



National Roadmap for Paratransit Reform

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Project Background

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is Germany's leading provider of international cooperation services. As a federally owned enterprise, it supports the German Government in achieving its goals in international cooperation for sustainable development.

This paper was prepared as part of the project Mobilize Net-Zero: Facilitating the Global Transport Transformation. Mobilize Net-Zero supports national governments in developing countries to accelerate the decarbonisation of transport through international cooperation, peer learning and digital innovation. It strengthens peer-to-peer networks through the annual Transport and Climate Change Week conference, incubates a global net-zero transport alliance, and promotes women's leadership across the sector. An AI-powered tool increases transparency by analysing climate and transport policies and integrating them into a UN data portal based on open data standards. In Rwanda, activities focus on developing and disseminating knowledge on paratransit reform and decarbonisation. In Ghana and Uganda, the project will align national transport policies with climate goals and improving access to finance. With a strong focus on the private sector, it catalyses investment and promotes gender-responsive planning. In Latin America, sustainable mobility is promoted in ten countries, with a strong emphasis on electrification and shifting towards public transport. By sharing tools and results through the Changing Transport platform and working through partnerships, the project ensures sustainable impact beyond its country components. The project is funded by the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (BMUKN).

About Changing Transport

We enable the rapid development of zero emissions transport systems to shape a liveable and just future. GIZ works on changing transport towards a sustainable pathway and facilitating climate actions in mobility. We support decision-makers in emerging and developing countries through training and consulting services, as well as by connecting stakeholders. Our ultimate goal is zero-emission transport. You can learn more about our projects on www.changing-transport.org.

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Acronyms

ATRACO	Association des Transports en Commun
BRT	Bus Rapid Transit
CBD	Central Business District
CETUD	Dakar Urban Transport Executive Board
GPS	Global Positioning System
ICT	Information Communication Technology
KAMBE	Kampala Metropolitan Boda-Boda Entrepreneurs
KBS	Kigali Bus Service
KCCA	Kampala Capital City Authority
KOTSA	Kampala Operational Taxi Stages Association
LATRA	Land Transport Regulatory Authority
PPP	Public Private Partnership
RTFC	Rwanda Federation of Transport Cooperatives
RURA	Rwanda Utilities Regulatory Authority
TOC	Transport Operating Company
UTODA	Uganda Operators and Taxi Drivers Association
UTOF	Uganda Transport Operators Federation
UTRADA	Uganda Transport and Development Agency
VTS	Vehicle Tracking System

1 Executive Summary

Paratransit is the backbone of motorized and collective transportation across most African cities, providing essential mobility for a significant portion of the population. Despite the introduction of structured mass transit services, paratransit remains a dominant mode of transport, often filling critical gaps in accessibility. While its spontaneous nature allows for flexibility, demand-responsiveness and improved territorial accessibility, it also faces economic and operational challenges, including low service quality, precarious business practices, and poor working conditions for operators. Recognizing these complexities, there is a growing consensus among transport experts and policymakers that rather than eliminating paratransit, improving and integrating it into multimodal transport systems is key to achieving sustainable urban mobility.

This roadmap document serves as a strategic guide for national governments, outlining a structured approach to paratransit reform. It emphasizes the need for collaboration with local governments and the adoption of a comprehensive, systemic approach to public transport. By doing so, it aims to address inefficiencies in the sector while enhancing service quality, economic viability, and overall transport integration.

Drawing on the authors' experience, literature reviews, and interviews with industry experts, this roadmap considers the general overview of the African paratransit industry, the specificities of different paratransit modes (for instance, motorised two- and three-wheelers versus minibuses), and the local contexts that exist in various geographical locations (such as governance structures, funding mechanisms, and cultural norms). It is structured into three key segments: (1) Putting the reform into motion, (2) Keystone and continuous actions, and (3) High-priority actions.

The success of the roadmap depends on the ability to organize resources around a task force that drives, advances, and monitors the implementation of the reform process. Given that human, infrastructural, and financial resources require significant investments, national governments must demonstrate leadership, initiative, and commitment. Paratransit reforms are best situated within a long-term urban mobility vision, with clearly defined and properly coordinated roles and responsibilities. Coordination between national and local authorities is essential to ensure the implementation of an integrated and harmonized vision. Beyond the desire to reform the paratransit sector, it is important to understand how the sector works and to establish a working relationship with its stakeholders. The best relationship to pursue is one that seeks to integrate, rather than eliminate, paratransit.

National governments play a pivotal role in shaping the overall policy framework and providing the financial and technical support necessary for successful paratransit reform. Compared to local governments, which often focus on implementation and operational management, national authorities are best positioned to harmonize regulatory and vehicle standards, coordinate funding mechanisms, promote and secure decent working conditions and establish overarching policy frameworks that ensure consistency across cities and regions. This high-level engagement is essential for aligning national development goals with local realities, facilitating economies of scale, and enabling sustainable, long-term investments in the sector.

Essentially, the roadmap outlines the following as high-priority stages to be implemented:

- Define and implement a licensing process
- Encourage the creation of SACCOs or their equivalent
- Reorganize the network to optimize operations (supply) with the aim to match demand
- Improve the vehicle fleet

In addition to presenting the roadmap, we apply it to Uganda’s context and propose high-priority actions for the short term. Recent efforts in the capital to foster dialogue and build trust between institutional and private stakeholders offer the opportunity to collectively redefine the role of paratransit in a city where traffic congestion is already a significant burden on economic and social life—and is expected to worsen with increasing motorization rates. The Consultative Forum for Greater Kampala has become instrumental. However, the sense of urgency to take action must be shared from the highest levels of government to the operators themselves. Building a task force is key to driving the process and engaging stakeholders, demonstrating involvement, commitment, and a unified voice from the public sector that private stakeholders seek.

Working and reflection groups involving members from the Consultative Forum in Kampala should be formed to design and implement a licensing process that could be branded as a “Be Legal” campaign—the first step toward successful reform. The process of setting up a Consultative Forum should be replicated in secondary cities to foster change through a collaborative approach across the country.

2 Rationale

Paratransit is the backbone of public transport in Africa. It encompasses services of varying degrees of informality and capacity, such as minibuses and two- and three-wheelers, which have emerged as the primary mode of motorized and collective transportation across many African countries. Paratransit has filled the void left by the absence of well-planned public transportation systems in many African cities, closing the gap between demand and supply as urban populations have rapidly expanded. For many households in African urban areas, paratransit remains the only option to commute beyond walking distances.

In cities like Nairobi (Kenya), Lagos (Nigeria), and Accra (Ghana), paratransit provides between 70% and 95% of all public transportation services, with a modal split of approximately 40% of all trips, across all purposes.

Despite the growth of mass transit systems and increasing motorization, paratransit will continue to play a major role in the transport systems of African cities. Mass transit networks are still in their infancy, while motorization rates remain low. For example, in Accra, the motorization rate is only 0.17 vehicles per household (54 vehicles/1000 inhabitants), and more than 80% of households do not own motorized vehicles. Although the capacities of paratransit vehicles are not always ideal, their contribution to addressing urban mobility challenges cannot be underestimated.

Beyond providing transportation, paratransit is a significant source of income for vast segments of the population. The sector contributes, both directly and indirectly, to employment for hundreds of thousands, including workers linked to operations or adjacent services, such as vehicle owners, drivers, conductors (mates), loading mates (who assist in gathering passengers), station and terminal staff, union executives, mechanics, painters, fuel station workers, as well as people with “gravitating” occupations often operating in stations such as street vendors, calligraphers, money changers, hawkers and porters.

However, the paratransit sector faces significant challenges that require urgent attention and reform. These challenges include safety concerns, poor service quality, inclusive accessibility and environmental impacts. Financial margins are often insufficient to sustain operations, leading to a reliance on poorly maintained vehicles, which in turn result in subpar service quality and working conditions that negatively affect both passengers and operators.

Given the limited availability of structured and planned mass public transport options (and the overwhelming focus on these systems’ development in primary and capital cities), any attempt to completely eliminate paratransit would severely restrict mobility, disproportionately affecting the livelihoods and economic opportunities of urban residents. Even with the introduction of mass transit services, there is a growing acknowledgment among transport experts and policymakers of the need to integrate paratransit rather than eradicate it. A holistic, multimodal system that includes paratransit is crucial for sustainable urban mobility.

Paratransit services often play a dual role: offering services at the metropolitan scale and providing last-kilometer connectivity, sometimes using different modes. In the near future, cooperation between mass transit and paratransit will better meet people’s mobility needs than competition

would. Reform efforts should aim to integrate paratransit systems into the broader urban mobility framework, fostering a balance between accessibility, efficiency, and sustainability.

For these reasons, it is essential to reform paratransit to achieve better outcomes. This roadmap document, intended for paratransit reform at the national level, provides guidance and recommendations to national governments and development organizations on how to design and implement comprehensive paratransit reforms, while stressing the importance of involving local governments and private stakeholders. The ultimate goal is to create a more sustainable, equitable, and efficient urban transport system that preserves and enhances the vital role paratransit plays in the daily lives of city inhabitants.

A two-step approach was adopted in designing the roadmap:



- An initial phase involving a review of academic literature, consultancy reports, and interviews with experts engaged in paratransit studies and projects. This phase identified and discussed current challenges and opportunities in the African paratransit sector to ensure practical and impactful recommendations.
- A second phase that converted this knowledge and these insights into a roadmap for paratransit reform at the national level in Eastern Africa, providing clear guidance and recommendations to national governments and development organizations on structuring and implementing reforms.

3 Understanding Paratransit

3.1. Defining Paratransit

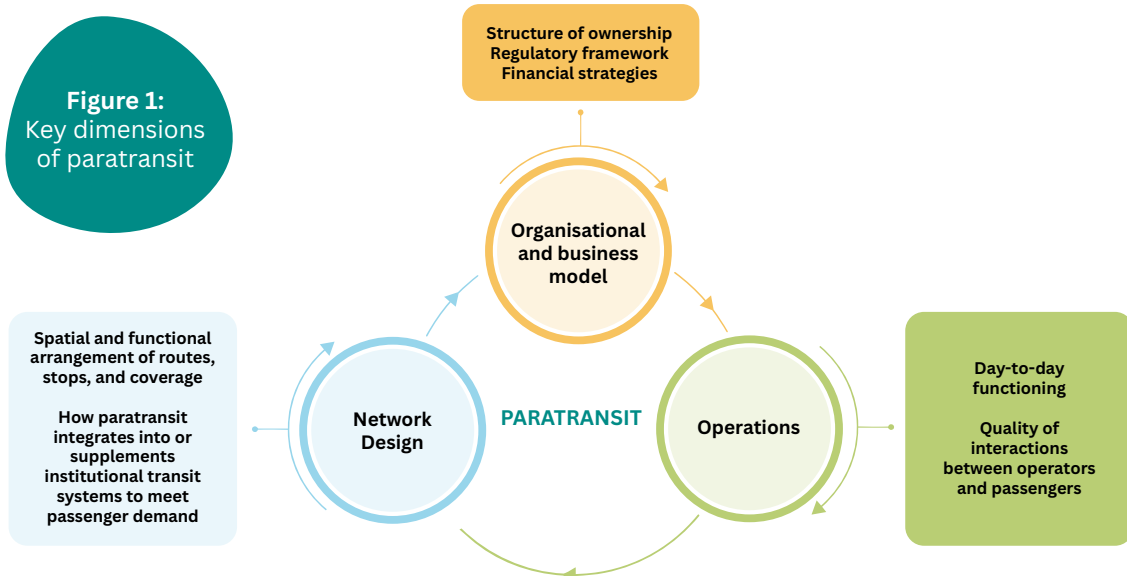
Paratransit services are characterized by their private ownership, often fragmented among numerous stakeholders, and their flexibility to balance supply and demand. These services are typically operated with vehicles such as minibuses, passenger cars (collective taxis), motorcycles (boda-bodas or okadas), and three-wheelers (auto-rickshaws or tuk-tuks).

Over time, various terms have been used to describe this mode of passenger transport. While “informal transport” has historically been used, it fails to acknowledge the organizational variety and adaptability inherent in the sector. More recently, some practitioners have used the term “popular transport” to emphasize its prevalence in emerging cities. However, for the purposes of this document, “paratransit” is used to highlight the services’ roles in complementing transit services through specific operational and business models, thanks to their capacity to adapt to local contexts, needs, and functions.

3.2. Understanding the Sector’s Distinctive Features

→ **The paratransit sector is best understood through three key dimensions:**

- **Organizational and Business Model:** This dimension includes ownership structures, the “daily target” system, and the prevalence of small-scale operators working independently or under loose associations or unions that coordinate drivers and owners.
- **Network Design:** This focuses on how routes, stops, and coverage emerge based on passenger demand, often filling gaps left by institutional transit systems.
- **Operations:** This includes the fill-and-go system, vehicle types, service frequency, and the interactions between operators and passengers.

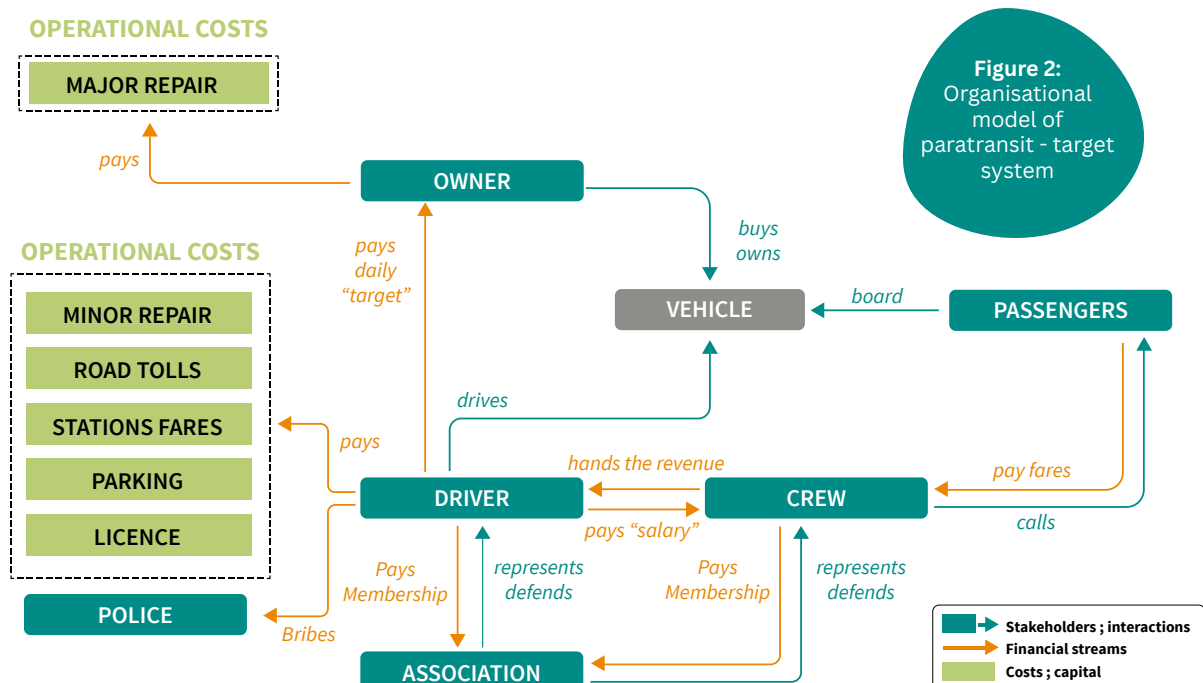


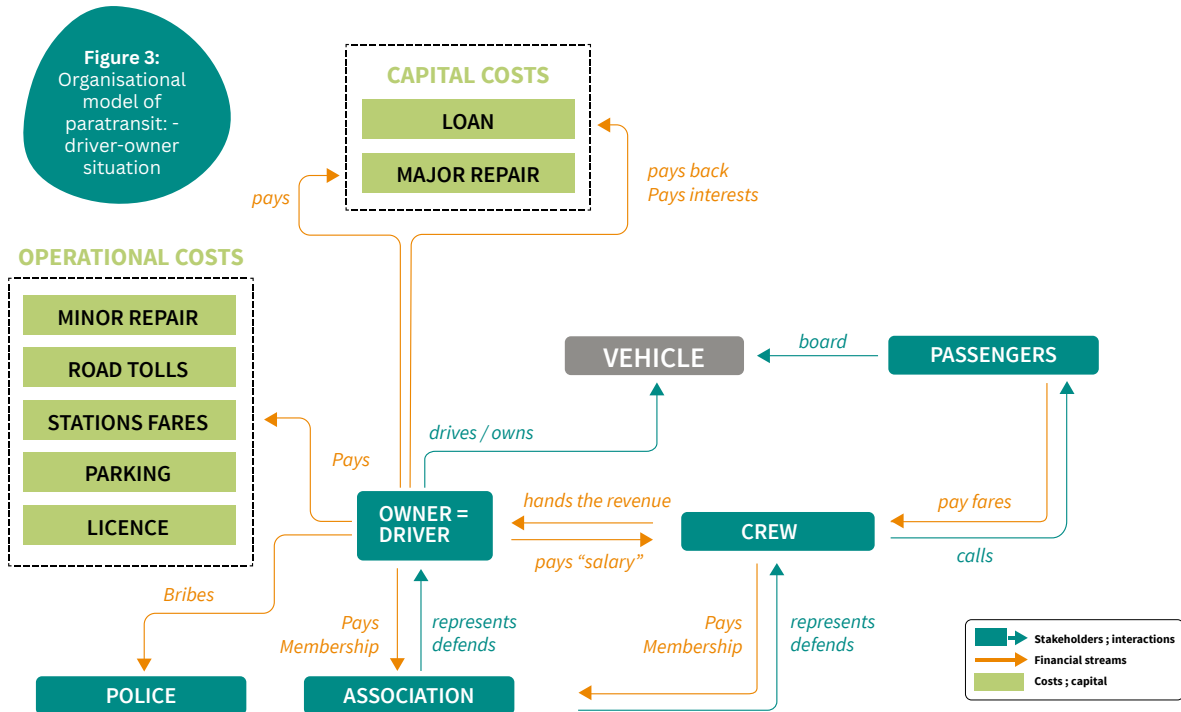
→ Organizational and Business Model

The paratransit sector’s organizational model developed spontaneously to meet the growing demand for urban passenger transport. In many African cities, operations are generally loosely coordinated around unions or associations that manage disputes, regulate entry, and determine key elements like route allocation and terminal management, although a complete lack of structures may still be observed in specific – and the most informal of – settings. These unions often collect membership fees or daily levies, but leadership structures are sometimes opaque and may not always represent the broader interests of drivers and vehicle owners. Some unions engage in advocacy with local authorities over issues like fare increases, parking rights, and regulatory changes, yet they can also create financial burdens through levies and inconsistent enforcement practices.

Despite efforts at self-regulation, the industry remains highly fragmented in its fundamental business model with individual vehicle ownership being the norm. The business model relies heavily on the “daily target” system: vehicle owners set a fixed daily target that drivers must remit regardless of operational costs, including fuel, repairs, and unofficial payments such as bribes or road tolls. Owners handle major repairs, aiming to recover their capital investment. For drivers who also own their vehicles, credit for vehicle purchase often comes from microfinance institutions at high interest rates; defaulting can result in vehicle repossession, and lengthy repayment periods can coincide with the vehicle reaching the end of its service life.

After covering expenses and meeting the daily target, any remaining revenue is split between the driver and the conductor. The pressure to meet daily targets leads many drivers to maximize trips and passenger loads, working excessively long hours—sometimes up to 14 to 16 hours a day. This operational pressure fuels intense competition, especially during peak hours, leading to “penny wars” where drivers compete aggressively for passengers. Such competition often results in unsafe driving, overcrowding, and conflicts among drivers. Drivers may also withhold information about their actual earnings to avoid target renegotiation, further highlighting the challenges of this business model.





As a result of the atomized nature of the industry, paratransit is a complex system with multiple stakeholders including vehicle owners, drivers, unions, and governmental representatives such as the police, vehicle and licensing authorities, local coordinating authorities, etc. These stakeholders have overlapping but occasionally conflicting interests, such as profit-sharing arrangements and service delivery standards, which add complexity to managing the industry.

As a private sector with very little regulation by governmental agencies, paratransit typically has low barriers to entry, allowing individuals with limited capital to join the industry. With minimal and often unchecked requirements for licensing, training, or vehicle standards, aspiring operators can enter the market easily. While this contributes to widespread accessibility, it also exacerbates challenges such as oversupply, safety concerns, and uneven service quality.

→ Network Design

Paratransit networks are primarily demand-driven, with routes emerging in response to passenger needs rather than formal urban planning. This responsiveness ensures coverage in underserved areas, such as informal settlements and peri-urban zones. Operators typically identify high-demand corridors through observation and passenger feedback, leading to constantly evolving networks that adapt to shifting mobility patterns. However, this organic growth can also produce overlapping routes, exacerbated competition, and inefficiencies. Networks often develop from profitable lines rather than a coordinated, citywide transport plan.

A key feature of network design is flexibility. Unlike institutional transit systems, which rely on fixed routes and schedules, paratransit services can dynamically adjust their routes based on real-time conditions and passenger demands. Drivers may deviate from their usual routes to pick up passengers or avoid congestion, enhancing responsiveness but also contributing to unpredictability for passengers and increased competition among operators. Better coordination and planning are needed to harness this adaptability while improving service quality and predictability.

→ Operations

Paratransit services typically operate on a fill-and-go system: vehicles depart from terminals only when full, leading to unpredictable wait times, especially during off-peak periods. Because operators rely solely on passenger fares for revenue, they often adopt pricing strategies that prioritize profitability over service quality. This reliance on fares also encourages cost-cutting measures, such as skimping on vehicle maintenance.

Vehicle conditions are often poor, with many vehicles being second-hand or outdated. Safety features like seatbelts, functioning brakes, and adequate lighting are frequently missing, increasing the risk of accidents. Additionally, because there is often no formal inspection system or effective regulation, substandard vehicles remain in service far longer than is safe or desirable. Older vehicles also tend to emit higher levels of pollutants, worsening urban air quality.

These operational challenges are compounded by the lack of government subsidies, which limits opportunities for fleet renewal and infrastructure improvements. As a result, service quality remains inconsistent, with unreliable schedules, unpredictable wait times, overcrowding, and little regard for passenger comfort.

3.3. Change in Mindset for a Paradigm Shift

→ Realizing the Prevalence of Paratransit in the Urban Mobility System

In many low and middle income countries, institutional public transport services have failed to keep pace with the rapid growth in mobility demands. Urbanization and rural-to-urban migration have increased the need for accessible transport, and paratransit modes—such as minibuses, collective taxis, motorcycles, and auto rickshaws—have emerged as critical providers.

As cities expand beyond the reach of formal systems, paratransit services connect residents in underserved areas to the urban core. Motorized two-wheelers, for instance, are especially well-suited for navigating unpaved roads and traffic congestion, offering a competitive advantage in terms of travel time and flexibility. Meanwhile, high youth unemployment and low barriers to entry have spurred significant growth in the number of paratransit operators.

In essence, the lack of investment in robust public transport systems has created space for private operators to fill the mobility gap.

→ Envisioning the Roles of Paratransit Services

The roles of paratransit services should be carefully defined to ensure integration with the broader public transport system without disadvantaging existing operators. Reforms must be implemented gradually to avoid resistance and should include paratransit operators in the planning and design of new systems to encourage their participation and buy-in.

→ Defining Entry Points to Reform: Objectives and Key Success Factors

The first essential step in any reform process is acknowledging that paratransit services must be integrated into the wider mobility system. This is crucial because:

- Paratransit services provide critical transport options where institutional services are inadequate and will continue to do so in the foreseeable future.
- They are a vital source of employment for large segments of the population, particularly unskilled youth.

Paratransit itself is not the problem. Rather, it is the quality of service, worker precariousness, and externalities that need to be addressed. Common challenges include:

- Poor vehicle quality and safety standards.
- Aggressive driver behavior and unprofessional service.
- Lack of regulation leading to congestion and competition with formal transport systems.

A holistic vision is required, including improvements to vehicle fleets, driver professionalization, regulation, and governance. Dedicated lanes and intersection priorities can enhance operational speeds, making paratransit more attractive to both passengers and operators. These improvements can boost profitability, a key metric for private operators.

Reforms should also account for the industry's existing self-regulation structures, including unions and associations. Mapping these organizations and engaging them in dialogue is essential. Reforms must aim to create a win-win situation:

- For governments: reforms can set minimum service standards, regulate market quantities, improve labor conditions, and enhance overall system efficiency.
- For operators: reforms should improve business models, efficiency, profitability, working conditions, and representation.

It is essential to engage operators using commercial language and incentives, aligning reform goals with their profit-driven motivations.

→ Defining Roles and Responsibilities in the Sector

Effective paratransit reform requires sustained institutional investment and commitment. The roles of institutional actors should be clearly defined, depending on the reform's scope. In urban areas, metropolitan authorities should coordinate with national ministries to align strategies and implement regulations. At the national level, ministerial authorities should spearhead efforts that require overarching policy coordination.

Establishing consultative forums with both public and private stakeholders is vital. These forums should be led by independent facilitators who can foster trust and guide constructive dialogue. A structured, impartial process enhances credibility and encourages mutual respect.

→ Addressing Inclusivity and Gender

Transport is vital for both men and women. However, women often face additional challenges, including safety concerns, harassment, and limited representation in decision-making roles. Women frequently rely on periphery-to-periphery trips that many operators deem less profitable, leading to higher costs or exclusion from services altogether. The sector is largely male-dominated, with very few women employed as drivers, which further entrenches gender inequality.

It is crucial to design paratransit systems that prioritize women’s needs, including safe travel, convenient stops, and consideration for traveling with children. Addressing these factors can improve overall accessibility and participation.

→ Leveraging Technology and Potential Disruptors

Technology offers promising opportunities to enhance paratransit efficiency and user experience. However, readiness and context are key. Electrification, for example, holds potential but requires reliable power supply, clean energy sources, and a supportive regulatory framework. The cost-intensive nature of electric vehicles also demands financial mechanisms to support operators. Before pursuing electrification, foundational improvements to the existing organizational structure and business models must be prioritized.

One of the most underutilized areas is the digital integration of paratransit systems. Despite widespread smartphone penetration among both passengers and drivers, many paratransit services remain dependent on word-of-mouth directions, analog fare systems, and opaque schedules. This not only hinders the user experience but also prevents operators and regulators from gaining insight into system performance.

With the growth of mass transit, intermodal connectivity will make digital passenger information systems increasingly essential. Projects such as Digital Transport for Africa (DT4A) and WhereIsMyTransport show that informal networks can be mapped and scheduled when intermediaries co-produce data with local actors. Furthermore, tools like GTFS (General Transit Feed Specification) and app-based trip planners can be adapted to suit semi-formal operators and heterogeneous fleet conditions.

Fare integration with formal systems (BRT, rail, city buses) can drastically reduce transfer penalties and enhance system-wide equity. Systems such as QR-code-based pre-paid ticketing, GPS-enabled driver dispatching, and real-time passenger information dashboards can offer low-cost, scalable solutions, provided data privacy and digital literacy are taken into account.

→ Centering Workers in the Reform Process: Towards Inclusive and Secure Labor Conditions

Reform is often framed as a path to greater efficiency, predictability, and service quality. However, if poorly managed, it risks reinforcing existing inequities—particularly for workers whose livelihoods depend on informal arrangements. The informal paratransit economy employs hundreds of thousands across African cities, most of whom work without contracts, social protections, or avenues for collective voice.

Transitions toward formal public transport systems can result in the displacement of informal workers, erosion of livelihood security, and psychosocial stress if not carefully managed. Reforms should thus not be conceived solely as a technical upgrade, but as a deep labor market transformation (GLI and VREF 2023).

Many paratransit workers operate under informal yet structured arrangements such as the “target system”—daily lease payments to vehicle owners—which generates intense pressure to maximize passenger loads and working hours. These pressures can intensify occupational health risks and diminish job quality. Reform efforts that impose top-down compliance measures (e.g., fixed routes,

regulated shifts, vehicle upgrades) without redistributing associated costs can deepen worker vulnerability.

International best practices (GLI 2020; ITF 2022) and sectoral reform lessons from mining and textiles suggest that just transition frameworks—which place labor rights and protections at the heart of restructuring—are critical to long-term success. These include:

- Conducting ex ante labour impact assessments to understand who is affected, how, and what mitigation measures are necessary.
- Establishing mechanisms for worker consultation, such as advisory boards, participatory planning forums, and union engagement.
- Designing transition plans that include re-skilling, employment pathways in the formal sector, and compensatory mechanisms.
- Ensuring portability of benefits such as pensions, health insurance, and access to credit.

Worker-led formalisation can create virtuous cycles of compliance, service quality, and job security. However, this requires state facilitation—not merely regulation. The informal sector’s resilience lies in its adaptability and embedded networks; reform must engage these strengths, not dismantle them.

3.4. Lessons Learned from Previous Reforms

Cape Town’s MyCiTi BRT

Cape Town’s MyCiTi reform, launched in the run-up to the 2010 FIFA World Cup, represents one of Africa’s most high-profile efforts to transition from informal paratransit to a formal Bus Rapid Transit (BRT) system. It offers important lessons on stakeholder engagement, business model design, and the limits of full replacement strategies.

The first major insight from Cape Town’s experience is the importance of early and sustained engagement with minibus taxi stakeholders. During Phase 1 (2007–2013), the City implemented the MyCiTi BRT system along trunk corridors, aiming to replace existing minibus services. However, insufficient consultation led to significant resistance from operators, particularly between 2014 and 2017, when conflicts intensified over compensation and operational displacement.

Responding to this backlash, the City shifted to a more incremental and inclusive approach during Phase 2 (2018–2020). Operators were engaged earlier, offered financial compensation, and provided with capacity-building support to transition into the formal system as shareholders in Transport Operating Companies (TOCs).



Lesson 1: Reforms that disrupt livelihoods must prioritize meaningful engagement, fair compensation, and a transparent transition pathway to secure operator buy-in.

Recognizing the limitations of full replacement, Cape Town gradually moved toward a hybrid model, integrating minibus taxis as feeder services to the BRT rather than attempting wholesale substitution. This shift in strategy helped acknowledge the utility of paratransit, particularly in areas underserved by formal corridors.

A notable innovation was the TOC model, wherein existing operators formed shareholder-based companies that managed services collectively under contract. These companies eliminated internal competition, replacing the target system with structured wage agreements and centralized planning.



Lesson 2: Replacing the target system with corporate structures requires strong leadership, trust between owners and drivers, and financial literacy among cooperative members.

However, the TOC model faced hurdles. Many associations were unprepared for the leap from informal to corporate governance, lacking the skills and internal cohesion to operate complex enterprises. Financial risks were high, and the promise of better earnings did not always materialize, immediately, raising doubts among operators about the long-term viability of the shift.



Lesson 3: Organizational readiness is key. Without strong internal governance and financial transparency, corporatization efforts risk collapsing under weak management and mistrust.



Dakar's Fleet Renewal Program

Dakar's fleet renewal program, formally launched in 2005, aimed to modernize the aging paratransit fleet, particularly the iconic but obsolete car rapides and ndiaga ndiaye minibuses that had long dominated the city's transport landscape. Between 2005 and 2013, the first batches of new vehicles entered service, accompanied by the creation of formal operating structures. Although the initial phase achieved visible improvements, implementation was uneven and met with skepticism from traditional operators wary of losing livelihoods and autonomy.

A central success factor was the establishment of the Dakar Urban Transport Executive Council (CETUD), created to coordinate and oversee public transport reform in the metropolitan area. CETUD played a pivotal role in organizing the sector, introducing regulatory frameworks, and ensuring that reform measures were implemented in a structured and sustained manner. Over time, CETUD evolved into the de facto metropolitan transport authority, responsible not only for the fleet renewal initiative but also for broader urban mobility projects, including Dakar's future Bus Rapid Transit (BRT) system.

This strong institutional leadership ensured continuity and coherence in implementation an essential condition often lacking in other reform attempts across Africa.

A key operational measure was the creation of Economic Interest Groups (Groupements d'Intérêt Économique, GIEs), cooperative entities uniting individual operators under shared management. Each GIE became the legal and financial interface for its members, capable of obtaining credit, purchasing vehicles, and managing services collectively.

This structure facilitated the roll-out of new fleets of vehicles and introduced a more transparent governance model. However, because participation in the reform was voluntary, engagement levels varied. Some operators, particularly those fearing loss of autonomy or financial risk opted out, resulting in partial rather than comprehensive transformation of the sector.



Lesson 1: Reforms that rely on voluntary participation must combine incentives (such as credit access or exclusive operating rights) with clear communication of long-term benefits to ensure broad uptake.

Another critical component was the design of sustainable financial mechanisms. The program's early phases were supported by international development partners, including the World Bank, which provided concessional loans for fleet acquisition. To sustain future renewal cycles, the authorities later established a revolving fund, complemented by partnerships with local commercial banks.

This financial model significantly improved access to credit for vehicle replacement previously out of reach for most informal operators. Repayment performance was impressive: loan repayment rates reached 99%, demonstrating that well-structured financing mechanisms, coupled with adequate institutional support, can yield strong results even in informal markets.

However, subsequent phases introduced stricter lending conditions, raising barriers for smaller operators and limiting inclusivity.



Lesson 2: Financial models for fleet renewal should balance commercial discipline with accessibility, avoiding overly restrictive conditions that exclude the operators most in need of modernization support.

Despite the success of fleet modernization, the reform revealed weaknesses in regulatory and operational planning. While vehicle renewal reduced on-road competition and improved route organization, limited attention was paid to key operational elements such as service frequency, scheduling, and fare regulation. This gap allowed some informal practices to resurface, undermining the expected gains in service quality and passenger experience.



Lesson 3: Fleet renewal alone does not guarantee service improvement. Reforms must also address operational regulation, including scheduling, fare consistency, and quality monitoring.

A notable strength of Dakar's reform was its phased implementation strategy, which enabled continuous learning and course correction. The first phase (2005–2008) focused on pilot operations and institutional setup. Lessons from this stage informed subsequent iterations, with the first phase repeated twice between 2008 and 2016 to consolidate learning.

By the third phase (from 2015), CETUD and operator groups jointly established a division for route regulation and operational assistance, further professionalizing the sector. This iterative process allowed the reform to evolve in response to feedback and contextual changes.



Lesson 4: A phased approach enables governments and operators to test, refine, and scale reforms progressively, building confidence, institutional learning, and political legitimacy.

As Dakar advanced its Bus Rapid Transit (BRT) planning and construction (launched in 2020), the city adopted a more deliberate approach to integrate existing paratransit operators into the new system. The institutional, financial, and organizational foundations laid during the fleet renewal process proved essential in enabling this integration.

The GIE model, coupled with CETUD’s regulatory role, has provided a structural interface between traditional paratransit and formal public transport systems, ensuring that reforms are not implemented in isolation but as part of a coherent metropolitan mobility strategy.



Lesson 5: Paratransit reform should be planned as part of a long-term urban mobility vision, ensuring alignment between modernization, integration, and environmental objectives.



Kigali’s Reforms

Kigali’s public transport reform offers a compelling example of how incremental formalization, built on policy clarity and institutional coherence, can reshape a fragmented paratransit sector into a more professional and reliable system. The reform, spanning from 2011 to 2019, tackled three core dimensions:

- Professionalizing operators,
- Regulating service provision, and
- Restructuring the network to enhance operational efficiency.

A first critical lesson from Kigali is the importance of setting a clear policy and regulatory foundation before attempting structural change. The Passenger Transport Regulation issued in 2011, and the Public Transport Policy and Strategy for Rwanda adopted in 2012, established the enabling framework for reform. These policies created institutional momentum, guiding the update of the Kigali Transport Master Plan, which provided a coherent vision for accessibility, modal integration, and public service obligations.



Lesson 1: A reform process must begin with a clear policy vision and a regulatory mandate. These set the direction, legitimacy, and scope for institutional and operational change.

The reform centered on operator consolidation, anchored by the Rwanda Federation of Transport Cooperatives (RFTC). RFTC served as an umbrella body for smaller associations and operators, encouraging the formation of cooperatives capable of meeting minimum standards for licensing and contracting. This structure gradually shifted operators away from the informal “daily target” model towards employment-based contracts.

As a result, drivers began receiving stable monthly wages, along with social security and health benefits, replacing an unstable income system that previously incentivized reckless driving and

strained owner-driver relations. In return, operators were expected to comply with a code of conduct and adhere to vehicle, service, and safety standards.



Lesson 2: Enhancing working conditions and professionalizing employment relationships improves service quality and helps stabilize the operator workforce.

A major structural change was the reorganization of the city's route network, implemented between 2014 and 2019. The network was divided into four service zones, and operators competed through an open tender process for zone-based service contracts. The successful bidders, Kigali Bus Service (KBS), Royal Express, and RFTC, were granted exclusive operating rights under performance-based contracts managed by the Rwanda Utilities Regulatory Authority (RURA).

Operators unable to meet the required vehicle standards (particularly size and emissions) were reassigned to peri-urban or intercity routes. Crucially, the strategy bundled profitable and less profitable routes within each service zone to ensure network-wide service coverage, while avoiding “cream-skimming” behavior.



Lesson 3: Franchising entire zones (rather than routes) and bundling profitable and marginal routes ensures universal service and reduces destructive competition (“penny wars”).

Despite significant gains in professionalism and service organization, the reform also revealed persistent financial and operational challenges. While the new model improved passenger experience and operator discipline, many public transport companies remained under-capitalized, limiting their ability to renew or expand fleets.

Further, low commercial speeds, unreliable operations, and limited investment in dedicated infrastructure continued to reduce system efficiency. These issues prompted Kigali to revisit its franchising arrangements in recent years to enhance accountability, service quality, and financial sustainability.



Lesson 4: Even successful reform models require long-term support, capital access, and continuous performance monitoring to remain viable and responsive to growing demand.

3.5. The Role of National Governments

Paratransit systems in most African countries have grown organically, driven by private initiative, not public policy. These services have thrived in the absence of structured regulation, formal subsidies, or government investment. In many cases, they fill a critical mobility gap left by underfunded or absent formal public transport systems.

However, without public intervention, the sector is unlikely to reform itself. Some stakeholders benefit from the current informality, while others lack the collective capacity or incentives to initiate change.

Public investment and engagement can unlock triple benefits:

- **Reform business models** to improve profitability and working conditions.
- **Create enabling conditions** for private operators to modernize and invest further.
- **Improve everyday mobility** by enhancing service quality, safety, and coverage.

National governments have a unique ability to set the legal, financial, and institutional frameworks needed to enable these changes—while also coordinating with metropolitan or local authorities that may be better positioned to implement reforms on the ground.

While reforms may be initiated at the metropolitan level, national governments have the jurisdiction and tools to enable or accelerate reforms across cities. Their roles may include:

A national framework helps clarify the “rules of the game” for all actors and enables consistent enforcement across jurisdictions. This can include:

1

Establishing a National Regulatory and Policy Framework

- **Clarification of institutional roles:** Clearly define the mandates of ministries, agencies, local authorities, unions, and private actors. Reducing overlapping responsibilities and resolving ambiguity fosters better coordination and accountability.
- **Entry conditions and operator recognition:** Set minimum standards for vehicles, driver training, roadworthiness, and operating safety. This ensures a baseline level of service and supports gradual professionalization.
- **Fare policy principles:** National oversight can provide general pricing frameworks, protect affordability, and encourage financial sustainability. Implementation may still occur at the local level.
- **Labor protection and transition planning:** National governments can mandate labor impact assessments, require inclusive planning for drivers and fare collectors, and define basic social protections (e.g., health insurance, working hours, safety protocols). They can also support cooperatives or inclusive enterprise models that promote decent work.

2

Influencing Vehicle Technology and Quality

Governments can shape the evolution of the fleet through regulations and market incentives:

- **Vehicle standards:** Enforce minimum safety, emissions, and accessibility requirements.
- **Tax policy:** Adjust import duties or VAT to favor newer, safer, or cleaner vehicles, including electric options.
- **Fleet renewal programs:** Co-finance programs to support the transition to modern fleets, especially in cities where aging, small-capacity vehicles dominate. These programs can be tied to emissions targets, accessibility improvements, or operator consolidation.

3

Enabling Investments in Infrastructure and Services

National programs can help cities access resources for paratransit reform, such as:

- Funding for fleet renewal, especially to upscale vehicle capacity where demand justifies it.
- Support for alternative livelihoods for operators opting out of the reform process.
- Investment in dedicated infrastructure: terminals, depots, lanes, shelters, and digital systems.
- Governments may also support the local manufacturing or assembly of compliant vehicles, especially electric minibuses or motorcycles, which helps build domestic value chains.

4

Institutional Support and Reform Management

Reform requires coordination across many actors. Governments can:

- Establish or support a national task force or program office dedicated to paratransit reform.
- Fund technical assistance, data collection, and monitoring mechanisms to guide cities and operator groups.

National governments must avoid undermining local government mandates. Instead, they should support capacity-building and respect devolution of powers, where applicable.

In contexts with fragmented mandates, dedicated agencies can help professionalize regulation and service planning. Options include:

- **Metropolitan Transport Authorities (MTAs):** These entities plan and contract transport services within urban areas. They can lead route restructuring, operator consolidation, and service contracts—often in coordination with city governments.
- **National Land Transport Regulatory Authorities:** Focused on regulatory oversight across all transport modes, these institutions set standards, monitor compliance, and may issue licences.

These models can co-exist, with metropolitan bodies leading policy and service planning in urban areas, and national regulators maintaining coherence and setting cross-cutting standards.



CETUD, a Metropolitan Transport Authority for Dakar (Senegal)

The Conseil Exécutif des Transports Urbains de Dakar (CETUD) is a public transport authority in Senegal, specifically mandated to oversee and coordinate urban mobility in the Dakar metropolitan area. CETUD was formally established in 1997 by decree, as part of broader efforts to address the growing challenges of congestion, inefficiency, and informality in Dakar's transport system. It was set up as an inter-ministerial agency, operating under the supervision of the Ministry of Infrastructure, Land Transport, and Opening Up, with strong ties to local governments and transport operators.

CETUD's core responsibilities include planning, regulating and coordinating public transport services in Dakar. This includes developing integrated urban mobility strategies, approving transport service providers, issuing and managing operating licenses, and promoting modern, structured transport systems like Bus Rapid Transit (BRT). CETUD is also tasked with ensuring that transport planning is responsive to both economic and environmental concerns, integrating sustainability and inclusivity into its policy competences.

CETUD is financed through a combination of sources. Its operational funding largely comes from the national government, but it also benefits significantly from international donor support, including institutions such as the World Bank, French Agency for Development (AFD), and European Investment

Bank (EIB). These partners have been especially instrumental in funding large-scale projects, like the BRT system currently being developed in Dakar. CETUD also receives financial contributions from urban transport operators and municipal budgets.

Among its notable successes, CETUD led the fleet renewal program that saw the replacement of aging minibuses (often called cars rapides) with newer, safer, and more efficient buses. It was also the driving force behind the design and implementation of Dakar's first BRT project, which is expected to revolutionize urban transport by providing a high-capacity, low-emission, and affordable mobility option to thousands of commuters. CETUD has also played a critical role in the formalization of paratransit operators by encouraging the creation of cooperatives and providing regulatory clarity.

Despite challenges such as resistance from paratransit operators, coordination issues among multiple stakeholders, and limited enforcement capacity, CETUD is often cited as a model for urban transport governance in West Africa. Its ability to work across sectors and maintain a long-term vision for Dakar's mobility future is considered a significant institutional achievement in the region.



Land Transport Regulatory Authority (LATRA), a national body for Tanzania

To boost the transportation sector, which was previously state-operated, the Tanzanian government implemented privatization reforms and in 2019, established the Tanzania Land Transport Regulatory Authority (LATRA). LATRA serves as the regulatory body overseeing road and railway transport. Its primary mandate is to safeguard public interests while promoting growth and efficiency within the transportation industry.

Headquartered in Dodoma with offices in all twenty-six (26) regions of mainland Tanzania, the stakeholders of this Authority are the long-haul bus and city buses, freight cars, bus and truck drivers, special hire vehicle providers, network taxi providers, passengers, public institutions and the general public. [Source: LATRA | Our Partners] LATRA operates as an autonomous body with the authority to issue, renew, suspend, or cancel licenses for public transport services. It is empowered to establish standards for vehicle roadworthiness and certify drivers and crew members. Additionally, it monitors the performance of regulated sectors including investment levels, cost of services, standards, availability and efficiency of services. [Source: LATRA | The Functions of the Authority]

Since its inception in 2019, LATRA has achieved notable successes, which can inspire change in other African countries:

- Financial Sustainability and Government Support: Unlike many regulatory bodies that struggle with funding, LATRA benefits from a combination of government budget allocations and regulatory fees from transport operators. This ensures financial stability and long-term effectiveness. The agency's funding sources include (a) fees collected by the Authority including fees payable for the grant and renewal of licences; (b) levies collected from regulated suppliers; (c) all other payment or property due to the Authority in respect of any matter incidental to its functions; (d) any grants, donations, bequests or other contributions made to the Authority; and (e) any other monies legally acquired or received by the Authority for the execution of its functions. [Source: Accessed here on March 5, 2025]
- Improvement of Safety Standards through the implementation of Vehicle Tracking System (VTS): LATRA has significantly improved road safety through strict vehicle inspections, driver certifications, and speed monitoring systems. The introduction of the Vehicle Tracking System (VTS), which monitors buses and other public transport vehicles in real time, has helped reduce accidents caused by reckless driving.
- Promotion of E-Ticketing: LATRA has been at the forefront of e-ticketing, digital fare collection, and monitoring systems, reducing fare evasion, improving revenue collection, and increasing operational efficiency. This technology-driven approach is a key lesson for other African nations seeking to modernize their public transport systems.
- Public-Private Partnerships (PPP) and Stakeholder Engagement: LATRA collaborates with transport operators, government agencies, and consumer advocacy groups to create a balanced regulatory environment that considers the interests of both service providers and passengers. Collaborations, such as the partnership between LATRA's Consumer Consultative Council and the Foundation for Civil Society, highlight the importance of engaging stakeholders to enhance consumer protection and rights in Tanzania's transport sector. This inclusive model helps mitigate resistance to reforms, a common challenge in other African transport sectors.

A wide range of stakeholders to engage



Paratransit reforms in African cities—ranging from fleet renewal to franchising and regulatory overhaul—tend to affect a wide spectrum of government ministries and public agencies. These reforms are not confined to the domain of transport authorities alone. Considering that paratransit systems are deeply woven into the socio-economic, environmental, and governance fabric of urban life, reforms often ripple across ministries responsible for finance, labour, the environment, and security. Clear leadership should be ensured to seek alignment between all these institutions.

Figure 4:
Ministries and stakeholders impacted by paratransit reforms

Ministries and Stakeholders impacted by paratransit reform in african cities



The Ministry of Transport or the designated transport authority typically serves as the lead institution, driving planning, route regulation, operator licensing, and overall coordination of reform efforts. However, reforms often require financial backing for fleet upgrades, infrastructure development or governance of urban mobility, drawing in the Ministry of Finance.

The Ministry of Infrastructure (or Public Works) is in charge of designing and building transport infrastructure and often plays a key role in the urban mobility system as it manages investment budgets. Its actions must be coordinated with other ministries to ensure that urban development is integrated with the overall mobility and urban development strategies.

City or municipal governments, under the Ministry of Local Government, are vital in implementation. They oversee infrastructure like terminals, enforce route plans, and facilitate dialogue with transport unions or cooperatives. Law enforcement agencies, usually under the Ministry of Interior, are critical in ensuring compliance with traffic and safety rules and managing unrest that can arise from displaced or dissatisfied operators.

The Ministry of Environment plays an increasingly important role, especially as cities seek climate-friendly transport options. Fleet modernization can significantly cut emissions, making paratransit reforms a key tool in achieving national environmental targets.

Meanwhile, the Ministry of Labor is often engaged when reforms affect employment in the paratransit sector, prompting retraining initiatives, formalization of labour contracts or support for cooperative integration.

Digital transformation components—such as cashless ticketing or GPS tracking—can require collaboration with the Ministry of ICT or Digital Innovation, especially where national e-governance or smart city strategies are involved.

The table below summarizes how these agencies are impacted by such reforms:

Ministry / Agency	Role / Involvement in Paratransit Reform
Ministry of Transport / Transport Authority	Lead policymaker; legal framework manages route regulation, operator licensing, and service standards.
Ministry of Finance	Provides subsidies, manages public-private financing, oversees budgeting for reforms.
Ministry of Infrastructure / Public Works	Design and build transport infrastructure
Ministry of Local Government / City Authorities	Implements reforms locally; manages terminals, urban planning, and public engagement.
Ministry of Interior / Law Enforcement	Enforces compliance, ensures safety, and manages unrest or conflict during reforms.
Ministry of Environment / Climate Change	Evaluates environmental impact; supports transition to cleaner transport fleets.
Ministry of Labor / Employment	Addresses employment impacts; supports training and inclusion of paratransit operators in structured systems.
Ministry of ICT / Innovation	Supports digital systems like smart ticketing, route tracking, and open data platforms.

3.6. Addressing Inequalities Between Metropolitan and Secondary Cities

While national paratransit reforms have often focused on major metropolitan areas, such as capital cities with high political visibility, secondary cities face rapid urbanization, limited mobility infrastructure, and acute institutional constraints. These cities are home to growing populations and expanding informal economies, yet they are frequently excluded from reform programs and investment flows.

National governments must proactively ensure that paratransit reform is not a capital city privilege, but a pillar of inclusive urban development policy. Below are concrete mechanisms by which national institutions can enable meaningful progress in secondary urban centers:

1. Develop National Urban Mobility Policies or Investment Programmes (NUMP)

- Create a national program aimed at supporting smaller cities to initiate, plan, and pilot paratransit reform.
- Provide technical guidelines and assistance for needs assessments, operator mapping, stakeholder consultations, and licensing frameworks, adapted to the constraints of low-capacity municipalities.
- Encourage participation through incentive-based schemes, e.g., matching grants for fleet renewal, or conditional funding for cities that establish inclusive planning processes, such as Sustainable Urban Mobility Plans (SUMP).

2. Provide Embedded Technical Support and Capacity-Building

Secondary cities often lack the staffing and expertise needed to plan and regulate transport systems. National governments can:

- Deploy regional mobility advisors or planning units embedded within local governments, supported by central technical agencies (e.g., national land transport authority).
- Offer standardized training to municipal officers in areas such as paratransit mapping, route restructuring, licensing, and contracting.
- Facilitate peer learning networks between municipalities facing similar challenges.

3. Decentralize Regulation, with Clear Mandates and Oversight

Where local governments are given the mandate to manage urban mobility, national governments must ensure that:

- Clear legal provisions specify the scope of municipal powers (e.g., over licensing, fare setting, enforcement).
- Tiered standards are adopted so that cities with different capacities can meet baseline regulatory goals without being overwhelmed by formalization burdens.

- National regulators provide compliance support and data systems to track implementation (e.g., license databases, operator registries).

4.Enable Access to Fleet Renewal and Vehicle Finance

Smaller cities face disproportionate barriers to renewing their fleets due to:

- Lower farebox recovery,
- Smaller operator associations,
- Weak creditworthiness among local banks.

National governments can:

- Develop national leasing or credit guarantee schemes for fleet renewal accessible to operators in small cities,
- Aggregate purchasing through regional cooperatives or SACCOs to unlock economies of scale,
- Coordinate with vehicle importers or manufacturers to offer standard vehicle packages for secondary markets.

5.Ensure Inclusion in National Transport Planning and Budgeting

Finally, secondary cities should not be afterthoughts in national mobility strategies. Ministries of Transport and Finance must:

- Include secondary city needs in national urban transport policies and investment plans.
- Require inclusion of paratransit and informal transport dimensions in all subnational mobility master plans.
- Track and publish disaggregated progress indicators (by city size, region, etc.) to ensure equitable reform outcomes.

Secondary cities will absorb a significant share of Africa's urban growth over the next two decades. If reforms are concentrated only in capital cities, the result will be deepening transport inequality, entrenched informality, and deteriorating service quality in smaller urban areas.

National governments have a pivotal role to play in ensuring that no city is left behind. By offering tailored support, financing, regulation, and technical capacity to smaller cities, they can foster context-appropriate paratransit reform that improves mobility, creates decent work, and supports inclusive urban development.

4 What to Consider when Designing a Paratransit Roadmap

A roadmap serves as a strategic guide on how to envision and structure a comprehensive paratransit reform. It describes the implementation process and the actions to undertake.

4.1. Developing a vision and a strategic course

Instituting a reform of the paratransit system and its services requires:

- **A vision that has to be shared with the stakeholders, and which seeks to:**
 - Improve the efficiency and quality of paratransit services
 - Improve working conditions
 - Enhance the viability of the services
- **A roadmap which serves as a strategic bridge between this overarching vision and actionable goals:**
 - It provides clarity by breaking down complex ambitions into specific actions that allow to achieve measurable objectives.
 - It ensures that all stakeholders understand the direction of reform and can align their efforts to see tangible outcomes come to fruition.

The roadmap is thus key for translating the vision into actions to achieve tangible and sustainable change.

4.2. Bringing change: Applying Kotter's eight steps to paratransit reform

Transforming the paratransit sector requires not only technical reforms but also a structured change management process to navigate the complex, informal, and often fragmented nature of the sector. To guide this transformation, the roadmap draws on John Kotter's Eight-Step Change Management Model, a widely recognized framework for leading organizational and sector-wide change.

Kotter's model (Kotter, 1996) identifies eight sequential steps to implement change successfully: (1) create urgency, (2) build a guiding coalition, (3) develop a vision and strategy, (4) communicate the vision, (5) empower broad-based action, (6) generate short-term wins, (7) consolidate gains, and (8) anchor new approaches in the culture. Originally developed for organizational change, Kotter's approach has also been applied to complex multi-stakeholder reforms in sectors like health, education, and—relevantly—urban mobility.

In the paratransit context, the fragmented nature of operators, the presence of powerful local associations, the informal business models, and the legacy of mistrust between operators and regulators all contribute to resistance to change. Kotter's framework is especially valuable because it:

- **Emphasizes building urgency and momentum**—essential in contexts where operators may see reforms as threats to livelihoods.
- **Highlights the need for inclusive coalitions**—key to bridging the gaps between government agencies, operator associations, unions, and passengers.
- **Structures reform into clear, sequential steps**—allowing policymakers to break complex reforms into manageable actions with defined milestones.
- **Integrates communication, capacity-building, and institutional** change—necessary to overcome fragmentation and foster buy-in from both operators and passengers.

By adapting Kotter’s eight steps to the realities of paratransit, this roadmap offers a practical, phased pathway to reform that balances ambition with feasibility and respects the interests of all stakeholders.



Step 1: To mobilize stakeholders – including government ministries, local authorities, paratransit operators, unions, and passengers – it is crucial to establish a sense of urgency. This can be achieved by presenting evidence-based data on the social and economic costs of the current paratransit system (e.g. road safety issues, poor service quality, daily earnings unpredictability, congestion) and highlighting opportunities for improvement (e.g. electrification, integration with formal transport).

Step 2: Given the multitude of stakeholders— including fragmented paratransit associations and unions—it is essential to establish a multi-stakeholder task force under the leadership of the Ministry in charge of Urban Mobility. This task force should include local governments, paratransit operator representatives, unions, passenger groups, and development partners. Its role is to drive the process, mediate conflicts, and oversee implementation.

Step 3: In this step, stakeholders collaboratively define the role of paratransit within the broader public transport network. This vision should emphasize complementarity with other modes, respect for livelihoods, and clear quality and safety standards.

Step 4: The roadmap must be shared to enable ownership by stakeholders and the public. A successful roadmap is not just a technical document but a shared vision. Engaging stakeholders—including transport operators, local governments, unions, and the public— fosters transparency and trust. Collaborative development ensures that all voices are heard, creating a sense of ownership that drives commitment to implementation.

Step 5: To implement change, stakeholders must have clear roles, responsibilities, and the necessary resources. This includes clarifying institutional mandates, strengthening local authorities, and investing in staff training and technical support. Capacity-building is essential for local and metropolitan authorities as well as ministries and technical agencies.

Step 6: Quick wins – such as improved safety measures, pilot registration systems, or priority lanes – demonstrate the practical value of reform. These wins must be visible, meaningful, and directly linked to reform objectives (e.g. improved operator earnings, reduced congestion). Early successes help build momentum, attract partners, and convert skeptics into supporters. It is equally important to analyze failures constructively and adjust strategies accordingly.

Step 7: Reform should be phased, with each stage building on previous successes. Consolidation requires evaluating pilot projects, integrating lessons learned, and refining policies. This approach helps sustain stakeholder engagement and secures additional resources for subsequent phases. Emphasizing gains also reinforces trust among operators and passengers, making it easier to deepen reforms (e.g. formalizing operator groups, modernizing fleets).

Step 8: Institutionalizing change requires embedding the new business and regulatory models into organizational and legal frameworks. This may involve revising transport laws to formally recognize paratransit cooperatives, incentivizing electrification, or adapting fare structures. It is critical to align the regulatory framework with the realities of paratransit operations to ensure that reforms endure beyond the initial implementation cycle.

4.3. Context consciousness

The roadmap is not an off-the-shelf toolkit that can be applied without a preliminary in-depth reflection. Each African country and city has unique characteristics, including its socio-economic conditions, urban design, and existing transport systems. Neither is it a one-size-fits-all action plan that could be adopted without taking into account:

- **The context:** Local factors such as governance structures, stakeholders, power relations, funding mechanisms, and cultural norms.
- **The specificities of the different modes and services:** Different transport modes, such as motorised two/three-wheelers and minibuses, have distinct operational challenges and user demographics. Separate roadmaps for these modes ensure targeted and effective reform strategies.

4.4. Reforming the organizational and business model

The roadmap paves the way for **a new business model**. Ultimately, the roadmap should lay the foundation for transitioning from fragmentation to better organized systems.

Currently, the target system exerts pressure on the drivers to maximise revenue at the expense of passengers comfort and road safety. It also ties them down to long and hard working-hours. The reform of the organisational and business model aims at ensuring long-term resilience, efficiency in the sector, increasing profitability, as well as improving working conditions and quality of service.

For a successful reform, it is proposed (as depicted in Figure 7 below) to shift from the target system towards a more structured system where a form of collectivised organization, be it SACCOs, economic interest groups, cooperatives, companies, etc, would own the paratransit vehicles and hire drivers and “mates” to operate them. In essence, fleet operations would be managed by the collective rather than by individuals.

Revenues would be earned and collected by the collective through fares, advertisement on vehicles and in the stations, parcel and goods delivery, rental space to vendors at terminals, membership fees, etc. The leadership of the collectivised group would manage the revenue flows, as well as the expenses. It is important that a system of trust is ensured between drivers and the leadership of the collectivised group. This would be key because even though the driver and his “mate” would directly collect fares from passengers, they would need to hand over 100% of the entire fare box to the managers of the revenue, at the end of each day. A simple ticketing system may be put in place for the sake of transparency and accountability. Smart, cashless ticketing could be introduced to reduce the need for handling cash, strengthen control over fare collection and increase transparency. Managed judiciously for the best interest of the group, the revenue must be used to cover expenses such as salaries, operational costs (fuel, maintenance costs, etc), capital costs, etc. Thus, the collectivised group bears financial risks and ensures the distribution of profits to its members, being notably shareholders, drivers and “mates” and staff.

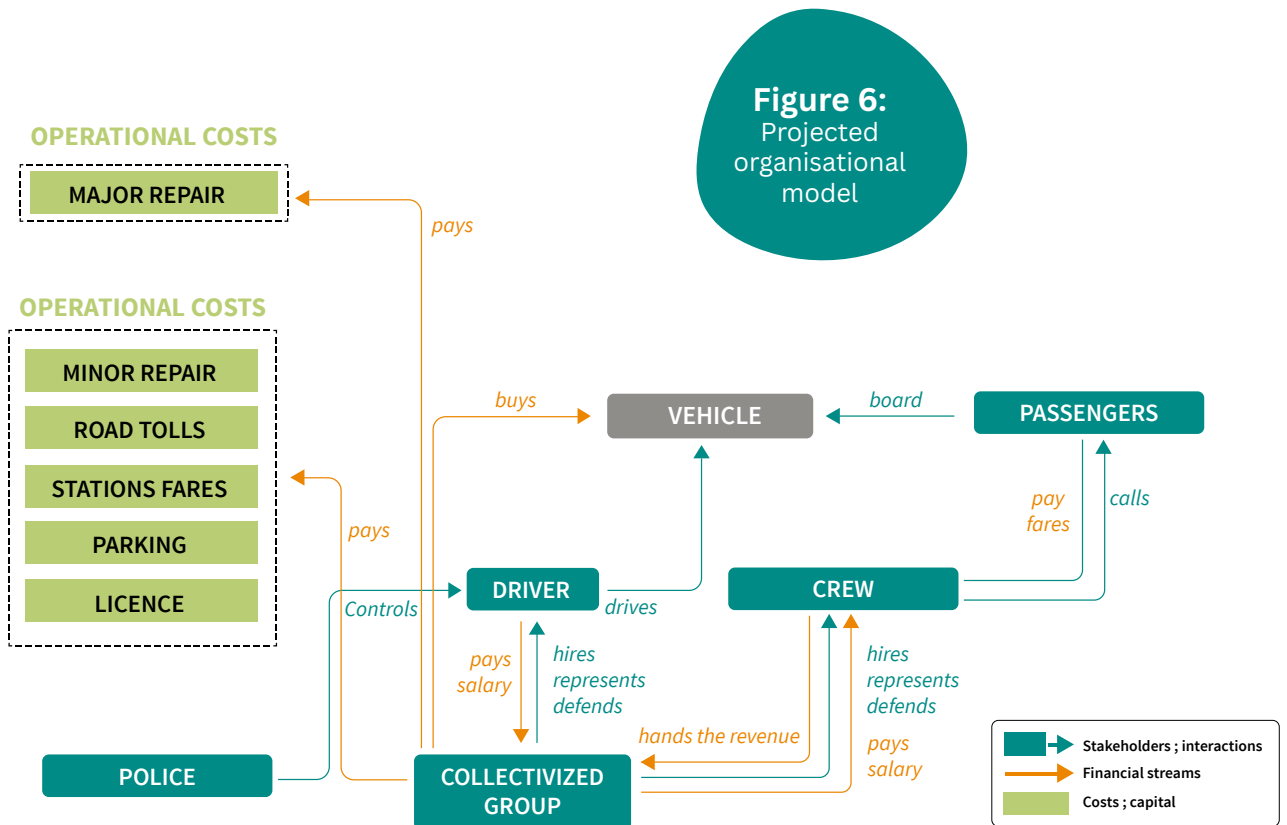
Furthermore, the collectivised group would reach a sufficient size to lever economies of scale and would have greater financial capacity to benefit from loans with lower interest rates (potentially

with the support of the public authorities). Cost of capital could thus be reduced, providing the opportunity to invest in more appropriately sized vehicles, that can serve the demand most cost-effectively when managed collectively.

Strength in numbers in such an organised and structured system could also mean higher negotiating power in activities such as purchase of fuel. Such a model would introduce a framework for professionalization of the workers and assure them of financial stability. Workers could benefit from social welfare and health program, as well as representations.

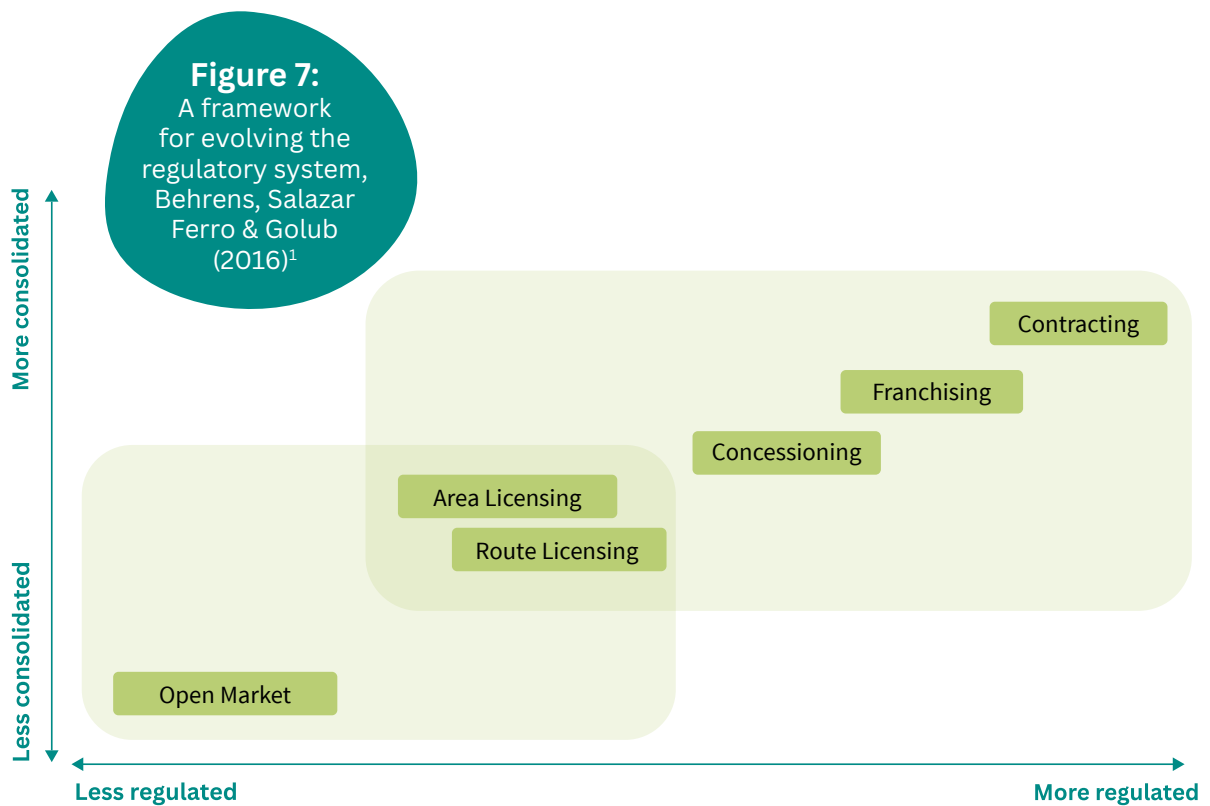
While contracting is a means to professionalise public transport services, it is important that the challenges it presents such as unclear contract terms, poor enforcement, and lack of transparency are adequately addressed. Effective contracting requires clear, enforceable agreements, fair competition, and strong regulatory frameworks to ensure reliable and sustainable public transport services.

The Figure 6 describes the projected organisational model as in comparison with Figure 2 describing the current organisational model.



This reform of the organisational and business model advocates for greater organizational sophistication and sets out the industry on the path of higher levels of formalization. The objective is not to impose constraining rules hindering operations, autonomy of private stakeholders but to improve efficiency, make a better use of resources and lower capital cost.

Steps on the path of higher levels of formalization have been conceptualized by and Behrens, Salazar Ferro & Golub (2016) are described in the Figure 7 below. In the last stage, contracting with a public authority, the stakeholders operate in a changed organisational and business model as proposed in this document.



1. [Behrens, Salazar Ferro & Golub, "Paratransit in African Cities", chap 10: International case studies of hybrid public transport system regulation and complementarity, 2016]

Case Study: SACCOs in Kenya

Savings and Credit Cooperative Organizations (SACCOs) have become central players in Kenya's paratransit sector, especially in organizing and regulating the matatu industry. They have transformed public transport in Kenya and provided a model that other East African countries have considered replicating.

In the early 2010s, the Kenyan government mandated SACCO formation to bring order to the chaotic matatu sector. This followed the success of some voluntarily formed SACCOs that had already improved service and regulatory compliance. In 2010, all matatu operators were required to join a SACCO or a transport management company to consolidate operators into organized groups, facilitating better regulation and service delivery.

In 2012, the newly formed National Transport and Safety Authority (NTSA) issued directives for SACCOs, including maintaining a minimum fleet of 30 serviceable vehicles, installing digital speed governors, and implementing fleet monitoring systems for night operations. A 2014 regulation required PSV operators to adopt a cashless fare payment system, further modernizing and improving oversight.

The Role and Importance of SACCOs in Kenya's Paratransit Sector

SACCOs have played a key role in transforming Kenya's paratransit industry by bringing greater organization, accountability, and professionalism. They group individual matatu operators into cooperatives, making it easier for authorities to enforce regulations and improve service standards. This has led to more reliable services, improved road safety, and better working conditions. For example, in 2012, the Embassava SACCO introduced higher-capacity buses on Nairobi's Embakasi route, reducing fares and improving passenger experience.

Beyond operational improvements, SACCOs have provided financial benefits by pooling member resources. These funds enable SACCOs to offer low-interest loans for vehicle acquisition and maintenance, insurance, and personal or emergency needs, which enhances financial stability. SACCOs also provide financial literacy training, encouraging saving and responsible borrowing, and distribute profits as dividends, promoting economic empowerment.

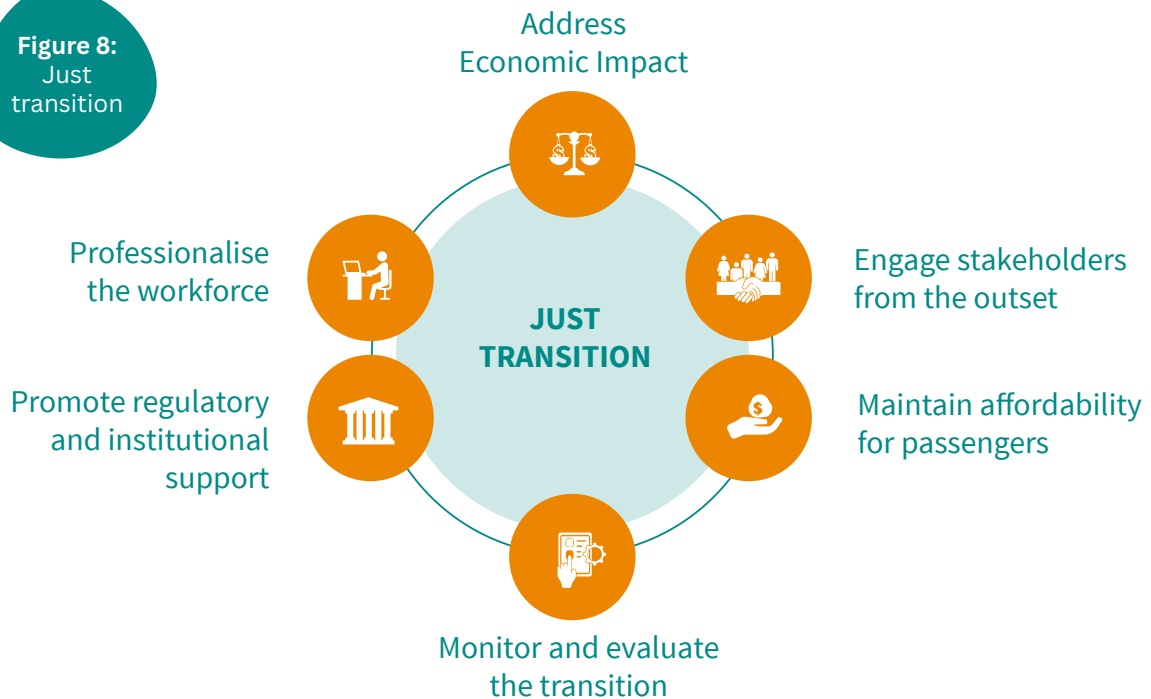
Replication in Other African Countries

Kenya's SACCO model has inspired neighboring countries like Uganda, Tanzania, Rwanda, Nigeria, and South Africa. Uganda, for instance, encourages SACCOs to improve service delivery, financial management, and regulation, with capacity-building sessions supporting their development. Tanzania's Daladala operators have formed SACCOs to alleviate poverty, while Rwanda's UMURENGE SACCOs promote financial inclusion and job creation.

However, challenges remain. In Uganda, complex and sometimes conflicting regulations hinder SACCO effectiveness. Informal practices persist due to weak enforcement, and governance issues can undermine cooperative efficiency. These challenges highlight the importance of adapting the SACCO model to each country's legal and institutional context and ensuring strong regulatory support.

Just transition

Figure 8:
Just transition



The success of paratransit reform in Africa—particularly when reorganizing business models like the daily target system—hinges on ensuring a just transition for all stakeholders: vehicle owners, drivers, commuters, and service providers. A just transition emphasizes fairness, equity, and inclusivity in implementing changes, ensuring that reforms do not disproportionately harm those who rely on the system for their livelihoods. The following key measures are essential:

→ Engage Stakeholders from the Outset

- **Participatory Approach:** Involve all stakeholders—drivers, vehicle owners, unions, passengers, and local government officials—in the design and implementation of reforms. Early and meaningful dialogue fosters buy-in and reduces resistance.
- **Transparent Communication:** Clearly explain the objectives, benefits, and potential impacts of reforms to build trust and understanding.

→ Address Economic Impacts

- **Support Mechanisms:** Provide compensation packages, financial safety nets, or alternative livelihood programs for operators and drivers whose income is affected by the reforms.
- **Access to Financing:** Offer affordable loans or grants to help operators upgrade vehicles, meet compliance standards, or adapt to new requirements.

→ Professionalize the Workforce

- **Fair Contracts:** Transition from exploitative daily target systems to transparent and equitable payment structures, such as fixed salaries or profit-sharing schemes.
- **Skill Development:** Offer training to improve drivers' skills, customer service, and regulatory compliance.
- **Social Protections:** Ensure workers are covered by health insurance, pensions, and unemployment benefits.

→ Maintain Affordability for Passengers

- **Equity in Access:** Avoid fare increases that disproportionately impact low-income commuters.
- **Subsidy Mechanisms:** Implement subsidies for critical routes or vulnerable groups to maintain affordability while ensuring system sustainability.
- **Monitor and Evaluate the Transition**
- **Feedback Mechanisms:** Establish channels for ongoing feedback from all stakeholders to address challenges promptly and adjust strategies.
- **Data-Driven Decision-Making:** Use data to track the social, economic, and environmental impacts of reforms, ensuring they align with just transition principles.

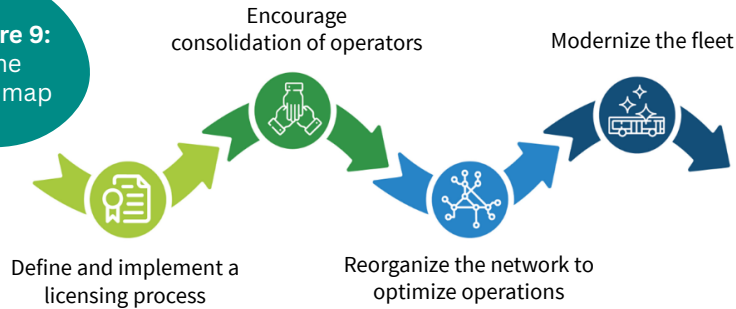
→ Promote Regulatory and Institutional Support

- **Policy Alignment:** Develop clear policies that balance formalization with inclusivity, ensuring small-scale operators are not excluded.
- **Capacity Building:** Strengthen institutions to implement and monitor reforms effectively.
- **Gradual Implementation:** Phase in reforms to give stakeholders time to adapt and mitigate abrupt disruptions.

5 The Roadmap

Understand the paratransit sector and forge a working relationship with its stakeholders

Figure 9:
The roadmap

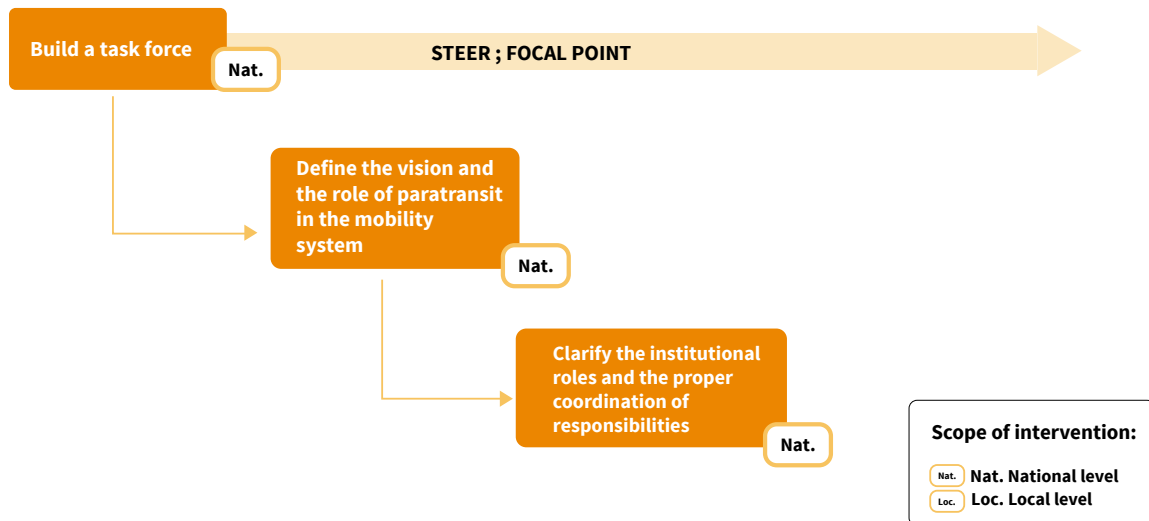


HERE GOES YOUR CITY'S VISION FOR PARATRANSIT
(e.g. safe, inclusive, efficient, affordable, accessible public transport)

Organise resources around a task force to drive and bring forward the process

5.1. Organize Resources Around a Task Force to Drive the Process

1 Organise resources around a task force to drive and bring forward the process



A dedicated, well-resourced task force is essential to successfully implement paratransit reform. Its role is to lead, coordinate, and monitor progress while ensuring that the reform process remains inclusive, evidence-based, and aligned with national and local priorities.

→ Establish a Task Force under a Strong Decision-Maker

A task force should be formally established under the authority of the Ministry responsible for urban mobility to lend it the necessary political weight and legitimacy. This entity must be

empowered to drive the reform process from inception to implementation, ensuring that decisions are taken efficiently and that responsibilities are clearly defined.

- **Composition and Expertise:** The task force should comprise members with expertise in paratransit operations, stakeholder engagement, transport economics, and project management. Inclusion of professionals with experience in managing stakeholder relations—particularly with informal operators and unions—will be key to building trust and mitigating resistance to change.
- **Dedicated Commitment:** Members should be expected to dedicate a significant portion of their time to reform activities, rather than treating this as an additional duty. This ensures that the task force remains focused and agile in its decision-making and implementation.
- **Focal Point for Stakeholders:** The task force will serve as the central point of contact for all stakeholders—public authorities, paratransit operators, unions, passengers, financiers, and development partners. It will coordinate communication, resolve conflicts, and ensure that stakeholder concerns are addressed in a timely manner.
- **Monitoring and Reporting:** The task force should be responsible for tracking progress, measuring achievements, and ensuring accountability. This includes maintaining a reform dashboard to monitor key indicators such as vehicle fleet modernization, service quality, and regulatory compliance.



Define the Role of Paratransit in the Mobility System

Before proceeding with technical reforms, it is essential to build a shared vision of the role that paratransit will play in the future urban mobility system. This includes clarifying how paratransit services can complement formal transport modes (e.g. buses, rail), serve last-mile connectivity, and ensure equitable access in underserved areas (see sections 3.3 and 4.1.1)

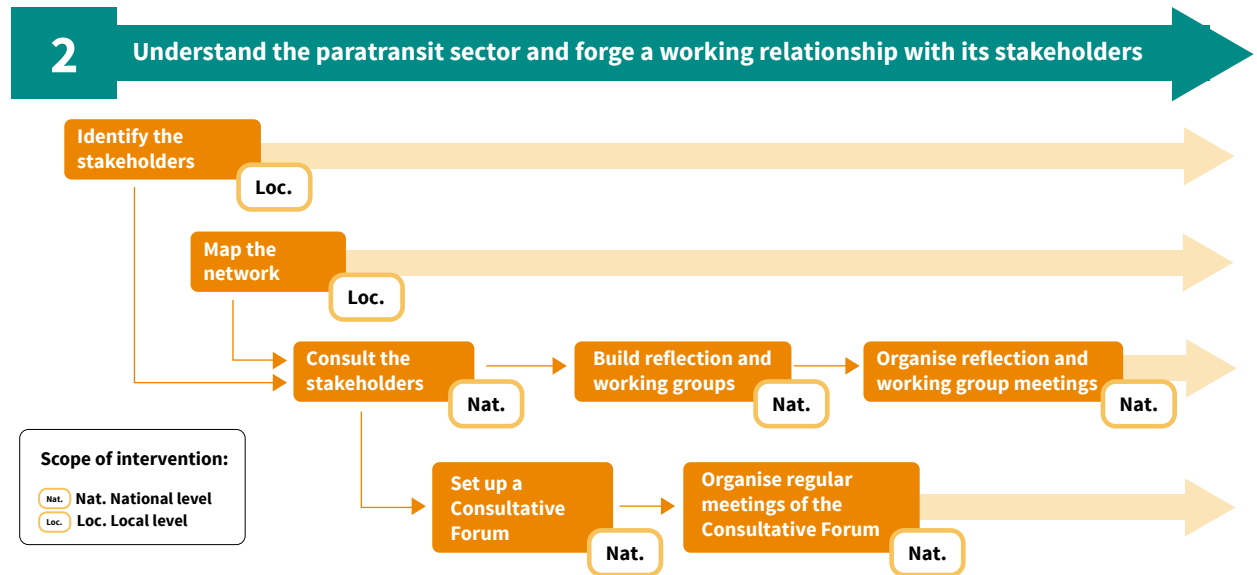


Clarify Institutional Roles and Responsibilities

A key barrier to effective reform is the overlapping of institutional roles, which can lead to regulatory gaps, conflicts of interest, and accountability issues.

- **Identify Overlaps:** Conduct an institutional mapping exercise to identify areas where roles overlap or are unclear, particularly between national ministries, metropolitan authorities, and local governments.
- **Allocate Responsibilities Clearly:** Assign operational responsibilities—such as route planning, licensing, enforcement, and operator support—at the appropriate level of government. Metropolitan or city-level authorities should manage day-to-day regulatory and operational functions, while national authorities should focus on policy direction, strategic planning, and setting regulatory frameworks.
- **Promote Collaboration:** Develop coordination mechanisms—such as interagency working groups or joint steering committees—to foster collaboration and information-sharing between different levels of government and between public and private stakeholders. Clear terms of reference should define the roles and mandates of each body to avoid duplication of efforts and ensure accountability.

5.2. Understand the Paratransit Sector and Forge a Working Relationship with its Stakeholders



A thorough understanding of the paratransit sector is essential for effective reform. This involves identifying key stakeholders, mapping services, and establishing structured dialogue platforms that foster trust, inclusivity, and joint problem-solving.

→ Identify Key Stakeholders and Business Units

Begin by mapping all relevant stakeholders involved in paratransit operations and governance:

- **Operators:** Identify formal and informal operator groups, cooperatives, owner-drivers, and fleet owners.
- **Associations and Unions:** Understand the role of transport unions, professional associations, and their influence on driver representation and regulatory compliance.
- **Government Entities:** Include ministries, metropolitan authorities, traffic police, licensing bodies, and city planning departments.
- **Passengers and Community Representatives:** Engage community groups and civil society organizations representing paratransit users, particularly women, youth, and people with disabilities.
- **Financiers and Development Partners:** Map banks, microfinance institutions, and agencies supporting transport investments.

→ Assess the level of interest and engagement of these stakeholders in the reform process, focusing on:

- **Power dynamics:** Who holds influence over routes, fares, and union membership?
- **Motivations and expectations:** What are the main drivers of stakeholder behavior (e.g. revenue, job security, service quality)?
- **Existing business units:** Identify consolidated operator groups or unions that may serve as reform champions.

→ Consult Stakeholders to Understand Structures and Needs

Conduct targeted consultations with each stakeholder group to gain insights into:

- **Organizational structures:** Determine levels of representation, internal governance mechanisms, and decision-making processes.
- **Context-specific needs:** Identify local challenges (e.g. vehicle financing, licensing delays, harassment, fuel costs) and opportunities (e.g. electrification, formalization support).
- **Expectations from reform:** Clarify stakeholder priorities regarding fare structures, route allocation, vehicle standards, and regulatory frameworks.

→ Map the Network and Service Structure

Develop a comprehensive mapping of paratransit operations, including:

- **Service structure:** Document routes, vehicle types, fleet sizes, and operational patterns.
- **Main origin-destination pairs:** Analyze travel demand and accessibility across the urban area to identify service gaps and overlaps.
- **Level of accessibility:** Assess affordability, physical accessibility, and coverage, paying particular attention to underserved communities and vulnerable populations.

→ Build Reflection and Working Groups

To foster collaboration and co-create solutions, the task force should establish multi-stakeholder reflection and working groups. These groups should:

- **Include Key Stakeholders:** Identify both institutional (e.g. ministries, metropolitan authorities) and private actors (e.g. operator associations, unions) to be mobilized at different stages.
- **Design Tailor-Made Actions:** Work together to define the scope, content, implementation, monitoring, and stakeholder involvement of each reform action.

- **Organize Regular Meetings:** Hold structured, recurring meetings at key milestones of the reform to sustain engagement and refine implementation strategies.
- **Integrate Gender and Inclusivity:** Establish a dedicated working group focused on addressing gender challenges, promoting women’s participation, and ensuring inclusivity throughout the entire reform process. This group should operate continuously and feed recommendations into all other groups.

→ **Establish a Consultative Forum**

Create a permanent consultative forum where consolidated representatives of paratransit stakeholders can present challenges and collaboratively develop solutions with government representatives.

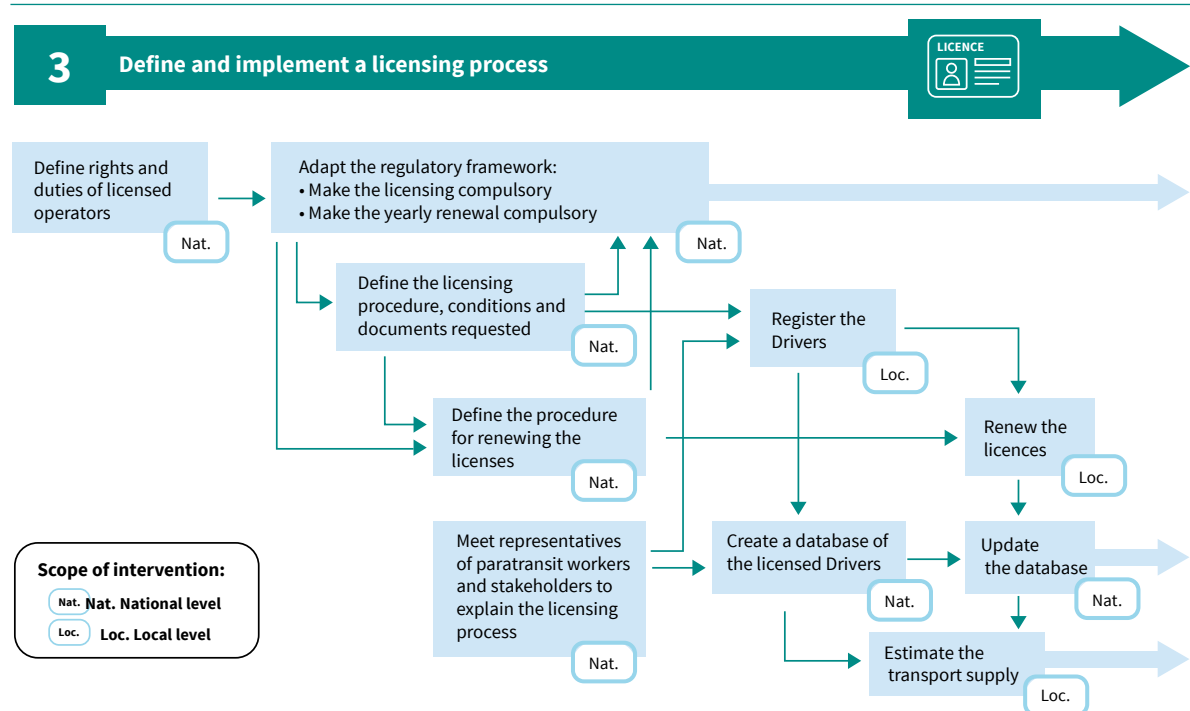
- **Role of the Forum:** Serve as a structured platform for dialogue and problem-solving, ensuring that issues are addressed transparently and constructively.
- **Independent Chairing:** Appoint an independent facilitator or neutral party to chair the forum to avoid conflicts of interest or dominance by any single stakeholder group. This ensures that discussions remain unbiased and inclusive.
- **Conflict Resolution:** Develop protocols for addressing disputes within the forum, including clear agendas, documentation, and follow-up mechanisms.

→ **Organize Regular Meetings of the Consultative Forum**

Schedule meetings of the consultative forum at appropriate intervals—typically two to four times per year—depending on the reform’s phase and the need for dialogue. Meetings should:

- Be planned well in advance, with clear agendas and background materials shared with all participants.
- Include updates from the task force on progress, challenges, and next steps.
- Serve as a space for stakeholders to raise concerns, share feedback, and contribute to decision-making.

5.3. Define and Implement a Licensing Process



Establishing a licensing process is a foundational step in regulating paratransit services, formalizing the sector, and improving service quality and safety. A well-designed licensing framework clarifies who can operate, under what conditions, and with what rights and obligations—thereby aligning paratransit operations with broader urban mobility objectives.

→ Define the Rights and Duties of Licensed Operators

Licensing should confer specific rights and duties to operators to incentivize compliance and professionalization:

- **Rights:** Access to operate paratransit services on defined routes, eligibility for capacity-building and training programs, access to dedicated infrastructure (e.g. terminals, layover facilities), and potential priority in service upgrades or fleet renewal programs.
- **Duties:** Compliance with service quality standards, adherence to safety regulations, participation in regulatory processes (e.g. reporting, inspections), and cooperation with formal authorities.

→ Link Licensing to Operators, Not Vehicles

To ensure continuity of service and recognize the skills and professionalism of individual operators, licenses should be issued to operators rather than attached to vehicles. This approach:

- **Promotes operator empowerment:** The license validates the operator's skills, experience, and commitment to service quality, reinforcing their professional status.

- **Avoids operational disruption:** A driver whose vehicle breaks down can continue working with another vehicle, maintaining service continuity.
- **Prevents market distortions:** Licenses should not be tradable, rented, or sold. This prevents speculative trading and ensures that only qualified operators provide services.

→ Regulate Supply through Licensing

Licensing is a powerful lever to align paratransit service supply with passenger demand:

- **Quantitative controls:** Set clear limits on the number of licenses issued to prevent oversupply, which can undermine service quality and operator earnings.
- **Responsive mechanisms:** If demand is met, freeze new license issuances and only allow renewals. If demand grows, expand license issuance in a controlled manner.
- **Annual renewals:** Make annual renewal compulsory to track active licenses, monitor compliance with service standards, and adjust supply as needed.

→ Define Licensing Criteria and Procedures

Licensing criteria should balance qualitative and quantitative considerations:

- **Qualitative criteria:** Gradually raise service standards by requiring minimum vehicle capacity, vehicle type, emissions standards, and operator training (e.g. safety, customer service, gender sensitivity).
- **Quantitative criteria:** Regulate the overall number of operators to match service supply with demand.

→ Licensing documentation should include:

- Identity and contact details of the license holder.
- Type and specifications of the vehicle operated.
- Proof of affiliation to an association, cooperative, or collectivised group.
- Designated route(s) or service area.

→ Licensing procedures should be:

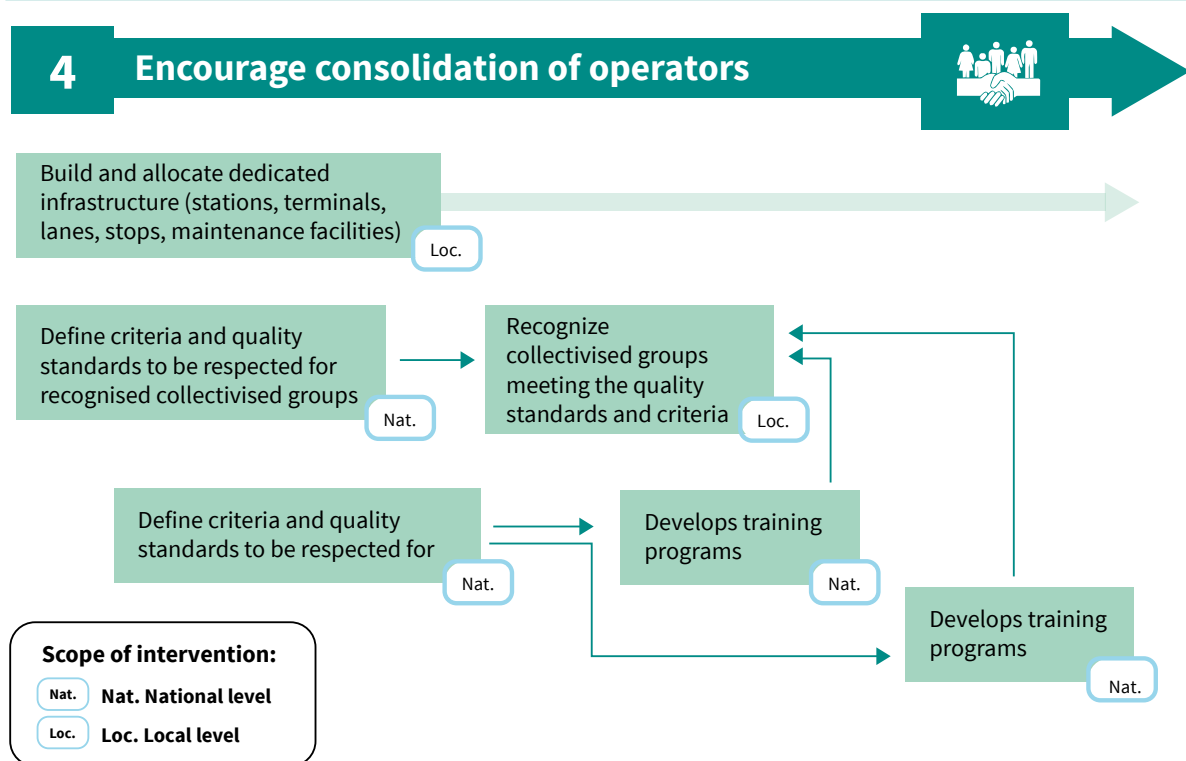
- **Simple and accessible:** Avoid burdensome bureaucracy that discourages operators from formalizing.
- **Transparent:** Clearly communicate requirements, processes, and timelines through workshops, printed guides, and online portals.
- **Adequately resourced:** Allocate sufficient staff and IT systems to process license applications efficiently.

→ Define the License Renewal Process

A transparent, fair, and efficient renewal process is key to maintaining regulatory oversight and service quality:

- **Stakeholder engagement:** Organize regular information sessions with unions, operator groups, and other stakeholders to explain the licensing process, its objectives, and any updates or changes.
- **Data management:** Create and maintain a national database of licensed operators, with standardized data fields, linked to local databases. This allows for efficient monitoring and data-driven planning.
- **Annual renewal:** Require operators to renew their licenses annually, subject to meeting all criteria (vehicle maintenance, training participation, compliance with regulations). Ensure that renewals are systematically recorded in the database.

5.4. Encourage Consolidation of Operators



Consolidating paratransit operators into collectivised groups—such as cooperatives, economic interest groups (EIGs), or associations—enhances the efficiency, safety, and sustainability of paratransit services. It also empowers operators to access finance, training, and infrastructure support, fostering a more professionalized and inclusive sector.

→ Develop and Allocate Dedicated Infrastructure

Invest in dedicated infrastructure accessible exclusively to licensed operators belonging to recognized collectivised groups. This includes:

- **Stations and terminals:** Designate safe, well-managed terminals with appropriate passenger facilities, prioritizing areas with high demand.
- **Dedicated lanes and stops:** Establish priority corridors and designated stopping points to improve service reliability and reduce congestion.
- **Maintenance facilities:** Provide access to shared maintenance workshops, spare parts depots, and vehicle washing stations to support operational efficiency.

→ Define Criteria and Quality Standards for Recognized Collectivised Groups

Establish clear, progressive criteria and quality standards that collectivised groups must meet to gain official recognition and access associated benefits. These criteria should aim to gradually improve service quality, operational efficiency, and working conditions, and may include:

- **Vehicle standards:** Minimum vehicle capacity, type, and emissions levels to align with environmental and safety objectives.
- **Driver and crew training:** Mandatory training on safety, customer service, gender inclusivity, and vehicle maintenance.
- **Governance structure:** Transparent and democratic governance, with clear leadership roles, conflict resolution mechanisms, and accountability measures.
- **Financial stability:** Evidence of sound financial management, such as transparent accounting practices and proof of tax compliance.
- **Inclusivity and gender equity:** Active measures to promote the participation of women and underrepresented groups in governance and operations.

Recognizing collectivised groups as emerging operating companies—gradually transitioning from informal associations into professional entities—builds capacity and lays the groundwork for long-term formalization.

→ Grant Advantages to Recognized Collectivised Groups

Recognized collectivised groups that meet established criteria and standards should be eligible for specific advantages, including:

- **Use of dedicated infrastructure:** Priority access to exclusive stations, lanes, and stops.
- **Participation in fleet renewal programs:** Eligibility for financial assistance and technical support to modernize vehicles.

- **Tax incentives:** Access to reduced import duties, VAT exemptions, or other fiscal incentives that improve financial viability.
- **Access to training and capacity-building:** Inclusion in government- or donor-supported training initiatives that enhance operational and management skills.

→ **Recognize and Register Collectivised Groups**

Develop a formal process for recognizing collectivised groups that meet the established criteria. During license renewal, operators should declare their affiliation with a recognized collectivised group. This process ensures that regulatory authorities can monitor group membership, compliance, and performance.

→ **Develop Training Programs for Group Members**

Develop targeted training programs for drivers, crew members, and managers of collectivised groups. Topics should include:

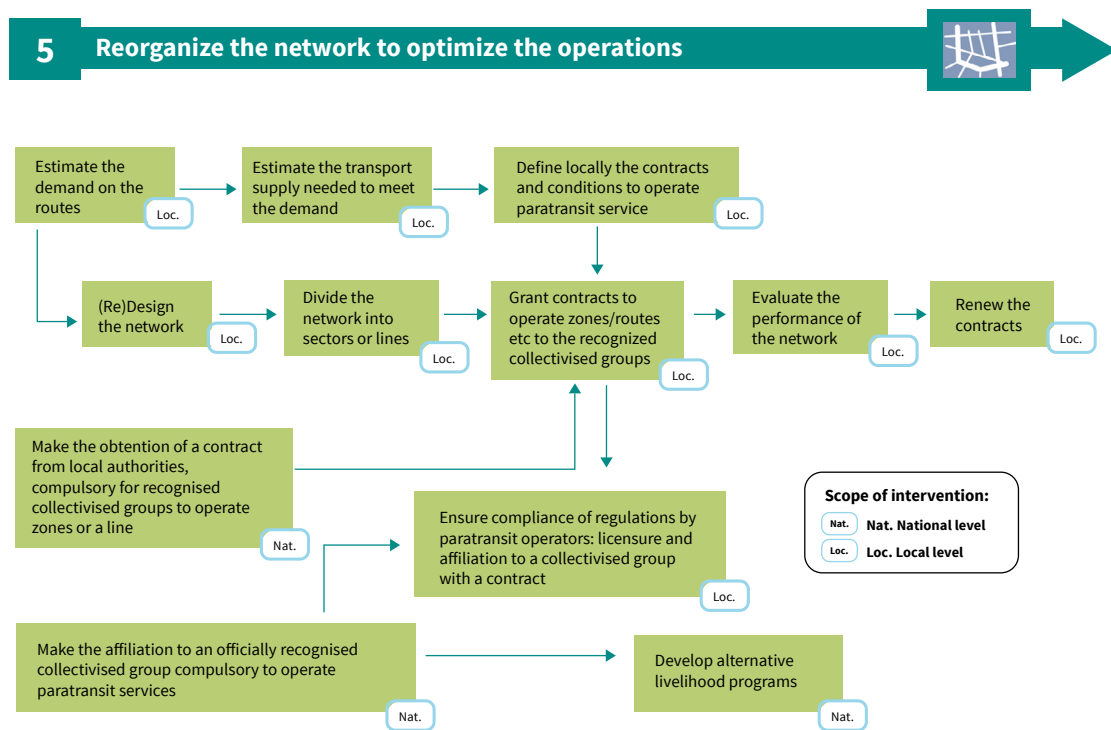
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- Safe driving practices and defensive driving.
 - Customer service and gender-sensitive service delivery.
 - Basic vehicle maintenance and troubleshooting.
 - Cooperative governance and financial management.
 - Environmental awareness and green vehicle operation.

→ **Expand Social Support Programs**

Encourage collectivised groups to formalize employment relationships with their drivers and crew, facilitating access to:

-
- **Healthcare:** Enrollment in national or sector-specific health insurance schemes.
 - **Credit facilities:** Access to tailored microfinance or cooperative lending programs for vehicle maintenance, personal emergencies, or business investment.
 - **Social protection:** Inclusion in pension and social security systems, improving job stability and social equity.

5.5. Reorganize the Network to Optimize Operations



→ Estimate Demand on Existing Routes

Begin by conducting a comprehensive assessment of passenger demand on existing routes:

- **Data Collection:** Use dedicated passenger surveys or integrate household travel surveys to gather data on trip patterns, volumes, and peak periods.
- **Demand Expression:** Express demand in terms of daily passenger volumes or trips travelled to quantify service needs.
- **Origin-Destination Pairs:** Identify key origin-destination pairs to understand travel flows and prioritize areas with high unmet demand.

→ Estimate Required Transport Supply

Translate the estimated demand into the required supply of services:

- **Capacity Requirements:** Calculate the number of vehicles, service frequency, and vehicle types needed to meet peak and off-peak demand while ensuring passenger comfort and safety.
- **Accessibility Considerations:** Ensure that services cater to low-income communities, informal settlements, and other underserved areas to promote social inclusion.

→ (Re)Design an Accessible and Efficient Network

Design a network that effectively meets the mobility needs of urban residents:

- **Network Structure:** Divide the network into lines, route pools, or operational zones based on demand and accessibility considerations.
- **Integration with Formal Transit:** Coordinate the paratransit network with other public transport services (e.g. buses, rail) to enable seamless connectivity and multimodal integration.
- **Service Coverage:** Prioritize coverage of key corridors and high-demand areas while ensuring last-mile connectivity.

→ Implement Contracting with Metropolitan Transport Authorities

Make contracting with metropolitan transport authorities a requirement for recognized collectivised groups to operate services in defined zones or corridors:

- **Contractual Framework:** Define locally tailored contracts specifying operational and quality requirements, including:
 - **Service Quality:** Licensing and affiliation to a collectivised group, vehicle condition, emissions standards, and driver training.
 - **Service Quantity:** Minimum fleet size, service frequency, and operating hours.
- **Contract Objectives:** Ensure that services meet passenger demand, deliver reliable and safe service, and align with regulatory objectives.

→ Improve Working Conditions through Contracting

Use contracts as tools to formalize decent working conditions for drivers and crew members:

- **Defined Standards:** Contracts should specify maximum working hours, minimum wages, benefits, and provisions for occupational health and safety.
- **Professionalization:** Reinforce the professional status of drivers by linking their work to recognized collectivised groups and regulatory oversight.

→ Grant Service Contracts to Recognized Collectivised Groups

Award route, corridor, or zone contracts exclusively to officially recognized collectivised groups that meet quality and governance standards:

- **Equitable Distribution:** Ensure sufficient service capacity to meet demand while avoiding oversupply that undermines financial viability.
- **Monitoring:** Regularly evaluate contract compliance to maintain accountability.

→ Clarify the Role of Unions and Associations

While unions and associations play an important role in representing members' interests and advocating for rights, they are not operational entities:

- **No Direct Contracting:** Contracts should not be awarded to unions, as they are not responsible for service delivery.
- **Representation Function:** Unions can participate in stakeholder consultations, grievance mechanisms, and collective bargaining processes to support their members.

→ Develop Alternative Livelihood Programs

To support operators who choose not to affiliate to a collectivised group or who prefer to exit the sector, develop alternative livelihood programs:

- **Retraining Opportunities:** Offer skills development programs in other sectors (e.g. logistics, retail, small business).
- **Financial Support:** Provide transitional financial assistance or access to microfinance for business start-ups.
- **Social Protection:** Link participants to existing social safety nets to ensure economic security during the transition.

→ Ensure Compliance with Regulations

Establish robust mechanisms to ensure that both individual operators and collectivised groups comply with all regulatory and contractual requirements:

- **Operators:** Licensing, affiliation to a collectivised group, vehicle maintenance, and adherence to service quality standards.
- **Collectivised Groups:** Compliance with contract conditions, enforcement of decent working conditions, and promotion of inclusivity in operations.

→ Monitor and Evaluate Network Performance

Regularly assess the performance of the reorganized network to ensure it continues to meet demand effectively:

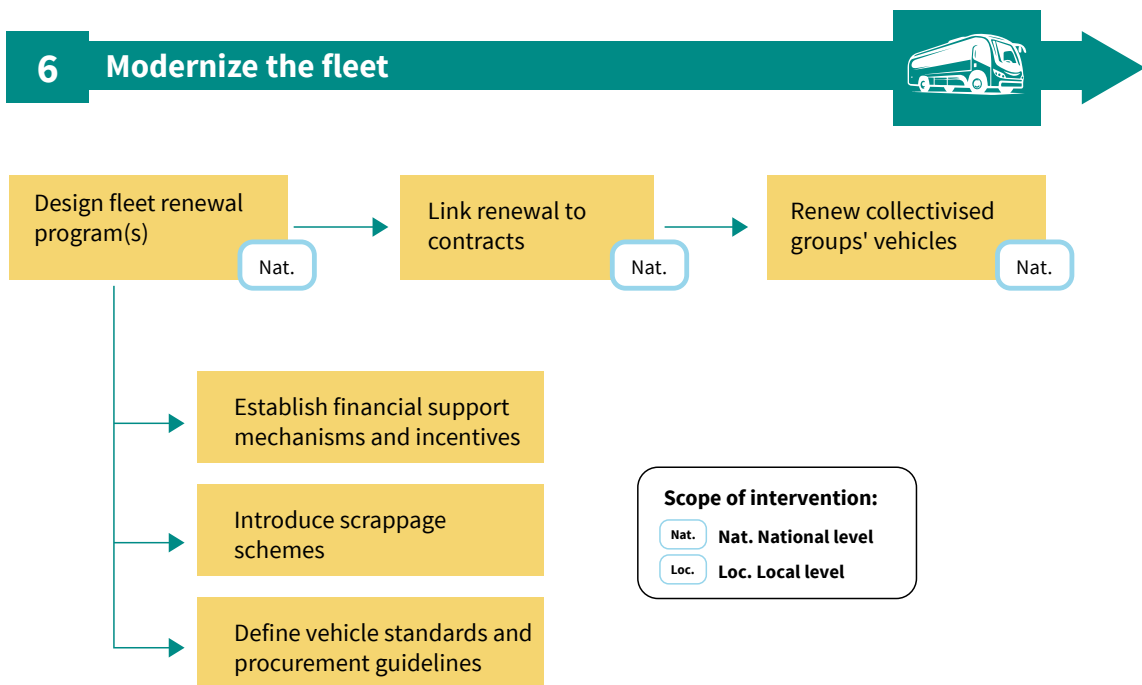
- **Key Performance Indicators (KPIs):** Monitor ridership, service frequency, reliability, safety, and customer satisfaction.
- **Adaptation:** Use evaluation findings to adjust routes, frequencies, and service coverage as needed to address emerging challenges or changes in travel patterns.

→ Renew Service Contracts

Contracts should be time-bound and renewable based on performance and risk considerations:

- **Contract Duration:** Align contract lengths with investment risks—longer contracts for significant capital investments (e.g. new fleet) to enable cost recovery; shorter contracts for lower-risk services.
- **Transparent Renewal:** Define clear criteria for renewal, including compliance with service quality standards, financial stability, and customer satisfaction.

5.6.Modernize the Fleet



→ Design Fleet Renewal Programme(s)

A successful fleet renewal programme should go beyond simply introducing new vehicles. Drawing from Dakar's experience, the programme should:

- **Establish financial support mechanisms**, such as partial government guarantees, soft loans, and scrappage allowances. Dakar's renewal programme included a 75% loan from the World Bank, complemented by an escrow fund from scrapped vehicles—an innovative risk-sharing approach .
- Include training on fleet maintenance and business management to ensure that operators can sustain the new vehicles' quality over time

→ Renew Collectivised Groups' Vehicles

Encouraging operator consolidation helps create a structure for managing fleet renewal at scale. Recommendations include:

- Define the minimum fleet size per group to qualify for renewal assistance (e.g. 5–10 vehicles per group).
- Provide technical support to ensure groups understand the financial obligations and governance structures required to manage collective vehicle ownership.
- Support groups in establishing maintenance workshops, spare parts depots, and training programs to manage their fleet efficiently.

→ Develop Financial Mechanisms

To ensure that operators can invest in new vehicles without jeopardizing their financial stability, it is essential to develop sustainable financing mechanisms tailored to the realities of paratransit operations. This step should include:

- Establishing partnerships with local and international financial institutions to offer low-interest loans or lease-to-own arrangements that align with operators' cash flow patterns.
- Designing government-backed guarantee funds to lower risks for lenders and improve operators' access to credit
- Exploring opportunities for subsidies or tax incentives to reduce the upfront cost of vehicles, including customs duty waivers or VAT reductions.
- Encouraging local vehicle assembly and maintenance capacity to make spare parts and technical support more accessible, thus reducing maintenance costs over the vehicle's lifecycle.
- Promoting pilot programs that test innovative financing models, such as pay-as-you-go vehicle leases or pooled cooperative financing structures, to assess their effectiveness in different paratransit contexts.

→ Introduce Scrappage Schemes

A scrappage programme can help ensure that old, unsafe vehicles are removed from service while enabling operators to contribute to the cost of new vehicles. Linking scrappage funds to loan guarantees (as done through Dakar's escrow mechanism) can enhance financial viability.

→ Define Vehicle Standards and Procurement Guidelines

Develop minimum technical specifications for vehicles to be eligible for renewal support, including safety, emissions, and accessibility standards. Ensure standardisation of fleet types to facilitate spare parts availability and maintenance.



Link Renewal to Regulatory Contracts

Connect fleet renewal with contracting models to ensure that new vehicles are integrated into service quality commitments, route assignments, and fare systems. This approach ensures that investments in new vehicles contribute to overall network improvements.

6

Uganda Context and Priority Actions for Paratransit Reform

Figure 10:
Minibus stage in
Kampala
(Source: Mateo
Gomez Jattin, GIZ)



6.1. Paratransit as the Dominant Form of Public Transport

Paratransit services in Ugandan urban areas play a crucial role in the country's public transportation landscape. These services have evolved over time, adapting to the growing mobility needs of the population, and have become the dominant form of public transportation. The paratransit industry provides essential transport services, particularly for low-income commuters, and contributes substantially to urban employment.

→ Types of Modes and Operations

The primary paratransit modes in Uganda include:



Minibus Taxis (Taxis):

These 14-seater minibus taxis, second-hand vehicles imported from Japan or more recently from Dubai, became prevalent in the late 20th century, filling the gap left by inadequate institutional public transport systems. The taxis were previously used for cargo activities and are easily reconditioned to carry passengers with minimal comfort and safety. Once imported, the lifespan of a vehicle is around fifteen years if it is taken good care of even though the state of the road is a major factor of premature aging.

The taxis operate on fixed routes, but with flexible schedules, waiting at designated “stages” (taxi ranks) until full before departing. In Kampala city centre, the “old taxi park”, the “new taxi park” and smaller parks are the departure and dropping stages of thousands of taxis, covering a sizable area vibrant with market, retail and resell activities. Traffic is unregulated in this area resulting in a chaotic situation.

According to the Kampala Capital City Authority (KCCA), there were 21,000 registered taxis (minibuses) in its jurisdiction in 2018, an underestimated figure which does not include the many more unregistered minibuses (Spooner et al. 2020).



Boda Bodas:

Over time and in the face of increasing traffic congestion, Uganda’s paratransit industry has expanded even more with the introduction of boda-bodas. These are considered a quicker means to weave through stand-still traffic.

The boda-bodas operate on demand and can serve any destination. They operate from stages since the 2000’s where the drivers can rest while waiting for passengers. Yet, there are no restrictions on the perimeter of operations for the drivers.

The majority of drivers have five to ten years of experience. The vehicles are used for 2 to 3 years and then sold as second hand, usually in secondary cities or villages.

As of 2024, it is estimated that there are over 600,000 boda-bodas in Kampala alone, half of them being registered only [Estimation from the Ministry of Work and Transport; collected during an interview on April 2025]. Given how expensive boda-boda services can be during evening peak hours when traffic conditions are heightened, the choice to use boda-boda services is primarily influenced by the balance between affordability, travel time and accessibility of the destination.



Network design

The taxis routes are chosen by the drivers on a rentability basis. The higher the level of passenger per kilometre the higher the revenues. High-demand corridors are favoured at the expense of sectors or routes with less demand.

As the Central Business District contains the main business and commercial activities, hotel cluster, national institutions and government administration, it attracts the majority of trips in a tidal commuting pattern. It is estimated that the daytime population of Kampala is nearly double its night-time population. The road infrastructure in the city centre, with major roads or intersections lacking in capacity to accommodate peak traffic volumes, is thus highly congested in peak hours. The congestion results in operational inefficiency for taxis and private motorised vehicles and makes the boda-boda more competitive in terms of travel time.



Business Models

The business model for taxis is the widely known “target system”, which causes drivers to work exceptionally long hours to generate enough revenue and to favour routes on high-demand corridors. The target for a 14 seater operating mainly in the city centre varies between 70 000 UGX to 80 000 UGX and for a taxi operating on longer distances it can be fixed to up to 120 000 UGX to be paid on a daily basis[The estimations for the “targets” have been shared by taxis owners in the course of an interview in April 2025]. The driver pays for the small repairs such as a flat tire and the owner takes care of the major repairs.

Taxi fares are currently determined based on the distance travelled and are periodically adjusted to reflect operational costs, profit margins, and the balance between supply and demand. Theoretically, operators set fares to cover fixed expenses, distance-based costs, and vehicle-related expenditures while ensuring a reasonable profit. In practice, fares are standardised among operators at the same taxi stage for specific origin-destination routes. When net earnings become insufficient, operators collectively discuss and agree on fare revisions before implementing changes. While there are official fares, adjustments typically occur in steps rather than fluctuating with every minor cost variation. However, once fares are increased, they very rarely decrease, even if operational costs later decline. This creates a “ratchet effect,” where fares remain at elevated levels, making downward adjustments unlikely despite changing economic conditions.

Most boda-boda riders also work on the target system. While there are owners of large motorbike fleets, there is also evidence that the pattern of ownership is shifting, as more riders are gradually able to gain access to loans to purchase their own motorcycle. The interest rates are very high and can reach 70% increasing drastically the capital cost for ownership. As for the taxis, the driver pays for the minor repairs and the owner for the major ones. There is also a growing number of riders working for ride-hailing platform companies. KAMBE, a national boda-boda driver union, has developed its own smartphone application to hire drivers.

Increasingly, Savings and Credit Cooperatives (SACCOs) are being used for financial support among drivers and operators and to leverage better interest rates for loans.



Actors and Players

The paratransit industry in Uganda involves multiple stakeholders, including institutional stakeholders such as ministries, government agencies, city authorities, and private stakeholders such as vehicle owners, drivers, unions, and associations.

The private paratransit sector in Uganda is characterised by a fragmented organisational structure. While exact numbers fluctuate, it is estimated that for the hundreds of thousands of taxis and boda-bodas operating within the capital city of Kampala alone, many operators are individual owners or part of small groups or associations managing the members and services. It is difficult to estimate the proportion of drivers of taxis and boda-bodas that are affiliated to associations or SACCOs and to which extent an association or a SACCO is representative of the sector. For example, if the Kampala Metropolitan Boda-Boda Entrepreneurs (KAMBE) is recognised as a leading association for boda-boda riders, advocating for better working conditions and financial sustainability, its real representativity is unknown.

This fragmentation leads to a lack of centralised control and results in challenges related to route management, fare regulation, and service standards. Conflicts for leadership and power are still occurring among associations.

Yet, some of the SACCOs and Unions spare no efforts to represent, to organise, to train and to support their members. In some cases, they only collectivise money for mutual help and financial support while in others they defend them in case of conflicts with the police, they offer a welfare system to their members, and they set up sensibilisation workshops for safe driving or training programs... SACCOs are structured at different levels from the parish level to the national one. SACCOs can merge at the parish level to form a division SACCO but the stages are usually managed directly by committees.

The formation of the Uganda Transport Operators Federation (UTOF) aimed to unify five minibuss taxi associations under one umbrella : KOTSA, UTRADA, UTODA, ITPA, & PITDA; to facilitate better dialogue with government authorities and presents itself as “a platform where taxi and public transport drivers air out their issues in order to bring about changes in the transport sector of Uganda”. Yet, UTOF is a spokesperson only for taxi drivers in the area of the Greater Kampala Area and not at the national level.

In Kampala, the Kampala Capital City Authority (KCCA) has regulatory oversight, but enforcement remains a challenge. The responsibilities of current institutional / inter-institutional arrangements pertaining to the governance and management of public transport in the Greater Kampala Metropolitan Area are outlined in the table below. Roles and responsibilities are split among many institutional stakeholders.

INSTITUTION	RESPONSIBILITY
Ministry of Works and Transport	Policy formulation, legislation, regulation, standard setting, strategic multi-modal transport planning, monitoring and evaluation, and general oversight of the sector.
Ministry of Land, Housing and Urban Development	Develop and maintain policy standards relating to land management, housing and urban development and responsible for administrative services relating to all identified transport reserves.
Ministry of Finance, Planning and Economic Development	Make available funding for the approved transport sector investment plan and for overseeing the Road Fund Management Board.
Uganda Police Force – Directorate of Traffic and Road Safety	Enforce road transport laws and regulations as well as record traffic accident data for annual publication.
Uganda National Roads Authority	Plan, develop and maintain the national roads network and axle load control.
Uganda Road Fund	Finance maintenance of public roads from collection and management of road user charges (RUCs) and other finances of the Fund.
National Road Safety Council	Oversee road safety work in Uganda including planning, coordination, advocacy and resource mobilisation, education, publicity, and road safety research, monitoring and evaluation.
Transport Licensing Board	Regulate the use of public transport vehicles, private omnibuses and goods transport vehicles.
National Planning Authority	Produce comprehensive and integrated development plans for the country, supporting the national vision and long-term objectives.
Kampala Capital City Authority	Plan, develop and maintain Kampala city transport infrastructure and traffic management.
Local Governments	Plan, develop and maintain transport networks under their areas of jurisdiction.

A **Paratransit Consultative Forum** was formed in 2020-2021. Independently chaired, it offers a neutral platform for discussion between private and institutional stakeholders. Its benefits are manifold. Mutual trust and engagement was built step by step in the past years. Stakeholders meet more regularly and have the opportunity to express their challenges and expectations on the private side and vision and projects on the institutional side. UTOF is a registered member of the Consultative Forum as well as KOTODA, an association of taxi owners, the Unified Medium Omnibus Drivers Operators (UMODO), KCCA, the Ministry of Works and Transport, Uganda Railways Corporation, Traffic Police.

6.2. The Urgency to Reform the Paratransit Sector

The population of Kampala urban area was estimated to approximately 4 750 000 inhabitants in 2020⁴. The projections for 2035 from Africapolis forecast a further expansion of the urban area until Mbale and Bwuike in the east. The expected population for this continuous urban area will reach 9 170 000 inhabitants. As the urban area sprawls, commuting distances and travel times increase. Simultaneously, a continuous economic growth can be hoped for. The combination of the demographic and economic growth will drive a tremendous increase in trips and motorisation rates. In a business-as-usual scenario, congestion and the mobility challenges faced currently in the Greater Kampala Area will be exacerbated. The risk of a paralysis of the mobility system in the urban area must not be underestimated as it will hinder the economic potential of the urban area and the everyday mobility of its inhabitants.



There is an urgency to prepare the future of urban mobility in the Greater Kampala area to anticipate the increase of the demand by designing and implementing a reform of the paratransit sector.

6.3. Challenges and Opportunities

The stakeholders have invested time and efforts to create a favourable environment for collaborative work. If the future reform must make the most of it, a special attention should be paid to the solicitation and involvement of the private stakeholders not to shatter the trust that has been gradually accumulated. Indeed, paratransit operators and their associations are open to discuss with institutional stakeholders but are also expecting engagement from them, concrete proposals and not hollow promises. A transparent communication and a participatory approach will be primordial to success of the reform.

The private stakeholders have an indisputable knowledge of the everyday challenges related to the operations of paratransit services and of the internal barriers to an evolution of the sector. Therefore, they have a unique capacity to contribute to the tailoring of the reform to the local context.

In spite of the fragmentation of the sector, SACCOs and unions still represent a large part of the workers of the paratransit industry and have connections with associated sectors (eg vehicle

4. [OECD/Sahel and West Africa Club (SWAC). (2024, updated). Africapolis (database): Kampala (Uganda) agglomeration, 2020 layer. Accessed April 2025]

mechanics). Their involvement is essential to pass down information to paratransit workers and sensitize them but also to collect feedback at a grassroots level. They can play a role in both a top-down and bottom-up approach. Strong leadership, transparency in management and democratic process in governance will be needed to ensure that the workforce is represented adequately.

As the number and length of trips is expected to increase, there is a need for the introduction of higher occupancy vehicles to improve the efficiency of the mobility system and its ability to meet the mobility needs in terms of passenger.km while minimising the vehicle.km and by extension congestion and emissions. Taxi drivers consider that in the current context, 29 to 35 seaters would be ideal for operating a taxi but the capital cost is too high for them.

Renewing the fleet offers the opportunity to introduce electric vehicles. The Ugandan electricity supply mix is mainly composed of renewable sources, with hydropower being the main source of energy generation and is largely in surplus⁵. In this context, comparison of the emissions of an electric bike and an equivalent fossil fuel motorcycle show a major reduction in GHG emissions. The Ministry of Energy and Mineral Development is developing a strategy for e-mobility that could play a catalytic role. Some of the boda-boda drivers are ready to switch to electric bikes. Indeed, the price of an electric bike is quite similar to the price of an equivalent fossil fuel motorcycle but the daily expenses for electricity to drive the bike is twice less than the cost of the equivalent consumed gas. Yet, the low density of swapping stations and the spare parts availability are currently major barriers to their use.

Regulatory compliance is a major challenge. Private stakeholders have the feeling that institutional stakeholders do not support in any ways the paratransit system even though it is of public utility. They resent the government for, in their opinion, not favouring business and trying only to make revenues from taxes. Regulations are perceived as restricting their operations and enforcement from the police as an impediment to their activities leading to conflicts. The lack of a structured and coordinated approach from the institutional stakeholders unwittingly undermines their legitimacy to try to reform the sector.

The institutional stakeholders regret the lack of compliance but are at the same time aware that the regulatory framework is currently not appropriate. KCCA recognises the need for a tightened coordination with Ministries and notably the Ministry of Local Government and Ministry of Finance to develop a structured and tiered public transport system where the role of paratransit would be clearly defined and the services regulated. The paratransit services expand beyond KCCA perimeter which calls for a reinforced coordination and cooperation at the metropolitan level.

6.4. Setting Priorities

Taking into account the current context and challenges and opportunities presented above, the following high-priority actions to undertake in a short term are proposed to initiate a reform of the paratransit sector :

- Spread the sense of urgency among the upper reaches of the ministries and power
- Build a task force to drive the process and engage the stakeholders
- Involve members from the Consultative Forum in Kampala in the definition of a vision for the mobility system and the definition of the role of paratransit in the mobility system

5. [Energy Generated and Maximum Demand, source Electricity Regulatory Authority, May 2024] (ERA, 2024)

- Set up Consultative Forums in secondary cities to develop collaborative work
- Clarify the institutional roles and the proper coordination of responsibilities
- Set up working and reflection groups involving members from the Consultative Forum to design and implement a licensing process to be labelled as a “Be Legal” campaign.

Once these high-priorities actions will be undertaken or ongoing, the task force should make an assessment of the barriers and new opportunities to proceed further with the reform. The proposed roadmap in this document constitute a basis that they will need to tailor to the state of affairs, mobilising the working and reflection groups.

7 Bibliography

- Arroyo-Arroyo, F., Finn, B., & van Ryneveld, P. (2025). Embracing informal transport: A new paradigm for urban mobility—Transforming challenges into opportunities with practical tools and strategies. SSATP/World Bank.
- Baffi, S., Mené, N., Lannes, J.-P., Musil, C., & Bogey, P. (2023, May). Reforming paratransit: Catalogue of practical measures. MobiliseYourCity Partnership.
- Behrens, R., Saddier, S., Pickup, L., & Durant, T., with consortium partners. (2021, June). TRANSITIONS Informal Transport Compendium Report: State of knowledge and gaps. High Volume Transport (HVT) Programme.
- Behrens, R., Salazar Ferro, P., & Golub, A. (2016). International case studies of hybrid public transport system regulation and complementarity. In R. Behrens, D. McCormick, & D. Mfinanga (Eds.), *Paratransit in African Cities: Operations, regulation and reform*. Routledge.
- Craig, D., et al. (2021). Environmental and social impact assessment of electric motorcycle taxis in Kampala, Uganda. University of Michigan.
- GIZ (Schalekamp, H., Gomez Jattin, M., & Dalkmann, H.). (2024, July). Minibus electrification in Africa: Discussion paper.
- Global Labour Institute (GLI). (2020). A trade union guide to worker-led formalisation: Informal passenger transport beyond COVID-19.
- Goodfellow, T., & Mukwaya, P. I. (2021, March). The political economy of public transport in Greater Kampala: Movers, spoilers and prospects for reform. Friedrich-Ebert-Stiftung.
- International Transport Forum (ITF). (2025). Incorporating informal transport in mobility planning: Summary and conclusions (Roundtable Report No. 199).
- Kerzhner, T. (2022). Is informal transport flexible? *Journal of Transport and Land Use*, 15(1), 671–689.
- Kerzhner, T. (2023). How are informal transport networks formed? *Cities*, 137, 104348.
- Kumar, A., Zimmerman, S., & Arroyo-Arroyo, F. (2021). Myths and realities of “informal” public transport in developing countries: Approaches for improving the sector. SSATP/World Bank.
- Lah, O., Werland, S., Kodukula, S., Eckermann, A., & Mettke, C. (2020, December). National Urban Mobility Policies & Investment Programmes: Guidelines. MobiliseYourCity Partnership.
- MobiliseYourCity (2022). Topic Guide: Paratransit contracting options.

- OECD/Sahel and West Africa Club (SWAC). (2024, updated). Africapolis (database): Kampala (Uganda) agglomeration, 2020 layer. Accessed April 2025
- Salazar Ferro, P. (2015). Paratransit: A key element in a dual system. AFD/CODATU.
- Spooner, D., et al. (2020). Kampala Bus Rapid Transit: Understanding Kampala's Paratransit Market Structure. Global Labour Institute, Manchester.
- SSATP; AFD; Transitec (Allaire, J., Grant Monney, M., Salazar Ferro, P., & Mugabo, P.). (n.d.). Regulation of buses and minibuses in Kigali, Rwanda: Private sector participation as catalysts to reform.
- Transitec (for Communauté Urbaine de Yaoundé). (2021, December). Feuille de route pour la réforme du transport artisanal à Yaoundé.
- Transitec; BEC La Routière. (2021, July). Opérationnalisation des propositions pour le transport artisanal à Yaoundé (atelier slides).
- Volvo Research and Educational Foundations (VREF); International Transport Workers' Federation (ITF); Global Labour Institute (GLI). (2025, January). Understanding informal transport in Africa: Labour impact assessments as tools to improve workers' conditions. VREF.
- Western Cape Government – Mobility Department. (2022, February). Blue Dot Taxi Pilot Project: Prospectus.

8 Appendix

List of Experts Interviewed

No.	Name	Relevant Position/Role	Organisation/ Affiliation
1	Nico McLachlan	Paratransit Reform Specialist	Organisation Development Africa (ODA), Advisory Board Member of the University of Cape Town Centre for Transport Studies
2	Roger Behrens	Paratransit Reform Researcher	Director of the University of Cape Town Centre for Transport Studies
3	Herrie Schalekamp	Paratransit Reform Researcher	Professor, University of Cape Town Centre for Transport Studies
4	Simon Saddier	Senior Urban Mobility Specialist/ Urban Mobility Pillar Co-Lead on the SSATP program.	World Bank, Formerly with Transitec Consulting Engineers
5	Farida Moawad	Urban Mobility & Sustainable Development Expert	Transport for Cairo previous roles at UITP, GIZ and UN-Habitat (United Nations Human Settlements Programme)
6	Mirko Goletz	Researcher	Institute of Transport Research (Berlin)



Paratransit Reform Specialist | Nico McLACHLAN

Nico McLachlan is a leading public transport and paratransit reform specialist with 30 -years' experience working in Africa. Nico was instrumental in establishing the paratransit – based BRT systems in Johannesburg and Cape Town and has worked on urban mobility improvement projects in Nairobi, Mombasa, Accra, Cape Town, Windhoek, Polokwane, Johannesburg, Kampala and Kigali.

Over the period 2017 to 2019 he designed and implemented the highly successful Minibus Taxi operations improvement program in Mitchells Plain, Cape Town and in 2020 he established the Paratransit Consultative Forum in Kampala (Uganda) which has resulted in the formation of the Ugandan Taxi Operators Federation (UTOF).

Nico serves on the Advisory Board of the University of Cape Town Centre for Transport Studies and is a contributing author to the book Paratransit in African Cities – Operations, Regulation & Reform edited by Roger Behrens, David Mfinanga & Dorothy McCormick. In June 2021 he delivered the keynote address at the Southern African Transport Conference entitled “The paratransit sector as a partner in change”. He is the editor of the Organisation Development Africa (ODA) blog known for providing insight into learnings from paratransit reform projects in Sub – Saharan African cities. He serves as a Senior Consultant with ODA.

**Paratransit Reform Researcher | Roger BEHRENS**

Prof. Roger Behrens is a Professor in the University of Cape Town's Department of Civil Engineering. He is Director of the Centre for Transport Studies. He graduated with a Master Degree in City and Regional Planning from UCT in 1991, and with a PhD degree in 2002. His current research activities relate to: the regulation and improvement of informal public transport services, and their integration with scheduled formal services; analysis of the dynamics of changing travel behaviour, and the implications this has for the management of travel demand; and the identification of urban form preconditions for effective and viable public transport networks.

**Paratransit Reform Researcher | Herrie SCHALEKAMP**

Dr Herrie Schalekamp is a member of the academic staff at the Centre for Transport Studies at the University of Cape Town. His research and teaching at the Centre focus on public transport reform in Sub-Saharan African cities, particularly on how the minibus operations providing mass transport in these cities might be supported and restructured to better respond to urban mobility needs. His research pursuits, often in collaboration with practitioners,

include explorations of the business aspirations of minibus operators, alternative mechanisms through which public agencies can build positive relationships with minibus operators, and the potential of new technologies to improve the reach and quality of minibus services. Building on his research, Herrie has been closely involved in a municipally-funded professional development programme for minibus operators in Cape Town, as well as in efforts to build public sector capacity in the public transport arena in cities in and beyond South Africa.

**Senior Urban Mobility Specialist | Simon SADDIER**

Simon Saddier is an urban planner and international affairs specialist by training, with work experience in various regions of the African continent (including South Africa, Botswana, Kenya, Uganda, Tunisia, Morocco, and Ghana). Mr. Saddier also has experience in the field of participatory processes, institutional development and governance, mobility planning, data collection analysis, capacity building, and the facilitation of workshops

and training activities. He has ever worked on a large paratransit improvement program in Uganda. His work focuses on the paratransit sector, a subject on which he has presented and published award-winning papers at international conferences. Currently, he is a Senior Urban Transport Specialist with the World Bank and serves as Urban Mobility Pillar Co-Lead on the SSATP program.



Urban Mobility & Sustainable Development Expert | Farida MOAWAD

Farida Moawad, based in Egypt, is currently a Consultant at Transport for Cairo. Farida Moawad brings experience from previous roles at UITP, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and UN-Habitat (United Nations Human Settlements Programme). Farida Moawad holds a 2013 - 2015 Master of Arts (M.A.) in International Development Studies at The Philipp University of Marburg. With a robust skill set that includes Sustainable

Development, Climate Change Mitigation, Energy Efficiency, Urban Mobility, Sustainable Transport and more. She currently serves as the Research Lead at Transport for Cairo.



Researcher, Institute of Transport Research (Berlin) | Mirko GOLETZ

Mirko Goletz is researcher at the Institute of Transport Research, based at the DLR in Berlin, Germany. Having a background in Economics, he holds a Master of Science from Free University Berlin. He has spent more than 10 years in transport research and currently leads a team on new mobility concepts and automation at German Aerospace Center (DLR). His main research focusses on the impacts of platform based mobility services on urban

mobility, accessibility analysis and the interlinkage of new and existing modes. Furthermore, he has extensively researched the usage of global and open data sources and ways to combine these data to appraise mobility on a global scale. Results from his work has been published in numerous scientific articles and book chapters and he is an active member in international transportation working groups and networks.

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