve road conditions, traffic management, bus priority, and passenger waiting facilities
- Implement ITS and ticketing

A key element of the reform program is to separate management and operational functions by transforming SLRTC into the Sierra Leone Public Transport Authority (SLPTA). SLPTA would act on behalf of the Ministry of Transport and Aviation as the regulator and procurer of public transport services.

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OECD/SWAC (2024), Africapolis (database), www.africapolis.org (accessed 29 November 2024).

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OECD/SWAC (2024), Africapolis (database), www.africapolis.org (accessed 29 November 2024).

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Kampala





Kampala is the main city in Uganda, with a population of 6.1 million in 2024.9 The Kampala Capital City Authority Act was enacted in 2010. One of the aims of the Kampala Capital City Authority (KCCA) was to address urban sprawl outside the administrative limits of the city and establish appropriate governance structures over an increased perimeter. KCCA is under the authority of the national-level Minister for Kampala Capital City and Metropolitan Affairs.

Urban public transport is provided almost entirely by the IPT sector, as formal public transport is minimal throughout greater Kampala. IPT consists of two main modes: about 20,000 minibus-taxis (taxis); and an estimated 200,000 motorcycle-taxis (boda-boda). Minibus-taxis in Kampala are licensed under a Public Service Vehicle (PSV) regime. In the absence of a formal route allocation process by the licensing authorities, the minibus-taxi industry has for decades determined unsupervised which routes should be provided. Boda-bodas provide three types of short-distance services: (1) in urban areas (competing with special-hire and minibus-taxis); (2) on routes from/to urban areas that are unattractive to taxis (due to low demand density or rough road conditions); and (3) as feeders to main roads (connecting to minibus-taxi and large-capacity bus services).

Efforts at IPT reforms in Kampala have had mixed results. The legal groundwork has been laid for reforms in both the minibus-taxi and the boda-boda sector. However, these have had only limited impact. In the minibus-taxi sector, a new licensing process was introduced for minibus-taxis when they resumed operations after the COVID-19 lockdowns This was in part to put the industry on a better footing after the crisis, but also in part to improve regulation and oversight by the authorities. In the boda-boda sector, a requirement for PSV licenses has been in place since 2016, but has not been effectively implemented.

Kigali City





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OECD/SWAC (2024), Africapolis (database), www.africapolis.org (accessed 29 November 2024).

Kigali City is the largest city in Rwanda, with a population of about 3.6 million people in 2024.10 The different transport functions are allocated to four key public sector departments: the City of Kigali; the Rwanda Utility and Regulatory Authority (RURA); the Rwanda Transport Development Agency (RTDA); and the Ministry of Infrastructure (MINIFRA).

Comprehensive reform of the urban passenger transport sector was implemented in Kigali in 2011–13, initiated by RURA and City of Kigali. Minibuses are now absent in the city, as they were removed as part of the reforms (but continue to operate in the hinterland). Former operators either now participate in the new large-bus companies or have exited the Kigali market.

The resulting system consists of high-occupancy buses and motorcycle-taxis (an essential component due to the hilly nature of Kigali). Bicycle-taxis operate to a lesser extent. There are no urban or commuter rail services. Bus services are provided by three operating companies, with 450 buses on about 60 routes. Two of these companies (KBS and Royal Express) are private bus companies that predate the reforms, while the third (RFTC) was formed from the minibus-taxi sector as part of the reform.

Reform focused on three main elements: (1) professionalizing operators; (2) enhancing regulation of the incumbent IPT sector; and (3) changing the network from an unplanned, unorganized service pattern. A new regulatory framework was chosen as the way to bring about reform, with a myriad specific regulations promulgated to accomplish it.

The reform was implemented in three steps: (1) publication of the first passenger transport regulation in August 2011; (2) approval of the Public Transport Policy and Strategy for Rwanda in October 2012; and (3) signing of the bus service contracts in August 2013. During the same period, the Kigali Transport Master Plan was updated. RURA awarded net-cost bus operating contracts to private companies and to larger cooperatives through a formal tender process. The contracts were defined for a specific period and can either be renewed at a later stage or a new tender process can be followed.

Lusaka

Zambia



Lusaka is one of the fastest-growing cities in southern Africa, increasing from 1.7 million people in 2010 to 3.2 million in 2024.11 A multiplicity of agencies, lack of clarity in functional responsibilities, and overlapping mandates have made effective planning and implementation difficult.

Since the early 1990s, the private sector filled the gaps created by the decline of the former bus companies, and eventually took over the sector with IPT services. For the most part, this was achieved with second-hand imported minibuses and small buses. There is no commuter rail service, and currently no BRT or other form of mass bus transit. A general license to operate public transport services can be obtained from the Road Transport and Safety Agency (RTSA). There is minimal regulation of bus routes, and operators have the freedom to operate anywhere once they have obtained an operating permit. Operating permits are routinely issued on request, without consideration of the demand-supply balance or of their impact on other operators. The fragmented ownership of minibuses is offset by the existence of unions or associations that organize the activities of the sector and provide a degree of self-regulation. The system has evolved as an industry response to the vacuum left by the failure of government to regulate the sector. Self-regulation has created an orderly market that avoids the worst consequences of unbridled competition on the routes.

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OECD/SWAC (2024), Africapolis (database), www.africapolis.org

(accessed 29 November

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2024).

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In 2019 the Minister of Transport announced the Zambian Government's intention to ban minibuses, but no reform has been implemented to date. There is no indication of commitment to upcoming reforms, other than a general aspiration to migrate from minibuses to larger vehicles.

Maputo





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OECD/SWAC (2024), Africapolis (database), <u>www.africapolis.org</u> (accessed 29 November 2024). Maputo is Mozambique's financial, business, and commercial center. The Maputo Metropolitan Area, also called Greater Maputo, has a population of about 2.9 million in 2024. Municipalities are responsible for regulating public transport services within their area. The Maputo Metropolitan Transport Agency (Agência Metropolitana de Transporte de Maputo, or AMT) was established in early 2018, to coordinate passenger transport across multiple local government areas.

Urban passenger transport is road-based, with very limited commuter rail services. Road transport consists of regulated route-based services operated by both large buses and minibuses (chapas), illegal services operated with open trucks (myloves), unauthorized motorcycle-taxis, and regulated for-hire taxis, 3-wheelers, and 2-wheelers.

The Maputo Metropolitan Area Urban Mobility Project commenced in 2022. It will implement BRT on one corridor and support substantial development of the regulatory and organizational framework. IPT reform has centered on the formation of cooperatives from among the chapa associations operating in corridors identified for reform; these cooperatives have access to large-buses at below-cost operating leases, are legal entities, and can engage in business (unlike the chapa associations). There are currently 10 cooperatives operating buses under agreement with AMT. The agreement is structured as a contract of five years' duration with scheduled maintenance for the buses, and provision for transfer of vehicle ownership if all payments are made by the cooperatives. To date, 400 buses have been purchased as part of the project, with funding arranged through the National Transport Fund (Fundo de Desenvolvimento dos Transportes e Comunicações, or FTC); most buses have been deployed in Maputo.

No reforms are aimed at developing the chapa sector, or assisting them in areas such as fleet renewal.

8.2

Synthesis of Reforms

Reforms are structured according to the clusters of reform levers discussed in chapter 7:

- Regulation
- · Organization of the IPT
- · Vechicle financing
- · Operations and maintenance
- · Supporting infrastructure and systems

The tabular format makes the range of practices for each lever type readily visible, while also showing them in context—within their specific settings and alongside other measures included in the reform package.

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TABLE 11. Range of Practices Across IPT Reform Levers in Select African Cities

| City | Regulation | Organization of IPT | Vehicle financing | Operations and maintenance | Supporting infrastructure | Supporting systems and mapping |
|--------------|---|---|--|---|---|--|
| Accra | New regulations, route registration, route-based license | Formed new operating companies | Vehicles purchased by government; repayments did not materialize | Defined level of services; limited improved bus priority | Very limited bus priority infrastructure | Mapping of minibus routes; automated fare payment system introduced |
| Antananarivo | n/a | n/a | Specifications for new vehicles prepared, not procured | Upgraded terminals and stops, improved sidewalks and access | n/a | n/a |
| Bamako | New regulations, never effectively enforced | n/a | n/a | Traffic management schemes, priority lanes | Infrastructure for dedicated minibus lane | n/a |
| Cape Town | New regulations, route registration, single route-based association | Organization into companies to operate BRT (VOCs) in 2011 7th Avenue Association: Pilot of company with common management of fleet and revenue (as TOCs) in 2017 | Minibus-taxi operators access national scheme for vehicle recapitalization | 7th Avenue Association: Optimized operations linked to the collectivization of fleet and revenue | Dedicated public transport lanes | Mapping undertaken for minibus-taxi routes; automated fare payment system introduced |
| Dakar | Comprehensive reform package, route-based structure | Formed Economic Interest Groups (EIGs) | Finance available for vehicle renewal, revolving fund established | Supported operators to develop internal capacity, post-purchase maintenance contract | n/a | Automated fare payment system under development |
| Freetown | Comprehensive reform package planned, new passenger transport authority | Minibus-taxi operators organized into a company | Vehicles purchased through public funds; repayments expected by operators | Traffic management schemes implemented | Enhanced basic public transport priority infrastructure | Automated fare payment system introduced; mapping undertaken for minibus-taxi routes |

TABLE 11. Range of Practices Across IPT Reform Levers in Select African Cities [continued]

| City | Regulation | Organization of IPT | Vehicle financing | Operations and maintenance | Supporting infrastructure | Supporting systems and mapping |
|------------|---|---|--|---|------------------------------|---|
| Gaborone | n/a | n/a | n/a | n/a | n/a | Mapping undertaken for minibus-taxi routes |
| Kampala | IPT sector reforms implemented during COVID-19 Operating licensing for moto- taxis | Uganda Transport Operators Forum, as a dialogue forum | Vehicle loans through associations for motorcycles | n/a | n/a | Ride-hailing companies, enable booking and mobile payments; tracking devices for motorcycles |
| Kigali | Major restructuring of urban public transport, larger buses only | Minibus-taxi stakeholders formed companies, motorcycle- taxi drivers in cooperatives | Financing for large- capacity buses required by newly formed companies | Network restructuring to match demand; moved to salary contracts for drivers | n/a | Smart-card based electronic ticketing implemented; cashless on-board system |
| Maputo | New metropolitan transport agency established New regulations | Ten cooperatives formed from minibus- taxi associations | Transport Fund organized and underwrote bank financing for large buses | Maintenance partner established for periodic maintenance/service | n/a | Automated ticketing/fare payment system |
| Maseru | n/a | n/a | n/a | n/a | n/a | Mapping undertaken for minibus-taxi routes |
| Nairobi | Operators required to join SACCOs; minimum number of associated vehicles | n/a | SACCOs established savings, credit, and other financing schemes | n/a | n/a | Digital payments introduced on minibus- taxis; mapping undertaken for minibus-taxi routes |
| Nouakchott | n/a | n/a | n/a | n/a | n/a | Mapping undertaken for minibus-taxi and shared taxi routes |

8.3

Motivations for IPT Reform

The reforms observed in the IPT sector of SSA cities are rooted in one of three approaches or motivations:

1. Develop or restore large-bus operations, for example, to implement BRT or general bus services (Cape Town, Dakar, Dar es Salaam, Freetown, Kigali, Maputo, Nairobi). This either seeks to transition IPT actors into participating in large-bus operations, move them to feeder services, or move them away from their current corridor. The underlying purpose of such reforms is to facilitate the (new) large-bus sector by reducing or removing the IPT actors from their area of operation. This does not seek to develop the IPT sector, although it may provide opportunities for some IPT actors.

- 2. Bring the IPT sector inside the regulatory framework or transition the sector from loose forms of regulation to more structured ones (Accra, Cape Town, Dakar). In some cases, this reform may seek to transition the sector from self-regulation to being regulated by government agencies; in others, it may seek to shift from loose, areabased permits to route-based licenses which may in turn require a more formal type of organization. In others, it may focus more on better compliance with driver and vehicle regulations, and safety and roadworthiness—backed by stronger enforcement.
- 3. Improve the IPT sector, primarily through support for vehicle renewal schemes and related investments (Antananarivo, Cape Town, Dakar, Nairobi). This may have the additional purpose of consolidating and corporatizing IPT entities, building management capacity, and professionalizing drivers and other workers. This is invariably linked to strengthened regulation, quality conditions, and compliance requirements.

While these are laudable motivations, it is evident that most efforts—and almost all of the investments—have been directed at transitioning the IPT sector towards formal large-bus operations (which could also be viewed as the systematic replacement of the IPT sector with larger buses) or establishing the basics for regulation and compliance. Only Dakar sought, from the outset, to develop the IPT sector in its own right. More recently—and reflecting a change of thinking in the approach to transitioning to BRTs—Cape Town has shifted to a hybrid approach in which the IPT sector is viewed as an integral part of the public transport system, complementary to large-bus operations. Kampala has also begun to recognize IPT in their Transport Master Plan.

That said, no city under study has explicitly approached IPT reform with the purpose of comprehensively improving the IPT sector and making it an integral and long-term part of the public transport sector. The Mitchells Plain 7th Avenue pilot in Cape Town could offer a proof of concept, but it remains to be seen whether it can be sustained over time, and whether the city will expand this approach more widely. More importantly, no city has approached IPT from the perspective of developing its overall modal capacity as a strategic way of responding to current shortfalls in the urban transport system.

The natural stakeholders for developing the public transport sector would be the state actors and the IPT actors. However, observed practice is that IPT reform mostly happens at the initiative of external stakeholders with linkages to urban transport projects—in particular, this includes the World Bank and other development partners.

This raises important questions about the direction of policy for urban passenger transportation. For all its failings, in most SSA cities, the IPT sector does the heavy lifting that authorities have avoided for several decades. It provides the needed mobility for people—especially those on lower incomes—at no cost to the state. It absolves the state of obligations towards workers or passengers, and it provides a convenient channel for otherwise-disaffected youth and off-radar investors. All of this has been done without structured policies or effective institutions. The IPT sector is still the primary form of passenger transportation in all the studied cities, and in most cases, is likely to remain so for many years to come. That being the case, the drivers for undertaking IPT reform will need to become more strategic, seeking to guide and develop IPT's main actors rather than just "tidying them up", converting them, or moving them out of the way to facilitate mass transit and large buses.

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On the motorcycle-taxi side, there are few reform efforts. Motorcycle-taxis are not permitted in many cities, including Antananarivo, Accra, Bamako, Cape Town, and Maputo. Kigali has made a major effort to improve their quality, safety, and traceability for the benefit of motorcycle-taxi riders; this effort has been successful and has been sustained. Kampala has approached reforms with the intention of restricting them to specific types of services and reducing their numbers. Efforts have been made to better regulate motorcycle-taxis, first by requiring them to have a PSV permit, then by gazetting stands and requiring them to register. These measures have not been effectively implemented.

8.4

Enablers of Successful IPT Reform

Of the 14 cases examined in this report, only Cape Town, Dakar, and Kigali show considerable evidence of success in IPT reforms. They each brought about change in the IPT sector and achieved what they had set out to do. The changes they implemented have mostly endured, or at least shown positive results—this is not to underestimate the challenges faced along the way, but these were mostly overcome.



Maputo was partially successful in forming cooperatives, but it did not strengthen their corporate and financial capacities. It is by no means clear whether the cooperatives will endure, and if and how they will be able to replace their vehicles as they age.

Enablers for success vary from one context to another. Nevertheless, some that are present in most or all successful cases include:

- · A strong public sector with a clear purpose
- · Commitment and relationship-building
- Measures that will benefit IPT stakeholders / actors
- An implementation process that helps the sector to develop
- · A strong public sector with a clear purpose:
 - + A leading institution that brings together other public sector actors
 - + Clarity and consistency of purpose of the reforms
 - + A regulatory base for the foreseen reforms
 - + Technical competence on the part of the public sector actors
- · Commitment and relationship building:
 - + Sustained commitment on the part of the public sector/state actors
 - + Taking the time needed for consultation, and re-engaging if/as needed
 - + Building relationships with IPT stakeholders/actors
- Measures that will benefit the IPT stakeholders/actors:
 - + A package of measures, some of which respond to the needs of the operators and not only the wishes of the authorities
 - + Access to new vehicles and/or the financing channels, which IPT stakeholders would otherwise have had little prospect of accessing
 - + Visible financial advantages for IPT stakeholders—operators may be skeptical at first but are likely to become convinced over time
 - + Benefits for those working within the system, such as employment contracts and shorter hours
- An implementation process that helps the sector to develop:
 - + Opportunities for IPT stakeholders to operate from inside rather than the system, with better security of tenure
 - + Measures and funding for capacity-building and improved professionalization of IPT entities and workers
 - + Clear expectations of required standards, set out in service contracts (or equivalent)
 - + The ability and willingness to adjust as/if required during implementation and/ or build on lessons learned (including unsuccessful aspects) for subsequent phases

"Success" is defined as being able to achieve and sustain planned reforms. None of the cities succeeded in extending the reforms to the entire IPT sector in their city, although Kigali phased out minibus-taxis completely. Further, none of the cities used IPT reforms to build the overall capacity of the passenger transport system to satisfy transport demand.

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8.5

Contributors to Unsuccessful Reform Experiences

Unsuccessful experiences can broadly be viewed in three categories:

- I. Efforts at reform that never got beyond the point of implementation
- 2. Reforms that did not get beyond a pilot phase, had limited take-up, or were discontinued
- 3. Reforms that were implemented but either did not achieve their intended outcomes, or that failed to sustain their initial achievements

The causes for the lack of reform success are multiple, but simply put, a number of the enablers for success listed above were missing. The most notable causes are the lack of sustained commitment by the public sector actors, the lack of a consultative process for gaining the buy-in of IPT actors before implementation, insufficient financing to achieve what is sought and sustain reforms, and the failure of public sector actors to implement essential enablers or to put required enforcement measures and resources in place.

These are discussed in more detail below.

8.5.1 Reform Efforts That Stalled After Implementation

These reform efforts did not go beyond the point of implementation:

- In Accra, the first step in reform was to get operators to register and receive individual operating licenses. The intention was a transition from individual licenses to route-level licenses, held by the route organizing entity. This did not get implemented despite having the regulations in place and the operators participating in the new regulatory framework. The primary cause was a lack of interest on the part of the many fragmented local governments to do so, or to work together in a common framework.
- In Antananarivo, a planned vehicle-renewal under the PAMU reform project did not go ahead after the project funding ended. The transformative phase 2 of PAMU did not proceed.

8.5.2 Reform Efforts That Stalled After the Pilot Phase

These reform efforts did not get beyond a pilot phase, had limited take-up, or were discontinued:

- In Antananarivo, the PAMU improvements (see city synopsis in appendix 1) were implemented on four pilot corridors, but no further progress was made when project funding ended. The improved infrastructure is now degenerating as no funding was available for maintenance and upkeep.
- In Bamako, regulations for the minibus-taxi sector were developed but never enforced.
- In Cape Town, the Blue Dot incentive scheme reached less than 10% of the minibustaxi sector. The high costs of maintaining the incentive made it unaffordable to extend it further. As a result, after the initial funds were disbursed, the funding line was not renewed, and the scheme ended despite some positive results.



- In Kampala, the city gazetted stands for the motorcycle-taxis, made registration compulsory, and declared a boda-free zone in the CBD. However, resistance from the sector thwarted the efforts, and the reforms were not effectively implemented.
- In Nairobi, multiple efforts to transition the minibus-taxi sector to electronic
 payments have either not gotten off the ground, or had minimal take-up among
 operators—who prefer to stick to cash payments.

8.5.3 Unsustainable Reform Efforts

These reform efforts were implemented but either did not achieve their intended outcomes, or failed to sustain their initial achievements:

- In Accra and Kumasi, transitioning the minibus-taxi sector from self-regulation to accepting regulation by local government was a major achievement. It was successful in the initial years with a high level of compliance. However, the system was undermined by local government itself since they did not follow their own procedures. Now a large number of minibus-taxis operate outside the system.
- Also in Accra, the bus companies that formed from the minibus-taxi associations to
 run the pre-BRT services started operations, but the promised bus lanes were very
 limited and not enforced. In fact, the bus routes were not viable from the outset—
 the companies needed financial bailouts, and now are reduced to operating a few
 peak trips.
- In Bamako, bus lanes to improve operating conditions for minibus-taxis were implemented but not enforced, so the minibus-taxis did not benefit.
- In Maputo, the minibus-taxi associations that formed into the large-bus cooperatives were supposed to disengage from minibus-taxi operations along the corridor. In fact, they continued to operate minibus-taxis alongside the large buses, thereby "keeping a foot in both camps."

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The Role of Financing

Financing plays a major role in enabling reforms. The IPT actors need access to affordable finance for vehicles and other systems/assets. This is especially important if the IPT sector is required to upgrade or expand its fleet. Successful IPT reform initiatives have brought considerable financing to the table, both for transitioning to large-bus operations (as was the case in Cape Town, Kigali, and Maputo) or for extensive minibus renewal schemes (in Dakar).

In the case of Dakar, the financing model evolved in subsequent phases, being able to tap into commercial finance with suitable structures put in place. In Maputo, government mobilized loans from commercial banks and put backstopping measures in place in case the operators did not meet loan repayments.

Measures that improve costs may prove more important to viability than measures that improve revenue. IPT actors can improve productivity and efficiency through internal organization, rationalization, and professionalization. In turn, state actors can support them by improving traffic and road conditions for better productivity, providing terminals and other facilities, preventing encroachment, and eliminating bribe-taking by enforcers.

In Cape Town, the Mitchells Plain pilot significantly increased the productivity and viability of IPT, maintaining the same service provision capacity with half the number of vehicles and a substantial reduction in fuel consumption (a major cost item).

In Maputo, the use of operating leases that included scheduled maintenance gave the cooperatives access to the type of services, which they could not otherwise have done themselves, needed to preserve their assets. In multiple cities, moderate levels of expenditure for repairing road surfaces reduced maintenance and repair costs, and improved the availability, speed, and productivity of IPT. Also, investment in driver training and monitoring reduced reckless driving, improved safety, and reduced fuel consumption, road crashes, and repair costs.

There are multiple business models at play within the IPT sector—those of the associations, vehicle owners, drivers, financiers, etc. The impact of reforms on the business models, viability, and margins of the various actors needs to be adequately considered. The power balance among the actors also needs to be considered, particularly when a reform shifts the flow of funds (e.g. under route-level contracting, electronic payment schemes), and the burden of costs or risks (e.g., employment contracts, shift from daily targets to salaried systems). The livelihoods of IPT actors depend on their ability to maintain their positions. Most IPT actors have limited personal financial capacity or resilience, especially drivers and other workers. They will be understandably reluctant to move away from established arrangements—however marginal or low-paid they may be—to ones that involve financial uncertainty or threaten the source of their livelihoods. For reforms that could negatively impact some stakeholders, finance needs to be available for support, backstopping, market exit or permit buyout, or retraining.

Fare-setting is a central issue. The entire IPT sector is financed by the revenues earned from passengers. IPT reform seeks to bring controls, transparency, and compliance to a sector that has hitherto set its own financial parameters. When reforms seek to bring IPT fares under government control, it is essential to have effective fare-setting and adjustment mechanisms.

Local government finance is an overlooked business model. Many cities lack a sound financial base and are perpetually short of the funds needed to run the administration or make the normal infrastructure investments required of a city. They are usually unable to recruit or retain the caliber of staff required to develop the public transport sector, and especially to plan and lead IPT reforms. They often do not have the funds needed to support the essential enablers of reform, including incentives and enforcement measures. In some cases, they view the IPT sector as a source to be tapped, and this often carries through to the regulatory and enforcement staff. IPT sector reform initiatives need to include financing to strengthen local government layers.

To date, despite the vast size of the IPT business in Africa, the private sector has generally not provided a significant source of new funds for developing and reforming the IPT sector (beyond the traditional purchase of aged and imported vehicles). Commercial banks have only become involved at any scale in government-supported schemes, although the subsequent phases in Dakar indicate that the transition to more commercial arrangements is possible. Cape Town is a notable exception, where the national private-sector financier SA Taxi has provided about 35,000 loans to about 28,000 minibus-taxi operators country-wide—although the high interest rates offered have meant that this model has recently run into some difficulties. Collectively generated financing is seen in the SACCO model, especially in Nairobi and to a lesser extent in Accra, but these are generally small in scale when compared to the volume of vehicles that need replacing.

The exception is in the motorcycle-taxi sector, where private-sector finance has been readily available. In many countries, finance is readily available to purchase new motorcycles, both from lenders and through hire-purchase schemes facilitated by vendors. Ride-hailing apps and cashless payment schemes have emerged in several cities (e.g., Kampala, Kigali, Nairobi), initiated by private-sector actors including telecoms companies and international ride-hailing companies. These have done so entirely based on their own initiative, having seen suitable market opportunities.

The importance of the financing arrangements for IPT reform cannot be understated. It requires credible, sufficient, and sustained financing mechanisms that are trusted by the IPT stakeholders.

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Lessons Learned

The evidence from different cities suggests that the oft-cited objective of in toto replacement of IPT is neither desirable nor achievable. Public transport systems in cities in developing countries will likely be at best a hybrid of both conventional, fixed-route/stop/scheduled services and IPT/ unscheduled services for the foreseeable future (Behrens, Salazar, and Golub 2016). This reflects the nature of cities in Sub-Saharan Africa in terms of the kind of public transport offered, how it is operated, and how it is paid for.

Understanding the transport-service market in these cities is becoming increasingly complex because of the in-migration of young, and poor individuals from rural areas, alongside the existing cohort of long-term residents with rising incomes and education levels. More than one type of service must be offered. A diversity of services is also necessary to provide for the mobility and access of populations made vulnerable because of physical disability, gender, and age. At the same time, the roles of government are expanding and changing, despite their limited financial resources, and there is a need to create jobs for new residents who have only basic education and little experience. Transport business models must be crafted to reflect the realities of the rapidly changing economic and social conditions in the respective cities.

Finally, the penetration of advanced communications and information technologies (such as smartphones) creates opportunities to change the way in which IPT has traditionally been operated.

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Twelve key lessons have been identified using the case studies examined in this report:

- 1. IPT helps broaden the transport service offering.
- 2. Different levels of formalization require different strategies.
- 3. Different stakeholders have divergent, competing interests and perspectives, and sensitivity toward these is imperative.
- 4. State actors must be the ones to give direction to enable or drive implementation.
- 5. There is no reform without sustained trust and communication.
- 6. Bottom-up initiatives tend to be more successful.
- 7. Strong, knowledgeable political leaders are needed to champion reform.
- 8. To achieve IPT reform, multiple intersecting aspects of financing must be addressed.
- 9. Access to affordable vehicle financing can enable reform.
- 10. Reforms impact business models, viability, and margins of the various. stakeholders—these impacts must be considered.
- 11. Government capacity to reform the sector must be strengthened—and this requires financing.
- 12. Capacity building must be a focus.

9.1

IPT Helps Broaden the Transport Service Offering

IPT is often portrayed as an undesirable outcome, resulting from a failure of formal urban transport systems—and to be eliminated once formal systems are restored. However, emerging practice in developed countries with well-established conventional public transport indicates a universal need for IPT-style services.

Cities through the developed-, medium- to high-income world are adopting what has been referred to as a "family of services" (or "mobility as a service"—which itself has many interpretations) for the public transport offer strategy. This differs from the one-size-fits-all approach used in almost all developing world cities since the 1950s—where fixed route, stop and scheduled services provided by a state-owned operator became the main, if not only, urban public transport service. Under that basic model, the variations were most often limited to demand-related headways (frequencies), stopping patterns, and vehicle size—with fixed route/stop/scheduled rapid transit (BRT/LRT/metro) and commuter express overlays where appropriate.

Where alternative, illegal, informal private operators began providing shared-ride service on demand in developed countries (such as in New York City's Latin and African neighborhoods), this was often because of perceived shortcomings of the conventional system.

Recently, low-frequency, conventional fixed route/stop/schedule service in low-density, low-demand, peripheral areas in middle-high income cities are being replaced by app- or phone-dispatched IPT service connecting origins directly to destinations, or to the closest stop on a high-frequency, conventional route. This is at the behest of the

monopoly, state-owned-operator as a money-saving move and to address passenger satisfaction concerns regarding the low-frequency, unreliable conventional services being provided.

IPT serving niche markets, in turn, is often operated under competitive contracts by a private operator different from the main, conventional public-transport operator—whether public or private.

In North America, this "family of services" approach has generally been quite successful. For the same or even less net operating and maintenance subsidy, passenger satisfaction has gone up orders of magnitude—along with ridership. This has even become a problem because, in many places, demand for the new services has outstripped the ability of the public agency to subsidize them.

This is similar to where developing cities appear to be going—providing a mix of services, operations, and business models depending on the nature of the corridor or service area in terms of land use, market character, and operating environment. It would therefore seem that future policy interventions would benefit from a change in the mindset that regards IPT services as a problem to be replaced everywhere (Shittu 2014), rather than improved and integrated into a broader, multi-modal, city-wide framework.

The strategies that build upon the advantages of IPT service provision—such as their demand-responsiveness and operations flexibility—are likely to be much more effective and sustainable than those that strive to supplant the IPT sector entirely with formal, bureaucratic structures (McCormick et al. 2016). It is clear, however, that there is no universal fix or magic bullet to resolving the problems common to IPT services in SSA cities (Behrens et al. 2012; McCormick et al. 2016). Nevertheless, there is a cause to look beyond technology-specific considerations such as BRT and to arrive at a more nuanced approach to public transport reform that looks at all aspects of the current network holistically.

9.2

Different Levels of Formalization Require Different Strategies

A continuum exists of different levels of the IPT sector's organizational sophistication, and there is a need to develop strategies taking these into account. Strategies that permit a more differentiated and incremental approach are likely to have greater success than those that seek to transform the informal sector directly into conventional formal services. This latter approach has characterized many of the past initiatives.

Strategies need to recognize the need for a broad service offer, reflecting the characteristics of the metropolitan area, the needs of users, the diversity of operators, and the affordability for users. Strategies also need to take account of the interest,

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willingness, and capability of operators to transform, and the time required for change. Some operators or associations will be more ready and willing than others to move towards formal types of service and to invest in newer vehicles and supporting infrastructure such as terminals and depots.

As already indicated in section 6.3, a step-wise approach is likely to work better for many within the sector, in which they first adjust their structure and methods, with basic compliance, then move towards a corporate form with the ability to raise finance, and eventually to move to formal transport services. Each step is within the reach of the IPT sector, and over one or two decades the sector can transform significantly.

Account must also be taken of the development and the conditions of the metropolitan area, especially of rapidly growing areas that are typically on the periphery. In these areas, there is rapid change in the population, available amenities, and travel demand—and roads are typically unpaved and unsuitable for buses or even minibuses. In such contexts, traditional IPT is suited to establish some level of service, work within the difficult conditions, and adapt as demand adapts. Thus, even when the public transport in the established part of the city is formalizing—such as in Accra, Dar es Salaam, or Maputo—there remains a need for more traditional IPT.

9.3

Different Actors Have Divergent, Competing Interests and Perspectives

Approaches to reform must include increased sensitivity to the range of stakeholder and actor interests and perspectives; there is a need to recognize this divergence in the IPT industry and market variations within increasingly complex cities. The dynamics of the informal sector are complex, with many actors in competitive tension with each other.

Very broadly they can be divided into three groups:

- Stakeholders or actors who are successful in terms of their power base and the benefits they gain from the sector (mostly vehicle owners and association office holders). They are relatively few and often hold public transport business as a second job and enjoy the gains from being able to act as a landlord.
- 2. Drivers and other support workers, who depend on this business for their daily livelihood. They are vast in number (over 500,000 in Lagos), and often recent migrants from rural areas who take to this profession as an available way to earn a living. In between are the owner-drivers, who have worked their way up the hierarchical structure of the IPT system from being a conductor to a driver (renting the vehicle on a daily/weekly basis from an owner) to saving up enough money to purchase their vehicle.
- 3. The usually poor traveling public. They have few mobility choices other than the poor-quality services that result from, in part, the informal sector's political power.



The views expressed by these groups and their motivation to support an informal sector reform program can be very different. Very often, the views expressed by senior officials of public transport organizations or unions cannot be automatically assumed to represent the diversity of attitudes across all their members. The union leaders are often primarily concerned with maintaining their political influence and power to extract levies from their members (Fourchard 2011). This mirrors findings by Schalekamp and Behrens (Schalekamp and Behrens 2013) for South Africa, where the primary IPT union effectively constitutes a political battleground and universe of its own, removed from operators' needs.

Thus, when considering the logic, attitudes, and aspirations of operators in the IPT sector, its highly hierarchical, often coercive structures cannot be ignored, nor can there be no differentiation between the powerful union leaders at its summit and the mass of individual operators barely surviving at its base (Vasconcellos 2014).

Given this context of divergent interests, the following are key lessons learned:

- When developing and implementing a support package for the IPT sector, first gain a strong understanding of the current operating sector and all its participants.
- Consider the interests of each type of participant in their own right. A scheme benefits one type will not necessarily benefit others, leading to tensions and disputes.
- Incentives and assistance in the procurement of vehicles can act as a catalyst for operating sector consolidation, and hence operations efficiency and effectiveness.
- Consider and address longer-term financial sustainability issues within the financing mechanism.
- Scheme success requires actions beyond financial assistance, including strong
 oversight and monitoring of business and operating practices by government,
 overcoming barriers faced by the sector, and improvements to their operating
 environment.

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9.4

State Actors Must Give Direction and Drive implementation

State actors need to set the framework for the long term, giving direction to reform and driving its implementation. Successful strategies require actions beyond financial assistance, including strong oversight and monitoring of business and operating practices by government. This has been illustrated in b the successful and less successful experiences discussed in chapter 8.

A capable, strong, legally empowered institution carrying out needed planning, monitoring, and regulation/oversight functions for all modes is required. Such an institution must have the scope of responsibilities, the authority, and the capacity to develop and drive strategy and ensure alignment with that strategy amongst all relevant public—and, if possible—private-sector bodies. Enforcement of applicable operating and related traffic rules can be carried out by a different organization, such as the traffic police, but they must be capable, incorruptible, and coordinate their activities with the public transport oversight agency.

The successes of Dakar's public transport reform and that in Lagos could not have happened without the well-organized, professionally strong CETUD and Lagos Metropolitan Area Transport Authority (LaMATA) directing implementation and management of the process. The positive aspects of reform in Cape Town, Kigali, and Freetown Also required strong public transport institutions in the respective places.

But while it is important to set up lead metropolitan institutions encompassing multiple jurisdictions, functions, and modes to address urban transport challenges holistically and comprehensively, merely setting up these institutions is not enough. Sustaining the institutions requires: (1) stable, secure, and independent financing for capital and recurrent budget; (2) A clearly defined mandate; (3) strong technical capacity and political support; (4) cooperation across multiple layers of government established through good communication practices; and (5) "connected" investment decisions to increase the chance of making a better impact.

This is the subject of a companion report to this one (Arroyo-Arroyo et al. 2024).

9.5

There Is No Reform Without Sustained Trust and Communication

Sustained trust and communication are essential in the process of IPT reforms. IPT reform requires committed engagement from both the public and the private sector, a willingness to understand the needs and constraints of the other, and to be flexible and patient in making progress. It also requires a willingness to reset and re-engage in the face of setbacks.

Establishing trust and channels for dialogue between government and the IPT sector can be difficult due to years of confrontational relationships. A further factor is the extent to which the IPT sector is reasonably cohesive and can engage collectively, or already has a coordinating body—as in Accra, Cape Town, or Maputo—or if the sector is fragmented, consisting of many smaller local associations and/or many operators who do not belong to any association.

There is also the issue of long-term commitment and continuity on both sides, as events and changes in key personnel can disrupt the slow process of building trust—often initiated at the interpersonal level. This is especially true for state actors, where routine changes in ruling parties, national and fiscal policies, ministers, and senior officials are common.

9.6

Bottom-Up Initiatives Tend to Be More Successful

Reform initiatives can be those initiated by the state actors (top down), or by the IPT actors (bottom up). Top-down initiatives tend to be structural and can be truly transformative. However, to date the experience has been one of limited success and durability-only Cape Town, Dakar, and Kigali can be considered broadly successful in IPT reforms.

Bottom-up initiatives seem to be more successful, especially in the motorcycle-taxi IPT sector. Such initiatives include mutual financing (e.g. SACCOs), driver training, or app-based booking and mobile payments. However, they tend to be at a smaller scale due to resource constraints. Each has its strengths so both should be pursued—in combination they could be highly transformational.

9.7

Reform Needs Strong, Knowledgeable Political Champions

Almost every case of SSA IPT sector reform highlights the political issues associated with public transport reform. The number of people directly and indirectly employed by the industry is huge and is often a substantial share of the employment available to people with less formal education. In addition, owners of licenses and vehicles inevitably include many powerful political and administrative officers. Both factors create inertia to keep all aspects of public transport the same, irrespective of the mobility issues people face every day due to its poor quality, cost to customers, and performance.

Though a significant number of users lobby for and even demand change, it takes a skillful political leader to convert demands into actual reform. The successful reforms of Lagos, Freetown, and Dakar happened largely because of the strength and capacity of the involved institutions and the support of a powerful, interested, and aggressive leader. In Lagos in particular, the champions were both political (Lagos State governors) and managerial/technical (the Managing Director of LaMATA).

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9.8 Reform Requires Financing Across Multiple Intersecting Aspects of the Sector

To achieve IPT reform, multiple intersecting aspects of financing must be addressed in the sector.

The IPT sector is inherently a low-cost, low-margin sector with thousands of loosely affiliated stakeholders. It typically has neither a corporate form nor a strong capital base and is run on a membership maximization basis rather than on a resource-optimization basis.

IPT reform requires an uplift in quality, access to finance for better assets, restructuring corporate and management approaches, improved conditions for a better-motivated workforce, and improved maintenance and safety, among others. This requires new or adapted business models, better margins and viability, increased expenditure on staff, maintenance and quality, productivity and efficiency gains through better practices and resource optimization, and access to affordable finance for investments.

This in turn needs to be underpinned by effective fare-setting and adjustment mechanisms. The many intersecting aspects of finance cannot be resolved individually, and instead require a structured program of measures. Government can assist at multiple levels through leadership, support for vehicle financing schemes, support for cost-reduction measures such as bus priority and maintenance facilities, and by improving road conditions on bus/minibus routes.

9.9

Access to Affordable Vehicle Financing Can Enable Reform

The informal transport sector does not have the collateral demanded by lending institutions to securitize any finance needed for fleet acquisition, and the sector is usually unable to provide credible business plans. A viable bus-financing scheme must give access to lower interest rates, provide security to financiers, and address the fact that operators can rarely afford deposits. Vehicle financing was part of the transition to large-bus operations in Cape Town, Kigali, and Maputo, as well as the extensive minibus renewal in Dakar. In the case of Dakar, the financing model evolved for subsequent phases, being able to tap into commercial finance, with suitable structures put in place. In Maputo, government mobilized loans from commercial banks and put backstopping in place for repayments in case the operators could not do so. Government can play an important backstopping role, even if it does not get directly involved in the financing of assets.

9.10

Consider the Impact of Reforms on Business Models, Viability, and Margins

Consider the impact of reforms on the business models, viability, and margins of the various IPT stakeholders. There are multiple business models at play within the IPT sector—those of the associations, the vehicle owners, the drivers, and the financiers. The power balances among the stakeholders also need to be considered, particularly when a reform would shift the flow of funds (e.g. under route-level contracting, electronic payment schemes), or would shift the burden of costs or risk (e.g. employment contracts, shift from daily target to salaried system).

Most IPT stakeholders have limited personal financial capacity or resilience—especially drivers and other workers. They will be understandably reluctant to move away from the established arrangements—however marginal or low-paid—to ones that involve financial uncertainty or where they could lose their livelihoods. For reforms that could negatively impact some of the stakeholders, finance needs to be available for support, backstopping, market exit or permit buyout, as well as retraining.

9.11

Strengthen Government Capacity Through Financing

Reform initiatives must include financing to strengthen government capacity in IPT sector reform initiatives. Providing the finance to strengthen the public sector tends to be overlooked in IPT reforms.

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Many cities lack a sound financial base and are perpetually short of the funds needed either to run the administration or to make the normal infrastructure investments required of a city. They are usually unable to recruit or retain the caliber of staff required to develop the public transport sector, and especially staff to plan and lead IPT reforms. Cities often do not have the funds to support the essential enablers of reform, such as incentives and enforcement. In some cases, cities view the IPT sector as a source to be tapped, and this attitude often carries through to the regulatory and enforcement staff.

9.12

Focus on Building Capacity

Irrespective of the direction of reform, there needs to be a clear focus on building capacity among the many groups of actors in both government and the private sector—individual owner/operators, officers of their representative associations and government, and labor—if reform/improvement of the IPT sector is to succeed.

Evidence from Lagos, Kigali, Maputo, and Freetown—which have attempted to reorganize informal operators and improve processes—suggests that any reform is likely to be resisted at first. Owner/operators do not understand the benefit of operating as part of a cooperative or a shareholder-owned corporate entity, and need to be educated about this. The owner/operators also have no experience preparing bidding documents, business plans, and data-based operations management that are part of a more formal, cooperative, or corporate operating environment.

Drivers typically have some driving experience, but not with operating large vehicles safely and efficiently in an urban environment while serving valued customers. Many are nervous about the implications of moving to a more formalized environment with different, larger, more difficult-to-drive vehicles and more effective traffic rule enforcement. Further, drivers currently understand how to make a daily living and collect revenue in a solo entrepreneur environment—any other approach is likely to be met with resistance. Drivers are accustomed to working independently and competing on one or more routes, with little or no experience in operating as part of a team within a participatory, managed organization.

Mechanics require training to service larger, presumably more sophisticated vehicles and equipment.

It is safe to say that other than in Cape Town and Lagos, public officials in the case study cities did not understand how to estimate public transport demand for various modes and services, revenue, recurring operations, and maintenance costs. This limited the ability to determine the optimal number of vehicles (and licenses) required to meet demand, and the fares needed to ensure the sector's financial viability.

Developing an optimal bus route network to serve passengers' origin–destination travel patterns also requires continual updates to the network design. Very often, the bus network in cities is the result of evolution over time, adding new routes to respond

to expanding city boundaries. Such a bus network structure is often not adequately equipped to contend with the changing nature of land use and resulting demand patterns—resulting in a multiplicity of overlapping routes and sub-optimal and outdated route structure. To address this deficiency would require an ability in the planning department to be able to continuously maintain and monitor travel data.

There are a variety of training courses available in the open market that target various technical aspects of IPT operations as currently practiced. However, there is a dearth of comprehensive programs aimed at the IPT sector that are directly connected with building operators' capacity to participate in conversations around reshaping public transport services (Schalekamp 2017) or building the capacity of the regulatory office to prepare, compete, and monitor route contracts.

A comprehensive capacity-building program, covering all relevant audiences and starting with policy and technical leadership, must be planned and put into operation in the run-up to the planning and execution of any reform effort.

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TABLE 12. Example of the types of skills and knowledge needed by IPT and state actors (audiences) to effectively introduce IPT reforms and manage new service models

| Туре | Audience |
|--|---|
| Corporate (cooperative) finance | Corporate management |
| Corporate governance | Corporate management |
| Operations management | Operations team |
| ITS, communications systems, revenue security/collection technologies | Operations team |
| Service planning/demand estimation | Planning team |
| Service/crew scheduling | Operations team |
| Traffic management/ITS applications | Operations team |
| Facility-infrastructure design, construction management | Engineering team |
| Vehicle engineering, maintenance | Engineering team, mechanics |
| Operations monitoring/data collection | Monitoring teams |
| Maintenance and repair | Workshop artisans, managers |
| Parts/stores management | Stores/procurement staff |
| Operating crews | Drivers/conductors |
| Operations supervision | Service, garage and terminal supervisors |
| Enforcement of public-transport related traffic laws and regulations | Traffic police |
| Public transport security, on-board and in terminals and other facilities: | Relevant security personnel from local governments, public transport agency |
| Communications/public relations | Communications/public relations teams |



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10

Developing the IPT Sector: A Way Forward

This chapter builds on the analysis and learning throughout this report to suggest a way forward for the development of the IPT sector in SSA cities. The chapter (1) outlines a clear purpose and outcomes for the IPT sector; (2) offers strategies for implementing reforms; and (3) proposed a way to move from strategy to practical measures to reform the IPT sector.

10.1

The Role of IPT in Urban Transport Policy and Planning

Much of the discussion about IPT to date has been concerned with whether to accept the sector at all, how to improve its quality, how to formalize the sector, or how to shift IPT operations to larger buses. This approach misses the bigger picture. Most SSA cities have a serious undersupply of accessible and affordable passenger transport. Further, SSA cities will double or even triple in population and size over the next generation. No SSA city has a formal public transport system that comes near to meeting the mobility needs of its population, nor an established framework to develop one at the rate that is required.



It is increasingly evident that harnessing the IPT sector is the only way for cities to meet current and growing mobility needs. In some cases, IPT may become (if it is not already) the primary provider of transport; in other cases, it may become complementary to formal public transport. Either way, IPT needs to become central in urban transport policy and planning, and to function within a clearly defined framework of roles and outcomes. By defining this clear purpose and required outcomes for the IPT sector, it will be much clearer to relevant actors what IPT sector reforms are needed, and why. In turn, this will lead state actors to make better decisions about the framework changes (regulatory, institutional, and operational) necessary to support investment and serve other needs.

It is clear that the role of the minibus-based IPT sector is to be the primary service provider, delivering sufficient transport service quantity and coverage based on acceptable levels of quality, reliability, and safety. In most cities, this will mean that the sector has to adapt its organization, business model, operations management, maintenance, finance, and staffing. The degree of adaptation and professionalization may vary depending on the types and quality of services required. Different pathways will coexist in a city; some of these pathways might involve part of the sector migrating to larger vehicles.

For the motorcycle-based IPT sector, the roles are more nuanced. Motorcycles are essentially for individual use, and should not be a primary mode in great numbers—they are better suited to local and connector roles, and to difficult terrains where buses or minibuses cannot function well. Policy should focus on compliance, safety, and the traceability of riders—but given the sector's already large presence, fragmentation, and extensive non-compliance, it will probably be a challenge to contain the sector or attain high levels of conformity to any proposed new role.

10.2

Implementing Reforms: Considerations for Strategy

There is no shortage of reform levers, methods, or technical approaches—it is a matter of choosing those that best fit the context, recognizing the local opportunities and constraints, and phasing them well. It is also a matter of packaging these appropriately, as many aspects are inter-connected.

Despite the many tools available and evident reform efforts, however, there have been only a few cases where reform has been both successful and sustainable. Reform efforts have largely been limited or thwarted by the following four factors:

- The initial implementation was either watered down or blocked, whether due to resistance from various IPT actors, legal or administrative impediments, or failure to put needed elements in place.
- 2. The initial implementation of a multi-phase reform was achieved, but it did not progress further. Most typically, this would entail not extending the reforms beyond the initial set of participants, or not proceeding to the next phase of transformation.
- 3. The allocated funding expired and was not renewed, or the sponsoring project ended. Without a continued source of funds, commitment levels reduce, assets are not replaced, and over time the reforms cease to be effective.
- Reforms were ended, undermined, or marginalized by changes in government, changes in leadership, or changes in policy. This lead to reform's immediate or gradual demise.

A fundamental factor for implementing reforms successfully is trust, often in contexts where there was little to none before. Successful reform requires long-term commitment and continuity, as well as considerable time, flexibility, and patience. Often, however, for different and complex reasons, neither state and nor IPT actors are reliable actors. The two sides are different in nature, with diverse motivations, values, and obligations. But significant reform requires the framework, means, and resources to work in partnership, in addition to trust and sufficient and sustained financial commitment. This approach requires committed engagement from both state and IPT actors, and a willingness to understand the needs and constraints of the other. It requires leadership and authorization from seniors on both sides. Often there are setbacks or interruptions, which may be due to unrelated or unexpected events—this then requires a willingness to resume engagement.

Reform initiatives can be initiated by state actors (top down) or by IPT actors (bottom up). Top-down initiatives are structural and are potentially truly transformative, but so far these have had limited success and durability—at best. Bottom-up initiatives—involving mutual financing (e.g. SACCOs), driver training, or app-based booking and mobile payments—seem to be more successful, but are limited in scale. This suggests that the normally conservative IPT sector is willing to act where it sees potential benefit. Thus, the key to reform may be in finding ways to couple public interest with self-interest.

Either way, state actors need to set the direction and framework for long-term reform—especially for the minibus-taxi sector. These frameworks need to be embedded in policy and other durable instruments.

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10.3

Moving from Strategy to Practical Measures

Every context is different, so there is no universally applicable way forward. Nevertheless, based on this research, it is apparent that the following four elements need to be in place for successful reform:

- A capacitated public-sector or state through which an effective lead institution develops and drives a coherent mobility strategy, coordinating all relevant state actors
- 2. A strong partnership with the IPT sector based on mutual respect
- 3. An IPT sector that is quantified and deeply understood
- 4. Realistic, incremental, and financially sustainable strategies for improvement

These are elements discussed in greater detail below, framed as practical measures or actions that public authorities or state actors can take to foster conditions more conducive to successful reform.

10.3.1 Build Public-Sector Capacity

IPT cannot be successfully managed and developed to serve the public interest if the public authority is fragmented and incoherent. Effective reform requires cross-cutting across work with different state and private-sector actors. Further, the lead institution must have sufficient responsibility, authority, and the capacity to ensure alignment between the state and IPT actors. This requires engagement with and support from key political leadership. This is the subject of a companion report (Arroyo-Arroyo et al. 2024).

10.3.2 Seek Partnership With the IPT Sector Based on Mutual Respect

A partnership approach requires public authorities to acknowledge the important role that the IPT sector plays, and its significant strengths. In many cases, the historical relationship between public authorities and the IPT sector has been conflictual—with authorities viewing the sector as a nuisance to be replaced or contained. Yet both parties and, more importantly, the general public, will benefit significantly if a sound partnership approach is established, based on cooperation. This requires trust and creative ways of coupling public interest with the self-interest of the IPT sector.

10.3.3 Measure and Understand the IPT Sector

Strategies to improve IPT must emerge from an exceptional understanding of the sector. This requires a detailed understanding of current operations, business models, ownership structures, association structures and dynamics, and demand characteristics, as well as the key constraints such as inadequate infrastructure and poor traffic conditions. Insight into routes served, and how vehicles run on the routes, and how they diverge from these routes, is also needed. In recent years it has become easier, faster, and cheaper to collect accurate information on IPT operations, through simple monitoring devices¹³, although this does need cooperation with the IPT sector.

10.3.4 Develop Realistic, Incremental, Financially Sustainable Strategies for Improvement

This report has outlined a variety of levers for improvement:

- Regulation
- · Organization of the IPT
- Vehicle financing
- · Operations and maintenance
- Supporting infrastructure and systems

These levers can be used to develop locally appropriate strategies for improvement. Working in partnership with the IPT sector is a slow and complex process because it requires a critical mass of individual operators to start changing the way they function. Building trust is critical and requires making material interventions, even if small, that are understood and acknowledged. Strategies that are not sustainable for financial and other reasons destroys trust and must be avoided. Progress will be mostly incremental, and strategies should recognize this.

Many of the improvement levers are not necessarily best implemented by the public sector. However, the public sector needs to play a key role in setting direction and fostering alignment between those responsible for the various levers of change.

10.3.5 Conclusion

Strategies must consider the divergent interests within the IPT sector and develop approaches to manage them optimally. These must be implemented consistently, but dynamically, responding to experience.

None of the levers discussed in this report have significant value unless the strategies for change are implemented. This implementation must be consistent and predictable, and in line with commitment. This builds trust, which is critical to success. At the same time, because this is a complex sector, programs may have unpredictable results. It is important, therefore, for state actors or other implementing teams to respond dynamically to evident experience, adjusting approaches while also being sufficiently consistent to not undermine trust. The public sector is often not easily able to operate in this dynamic manner, which is why other parties might be better at implementing in some cases. This needs to be considered when developing strategies.

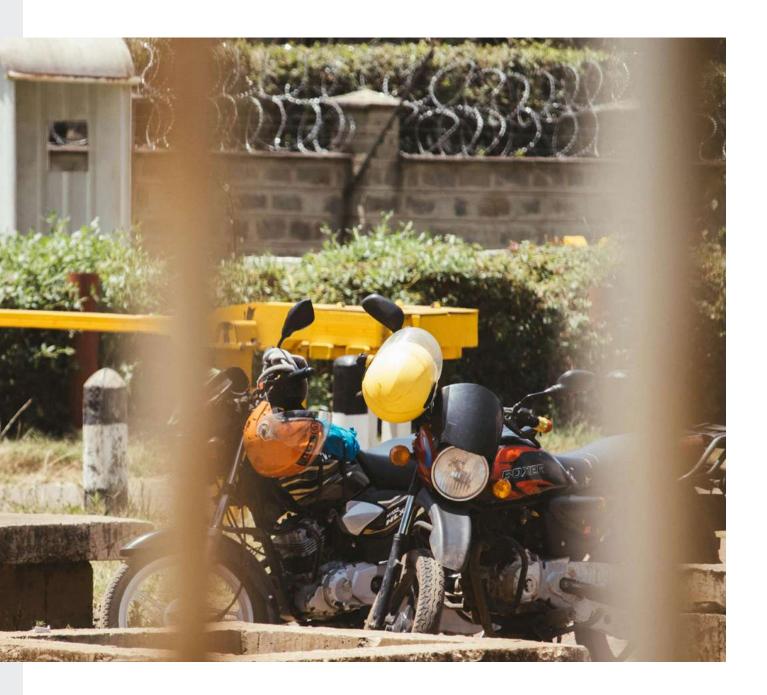
Progress is not likely to be as dramatic or self-evident as when a new mass transit project is built and starts operating, but with the right strategies and sound implementation, the impact of incremental, consistent, sustainable measures on the mobility sector in Sub-Saharan African cities—and other similar contexts—can be profound.

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References

This report is based primarily on a wide range of case studies prepared for SSATP, some specifically for this report, on reforms in IPT, others for studies on topics including urban transport organizing authorities, on innovations in fare payment systems, and on the impacts of COVID-19 on urban transport and its operators. The case studies are unpublished, and hence they are not individually referenced here.

The following published references are used in this report:

Arroyo-Arroyo, F., P. Van Ryneveld, and B. Finn. 2024. *Institutions in Motion: Learning from the Experience of Urban Mobility Organizing Authorities in Sub-Saharan Africa*. Washington, DC: SSATP.

Behrens, R., D. McCormick, and D. A. Mfinanga. 2012. "An Evaluation of Policy Approaches to Upgrading and Integrating Paratransit in African Urban Public Transport Systems: Results of the First Round of a Delphi Survey." In CODATU XV: The Role of Urban Mobility in (Re)Shaping Cities.

Behrens, R., P. Salazar, and A. Golub. 2016. "International Case Studies of Hybrid Public Transport Systems." In *Paratransit in African Cities: Operations, Regulation and Reform*, edited by R. Behrens, D. McCormick, and D. Mfinanga. London: Routledge.

Fourchard, L. 2011. "Lagos, Koolhaas and Partisan Politics in Nigeria." *International Journal of Urban and Regional Research* 35: 40–56.

Gobin, L., and M. Sybillin. 2010. *Définition d'une autorité des transports pour le Grand Antananarivo*.

Jia, W., E. Beukes, J. Coetzee, and P. Van Ryneveld. 2022. *Improving Paratransit in Maseru and Gaborone: Using Innovative Data Techniques in a Diagnostic Approach to Inform Strategy*. Washington, DC: World Bank.

McCormick, D., H. Schalekamp, and D. Mfinanga. 2016. "The Nature of Paratransit Operations." In *Paratransit in African Cities: Operations, Regulation and Reform,* edited by R. Behrens, D. McCormick, and D. Mfinanga. London: Routledge.

Niyonsenga. 2012. Assessing Public Transport Supply for Kigali, Rwanda. Master's thesis, University of Twente, Faculty of Geo-Information Science and Earth Observation.

Schalekamp, H. 2017. "Lessons from Building Paratransit Operators' Capacity to Be Partners in Cape Town's Public Transport Reform Process." Transportation Research Part A 104: 58–66.

Schalekamp, H., and R. Behrens. 2013. "Engaging the Paratransit Sector in Cape Town on Public Transport Reform: Progress, Process and Risks." *Research in Transportation Economics* 39: 185–190.

TRANSITIONS Project. 2021. TRANSITIONS Informal Transport Compendium Report.

Vasconcellos, E. A. 2014. *Urban Transport, Environment and Equity: The Case for Developing Countries.* London: Routledge.

World Bank. 2022. *Study of Public Transport in Lusaka: Final Report.* Washington, DC: The World Bank, in association with Transaid and Integrated Transport Planning Ltd.

FOUNDATION

PART I

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PART III 🔸



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Appendices

Appendix 1: Synopses of the Case Studies

Appendix 1 provides a synopsis for each of the eight main case studies:

- Antananarivo
- Cape Town
- Dakar
- Freetown
- Kampala
- Kigali
- Lusaka
- Maputo

Each synopsis follows the format below:

- Context
- Urban passenger transport in the city/metropolitan area
- · Organization of the minibus-taxi sector
- Organization of additional IPT mode (where relevant)
- · IPT reforms in the city/metropolitan area

The purpose of these synopses is to provide context for the practices described in the main report.









Context

Antananarivo is the capital and main urban center of Madagascar. The population of the Commune Urbaine d'Antananarivo (CUA) was 3.5 million in 2024. It is expected to reach 5-6 million inhabitants by 2040. The city has expanded beyond its initial 6,500-ha area with this rapid urbanization process. It is now a concentric urban development along the main radial axes and the population is concentrated in the inner city. It remains compact, as 60% of the Antananarivo population lives within 5 km of the CBD. Although walking and public transport remain the main means of transport, individual motorized travel is increasing, with growth in the number of cars of around 5% per year. The narrow, winding and sloping roads of the hills exceed capacity in the peak periods. Because there are no ring roads, vehicles have to make inter-provincial connections on the radial roads, and thus enter the central city and add to the traffic congestion; the radial axes of the lower city are narrow and larger vehicles cannot easily circulate.

Institutional responsibilities relevant to the urban passenger transport sector are spread across multiple agencies at national and local levels. Madagascar has a system of Decentralized Territorial Communities (Collectivité Territoriale Décentralisée) which, among other things, means that the CUA organizes transport within its territory. The National Land Transport Agency (ATT) under the Ministry of Transport organizes transport in the surrounding suburban and hinterland areas. Four national ministries have direct involvement in matters related to transport, through their departments and agencies, covering the core areas of roads, transport regulation, enforcement, and road safety.



Urban passenger transport in Antananarivo

Urban public transport in Antananarivo is provided by two main modes:

- Taxi-be: These are midibus/minibus-taxis operating on fixed routes, in typical informal style. They are broadly categorized as:
 - + urban lines, under the control of the CUA, in which about 5,500 vehicles operate 73 routes, and
 - + suburban lines, under the control of ATT, in which about 3,000 vehicles operate 98 routes
- Taxi-ville: These are sedan shared-taxis, officially 4-seaters, operating on-demand transport without fixed routes or stops. About 4,000 such taxis operate in the CUA urban area.

Organized large-capacity bus services no longer exist in Antananarivo, and tentative attempts to reintroduce such services have come to nothing. There is also no rail passenger transport in the city. A current initiative is ongoing and had hoped to have the first of five lines operational in 2022. Taxi-motos (motorcycle-taxis) have been circulating clandestinely in several districts of the capital for years, and have even multiplied, despite their prohibition, due to growing traffic jams.



Organization of the taxi-be (midi/minibus-taxis) sector in Antananarivo

Taxi-be operations are organized by lines (i.e., routes), either urban (73 routes as of 2019) or suburban (64 routes as of 2019). Urban routes are on average 12.3 km long and the taxi-be operated on these routes make on average four and five round-trips per day. Suburban routes are on average 15.9 km long and the taxi-be operated on these routes make on average three to five round-trips per day, depending on route length. All vehicles operating on the same line are supposed to have the same livery color, but in practice, the different routes are marked on a board. Most lines include some mandatory stops (listed in the operating permit), but taxi-be can make additional informal stops.

CASE STUDY

Route permits are granted by CUA for the urban area and by ATT for the suburban area for a single cooperative. Route permits are issued to cooperatives. Cooperatives are made up of several owners who have been licensed per vehicle. Taxi-be cooperatives commit to specific days and times of service, as well as maximum service intervals (peak and off-peak) for each line covered by their operating permit (see the section on license and regulation). In practice, Taxi-be drivers tend to work on fill-and-go basis, which results in long queues and waiting times at bus stops along the taxi-be routes during low-demand or off-peak periods (JICA 2019). Cooperatives can implement a control system, including timekeepers and controllers placed at intermediate or terminal stops, to supervise operations and enforce their service commitments. Not cooperatives work in the same way, though and some are more rigorous, while others are more lax.

The taxi-be fleet in Antananarivo is made up of some 2,650 vehicles on urban routes (within CUA) and around 3,000 on suburban routes (between the CUA and the peripheral communes). The fleet is mostly Mercedes Sprinter (26–32 seats), or Mazda Bongo/Eclipse (14–18 seats). In practice, operators illegally increase the number of passengers. Most vehicles are very old. Suburban taxi-be were on average 24 years old in 2019 (WB and JICA 2019). Operators buy directly either by bank loan, family loan, or by inheritance. Ownership of taxi-be is highly dispersed, with most operators owning just one or two vehicles (Maubois 2011). A survey of taxi-be owners operating on Line 119 in 2012 revealed that 77% of them owned one vehicle only, 15% owned two, and 8% owned three or four.

As of 2019, there were 52 urban taxi-be cooperatives (operating 73 routes) and 31 suburban taxi-be cooperatives (operating 64 routes) (WB and JICA 2019). Urban cooperatives are subject to oversight by CUA; suburban cooperatives by ATT. However, taxi-be cooperatives are not well regulated or coordinated, and as a result, many taxi-be routes are duplicated and their services are concentrated on certain routes (WB and JICA 2019).

The Union of Urban Transport Cooperatives (UCTU), created in December 2007, brings together most cooperatives operating routes in the Antananarivo commune. Cooperatives are not required to join UCTU. Fitaterana mirindra ho an'Antananarivo (FMA) is another Union of Urban Transport cooperative. It is the successor to the Bureau Professionnel des Transports Urbains (BPTU), which was abolished by the state, and the Crédit Conseil pour le Redressement et le Développement des Transports (CCRDT), both of which were informal organizations (Gobin and Sybillin 2010). The Union of Suburban Transport Cooperatives and the Union of Suburban Transport Cooperatives Fanavoazana (UCTS) bring together cooperatives in suburban transport. There is competition between UCTU and UCTS cooperatives because of overlapping routes: some urban taxi-be routes serve the periphery, while some suburban taxi-be serve the center. Only suburban taxi-be allow the transport of goods (e.g., fruit, vegetables on market days) to the center, which complicates the situation.



Organization of the taxi-ville (shared-taxi) sector in Antananarivo

City taxi-ville operate as on-demand transport services in the perimeter of CUA. They are seen to have advantages over taxi-be, including comfort, speed, and safety (especially at night)—but are regarded as very expensive. They are less used as taxi-be offer better pricing. Estimates put the fleet of legal taxi-ville in Antananarivo at around 4,000 vehicles in 2020 (although the main association claimed a total fleet of 5,700 taxi-ville). Antananarivo's taxi-ville have historically consisted of decades-old Citroën 2CV and Renault 4L models. Newer models have recently joined the fleet, including Peugeot 205 and Peugeot 309.

Taxi-ville are subject to fewer regulations than are taxi-be, as they are not covered by Decree no. 2097/98 of March 28, 1998, which established the general organization standards for public road passenger transport in the national, regional, suburban, and urban areas. CUA is in charge of the licensing process. Unlike taxi-be licenses, taxi-ville licenses have no expiration date, and need only be renewed in case of destruction or loss, or if the owner has decided to sell the vehicle or stop working in the sector. A new licensing process has been inaugurated in 2020 by CUA, enabling the switch to digital licenses. There has however been some resistance from taximen and their associations for fear of additional costs associated with the digitalization process.

CASE STUDY

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Taxi-ville are organized in the form of associations or cooperatives. A union of taxi-ville operators was created in 2016, called Association des Taximen de la Capitale or Fikambanan'ny taxi eto Antananarivo Renivohitra (FTAR). Since its creation, FTAR has fought, together with competent authorities, the proliferation of illegal taxis as well as the decision by CUA to privatize vehicle inspection (the decision was reversed in 2020 and the General Directorate of Road Safety (DGSR, Direction Générale de la Sécurité Routière) is now again in charge of vehicle inspection). Due to internal divisions among taxi operators concerning their attitudes towards CUA, a union called VTM was formed in 2017 to compete with FTAR.



IPT reform efforts in Antananariyo

The Urban Mobility Improvement Program (PAMU) was designed and implemented from 2009 to 2016. It was supported by the Ile-de-France region in France, which allocated € 1.5 million to the first phase. However, this engagement did not continue in subsequent years, which meant that phase 1 and all of phase 2 could not be completed.

Phase 1 implemented improved infrastructure along four pilot lines, including upgraded terminals and associated amenities such as small restaurants and sanitary blocks, and improved bus stops (some of them with bus shelters, improved sidewalks, and drainage). Phase 1 also included a number of studies and training activities, and sought to upgrade and renew the taxi-be fleets by replacing some of the minibuses with 40-seater midibuses. Technical specifications were prepared, but the project did not proceed to procurement or deployment. Further elements that were planned but not implemented included a fare-collection system, rationalizing the route network, professionalizing operators and their workforce, strengthening the financial management and financing capacity of the sector, developing an organizing authority structure to coordinate CUA and ATT, and strengthening the regulation and operational oversight of the public transport lines.

The improved infrastructure elements on the pilot lines are no longer maintained, so over time they are likely to diminish and none of the PAMU measures will have been sustained.

Phase 2 ended because funds were no longer available; political change at the level of the Ile de France Region ended the engagement and funding support for the PAMU. However, the primary reason for the failure of the planned PAMU measures was the lack of political will among leaders of Antananarivo, and of the Ministry of Transport to reform the sector or to achieve change. For the cooperatives, moving from artisanal operations to a company would have required them to join forces, which was difficult to accept. This fear also motivated their rejection of the project's in-depth actions.













Context

Cape Town is the second largest economic center in South Africa. It is the legislative capital of South Africa and the provincial capital of the Western Cape Province. Cape Town is the capital of the Western Cape Province, with a current population of about 4.4 million in 2024. Cape Town is governed at the local level by a single-tier municipality of 400 km2, which extends across most of the metropolitan region and is referred to as the City of Cape Town (CCT). Of the estimated 2.65 million daily private and public passenger trips in the Cape Town area, over 95% have both their origin and destination within the boundary of CCT. Responsibility for urban transport is shared across different layers of government and their agencies. This particularly impacts the informal transport sector. The main institutional stakeholders are:

- The City of Cape Town (CCT) is the organizing authority for transport in the metropolitan area, thus the main body responsible for the private transport road network, the planning authority for all public transport, and responsible for BRT.
- The Provincial Government of the Western Cape is currently responsible for contracting commuter bus services and issuing operating licenses for public transport based on recommendations from the planning authority (CCT).
- The National Department of Transport is responsible for legislation and policies governing rail, pipelines, roads, airports, and ports, and the intermodal operations of public transport and freight. This is also the body responsible for grant frameworks in terms of which conditional grants are made for the provision of transport services, and it makes key decisions on devolution.
- Metrorail, a division of the Passenger Rail Agency of South Africa (PRASA), is a state-owned company
 reporting to the National Department of Transport (DoT). It is responsible for commuter rail services
 nationally, operated by its division, Metrorail. PRASA is also responsible for mainline passenger rail
 between cities.
- The South African National Roads Agency (SANRAL) is an independent statutory company that maintains and develops South Africa's national road network, including the three national roads that traverse Cape Town (N1, N2, N7).



Urban passenger transport in Cape Town

A decade ago, most passenger trips were made by formal modes of transport, but in recent years the commuter rail has declined drastically. IPT has captured the business so informal modes now carry more passengers than formal transport. Transport is provided by the following main modes:

- Minibus-taxis, which are believed to number about 16,000—about 6,000 of these are unlicensed
- Commuter rail, which had been the backbone of public transport in Cape Town and its hinterland, has
 greatly declined due to poor management, criminality, asset theft, and closure of much of the network
 during COVID-19
- Conventional commuter buses, of which Golden Arrow Bus Services (GABS) is the largest operator with a fleet of more than 1,000 buses
- BRT, which commenced operations in 2011 and has a fleet of 372 buses
- Sedan taxis

Shared-taxis, motorcycle-taxis, and 3-wheelers do not operate in Cape Town—at least not legally or to any visible extent.



Organization of the minibus-taxi sector in Cape Town

Minibus-taxis (taxis) operate an unscheduled service on fixed routes. Most operators own three or fewer vehicles, although some operators own more than 50. About 200,000 minibus-taxis operate nationally.

While the IPT sector is subject to some regulation by the state, it is largely self-regulated by taxi associations, of which operators are members. Government required the associations to become more formally structured in response to violent competition among operators in the late 1990s. A new licensing regime was introduced at this time, which included a shift from area-based to route-based licenses, which—it was hoped—would reduce conflict. In the Cape Town area the Provincial Regulatory Entity (PRE), which is linked to the provincial administration, issues licenses to operate. It must do so based on the recommendations of CCT, as the planning authority in the area. CCT undertakes regular (180-day) surveys to scientifically assess supply and demand before recommending the issuing of new licenses. The system works reasonably satisfactorily, although there are a significant number of unlicensed operators (c. 6,000).

The 10,000 licensed taxis are organized into 102 local associations, which form the core of taxi organization in the Cape Town area. These associations are organized into six regions and elect the leadership for their region. A body known as the South African National Taxi Council (SANTACO) was established by government with representatives from the industry as the key channel through which government at a national level engages with the minibus-taxi industry. SANTACO has provincial branches, with SANTACO Western Cape being the relevant body in the city. The regional bodies tend to have more power and influence than SANTACO Western Cape over what transpires while, particularly in their own area, some of the larger of the 102 associations are dominant.

Despite the relatively structured institutions, violence between associations is an ongoing feature of the minibus-taxi industry, resulting in a significant number of deaths each year. A key motivation is the significant income that associations generate from joining fees. This worsens when new routes are opened up as a result of city expansion, or more recently, due to the decline of the rail services.



IPT reform efforts in Cape Town

Three main reform efforts specific to the Cape Town minibus-taxi sector are reported here (there have also been other national initiatives, in particular the National Taxi Recapitalization Program). Of necessity, these are only briefly summarized here; detailed descriptions are in the case study:

- Development of BRT operating companies from minibus-taxi stakeholders
- A new contracting and operating model at Mitchells Plain (Mitchells Plain is one of South Africa's largest residential areas, located about 20 km from the City of Cape Town)
- The Blue DOT scheme to incentivize improved driving quality and safety

BRT was developed in Cape Town and Johannesburg to provide transport during the FIFA Football World Cup in 2010, after which permanent services were established. The MyCiti BRT in Cape Town then served the northern corridor and the airport, and commenced service in 2011. A fundamental principle was that minibus-taxi stakeholders would be an integral part of the services.

Vehicle Operating Companies (VOCs) were established to run the BRT and related services. CCT purchased the buses and services were operated under gross-cost contracts. Meanwhile, drivers could qualify as BRT bus drivers, with training funded by the BRT project, and they and other employees could be placed in line for positions in BRT station and service contracts.

Affected operators would have one of three options once BRT operations were running and the VOCs were formally constituted. The first option was that, in return for compensation, they would give up their existing operating rights in the BRT phase 1 area and convert the value of such compensation into shares in the VOCs. The second option was that operators convert only a portion of the compensation into shares in the VOC and take the remainder of the compensation as a cash pay-out. The third option was to take the entire compensation amount as a cash pay-out and relinquish the right to operate public transport services in the Cape Town municipality in perpetuity.

CASE STUDY

The Mitchells Plain pilot took a different approach. The N2 Express Service from the area to the inner city had already been launched in 2014 as a joint venture (JV) between minibus-taxi associations and GABS. In 2017, CCT embarked on a study aimed at piloting the transformation of selected minibus-taxi associations into Taxi Operating Companies (TOCs). Four Mitchells Plain-based minibus-taxi associations were selected to participate in the pilot project, three of which operated feeder services within Mitchells Plain while the fourth was the trunk-route association that was part of the N2 Express JV. These associations, amongst others, were identified based on their readiness to participate in the pilot, as well as to include both feeder and trunk-type operations to test the possibility of alignment, and/or integration, with CCT's revised hybrid reform approach. Key features of the pilot were to rationalize and consolidate minibus-taxi operations, to move away from the daily target-driven system for drivers to corporate legal entities with legally compliant conditions for labor, to improve efficiency and viability, and to improve quality of service. The outcome was a major improvement in productivity, in which the operational fleet of 78 vehicles could be reduced to 37, providing the same level of service, a reduction of 45% in fuel consumption, achieving breakeven on operating costs (not counting depreciation/replacement), and accommodating all previous drivers on a shift system with a 7.5-hour day (previously 12 hours).

The Blue Dot scheme was implemented in 2021. It centered on participating minibus-taxis agreeing to have their vehicles monitored with installed in-vehicle equipment, and each operator would get bonus payments for proper daily operations. Each would start the day with five "stars", and could lose stars over the day for irregular operation or unsafe driving. Each "star" was worth a given amount, and operators would receive the bonus for whatever stars they hadn't lost. This seemed to be effective in improving driver behavior. In total, about 900 taxis participated. The scheme was well received and served as a basis for improved relationships and trust between government and operators. However, it faced some problems. First, there was controversy about "rewarding" drivers for doing what they should be doing in the first place. Second, the bonus scheme was generous to the point that government could not afford to include all 16,000 taxis operating in Cape Town. Third, it had a limited period and expired in late 2022, once the budget of ZAR 70 million was spent. Fourth, the bonus was paid to the operators, so the drivers only received cash if the operators (vehicle owners) chose to share. Nevertheless, the scheme indicated that financial incentives could lead to improved behavior.



Case study 3 DAKAR





Senegal





Context

Dakar is the political and economic capital of Senegal. The Dakar region is a peninsula, with an area of 547 km2. The Dakar region is a peninsula, with a population estimated at 4.4 million in 2024. ¹⁶

The Dakar region has five departments subdivided into 14 districts. The Dakar agglomeration includes: two departments, which are Keur Massar and Rufisque; and four cities, which are Dakar, Guédiawaye, Pikine, and Rufisque. There are also 53 communes, including 19 in Dakar, five in Guédiawaye, six in Keur Massar, 12 in Pikine, and 11 in the department of Rufisque. Local authorities are responsible for environmental management, as well as land-use planning and development (e.g., parking). Land transport is the responsibility of national government, and legislation does not clarify any overlaps. The governor of the region chairs the regional commissions for transport and traffic, urban planning, and regional development.

In March 1997, an urban transport coordination agency—the Dakar Urban Transport Executive Board (CETUD)—was created. CETUD is responsible for implementing and monitoring Urban Transport Sectoral Policy in the Dakar region. The implicit objective of the policy is to organize and regulate public transport to improve public transport operations from both the operator and user perspectives. Functions of CETUD include:

- Deciding on routes to be served and their operational parameters
- Signing agreements with transport operators and managing the contracts
- Making proposals for fare-setting, ensuring coordination of various forms of transport
- · Identifying infrastructure, traffic management, and road safety improvements
- · Identifying improvements to the vehicle fleet
- · Advising government on urban projects that may impact public transport

Despite its name, CETUD has no executive function and cannot control or influence the issuance of licenses or allocate compensation to operators without the consent of both the Ministry of Transport and the Ministry of Finance. The Ministry in charge of Infrastructure and Transport (MITTD) remains the national authority responsible for urban transport in Senegal. Nevertheless, over the past two decades, CETUD has established itself as the de facto leader in the sector, and as a key player in projects involving international donors. In large part, this has resulted from the restructuring program for the minibus-taxi sector, and the associated fleet renewal (described below).

CASE STUDY



Urban passenger transport in Dakar

Of the 7.2 million trips made daily by people aged 11 years and older, 70% are made on foot. There is a wide range of public transport, of which minibuses are the majority form, followed by various types of taxi. The midibuses are aging and in decline. The major modes are as follows:

- Buses, operated by Dakar Dem Dikk SA, a company with a majority public shareholding. The bus network has 35 lines and carries about 50 million passengers/year
- · Midibuses, adapted light commercial vehicles (ndiaga ndiaye), with a capacity of around 45 seats
- Minibuses, consisting of either vehicles operated by AFRU or those operated by traditional IPT style of operations (car rapides)
- Shared-taxis (clandos) which, as their name suggests, are unlicensed but operate openly. Their number is unknown
- · Commuter Rail (Petit Train de Banlieue), with one line carrying five million passengers/year
- Taxis (suburban, "yellow" taxis, not metered)

A World Bank–supported BRT project commenced operations in early 2024. This project has catalyzed a major restructuring of the public transport system.



Organization of the minibus-taxi sector in Dakar

Over the past two decades, the minibus-taxi sector in Dakar has become two sub-sectors: the AFTU bus sub-sector; and the car rapide sub-sector.

The AFTU Bus sub-sector emerged as part of the restructuring under CETUD. AFTU buses have gained a large market share at the expense of the car rapide minibuses and ndiaga ndiaye midibuses. This is evidence of CETUD's efforts to formalize the transport supply through the bus renewal and staff professionalization (see below). AFTU buses are operated by 14 Economic Interest Groups (EIGs), which consolidated 900 operators who had about 2,000 vehicles. These operators now function in a more formalized way, under a quality-based contract. Routes are negotiated between the operators and CETUD, with defined stops and defined service hours. Formal frequencies/schedules are still lacking, however. Specifications for vehicles, operations, and the level of professionalization have all been agreed to by operators and are generally respected. Vehicles are newer than the car rapides as a result of the fleet-financing program.

The car rapide sub-sector is made up of the remaining operators, who did not participate in the reforms but continue to operate in the informal way. They have no set routes but have defined destinations, and normally ferry locals to the city center in the mornings and back to the suburbs in the evenings. Depending on the probability of finding passengers on the way, the driver can decide to depart with a half-full vehicle or, in some cases, an almost empty one. The driver will then opt for the most profitable itinerary between departure and arrival points, considering the expected ridership and commercial speed. Car rapides often stop along the route to pick up passengers, sometimes exceeding the vehicles' capacity.



IPT reform efforts in Dakar

There has been major reform of the minibus-taxi sector in Dakar over the past 20 years. This reform included a large part of the minibus-taxi sector and appears to be sustainable. The reform had three interlinked aspects: (1) restructuring of a substantial portion of the minibus-taxi sector into economic entities, building up both their financial capability and their professionalization; (2) a multi-phase fleet program in which about 2,000 vehicles were purchased; and (3) transition from a system of loose permits to quality-based contracts and institutional oversight. These reforms were made possible by the establishment of CETUD, sustained support from the World Bank, and sustained commitment from the operator sector.

The need for reform of the minibus-taxi sector was evident by the late 1990s, for the same reasons seen throughout the region. In 2000, the Urban Mobility Improvement Project (PAMU) was launched, led by CETUD and supported by the World Bank. PAMU included a leasing facility to support the complete renewal of the car rapide and ndiaga ndiage fleets over several years and facilitate access to credit for private operators. To kickstart the process, a non-profit organization called the Urban Transport Funding Association (AFTU) was set up in 2001, including operators and representatives from the ministries of Transport and of Finance, and CETUD.

Under the AFRU system, operators were required to organize themselves into EIGs in order to gain access to loans under favorable conditions to renew their fleet. Senbus, a Senegalese company specializing in assembling vehicles, was created around the same time to support the first fleet-renewal program and ensure the maintenance of the vehicles. EIGs were obliged to use Senbus to perform routine maintenance for at least five years.

Initially, CETUD was responsible for defining routes, leading negotiations with the AFTU, signing agreements with EIGs, and managing contracts. In November 2003, the first concession contracts were signed between CETUD and the EIGs, setting the overall service parameters (e.g., vehicle capacity, concession duration, area of operation, agreed-upon routes, the obligation to share financial and operational data, etc.) as well as terms of reference (vehicle specifications, authorized stops, ticketing system, applicable fares, schedules, frequency of services etc.). In parallel, AFTU and the EIGs signed membership agreements for AFTU to represent the EIGs in technical committees with CETUD and facilitate the purchase and rental of new vehicles (taking out loans and acting as guarantors).

The first phase of reform took place in 2005–08, using a World Bank loan of US\$ 15,9 million to finance the renewal of the public transport fleet and build operator capacity. The loan was intended to cover 75% of total renewal costs, complemented by an initial contribution from the operators. The tender for 505 buses had two main conditions: after-sales maintenance would be ensured by the Senegal state; and vehicle warranties were granted for up to five years or 200,000 km. Participants had to join an existing EIG or form a new one, either of which would be responsible for the loan repayment. Ownership arrangements did not change, as private individuals still could own vehicles or small fleets. This has been maintained throughout all renewal phases. AFTU represented the various EIGs during the negotiations with CETUD and the vehicle supplier. Out of the 14 EIGs, nine took part in the first phase of the program. In 2006, the various EIGs created a micro-finance organization, Mectrans.

Building on the success of the first phase, the second phase took place between 2010 and 2012, with a third phase between 2013 and 2016. The second phase involved 402 minibuses, and the third phase involved 700 minibuses and 300 buses. The later phases incorporated new conditions, based on the lessons learned from the first experience. A similar approach was adopted for the financial scheme, with a transfer mechanism to the operators, and AFTU playing the role of financial lessor.

The major differences in the latter phases centered on the funding source and mechanism, which moved towards the commercial finance sector, and the institutional set-up, in which AFTU restructured itself. Notably during the third phase, in 2015, CETUD, together with the operators, took the initiative of setting up a division within AFTU for route regulation and operational assistance called Captrans (Support Centre for Transport Professionalization) in an attempt to better organize the EIGs.

The Suburban Taxi Modernization Program in Dakar

As part of the professionalization of transport operators and fleet renewal, in 2014 CETUD launched a pilot in the suburbs of Dakar to renew suburban taxis and rationalize their operations. These suburban-taxis (clandestine taxis, or clandos) had proliferated and efforts to organize them had not produced the expected results. Clandos complement the existing urban transport network and play the role of feeders to the AFTU and Dakar Dem Dikk networks.

Clandos emerged in the 1980s in response to a demand not covered by other urban transport services (buses and minibustaxis). These five-seaters (including the driver) infringed upon Senegalese regulations by serving as collective transport vehicles on fixed routes—they operate without licenses and use vehicles without any transport or traffic authorization (certificate of technical aptitude).

The government therefore decided to use fleet renewal as an instrument to organize this sector.

The pilot aimed then to: (1) identify clandos (vehicles and owners) and incentivize them to comply with the regulations (obtain the necessary certificates and licenses); (2) organize the network of clandos around routes serving the main hubs, (3) ensure fare levels approved by the administrative services.

The pilot was led by CETUD with Tata Motors as an industrial partner. Mectrans funded the pilot phase. The purchase cost of the eight-seater vehicle negotiated with Tata was 6,000,000 FCFA (US\$ 9,550 equivalent) including tax, or 120 million FCFA (US\$ 192,100 equivalent) for the entire project. In Decree n° 2013-1374 on October 30, 2013, the vehicle was exempted from complying with the ban on seats with passengers facing each other.

The financing conditions were as follows:

Tata supplied the vehicles to its subsidiary UNITECH Motors, which granted a loan equivalent to their cost to Mectrans, for 15 instalments.

Mectrans leased the vehicles to the operators selected for the pilot and grouped into approved EIGs, under the following financial conditions:

- Operator's personal contribution: 25% of the cost including tax of the vehicle, i.e. 1.5 million FCFA (US\$ 2,300 equivalent) per vehicle, or 30 million FCFA for the pilot phase
- · Interest rate: 11% per year
- · Repayment term: three years, i.e. 36 monthly instalments.

CETUD remitted to Mectrans an amount of 25 million FCFA (US\$ 38,100 equivalent), as a financial guarantee for the operation. This amount will be returned to CETUD at the end of the operation.

The pilot was launched with 20 vehicles deployed on selected routes in the departments of Pikine and Rufisque. The following accompanying measures were implemented to guarantee the pilot's success:

- · An awareness campaign was implemented for the selected operators, the decentralized authorities, and the users
- · CETUD supported the repair of road infrastructure on the routes selected to carry out the pilot
- UNITECH Motors maintained the vehicles, financed by a flat-rate financial contribution from the operators included in the monthly loan repayments.

CETUD monitored the implementation of the pilot. Based on the key successes, such as the emergence of new form of organization based on the pooling of revenue, and the management of operations and the profitability of the operation, the program was extended to other suburbs and to other towns (Touba). In these subsequent phases, more than 400 vehicles were introduced by in partnership with Mectrans and the National Economic Development Bank (BNDE).

Arrangements will be made by the central administrative authorities (DTR and CETUD) and local authorities (the cities of Pikine and Guediawaye) to ensure the exclusivity of the recommended service on the routes chosen (protection against unfair competition).



Case study 4 FREETOWN







2.01





Context

Freetown is the capital and commercial center of Sierra Leone, a coastal city located on a peninsula. Its topography results in the city mainly occupying the northern and eastern areas, with accelerated ribbon development and expansion on the elevated, steep, and forested central belt. Freetown's population was 2 million in 2024.¹⁷ The national population is forecast to double in 20 years, while Freetown's outer (rural) area is expected to double in just eight years.

Multiple government ministries and departments are responsible for planning and financing, as well as management, implementation, and enforcement in the urban transport sector. Key stakeholders in the transport sector are listed below:

- The Ministry of Transport and Aviation (MoTA) has the overall responsibility for planning, policy making, and performance management, covering all modes of surface transport and also air transport. Many of the sector roles originally vested in the MOTA have been devolved to infrastructure agencies and safety regulators, following the general practice applied internationally.
- The Sierra Leone Road Safety Authority (SLRSA) is responsible for testing and licensing all vehicles and drivers, traffic management, issuing driving licenses, and overseeing driver examinations/tests.
- The Sierra Leone Road Transport Corporation (SLRTC) is responsible for regulating public transport operations as well as operating the government-owned fleet of public transport vehicles.
- The Freetown City Council (FCC) is responsible for the designation of on-street parking control and enforcement of parking.
- The Ministry of Internal Affairs is responsible for the Sierra Leone Police Service. Police traffic functions include controlling vehicle operations and enforcing regulations. The Police also undertake some traffic planning functions, such as the design and implementation of one-way traffic systems.
- The National Commission for Privatization (NCP) was established to fast-track the reform of stateowned enterprises. In the road transport sector, the entities originally assigned to the NCP included SLRTC in the service delivery domain.

The road system in Freetown suffers from major deficiencies—inefficient network, no proper hierarchy of roads, poor connectivity, and a considerable backlog of road maintenance. Traffic management and the enforcement of traffic rules and regulations are generally weak. These factors combine to create severe traffic congestion at all times of the day, which impacts heavily on public transport.



Urban passenger transport in Freetown

The private sector is the major provider of transport services in Freetown, accounting for nearly 90 percent of the market share. Transport is provided by the following main modes:

- · Private-sector large-capacity buses, about 12 in total with fleets of less than 20 vehicles
- Public-sector large-capacity buses, the SLRTC, which nominally operates 10 routes with an aged fleet and with deteriorating output (c. 20 buses daily)
- · Mini/midibuses (poda-podas), of which 5,500 are registered
- · Shared-taxis (sedans)
- · Motorcycle-taxis (okadas), of which there are c. 1,900 vehicles
- · 3-wheelers (kekes), of which there are c. 1,700 vehicles.

CASE STUDY

Small-engine motorcycle-taxis (okadas) and 3-wheelers (tricycles or auto-rickshaws, known as kekes) have increased annually by more than 20 percent over the past few years, due to their low upfront cost, ability to navigate congested and unpaved roads, low barriers to entry, and the high unemployment.

Fares for the collective modes—private-sector buses, poda-podas, and shared-taxis—are set by the Ministry of Transport. The resulting fare structure is a flat fare for each route, although fares for individual routes can vary somewhat with their length. SLRTC has explicit power to set its own fares.

An urban mobility project has recently commenced, which will establish BRT in Freetown, develop a public transport authority, and assist operators in fleet renewal (see below under IPT reforms).



Organization of the minibus-taxi (poda-poda) sector in Freetown

Poda-podas are the most prevalent form of bus-based transport in Freetown. Vehicles are privately owned and operated, with most owners having a single vehicle or a small fleet. Poda-podas are licensed as commercial vehicles and are authorized to operate only within one of two specific zones (the East Wards or the West Wards). The authorized operational area is painted on the vehicle side.

Interaction between the IPT operators and SLRSA mainly concerns vehicle- and driver-licensing rather than the planning of routes, networks, times of operation, fares, passenger interests, or other regulatory issues. Licenses do not have service quality or performance conditions, and there is little compliance with vehicle fitness certification.

The organizational structure is based on associations or unions representing the interests of IPT modes, with the numerically largest modes sometimes supporting more than one association with their own divergent interests. The associations manage the orderly functioning of terminals, provide training to new entrants, and advise on vehicle funding and purchasing; they may also advise in operational disputes with regulatory authorities or the police. In some instances, an umbrella association may cover more than one mode, but this format is inherently unstable as the interests of its members may not be consistent and sub-groups will break away. In other cases, the association may split as the interests of fleet owners and individual vehicle operators may diverge.

Each association organizes itself into branches that divide the network among themselves. These branches are typically based at a station (off-street parking) or a stage (on-street parking), and routes are operated from or between these points. Membership of a branch is dependent on access to a suitable vehicle, with most of these sourced through operating leases from non-participant owners. Each route is then operated on the principle of fill-and-go, but priority may sometimes be given to vehicles owned by association leaders. This process is managed by branch officials, and a departure levy is raised for this purpose. The fare charged for each route is generally controlled by government, in negotiation with the associations. Where fares have been kept too low, the associations have responded by shortening routes to the extent that revenues can more than cover operating costs. The resultant network pattern has become entrenched through the fixed location of the stations and stages, and fails to meet the needs of passengers making longer trips in an expanding city.



Organization of the motorcycle-taxi (okadas) and 3-wheeler (kekes) sector in Freetown

Certain areas of the city are accessible only by these 2- and 3-wheelers (okadas and kekes), which has allowed the sector to grow. They now represent a fundamental part of the transport network in Freetown. Since May 2016, commercial kekes have been banned from operating in the Freetown CBD. This ban was aimed at reducing congestion and improving road safety.

Currently the keke and okada industry is highly informal, with self-regulation through wardens hired by the associations. This informality means that regulating the quality and quantity of vehicles is difficult. Riders are required by law to have a yearly inspection by SLRSA, and licensed vehicles will receive a red license plate. However, it is possible for riders to use the red plates on unlicensed motorcycles.

Okadas and kekes operate as taxis with no fixed route, so supply is responsive to demand. Routing depends on their perception of least cost/time. Operators wait for business at parks across Freetown, located at key junctions and areas of interest. Fares are higher than other public transport modes, yet users pay for the speed and maneuverability of the vehicles.

Over 70% of okada riders surveyed in 2019 own their motorcycles. In contrast to neighboring countries such as Liberia, where most okadas are bought new, in Freetown, most are acquired second-hand. These are imported from developed countries, where their lifecycle has expired by the standards of their original countries. That said, there are some exceptions in that some 2- and 3-wheelers were acquired new by their private-sector owners.



IPT reform efforts in Freetown

To date, reforms in the IPT sector have not been implemented, other than restrictive measures such as the ban on kekes entering the CBD or compliance measures such as requiring annual vehicle inspections. This inaction has in large part been attributed to institutional weaknesses.

The World Bank–supported Sierra Leone Integrated and Resilient Urban Mobility Project (IRUMP) has recently been launched, and aims to transform the urban transport situation in Freetown. In addition to major investments in the form of BRT, the project aims to:

- · Develop the Sierra Leone Public Transport Authority (SLPTA)
- · Move operators to a contractual basis for services
- · Support financing for fleet renewal
- · Improve road conditions, traffic management, bus priority, and passenger waiting facilities
- · ITS and ticketing

A key element of the reform program is to separate management and operational functions by transforming SLRTC into the Sierra Leone Public Transport Authority (SLPTA). SLPTA would act on behalf of the Ministry of Transport and Aviation as the regulator and procurer of public transport services. A project steering committee has been established to include all Ministry and agency stakeholders, the transport unions/associations, and passenger representative associations. It remains to be seen how well the proposed reforms and investments are received by the diverse IPT sector stakeholders; and whether the focus will be primarily on migrating IPT actors to larger-vehicle operation or also developing the current IPT modes.





Uganda





Context

Kampala is the largest city in Uganda, the main administrative and commercial city in the country, and the seat of government. Kampala is the main city in Uganda, with a population of 6.1 million in 2024. After years of fragmentation and conflicts in Kampala City between the central power and the local power, the Kampala Capital City Authority Act was enacted in 2010. One of the aims of the Kampala Capital City Authority (KCCA) is to better address urban sprawl outside the administrative limits of the city and establish appropriate governance structures over an increased perimeter. KCCA is under the authority of the national Minister for Kampala Capital City and Metropolitan Affairs.

Upon its creation in 2010, KCCA incorporated local communities close to the central city, and this territory was divided into five urban divisions (Makindye, Rubaga, Nakawa, Central, and Kawempe), 99 wards, and 863 villages. Because the metropolitan area has grown to cover several jurisdictions, it is now envisaged as a new metropolitan perimeter, the Greater Kampala Metropolitan Area (GKMA), which will be extended from the core of KCCA to Entebbe municipality as well as some parts of Wakio and Mukono districts (including Kira and Nansana). This will allow better institutional management of planning and transportation.



Urban passenger transport in Kampala

Urban public transport is provided almost entirely by IPT, as formal public transport is minimal throughout greater Kampala. IPT consists of about 20,000 minibus-taxis (taxis) and an estimated 200,000 motorcycle-taxis (boda-bodas).

The legacy bus company (UTC) deteriorated during the 1990s. Over the years, various initiatives either failed due to fierce competition by the minibus-taxi sector or never got off the ground. Another initiative (Pioneer Easy Bus) has operated 100 large buses on four routes since 2020. A rail system to link Kampala CBD to neighboring areas is in the project development phase.



Organization of the minibus-taxis sector in Kampala

Minibus-taxi services started developing in Kampala following the nationalization and gradual decline of UTC. They are now the main form of public transport, and are acknowledged as such in recent planning documents. The Transport Regulation Department of the Ministry of Works and Transport (MoWT) has been the licensing authority for minibus-taxis in Kampala since the Transport Licensing Board was abolished by the Traffic and Road Safety (Amended) Act, 2020.

Minibus-taxis are licensed under the PSV regime. Minibus-taxi owners are supposed to renew PSV licenses every year. So far, however, there has been no policy to restrict the number of PSV licenses issued by MoWT (just as there were no restrictions under the Transport Licensing Board's oversight). In the absence of a formal route allocation process by the licensing authorities, the minibus-taxi industry has for decades themselves determined which routes should be provided.

There were 21,000 registered minibus-taxis (mostly 14-seaters) in Kampala in 2018, according to KCCA, but this number did not account for unregistered taxis and therefore most probably was an under-estimate. The typical life-expectancy of these vehicles is five to eight years. Most owners have only one or a few vehicles. Investment by large-fleet owners is declining, as they fail to make good returns on their capital, while at the same time more small operators and drivers are entering the market.

The stage is the most important structure in the organization of the sector. Each stage serves a specific route (corridor) to/from one of the major city center taxi parks. Minibus-taxi stages are grouped in taxi parks. There are five main taxi parks in Kampala's CBD, most of which are gazetted or formalized by KCCA, and these serve as transportation hubs. The five main taxi parks in the CBD are host to 101 stages and 8,100 minibus-taxis. There are also many unregistered, ungazetted stages in the CBD and many more stages along routes and in suburban areas. Minibus-taxis operate along the main radial roads without fixed stops or timetables, covering the entire metropolitan area, with a strong presence in the Kampala CBD. The current network still bears the trace of the legacy of the strong UTODA (Uganda Taxi Operators and Drivers Association) regime, whereby all minibus-taxis were required to use the centrally located bus taxi parks controlled by UTODA. They remain concentrated on radial routes and there is still a perceived lack of circumferential routes.

Every stage has a leadership (typically elected among drivers, and highly hierarchical), security staff (also known as defense), welfare staff, and a liaison officer (also known as a mobilizer, in charge of contact and meetings with stage workers). Stage leadership is responsible for: (1) implementing the loading chart, i.e., a numbered list of drivers that determine the order in which vehicles queue in a stage at a taxi park to fill their vehicles with passengers (usually determined the previous evening in a lottery); (2) collecting mandatory welfare contributions and managing the stage's Savings and Credit Cooperative (SACCO) welfare fund; (3) setting the fares; (4) enrolling vehicles, maintaining discipline, resolving disputes between stage members; and (5) liaising with the taxi park administration, the taxi association executive, and relevant authorities.

From 1986 to 2015, taxi owners, drivers, and conductors were organized under UTODA, which was initially formed to bring order to the growing minibus-taxi market through self-regulation and control of the two historical taxi parks (terminals) in Kampala—under a licensing contract won from the Kampala City Council. UTODA's management of taxi parks and fee and tax collection led to rising complaints about conflicts of interest and abuse of power in the 2000s. After losing their license to operate the taxi parks, UTODA was terminated in 2015, to give KCCA a full mandate to run the passenger transport business in the city.

As of 2020, there were two main taxi associations in the city: the Kampala Operational Taxi Stages Association (KOTSA), created in 2011 in order to better represent the interests of drivers and conductors; and the Uganda Transport Development Agency (UTRADA), built on the ashes of UTODA in 2015. KOTSA affiliated with the Amalgamated Transport and General Workers Union (ATGWU) in 2015.

Additional taxi associations, with overlapping membership, can be found in all major long-distance destinations. In 2016, KOTSA formed a SACCO embracing all the taxi-stage cooperative societies (the Undugu Na Bidii Taxi Drivers and Conductors Transport Cooperative Society Ltd) and is fully registered with the Registrar of Cooperative Societies.



Organization of the motorcycle-taxi (boda-boda) sector in Kampala

Boda-bodas grew rapidly in the late 1990s to early 2000s due to urban sprawl, poor road conditions, and the inability of bus and minibus services to meet demand and operate in low-density residential areas over unpaved roads. There are estimated to be about 200,000 boda-bodas in the city.

Boda-bodas primarily provide three types of short-distance services: (1) in urban areas (competing with special-hire and minibus-taxis); (2) on routes from/to urban areas that are unattractive to taxis (due to low demand density or rough road conditions); and (3) as feeders to main roads (connecting to minibus-taxi and large-bus services).

The majority of boda-boda operators do not own their motorcycles. In contrast to the minibus-taxi sector, there are large-scale fleet operators with up to 2,000 motorcycles, although most owners have just two or three, riding one themselves and renting out the other.

As in the taxi industry, the stage is the cornerstone of the organization of the boda-boda industry. Boda-boda stages are typically located in towns, in trading centers, and on the feeder routes. Stages are highly concentrated in and near the city center, but there are hundreds of boda-boda stages throughout GKMA, from those with only a few riders registered to those in the CBD with 100–300 registered. Some stages are managed by a single person, while others have large committees. Some riders choose to register with two or three different stages, but joining a stage is a selective process (involving a recommendation letter from the local administration and referees)—and can be costly.

Boda-boda associations were formed to provide some operational discipline, but attempts to form a national association were defeated by the chronic instability of most associations. KAMBE is the only association that has built a level of structural power, with about 48,000 members in 2019, and a SACCO that helps members purchase motorcycles.

Ride-hailing apps have entered the boda-boda market, providing booking and vehicle leasing services.



IPT reform efforts in Kampala

Efforts to implement IPT reforms have had mixed results. The legal groundwork has been laid for reforms in the minibus-taxi and the boda-boda sector, but these have had only limited impact.

In the minibus-taxi sector, a new licensing process was introduced when minibus-taxis resumed operations after the COVID-19 lockdowns This was in part to put the industry on a better footing after the crisis and to improve regulation and oversight by the authorities.

The main aspects of reform include: (1) establishing new park user fees; (2) linking registration with KCCA and licensing by MoWT to parks of operation; and (3) allocating route charts upon payment of park user fees (mandatory from January 1, 2021). Route allocation, which had been the job of stage leadership until 2020, is now determined by KCCA.

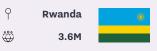
While these are modest reforms, they have begun to establish the framework in which minibus-taxis can be included as a recognized mode within an integrated public transport network, and in which more substantial reforms can be attempted. It remains to be seen whether the sector will continue to comply with these new arrangements.

In the boda-boda sector, a requirement for PSV licenses has been in place since 2016 but has not been effectively implemented. Mandatory requirements for vehicle inspection and third-party insurance have not been complied with. A list of 579 gazetted boda-boda stages was made by KCCA in late July 2020, on the eve of boda-bodas resuming operations post-COVID, together with the perimeter of a boda-free zone. KCCA's guidelines stated that registration at gazetted stages would be compulsory to resume operations, but they encountered resistance from the industry, on the grounds of lack of consultation and incompatibility with the prior organization.



Case study 6 KIGALI







Context

Kigali City is the capital and largest city of the Republic of Rwanda and is made up of three districts: Nyarugenge; Gasabo; and Kicukiro. It is one of the most densely populated cities in East Africa, with approximately 1 060 inhabitants per km2. The population has increased rapidly, from 1 million in 2008 to 1,26 million in 2012 and to about 3.6 million people in 2024.¹⁹

The topography results in high net population densities. Kigali is situated in steep, mountainous terrain which extends north-westwards across Rwanda. Constrained by geography, the built-up area and supporting transport infrastructure have historically been concentrated along the valleys between the mountains. As the financial and commercial hub and capital, most national job opportunities are located within this built-up area. The service sector increasingly employs more workers, with banks and multinational organizations in Kigali. Even so, the informal sector continues to contribute a large share of employment—representing 60% of employment opportunities in 2011 (Niyonsenga 2012).

The different transport functions are allocated to four key public sector departments:

- 1. The City of Kigali is a semi-autonomous local government institution responsible for planning, developing, and providing infrastructure services, maintaining all infrastructure, and managing mobility services in the city jurisdiction, as guided by the city master plan.
- 2. The Rwanda Utility and Regulatory Authority (RURA) is responsible for transport regulation and is responsible for regulating and contracting public transportation.
- 3. The Rwanda Transport Development Agency (RTDA) is responsible for transport network strategy, planning, development, and maintenance of roads outside of the City of Kigali jurisdiction at the national level.
- 4. The Ministry of Infrastructure (MINIFRA) is responsible for developing policy, planning and strategy for the transport sector infrastructure and services. MINIFRA coordinates and oversees all implementation agencies and regulatory authorities in their activities.



Urban passenger transport in Kigali

Public transport services in Kigali are provided by high-occupancy buses, motorcycle-taxis (moto-taxis), and bicycle-taxis. Buses and motorcycle-taxis are the main motorized forms of transport. Minibuses are absent in Kigali, as they were removed as part of the reforms in 2013 (described below) although they continue to operate in the hinterland. There are no urban or commuter rail services.

Since 2013, bus services in Kigali have been provided by three operating companies, with 450 buses on about 60 routes. Two of these companies (KBS and Royal Express) are private bus companies that predate the reforms, while the third (RFTC) was formed from the minibus-taxi sector as part of the reform.

The bus system in Kigali is entirely cashless. An automated fare collection system (Tap & Go), provided by a private-sector technology company, was implemented as part of the reforms. It accepts payments from cards and mobile apps. Buses must be equipped with vehicle tracking systems.

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CASE STUDY



The motorcycle-taxi sector in Kigali

Motorcycle-taxis (motos or moto-taxis) have grown to almost 58% of the total modal split for motorized modes in the city (from a city-wide study conducted in 2019).

Only registered motorcycle-taxis can legally operate in the city. All moto operators must have a helmet for both the driver and rider, and an identifiable reflective vest with an individual identification ID and operating zone. Operating illegally comes with large fines and can lead to arrest. Despite this, there is a significant number of motorcycle-taxis drivers who operate without a license.

RURA's Strategic Transport Masterplan proposes a cashless public transport system although at present most fare payment transactions for motorcycle-taxis are cash-based. RURA aims to increase the safety and security of motorcycle-taxi operations, and therefore increasingly requires the use of intelligent meters for the sector.

The governance of the motorcycle-taxis industry is through two operating organizations: the Rwanda Federation of Taxi-Moto Drivers (FERWACOTAMO); and the Syndicate of Taxi-Motos of Rwanda (SYSTRAMORWA). FERWACOTAMO was registered as a cooperative federation under the 2007 Law of Cooperatives. SYSTRAMORWA is a trade union under regulations promulgated by the Ministry of Labor. FERWACOTAMO has 240 moto-taxi cooperatives registered under it with 78,000 registered known members. The membership of SYSTRAMORWA could not be obtained. These organizations developed from a RURA framework that encouraged motorcycle-taxis operators to organize into cooperatives in order to be registered to operate.



The bicycle-taxi sector in Kigali

Kigali has many bicycle-taxis that transport commuters to their final destination—usually their homes. According to the City of Kigali transport master plan 2020, about 53% of trips in the city are non-motorized (walking or cycling). Although not required, many bicycle-taxi operators belong to cooperatives, under the national Rwanda Cooperative Agency (RCA). In 2021, an estimated 145 registered cooperatives had 56,514 commercial bicyclist members (transporting people and goods).²⁰ It is estimated that there are over 5,000 non-regulated bicycle operators in Kigali itself (SSATP 2018). The fare is cash-based or paid for with mobile money—which represents the digitalization of cash transactions.

There is no collective or association of bicycle-taxis in the city, and the trade is not formally organized. These bicycle-taxis can be found at most bus terminals and public transport interchanges in small numbers—completing the last mile journeys into residential areas. They are also very common in urban areas connecting passengers to trunk routes with bus lines, operating in that sense as a feeder line. This is the cheapest form of transport in Kigali.



IPT reform efforts in Kigali

Comprehensive reform of the urban passenger transport sector was implemented in Kigali primarily in 2011–13. In essence, the minibuses were removed from the system, with operators either participating in the new large-bus companies or exiting the Kigali market. The resulting system consists of buses and motos.

Reform focused on three main elements: (1) professionalizing operators; (2) enhancing regulation of the incumbent IPT sector; and (3) changing the network from an unplanned, unorganized service pattern. A new regulatory framework was chosen as the way to bring about reform, with a myriad specific regulations promulgated to accomplish it.

The reform was implemented in three steps: (1) publication of the first passenger transport regulation in August 2011; (2) approval of the Public Transport Policy and Strategy for Rwanda in October 2012; and (3) signing of the bus service contracts in August 2013. During the same period, the Kigali Transport Master Plan was updated.

Several successful outcomes were achieved with this first-generation public transport system reform, including:

- · Contracting and regulation of public transport operators
- Public transport infrastructure improvements (main bus terminals, non-motorized facilities, and roads improvement)
- · Increase in public transport supply
- · Cashless fare collection system on all bus services and routes
- · Onboard public transport Wi-Fi
- · Public transport vehicles speed management
- · Regulation of motorcycle-taxis
- · Regulation of taxi services

RURA awarded net-cost bus operating contracts to private companies and to larger cooperatives through a formal tender process. The contracts were defined for a specific period and can either be renewed later or a new tender process can be followed.

The first-generation bus network—commissioned in 2013—consisted of 75 routes and a mixed fleet of approximately 450 buses. Three companies were awarded operating contracts to provide transportation services in the City of Kigali after a tendering and procurement process.

- KBS (Kigali Bus Service) operates in Zone 1 from the city center to the east. KBS operates a mixed fleet consisting of midibuses (20-35 passengers) and buses (for 60 passengers) on 28 routes.
- Royal Express operates Zone 2. The fleet mix consists of 35- and 69-seater vehicles and operates on 14
 routes southeast of the city.
- RFTC (Rwanda Federation of Transport Cooperatives) operates in Zone 3 and Zone 4. RFTC operates
 a mixed fleet consisting of minibuses, which operate intercity services, and midibuses and buses for
 intracity services.

Operators who were left out of these zones were reallocated routes outside the City of Kigali. Similarly, operators who did not meet vehicle standards, most notably concerning size/capacity, were also reassigned to peri-urban operations. Operators initially resisted the reforms, however, this eased over time once increased profits were evident—from more efficient operations and the elimination of service redundancy. The working conditions of drivers also improved significantly. Before the reforms, drivers did not receive a fixed salary but operated under the target system, giving owners a set return every day. Under the new system, drivers are offered salaried contracts and universal medical insurance. In addition to having stable jobs, drivers and conductors now have access to bank loans from the RFTC microfinance and additional job opportunities in stations, bus depots, and garages owned by RFTC.





Zambia





Context

Lusaka is one of the fastest-growing cities in southern Africa, increasing from 1.7 million people in 2010 to 3.2 million in 2024. The Greater Lusaka area covers 850 km2, which includes the city of Lusaka with an area of 423 km2, and its adjoining districts Chongwe, Chibombo, and Kafue. Rapid growth has also expanded the unplanned urban settlements. Due to ineffective urban planning and weak legal and policy frameworks, investments in urban infrastructure have not matched the demand, resulting in inadequate access to housing and inefficient transport services, among others.

A multiplicity of agencies, a lack of clarity in functional responsibilities, and overlapping mandates have made it difficult for effective planning and implementation. In 2002, three agencies were created to manage the road sector in Zambia:

- 1. The Road Transport and Safety Agency (RTSA), under the Ministry of Transport and Communications (MoTC), is responsible for transport regulation, registration, and road safety, including vehicle importation regulations, fees, tariffs, and inception requirements. Bus route allocation and licenses fall under the jurisdiction of the Road Transport and Safety Agency (RTSA). The RTSA issues annual vehicle fitness certificates.
- 2. The Road Development Agency (RDA), under the Ministry of Housing and Infrastructural Development (MHID), is responsible for the construction of roads, maintenance of road infrastructure, and road furniture
- 3. The National Road Fund Agency (NRFA), under the Ministry of Finance, is responsible for administering and managing all financial resources in the Zambian road sector.

Lusaka City Council (LCC) does not have a dedicated transport department. The city is not guided by a comprehensive urban transport policy. LCC is responsible for managing bus stations, and owns all but one of the bus stations (the privately owned Millennium Bus Station is operated by Flash Buses, a private operator). In some of the stations there is a police post to maintain law and order, but LCC is responsible for station operations.

Issues relating to transport are handled by the Engineering Services Department (ESD) and the Department of Housing and Social Services (DHSS). ESD manages the physical infrastructure involved in public transport (i.e., all public roads under the jurisdiction of the local authority, traffic signals and infrastructure, and bus bays and bus stations). DHSS is tasked with managing the operations of all gazetted bus stations in line with the Markets and Bus Stations Act (2007).



Urban passenger transport in Lusaka

Before 1980, all cities in Zambia had a monopoly supplier of large-bus services. After 1980, traditional bus companies were nationalized in the process of decolonization. As the need for subsidies grew at these state-owned companies, they went into decline—and by the late 1980s most had ceased operations. From the early 1990s onward, the private sector filled the gaps and eventually took over. For the most part, this was achieved with second-hand imported minibuses and small buses.

Relaxation of import policies in Zambia and liberalization of public transport licensing brought about a rapid increase in the number of bus operators as well as buses of all kinds. This diversity in vehicle and operator type followed through to associations and their members, so there are now no clear divisions between formal and informal transport.

With that caveat, urban public transport in Lusaka consists of buses, minibuses, and sedan shared-taxis. There is no commuter rail service, and currently no BRT or other form of mass bus transit.

The RTSA regulates public transport fares. Insurance and road tax are compulsory, and insurance status (updated quarterly, every six months, or annually) is displayed as a window sticker.



Organization of the minibus-taxi sector in Lusaka

The shift to minibuses and sedan shared-taxis in Lusaka, like in other SSA cities, did not result from a conscious decision to deregulate public transport. Rather, it was a local response to the limited supply of formal bus services, rising demand, and commercial opportunity.

A general license to operate public transport services is obtained from the RTSA. There is minimal regulation of bus routes, and the operators have the freedom to operate anywhere once they have obtained a vehicle license. Operating permits are routinely issued on request, without consideration of the demand-supply balance in the locality or of their impact on other operators.

Ownership is highly dispersed, with most individual entrepreneurs owning no more than one or two vehicles. The fragmented ownership is offset by the existence of unions and associations that organize the sector and provide a degree of self-regulation. In practice, operators' associations are self-regulated. The system has evolved as an industry response to the vacuum left by the failure of government to regulate the sector. Self-regulation has created an orderly market that avoids the worst consequences of unbridled competition on the routes. Route terminals are well managed, within the constraints of their infrastructure, and overloading and fare gouging are largely avoided. In Zambia, IPT is structured around three associations:

- 1. The Public Passenger Transport Multipurpose Cooperative (PPTMPC) is a consortium of drivers who have invested in the transport sector and are now the driver-owners of the buses. They operate nationally and are registered under the laws of Zambia (since 1996). They represent licensed public transport drivers, including both larger intercity buses and smaller local buses, as well as taxi drivers. They fall within formal labor laws and have access to social security and a minimum wage. They also hold a Memorandum of Understanding with the National Pension Scheme Authority (NAPSA), registering their members to this platform and compelling those that employ them to contribute to NAPSA. They currently hold no assets, and all vehicles are owned by the individual drivers or operators. Vehicle owners cannot become members, as they are generally not involved in the transport sector activities. Owners collaborate with the Bus and Taxi Owners Association of Zambia (BOTOA) on areas of mutual interest and to avoid any conflict, but they have different members and a different mandate.
- 2. The Public and Private Drivers Association of Zambia (PPDA) was established in 2010 as a driver association whose main objective is to provide a link between private-sector drivers (including PSV drivers) and the government. The association provides financial and legal support, including representation in road crashes and incidents and in disputes with the owners. They choose not to operate their buses in Lusaka due to the high chance of damage—Lusaka is where "older buses are sent to retire" (World Bank 2022, 49).

3. The Bus and Taxi Owners Association of Zambia (BATOA) was established in 2013 with a national representation (broken down into provinces). It is the only association representing owners and is registered under the Societies Act (1957). To obtain a public operator license, individuals must first become a member and seek clearance from this association. They currently have over 5,000 members (1,245 are based in Lusaka), representing taxis and buses. Annual subscription depends on the size of the vehicle.



IPT reform efforts in Lusaka

No reform has been implemented to date. There is no indication of commitment to upcoming reforms, other than a general aspiration to migrate from minibuses to larger vehicles. The Minister of Transport announced in 2019 the Zambian government's intention to ban minibuses.

A Public Transport Management Unit (PTMU) has been formed under the Department of Housing and Social Services in line with the objectives of the National Transport Policy (2019). The PTMU's role is analyze the public transport sector in Lusaka and propose reforms to develop a safe and efficient public transport system. The unit is still in the early stages of establishment and needs to be fully staffed and resourced.

Case study 8 MAPUTO







Context

Maputo, the capital of Mozambique, is the country's main financial, business, and commercial center. In recent years, residential and industrial development has spread to the surrounding cities and districts of Matola, Boane and Marracuene, creating the Maputo Metropolitan Area (AMM, in Portuguese), also called Greater Maputo. The Maputo Metropolitan Area, also called Greater Maputo, has a population of about 2.9 million in 2024.²²

Local government in AMM consists of the contiguous municipalities and districts. Among other things, municipalities have the regulatory function for public transport services within their area. These entities are independent of each other, with limited mechanisms or obligations to work together at planning, implementation, and development levels. There is no actual Greater Maputo entity, neither as a mandated super-authority nor as a functional mechanism developed by the municipalities and districts. Although the metropolitan area has grown organically across boundaries, it has not become integrated at territorial, governance, or functional levels.

The Maputo Metropolitan Transport Agency (Agência Metropolitana de Transporte de Maputo, or AMT) was established in early 2018, to coordinate passenger transport across multiple local government areas. Its core mission is to coordinate and implement the Maputo Metropolitan Area Transport and Mobility Master Plan. AMT is a regional institution, with jurisdiction over the municipalities and districts in the AMM in Maputo province. How this will work in practice remains to be resolved, as the municipalities have their own mandated authority over public transport services and over general traffic management and enforcement.



Urban passenger transport in Maputo

Urban passenger transport is road-based, with limited commuter rail services. Road transport consists of regulated route-based services operated by large buses and minibuses (chapas), illegal services operated with open trucks (myloves), unauthorized motorcycle-taxis, and regulated for-hire taxis, 3-wheelers, and 2-wheelers. The following are the main modes of transport:

- Private-sector bus services are provided by 10 cooperatives with 350 buses on six corridors. The
 cooperatives were formed from the IPT sector and are discussed under reforms, below.
- Three municipal bus companies provide bus services, fielding about 60 buses daily in 2020 following a period of decline. Recent investments have boosted their fleets.
- Minibus-taxis (chapas) operate on fixed routes, with about 2,000 vehicles.
- About 1,000 sedan shared-taxis operate from 124 specified locations.
- · About 200 3-wheelers (tuk-tuks) operate from 15 specified locations.
- · Public- and private-sector rail companies operate a limited commuter rail service.
- An unknown number of open trucks (myloves) and motorcycle-taxis operate illegally.
- A new fare payment system for buses (FAMBA) was launched in 2022.

The Maputo Metropolitan Area Urban Mobility Project commenced in 2022. It will implement BRT on one corridor and support substantial development of the regulatory and organizational framework.



Organization of the chapa sector in Maputo

Chapas are mostly minibuses (nominally 15-seater), although some are midibuses (nominally 26-seater). Vehicles are invariably second-hand imports from Japan, typically about 10 years old (when they are no longer usable in Japan). An owner would typically buy a vehicle with their own funds, get four to five years from such a vehicle, and then replace it. Most owners have just a single vehicle.

Chapas operate on a fill-and-go basis, without specified schedules. They do operate on defined routes, however, from terminal to terminal via specified points, under licenses issued by the relevant municipality in which they operate—in this sense, they are formal, regulated public transport.

In Maputo, associations are route-level entities. A route is operated exclusively by an association established for that purpose. The two directions are considered to be the one route (e.g. Zimpeto-Museu and Museu-Zimpeto are considered to be the same route, operated by the one association). The typical association would operate one route, although there are associations that operate multiple routes.

Associação dos Transportadores Rodoviários de Maputo (ATROMAP) is the oldest and largest association, with 10 routes in Maputo.

Associations are purely means of associating—they are not legally structured to conduct business. There is no standard form of association structure as in for example Ghana, Kenya, or South Africa. Apart from their participation in the Federação Moçambicana dos Transportadores Rodoviários (FEMATRO), associations are not part of national, regional, or city structures. They retain their identity and independence and organize themselves as they see fit.

FEMATRO was established in 2003 when the government requested the formation of a federation of the many associations to dialogue through a single channel. FEMATRO is primarily a representative organization for associations. It covers associations of passenger transport (cargo/freight and taxis. Associations affiliate to FEMATRO by choice. However, FEMATRO is the only such federation and thus the one with which government has chosen to interact. FEMATRO states that it does not get involved with or interfere in the business of the associations, but it may mediate to help solve disputes between associations. FEMATRO has kept to its representative and advocacy role, and as the consulted stakeholder on matters such as the routes, contracts, and concessions for the cooperatives.



Other forms of IPT in Maputo

Myloves are open-backed vans and small trucks in which passengers are carried in the rear, sitting on the side panels or standing on the open interior. The number of myloves in AMM is unknown, but it is substantial. The municipalities and districts will not provide licenses to myloves, which they deem to be illegal and undesirable. Despite being patently unsafe, uncomfortable, and illegal, myloves have been able to establish themselves and endure because of the chronic lack of capacity on the legal forms of public transport. They operate on all the main arterials into downtown Maputo and also in the new residential areas—especially in Matola—where the roads are unpaved and in such poor condition that minibuses and buses cannot enter.

As elsewhere in Africa, motorcycle-taxis have emerged in AMM. Municipalities and districts do not issue licenses for motorcycle-taxis and consider them illegal. As with myloves, motorcycle-taxis have been able to enter the market due to the lack of organized public transport, especially in the new residential areas where the unpaved roads inhibit minibus and bus services. The number of motorcycle-taxis in AMM is unknown. They do not appear to have established a significant share in Maputo itself, as there are not many motorcycles visible on the streets.



IPT reform efforts in Maputo

IPT reform has centered on forming cooperatives from among the chapa associations, which then have access to large-buses on below-cost operating leases. There have been no reforms aimed at developing the chapa sector itself, or assisting the sector in areas such as fleet renewal.

In 2016, fuel subsidies were withdrawn during a financial crisis. The president announced that 1,000 buses would be purchased and allocated throughout the country. This capital subsidy was intended to replace the fuel subsidy. To date, 400 buses have been purchased, with funding arranged through the National Transport Fund, most of them were deployed in Maputo. Cooperatives were established to operate routes in Maputo using the buses provided by government. They are legal entities, of a form that can engage in business (unlike chapa associations). The cooperatives were formed by those in the associations that operated in the corridors assigned to the cooperatives.

There are currently 10 cooperatives operating buses under five-year contracts with AMT. The contract is centered around: (1) the provision of the bus, the associated responsibilities of the cooperative (monthly payment for 60 months, care of the vehicle), and transfer of ownership of the vehicles if the 60 months are paid; (2) operational obligations, such as operating only on the assigned route as per agreed schedule/frequency, using suitably qualified drivers, operating in compliance with traffic law, accepting the installation of AFCS, ITS and other equipment, and protecting these items; (3) provision for assorted penalties for various violations, including permanent withdrawal of the vehicle; (4) the responsibilities of both parties concerning vehicle maintenance; and (5) the right of AMT to reassign the cooperative to other routes or corridors.

The first of these contracts commenced in 2016 and was to conclude in 2021. Other contracts were initiated in 2017–2018 and would naturally terminate in 2022–2023 respectively. To date, however, none of the contracts have terminated or been retendered. In the first phase, government allocated vehicles to named individuals. This did not work out very well. In the second phase, government allocated the buses to the cooperative and the cooperative organized the allocation and the crews. Buses were sourced from four different manufacturers, and each was required to put in place a maintenance scheme. In general, the maintenance arrangements for the buses worked out reasonably well (except for one manufacturer who did not establish a good service partner), as most of the buses were still on the road after the first five years. However, the monthly payments have not been honored as well as they should have been, and were badly hit during the COVID-19 pandemic.

Each cooperative establishes a management and supervisory structure. The main control is at the terminals, but there is also some on-route supervision to ensure drivers do not engage in trip-cutting, off-route running, etc. In the cooperative model, the driver has nothing to do with the revenue. The fare collectors work for the cooperative. All revenue is returned to the cooperative, which then pays the salaries, the cost of fuel, and all the other expenditures. At the end of the month, the cooperative pays the vehicle financing fee plus any other obligations. In practice, though, at some of the cooperatives, some members continue to control their allocated bus and the revenue collection, and pass on only the due fee.

It was expected that the chapa associations whose members joined cooperatives would discontinue their chapa operations, or at least vacate the corridors. In practice, the chapas have continued in parallel, and some members have both buses and minibuses. This seems to be a case of "keeping a foot in both camps," at least until they have faith in the long-term durability and viability of cooperatives.

Appendix 2:

${\bf Licensing\, Arrangements\, for\, the\, Main\, IPT\, Modes\, in\, the\, Case\, Cities}$

TABLE 13 Licensing arrangements for the main IPT modes in the case cities

| | Minibus-bas | ed IPT | Shared-taxi (sedan) or motorcycle-based | | | | | |
|--------------|---|--|---|--|-------------------------|--|---|---|
| | Formal licensing? | Type of license | Service conditions | Compliance levels | Туре | Formal licensing? | Type of license | Compliance levels |
| Accra | Yes | Supposed to be route-level permit issued to route organizer, but in practice remains at the level of individual | Provided for in the regulations, but not yet implemented in practice | Very high when licensing first implemented c. 2010-11; weak enforcement and undermining by authorities led | Motorcycle- taxis | Not recognized or permitted, but operates anyway | Not applicable | Inherently non- compliant |
| | | vehicle license on designated route | | to about half of operators being non-compliant | Shared-taxis (sedan) | Formal licensing, as tro-tros | Route licenses, as tro-tros | Very compliant |
| Antananarivo | Yes | Route license issued to cooperatives | No service quality or performance conditions | Illegal market in licenses; known to be duplication of old licenses for illegal operators | Shared-taxis (sedan) | Yes | Individual vehicle licenses for the area | Many clandestine taxis |
| Bamako | Nominal: in practice they self-regulate | General license to operate | No; operators self-organize as they see fit | Weak/minimal enforcement of regulations | Shared-taxis (sedan) | Nominal | General license to operate | Weak/minimal enforcement of regulations |
| Cape Town | Yes | Route-based license issued to individual operator; valid for seven years | Generally not Service contracts on N2/Mitchells Plain pilot project Performance bonus on Blue Dot scheme for c.900 minibus- taxis | About one third of minibus-taxis are unlicensed. | n/a | n/a | n/a | n/a |
| Dakar | Yes | Basic license is all urban zone, but the reformed operators have contracts on specific routes | Concession contracts for the EIGs: vehicle specifications, stops, fares, service frequency | Significant level of compliance by EIG members on the overall scheme, but non-compliance common on fares | Shared-taxis (sedan) | No | n/a; only basic driver and vehicle license | Inherently non-compliant (clandos) |
| Freetown | Yes | Area license for one of two zones | No service quality or performance conditions | Much non- compliance with vehicle fitness certification | Motorcycle- taxis | Yes | Area permit | Mixed results |
| | | | | | 3-wheelers | Yes | Area permit banned from CBD since 2016 | Mixed results |
| | | | | | Shared-taxis (sedan) | Yes | Area permit | Mixed results |
| Gaborone | Yes | General operating permit issued to individual; in practice, self-regulating operators ply routes as they see fit, in line with expected business | No | | Shared-taxis (sedan) | Yes | General operating permit: in practice, self-regulating operators ply routes as they see fit, in line with expected business | |

| | Minibus-base | ed IPT | | | Shared-taxi (sedan) or motorcycle-based | | | |
|------------|--|---|--|---|---|--|--|--|
| | Formal licensing? | Type of license | Service conditions | Compliance levels | Туре | Formal licensing? | Type of license | Compliance levels |
| Kampala | Yes | Route-based PSV license issued to individual operator | No service quality or performance conditions | | Motorcycle- taxis | Yes | PSV License | Low. Very many have not acquired PSV licenses; Boda-free zone ir central Kampala resisted. Gazetting of stages (stands) not effectively implemented |
| Kigali | n/a | n/a | n/a | n/a | Motorcycle- taxis | Yes | Area permit issued to fleet or cooperative with minimum 100 motorcycles | Mostly compliant with registration Internal controls by cooperatives on valid permits, area identification marks, wearing bibs/helmets Strict police enforcement on helmet wearing, max. 1 passenger |
| Lusaka | Basic registration and technical regulation only (annual vehicle inspection) | General permit | No | Minimal enforcement by authorities | Shared-taxis (sedan) | Basic registration and technical regulation only (annual vehicle inspection) | General permit | Moderate to weak |
| Maputo | Yes | Route-based license issued to individual operator, renewable annually | No service quality or performance conditions | Mostly compliant for registration and on-route operation; less so for vehicle quality | Open-backed trucks (myloves) | No | Not applicable | These services are illegal, but their existence is tolerated due to chronic shortage of other PT |
| Maseru | Yes | Route-based license issued to individual; renewable annually; limited number of licenses per route | | Significant level of operation without a license | Shared-taxis (sedan) | Yes | Open area license issued to individual; renewable annually | Reasonable compliance with requirement for operating license |
| Nairobi | Yes | Route license issued to SACCOs. The sector is self-regulating in organizing routes and operators. However, all operators are required to belong to a SACCO, and each SACCOs must be registered with lists of all members and their vehicles | | | Motorcycle- taxis | No | | |
| Nouakchott | Yes | | | Good compliance with licensing requirements Overcrowding is standard | Shared-taxis (sedan) | | | Good compliance with licensing Many private vehicles are used as informal taxis Overcrowding of taxis is standard |

Appendix 3: Main Actors Relevant to the Primary IPT Modes in the Case Cities

TABLE 14 Main government, internal and external actors relevant to the primary IPT modes in the case cities

| | Minibus-base | ed IPT | | Shared-taxi (sedan) or motorcycle-based | | | | |
|--------------|---|---|---|--|---|---|--|---|
| | Licensing authority or regulator | Other relevant state actors | Lead internal actors IPT | Relevant external actors | Licensing authority or regulator | Other relevant state actors | Lead internal actors IPT | Relevant external actors |
| Accra | Municipality (Assembly) in which the service is located; of which there are many | Ministry of Transport Ministry of Roads and Highways Ministry of Local Government | 3 main national unions: GPRTU (the largest), PROTOA, GCTA/ cooperative Branches and Locals affiliated | Microfinance and Small Loans Centre (MASLOC), for concessional loans arranged by Ministry of Transport | Not at present Assemblies would be the regulator, if permitted | None identified MOT/DVLA for driver and vehicle regulation | Stands, based in areas of demand Stand leaders rather than associations | Motorcycle-taxis |
| | without a coordinating body | National Police Greater Accra Passenger Transport Executive | to the Unions Ghana Road Transport Coordination Council (GRTCC) | | Assemblies | Assemblies for taxi stands MOT/DVLA | Unions, along the same lines as tro-tros | Shared-taxis (sedan) Some subscribe to regular taxi app |
| Antananarivo | Urban: City of Antananarivo Suburban: Land Transport Agency (ATT) at Ministry of Transport | Ministry of Transport (Policy) Department of Public Works (Roads) National Police (enforcement) | 52 urban and 31 suburban taxi-be cooperatives of owners 2 urban, 1 suburban unions of cooperatives | | Urban: City of Antananarivo Suburban: Land Transport Agency (ATT) at Ministry of Transport | Ministry of Transport (Policy) Department of Public Works (Roads) National Police (enforcement) | Two unions of operators | Taxi call center company |
| Bamako | Ministry of Urban Mobility and Transport, MTMU (policy, regulation, roads) | Department of Urban Traffic and Transport Management of Bamako District Council The six urban municipalities of Bamako Traffic Enforcement Brigade | Owner associations Two driver associations, of which one has 90% of drivers Malian Council of Road Transport Operators: CMTR (sector interface to government) | None identified No reported apps or ride-hailing No reported vehicle finance or leasing companies | Ministry of Urban Mobility and Transport, MTMU (policy, regulation, roads) | Urban Traffic and Transport Management Bamako District Council The six urban municipalities of Bamako Traffic Enforcement Brigade | Owner associations Driver associations | None identified No reported apps or ride-hailing No reported vehicle finance or leasing companies |
| Cape Town | Department of Transport and Public Works of Western Cape Province | City of Cape Town National Department of Transport | Total of 102 taxi associations of owners 6 mother bodies, CODETA being the largest 2 national bodies (SANTACO, NTA) | Private-sector financier SA Taxi has provided about 35,000 loans to about 28,000 minibus-tax operators | n/a | n/a | n/a | n/a |
| Dakar | CETUD | Ministry of Finance Ministry of Transport | Total of 14 Economic Interest Groups (EIGs) AFTU, network of the EIGs | Senbus, a Senegal bus manufacturer Mectrans, micro- finance company establish by EIGs | Not licensed | n/a | Unclear | None identified |
| Freetown | Sierra Leone Road Transport Corporation | Ministry of Transport and Aviation (policy) Sierra Leone Road Safety Authority (licensing vehicles and drivers, making of regulations) | Route/terminal associations Indigenous Transport Owners Association Poda-poda and Bus Owners Association Motor Drivers and General Workers Union | | Sierra Leone Road Transport Corporation | Sierra Leone Road Safety Authority (licensing vehicles and drivers, making of regulations) Freetown City Council (parking) Sierra Leone Police (enforcement) | Route/ terminal associations Commercial Bike Riders Association Sierra Leone Tricycle Union | App/ride-hailing companies, some of which also lease vehicles Motorcycle finance and leasing companies |

| | Minibus-base | ed IPT | | | Shared-taxi (sedan) or motorcycle-based | | | |
|----------|--|---|--|--|---|--|---|--|
| | Licensing authority or regulator | Other relevant state actors | Lead internal actors IPT | Relevant external actors | Licensing authority or regulator | Other relevant state actors | Lead internal actors IPT | Relevant external actors |
| Gaborone | Department of Road Transport and Safety at Ministry of Transport | Gaborone City Council (infrastructure) Traffic Police (enforcement) | | | Department of Road Transport and Safety at Ministry of Transport | Gaborone City Council (infrastructure) Traffic Police (enforcement) | Gaborone Taxi Association Many operators not members of any association; there are some loose, informal area sub-groups | |
| Kampala | Transport Regulation Department at the Ministry of Works and Transport | Kampala Capital City Authority (route setting, roads, traffic management) Uganda National Police Uganda Revenue Authority | Kampala Operational Taxi Stages Association Uganda Transport Development Agency Stage (stand) leadership SACCOs | | Transport Regulation Department at the Ministry of Works and Transport | Kampala Capital City Authority Uganda National Police | Kampala Metropolitan Boda-Boda Entrepreneurs Local associations | App/ride-hailing companies Vehicle financing and leasing/ lease-to-own entities |
| Kigali | n/a | n/a | n/a | n/a | Rwanda Utilities Regulatory Authority | Ministry of Infrastructure Rwanda Transport Development Agency City of Kigali | Federation of Motorcycle Taxi Operators Syndicate of Taxi-Motos of Rwanda Individual mot-taxi cooperatives Fleet owners | Providers of intelligent fare meters and payment platforms Battery-swapping initiative with rental (Ampersand) |
| Lusaka | Road Transport and Safety Agency | Ministry of Transport and Communications Lusaka City Council Zambia Police | Bus Station managers Associations | Booking mobile money slowly emerging | Road Transport and Safety Agency | Ministry of Transport and Communications Lusaka City Council Zambia Police | Bus and Taxi Association | None |
| Maputo | Municipality or District within which service is provided Inter- Municipal services are licensed by the Province | Maputo Metropolitan Transport Agency (AMT) Ministry of Transport and Communications Municipal Police | FEMATRO (Federation) Multiple route-level Associations | Cooperatives of bus operators, formed from minibus operators | Not licensed: deemed illegal | Municipalities of Maputo and Matola; Districts of Marracuene and Boane Municipal Police | Associations of transporters Many/most of the mylove operators primarily carry cargo, transport passengers only in the peak | Open-backed trucks (myloves) |
| Maseru | The Traffic Department at the Ministry of Public Works and Transport | Maseru City Council (infrastructure) Road Transport Board (fares) Department of Traffic and Transportation (legislation, plans, regulations, safety) Traffic Police (enforcement) | 4 area-based associations, catering to both minibus and shared-taxis (sedans) | None identified; no apps or ride-hailing reported | The Traffic Department at the Ministry of Public Works and Transport | Maseru City Council (infrastructure) Department of Traffic and Transportation (legislation, plans, regulations, safety) Traffic Police (enforcement) | 4 area-based associations, catering to both minibus and shared- taxis (sedans) | No apps or ride- hailing reported Importers of sedan cars |

| | Minibus-base | d IPT | | | Shared-taxi (| sedan) or motorc | ycle-based | |
|------------|---|--|---|--|--|--|--|--|
| | Licensing authority or regulator | Other relevant state actors | Lead internal actors IPT | Relevant external actors | Licensing authority or regulator | Other relevant state actors | Lead internal actors IPT | Relevant external actors |
| Nairobi | Nairobi Metropolitan Services (regulator, approves routes, formerly by NTSA) | National Transport and Safety Authority (NTSA) Ministry of Cooperative Development and Marketing (registration of SACCOs) Nairobi Metropolitan Area Transport Authority (NaMATA) (planning and programs) Nairobi City County National Police | Savings and Credit Cooperative Organizations (SACCOS): 279 registered SACCOS Matatu Welfare Association Matatu Owners Association Operators Federation of Kenya | Mobile money companies (MPesa); agents for mobile money e-hailing and e-payment apps (e.g. SWVL, Little) | Nairobi Metropolitan Services (regulator, compliance oversight, since 2020— previously NTSA) | National Transport and Safety Authority Ministry of Cooperative Development and Marketing (registration of SACCOs) Nairobi City County National Police | Associations and SACCOs of boda-boda operators Operators Federation of Kenya | e-hailing and e-payment apps (e.g. SafeBoda) |
| Nouakchott | | Police | Associations for the minibus- taxis, organize services at terminals | | | Police | Associations for the formal taxis Taxis are not members of associations | |

Appendix 4:

Measures Implemented in each City, for Minibus-Taxis and for Motorcycle-Taxis

A.4.1 Observed reforms in the minibus-taxi sector

Experiences in the minibus-taxi sector from eight African cities have been documented in the case studies. Not all of the cities have implemented or made any significant attempt at reform in this IPT sector. Key features of their reforms are presented in the table below.

TABLE 15 Key features of minibus-taxi based IPT reform in the case cities

| City | Observed reforms in the minibus-taxi sector |
|--------------|---|
| Antananarivo | A pilot scheme included the following: |
| | Restructuring and equipping terminals and stops Improved sidewalks and access |
| | Specifications for new vehicles prepared, but not procured |
| | |
| | The pilot was terminated when the funding from an international donor was discontinued. |
| Cape Town | Minibus-taxi associations combined to form the bus operating companies for phase 1 BRT: this included aspects of vehicle financing, long-term contracts, capacity development, etc. |
| | The City of Cape Town developed capacity to design, guide and work with the IPT sector, including on the Mitchells Plain 7th Avenue pilot. |
| | A key element of the Mitchells Plain pilot was the minibus-taxi associations forming Taxi Operating Companies (TOCs). This led to resource consolidation, reduced fuel consumption, better working hours for drivers, and improved viability. |
| | The Blue Dot incentive scheme provided cash bonuses to operators for better driving and operation performance. It covered 900 taxis out of total 16,000 in the city. The scheme was discontinued in late 2022 when funds were depleted. |
| Dakar | A competent transport authority (CETUD) was developed, which has endured. |
| | • A financing scheme for vehicle renewal was developed, in which almost 2,000 vehicles have been replaced in three phases over two decades; it now has a revolving fund. |
| | Individual operators were restructured into economic interest groups which could access the vehicle financing; service contracts were signed with quality requirements; operators received training and capacity building. |
| Freetown | Limited or no reforms have been implemented to date. A World Bank–supported project is currently in progress which aims to: |
| | Develop the Public Transport Authority (PTA) |
| | Move operators to a contractual basis for services |
| | Support financing for fleet renewal |
| | • Improve road conditions, traffic management, bus priority, and passenger waiting facilities |
| | Implement ITS and ticketing |

| City | Observed reforms in the minibus-taxi sector | | | | | |
|---------|--|--|--|--|--|--|
| Kampala | A Multi-Modal Urban Transport Master Plan 2040 for Greater Kampala (2018) recognized minibus-taxis as part of the public transport hierarchy, albeit as secondary to new mass transit modes intended to replace much of the IPT. The Plan proposes a transport authority that would license and have oversight of all IPT modes, require registration of all IPT modes, reorganize minibus-taxi routes, more active management of terminals, and clampdown in non-compliant, unauthorized, and illegal operations. | | | | | |
| | A new licensing process for minibus-taxis was designed as part of IPT reforms during COVID-19 lockdowns, including a new Transport Regulation Department at the Ministry of Works and Transport, new rules for the minibus-taxi parks, and a reallocation of route charts to Kampala Capital City Authority (KCCA). | | | | | |
| | A Uganda Transport Operators Forum was established to provide a common forum for the multiple IPT associations to work together with government on participation in the restructuring associated with BRT. | | | | | |
| Kigali | There has been regulatory strengthening, and a move to route-based contracts of medium duration, with service and quality requirements. | | | | | |
| | The network has been restructured in line with actual demand. | | | | | |
| | Minibus-taxi operators have been restructured into companies operating large-capacity buses; they have received assistance in professionalization and capacity development. | | | | | |
| | Fleet renewal for large-capacity buses, and existing minibuses have been relocated to suburban and outer areas. | | | | | |
| | Staff have moved to salaried contracts, with more benefits and fewer working hours. | | | | | |
| | Cashless ticketing systems have been implemented with consolidated revenue and distribution. | | | | | |
| Lusaka | No reform has been implemented to date. There is no indication of committed upcoming reforms, other than a general aspiration to migrate from minibuses to larger vehicles. The Minister of Transport announced in 2019 the Zambian government's intention to ban minibuses. | | | | | |
| Maputo | A new metropolitan transport agency has been established. | | | | | |
| | Cooperatives operating large-capacity buses on key routes have been formed from the minibus associations that used to operate on those corridors. | | | | | |
| | About 400 government-purchased buses have been made available to the cooperatives on an operating lease with maintenance basis, at subsidized rates, under route contracts. | | | | | |
| | A new ticketing system has been implemented, initially on the large-capacity bus network, and expected to eventually be extended to minibuses. | | | | | |
| | Minibus-taxi operating routes in Maputo Municipality have been mapped. | | | | | |

A.4.2 Observed reforms in the motorcycle-taxi sector

Experiences in the motorcycle-taxi sector from eight African cities have been documented in the case studies. Not all of the cities have implemented or made any significant attempt at reform in this IPT sector. For those that have, the key features of their reforms are presented in Table 16 below.

TABLE 16 Key features of reform in motorcycle-taxi based IPT in the case cities

| City | Observed reforms in the motorcycle-taxi sector | | | | | | |
|--------------|---|--|--|--|--|--|--|
| Antananarivo | No reforms have been attempted. Motorcycle-taxis do not have legal recognition, but operate clandestinely and have nonetheless proliferated. There are periodic crackdowns. | | | | | | |
| | In September 2020, the mayor reasserted that such services were illegal and that their vehicles could be impounded. | | | | | | |
| Cape Town | No reforms have been attempted. Motorcycle-taxis are not a feature of the passenger transport in Town. | | | | | | |
| Dakar | No reforms have been attempted. Motorcycle-taxis are limited but growing in Dakar. | | | | | | |
| Freetown | Okadas have increased at over 20% annually in recent years, with permits for geographic areas, typically operating from informal bike parks. | | | | | | |
| | No government-side reforms are reported. This may be attributed to the weak institutional context in planning, regulation, and enforcement. | | | | | | |
| | Significant ownership (around 70% of riders own their bike). If broadly true, it indicates that sufficient financing mechanisms already exist and reforms in this area would not be required. | | | | | | |
| | Some unions make driving-training mandatory for new members and also run train-the-trainer programs. | | | | | | |
| | No other sector-initiated reforms have been reported. | | | | | | |
| Kampala | There are about 200,000 boda-bodas in Kampala, with one core association and many smaller ones. | | | | | | |
| | Urban plans seek to restrict them to specific types of service and control their numbers, but has not been effective to date, especially as a planned major increase in formal public transport has not yet materialized. | | | | | | |
| | • PSV licenses were implemented for boda-bodas in 2016, with the fee including income tax. However, this has not been effectively implemented and most riders remain unlicensed. | | | | | | |
| | Stages (bike stands) were officially gazetted in 2016. An attempt by Kampala City to gazette 579 stages in 2020 was resisted by the sector and not effectively implemented. | | | | | | |
| | Attempts to establish a boda-free zone in 2020 has not been effectively implemented. | | | | | | |
| | • There is an increasing proportion of owner-drivers (c. 40%) due to easier access to bank financing, lease-to-own, and other leasing arrangements. | | | | | | |
| | The core association (KAMBE) organizes vehicle loans as a SACCO, as well as provides training for riders on driving and regulations, and tracking devices for motorcycles, etc. | | | | | | |
| | • Six ride-hailing companies (three international, three African) enable booking and mobile payments. App companies also lease vehicles to riders. | | | | | | |
| | Ride-hailing companies set standards for riders (training, helmets, jackets) and traceability of riders for customers. | | | | | | |
| Kigali | Motorcycle-taxi drivers and owners have been grouped into different cooperatives, depending on the terminal they use; regulations require a minimum number of units for a cooperative to obtain an operating license. | | | | | | |
| | All motorcycle-taxi riders are required to belong to a cooperative. Cooperatives provide regular road safet training and ensure observance of protocols (compulsory helmet wearing, bib-wearing, am operating number, and trip tracking). | | | | | | |
| | Roadworthiness checking and emission standards have been introduced. | | | | | | |

| City | Observed reforms in the motorcycle-taxi sector |
|--------|---|
| Lusaka | No reforms have been identified. |
| Maputo | Motorcycle-taxis are not recognized in the regulations and hence are illegal. They operate in developing suburban areas with unpaved roads, which are not served by buses or minibus-taxis, but not in the central or main urban areas. Government has initiated no reforms of the motorcycle-taxis. The case study does not report any sector-initiated reforms. |



