INSTITUTIONS IN MOTION

LEARNING FROM THE EXPERIENCE OF URBAN MOBILITY ORGANIZING AUTHORITIES IN SUB-SAHARAN AFRICA

FATIMA ARROYO-ARROYO • PHILIP VAN RYNEVELD • BRENDAN FINN

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SSATP
Africa Transport Policy Program

MOLO
Mobility & Logistics

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African Association of Urban
Mobility Authorities

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FOREWORD

As we stand at the threshold of a new era in the development of our vibrant African cities, it is my distinct honor to present this comprehensive report on urban mobility organizing authorities in Africa. This landmark publication, prepared by the Africa Transport Policy Program (SSATP) in partnership with the African Association of Urban Mobility Authorities (AUMA), underscores the pivotal role that urban mobility organizing authorities play in shaping the future of our cities.

Africa is a continent on the move. With unprecedented urbanization rates, our cities are experiencing rapid growth and transformation. According to the World Bank, Africa's urban population, which stood at almost 500 million in 2017, is set to double over the next few years, reaching 1 billion by 2040. The challenges and opportunities of this urban revolution are immense, and they necessitate innovative approaches to urban mobility. It is in this context that the AUMA emerges as a beacon of hope, collaboration, and forward-thinking leadership.

To better understand the path of urbanization and support the development of our cities, we must remember that they are built not just with bricks and mortar but with the aspirations, dreams, and well-being of our people. The success of our cities depends on the foresight, dedication, and resilience of urban mobility organizing authorities, which play a pivotal role in the development of robust public transport networks serving the needs of their citizens. These entities have the power to improve urban livability, reduce congestion, minimize pollution, and enhance the overall quality of life for the residents of our cities. Moreover, they are instrumental in fostering economic growth, reducing inequality, and contributing to broader sustainable development goals.

The AUMA, as the apex body for urban mobility authorities across our continent, is committed to driving positive change in the way we move and connect within our cities. Our mission is to facilitate knowledge sharing, encourage best practices, and empower our members to shape urban transport systems that are resilient, inclusive, and responsive to the unique challenges faced by Africa.

This report is a testament to the dedication and ingenuity of the professionals who tirelessly work to make our cities better places to live, work, and play. It is a valuable resource for all stakeholders, from policy makers and urban planners to private sector partners and civil society organizations. It offers a strategic road map for the future, highlighting the importance of well-coordinated, sustainable urban transport systems as a linchpin for African cities' prosperity.

We must embrace a holistic vision for the future of our cities, one where mobility is seamless, efficient, and environmentally responsible. This report reinforces the imperative of urban mobility organizing authorities in driving this transformative agenda.

Let us, as leaders, decision-makers, and stakeholders, join hands to support the objectives outlined in this report, empowering urban mobility organizing authorities to be the catalysts of positive change in our urban landscapes. Together, we can turn our cities into engines of progress and prosperity, where every citizen has an equal opportunity to thrive.

I extend my deepest appreciation to the SSATP for its unwavering commitment to this cause, and I am confident that this report will serve as a catalyst for transformative action.

Sincerely,
Dr. Thierno Birahim AW
Managing Director of CETUD
President of AUMA

PREFACE

Over the last decades, Africa has experienced unprecedented urbanization, leading to increased pressure on transportation systems. As cities grow, the complexity of coordinating the various institutions at play increases. This has made it imperative to establish effective and efficient urban mobility governance frameworks that can address the challenges faced by fast-growing African urban areas.

To cope with this mega trend, Africa has pursued the creation of urban mobility authorities over the past few years. These authorities are uniquely positioned to play a pivotal role in integrating public transportation networks, coordinating operations, and promoting smart, sustainable, and inclusive urban mobility services. The first of its kind is the Dakar Urban Transport Authority (CETUD), established back in 1998. Since then, many other authorities have emerged, reflecting the growing recognition of the importance of these institutions in addressing the transportation challenges faced by African cities.

In this regard, this report is a valuable resource as it documents the practical experiences of eight of these urban mobility authorities across cities in Africa. While some of the experiences have been more successful than others, all contain useful lessons from which to learn. The report provides an in-depth analysis of each authority over time, examining their successes, challenges, and lessons learned. By studying these authorities, the report identifies valuable insights and good practices that can be applied by cities facing similar urban mobility challenges.

It is our hope that the experiences and lessons learned from these authorities will serve as a guide and inspiration for other cities in Africa and beyond. The World Bank has been at the forefront of supporting the development of many of these institutions across the African continent. Research has demonstrated that well-functioning urban mobility authorities are the foundation upon which to build competitive, sustainable, and resilient African cities. Through the provision of technical expertise and platforms for knowledge exchange, the Africa Transport Policy Program (SSATP) has been working closely with governments, local authorities, and relevant stakeholders to strengthen the institutional framework for urban transport planning and management.

I encourage all readers to delve into the report and explore the wealth of knowledge it includes. May it inspire and guide cities across Africa in their journey towards building competitive, green, inclusive, and resilient urban transport systems for all.

Ibou Diouf
Practice Manager, Transport
West and Central Africa
World Bank

ACRONYMS

AMT	Agência Metropolitana de Transporte de Maputo
BRT	bus rapid transit
CETUD	Conseil Exécutif des Transports Urbains de Dakar
CoCT	City of Cape Town (municipality)
CoCT (UM)	City of Cape Town Urban Mobility Department
CUT	Centre of Urban Transport (Accra)
DART	Dar Rapid Transit
DUTA	Dar es Salaam Urban Transport Authority
FLM	first/last mile
GAPTE	Greater Accra Public Transport Executive
GDP	gross domestic product
JICA	Japan International Cooperation Agency
LAMATA	Lagos Metropolitan Area Transport Authority
LASG	Lagos State government
LASTMA	Lagos State Traffic Management Authority
LATRA	Land Transport Regulatory Authority (Dar es Salaam)
LSMT	Lagos State Ministry of Transport
MMDAs	metropolitan, municipal, and district assemblies (Ghana)
MRTS	mass rapid transit system
NaMATA	Nairobi Metropolitan Transport Authority
NURTW	National Union of Road Transport Workers
NGO	nongovernmental organization
PO-RALG	President's Office, Regional Administration and Local Government (Senegal)
PT	public transport
UTAC	Urban Transport Advisory Committee (Accra)
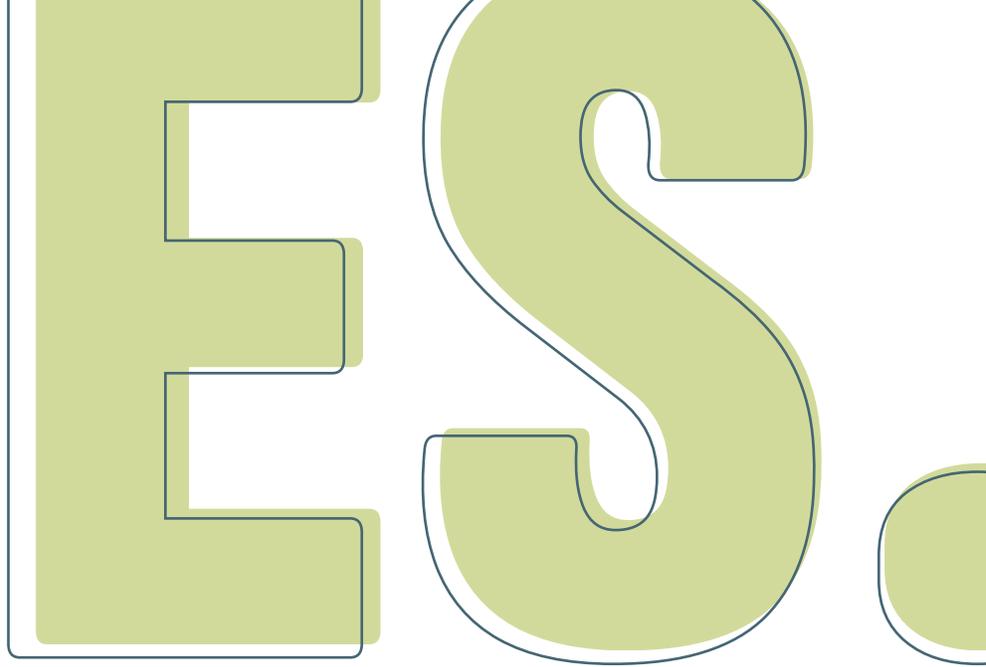
EXECUTIVE SUMMARY

Introduction

In 1960, the continental population of Africa was under 300 million people; it is now over 1.3 billion people, and by 2050 it is expected to reach 2.5 billion people—an eightfold increase. Much of this growth is concentrated in cities. Metropoles in Africa are growing faster than those elsewhere and some African cities will soon be among the largest in the world. However, they have significantly lower GDP per capita than other regions.

Crucial to the success of any city is the ability to move around and access the opportunities it has to offer. Yet mobility in many Sub-Saharan African cities is poor. African cities face tremendous challenges in responding to the mobility needs of their growing populations yet have limited financial resources to do so. Underdeveloped public transport networks compromise accessibility across metropolitan spaces, discriminating particularly against the poor.

In response, among other initiatives, some countries and cities in Africa have sought to improve the institutional arrangements through which these challenges can be addressed. This paper documents and reflects on these efforts, combining a theoretical framework that identifies important institutional requirements with evidence from the case studies of seven Sub-Saharan African cities: Accra, Cape Town, Dakar, Dar es Salaam, Lagos, Maputo, and Nairobi.

The paper builds on the publication *Institutional Labyrinth* by Kumar and Agarwal (2013), but with a focus on Sub-Saharan Africa. In doing so, we argue that lead institutions in the region and in similar contexts need to broaden their focus from formal public transport to the wider demands of organizing all mobility at a metropolitan scale. Most mobility in Africa, including public transport, will for the foreseeable future occur within mixed traffic, so addressing this is crucial. Furthermore, these institutions must work toward improving the informal transit sector, which remains overwhelmingly dominant despite efforts to replace it with formal modes.

Why lead institutions?

Making the mobility system work and managing competition within it requires a clear point of public authority. This point of authority may not directly control all the variables that contribute to enhancing mobility and access, but it should wield sufficient influence over a critical mass of relevant factors. The public authority that organizes the whole system is often referred as a "lead institution" or an "organizing authority." These terms emphasize the need to overcome fragmentation in the governance of the transport sector by establishing one institution with clear responsibility for addressing mobility needs on a citywide or metropolitan basis, able to marshal the activities of others around an integrated overarching strategy and plan.

What are the key dimensions of urban mobility lead institutions?

We analyze urban mobility lead institutions around three key dimensions: scope, authority, and capacity. While this framework can be applied universally, we approach the discussion from a Sub-Saharan African perspective.

Scope

For an institution to be successful, it must have a wide enough scope of responsibilities to design and implement effective strategies. It need not necessarily have full and direct authority over all these responsibilities, but it must be able to exercise sufficient influence to determine what happens across the key factors upon which mobility depends.

A lead institution's scope of responsibility should extend over most, if not all, of the city's functional area—defined by the extent of intense daily movement in the urban area. This is because acting on one part of any system tends to have knock-on effects throughout the system. The ultimate objective is access, which is a function of both mobility and how land is used. Institutions responsible for mobility must therefore work very closely with those responsible for land use.

In understanding institutions that manage mobility, we draw a distinction between (i) the management of urban transport including public, private, and nonmotorized modes; (ii) the integrated management of a multimodal public transport system; and (iii) the management of an individual public transport mode.

In some cities, organizations only have responsibility over the formal public transport system. This is insufficient in Sub-Saharan Africa. First, informal transport dominates public transport in the region. Second, the effectiveness of most public transport depends on managing competition for road space with general traffic. Third, with the proliferation of sedan and motorbike taxis, the distinction between public and private mobility is difficult to draw.

Lead institutions in Sub-Saharan Africa must therefore have decisive influence over both public and private mobility, at least along the major mobility routes. There may be benefit in a dedicated organization taking responsibility for a particular mode, such as a bus rapid transit system, but this is not the same as a lead institution responsible for mobility and access, which requires a much wider span of influence.

Regarding land use, lead transport institutions should be able to exercise considerable influence at both the citywide scale and the more local scale. Land use at a citywide scale determines the location of origins and destinations, and therefore the underlying patterns of transport demand. But local-scale land use also affects access through the interface between the mobility system and activity along the street, including through parking, traffic management, pedestrian safety, and the general attractiveness of destinations. There are dangers in placing ultimate responsibility for land use in the hands of an organization that perceives itself as primarily responsible for mobility, since this can lead to streets being dominated by vehicles at the expense of human activity along the street. However, the critical relationship between access, mobility, and local-level land use must be understood and addressed institutionally. Often influence at a local scale depends on smaller, local jurisdictions—in which case, lead institutions need close relationships with them and the ability to exercise joint decision-making on some issues.

There is often a tendency in the transport sector to focus on infrastructure and logistics as the keys for addressing mobility. However, much of the task lies in managing relationships and behavior. Institutions created to manage mobility must therefore be able to ensure that the sector is well regulated—including the design, implementation, and enforcement of regulations. This includes regulation of standards affecting issues such as safety and labor conditions, and regulation of the market, which is about mechanisms to enable supply and demand to be optimally matched.

Authority

Optimizing mobility is intimately connected to a range of other functions that lie at the heart of city management. It also involves marshaling public resources and mediating between competing interests in a way that is inevitably political. Thus, in building institutions for managing mobility, close attention must be paid to the relationship with broader city governance.

City governance faces multiple challenges in Sub-Saharan Africa. The scale, speed of growth, and levels of poverty and inequality make the task of urban management in this region enormous. Yet the institutions currently required to do this tend to be weak.

How institutions responsible for mobility are best structured and built will depend on the context. While a lead institution for mobility needs to be driven by the pursuit of optimal technical solutions, it cannot escape being significantly political, and therefore it will always be dependent

on political power structures. It is inevitably part of city governance, however that is configured—be it with local political authority or national political authority, or a combination of the two. Insulating an institution for mobility from wider city governance is thus not an appropriate objective; to operate most effectively, it must be positioned as part of, or in partnership with, the political power structures.

How legal authority is configured is important, but for institutions to exert their authority successfully they also require effective leaders. A characteristic of good leadership is good judgment, combined with an ability to motivate others to follow a chosen direction. Judgment is enhanced by exposure to good information and sound argument, although many other factors, such as experience and motivation, play a critical role, too. Leadership is required at both the political and administrative levels.

Capacity

Three main elements determine the ability to implement: (i) human resources, (ii) financial resources, and (iii) administrative procedures.

A successful institution will require a wide range of skilled human resources. Getting the right skills begins by having a coherent and clearly articulated strategy for mobility so that the right skill sets are identified. It also depends on the ability to offer employment conditions able to attract such skills.

Having adequate financial resources is a critical driver of success. It determines, first, the ability to attract the right human resources to the institution, and second, the power of the institution to make things happen.

Important aspects include the distinction between the resources required to run the institution and the resources required to implement and run projects, and, especially in relation to the latter, the capital required to build projects and the ongoing stream of income required to run them. It is often simpler to source capital funding than operating revenue, yet over the long term, sufficient operating revenue is ultimately a fundamental driver of successful services.

A further consideration is whether resources are generated through an ongoing, dedicated revenue source—optimally one over which the lead institution has control—or a grant from a different entity, such as the national government. The reliability and predictability of financial resources is critical.

A lead institution needs to be able to exercise sufficient control or influence over all expenditure on mobility that takes place within its area of jurisdiction, even if the institution does not have direct control over such expenditure. A good mechanism is for the lead institution to effectively be the planning authority for mobility in the area, drawing up plans that other institutions must support when designing and implementing their own projects. This falls short of the power to prioritize resources, which would be even better, but it does ensure that where resources are spent, they conform with a coherent overall strategy and plan.

Institutions located within the public sector tend to be subject to a range of administrative rules and procedures that can affect their efficiency and effectiveness. One motivation for establishing

a lead institution somewhat independent of government administration is that it may offer scope for tailoring such rules to better suit the needs of the organization. However, this is not always the case, and it must be considered against the loss of authority that usually comes with that independence.

Successful institutions build legitimacy and a strong institutional culture that can persist independently of any single factor, making it easier to marshal resources and influence decisions. Good internal and public communication is an important contributor to establishing a lead institution's internal institutional culture and external legitimacy. But ultimately these are built over time through success. Choosing achievable objectives that build a record of successes is of great importance.

Establishing lead institutions

While the formal establishment of a new lead institution for mobility is a distinct event, building it is an incremental process, requiring the emergence of sufficient consensus around the need for such an institution as well as its development and strengthening once established. Most of the well-regarded lead transport institutions globally have had many decades to reach their current level of development.

In this paper, we analyze a set of already formally established institutions in various Sub-Saharan African cities and seek to give guidance on what is needed for greater success, recognizing that every city is different; what works well in one may not be feasible in another. Where such institutions have not been established, the focus should be on strengthening coordination among role players to ensure a more effective, systemic approach while working toward better institutional arrangements guided by the insights presented here.

What is the African experience in the establishment and enhancement of lead institutions?

In recent decades, several African cities have developed innovative institutional arrangements aimed at organizing and driving the transport sector. In this paper, we assess seven lead institutions in Sub-Saharan Africa using the framework outlined above. Each institution is different: some have built a long track record—although, of these, some have been less successful than others; some are very new table ES.1).

Table ES.1 Key Features of the Seven Case Studies (**Part I**)

City	Institution	Year established and maturity	Scope of responsibilities		
			Public transport	**Overall mobility**	**Land use**
Accra, Ghana	GAPTE	2014; has not consolidated as intended	Operator for limited BRT; coordination function could not be implemented	No	No
Cape Town, South Africa	City of Cape Town (Urban Mobility Dept.)	2000; mature and stable, but some key urban PT functions yet to be devolved	Planning authority for all urban PT; direct responsibility for BRT; works with paratransit	Yes, incl. roads, traffic management; some national/provincial roads in area	Full authority over land use metrowide and locally
Dakar, Senegal	CETUD	1997; mature and stable; initial scope quite limited, but now expanding	Regulation; recapitalization of paratransit and bus fleet; now leading BRT project	Responsibility for initiatives to manage traffic management and congestion and emissions	No
Dar es Salaam, Tanzania	DART Agency	2007; somewhat mature but vulnerable	BRT only; other modes licensed by national regulatory authority (LATRA)	Mandate includes some traffic responsibilities, but activity limited	Very limited mandate to support TOD on BRT routes
Lagos, Nigeria	LAMATA	2003; mature and stable; sound reputation and expanding scope	Key authority for urban PT, including BRT, bus, urban rail, ferries; works with paratransit	Maintenance and management of declared road network, but traffic managed by the state traffic mgmt. agency (LASTMA)	No, but other state-level institutions have some responsibility with local govt.
Maputo, Mozambique	AMT	2018; new and not yet mature; potentially vulnerable	Emerging as key authority for urban PT; bus, BRT, integrated fare system; works with paratransit	Some transport planning responsibilities	No
Nairobi, Kenya	NaMATA	2017; new and not yet mature, but fairly secure legal and financial base	Responsible for implementing mass rapid transport system; currently BRT and some rail	Mandate includes improving overall traffic flow and parking, but no activities yet	Mandate includes integration of transport and land-use planning, but no activities yet

Table ES.1 Key Features of the Seven Case Studies (**Part II**)

City	Authority		Capacity to implement	
	Legal basis	**Relationship to governments**	**Human resources**	**Financial resources**
Accra, Ghana	Company, limited by guarantee	Accountable to all local govts. in Greater Accra through MOUs	Limited personnel; competitive merit-based recruitment and salaries, set by GAPTE	Insecure; fares, ad hoc grants; route permit fees from local govts. not forthcoming
Cape Town, South Africa	Constitution gives transport authority to municipality; details provided in National Land Transport Act	Urban Mobility Department is a department of the metropolitan govt.	Municipal employees, but competitive merit-based recruitment and salaries	Secure; fares, own tax revenues, grants from national govt.
Dakar, Senegal	National legislation and official decrees	Partnership between national and local govts., users and operators	Competitive merit-based recruitment and salaries, set by CETUD	Somewhat insecure; recapitalization through revolving fund; national grants; IDA aid
Dar es Salaam, Tanzania	Govt. entity established by notice under Executive Agencies Act	Reports to Dept. of Regional and Local Govt. in President's Office (PO-RALG)	Merit-based recruitment	Vulnerable; fares and national grants
Lagos, Nigeria	Semiautonomous state govt. agency created by LAMATA Act, 2003, strengthened in 2007	Accountable to Lagos State govt.; coordinates with local govts.	Competitive merit-based recruitment and salaries, set by LAMATA	Somewhat insecure; fares, fees and road taxes authorized by state governor; IBRD loans
Maputo, Mozambique	Semiautonomous agency established by central govt. decree	Accountable to national govt.	Merit-based recruitment; at least a third of staff employed by NGOs and development orgs.	Vulnerable; national grants; envisage charge for fare collection; concession fees; donations
Nairobi, Kenya	State corporation established by presidential executive order	Accountable to council of national transport & finance ministers + 5 county governors	Merit-based recruitment; public sector salaries reasonable	Partly vulnerable; national govt. pays salaries; mandate to develop revenues; donor funding

Note: AMT = Agência Metropolitana de Transporte de Maputo;
CETUD = Conseil Exécutif des Transports Urbains Durable;
GAPTE = Greater Accra Public Transport Executive;
IDA = International Development Association;
LAMATA = Lagos Metropolitan Area Transport Authority;
NaMATA = Nairobi Metropolitan Transport Authority;
PT = public transport;

BRT = bus rapid transit;
DART = Dar Rapid Transit Agency;
IBRD = International Bank for Reconstruction and Development;
MOU = memorandum of understanding;
LASTMA = Lagos State Traffic Management Authority;
NGO = nongovernmental organization;
TOD = transit-oriented development.

Key reflections on the Sub-Saharan African experience with lead transport institutions

The findings of our study align well with the factors identified in *Institutional Labyrinth* as underpinning the sustainability and effectiveness of lead transport institutions globally:

- Their ability to deliver public value
- The political support they enjoy and their legal authority
- Internal capacity, through personnel, and secure sources of finance for their own operations
- Decision-making authority over financial resources for investment and operating subsidies

However, some factors of particular relevance to Sub-Saharan Africa warrant further reflection:

- Establishing authority at a metropolitan scale
- The benefits and risks of major projects
- Regulation and relationships in the context of limited state power
- Working with informal transport

Establishing authority at a metropolitan scale

In Sub-Saharan Africa, lead transport institutions tend to be one of the first institutions through which some form of governance is established at a metropolitan scale.

Many Sub-Saharan African countries remain significantly rural, with economies still based on primary sectors such as agriculture and mining. Government services are thus structured mainly toward responding to this; the awareness of a need for metropolitan-wide governance institutions tends to be quite new.

Many countries do have a program of decentralization aimed at strengthening local governments. However, these programs tend to be rooted in the legacy economic geography, with a conception of local government that does not distinguish sufficiently between small towns or rural settlements and big cities. Local government systems are often understood as mechanisms for "intimate" governance in local communities, not designed to manage complex and rapidly growing agglomerations of millions of people. And they are often oriented toward social services such as primary health and education rather than the built environment–related services that become more crucial as cities grow.

Deteriorating access caused by congestion and increased travel distances is often one of the earliest and clearest crises to emerge in Sub-Saharan Africa's large, rapidly growing cities. Initial responses usually focus on road-building schemes, but while these may be necessary, it soon becomes obvious that what is needed is a more systemic approach that understands movement within the city as an integrated whole. This results in the establishment of institutions that engage at a metropolitan scale with mobility, and may broaden to encompass other functions.

All seven case study cities manifest this pattern except for Lagos and Cape Town. In Nairobi, while there has long been discussion on the need for metropolitan governance institutions, only

the Nairobi Metropolitan Area Transport Authority (NaMATA) has been established. Its terms of reference enable it to extend its scope beyond mobility; if it manages its initial agenda well, its scope is likely to grow.

Effecting significant change in patterns of access and mobility in Sub-Saharan African cities is a substantial undertaking, requiring a degree of power and authority that usually depends on national government support. On the other hand, a metropolitan-level authority undertakes tasks that require a strong sensitivity to local issues, including how urban space is managed at a very local level. Thus, the authority also requires support from local government.

Successful metropolitan transport institutions therefore generally require active support from both national and local government. Over time, they are likely to expand their scope or lead to the exercise of further authority through other mechanisms at this crucial scale of urban governance.

The benefits and risks of major projects

Most of the lead institutions reviewed established their profile through large projects. Large, capital-rich projects provide a mechanism for lead institutions to build authority and legitimacy; they mobilize resources, and an urgency to deliver. These projects often have sound logic; high-capacity trunk lines based on infrastructure that gives priority to public transport are highly likely to form part of the access solution in large urban areas.

On the other hand, large projects are complex. They have many different dimensions, are subject to a wide range of pressures, and, if they fail, can have significant adverse impact that undermines the legitimacy of incipient lead transport institutions. Bus rapid transit (BRT) projects are particularly complex. Generally, in time, well-conceived BRT projects prove a significant asset to mobility in a city, but the journey can be painful. In both Accra and Dar es Salaam, the institutions—the Greater Accra Public Transport Executive (GAPTE) and Dar Rapid Transit (DART) Agency, respectively—have thus far struggled to realize the initial BRT vision. BRT services have functioned somewhat poorly at times in Lagos. And in Cape Town, operating deficits have been higher than envisaged. There is also a danger that establishing a lead institution around a single major project or mode can tie the organizing authority into promoting a single element of the system at the expense of the whole system.

It is therefore critical that such projects are well designed, supported, and financed, and that the risks in establishing a new institution around a major project such as BRT are understood and managed. Other options should be considered.

Dakar's lead institution—Conseil Exécutif des Transport Urbains Durable (CETUD)—represents an important alternative to an infrastructure-heavy, large project approach. It has worked with paratransit operators over two decades to recapitalize their vehicles, and improve their organization and skills, and it is only now embarking on a BRT project. This has given CETUD time to establish itself and its legitimacy and created a much better context for involving paratransit operators in the new BRT service.

Regulation and relationships in the context of limited state power

Institutions in Sub-Saharan Africa generally work within the context of limited state power. They must design their strategies creatively around this and other realities rather than seek to replicate approaches from other contexts without sufficient thought.

Limited state power means that the state sector has far fewer financial and other resources at its disposal. But the absence of state-provided public transport and other services does not rule out these services altogether; instead, private operators fill the gap.

This system of private operators works according to its own, unofficial rules in patterns that have developed endogenously between operator and user. Thus, while some major, infrastructure-heavy projects may be appropriate where resources permit, the key to success lies in improving how the existing system works. Moreover, limited financial resources means that these improvements cannot rely on a new, ongoing stream of subsidies. Rather, they must result in greater efficiencies that ideally benefit all operators, drivers, and users.

This implies a strong emphasis on changing behavior and relationships—or "regulation," broadly understood. But a relatively weak state cannot simply impose new rules; it must work with key stakeholders to demonstrate better practices and incentivize change to establish better patterns of operator and user behavior.

The starting point for addressing these issues is to have a good understanding of the problems. This requires good data, and methods for turning such data into good information that informs good strategies. Strategies for improving mobility will differ in Sub-Saharan African cities in some fundamental ways from those in more industrialized countries; it is crucial to have the right data to develop locally appropriate strategies. Significant advances in data and communication technology have already transformed what is possible in this area, and there are numerous examples of innovative use of technology in African cities. Modern data techniques also make new practices possible in regulation and enforcement.

Organizing authorities need to be excellent at communication. While a variety of communication channels need to be used, mobile phones offer significant new scope for communicating with users on a collective or individual basis. Creatively used, mobile phones could be an important means through which organizing authorities can better understand and partner users.

Working with informal transport

Working in the current reality means working with informal transport, which accounts for most mobility in Sub-Saharan African cities. While a lead transport institution may aim to implement a range of initiatives, it must locate the paratransit sector at the heart of its work.

Once the informal public transit sector is engaged, and new approaches are developed to work with it, the dichotomy between formal and informal transit becomes less clear. Instead, there is a continuum of institutional forms based on changing modalities of operator organization. Lead institutions need to understand this continuum and work with the sector to bring about change. This is likely to require an incremental approach.

Key conclusions

Some important implications for lead institutions in Sub-Saharan Africa are evident from the case studies:

- They must be well positioned in relationship to both local and national government.
- They will hopefully result in metropolitan governance arrangements being established for a wider set of relevant functions, especially around land use and the location of bulk services.
- They must enable a good balance between addressing relevant technical and political issues.
- They must establish an appropriate balance between large infrastructure projects and more systemic, incremental change, ensuring that all contribute to a multimodal approach.
- They must prioritize the needs of the user and place existing services—which are predominately informal services—at the heart of its strategies.
- They must have a scope of responsibility that enables it to engage with all key factors relevant to its strategies, including the functioning of general traffic and the core road network, in which current services largely operate.
- They must pay close attention to practical approaches to regulation—in the sense of finding ways of better matching supply and demand—in an environment where current services are largely unregulated.
- They must pay close attention to understanding the mobility environment through good data and information systems and develop effective strategies on this basis.
- They must be highly skilled at communicating and engaging with all key stakeholders to facilitate institutional alignment and positive change.

Finally, as already emphasized, it must be understood that the development of lead transport institutions takes time. The most successful lead institutions have developed over many decades. All have made errors and suffered setbacks in the process. Hopefully, as new lead transport institutions emerge in Sub-Saharan Africa, these can be minimized.
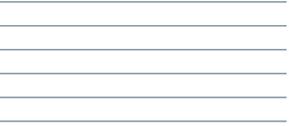
INTRODUCTION

1.1. Purpose of the report

Cities thrive because of the many opportunities they offer in a small area, yet the benefits of agglomeration will not be realized if the opportunities cannot be accessed. Mobility is fundamental in enabling access in a city and is therefore one of the most important functions of city management. Access also depends on how land is used, including the location of origins and destinations.

Urban mobility is a complex system requiring the effective functioning of its individual parts as well as of the system overall. Private actors working for their own gain have an important role to play. But successful urban mobility also needs a public sector that can ensure that appropriate public infrastructure and public transport are provided, regulate the behavior of the various actors, and enhance the efficiency of the system in ways that private actors working in their own interests cannot.
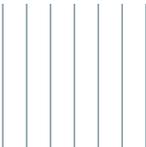
The challenge is exacerbated in developing countries, and in Sub-Saharan Africa in particular, for multiple reasons, including rapid demographic and motorization growth.

Unfortunately, in many cities around the world the public sector either fails to take adequate responsibility for improving mobility, or responsibility is fragmented among different public sector institutions. Sub-Saharan Africa is no exception. Often this is primarily not because of an absence of political will or even a lack of resources, but because the institutional arrangements through which the public sector seeks to act are inadequate.

There is an emerging consensus around the need for a "lead institution" or "organizing authority" able to drive the management of mobility in a strategic way at a citywide or metropolitan scale, organizing the multiple subsystems collectively to enhance access. Having such an institution is not a prerequisite for all transport improvements; advances can be made without them. However, these advances are more likely to be disjointed and achieve less with available resources than if they were part of a wider, more systemic approach. In Sub-Saharan Africa, there have been some successes in creating such institutions, but progress has mostly been quite limited.

A useful informant of the debate within the transport sector is the publication *Institutional Labyrinth* by Ajay Kumar and O. P. Agarwal (2013), which seeks to develop a global understanding of the scope and functions required of urban transport lead institutions, with a particular focus on public transport. However, so far most of the literature on urban mobility organizing authorities has a strong focus on cities with formal public transport systems and matured institutions in developed countries. Using benchmarks such as London, Paris, and Singapore can help convince decision-makers that any major city needs a well-coordinated transport system with a single guiding authority. But developed-country benchmarks are not always applicable in developing countries, where the transport authorities must be created and evolve in very different contexts. Factors such as weak state capacity, ineffective regulatory frameworks, limited resources, and the dominance of the informal transport sector can make a significant difference.

This paper focuses on establishing appropriate institutional arrangements for managing mobility in ways that increase public benefit in Sub-Saharan Africa; however, many of the observations have wider developing country relevance. It examines the progress made in select cities, drawing both general conclusions as well as ones particularly relevant for Sub-Saharan Africa.

The paper has three objectives:
- Provide a conceptual understanding of what kind of institutions are needed, why, and the key options and challenges in establishing and strengthening them.
- Against this conceptual framework, review progress in the establishment and operation of a selection of lead transport institutions in Sub-Saharan Africa, based on case studies.
- Draw lessons aimed at enhancing the approach toward the development of institutions for improving mobility in the Sub-Saharan African region and in other similar contexts.

Building institutions is an incremental process. The formal establishment of an institution is one important moment on a much longer path that includes the emergence of sufficient consensus among key stakeholders about the need for such an institution as well as its development and strengthening once established. Most of the well-regarded lead transport institutions globally have had many decades to reach their current level of development.

This paper analyzes a set of institutions already formally established in seven Sub-Saharan African cities: Accra, Cape Town, Dakar, Dar es Salaam, Lagos, Maputo, and Nairobi (Figure 1.1). The hope is that where such institutions have not yet been established, the paper gives key stakeholders some guidance as to what to work toward and what mistakes to avoid, while simultaneously strengthening coordination among themselves in pursuit of a more effective systemic approach.

Each city is different; what works well in one may not be feasible in another. This paper seeks to present a conceptual framework that highlights important issues and options—and describes actual experience. Certain principles do emerge, such as the need to address issues on a metropolitan-wide basis. But the detail of how to apply the knowledge within each city will vary.

The analysis of the institutions is framed around three key dimensions:

- Scope
- Authority
- Capacity

This paper develops and explains this framework, using it to assess the institutional arrangements in Accra, Cape Town, Dakar, Dar es Salaam, Lagos, Maputo, and Nairobi (Table 1.1).

Figure 1.1 Case Study Cities

DAKAR

LAGOS

ACCRA

NAIROBI

DAR ES SALAAM

MAPUTO

CAPE TOWN

Table 1.1 General Information about Case Study Cities

	Population (2020)	Built-up area (km²)	Population density (people/km²)	Transport authority
Accra, Ghana	4,686,394	1558	3,008	GAPTE
Cape Town, South Africa	4,054,604	808	5,018	City of Cape Town Urban Mobility Dept.
Dakar, Senegal	3,876,552	352	11,013	CETUD
Dar es Salaam, Tanzania	5,601,592	1080	5,188	DART Agency
Lagos, Nigeria	13,799,785	1433	9,633	LAMATA
Maputo, Mozambique	2,652,721	984	2,695	AMT
Nairobi, Kenya	7,573,673	1746	4,337	NaMATA

Source: Africapolis.

Note: AMT = Agência Metropolitana de Transporte de Maputo; CETUD = Conseil Exécutif des Transports Urbains Durable; DART = Dar Rapid Transit Agency; GAPTE = Greater Accra Public Transport Executive; LAMATA = Lagos Metropolitan Area Transport Authority; NaMATA = Nairobi Metropolitan Transport Authority.

1.2. Content of the report

Following this introduction, the report has three sections.

Section 2 locates the analysis within the Sub-Saharan African context—although, as indicated, the paper does have wider developing country relevance. The purpose is to stress the scale and complexity of African cities, the speed with which they are growing, as well as the challenges of urban mobility. It also introduces the seven case studies, noting factors relevant to their establishment.

Section 3 develops the three-dimensional analysis of scope, authority, and capacity, describing the key elements required of an institutional response to the challenges of urban mobility and accessibility in contexts such as those found in Sub-Saharan Africa. It links this framework with the seven case studies, presenting them in a format that enables comparisons across the cities.

Section 4 reflects on the Sub-Saharan African experience with lead transport institutions, reiterating and expanding on some of the issues raised earlier in the paper. Acknowledging the conclusions contained in *Institutional Labyrinth*, it draws lessons aimed at informing the development of effective institutions specifically in Sub-Saharan Africa.

The appendix contains an overview of each case study.
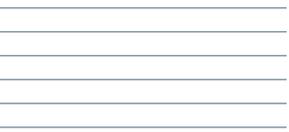
CONTEXT AND ORIGINS OF THE CASE STUDY INSTITUTIONS

2.1. Demographic Growth and Urbanization

Sub-Saharan African cities are growing rapidly, and some will soon be among the largest metropolitan areas in the world. Crucial to the success of any city is the ability to move around and access the opportunities it has to offer. Yet congestion, failing infrastructure, and other deficiencies in urban management result in poor mobility in many Sub-Saharan African cities.

In 1960, the continental population was under 300 million people. By 1990, it had more than doubled to about 630 million. Since then, it has more than doubled again, to over 1.3 billion people, and by 2050 it is expected to reach 2.5 billion people. This represents an eightfold increase in population since the 1960s. However, this growth occurs unevenly within countries.

The greatest growth has been in urban areas, as people migrate from the countryside to cities in search of work and better opportunities. Sub-Saharan African countries are all experiencing a high rate of urbanization. Towns have become cities, while cities have become megacities, each with a larger population than many small countries. Were the Lagos metropolitan area a country, it would rank about 75th in the list of countries by population.

The scale of growth is seriously challenging the ability of governments and agencies to cope. In many cities, growth is happening on the periphery faster than governments can plan or provide essential infrastructure such as paved roads, water, and sanitation, or indeed, exercise the necessary level of control over housing and other developments.

This leads to sprawling, low-density suburban areas that are difficult to serve and manage. Furthermore, in many cities the urbanized area has spread far beyond the original city boundaries, straddling multiple local government areas, and even adjacent provinces. This can make it very difficult to coordinate the development of the overall area and the provision of services, as often institutional frameworks for governance and management of the wider urbanized area do not exist.

In short, Africa's cities have outgrown the structures that worked reasonably well in earlier times.

Photo 2.1 Traffic Congestion in Lagos

2.2 Institutional Efforts to Improve Access

The serious and overt challenges represented by congestion and poor access have led several African cities to attempt a response. Part of this has included an institutional response, creating transport authorities or similar bodies aimed at improving urban mobility. For example:

- Abidjan: Autorité de la Mobilité Urbaine dans le Grand Abidjan (AMUGA)
- Accra: Greater Accra Public Transport Executive (GAPTE)
- Casablanca: Casablanca Transport en Site Aménagé SA (CTSA)
- Conakry: Autorité Organisatrice des Transports Urbains de Conakry (AOTUC)
- Cape Town: the City of Cape Town and its Urban Mobility Department (CoCT (UM))
- Dakar: Conseil Exécutif des Transports Urbains Durable (CETUD)
- Dar es Salaam: Dar Rapid Transit Agency (DART Agency)
- Freetown: Sierra Leone Public Transport Authority (SLPTA) (under creation)
- Lagos: Lagos Metropolitan Area Transport Authority (LAMATA)
- Maputo: Agência Metropolitana de Transporte de Maputo (AMT)
- Nairobi: Nairobi Metropolitan Transport Authority (NaMATA)
- Ouagadougou: Conseil des Transports du Grand Ouaga (CTGO)

These institutions emerged in different ways in each city. In many cases, the institutional initiative was linked to implementation of a large, infrastructure-oriented public transit project—which in recent years has usually been bus rapid transit (BRT). Sometimes this was accompanied by a study that identified the need for a metropolitan-wide institution to improve mobility and drive major projects.

Lagos's LAMATA, which was established as part of an important set of institutional reforms driven by a new state governor after his election in 1999,[1] initially gained some legitimacy by improving road maintenance and traffic management, but its focus quickly became the implementation of BRT. The DART Agency in Dar es Salaam was established largely with the purpose of building a BRT network, while a major BRT project was also a driving force in the establishment of Nairobi's NaMATA. BRT was initially part of the purpose for establishing GAPTE in Accra, too, but this project eventually transformed into a quality bus service with a very limited infrastructure component.

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1. State Governor Bola Tinubu, elected to lead the Lagos State in 1999, was later elected as Nigeria's national president in 2023.
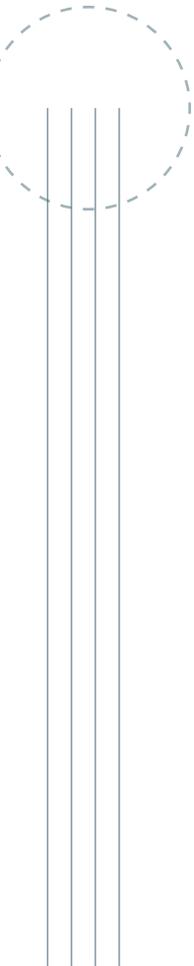
The origins of Cape Town's institutional initiatives are somewhat different. The City of Cape Town (CoCT) is a single-tier metropolitan-wide municipality that was established in 2000 after the end of apartheid and the introduction of a new national Constitution leading to the amalgamation of numerous legacy municipalities in the area. The Constitution and other laws give the municipality extensive powers that include powers over local transport. These powers are mostly carried out by its Urban Mobility Department (CoCT (UM)), although other departments also play a role.[2] When the municipality was established, its Urban Mobility Department focused initially on managing private mobility through the municipality's road network and traffic management services. However, a BRT project financed by the national government in the context of hosting the 2010 FIFA World Cup was the catalyst for the municipality taking up some of its constitutional powers and orienting itself toward becoming the main locus of responsibility for public transport in the metropolitan area.

The creation of CETUD in Dakar is also an exception in that it was not linked initially to a major infrastructure project. Instead, it was established through a project to recapitalize the fleet of the artisanal, paratransit sector and improve its organizational capabilities. It is only approximately two decades after its creation that it has now embarked on a BRT project.

This link between institutional genesis and large, capital-intensive projects—especially BRT projects—has both advantages and disadvantages, which are discussed in section 4.

Various studies have also played a role in establishing these institutions. For example, several studies in the 1990s that sought to address traffic problems in Lagos underpinned the move by the newly elected governor to establish LAMATA. Similarly, the creation of GAPTE in Accra flowed from a set of national policy initiatives. In Maputo and Dar es Salaam, the creation of the AMT and DART Agency, respectively, followed the compilation of transport master plans, assisted by the Japan International Cooperation Agency (JICA), that identified the need for mass transit networks and recommended the creation of metropolitan-wide institutions to manage this. NaMATA's formation followed various studies, beginning in 2003 with a national transport study, which recommended the creation of some form of metropolitan transport authority and was accompanied by various policy initiatives aimed at developing metropolitan governance arrangements.

The lead institutions analyzed in this study have different levels of institutional maturity. Some have been in existence for over two decades, while others are more recent creations. Some were created by combining or restructuring existing institutions, while others were created from scratch. The lessons to be drawn from the more recently established institutions are more tenuous; however, all are instructive.

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2. The juristic entity is the City of Cape Town (CoCT), not the Urban Mobility (UM) Department, which is one of its departments. The Urban Mobility Department is responsible for most of the city's transport-related functions, although some functions, such as traffic policing, are carried out by other departments. Because most of the focus in this paper is on the department rather than the municipality as a whole, we usually refer to the institution as CoCT (UM).

Table 2.1 Comparison of Origins and Maturity

City	Accra, Ghana	Cape Town, South Africa	Dakar, Senegal	Dar es Salaam, Tanzania
Name of institution	GAPTE	CoCT (UM)	CETUD	DART Agency
Year established	2014	2000	1997	2007
Who/what was the main sponsor in forming the organization?	Accra local govts. collectively following national initiative	Constitution and national legislation	Ministry of Land Transport	The President's Office
Was its emergence catalyzed by a large, infrastructure-oriented project?	No, but GAPTE subsequently took responsibility for BRT	CoCT (UM) urban PT focus catalyzed by BRT	No	Yes, BRT
Was its emergence catalyzed by a policy or planning exercise?	National initiative to improve urban transport	National policy on public transport	National initiative	Master plan by JICA
Could it be considered a reasonably mature organization?	NaMATA Has not consolidated as intended	Mature and stable, but some key urban PT functions yet to be devolved	Mature and stable; initial scope quite limited, but now expanding	Somewhat mature, but vulnerable

City	Lagos, Nigeria	Maputo, Mozambique	Nairobi, Kenya
Name of institution	LAMATA	AMT	NaMATA
Year established	2003	2018	2017
Who/what was the main sponsor in forming the organization?	Governor of Lagos State	Ministry of Transport and Communications	Joint initiative with counties led by national govt.
Was its emergence catalyzed by a large, infrastructure-oriented project?	Yes, BRT	Project to manage fleet of buses newly acquired by national govt.	Yes, BRT
Was its emergence catalyzed by a policy or planning exercise?	1992 Lagos Mass Transit Study	Master plan by JICA (2012–14)	Integrated National Transport Plan + Nairobi 2030 vision document
Could it be considered a reasonably mature organization?	Mature and stable; sound reputation and expanding scope	New and not yet mature; potentially vulnerable	New and not yet mature, but somewhat stable legal and financial base

Note: AMT = Agência Metropolitana de Transporte de Maputo; BRT = bus rapid transit; CETUD = Conseil Exécutif des Transports Urbains Durable; CoCT (UM) = City of Cape Town Urban Mobility Department; DART = Dar Rapid Transit; GAPTE = Greater Accra Public Transport Executive; JICA = Japan International Cooperation Agency; LAMATA = Lagos Metropolitan Area Transport Authority; NaMATA = Nairobi Metropolitan Transport Authority; PT = public transport.

3.
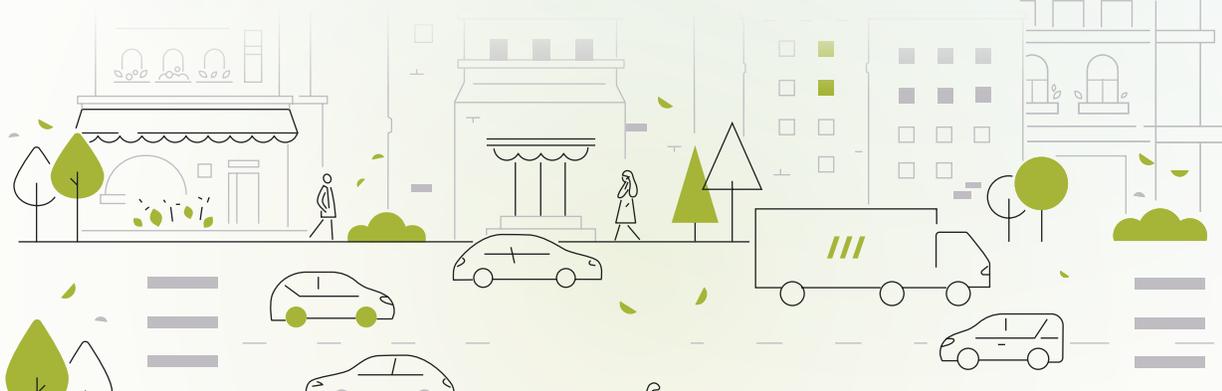
DEVELOPING AN INSTITUTIONAL RESPONSE

3.1. Introduction

This section explains what is required of successful organizing authorities. We approach the analysis from a Sub-Saharan African perspective—although the analysis is relevant to many other developing countries, especially where informal transit is dominant. This discussion seeks to identify the most important elements that must be either incorporated within such institutions or managed through relationships with other institutions.

We frame the analysis around our three-dimensional framework of scope, authority, and capacity. As we proceed, we show how the various Sub-Saharan African case studies compare against the characteristics we identify as important for success (Box 3.1).

Box 3.1   Key Dimensions for Success: Scope, Authority, and Capacity
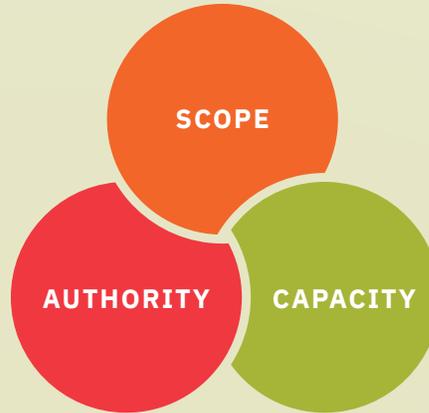
Scope
To drive the right strategies, and successfully add public value, a lead institution must have the right scope of responsibilities, exercised over the whole urban area. Most mobility—private and public—occurs within mixed traffic. Thus, for an organizing authority to make an impact on mobility, it must be able to influence or control—directly or indirectly—the overall flow of mixed traffic. The dominance of informal transit in Sub-Saharan Africa means that the functional scope of an organizing authority must enable it to work effectively with this sector. Ideally, the institution should be able to influence land use.

Authority
Authority derives from the legal and constitutional basis upon which institutions are established, including how these are located within a wider set of government institutions. But effective authority also requires leadership able to take the right decisions within the given framework of authority and drive them toward implementation.

Capacity
Successful institutions must have the capacity to implement. The critical components of this include having sufficient human resources with the right kinds of skills and capabilities, sufficient financial resources, and effective administrative procedures.

3.2. Scope

Scope refers to the institutions' range of responsibilities and purpose. In examining the scope of the institutions, we address both geographical scope and functional scope. While there is broad consensus around the need for organizing authorities to extend across the whole urban or metropolitan functional region, there is less clarity on issues of functional scope.

As argued by Kumar and Agarwal (2013), there is a need for a clearly identifiable "lead institution"—otherwise referred to as an "organizing authority"—responsible for managing mobility in a city in a way that adds public value. Without a lead institution, responsibility and authority is fragmented, making it difficult to devise and implement coherent strategies. It is unusual for all the responsibilities required for the implementation of good strategies to be comprehensively located in one institution. However, if there is a clear lead institution, it is easier to reach agreement with other stakeholders to ensure they work in alignment with chosen strategies.

3.2.1 Geographical Scope

Cities are characterized by intense daily movement between a variety of origins and destinations. The functional extent of a city or other urban agglomeration is defined by the boundaries that largely contain that daily movement. In bigger agglomerations with numerous nodes, the functional area is often described as a metropolitan area.

It is difficult for a lead institution to manage urban mobility effectively if its scope of responsibility does not extend over much—if not most—of the functional area. This is because acting on one part of any system tends to have knock-on effects throughout the system. In a multi-jurisdictional agglomeration, efforts to address congestion within one jurisdiction will often have adverse impacts on neighboring jurisdictions.

Unless limited by geographical barriers such as water bodies or mountains, the functional edge of a city is seldom clearly delineated; thus, it is likely that any lead institution will need to engage with movements entering or exiting its area. However, a lead institution should have sufficiently wide boundaries to be able to exercise authority over the area defined by most of the intense daily movement in the urban area.

In all seven case studies, the organizing authority extends over most of the functional metropolitan area. In four case studies, the transport organizing authority was the first significant public institution to be created with a metropolitan-wide geographic scope. Lagos and Cape Town are the main exceptions; they have a state and a metropolitan government, respectively, that covers most of the functional area. Dar es Salaam previously had a form of regional government that extended across three municipalities accounting for most of the city, but this was abolished in 2021. In Accra, the subdivision of local assemblies from 3 in 2003 to 26 in 2021 has—along with the expansion of the city—heightened the need for such a metropolitan-wide body; however, it has also made it more difficult to achieve.

3.2.2   Functional Scope

As explained at the outset, the key objective is to improve access. This is one of the most important functions of city management because without access to the many opportunities available in a city, agglomeration benefits—which are the key reason for a city's existence—cannot be realized.

Given this objective, the key question is, What functions should an organizing authority have? In discussing access more generally, we reflect on what this means for functional responsibilities of organizing authorities in Sub-Saharan Africa, and the experience of the case study institutions.

Access and mobility
Access depends on multiple key elements (box 3.2). Figure B3.2.1 shows that mobility has many forms and includes both passenger transport as well as freight, since part of access is about bringing goods to people rather than the reverse.[3]

Unfortunately, public, private, and nonmotorized transport tend to be competitors. Private vehicle use drives congestion, not only making public transport slower but also reducing demand for it. Pedestrians are often at the mercy of both. Enhancing access involves managing this competition and seeking ways whereby they can complement one another instead.

The distinction between public and private motorized transport is not always clear. Traditionally, public transport is understood as being provided to groups of people in larger vehicles. Private taxis occupy a somewhat different category; they are available for public use but function more like a private vehicle. Recent years have seen strong growth in this sector: in wealthier countries, it is dominated by e-hailed sedan cars, while in poorer countries, there has been a significant rise in motorcycle taxis and shared sedan taxis. There are now some examples of e-hailed motorcycle taxis in Africa.

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3.   The use of motorbike delivery services in combination with online purchases is an expanding part of this, including in Sub-Saharan Africa.

In practice, enabling and managing mobility requires facilitating both private and public transport while retaining the right balance between the two. Mixed traffic accounts for most mobility in most cities; therefore, managing the core road network and how traffic flows is key. In many cities in the global South, this also requires managing the conflict between public transport, the urban environment, and the proliferation of sedans and motorcycle taxis for hire while protecting and providing for nonmotorized modes.

Improving access requires managing divergent forces within public transport. Good public transport systems are multimodal. Different users have different needs, while different modes are suited to different types of journeys. Often a single journey is best undertaken using a combination of modes. Effective public transport systems therefore require each mode or operator within a mode to work well, but the different modes and operators also have to work well together as a system. Very often, modes or operators are in competition with one another. Thus, a critical task of an organizing authority is to manage that competition in the overall public interest.

In determining what functions an organizing authority needs to perform, a distinction must therefore be drawn between the following:

- The management of urban transport, including public, private, and nonmotorized passenger modes, together with freight
- The integrated management of a multimodal public transport system
- The management of an individual public transport mode

Often, organizing institutions are focused on the management of an individual mode, or perhaps the integration of a multimodal public transport system. However, the key—even to public transport—often lies in the management of the overall system of urban transport.

As already noted, in Sub-Saharan African cities the impetus for the creation of new lead institutions for mobility often derive from the implementation of major formal public transport projects such as BRT. Such projects capture attention and mobilize resources, enabling new initiatives to be taken. However, they can lead to a focus on these projects to the exclusion of other priorities. This is discussed further in section 4.

Indeed, if most mobility occurs within mixed traffic, and most public transport is provided by informal transit, then determining the scope of responsibilities of an organizing authority should take this as the starting point, having either direct responsibility for related functions or sufficient influence over those that do.

For example, in Sub-Saharan Africa national government department or agencies are often responsible for road construction, including within cities. However, they may design and implement projects from a perspective that lacks a comprehensive and balanced vision of how to optimize mobility and access within the city. An organizing authority must have sufficient authority or influence to play a leading role in the design and management of this network, especially on core routes. It must be able to design strategies for easing congestion—which may mean excluding some classes of vehicles rather than seeking to widen roads—and ensure implementation either directly or indirectly.

The dominance of informal transport means that an organizing authority must have the scope to prioritize improvements to this sector. There may well be a need to supplement this with

more formal projects on some key corridors to allow efficient mobility over longer distances and make better use of critically congested road space, but this will take time. Most paratransit is fully integrated with mixed traffic; thus, providing appropriate infrastructure that offers scope for improved paratransit within the mixed traffic network, and regulating and managing all traffic—including how paratransit and private vehicles operate within the same road network—is likely to be central to effective paratransit improvement strategies. Controlling the movement of motorbike taxis forms part of this.

There may be room for a dedicated organization to take responsibility for a particular mode, such as a BRT network. However, this ought not to be confused with the creation of a lead institution in charge of public transport generally. The former may grow into the latter, but there is a danger that the lead institution becomes unimodal, emphasizing the requirements of that mode above other modes.

Where a lead institution only has responsibility for public transport modes, it needs to have very close and strong relationships with the authorities responsible for urban mobility across the metropolitan area. But often it is precisely coherence in this responsibility for metropolitan-wide urban mobility that is lacking and for which new institutional arrangements are needed.

Access and land use

Mobility is not the only enabler of access; it functions in conjunction with how urban land is used at both a metropolitan and local scale (Box 3.2). At a citywide scale, this includes the location of origins and destinations. Land use at a more local level is also critical to mobility. Here, we refer to the physical design of streets, public spaces, and frontages, as well as the management of streets and public spaces.

Land use tends to be structured largely around the road network. Roads provide access, and access is a defining element in land use. But there is a danger in placing ultimate responsibility for land use in the hands of an organization that perceives itself as primarily responsible for mobility rather than access more broadly: it can lead to streets being dominated by vehicles at the expense of human activity along the street. Moreover, land-use management at both scales has many dimensions, not all of which are about access or managing the relationship with mobility. Land use at both scales is also significantly dependent on the design and functioning of key utility services that make cities habitable, such as water, sanitation, power, drainage, and waste removal. However, the critical relationship between access, mobility, and land use must be understood and addressed institutionally; land use should not be subservient to mobility needs— the two need to work closely together.

Cities in Sub-Saharan Africa often exercise relatively weak control over land use, especially on their outskirts, which can become the site of sprawling settlements with varying degrees of formality. Often these settlements begin developing close to the roads leading into the city, but then spread increasingly onto adjacent land, and are poorly serviced by access roads. The lead institution responsible for mobility should work closely with those determining land use and the process of urban growth to influence urban form. The objective should be to ensure growth is better controlled—and preferably planned—and that provision is made for roads, even if these are initially built only to a rudimentary level.

Box 3.2   The Multiple Elements That Enable Access

Realizing agglomeration benefits requires being able to access social and economic opportunities. Access is
dependent on two main elements: mobility and land use. Both mobility and land use consist of multiple, complex
subsystems.

Figure B3.2.1   Dimensions of Urban Access
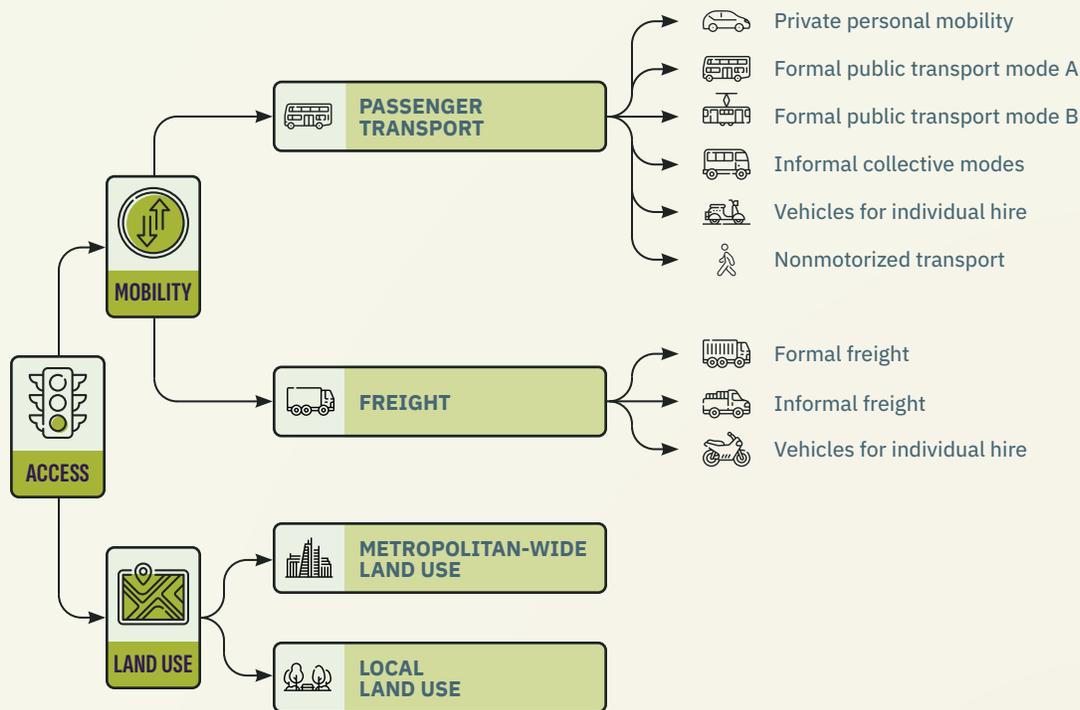
Mobility
Mobility can be divided into passenger and freight systems. *Passenger transport* can be based on either motorized or
nonmotorized modes, with the former including both private personal mobility and public transport modes.

Given rising incomes, *private personal mobility* is an inevitable and increasing feature of cities in the global South,
leading to high congestion levels. In cities where mobility is overdependent on private vehicles, inequality is
exacerbated because only those owning vehicles have good access to agglomeration benefits. *Public transport*
enables more inclusive access and helps reduce congestion, thereby making the urban system more efficient
while also reducing resource use and lowering emissions. Public transport systems are multimodal; different users
have different needs, while different modes are suited to different types of journeys. Often a single journey is best
undertaken using a combination of modes. *Nonmotorized transport* is a further important element in enabling mobility,
especially in conjunction with public transport. *Urban freight* is key for both businesses and consumers—bringing
goods to people rather than the reverse—and enhancing the city's competitiveness.

Land Use
Land use is important at two scales. At a *metropolitan-wide scale*, it includes urban form and the location of
origins and destinations that drive mobility patterns. If urban form results in longer distances between origins and
destinations, there will be greater reliance on mobility. Urban form also dictates the nature of mobility; where origins
and destinations are concentrated along corridors, it permits a linear concentration of mobility patterns that can
usually be more efficiently served. At a more *local scale*, land use affects the interface between the transport system
and the environment where people board and alight, how they then get to their final destination—by walking or other
means—and the relationship at a street level between pedestrians and other vehicles. It affects parking and traffic
management. Where the urban environment is unattractive, congested, or unsafe, access is diminished.

The importance of regulation

Often there is a focus on infrastructure and logistics as the keys for addressing mobility. However, much of the task lies in managing relationships and behavior. Institutions created to manage mobility must therefore be able to ensure that the sector is well regulated—including the design, implementation, and enforcement of regulation.

Regulation can be divided into two broad categories: regulation of standards affecting issues such as safety and labor conditions, and regulation of the market. Regulation of standards includes issues such as vehicle speed, vehicle standards, vehicle maintenance, acceptable seating/standing configurations, driver behavior, and working conditions of those providing public transport.

Market regulation is, in essence, about optimally matching supply and demand while making best use of available infrastructure and resources. Market regulation includes creating conditions whereby services are optimized in relation to costs. This entails regulating competition for and in the public transport market, and regulating fares imposed on a captive market. It includes finding ways of ensuring less profitable public transport routes are adequately serviced.

Figure 3.1 The Two Key Dimensions of Regulation

Regulation has two broad objectives:

Minimum safety, labor, and other standards	More efficient matching of supply and demand
For example:	**For example:**
• Vehicle standards such as well-functioning brake systems, roller bars, and seatbelts • Acceptable seating/standing configurations • Passenger facilities • Driver behavior • Working conditions	• Creating conditions to optimize services in relation to cost • Regulations of competition for and in the market, incl.control over supply and growth • Regulation of fares imposed on a captive market • Ensuring less profitable routes are adequately serviced

Managing conflicts between private, public, and nonmotorized transport—as well as conflicts within each of these categories—is usually achieved through a combination of standards and market regulation.

Regulation is meaningless without enforcement; however, enforcement is a difficult task. The key lies in designing rules and finding ways of encouraging adherence to rules such that enforcement requirements are reduced; while policing is needed, positive community behavior rather

than policing is what creates patterns of adherence. This requires that rules be practical and legitimate—and in instances where rules are transgressed, they are identified and dealt with.

Increasing attention is being given in regulatory discourse to the concept of "nudging." The idea is to find discreet ways of nudging behavior in the right direction, leading to the establishment of community patterns to which there is widespread adherence.

What functional scope do the case study institutions have?

Table 3.1 and Table 3.2 give details on the scope of each case study institution, which ranges from having a broad responsibility for overall mobility, to being responsible for public transport in general, to being responsible for a single mode.

Table 3.1 Functional Responsibilities of the Case Study Institutions

| | Strategic | Tactical | | | | | | Operational | | | | |
| | | Regulation | | | | Planning | | | | | | |
	Strategic planning and policy formulation	Regulation of safety/ minimum standards	Commercial regulation – formal	Commercial regulation – informal	Tariff	Infrastructure planning	Service planning	Infrastructure construction	PT operations	Traffic management	Parking management	Enforcement
AMT	Yes	No	Partial[a]	Partial	Partial[b]	Partial	Yes	No	No	No	No	No
CETUD	Yes	No	Yes	Yes	Partial[b]	Yes	Yes	No	No	Yes	Yes	No
DART Agency	No	No	Partial[c]	No	Partial[b]	Partial[d]	Partial[e]	No	No	Partial[f]	No	No
GAPTE	No	No	Partial	No	Yes	No	Partial	No	Partial[g]	No	No	No
LAMATA	Yes	No	Yes	No	Partial[b]	Yes	Yes	Yes	No	Partial	Partial	No
NaMATA	Yes	No	Partial[h]	No	Partial[b]	Partial[d]	Partial[e]	No	No	Yes	Yes	No
CoCT (UM)	Yes	Yes	Partial[i]	Partial[j]	Partial[k]	Yes	Yes	Yes	No	Yes	Yes	Yes

Note:
a. It covers public transport cooperatives and will cover future BRT regulation and service planning. It does not cover regulation of commuter railway.
b. It advises about fare setting but does not have the authority to decide fare/tariff.
c. It covers only regulation of BRT.
d. It covers only BRT infrastructure planning.
e. It covers only BRT service planning.
f. It covers only traffic management in the BRT corridor.
g. It covers operations, although it is out of their mandate.
h. It covers mass transit system.
i. It covers regulation of BRT but does not cover commuter railway.
j. It advises provincial government about commercial regulation of informal modes.
k. It sets fares for BRT.

Table 3.2 Comparison of Scope

City	Accra, Ghana	Cape Town, South Africa	Dakar, Senegal	Dar es Salaam, Tanzania	Lagos, Nigeria	Maputo, Mozambique	Nairobi, Kenya
Name of institution	GAPTE	CoCT (UM)	CETUD	DART Agency	LAMATA	AMT	NaMATA
Does it extend over most of the functional metropolitan area?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of local government units covered by the organizing authority	26 assemblies	1 municipality	7 cities	5 districts	5 admin. areas, with 20 LGUs	3 municipalities and 1 district	5 counties
Is it responsible for all public transport in the area?	No, only a BRT project; intended regulatory responsibilities dormant	Planning authority for all public transport; direct responsibility for BRT	Mostly, and is now leading a BRT project	No, only BRT	Yes	Yes. Planning across all modes. Regulation of intermunicipal bus services	Focus is on BRT with some attention to rail
What key public transport functions is it not responsible for?	Now only does BRT	Commuter bus and commuter rail, but devolution anticipated	"Clando" – shared taxi paratransit	Only responsible for BRT	Responsibility across all modes	Regulation of commuter railway, minibuses	Theoretically responsible across all modes, but org. is young
Does it have a strong focus on reforming paratransit?	No	Increasingly; views paratransit as part of core network	Yes, leading project has been recapitalization and development of paratransit	No	No, other than required for integration into more formal systems	Supporting formation of cooperatives to run formal buses	No
Does it have responsibility for overall mobility in the area?	No	Yes	Limited	No	Yes, along declared road network	Has a fairly wide mandate, but org. is young; main focus is on public transport	Mandate intends responsibility along key road network, but org. is still young
Does it manage traffic in the area?	No	Municipality does – another department	Yes	No	Associated state authority (LASTMA)	No	No
Does it plan and manage road construction projects?	No	Yes	No	No	Yes	No	No
Does it have control over metropolitan-wide land use?	No	Municipality does – another department	No	No	Some planning influence	No	Mandate intends it to have influence
Does it have control over local/ sub-metropolitan land use?	No	Municipality does – another department	No	No	No	No	No

Note: AMT = Agência Metropolitana de Transporte de Maputo; BRT = bus rapid transit; CETUD = Conseil Exécutif des Transports Urbains Durable; CoCT (UM) = City of Cape Town Urban Mobility Department; DART = Dar Rapid Transit; GAPTE = Greater Accra Public Transport Executive; LAMATA = Lagos Metropolitan Area Transport Authority; LASTMA = Lagos State Traffic Management Authority; LGU = local government unit; NaMATA = Nairobi Metropolitan Transport Authority.

LAMATA and the City of Cape Town have broad urban mobility responsibilities. LAMATA was created by the Lagos State governor in conjunction with the Lagos State Traffic Management Authority (LASTMA), which has responsibility for traffic management in Lagos. While they are separate organizations, they work closely together. In Cape Town, the municipality's Urban Mobility Department has historically taken responsibility primarily for the private mobility system rather than public transport, and only more recently has begun focusing on public transport. The UM Department is a department within the larger Cape Town municipality, which enables close working relationships with other departments. Traffic policing falls within a separate department responsible for safety and security, but these two departments also work closely together.

Most of the other organizations largely focus on public transport. Dar es Salaam's DART Agency works exclusively on BRT. NaMATA focuses on public transport, but its functions, as set out in the presidential executive order that established it, provide for a wider scope, including traffic and parking management and the facilitation of better integration between transport and land use. GAPTE was intended to have a wider focus but now mainly provides services to a single bus operation that is using government-purchased vehicles. The AMT largely focuses only on public transport, but it is a young organization and its brief may grow. CETUD exemplifies an authority whose initial scope focused mainly on public transport but with time evolved to also include the functions of parking and traffic management, which are increasingly seen as essential for the overall management of public transport and mobility.

In all the case study cities, informal transit—or paratransit—is currently responsible for the largest modal share, yet the strategies of most of the organizing authorities are predicated to a greater or lesser degree on the replacement of informal transport operators with more formal systems. As indicated, there are good arguments for creating higher-capacity formal systems along key corridors; however, in most cases this will take time.

CETUD in Dakar is an exception, however. Apart from supporting recapitalization and strengthening of the formal bus service and paying some attention to the small rail service, CETUD has built capacity and legitimacy by improving the fleet quality and organization of the informal transit sector. Only recently has it begun a project to introduce BRT services on key corridors. In Cape Town, initial strategies to replace paratransit minibus-taxis with BRT have been discarded and "hybrid" strategies that regard paratransit as a key part of the network have been adopted. New approaches are being explored aimed at refining and implementing this strategy.

All of the organizing authorities engage with the informal paratransit sector because, even where the objective is to replace this sector, doing so inevitably requires working with it—often with the objective of involving it in the provision of new services. The skills required to do so are generally not regarded as part of public transport provision globally, yet in Sub-Saharan Africa they are vital.

Several of the organizations in the case studies have some responsibility for aligning transport with land-use planning without having direct control over land-use regulation. Cape Town is, once again, an exception. The Cape Town municipality is the main government body responsible for not only transport planning but also land-use planning in the metropolitan area, including the granting of land-use rights at both the metropolitan and local levels. The UM Department, itself,

does not have direct land-use functions; metropolitan planning and the design of local areas and precincts is the responsibility of CoCT's Urban Planning Department, with which the UM Department works very closely. In our framework, the City of Cape Town is responsible for *access* across the metropolitan area, with its UM Department responsible for *mobility* and its Urban Planning Department responsible for *land use*. Since CoCT took on increased public transport responsibilities, it has paid significantly more attention to the link between land use and public transport in enhancing access.

From the case studies, even where the organizations have a responsibility for broader urban mobility, they tend not to have traffic-policing responsibilities, which is usually the responsibility of other authorities. Again, Cape Town—as a fully-fledged local government—is an exception.

Cape Town's responsibility for traffic policing gives it a more direct role in enforcement, although the emphasis is mainly on compliance with traffic regulations and minimum standards. For some misdemeanors, such as unroadworthy vehicles or operating without a license, the municipality impounds minibus-taxis, which has a significant impact on operators and ensures a measure of compliance. Bribery does not seem to be a significant problem—although this is always difficult to ascertain. Nevertheless, noncompliance with traffic rules among informal operators remains rife.

Increasingly, while strengthening policing, the municipality is also taking a more holistic approach to enforcement, seeking to understand how the informal sector business model incentivizes reckless driving, and working with the sector toward reforming the business model. Building partnerships with licensed informal operators is increasingly viewed as critical in controlling unlicensed operators.

However, as indicated, the City of Cape Town's direct responsibility for enforcement is the exception. In most cases, transport lead institutions must rely on entirely separate agencies that may not have the same incentives to address enforcement in ways that align with transport goals.

In Dakar, CETUD is seeking to play a larger role in traffic management and enforcement in the context of the implementation of its new BRT project. Traffic policing and enforcement in Dakar is a national government function; however, CETUD recognizes that unless it can exercise traffic control—including enforcement—at key intersections on the BRT routes, much of the efficiency of the new system will be seriously compromised. CETUD has therefore negotiated with the national traffic authorities to manage these intersections.

Indeed, across a variety of functions it is evident that in most cases most projects and activities must be implemented in cooperation with other agencies. Having the authority to gain this cooperation is therefore crucial.

Functional hierarchy

Thus far, we have discussed the scope of functions that an organizing authority should have responsibility for, or influence over. The critical objective of the organizing authority is that it should be able to direct positive outcomes in a strategic way; it does not necessarily need to operationalize all outcomes itself.

In *Institutional Labyrinth*, Kumar and Agarwal (2013) use van de Velde's (1999) hierarchical classification of functions as strategic, tactical, and operational to discern what aspects of each function should be considered the key domain of an organizing authority.

- The strategic level concerns the formulation of general aims and determination of the broad terms and means that can be used to attain these—in short, "what we want to achieve." Main strategic functions would be related to policy formulation and long-range planning.
- The tactical level concerns making decisions on the means for achieving goals and how to use these means most efficiently—in short, "what product can help to achieve the aims." Tactical functions include regulation and detailed planning.
- The operational level concerns ensuring that orders are carried out and that it happens in an efficient manner—in short, "how do we produce that product." Operational functions include dimensions linked to the construction/development of physical facilities and ensuring the availability of services.

Kumar and Agarwal argue that the core responsibilities of the organizing authority lie primarily at the strategic and tactical levels, while there is increasing consensus that many operational-level functions should be outsourced.

Nevertheless, we must draw a distinction between performing an operational function and procuring a service provider to perform that function, or ensuring another public agency does so. Determining and procuring what needs to be delivered are generally tasks for the organizing authority—and are often very challenging to perform effectively. Getting other public institutions to align with the objectives of the lead institution is also difficult.

In Figure 3.2, we apply the framework from *Institutional Labyrinth* to the environment found in Sub-Saharan Africa and many other developing countries, adapting the framework in two ways. First, we include functions that address the arguments that organizing institutions have a key role to play in managing mixed traffic and working with the informal transport sector, adding traffic, parking, road management, and enforcement under the set of operational functions. Second, we add cross-cutting functions that highlight three critical *enablers* required for an organizing authority to do its job. These three enablers do not constitute an exhaustive list, but they are included to highlight their importance.

The first enabler is ensuring institutional alignment. Some organizing authorities will have more functions under their direct control than others, but no authority is likely to fully control all the functional levers. To be successful, an organizing authority must ensure that external parties are aligned with its goals and objectives. This includes the ability to work effectively with other parts of the public sector as well as being good at specifying and procuring what is needed from external operators, including through public-private partnerships. Good communication and networking capabilities, both internally and externally with all affected parties, including the public, are critical for achieving this.

Figure 3.2 Functional Framework for Urban Mobility in Developing Cities Context
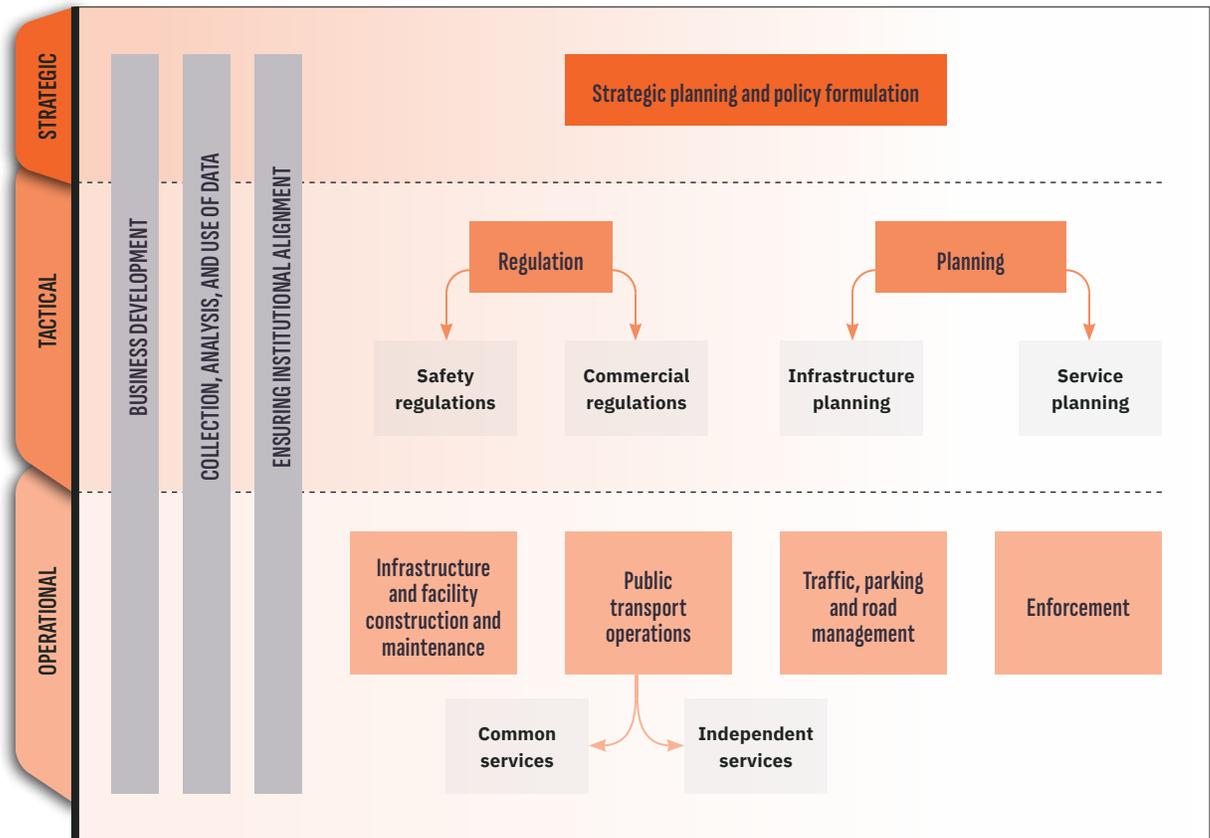
Source: Author's adaptation of the framework from *Institutional Labyrinth* (Kumar and Agarwal 2013)

The second enabler is the collection, analysis, and use of data. Data-driven decision-making and action have always been required, but the global revolution in recent years in how data are collected, transmitted, and analyzed—and the relatively low cost at which this can be done— opens substantial new possibilities for organizing institutions. Examples of creative generation and use of data in Sub-Saharan Africa abound, but there remains substantial unmet potential in applying these to the mobility sector in the region and to developing countries more widely.

The third enabler, we call business development. The capabilities for working with the informal transit sector are included here. To be successful, the public sector in Sub-Saharan Africa must work with an already existing informal transit sector that has developed its own ways of working. A developmental approach that enables the realization of efficiencies and shares the benefits between users and transit providers is likely to be most successful. Organizing authorities in any context would do well to understand the microeconomics and institutional characteristics of service providers and design their procurement and regulations in ways that support supplier development. However, we include this here to emphasize its importance in working with the informal sector in Sub-Saharan Africa.

These enablers apply in different ways across all three levels. In Box 3.3 we highlight some aspects of the various functional elements within a Sub-Saharan African context.

The case studies indicate that the organizing authorities' mandate is often linked to the strategic and tactical level for urban mobility. At the strategic level, institutions such as the AMT, CETUD, CoCT (UM), LAMATA, and NaMATA are responsible for strategic planning and policy formulation in urban mobility. Only GAPTE and the DART Agency's mandates have a limited strategic dimension.

At the tactical level, authorities all have functions linked to commercial regulation and service planning, while safety/minimum standards regulation tends to be the responsibility of other institutions (often central-level institutions). Only CoCT (UM) has responsibilities for safety/minimum standards, including the power to make bylaws consistent with national minimum standards and to fine transgressors. It issues driver and vehicle licenses, although the legislative requirements on which this is based is the responsibility of national government. In Lagos, this is the responsibility of LAMATA's partner institution, LASTMA. The remaining institutions do not have a significant role in safety/minimum standards regulation.

In all the case studies, the authorities play some role in commercial regulation. Commercial regulation generally includes issuing licenses to operate based on market conditions, or—in more active instances—contracting operators to provide specified services. Institutions such as CETUD and LAMATA have a broad responsibility in the regulation of different modes of transport, with LAMATA playing a significant role in respect of BRT and other formal bus services. As the planning authority, CoCT (UM) has responsibility for determining—based on market conditions—whether the provincial operating license authority should issue route licenses, doing so in respect of both formal and informal transit applicants. However, it currently only contracts in respect of BRT and a small service for the disabled. The AMT has only a partial regulatory responsibility focused on intermunicipal bus services, while municipalities within Maputo regulate internal urban bus services. The DART Agency, GAPTE, and NaMATA have commercial responsibility for mass transit, with particular focus on BRT, while commuter rail—where it exists—is currently outside the institutions' mandate (Cape Town, Maputo, Nairobi). CoCT (UM), as the planning authority, potentially has wider commercial regulatory powers than it exercises.

The role of transport authorities in the commercial regulation of informal transport is mostly limited. CETUD is an exception in that it has engaged in extensive programs for the professionalization of informal transport over the last two decades. As indicated, CoCT (UM) determines whether route licenses should be issued to informal operators based on an assessment of market conditions. The AMT has supported and advised other institutions on informal transport regulation, and led the professionalization of bus cooperatives that provide intermunicipal services. GAPTE was intended to enable cooperation among local assemblies and oversee and lead the issuing of operating licences to informal operators in Accra; however, this cooperation could not be sustained.

Fare regulation, when it is implemented, which is generally only in the formal sector, often remains the responsibility of core government institutions. Where an institution is directly responsible for a service, it tends to design and set the fare, while in other cases, it may have responsibility for approving fares proposed by the service provider. The informal transit sector usually sets its own fares.

STRATEGIC FUNCTIONS
Strategic planning and policy formulation
- A realistic, locally appropriate strategy is required, aimed at improving mobility to optimize access in the most effective way.
- The scope of strategy and policy should extend to all transport and nonmotorized transport—not just formal public transport—and include mechanisms to optimally manage road/street use as well as land use.
- Strategy will require the active support of relevant state authorities, which may be a strong metropolitan-wide government, but is likely to need to include national and local governments.
- Part of strategy and policy should include the strengthening of the organizing authority/lead institution, itself, and the processes for working effectively with all relevant state/nonstate actors.

TACTICAL FUNCTIONS
Regulation
- Effective regulation should be at the heart of strategy/tactics in Sub-Saharan African cities, based on a locally appropriate approach.
- Current regulatory systems tend to be irrelevant; current activity falls mostly outside the formal system and ignores it.
- Regulation includes (a) safety/minimum standards and (b) better matching of supply/demand (that is, commercial regulation).
- Effective regulation requires a detailed understanding of current mobility practices and business models.

Planning
- Transport planning should be oriented toward better mobility in general—not restricted to formal public transport.
- The overarching objective is access; planning should include land-use scenarios and realistic options for influencing this.
- To the extent formal services are to be provided, traditional service planning is required, but a significant aspect of planning should be oriented toward enhancing paratransit.
- New concepts are needed to plan for informal/paratransit.

Safety/Minimum standards regulation
- A single framework is required that differentiates appropriately among different modes and types of service, including paratransit.

Commercial regulation
- Instruments for formal services include contracts and concessions.
- Instruments for paratransit include quotas for licences to operate per area/route and enforceable service restrictions.

Infrastructure planning
- Infrastructure planning should optimize mobility and access on a multimodal basis, protecting road space for public transit.
- Priority infrastructure for paratransit can greatly enhance mobility and support a shift to greater formalization.

Service planning
- New techniques for service planning are required that are effective in a hybrid environment of formal and less formal services.

OPERATIONAL FUNCTIONS
Infrastructure/Facility construction and maintenance
- Lead institution should have key authority over design and implementation of infrastructure and facilities.
- In many cities, the basic road network is in a poor state and should therefore be a priority.
- New thinking is required on how to design infrastructure for a hybrid environment of formal and less formal services.

Public transport operations
- Limited subsidies available for operations.
- Demands placed on operators must allow financial sustainability.
- New approaches required for enhancing informal services while not compromising financial sustainability.

Traffic, parking, and road management
- Most mobility services will be in general traffic; public transport depends on effective traffic, parking, and road management.
- Lead institution to have significant authority over core road network.
- Extensive cooperation with other parties usually required.

Enforcement
- State will not have power to enforce unless rules have buy-in from key stakeholders, including paratransit.
- Engagement needed with paratransit so they understand how regulation can benefit their business.
- Creative approaches needed to incentivize new behavior.
- Need excellent cooperation with enforcement authorities.

Common services
- Electronic fare systems can play significant role in enhancing multimodality, providing data, and improving efficiencies.
- Business opportunities in managing common facilities and services to be optimized, including for paratransit operators.

Independent services
- Organizing authority needs excellent skills for designing and managing contracts; creative combination of gross and net contracting required.
- Facilitate participation of paratransit in contracted services.
- May be limited procurement of formal independent services in system dominated by informal transit.

ENABLING FUNCTIONS

Ensuring institutional alignment
- No authority is likely to fully control all the functional levers, so for an organizing authority to be successful it must ensure that external parties are aligned with its goals and objectives.
- This includes the ability to work effectively with other parts of the public sector as well as being good at specifying and procuring what is needed from external operators, including through public-private partnerships.
- Good communications and networking capabilities, both internally and externally with all affected parties, including the public, are critical to achieving this.

Collection, analysis, and use of data
- The global revolution in how data is collected, transmitted, and analyzed—and the relatively low cost at which this can be done—opens substantial new possibilities for organizing institutions.
- Examples of creative generation and use of data in Sub-Saharan Africa abound, but there remains substantial unmet potential in applying these to the mobility sector in the region and to developing countries more widely.

Business development
- The capabilities for working with the informal transit sector are included under this heading.
- The public sector in Sub-Saharan Africa needs to work with an already existing informal transit sector that has developed its own ways of working.

A developmental approach that enables the realization of efficiencies and shares the benefits between users and transit providers is likely to be most successful.

Most of the case study authorities were either established to implement formal public services or given the responsibility to do so after they were established. Thus, the provision of public transport infrastructure and service planning in respect of such services is generally a core responsibility. The authorities do not plan informal transit—although they may have a role in determining whether licenses to operate should be issued. There are few examples of organizing authorities providing infrastructure for the informal sector, although the Urban Mobility Department has done so by providing priority lanes and infrastructure for use by both the formal and informal sector.

The functions at an operational level tend to be quite fragmented, performed by other parts of the public sector and often with a strong private sector role. Functions of traffic and parking management, and enforcement, tend to be performed by other public sector organizations— sometimes at the national level and sometimes at the municipal level. There may be some private sector involvement in these operations. As explained above, CoCT is an exception here, having core responsibility for all traffic and parking functions. NaMATA has a defined function of traffic and parking management, although it has not yet begun to work in this area. The law has recently been changed to enable CETUD to integrate these functions into its mandate. In Lagos, the traffic management and parking responsibilities are the responsibility of LASTMA, the state government institution created in parallel with LAMATA.

The procurement of formal public transport operators is usually by the organizing authority, with the services themselves provided by the private operators they procure. Infrastructure construction is mostly procured by the public sector but implemented by the private sector. In some of the case studies, while the organizing authority may give advice and make recommendations, other government departments—often at the national level—may procure, especially on larger projects. This is true, for example, in Dakar, where CETUD is leading the design of the new BRT service, but the national ministry is responsible for procuring private construction companies to build the route.

LAMATA is building a reputation for effectiveness in driving transport infrastructure projects, including procuring private companies, while CoCT (UM) is responsible for procuring private construction companies to provide infrastructure and BRT operations.

The private sector often has a strong role in system operations—both for common services as well as independent public transport operations. Common services include terminal management, parking management, fare collection systems, and infrastructure construction and maintenance.

3.3 Authority

Authority refers to the institutions' legal and actual authority. Having the right scope of responsibilities is insufficient without having the authority to solve problems. Authority derives from the legal and constitutional basis upon which institutions are established, including how these are located within a wider set of government institutions. But effective authority also requires leadership able to take the right decisions within the given framework of authority and drive them toward implementation.

Lead institutions require sufficient authority to be effective.

3.3.1 Relationship with Broader City Governance

Successful lead institutions will have significant impact on the marshaling and use of public resources and the functioning of the city, often requiring mediation between competing interests that is inevitably political. Thus, while a lead institution needs to be driven by the pursuit of optimal technical solutions, it must be positioned to operate effectively as part of, or in partnership with, the political authorities and institutions responsible for broader city governance.

The demographic, social, and economic challenges facing Sub-Saharan African cities make the task of urban management enormous. Yet the institutions currently required to do this tend to be weak. First, the institutions of city governance are, themselves, often highly fragmented. In many cases, there is no institution with responsibility extending across the whole city or metropolitan area; rather, there is a collection of smaller entities, with each one responsible for a portion of the city. Second, even where local government institutions exist, they do not control of key functions. Third, even if they do control key functions, they tend to be weak in comparison with central government power. An important dimension of this is that control over important revenue sources such as income tax, value added tax (VAT), customs duties, and fuel levies lies invariably with the central government, making local governments dependent upon grants from the center. This situation is often maintained by national politicians uneasy about the potential for political challenges from large urban centers.

How institutions responsible for mobility are best structured and built will depend on the context. Table 3.3 summarizes the various forms of local government structure that may be found and locates the case studies within this framework. There may already be an institution with devolved responsibilities for governance of a metropolitan area. This may be structured within the constitutional system either as a "state" or "local" government—or as a special arrangement of a different kind. In such cases, the lead institution for mobility will relate primarily to such an institution.

It may form a part of the general metropolitan wide authority as a department within it, or it may take the form of an agency created by it. Under different conditions, different approaches will be more advantageous. An external agency allows for a clearer organizational identity and may free the lead mobility institution from some of the more onerous administrative constraints arising from being part of general government. However, to the extent that a lead mobility institution needs to work closely with other functions that are located within general government, there may be disadvantages in being too far removed from them.

No.	Local government arrangements	Locating the lead institution in relation to existing city governance structures	Examples from case studies
1	Single-tier local government authority that extends across the whole urban functional area.	A good structure for locating the lead institution since it enables authority over transport to be exercised both at a metropolitan and more local scale through a single institution. Especially advantageous if the metropolitan authority also has power over land use, and the provision of bulk services that underpin land use, since this enables it to manage both key factors underpinning access.	*Cape Town.* The Urban Mobility Department is part of the single-tier City of Cape Town municipality, which extends across the whole metropolitan area.
2	Two-tier system of authority where the upper tier extends across the whole urban functional area and the lower tier has several jurisdictions each covering a part of the wider urban functional region.	The metropolitan-wide upper tier (which may be a state government) can be a good structure for locating authority over transport but must be able to work well with the lower tier authorities, and collectively they must govern both transport and land use.	*Lagos.* LAMATA is a semiautonomous agency created by and accountable to the Lagos State government, which is effectively a metropolitan-wide upper tier. Local governments are represented on the LAMATA Council.
3	Single-tier local government system with multiple authorities that collectively cover the urban functional area, but no single overarching body covering the whole area.	This needs a metropolitan-wide lead institution through which the multiple local authorities and other entities can work together. The danger is that the local authorities fail to allow the metropolitan-wide body sufficient power. To be successful it is often necessary for national government to play a key role, thus bolstering the power of the metropolitan-wide body.	*Accra, Dakar, Dar es Salaam, Maputo, and Nairobi.* There is no metropolitan-wide local government authority in any of these cities. In all cases, a new transport lead institution was created covering the metropolitan area, with the local governments all involved to a greater (Accra, Dakar, Nairobi) or lesser (Dar es Salaam, Maputo) degree. In all but Accra, the national government is substantially involved.
4	A single authority that only covers part of the urban functional area.	A metropolitan-wide lead institution is needed. This could be created by extending the existing local authority boundaries to achieve an outcome equivalent to #1 above. Alternatively, a separate, metropolitan-wide lead transport institution could be created as in #3.	None
5	Multiple authorities that collectively cover only a part of the urban functional area.	A metropolitan-wide lead institution is needed. One option is to amalgamate the authorities and extend their authority to achieve an outcome equivalent to #1. Alternatively, a separate, metropolitan-wide lead transport institution could be created as in #3.	None

Often there is no existing metropolitan political structure. In such cases, the creation of a metropolitan-wide lead institution for mobility is an important step in beginning to establish metropolitan governance arrangements. How that authority is constituted will depend on local circumstances. It may, for example, derive authority jointly from various sources, including a collection of local government entities and national authority, such as a national minister.

The process of creating such an institution may be slow and incremental, starting with seeking to achieve as much coordination and cooperation as is feasible among existing relevant institutions while working toward more substantial institutional reforms over time. Attempts to improve transport cannot be placed on hold until new institutional arrangements have been created.

But once an institution emerges with sufficient power to improve mobility, it inevitably becomes substantially political and requires the support of key political forces in government. So, it cannot be formed in isolation of these. Certainly, a lead transport institution will struggle to be successful if viewed as a competitor by broader political authorities.

In four of the seven case studies, the organizing authority was the first institution created with a metropolitan-wide geographic scope. The main exceptions are Lagos and Cape Town. In Lagos, multisectoral, metropolitan-wide governance is provided by the state government; in effect, the city grew to cover much of the state. LAMATA, an agency of the state government, is responsible for most of the functions that relate to transport on the core road network.

In Cape Town, the metropolitan government was created as part of the processes of constitutional and democratic reforms that occurred in the early 1990s and resulted in a metropolitan government with significant constitutional powers relating to transport. Cape Town is unusual in being a single-tier, metropolitan-wide local government that combines a wide range of responsibilities, including land use, traffic control, most road provision, and municipal utilities, at both the metropolitan and more local scale within one organization. Cape Town's single-tier structure is simple, and by gathering all these powers within a single organization at the metropolitan scale, it offers an ideal location for organizing transport. Whether single-tier local government structures are workable in much large cities is not obvious. The two-tier structure in Lagos, with the state level exercising metropolitan-wide power and the collection of local governments exercising more local power, may be more appropriate.

But in establishing new arrangements, what is feasible will depend on what exists and how this can be best adapted to meet the requirements we spell out in this paper.

In Dar es Salaam, a form of regional government did exist, encompassing five districts that covered much of the city. This entity, which was referred to as the Dar es Salaam City Council, had made proposals toward the formation of a metropolitan-wide transport authority, but unfortunately it was dissolved in 2021. One of the constituent districts that covers the central city has now been renamed the Dar es Salaam City Council.

As shown in table 3.2, in the five cities currently without a metropolitan-wide authority, the initiative to create the organizing institution came from the national government. Where strong authority at a metropolitan scale does not exist, the national government must play an important role.

Several of the organizations created through national government initiatives have a board or council representing critical stakeholders at the national and local levels, and sometimes include operators and civil society. This gives a wider voice and greater legitimacy. The Plenary Assembly in Dakar and the council and board in NaMATA are examples of this. LAMATA also has a board appointed by the governor to deepen voice and legitimacy.

In summary, while there may be a tendency among some transport specialists to seek to create a lead institution that is insulated from political pressures, the objective should be to position them to operate most effectively as part of, or in partnership with, the power structures that are effectively responsible for city governance. This may include the national government.

3.3.2 Legal Authority

In structuring organizing authorities, attention must be paid not only to authority in relation to broader governance but also to their legal authority to act.

As indicated, an organizing authority may be created as an agency independent of core government. Indeed, this is the case in most of the cities studied. One advantage of this can be that it frees them from some of the human resource and procurement constraints under which core government operates. However, there can be dangers in this where the country's legal framework does not permit the delegation of important powers to institutions outside of core government. Typical examples include regulation of various kinds, raising revenue sources, and ensuring enforcement.

In creating organizing authorities, detailed attention needs to be paid to who has legal authority to take what decisions. If key decisions and actions cannot legally be delegated, other mechanisms must be established to ensure that the organizing authority can exercise sufficient influence. Otherwise, they can be left with responsibilities but no effective authority to ensure implementation.

Because of different legal and constitutional systems, the legal instruments used to establish organizing authorities are not always comparable across countries. Box 3.4 identifies different types of legal forms of lead institutions and characterizes each case study in terms of that framework.

The strongest legal basis for any of the organizing authorities is in Cape Town, where relevant powers are rooted in South Africa's Constitution, and these are given more detail by national law. CETUD was established through a national law, while LAMATA was created through a state law. The DART Agency and NaMATA were both created through presidential executive orders; NaMATA is a "state corporation," while the DART Agency is an "executive agency." The AMT in Maputo was created by the somewhat weaker instrument of a cabinet decree, while GAPTE is the weakest of all lead authorities, created as a company based on a memorandum of understanding among the participating local governments.

Even if the political will behind an authority is strong, the instrument used to create it may undermine its ability to operate. Political forces are not as enduring as laws. Moreover, there are various powers that cannot be granted to organizations that have a weak legal basis. An organization such as CoCT (UM), being part of a metropolitan government with strong powers, effectively has the power to pass and enforce bylaws, collect various revenues, and appropriate budgets, and it has strong regulatory powers. A body created as a state corporation, such as NaMATA, cannot have such regulatory powers.

The more independent the lead institutions are from core government, the more crucial their relationship with core government.

Lead institutions perform an inherently public function, optimizing the public good. But even while being part of the public sector, they can have different degrees of autonomy from core government.

Governmental authority is decentralized in most countries—sometimes substantially, sometimes only minimally. The powers of these decentralized governments are established through national laws. A constitution is a very strong form of national law that requires overwhelming support in the national parliament to change and often specifies the powers of core decentralized governments at a high level, with ordinary laws—which must be consistent with the constitution—providing more detail.

Usually, core governments (such as state, province, or local governments) have the power to create external entities to carry out some of their tasks. In some cases, they pass laws to do so, and in others they issue orders or decrees. A body created by law is usually able to be given more powers than one created by order or decree. Orders and decrees are usually issued in terms of a generic law. The details of how this works depends on the legal and governance framework of the country. These entities are still part of the public sector but operate somewhat independently. Nevertheless, they remain ultimately accountable to the core government that created them.

Usually, there are certain powers that only core governments can have because—at least in democratic countries—it is only they who can be recalled by the electorate. These usually include powers to pass laws and regulations, levy taxes, appropriate budgets, issue permits, and enforce laws. In carrying out their functions, core governments are usually subject to quite strict administrative regulation governing procurement, recruitment and remuneration, and administrative processes. And they tend to be more directly affected by change in political power.

The advantages of creating a lead institution as a semiautonomous agency rather than as a part of core government is that this can often be done more easily, and the lead institution can be given more flexibility—especially in relation to administrative regulation. However, the lead institution generally has fewer powers.

Table B3.4.1   Legal Forms of Lead Institutions and Their Characteristics

No.	Type of entity	Characteristics	Example from case studies	Explanation
1	Department within core government with authority backed by Constitution and/or national law	● Can have substantial authority, exercising the powers associated with the core government, usually including passing laws, levying taxes, appropriating budgets, issuing permits, and enforcing laws. ● Subject to strict public administrative regulation, which is often rigid. ● More directly subject to political changes. ● If powers are backed by Constitution, then these are very secure.	● Urban Mobility Dept. in City of Cape Town	● As part of core government, the UM Dept. has significant powers. ● Original powers in Constitution relating to key aspects of transport are further detailed in national laws.
2	Semiautonomous public entity with powers established through a law	● Has the powers allowed by the relevant law—which may be substantial, although less than powers of core government. ● May be allowed some independence from strict public administrative regulation. ● May be somewhat insulated from political changes. ● Can be disbanded or weakened through a change in law.	● LAMATA ● CETUD	● LAMATA established by state law, while CETUD established by national law. ● CETUD's powers are further elaborated in nationally issued decrees.
3	Semiautonomous public corporate entity established through an order or decree	● Has the powers allowed by the order or decree, which may be less substantial than those enabled by a dedicated law. ● May be allowed some independence from strict public administrative regulation. ● May be somewhat insulated from political changes. ● Can be disbanded or weakened through decisions taken by the person who issued the order or decree (or his/her successor).	● DART Agency ● NaMATA ● AMT	● All established by legal instruments of national governments. ● DART Agency established by government notice. ● NaMATA established by presidential executive order. ● AMT established by cabinet decree.
4	Independent public company with core government shareholders	● Has the powers allowed to any company, which are limited. ● Is almost certainly not subject to strict public administrative regulation. ● May be somewhat insulated from political changes. ● Significantly dependent on shareholder decisions.	● GAPTE	● Company established on basis of memorandum of understanding signed by all mayors of local governments in Accra.

3.3.3 Leadership

For institutions to exert authority successfully, they require effective leaders. One key characteristic of good leadership is good judgment, combined with an ability to motivate others to follow a chosen direction. Judgement is enhanced by exposure to good information and sound argument, although many other factors play a critical role, such as experience and motivation.

Leadership is required at both the political and administrative levels. Political and administrative leaders assess problems through different lenses. Government works best where these two levels of leadership are both competent and work well together. This requires each level of leadership to be cognizant of the pressures on the other.

While individual leaders play a critical role, successful leadership usually lies in the ability to broaden leadership so that it becomes more collective.

Leadership is not something able to be delivered on demand. But in designing institutions, attention must be paid to what makes it more likely for effective leaders to be found and for them to take charge.

3.4 Capacity

Capacity refers to the capacity to implement. Even with the right scope and strategy, and the right authority and leadership, institutions will have limited success if they lack the capacity to implement. The most important requirements underpinning capacity are having sufficient human resources with the right kinds of skills and capabilities, sufficient financial resources, and effective administrative procedures.

Ultimately, effective organizations develop an institutional culture that encourages good delivery of the right solutions. This, in turn, builds legitimacy among the public and all key stakeholders, leading to further success.

Three main elements determine the ability to implement: (i) human resources, (ii) financial resources, and (iii) administrative procedures.

3.4.1 Human Resources

A successful institution requires the right human resources. From the above discussion, it is evident that this encompasses a much wider range of skills than those of traditional transport engineers.

Getting the right skills begins by having a coherent and clearly articulated strategy for mobility, so the right skill sets are identified. It also depends on the availability of these skills in the city, and the ability to offer employment conditions able to attract such skills. One of the key motivations for creating an independent organization is often to escape the constraints of standard public sector pay levels.

Table 3.4 Comparison of Authority

City	Accra, Ghana	Cape Town, South Africa	Dakar, Senegal	Dar es Salaam, Tanzania	Lagos, Nigeria	Maputo, Mozambique	Nairobi, Kenya
Name of institution	GAPTE	CoCT (UM)	CETUD	DART Agency	LAMATA	AMT	NaMATA
Type of body	Private company limited by guarantee	Internal department of City of Cape Town municipality	Semiautonomous govt. institution	Semiautonomous govt. institution	Semiautonomous govt. institution under Lagos State govt.	Semiautonomous govt. institution	Semiautonomous govt. institution
Is there a formal metropolitan authority?	No	Yes. The City of Cape Town is a single-tier metropolitan-wide local govt. and covers most of the metropolitan functional area	No. The various authorities sit within Dakar Region	No. Dar-es-Salaam City Council previously coordinated the 5 constituent municipalities, but it was dissolved in February 2021	Yes. Lagos State govt. performs this function	No	No, but national govt. process aims to create one. Nairobi County covers up to about two-thirds of metro functional area
What is the legal basis for the mandate?	MOU signed by mayors based on provision in Local Govt. Act for Assemblies to form entities for common purpose	Key relevant powers given by national Constitution; regulated by National Land Transport Act	National Law established CETUD (1997); national decrees define its powers, organization, and operations	Government Notice No. 120 of May 2007, under Executive Agencies Act No. 30 of 1997	LAMATA Law, State Act of Lagos State govt.; strengthened by LAMATA Act, 2007	Decree 85/2017 of the Cabinet of Ministers established AMT and defined its powers	Executive Order of the President made under the State Corporations Act. Legal Notice 18, Feb. 17, 2017.
Mother institution	The participating assemblies of Greater Accra	Inherent function of City of Cape Town municipality	National Ministry of Land Transport	President's Office, Regional Administration and Local Government (PO-RALG)	Lagos State govt.	National Ministry of Transport and Communications	Partnership between central govt. and 5 counties, but ultimately under national transport ministry
Is there a governing board or council?	Mayors of the local assemblies	Mayoral committee member for Urban Mobility, but ultimately the municipal council	19-person Plenary Assembly of national depts, local govts., operators, and civil society	No. Reports via permanent secretary of PO-RALG to national minister	Board, appointed by state governor, incl. transport operators, unions, private sector, local govt., related Lagos State govt. agencies (13 pers.)	No. Reports to national minister	Council consists of national ministers of finance and transport plus governors of 5 constituent counties; 12-person technical board

Note: AMT = Agência Metropolitana de Transporte de Maputo; CETUD = Conseil Exécutif des Transports Urbains Durable; CoCT (UM) = City of Cape Town Urban Mobility Department; DART = Dar Rapid Transit; GAPTE = Greater Accra Public Transport Executive; LAMATA = Lagos Metropolitan Area Transport Authority; MOU = memorandum of understanding; NaMATA = Nairobi Metropolitan Transport Authority.

Table 3.5 suggests a set of required functions and skills for a lead institution. Different circumstances will require somewhat different functions and skills; the suggestion here assumes substantial mobility responsibilities but only high-level land-use responsibilities. The assumption is that while land-use issues will be key to a lead institution's strategies and plans, ultimate responsibility for land use will lie with a different organization with which there is a very close working relationship.
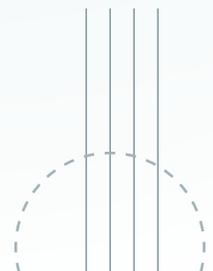
The ability to recruit good technical staff is critical, and sometimes public sector service conditions can limit this. Interestingly, this does not generally appear to be a problem in the case study organizations. In most cases, salary levels are somewhat above normal public sector salaries and, where they are not, such as in Cape Town where officials are municipal employees, they are more or less commensurate with the private sector.

Table 3.5 Suggested Functions and Human Resource Requirements

High-level category	Function	Explanation	Type of skills
Strategy planning and policy formation	Leadership/CEO	Strong leadership is crucial; must develop/drive strategy, motivate the organization, manage the technical/political interface and other stakeholders	General leadership, MBA, transport skills
	Strategic and business planning	Supports strategy and ensures that it is commercially viable	Economist, MBA, transport
	External and internal communication	Communication and engagement externally to public and internally must be well managed	Communications, stakeholder engagement
Organizational services	Financial management	Responsible for financial strategy, including revenue generation, in consultation with strategy/business planning, and financial administration of the organization	Financial strategy, accounting
	Human resource management	Procurement and management of human resources	Human resources
	Legal services	Legal inputs are required on a wide range of issues	Law
	Business improvement and procurement support	Continuous business improvement required; linked to procurement support because managing outsourcing is key aspect of business improvement	MBA/legal with transport experience
Planning	Transport planning	Plans transport system in consultation with land use to optimize access	Transport planning
	Land-use planning	Plans land use in consultation with transport to optimize access. Usually, a separate body has primary responsibility for land-use planning and regulation; a close working relationship is needed	Land-use planning
	Traffic and parking planning	Understands how general road traffic moves, including freight and develops strategies and plans for improvement, including roads, signaling, and parking	Traffic, transport planning, and engineering
	Public transport service planning	Plans public transport services including strategies appropriate to informal transport in a hybrid system, including contract/concession strategies	Transport planning, MBA, sociology, etc.
	Road and infrastructure planning	Plans and designs roads, railway lines, nonmotorized transport, and other network and facility infrastructure	Transport, roads, rail engineering

Table 3.5 Suggested Functions and Human Resource Requirements **(continued)**

Regulation	Safety/minimum standards regulation	Usually set at national level, but lead institution to recommend improvements	Transport engineering
	Commercial regulation	Design of concessions, contracts, and system of permits to operate, considering predominance of informal transport and viable enforcement strategies	MBA, law, transport engineering, sociology, economics
Strategy, planning and regulatory support functions	Data and analysis	Critical function to ensure all practices are evidence based; must capitalize on huge growth in new data sources and techniques currently available	Data and IT skills
	Stakeholder engagement	Skilled approach required to align all key stakeholders with organizational vision. Could be part of communication function above	Communications, stakeholder management
	Informal transport and business partnering	Works especially with informal transport to develop and implement improvement strategies	MBA, sociology, economics, transport
Fare systems	Fare system design and implementation	Fare collection is fundamental to success; new mobile technologies create potential for integrated fare systems that enable significant user engagement	MBA, data, tech innovation, fare system knowledge
Implementation and operations	Infrastructure and facility design, construction, operations and maintenance	Procurement of design, construction, operations and maintenance of roads/infrastructure/facilities, including contract design and management	Transport engineering, legal, MBA
	Provision of independent transport services	Procurement of service operations, including contract/concession design and management; may include rail service provider	Transport engineering, legal, MBA
	Traffic management and enforcement	Signage, signaling and enforcement of minimum standards and commercial regulation	Traffic engineering, sociology, admin

Note: CEO = Chief Executive Officer; IT = Information Technology; MBA = Master's of Business Administration.

3.4.2 Financial Resources

Having adequate financial resources is a critical driver of success. It determines, first, the ability to attract the right human resources to the institution, but second, the power of the institution to make things happen.

Important aspects of this discussion include the distinction between the resources required to run the institution and the resources required to implement and run projects, and, especially in relation to the latter, the capital required to build projects and the ongoing stream of income required to run them. It is often simpler to source capital funding than operating revenue, yet over the long term, sufficient operating revenue is ultimately a fundamental driver of successful services.

A further consideration is whether resources are generated through an ongoing, dedicated revenue source—optimally one over which the lead institution has control—or a grant from a different entity, such as the national or a subnational government. Most significant transport projects are implemented over a few years and then continue operating in perpetuity. In such

cases, the reliability and predictability of financial resources is critical. It is sometimes better to have a more limited but reliable income flow around which appropriate strategies can be developed than large flows that are unpredictable and may be halted abruptly.

Table 3.6 identifies the more common potential revenue sources, separated into recurrent (or operating) revenue sources and capital sources. In principle, the recurrent, core costs of a lead institution—such as its core personnel—should be funded by reliable recurrent revenue streams.

A lead institution needs to be able to exercise sufficient control or influence over all expenditure on mobility that takes place within its area of jurisdiction. Even if the institution does not have direct control over such expenditure, a good mechanism is for the lead institution to effectively be the planning authority for mobility in the area, drawing up plans that other institutions must support when designing and implementing their own projects. This does not enable the lead institution to prioritize spending, which would be an important further step, but is does ensure that where spending takes place it is consistent with coherent overall plans.

Unfortunately, the financial picture among the case study institutions is less encouraging overall. In most cases financial resourcing is quite limited and somewhat unreliable.

Several of the organizations rely quite heavily on external development partners—even the more established organizations of CETUD and LAMATA. The national contribution to CETUD has declined significantly since 2016. Fortunately, this has been compensated by development loans and grants supporting the new BRT project. LAMATA has generally been well supported by a transport fund from the Lagos State government over the years. However, a few years ago these flows were stopped for three years. Fortunately, LAMATA was able to continue operating until the fund flow was restored, in part thanks to the existence of major external-funded projects; however, an organization of this kind requires greater funding security.

In the AMT, nongovernmental organizations (NGOs) and development partners employ a significant proportion of the staff members in the core organization.

In some cases, the salaries of core staff are provided for in the national budget (NaMATA, AMT, and CETUD).

The most securely funded case study institution is CoCT (UM). The municipality, itself, is securely funded and, being part of the core municipality, the Urban Mobility Department is funded from the municipality's own general revenue sources, which include property taxes and a share of the national fuel levy. There is also a well-structured system of national grants to the municipality that are budgeted on a rolling three-year basis, enabling a good level of predictability.

One advantage of implementing large capital projects is that ways can usually be found to use some of the resources to fund the core organization. However, this can create perverse incentives, and it is not ideal.

3.4.3 Administrative Procedures

Institutions located within the public sector tend to be subject to a range of administrative rules and procedures that can impact their efficiency and effectiveness. These often relate to procurement and employment processes.

Table 3.6 Existing Revenue Sources of Case Study Institutions

Category	Revenue source		GAPTE	CoCT (UM)	CETUD	DART Agency	LAMATA	AMT	NaMATA
User charges and other recurrent fees	Fares	RECURRENT	√	√	o	√	√	√	o
	Tolls		o	×	×	×	×	×	o
	Facilities rental		o	×	o	√	×	×	o
	Concession/license to operate		o	×	√	√	√	o	o
	Royalties and fees		√	×	√	√	×	o	o
	Advertising		o	√	o	√	√	o	o
Taxes	Property tax		×	√	×	×	×	×	×
	Business and other taxes		×	×	×	×	×	×	×
	Fuel levy		×	√	×	×	√	×	×
	Vehicle licenses		×	×	×	×	√	×	×
	Surcharge on fares		×	×	×	×	o	o	×
Operating grants	Monetary government grant		√	√	√	√	√	√	√
	Grants-in-kind		√	×	√	o	√	√	√
	Donor grants		√	×	√	√	√	√	√
Capital grants	Monetary government grant	CAPITAL	o	√	√	√	√	√	√
	Donor grants		√	×	√	√	√	√	√
Loans	Government		√	×	√	√	√	×	√
	Donors		√	×	√	√	√	√	√
	Development banks		o	√	√	√	√	√	√
	Private financial institutions		o	√	√	o	√	o	o
PPPs	Various		×	×	√	×	√	√	√

Note: This is based on best available information, but the reality is dynamic and subject to change. The AMT and NaMATA are new institutions; some revenue sources such as fares will only be implemented when services start. Monetary government grants could be from national and/or subnational governments.

√ = Is or has been receiving this category of revenue

o = Mandated/intended to have received this category of revenue but source not forthcoming thus far

× = Has not been a significant revenue source thus far

It is important to address this issue since it can have considerable impact on the capacity to implement. One motivation for establishing a lead institution somewhat independent of government administration is that it may offer scope for tailoring such rules to better suit the needs of the organization.

3.5 Institutional Culture and Legitimacy

The characteristics outlined above are crucial elements in building effective lead institutions able to organize transport in cities in the public interest. Over time, institutions develop an institutional culture that becomes an important determinant of success or failure. Having the right characteristics, as discussed in this section, provides an important foundation for developing a positive institutional culture that leads to effective delivery of the right outputs. Leadership is critical in establishing a sound institutional culture, but all the elements play a role. Once such a culture is established, it can persist independently of any single factor.

Alongside institutional culture is the concept of legitimacy. Legitimacy is about trust in an institution and a generalized belief in its capability to perform appropriately and effectively. This is developed mostly through building a track record of successful delivery. Choosing achievable objectives that build a record of successes is thus of great importance.

The process is self-reinforcing; if an institution has legitimacy, it is more likely to be successful because stakeholders are more willing to align themselves with the institution and act to support its objectives. Having the right scope, authority, and capacity enables the building of legitimacy, but in turn, greater legitimacy makes it easier for an organization to strengthen these elements. Hopefully, the NGO funding of some posts of an incipient organizing authority leads to successes that, in turn, result in better and more secure public funding.

**Figure 3.3** Institutional Legitimacy within the Framework of Analysis

Good internal and public communication is an important contributor to the establishment of a lead institution's internal institutional culture and external legitimacy. But ultimately, these are built over time through success.

Table 3.7 Comparison of Capacity to Implement

City	Accra, Ghana	Cape Town, South Africa	Dakar, Senegal	Dar es Salaam, Tanzania	Lagos, Nigeria	Maputo, Mozambique	Nairobi, Kenya
Name of institution	GAPTE	CoCT (UM)	CETUD	DART Agency	LAMATA	AMT	NaMATA
Are appointments of technical officials merit based?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is organization bound by public sector conditions of service?	No	Yes, but these are competitive with private sector					Yes, but these are reasonably competitive
Does the operating authority have a committed budget line at some level of government?	No	Yes, it forms part of the budget of the City of Cape Town	Yes, toward CETUD's operational costs	Yes, toward DART Agency operational costs	Not a committed annual budget amount. LAMATA has received substantial LASG funding in 12 of its 17 years, but in only 2 of the most recent 5 years	No	Yes, salaries of the core NaMATA staff are provided for in the national Transport Department budget
Is there a predictable flow of grant income from national/state/ local government?	No	Yes, Public Transport Network Grant from national govt.	Grant from national govt. declining; no contribution from local govt.				
Is a significant portion of the core budget dependent on external donors?	No	No	Yes	No	IBRD loans for large projects	Donors account for a significant number of core employees	No
What is the main source of capital funding for major projects?		National grants					
Does the organization have its own tax base?	No	Municipality levies property tax and a share of national fuel levies	No	No	State govt. levies taxes and LAMATA may levy with governor's permission	No	No

Note: AMT = Agência Metropolitana de Transporte de Maputo; CETUD = Conseil Exécutif des Transports Urbains Durable; CoCT (UM) = City of Cape Town Urban Mobility Department; DART = Dar Rapid Transit; GAPTE = Greater Accra Public Transport Executive; LAMATA = Lagos Metropolitan Area Transport Authority; LASG = Lagos State government; NaMATA = Nairobi Metropolitan Transport Authority.
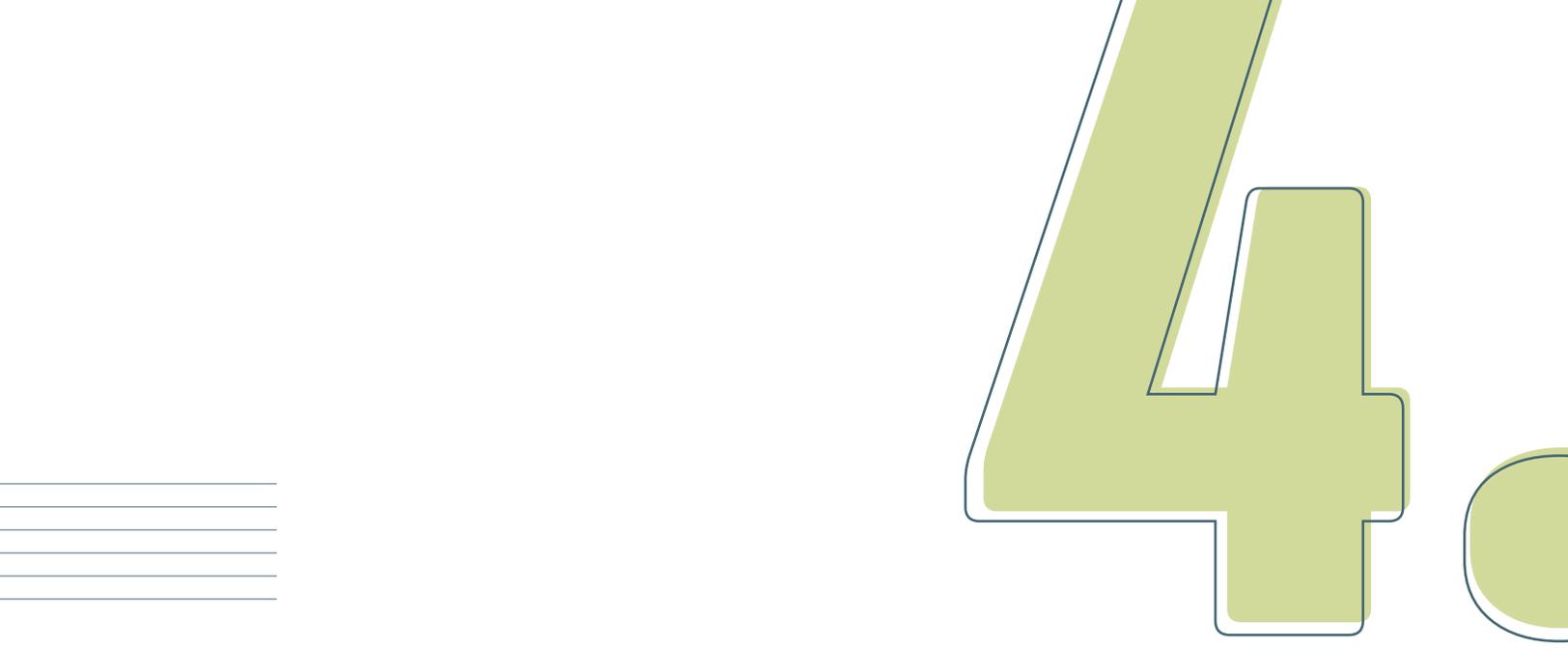
REFLECTIONS ON THE SUB-SAHARAN AFRICAN EXPERIENCE

4.1. Introduction

In this paper we have highlighted the Sub-Saharan African context of rapid urban growth, poor urban mobility, and metropolitan governance challenges. We have outlined the theory behind the need for lead transport institutions on a metropolitan scale and the key characteristics that such institutions should embody. We have summarized the experience of each case study institution and compared them across significant themes.

In this concluding section, under four key themes, we reiterate and expand on some of the ideas already raised, discussing the establishment of lead transport institutions from a distinctly Sub-Saharan African perspective, and responding to the local context and the insights drawn from the case studies.

The four themes are:
- Establishing authority at a metropolitan scale
- The benefits and risks of major projects
- Regulation and relationships in the context of limited state power
- Working with informal transport

4.2 Universal Factors Underpinning Sustainability and Effectiveness

In *Institutional Labyrinth*, Kumar and Agarwal (2013) identify four factors key for ensuring the sustainability and effectiveness of lead transport institutions globally:

- Their ability to deliver public value
- The political support they enjoy and their legal authority
- Internal capacity, through personnel, and secure sources of finance for their own operations
- Decision-making authority over financial resources for investment and operating subsidies

These criteria for success resonate well with the findings of this study on Sub-Saharan institutions.

Their ability to deliver public value depends on lead institutions having the right *scope* of responsibility to enable them to develop and implement successful mobility strategies. If not, what they do—even if they do it well—will likely not deliver public value.

The political support they enjoy, and their legal authority, corresponds to our requirements that they have sufficient *authority*.

Finally, the first and last two factors correspond with our requirement that lead institutions have *capacity* to implement. This, we have argued, is related especially to being able to marshal appropriate personnel and have sufficient financial power to fund internal operations as well as influence how resources are spent on transport projects and operations.

4.3 Establishing Effective Metropolitan Scale Transport Governance

As explained in section 3, two of the seven case studies—Lagos and Cape Town—have established governance authorities at a metropolitan, or citywide, scale. Dar es Salaam had an overarching authority, but it was recently abolished. In the other four case studies, the lead transport institutions represent a first attempt at establishing governance of any form at that scale.

4.3.1 Changing Economic Geography Requires New Governance Institutions

Awareness of a need for metropolitan-wide governance institutions in Sub-Saharan Africa tends to be quite new. Many countries remain significantly rural, with economies still based on primary sectors such as agriculture and mining. Government services are thus structured mainly toward responding to these needs, providing social services to dispersed populations and focusing road, rail, and other infrastructure systems on connecting regions within the country and exporting primary products.

But the scale of urban growth, as described in section 2.1, and the severe adverse impact on productivity and quality of life arising from challenges such as congestion and poor access, is leading to a growing realization not only that this relatively new phenomenon in Sub-Saharan Africa has significant national implications, but that it cannot be addressed by the legacy institutional forms.

4.3.2 Decentralization Programs Often Fail to Respond to the Emergence of Large Cities

Countries in Sub-Saharan Africa often do have a program of decentralization aimed at strengthening local governments. But these programs tend to be rooted in the legacy economic geography, with a conception of local government that does not distinguish sufficiently between small towns or rural settlements and big cities. Local government systems are often understood as mechanisms for "intimate" governance in local communities; they are not designed to manage complex and rapidly growing agglomerations of millions of people.

Moreover, they are often oriented toward social services such as primary health and education rather than the built environment–related services that become more crucial as cities grow. Even while attempts are made to strengthen local governments, their resources remain limited and their status relatively low.

4.3.3 Mobility Is a Leading Sector in Establishing Metropolitan Governance

As noted, deteriorating access caused by congestion and increased travel distances is often one of the earliest and clearest crises to emerge in large, rapidly growing cities in Sub-Saharan Africa. Initial responses usually focus on road-building schemes, but while these may be necessary, it soon becomes obvious that what is needed is a more systemic approach that understands movement within the city as an integrated whole. This provides the impetus for establishing the kinds of institutions highlighted in the case studies. These may broaden to encompass other functions.

As explained in box 3.2, a systemic approach to improving access ought to address land-use issues and the factors that determine urban form, since this is what defines patterns of demand. This, in turn, is related to the provision of bulk services. Roads, traffic, and parking control and enforcement are also critical. An effective approach to managing the city will combine at least elements of all of these at a citywide or metropolitan scale. Having a metropolitan-wide spatial plan that not only forms a basis for designing transport systems but also can direct major infrastructure development is an important goal.

Nairobi illustrates how the transport sector can lead the creation of metropolitan institutions. There has been discussion about the creation of a metropolitan government for almost two decades, with the national Ministry of Nairobi Metropolitan Development formed in 2008. However, only NaMATA has been created at this scale. NaMATA's scope of responsibilities enable it to expand into land-use issues, and it may well grow into a broader metropolitan authority with lead responsibility for ensuring implementation of a Nairobi spatial plan.

4.3.4 Metropolitan Governance Usually Needs National and Local Partnerships

Lagos and Cape Town are somewhat exceptional in having established, constitutionally entrenched subnational governments at a metropolitan scale. But usually, metropolitan governance arrangements need involvement from government at both the national and local levels to be effective.

Effecting significant change in patterns of access and mobility in Sub-Saharan African cities is a substantial undertaking, requiring a degree of power and authority that usually depends on national government support. Conversely, national governments can easily feel threatened by strong metropolitan entities, so there are dangers in their not being involved. This applies not only in Sub-Saharan Africa; the abolition of the Greater London Council in the 1980s was partly motivated by the challenge that it represented to the UK national government at that time.

On the other hand, as has been explained, the tasks that a metropolitan-level authority undertakes require a strong sensitivity to local issues, including how urban space is managed at a very local level.

Nairobi's NaMATA is a good example of how a formal governance structure has been created that involves both the national government and all the counties in which the functional metropolitan area falls. In the council governing NaMATA, the national minister for transport (the cabinet secretary) is the chair, while the governor of Nairobi City County—the core county within the area—is the deputy chair. Many of the staff are seconded from the counties, while the budget for the core administration is paid for by the national Transport Department.

CETUD in Dakar combines both local and national stakeholders in its Plenary Assembly, including national ministries and departments and a representative from each of the five local governments in the region. CETUD goes further by also including six representatives from the private sector, transport operators, and consumer associations.

Part of the challenge faced by GAPTE in Accra is that there is insufficient national involvement in the organization—particularly in the context of increasingly fragmented local government.

We have explained in section 3 that joint arrangements can limit the legal power of the metropolitan-level institution, since an institution based on a partnership between national and local governments is usually not part of either national or local government but is created rather as some form of semiautonomous government body. This means that it cannot be given the level of power that a fully-fledged national or local government can have. Having the Urban Mobility Department located within the City of Cape Town gives it significant legislative, regulatory, and enforcement powers, as well as the power to levy taxes and charges—within constitutional constraints. However, this option does not exist in many countries.

4.3.5   Getting the Balance Right between Technical and Political Dimensions

Establishing the right combination of national and local government involvement raises the issue of the balance between technical and political dimensions.

There is a danger that professionals in the transport sector take insufficient account of the political dimension to improving urban mobility when designing transport governance institutions. The changes in people's daily patterns and the resources required to bring about real improvements are substantial and undoubtedly have significant political impact. Locating transport lead institutions well in relation to national and local governments is thus important for driving change, mobilizing material support, and managing political headwinds. Seeking to isolate them as purely technocratic institutions is unlikely to bring success.

On the other hand, having technically sound strategies and approaches is critical. Designing lead institutions requires paying close attention to this. In a few of the case studies, the organizing institution has a political-level authority and a separate, more technical body reporting to it. For example, NaMATA has a council made up of key political representatives of the national and county governments, and a separate board that reports to it and is primarily technical in nature. The CEO of NaMATA, who heads the administration, is also on this board. While the board includes senior administrators from the constituent national and local authorities, it also provides for three external technical experts. LAMATA's board combines political and technical perspectives, as does CETUD's Plenary Assembly.

One of the advantages in creating a dedicated metropolitan-scale lead institution for managing mobility is that it has a clear functional purpose and is often created with the intention of addressing specific and clear problems, such as congestion and access. This makes it easier to recognize the importance of the technical dimension and design it with this in mind. National and local governments also have functional responsibilities, but their role as representative bodies often becomes dominant, and this can undermine good technical decision-making.

Much depends on the ethos that prevails when such institutions are formed. In most of the case studies, the importance of the technical dimension was recognized in establishing the institutions. Care was taken to establish recruiting and remuneration mechanisms for LAMATA that brought in strong technical personnel to head the organization. A similar ethos prevails in CETUD. This can also be done within general government institutions. For example, the City of Cape Town has a well-established tradition of separating political and administrative levels and paying salaries that are commensurate with the private sector.

4.3.6   Conclusion

The speed and dimensions of growth in Sub-Saharan African cities have thrust the need for metropolitan-scale governance institutions to the forefront. Mobility tends to be one of the first functions where the need for this becomes apparent, so organizing authorities for transport often lead the development of new, metropolitan-level governance institutions, and may broaden their functions over time. The nature and significance of their task requires establishing the right balance between political and technical dimensions and good support from national government while being sensitive to local needs.

4.4 The Benefits and Risks of Major Projects

4.4.1 Major Projects as Catalysts for Building Lead Transport Institutions

We have explained that lead transport authorities need to build their legitimacy and authority. Often large, high-profile projects provide a mechanism for doing so, and are even the trigger for their establishment. Large projects mobilize resources. They can also create an urgency to deliver—since a failure to deliver is widely evident.

As explained in section 2, LAMATA began its work by improving road maintenance in Lagos but gained profile and real momentum through its BRT projects. It has now extended its focus to commuter rail. The lead institutions in Maputo and Dar es Salaam have been catalyzed by major projects. The establishment of NaMATA was driven to a large degree by plans to develop a mass rapid transit system, including BRT and commuter rail lines. In Cape Town, while the Urban Mobility Department has existed for many years, it was only because of a BRT project, triggered by national policy developments and promoted and funded largely by the national government, that the municipality began to play a more leading role in public transport.

4.4.2 Trunk Lines and Priority for Public Transport Likely Part of the Solution

High-capacity trunk lines based on infrastructure that gives priority to public transport is highly likely to form part of the access solution in large urban areas. These enable the rapid movement of large numbers of people across the conurbation and, complemented by a good system of feeder, distributor, and other services, provide a critical dimension of mobility.

There is thus a strong technical motivation for these kinds of projects.

4.4.3 Complexity and Risks of Large Projects

But large projects are complex. They have many different dimensions, are subject to a wide range of pressures, and, if they fail, can have significant adverse impact that undermines the legitimacy of incipient lead transport institutions.

BRT projects are particularly complex. They seek to carve out priority roadway for public transport in often highly contested and congested road space. Most BRT systems require specific bus designs that allow docking at stations, thus introducing new constraints. And they can lead to major conflict with the paratransit sector whose market they disrupt. Theoretically, they introduce substantial efficiencies that should enable them to operate without operating subsidies; however, new institutional forms based on larger businesses compared to the existing paratransit sector can create new challenges, which means that this is not always what transpires.

Generally, in time, well-conceived BRT projects will prove a significant asset to mobility in a city. But the path forward can be painful. Both GAPTE and the DART Agency have thus far struggled to realize the initial BRT vision. BRT services have functioned somewhat poorly at times in Lagos. Meanwhile, operating deficits have been higher than envisaged in Cape Town.

It is therefore critical that such projects are well designed, supported, and financed, and that the risks in establishing a new institution around a major project such as BRT are understood and managed.

4.4.4   Major Projects as a Means to a Wider End

As noted, there is also a danger that establishing a lead institution around a single major project or mode can tie the organizing authority into promoting a single element of the system at the expense of the system as a whole. For example, when a lead institution is established around a BRT project, its priority can become ensuring the financial success of that project rather than optimizing mobility overall.

Organizing authorities need to be multimodal and primarily user oriented in their approach. Establishing them to implement a particular project risks making them not just supply oriented but oriented to one form of supply.

This risk has been evident in Cape Town, where much of the focus of the Urban Mobility Department since 2008 has been on building the MyCiTi BRT system. However, over time, as the limitations of a single modal solution have become more evident, the department has been broadening its perspective to focus on improving the wider multimodal system. The DART Agency has, by design, had a single focus on BRT, while GAPTE has arrived at this orientation somewhat by default.

Thus, while large projects can be a significant catalyst for the establishment of lead transport authorities, attention needs to be paid to leveraging this toward a multimodal, user oriented systemic approach.

4.4.5   Dakar Exemplifies an Important Alternative Approach

CETUD in Dakar represents an important alternative to an infrastructure-heavy, large project approach. It has worked with paratransit operators over two decades to improve their organization and skills and is only now embarking on a BRT project. This has given CETUD time to establish itself and its legitimacy and created a much better context for involving paratransit operators in the new BRT service.

4.4.6   Conclusion

The establishment of lead transport organizing authorities tends to be driven by large, infrastructure-oriented formal transport projects. This can help leverage resources and establish the organization's profile and authority. But large projects are difficult to implement successfully. Alternative approaches are possible, such as that of CETUD in Dakar.

4.5 Regulation and Relationships in the Context of Limited State Power

4.5.1 Limited State Power in Sub-Saharan Africa

Unlike many of the lead organizations highlighted in Institutional Labyrinth (Kumar and Agarwal 2013), institutions in Sub-Saharan Africa work within the context of much more limited state power. Thus, the state sector has far fewer financial and other resources at its disposal. But the absence of state-provided public transport and other services does not rule out these services altogether; instead, informal operators fill the gap.

This system of private informal operators works according to its own unofficial rules in patterns that have developed endogenously between operator and user. So, while in London the challenge may be the absence of a convenient route between two points and thus the development of a major project such as Crossrail, in Sub-Saharan African cities the challenge is to change how an existing system operates in order to rationalize it and bring about greater efficiencies.

Some strategies developed for Sub-Saharan African cities assume the absence of an existing system. This may be because of the difficulty in measuring current operations using traditional transport planning methodologies developed for fully industrialized countries. But they tend to bring disappointing results.

Thus, while some major infrastructure-heavy projects may be appropriate, the key to success lies in improving how existing operators work. Limited financial resources mean that these improvements cannot rely on a new, ongoing stream of subsidies. Rather, they must result in greater efficiencies that ideally can be shared by operators, drivers, and users so that everybody benefits.

4.5.2 Regulation and Relationships

This implies a strong emphasis on changing behavior and relationships—or "regulation" broadly understood. Apart from safety and minimum standards issues, regulation is essentially about better organizing the sector through better matching of supply and demand. Thus, regulation should lie at the heart of organizing authority strategies, working with other levers, such as contracting services or concessioning routes. But a relatively weak state cannot simply impose new rules; it must work with key stakeholders to demonstrate better ways of doing things and incentivize change to establish better patterns of operator and user behavior.

Because operator livelihoods are at stake and they are better able to organize, there is a danger that user interests become subservient to operator interests. One of the tasks of an organizing authority is to help understand and articulate the needs of the user. If users view the organizing authority as a partner, this strengthens both users and the organizing authority in its engagement with operators. A more clearly articulated user voice is more likely to find expression through political processes and help drive change.

A critical interest group that potentially presents a significant obstacle to change is the growing population of car owners. Not only do they occupy a large proportion of road space for relatively

low passenger movement, but they constitute the wealthiest segment of the society and generally the most powerful. As congestion mounts, preserving road space for exclusive public transport use becomes increasingly contentious. Ultimately, better public transport should lead to lower congestion; the challenge lies in bringing car users to this understanding.

But existing operator associations can also be an obstacle to change. These organizations have usually established a business model that is based on the status quo. It may be difficult for them to give this up for a future that is not clear.

This all implies that a lead institution must pay close attention to relationships with and between all relevant stakeholders and seek creative ways of working with them to bring about change.

4.5.3   The Importance of Data

The starting point is to have a good understanding of the current situation and its problems, including what lies behind these problems. This requires good data—and methods for turning the data into good information that informs good strategies. Strategies for improving mobility in Sub-Saharan African cities will differ in some fundamental ways from those applicable in more industrialized countries; it is crucial to have the right data to develop locally appropriate strategies.

Significant advances in data and communication technology have already transformed what is possible in this area, and there are numerous examples of innovative use of technology in African cities at low cost. A recent account of the application of cheap mobile technologies to the marshaling of information about the paratransit sector in Sub-Saharan African cities can be found in the report *Improving Paratransit in Maseru and Gaborone: Using Innovative Data Techniques in a Diagnostic Approach to Inform Strategy* by Jia et al. (2022).

Where electronic fare systems are used, this can be a vital source of information relating to the service itself. However, while there is much interest in their potential, currently the penetration of such fare systems in Africa remains limited. Arroyo-Arroyo, van Ryneveld, and Finn (2021) describe some of the developments in this regard in the report *Innovation in Fare Collection Systems for Public Transport in African Cities*.

Increasingly, mobile phones are being used to make payments and summon rides, although the latter tends to be restricted to motorbike taxis.

4.5.4   Communications

Apart from the importance of gathering information for improving operations and policy, organizing authorities need to be excellent at communication. This is fundamental for working with all the existing stakeholders as outlined above and requires a diversity of communication methodologies, but it need not require substantial resources.

While a variety of communication channels need to be used, for users, mobile phones offer significant new scope for communicating with these stakeholder groups on a collective or individual basis. Creatively used, this could be an important vehicle whereby organizing authorities can better understand and partner users.

An organizing authority should pay substantial attention to creating capabilities for both gathering data and information as well as communicating with users. This is in addition to the role it may play in using data technologies in operations, such as fare systems and control over vehicles. Modern data techniques also make new practices possible in regulation and enforcement.

4.5.5   The Significance of Branding

To the extent that others relate to it, all organizations have some form of identity, however low-key. Organizing authorities need to be clear about their identity and about how they wish to communicate it to others. How they communicate their identity to others becomes their brand.

Different approaches to branding will be needed under different circumstances. LAMATA was created and launched with a high profile, while the establishment of other organizing authorities, such as the AMT in Maputo, occurred with much less publicity.

But an organization's brand must be rooted in its purpose. The distinction between a project or service and the role of the organizing authority as an institution that seeks to make mobility work in the city across various modes is relevant to identity and branding. Being too closely identified with one or other branded service can be a limiting factor.

4.5.6   Conclusion

The state sector in Sub-Saharan Africa tends to have limited financial and other resources at its disposal while facing entrenched existing systems that it cannot easily replace. The focus therefore needs to be on working with these existing systems to improve efficiencies. This places the emphasis on changing operator and user behavior—or regulation, broadly understood.

Having limited resources means change cannot easily be forced on existing stakeholders; rather, transport organizing authorities need to work creatively with these parties to demonstrate better ways of doing things and incentivize change. The key is having a good understanding of the current system, based on good data, and placing emphasis on communicating well. New technologies enable this at relatively low cost.
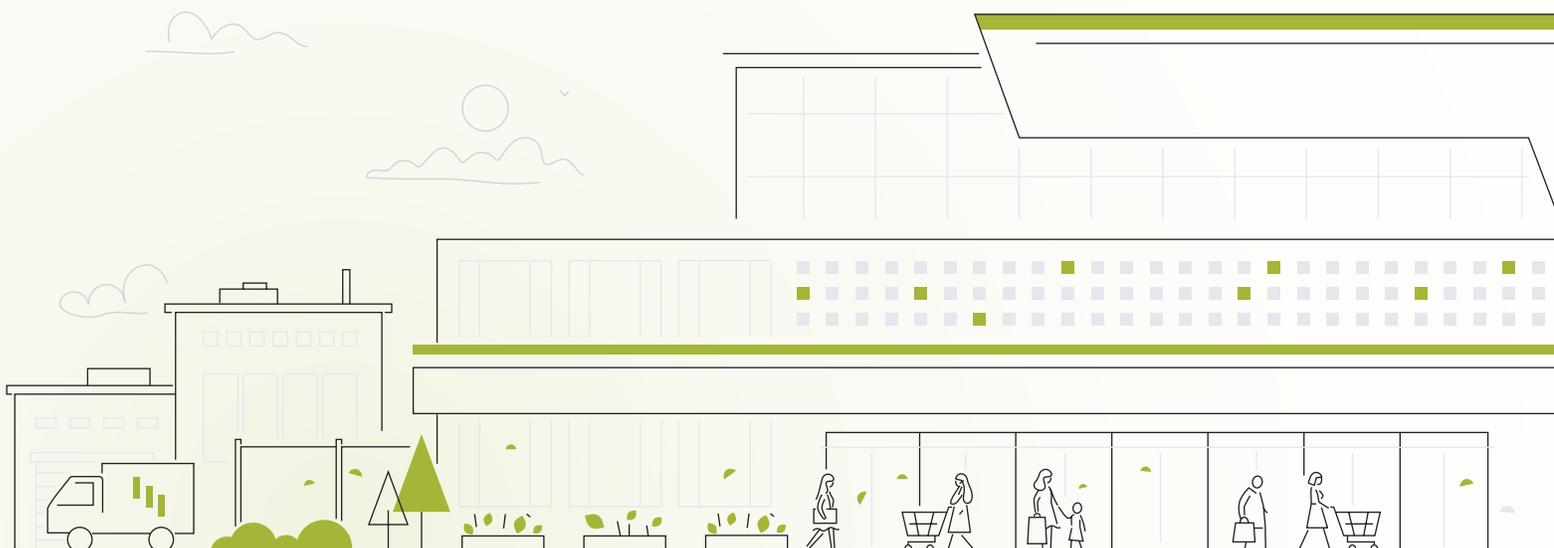
4.6 Working with Informal Transport

4.6.1 Working with Informal Transport Must Be at the Core of Mobility Strategies

Working in the current reality means working with informal transport, which accounts for most mobility in Sub-Saharan African cities. While a lead transport institution in the region may aim to implement some large mass rapid public transport corridors, if it does not also place engagement with the paratransit sector at the heart of its work and seek ways to enhance how it functions, its strategy is probably weak. Incremental approaches that work with existing realities may not achieve substantial results quickly, but ultimately, they often have a better likelihood of success.

Even if the key aim is to shift paratransit operators into more formal services, a detailed knowledge of and engagement with the paratransit sector is vital.

Once there is engagement with the informal public transit sector, and new approaches are developed to work with it, the dichotomy between formal and informal transit becomes less clear. Instead, there is a continuum of institutional forms based on changing modalities of operator organization. Lead institutions need to understand this continuum and work with the sector to bring about change. This is likely to require an incremental approach.

4.6.2 Areas of Intervention

There are five broad areas for engagement:

- Regulation
- Organization of the informal passenger transit sector
- Vehicle financing
- Operations and maintenance
- Supporting infrastructure and systems

Adopting these approaches means that new organizing authorities will need to engage with paratransit business models to enable innovation while building knowledge, capacity, and relationships that create a platform for more substantial projects over time. They may need to focus initially on smaller infrastructure projects aimed at enhancing the efficiency of existing services before embarking on larger mass transit projects.

The informal transit sector, by definition, stands outside traditional regulatory frameworks, so bringing them into these frameworks—or building frameworks around the sector—will take considerable ingenuity. Knowledge on how to do this is expanding, although there is much still to learn.
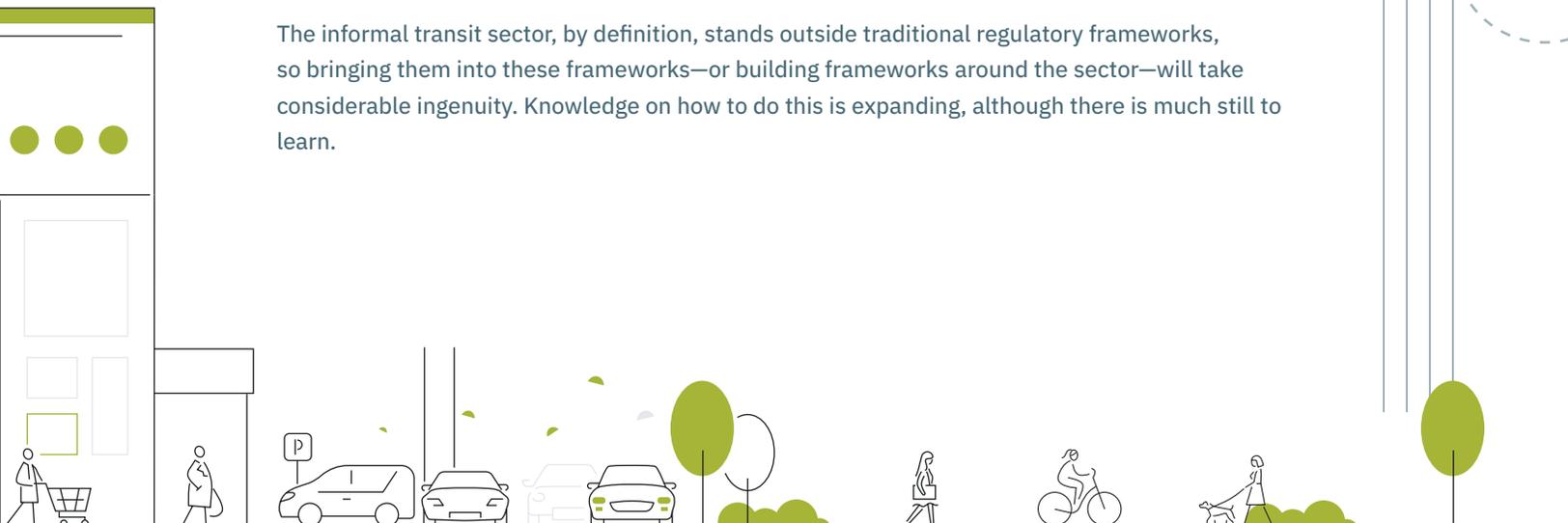
4.7 Conclusion

The establishment of a well-designed lead institution with sufficient scope, authority, and capacity is not a prerequisite for making transport improvements, but without it, advances are likely to be much more fragmented and have more limited impact.

Some important implications have emerged for lead institutions in Sub-Saharan Africa:

- They must be positioned to exercise authority and influence over the whole metropolitan area.
- They must be well positioned in relationship to both local and national government.
- They will hopefully result in metropolitan governance arrangements being established for a wider set of relevant functions, especially around land use and the planning of bulk services.
- They must enable a good balance between addressing relevant technical and political issues.
- They must establish an appropriate balance between large infrastructure projects and more systemic, incremental change, ensuring that all contribute to a multimodal approach.
- They must prioritize the needs of the users and place existing services—which are predominately informal services—at the heart of its strategies.
- They must have a scope of responsibility that enables the lead institution to engage with all the key factors relevant to its strategies, including the functioning of general traffic and the core road network, in which current services largely operate.
- They must play close attention to practical approaches to regulation—in the sense of finding ways of better matching supply and demand—in an environment where current services are largely unregulated.
- They must play close attention to understanding the mobility environment through good data and information systems and develop effective strategies on this basis.
- They must be highly skilled at communicating and engaging with all key stakeholders to facilitate institutional alignment and positive change.

Finally, it should be recognized that the development of lead transport institutions takes time, and the most successful lead institutions have developed over many decades. All have made errors and suffered setbacks in the process. Hopefully, as new lead transport institutions emerge in Sub-Saharan Africa, these can be minimized.
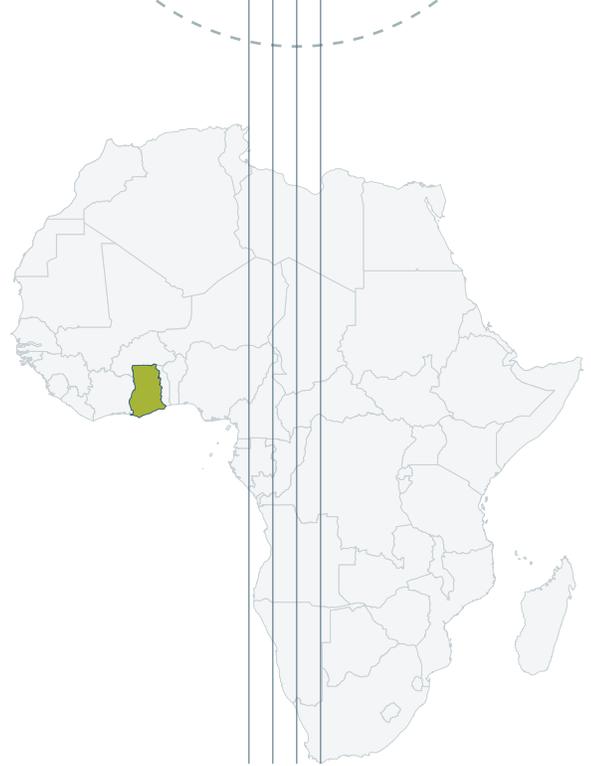
APPENDIX

Summary and Analysis of Case Study Cities

This appendix provides a summary of the case studies of organizing institutions in seven select Sub-Saharan African cities, commenting on how the examples relate to the key conceptual issues explained in section 3.

GHANA
ACCRA

1.1   Name of Organizing Authority

Greater Accra Public Transport Executive (GAPTE)

1.2   Summary of Key Features

- GAPTE was established in 2014 to coordinate the transport functions of the local governments in Greater Accra and develop and implement an integrated metropolitan-wide public transport strategy, following a broader national initiative starting in 2000 to improve public transport, especially in Accra.
- GAPTE is under the authority of and accountable to all local governments (known as MMDAs—metropolitan, municipal, and district assemblies) in Greater Accra (26 in 2021).
- The broader initiative included the creation of a national Centre for Urban Transport (CUT) to strengthen technical insights for urban transport improvements; the creation of an Urban Transport Advisory Committee (UTAC) to coordinate activities among national ministries and departments, other national agencies, and MMDA's; and an intention to implement a bus rapid transit (BRT) project in Accra.
- The creation of GAPTE represented an attempt at local-level institutional innovation; however, by the time it was formed, the national-level initiatives had lost momentum, with UTAC failing to meet for almost two years after elections in 2008 resulted in a change of national government.
- While the Constitution and the Local Government Act (1993) seek to strengthen MMDA powers, the increase in the number of MMDAs in Greater Accra from 3 municipalities in 2003 to almost 30 currently, largely because of subdivisions, combined with underfinancing, has weakened local governance in Accra, especially the ability to act at a metropolitan scale.
- Whereas the original core of MMDAs had established administrations, their fragmentation as a result of legacy local governments being subdivided has resulted in limited municipal administrative capacity and has undermined the potential effectiveness of GAPTE.

- Cash-strapped MMDAs have failed to contribute the intended route permit fees (sticker fees) or to make other envisaged subventions to GAPTE, or coordinate administration.
- Unable to work with the MMDAs to establish combined transport management capabilities, GAPTE now focuses largely on providing operational support to the envisaged BRT project; however, this project has been undermined by the national government's pre-election purchase and use of expensive buses before key elements of the project have been put in place, including adequate bus prioritization infrastructure.
- GAPTE has thus struggled to meet expectations.

1.3   Scope

GAPTE was established in 2014 and covers the area of the 26 (in 2021) contiguous MMDAs that cover the area of Greater Accra, which has an estimated population of 4.6 million.

Its establishment formed part of a set of initiatives taken by the national government since 2000 as part of the Ghana Urban Transport Project (GUTP) to improve the transport sector, with a focus on the following:

- Clarifying responsibilities at different levels of government
- Formalizing informal public transport
- Investing in infrastructure and bus rapid transit to catalyze transformation of public transport

GAPTE was formed because of a realization that unified transport authorities are necessary in order to coordinate across multiple local jurisdictions in each urban functional area so as to improve regulation and service planning. The expansion of the city and the subdivision of assemblies, resulting in an increase from 3 assemblies in 2003 to 4 in 2008 to 26 in 2021, has heightened the need for such a metropolitan-wide body; however, it has also made it more difficult to achieve.

At the outset, GAPTE's intended responsibilities were many:

- Ensuring urban public transport network and service planning
- Urban public transport regulation, route licensing, and contracts with operators
- Setting service standards
- Service monitoring and enforcement
- Establishing tariff levels for urban public transport services
- Integrated customer services, including fare collection and traveler information
- Developing priority measures for urban public transport
- Planning, provision, and management of urban public transport supporting infrastructure
- Control of bus terminals
- Urban public transport financial planning
- Managing BRT, when/if developed

GAPTE was one of the later initiatives to be implemented, growing from its predecessor known as the Steering Committee for Urban Transport in Accra (SCUTA). Other elements of the national initiatives included the creation of UTAC, to coordinate activities among national ministries and departments, other national agencies, and the MMDAs; and CUT, established by an act of Parliament in 2010, to develop national urban transport policy and strategy; set standards and guidelines; provide technical support and knowledge on urban transport; provide information on innovative solutions; support research and maintain a database; and promote human development in the sector.

Unfortunately, by the time GAPTE was established, the national initiatives had lost significant momentum. UTAC, which had been an active group coordinated by the Project Implementation Unit of the Department of Urban Roads, ceased to meet after the 2008 national elections led to a change in the ruling party; it was revived in 2010, but without the same coherence of direction. CUT never established itself as an effective institution and the initiative was abandoned.

In 2008, based on the understanding that local government legislation vests regulatory authority for urban passenger transport services in the MMDAs, each assembly established an Urban Passenger Transport Unit (UPTU/Transport Department) to regulate and license the paratransit tro-tros within its area, collect transport supply information, and coordinate with other assemblies. GAPTE is intended to work in cooperation with MMDAs in issuing permits and managing day-to-day operations, thus regulating entry into and providing rules for guiding operations in the industry.

For reasons discussed below, GAPTE has not been able to establish and formalize the working relationships with the MMDAs and other local stakeholders necessary for it to function in its intended manner as a market regulator. Thus, it cannot guide and coordinate the MMDAs in the planning required to create a shared Greater Accra strategy for the development of public transport. It also cannot provide services such as establishing common standards and methodologies for registration, permitting, and monitoring of all public transport services (including tro-tros and taxis), or establishing metropolitan-wide databases and consolidating information.

While not able to properly perform its core designated role, GAPTE has been drawn into taking on bus operation functions that should be performed by contracted operators, for a BRT project forming part of the wider reforms. These functions include fare collection, scheduling, and depot management. Unfortunately, these bus services began operating before crucial elements such as dedicated transitway and other infrastructure were in place when the national government purchased expensive vehicles in 2016, ostensibly to demonstrate "delivery" before elections. The bus services have thus been subject to congestion and unable to deliver services and generate returns as envisaged.

1.4   Authority

Formally, GAPTE was established by the MMDAs of Greater Accra as a company limited by guarantee for "developing and implementing systems for urban transport system and permitting, network planning, service contracts management and urban transport management in the Greater Accra Region."

It is an executive body created by the Local Government Act, which provides for cooperation across MMDAs, and derives its powers from the participating MMDAs, with authority delegated to it by them. Each MMDA has signed a memorandum of understanding to work together on urban transport and is represented on the GAPTE Board of Directors by its mayor.

Effectively, however, the authority of the organization is weak. This is partly the result of the proliferation of MMDAs in Greater Accra, arising predominantly from the subdivision of existing local authorities. This has resulted in much weaker administrations as legacy administrations are subdivided and an ever-growing number of mayors—with no clear leader among them—become responsible for the success of the transport initiatives. There appears to be limited understanding of the need for citywide governance over Greater Accra at the local level. And given that GAPTE's powers are delegated by the MMDAs, the GAPTE CEO has been unable to enforce stronger cooperation among them.

The challenges appear to be exacerbated by contestation as to whether transport institutional reforms at the city level should fall under the responsibility of the transport or the local government departments at the national level.

Furthermore, the MMDAs are poorly financed, with the result that rather than contribute route licensing fees (known as sticker fees) to GAPTE as intended, they retain them for their own use.

This has created an ineffective system of control for the informal public transport sector, in particular, leading to enforcement challenges across Greater Accra.

1.5   Capacity

i)   Human resources – conditions of service
ii)   Financing

GAPTE was established with initial seed capital contributed by the participating MMDAs as subscriptions. The main source of GAPTE financing is route permit fees, income from bus operations, and any subventions from the local government.

Its main source of revenue is currently from the BRT project.

1.6   Concluding Observations

While the intentions behind the establishment of GAPTE were reasonable, GAPTE has not been able to establish sufficient authority and legitimacy to achieve success. Political shortcomings have played an important role. These include a substantial loss of program momentum after elections in 2008 led to a change in the ruling party, and the fragmentation of local administrations. The latter demonstrates a lack of appreciation for the importance of citywide governance approaches based on the functional extent of cities. There has been no mayor or administration able to act at this crucial level.

Ironically, the legislative reforms establishing authority over transport at the local level, when combined with the proliferation since 2001 of local governments in Greater Accra from 3 to nearly 30, have effectively made it extremely difficult for an institution at the scale of Greater Accra to be established, and thus it has not been possible to establish an effective lead institution for transport.

Another political shortcoming was the rushed purchase of expensive buses before elections, and their deployment before key elements of success—including dedicated roads and other infrastructure—were in place.

Similarly, at the national level, the convening power of the Urban Transport Advisory Committee has been weak and its ability to direct how resources are actually used is limited. A contributing factor may be its positioning under the Ministry of Local Government, which views efforts in relation to its broad decentralization agenda rather than from a strategic transport perspective. The Centre for Urban Transport never gained momentum and was abandoned after a few years.
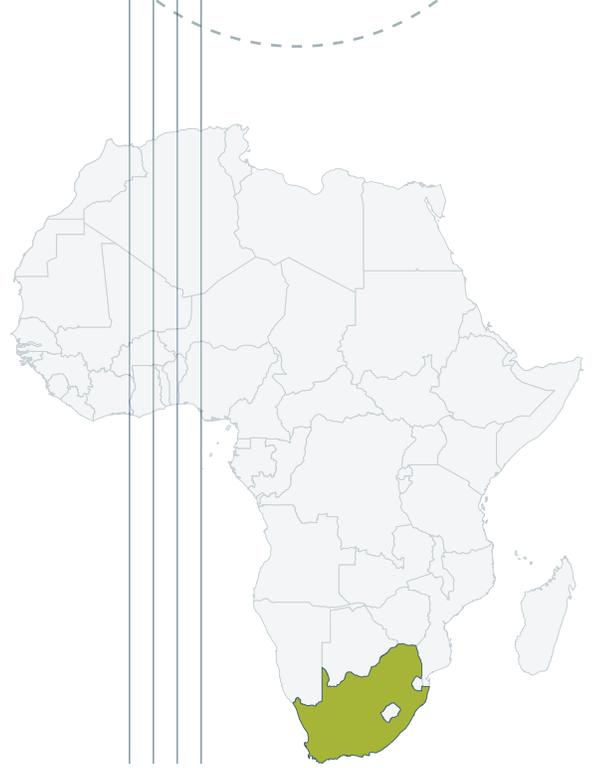
CAPE TOWN

2.1   Name of Organizing Authority

City of Cape Town's Urban Mobility Department

The Urban Mobility Department is not a separate legal entity from the City of Cape Town metropolitan municipality; rather, it is a department within it that takes most of the responsibility for urban transport. Other departments are responsible for traffic enforcement and land-use planning. The authority, itself, is the City of Cape Town (CoCT), but it has a fairly wide range of municipal and utility functions, so we mostly refer to the department, which we denote as CoCT (UM).

2.2   Summary of Key Features

- Cape Town's Urban Mobility Department is an internal department of the single-tier metropolitan municipality known as the City of Cape Town, which governs the metropolitan area of Cape Town.
- The metropolitan municipality was established in 2000 through amalgamating existing municipalities as part of the national reorganization of local government arising from the adoption of a new Constitution in 1996 in the transition to democracy from apartheid; over 95 percent of daily trips in the metropolitan area are fully contained within the City of Cape Town's boundaries.
- The national Constitution and legislation create a strong basis for decentralization and place responsibility for transport and land-use planning—along with a range of other functions—with metropolitan governments; as a constitutional sphere of government, the municipality has the power to raise various taxes and to pass and enforce bylaws.
- After its inception in 2000, the municipality initially focused on managing the private transport road network, including road planning, construction and maintenance, traffic management, and streetlighting, but a BRT project (called MyCiTi) initiated and funded by the national government in the lead-up to hosting the 2010 FIFA World Cup, and implemented by the municipality, initiated a process that should eventually result in the City of Cape Town becoming the main locus of responsibility for all public transport in greater Cape Town.

- Devolution has been resisted thus far by the provincial government (responsible for the main commuter bus service) and the national commuter rail authority, although momentum is toward devolution and integration of key transport and land-use responsibilities within the municipality.
- The legacy commuter rail system was and could again become the single biggest urban public transport mode, but over the last decade and a half it has declined severely, largely because of poor management exacerbated recently by disruptions arising from the COVID-19 pandemic; the largest mode is now paratransit minibus-taxis.
- The Cape Town mayor is currently advocating for the commuter rail function to be devolved and become primarily accountable to the municipality, which the national government has in principle approved in a white paper adopted in late 2022.
- Cape Town is a good illustration of a transport organizing authority forming part of a metropolitan government with multiple urban management functions in a single-tier arrangement—a good, if somewhat rare, governance configuration for addressing mobility challenges.
- The Cape Town case also demonstrates how slow the process of consolidating responsibilities around a lead institution can be even with a constitutional and legal mandate to do so.

2.3   Scope

CoCT (UM) is largely responsible for managing private mobility in the metropolitan area of Cape Town. CoCT is the planning authority for mobility in the area, including public transport, and responsible for the MyCiTi BRT service. MyCiTi currently provides 65,000 journeys per day;[4] when the next phase, currently under construction, is completed, MyCiTi expects to provide 100,000 journeys per day. It is set to become the key locus of responsibility for all public transport in the area.

The end of racially based minority rule (known as apartheid) resulted in the adoption of a new democratic Constitution in 1996, which, together with local government legislation passed in 2000, led to the creation of single-tier municipalities in metropolitan areas. The City of Cape Town extends across most of the Cape Town urban agglomeration and has an estimated population of 4.7 million.[5]

The 1996 Constitution places a strong emphasis on decentralization, and, in respect of Cape Town, largely mandates that urban mobility and land-use responsibilities be consolidated within the City of Cape Town metropolitan municipality.

The long-established but somewhat fragmented local municipalities that were amalgamated in 2000 to form the new metropolitan municipality had been responsible for much of the management of private mobility in the area—other than a shared responsibility with the national and provincial governments for some of the urban freeways—but not public transport. The creation of the new City of Cape Town enabled the rationalization of the management of private mobility in the metropolitan area, and also made it the obvious locus of responsibility for public transport in the area, especially given its other constitutionally designated responsibilities such as land-use planning and regulation.

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4.   A *journey* in many cases consists of a trunk and feeder leg.

5.   The dispensation created in South Africa's main urban agglomeration now known as Gauteng is more complex, with three adjacent metropolitan governments—the Cities of Johannesburg, Tshwane (formerly Pretoria), and Ekurhuleni—created within the single extended urban province. In this case, the provincial government of Gauteng is better placed to be an authority responsible for agglomeration-wide urban mobility, but this will require significant cooperation between the three cities and the province.

Following national policy that envisaged metropolitan governments as the appropriate level to take responsibility for public transport, and in the context of preparations for the 2010 FIFA World Cup, the national government encouraged the implementation of a BRT system in Cape Town and provided substantial funding.

Initially, the municipality's focus was only on the MyCiTi BRT project. However, as the limitations of a single technology have become evident, CoCT (UM) has developed a much stronger multimodal perspective and has been actively pursuing the devolution of the main commuter bus contract from the provincial government (approximately 1,100 buses run by a private contractor), and that of the commuter rail service (a network of 270 kilometers with 119 stations) from the national rail agency, PRASA (Passenger Rail Agency of South Africa). The rail service used to be the backbone of public transport in the area, but it has deteriorated over the last decade through poor management and it was closed and pillaged during the COVID pandemic. The municipality is giving significant attention to the reform of paratransit, viewing it as a part of what is termed an *integrated public transport network*.

The general approach of the municipality to public transport is that operations should be outsourced to private operators under contract or, in the case of rail, to the proposed independent local rail agency.

Key current functions include the following:
- Municipal planning, including land-use planning and enforcement, development of the Comprehensive Integrated Transport Plan, based on content requirements set out in national regulations
- Planning, construction, and maintenance of municipal roads and bridges
- Street cleaning and lighting
- Traffic management and enforcement, including operation of the Transport Management Centre, which consolidates all transport-related operations in one location
- Freeway management system
- Driver and vehicle licensing in the metropolitan area
- Parking management
- Advising the provincial government on issuing of public transport operating licenses for bus and minibus services
- Enforcement related to bus and minibus services and minibus-taxi ranks
- Development, operation, and management of the BRT network
- Fare fixation for BRT
- Monitoring air quality

Devolution of responsibility for the commuter bus and rail services has been resisted by those currently running these functions even though both the policy arguments and legal basis for this shift are strong in Cape Town. National legislation envisages the devolution of the commuter bus function, and in 2022 the national government adopted a rail white paper that envisages the devolution of commuter rail. The mayor of Cape Town has made this latter shift a core element of his agenda, seeking the establishment of a Passenger Rail Agency for the region primarily accountable to Cape Town, in consultation with other local municipalities into which some lines extend. However, the process of shifting responsibility is likely to be slow.

2.4 Authority

The Urban Mobility Department is a department of the City of Cape Town metropolitan municipality. It is not a juristic "person" in its own right; it forms part of the municipality. Contracts are thus issued in the name of the City of Cape Town, not the Urban Mobility Department.

While its experience in managing public transport is limited, the metropolitan municipality is a strong institution within the configuration of the South African state established by the 1996 Constitution and is built on a long tradition of a professional city administration. As a democratically elected metropolitan government within a decentralized constitutional dispensation, it has strong legal powers and public authority, including the ability to pass and enforce bylaws. The mayor of Cape Town has significant public profile and is well positioned to drive the improvement of public transport.

While many countries struggle to establish any strong institutions of decentralized government, South Africa's Constitution establishes both provincial and local levels of government—or what it terms spheres of government. Ironically, this can complicate decentralization, with provincial governments often reluctant to relinquish to the new metropolitan municipalities responsibilities they or their predecessor institutions have held for many years.

Since the start of the MyCiTi project there have been attempts to give the Urban Mobility Department more profile and power within the city administration, branding it initially as Transport for Cape Town (TCT) and subsequently combining it with the land-use planning department to create the Transport and Development Authority (TDA). However, it never became an independent juristic person; the national Constitution does not permit the externalization of key powers, such as regulatory powers, from elected governments. These initiatives, while they may have had some superficial merit, were poorly conceived and ultimately resulted in a weakening of the department within the administration. They were reversed, with the Urban Mobility Department now the same as the previously named Transport Department. However, significant administrative damage was done in the process.

The Urban Mobility Department is headed by an executive director appointed on contract by the municipal council in consultation with the city manager, is staffed by administrative and technical officials, and reports via the city manager to the political level. The mayor—who has strong executive responsibilities—appoints a mayoral committee from among the elected councilors to take executive decisions at a political level. The mayor designates one of the mayoral committee members to be responsible for urban mobility—and this person is, in essence, the political head of the Urban Mobility Department—although, legally, authority flows between the political and administrative levels via the mayor and city manager.

2.5 Capacity

i) Human resources

The Urban Mobility Department is part of a well-established local government. After the various municipalities within the municipal area were amalgamated to form the metropolitan local government in 2000, conditions of service and pay scales were harmonized. Municipal salaries in South Africa are competitive with the private sector.

The latest available figures (2021) indicate there are 51 permanently employed professionals and 81 technicians in the Urban Mobility Department. The department also uses consultants, and much of the work for which the department is responsible is contracted out.

ii) Financing

The latest available figures indicate an annual budget of approximately R 6.7 billion (US$375 million per year at an exchange rate of R 18 to US$1) for all transport-related activities, including road and related infrastructure construction, maintenance and management, traffic control and enforcement, streetlights and street cleaning, and public transport.

The municipality generates approximately nine-tenths of its own revenues through property taxes, a share of the national fuel levy, and user charges for municipal services such as electricity, water distribution, sewerage, and refuse management. The municipality borrows for capital expenditure, including sometimes issuing municipal bonds. There is a transparent and generally predictable system of grants from the national government, of which the public transport function is a key recipient; almost all capital funding and a significant portion of operating and maintenance expenditure for the BRT service has been financed by national grants.

2.6   Concluding Observations

The City of Cape Town, through its Urban Mobility Department, is unusually well placed to become an organizing authority with many desirable institutional characteristics. The Urban Mobility Department is responsible for urban mobility as a whole, including private, public, and nonmotorized transport. As a department within a metropolitan-wide municipality that also has responsibility for land-use planning and urban infrastructure provision both at a metropolitan scale and a more local level, it is possible for integrated strategic control to be exercised over all the key factors determining access.

While significant attention has been given to developing appropriate institutional policies, the Urban Mobility Department's creation has emerged through the country's constitutional and legal frameworks rather than through a focused attempt to create a transport organizing authority.

Unlike many other municipalities in South Africa, the City of Cape Town has been able to manage the metropolitan amalgamation process and the transition to a democracy relatively well and it has a fairly strong administration able to attract good skills, although its management practices are somewhat rigid.

While fragmented metropolitan governance systems often make it necessary to create an independent metropolitan-wide transport organizing authority, the Cape Town case illustrates the benefits of having such an authority as an integral part of a consolidated, constitutionally entrenched, and well-financed system of metropolitan urban management. However, the slow process of consolidating responsibility for the various modes at the metropolitan government level despite constitutional and legal imperatives to do so illustrates how difficult it is to realize institutional change within the public sector.

DAKAR

3.1 Name of Organizing Authority

Conseil Exécutif des Transports Urbains de Durable (CETUD)

3.2 Summary of Key Features

- Established in 1997 through national legislation and official decrees (and originally called the Conseil Exécutif des Transports Urbains de Dakar). Supports the development of traffic and parking measures in the greater Dakar area.
- Focuses on the organization and regulation of public transport in greater Dakar. The scope was expended in 2023 to incorporate traffic and parking management. The geographical scope was also expanded to neighboring municipalities.
- Within the context of relatively weak local government, CETUD has been able to convene all key stakeholders, including national and local governments, operators, and users, around improving public transport at a metropolitan scale.
- While CETUD has wide regulatory responsibilities, its most significant project thus far has been to work on a sustained basis since 2001 with the artisanal/paratransit sector (representing 36 percent of public transport modal share) in recapitalizing its fleet and helping professionalize participants—both owners and drivers.
- CETUD is staffed through competitive recruitment by an independent agency and has succeeded in establishing and sustaining its identity as primarily a professional and technical organization operating at a strategic and tactical level, with employees subject to private sector labor regulations.
- CETUD is a key contributor to the national government's urban transport policy.
- In 2019, it commenced with design and implementation of a BRT project; this represents a significant expansion of scope and therefore a change to its institutional profile.

- CETUD has established sound credibility through its successful work over more than two decades supporting the recapitalization of the paratransit fleet and working with operators to improve business practices.
- CETUD's key vulnerability is its financing, which significantly depends on developing partners loans, although the recapitalization of the paratransit fleet is now financed by a revolving fund, thus avoiding the need for a constant supply of new capital.

3.3 Scope

Established in 1997, with a mandate extending over greater Dakar, a city of approximately 3.9 million people, CETUD's main mission, as defined by relevant law, is to "organize and regulate the supply and demand of public transport in order to create a secure environment for operators and to promote healthy and sustainable competition for the benefit of users and the regional and national economy."

To that end, legislation and decrees have given it the following competencies:

Regulation of urban public transport services:
i.   Determining the public transport networks (bus, minibus, and train services), setting the transport offer and operating procedures for these networks, and awarding contracts
ii.   Identifying public service contracts and determining the associated financial compensation
iii. Modal coordination and revenue sharing in the case of fare integration

Support for traffic, parking and environmental management:
i.   Developing and supporting the implementation of action and investment programs to improve the quality and level of service of infrastructure, traffic, and road safety
ii.   Improving the condition of the public transport fleet to reduce pollution generated by motorized transport
iii. Supporting the development of traffic and parking measures in the greater Dakar area

Contributing to the viability of the sector:
i.   Proposing to the competent authorities' tariff policies that allow for a fair coverage of the real costs of operators
ii.   Strengthening the professionalization of the actors and monitoring information for users in particular

CETUD's most significant project thus far has been working with the artisanal sector to recapitalize its fleet and to help professionalize participants—both owners and drivers. These operators account for 36 percent of the motorized public transport modal share, translating into more than 266 million passengers/year. This project, which has been sustained for approximately two decades, saw the sector organized in 2001 into 14 economically viable units (referred to as economic interest groups) and the replacement of more than 2,000 minibuses with new vehicles, financed through a revolving fund. Participation is conditional on agreeing to certain operational and quality standards.

Other important projects include support for the renewal and development, including recapitalization of the fleet, of the legacy formal bus company—the Dakar Dem Dikk (DDD), which accounts for 6 percent of the public transport modal share.

It has also established a Technical Control Centre for motor vehicles and the air quality management and placed it at the disposal of the national Directorates of Road Transport and Environment. However, CETUD is not in charge of road construction and management, traffic and parking management, or driver and vehicle licensing.

In 2019, CETUD began implementing a BRT line between Petersen Station and Guédiawaye Prefecture. The project implementation team significantly increases CETUD's personnel numbers. CETUD does not take direct responsibility for construction; delegates the project management of this element of the project to AGEROUTE, the national roads agency.

Recognizing that pedestrians constitute 70 percent of the modal share, there have been calls for CETUD to extend its work into this and related issues, focusing on mobility as a whole rather than just on public transport.

3.4 Authority

CETUD was established through national legislation (Law No. 97-01 of March 1997) and its powers, organization, and operations were set out in official decrees in 1997 (Decree No. 97-356) and updated in 2001 (Decree No. 2001-557). While CETUD falls under the National Ministry of Land Transport, it is a semiautonomous body with a deliberative and decision-making board (the Plenary Assembly) and an executive body (the Permanent Secretariat). It was conceived and implemented as part of an Urban Transport Reform and Capacity Building Project that ran from 1997 to 2001, which was then followed by an Urban Mobility Improvement Project (2002–09). Furthermore, CETUD changed its denomination (from Conseil Exécutif des Transport Urbains de Dakar to Conseil Exécutif des Transport Urbains Durable) through a national legislation (Law No. 2022-15 of April 2022), which expanded the geographical scope to the Thiès region and expanded the functional scope to include traffic and parking management. The official decree (Decree No. 2023-740) followed this law and updated the 2001 decree.

The 19-member Plenary Assembly brings together key stakeholders, including six members from national ministries and departments, and a representative of each of the five local governments in the greater Dakar Region—the Cities of Dakar, Guédiawaye, Pikine, and Rufisque, and the Department of Rufisque—which together account for 53 communes. The Plenary Assembly also includes six representatives from the private sector, transport operators, and consumer associations. It thus enables a partnership approach between national and local government and important private sector and civil society stakeholders involved in the public transport sector in greater Dakar.

CETUD has been successful in establishing its credibility, gaining the support of key parties over time. Its balanced representation from national and local government as well as the private sector and civil society has helped build consensus across potentially competing interests around rational approaches to addressing public transport challenges.

It has managed to establish and sustain its identity as primarily a professional and technical organization operating at a strategic and tactical level while enjoying good political support from the relevant stakeholders.

3.5   Capacity

i) Human resources

The executive had 81 staff members in 2021—46 assigned to the basic structure of the organization and 35 working on the recently established BRT project for Dakar. The basic structure had 21 unfilled vacancies in 2021 because of insufficient core funding.

Recruitment of the president of the Plenary Assembly, the head of the Permanent Secretariat, and the management staff is competitive and transparent and generally run through an independent firm. The plenary president and the head of the secretariat are appointed by the national president from the three best candidates identified from this process, with the result that these key figures also have some political legitimacy. The CETUD staff is subject to private sector labor regulations.

ii) Financing

The key constraint CETUD faces is its financial resourcing. According to the establishing decrees, it is supposed to receive funding from the following sources:

- Urban Transport Development Fund (FTDU), which is to be funded on an equal basis by national government, local authorities in the Dakar Region, and professionals in the sector
- Royalties and other remuneration paid by beneficiaries of services provided by CETUD
- Resources allocated to the state by development partners
- Grants, donations, bequests, and gifts

Thus, CETUD should receive funding from the national government, the local governments in its area of jurisdiction, and the private beneficiaries of its work. While local government and others contribute significantly to CETUD's work, only the national government contributes to the FTDU, and this has declined significantly in recent years. Most of the funding received currently is through low-interest loans and grants from the International Development Association (IDA), an arm of the World Bank. This has increased significantly since the commencement of the BRT project.

Table A.1 shows CETUD's various sources of income over a five-year period, illustrating both the quantum and variability of funding. The CFAF 14,880.8 million total received in 2020 equals currently approximately US$25 million.

Table A.1 CETUD Income Sources, 2016–20 (CFA francs, millions)

	2016	2017	2018	2019	2020
State of Senegal	4,843.4	2,740.0	1,971.1	1,631.8	838.0
Royalties and other income	134.3	216.2	712.8	281.7	233.8
International Development Association	810.7	1,441.7	1,331.8	20,938.6	13,809.0
Total	**5,788.4**	**4,397.9**	**4,015.8**	**22,852.2**	**14,880.8**

Note: 1 CFA franc = US$0.0015

3.6   **Concluding Observations**

In the absence of formal metropolitan government, CETUD has managed to convene all key parties around the improvement of public transport at a metropolitan scale.

The basis of its legitimacy appears to be its sound national government support, its technical credibility, and its sustained success in formalizing the artisanal sector, which represents over a third of the public transport modal share. National support is key in a country where most state power and implementation capabilities lie at the national level.

The BRT project begun in 2019 represents a significant expansion of scope. While BRT projects are difficult to implement, the current project appears to be well conceived; successful implementation and operation of the project will further bolster CETUD's legitimacy.

While CETUD is able to convene local governments in greater Dakar, it is not dependent on them for its authority, and although it faces financial challenges, it has been able to function despite the failure of local governments to make financial contributions as intended.

An important element in the recapitalization of the paratransit fleet is the instrument of a revolving fund. This has meant that once the process became established, it is not as dependent on new sources of capital finance for its continuation. This makes it a less vulnerable mechanism in a financially constrained environment.

TANZANIA
DAR ES SALAAM

4.1   Name of Organizing Authority

Dar Rapid Transit (DART) Agency

4.2   Summary of Key Features

- The DART Agency was established in 2007 primarily to implement and operate a BRT system for greater Dar es Salaam.
- Governance of mobility in Dar es Salaam is fragmented across numerous national ministries and agencies reporting to these ministries.
- The Land Transport Regulatory Authority (LATRA), a national authority that reports to the Ministry of Works and Transport, is responsible for BRT-related regulatory issues and for all other forms of public transport (non-BRT buses, paratransit—daladalas—and passenger rail), although two- and three-wheelers are licensed by municipalities.
- One BRT corridor (20.9 kilometers) out of a planned six has been operating since 2016, although procurement and other challenges have resulted in a lower level of service than planned.
- Metropolitan governance in Dar es Salaam is fragmented. The overarching Dar es Salaam City Council was abolished in 2021, leaving the five lower-tier councils responsible for the area; however, a regional commissioner remains in charge of a metropolitan-wide regional administration.
- There have been calls since the early 2000s for the establishment of a Dar es Salaam Transport Authority (DUTA); however, this initiative has been stalled since 2018.
- The DART Agency is not a transport organizing authority; rather, it is an agency established to implement BRT. However, there have been calls to broaden its scope, both to include all forms of public transport and to operate nationally rather than only in Dar es Salaam.

4.3   Scope

The DART Agency is a government entity that was established in 2007 by the national government primarily to implement and operate a BRT system for Dar es Salaam, a city with an estimated population of 7 million in 2021. The BRT network was first conceptualized in 2002 by the Dar es Salaam City Council and was integrated into the planned transport system of the city in April 2003.

The DART Agency's mandate consists of the following:

- Establish and operate the BRT system for Dar es Salaam, branded Dar Rapid Transit (DART).
- Ensure orderly flow of traffic on urban streets and roads.
- Ensure effective management of the DART Agency.

Intended tasks include the following:

- Planning and design of BRT infrastructure
- Planning of BRT trunk and feeder routes
- Contracting the BRT operators
- Provision of integrated services for BRT, including fare collection and traveler information
- Management of BRT operations delivery
- Fare analysis for BRT routes (requiring LATRA approval)
- Manage traffic and parking facilities along the BRT corridor
- Planning for transit-oriented development along the BRT corridor

The DART Agency has never had the resources or capacity to "ensure orderly flow of traffic on urban streets and roads" more broadly as stated in the mandate and has restricted itself to seeking the intervention of the Traffic Police to do so, mostly on BRT corridors.

The BRT system is known as DART (Dar Rapid Transit). One BRT corridor out of a planned six is in operation, with a second corridor under construction, and a third in development. The first corridor (20.9 kilometers) began operating in 2016. Procurement and other challenges have resulted in a lower level of service than planned (including no feeder network or fare collection/operations management systems). It is operated by an interim service provider, now majority owned by government.

The DART Agency has full mandate in law as a transport organizing authority for planning, implementing, and operating BRT transport. However, the regulatory mandate remains with LATRA, from which the agency must seek approval on regulatory issues. In addition, the DART Agency's mandate is limited to BRT; all other forms of land public transport—non-BRT buses, paratransit (*daladalas*), and passenger rail, but not two- and three-wheelers, which are licensed by municipalities—fall under the mandate of LATRA.

LATRA, a national government regulatory authority established by the LATRA Act No. 3 of 2019, is the primary regulator of all forms of land transport in Tanzania, including urban passenger transport in Dar es Salaam. LATRA operates under the Ministry of Works and Transport. It is mandated to regulate land transport sectors nationally, including road and railway transport services for goods and passengers as well as cable transport in Tanzania Mainland. LATRA is therefore responsible in Dar es Salaam for non-BRT bus routes, minibus routes, commuter rail, ferries, and taxis.

4.4 Authority

The DART Agency was established by Government Notice No. 120 of May 25, 2007, under the Executive Agencies Act No. 30 of 1997 and its subsequent amendments. The agency operates under the guidance of the President's Office, Regional Administration and Local Government (PO-RALG). It is structured such that the chief executive is responsible for the administration and management of the agency. The chief executive reports to the permanent secretary of PO-RALG, who in turn reports to the minister.

There is no unified manager of urban road passenger transport in the Dar es Salaam metropolitan area; the functions are spread across multiple entities, predominantly ministries and other entities at the national level. The Ministry of Works and Transport is responsible, among other things, for LATRA, the national roads agencies (TANROADS and TARURA), and the planning and regulation of urban public transport. The Ministry of Internal Affairs is responsible, among other things, for traffic regulation and enforcement, and the Ministry of Finance and Planning is responsible, among other things, for the allocation of national revenues.

Until 2021, the area normally referred to as Dar es Salaam consisted of five district municipalities: Ilala (which includes the Central Business District), Kinondoni, Temeke, Ubungo, and Kigamboni. There was an overarching regional body with a regional commissioner called the Dar es Salaam City Council, but this council was dissolved in February 2021 and the Ilala Municipal Council was renamed the Dar es Salaam City Council, despite it only covering part of the city. Each district municipality has a local governing council and a district commissioner.

While the overarching Dar es Salaam City Council was dissolved, the regional commissioner for the full area of the five district municipalities remains in place.

There is a Dar es Salaam Urban Transport Master Plan, which was most recently revised in 2018.

Efforts have been made to establish an organizing authority. A study on the possible establishment of a Dar es Salaam Urban Transport Authority (DUTA) was carried out in the early 2000s with the assistance of the Japan International Cooperation Agency (JICA) through PO-RALG and the Dar es Salaam City Council. In 2017, the World Bank allocated US\$5 million for the establishment of DUTA and support to restructure the DART Agency. However, lack of clarity around which ministry should be responsible (Ministry of Works and Transport or PO-RALG) and the challenges inherent in existing ministries and agencies giving up responsibilities, especially for only the city of Dar es Salaam, led to the initiative being stalled in 2018. Nevertheless, the 2018 Dar es Salaam Urban Transport Master Plan reiterated these calls.

The DART Agency has also called for the establishment of an urban transport authority, but at the national level. The motivation given for this is that one organization could solve several cities' urban transport problems, and it would also be less dependent on power configurations at the subnational level.

4.5   Capacity

i)   Human resources

ii)   Financing

The DART Agency's resources come from various sources:

- Revenue collected from bus fares
- Investment in DART facilities and charges for services rendered
- Supplements as indicated in the agency's business plan
- Government subventions through PO-RALG
- Credits and grants

There is a committed line item on the PO-RALG budget for DART Agency operational costs.

For the year 2021/22, the estimated revenue is T Sh 7,027,964,258.00 (about US$3 million), which is insufficient to cater for the planned activities and have quality BRT services.

4.6   Concluding Observations

Currently, no institution in Dar es Salaam could be called an organizing authority. The DART Agency is relatively weak and restricted to BRT, with only one route operating and having a somewhat limited impact thus far. LATRA is a national agency with no special focus on Dar es Salaam or on what is required to build and implement an urban transport strategy for the city. The local governments in the city have limited involvement in the urban transport sector, and the abolition of the metropolitan-wide Dar es Salaam City Council has fragmented metropolitan governance.

This lack of institutional capabilities to address the urban transport challenges is linked to a general absence of strong city-level governance institutions. Given Dar es Salaam's size and anticipated growth, there is a need to develop metropolitan-wide governance capabilities; however, there appears to be some ambivalence in the national government to decentralizing authority—or, even if that is agreed to, how it is done.

The establishment of an organizing authority for mobility in the metropolitan area should ideally be pursued in the context of a broader approach to the development of metropolitan-wide powers and capabilities.

NIGERIA
LAGOS

5.1   Name of Organizing Authority

Lagos Metropolitan Area Transport Authority (LAMATA)

5.2   Summary of Key Features

- LAMATA was established as a semiautonomous, state-level government body in 2003 as part of a set of reforms initiated by the then Lagos State governor, Bola Ahmed Tinubu (elected in 2023 as the country's president).
- The Nigerian Constitution, adopted in 1999, gives state governments key powers over the urban transport sector.
- The Lagos State government has boundaries that largely coincide with the greater Lagos metropolitan area, so in effect, the state is a form of metropolitan government.
- After gaining initial credibility through improvements to the core road network, LAMATA focused on designing and implementing BRT services, and has thus far completed two major corridors, which are sometimes referred to as BRT-Lite because of the adaptations made to the classic model.
- A key element of LAMATA's work has been to develop partnerships with the private sector public transport operators, many of whom would be regarded as informal service providers.
- Initiatives to strengthen the formal large bus sector as service providers on BRT and other routes and including elements from the legacy private operators have resulted in the establishment of at least five significant bus companies.
- LAMATA has recently introduced a first/last mile scheme, which it is hoped will help contain the proliferation of motorbike taxis.
- LAMATA is now also driving major commuter rail projects, with seven lines envisaged, of which two are under construction with intended completion dates in 2023; it is also driving improvements in water transport.

- LAMATA has enjoyed a combination of substantial authority over the metropolitan area of greater Lagos and very strong leadership at both the political and technical levels.
- It is well located within governance structures, forming part of the state public sector and able to work closely with all agencies within it, while also having a measure of independence that has enabled it to avoid civil service human resource and management constraints.
- Its funding model appears to be somewhat unstable; however, LAMATA seems to have gained enough legitimacy and to be sufficiently valued by key players to survive adverse financial conditions.

5.3 Scope

LAMATA was created in 2003 through state level legislation under the leadership of Bola Ahmed Tinubu—Lagos State governor from 1999 to 2007, and elected the country's president in 2023—as part of a major renewal and reorganization of the Lagos State government.

The metropolitan area of Lagos is largely contiguous with state boundaries, although only 85 percent of the estimated 15 million (2015) state population is regarded as living within the metropolitan area, while part of the metropolitan functional area extends into Ogun State in the north. Mobility challenges are substantial, with most public transport passenger services currently provided by the private sector, including mini- and midi-buses (*danfos* and *molue*), large buses, motorcycle taxis (*okadas*), and three-wheelers.

LAMATA's establishment was preceded in the 1990s by a number of studies, including the Lagos Mass Transit Study (1992), which recommended, among other things, the creation of one entity to coordinate transport policies, programs, and actions of all agencies at different tiers of government. This was followed by a framework in 1996, and a process of organizational design and establishment initiated in 1999.

The agency's responsibilities extend across both private and public transport. LAMATA is responsible for transport planning and coordination in metropolitan Lagos, playing a leading role in transport policy formulation, coordination of major operational and investment decisions, and implementation. The agency also has the power to levy and collect user charges in connection with the provision of its services and to collect any other tariffs, fees, and road taxes authorized by the state governor.

LAMATA's key policy intentions include the following:
- Improving public transport services and promoting its use
- Improving infrastructure and operations through effective monitoring of operations, utilizing transport management measures; development of key strategic links; encouraging area-wide control of demand, parking supply, and access to Lagos Island
- Cost recovery
- Demanding restraint by discouraging car use; encouraging energy conservation, control of car use in Central Business District (CBD) and major traffic corridors

To achieve the policy framework, various functions and responsibilities were identified:
- Coordinate transport policies, programs and actions of all agencies in the state.
- Maintain and manage the declared road network, mainly 632 kilometers of bus routes.
- Plan, coordinate, manage, and develop the supply of adequate and effective transportation.
- Urban public transport route planning and location of bus shelters, pedestrian ways, and bridges.
- Collect and levy transport road user charges and establish a Transport Fund.

- Collect 50 percent of net motor vehicle administration (MVA) revenue to be paid directly into the Transport Fund.
- Regulate BRT along prioritized corridors.
- Coordinate activities of the State Licensing Authority and all vehicle inspection units.
- Make urban public transport policy recommendations to the governor.
- Prepare plans for the development and management of an integrated multimodal public transport system.

On road maintenance, LAMATA only has responsibility for the declared road network in the state, which includes the major traffic corridors and public transport routes on which the highest benefits are realized.

The Tinubu reforms encompassed a range of services. The first initiative in transport was the establishment of the Lagos State Traffic Management Authority (LASTMA) in 2000, with a mandate to improve the enforcement of traffic laws, create a new set of standards and regulations, and ensure road user traffic law compliance. LAMATA followed three years later. LAMATA was able to gain credibility in its initial years by focusing on key road improvements while developing its public transport program.

LAMATA has made some key achievements:

- The Ikorodu to CMS, and Abule-Egba to Oshodi BRT lines
- Intelligent Transport Systems (ITS) and e-ticketing from November 2017
- A new bus fleet management center equipped with the latest technology providing real-time control and communication with all public buses using GPS and 3G technologies

An important element of this work has involved cooperation with the National Union of Road Transport Workers—which represents owners, drivers, and conductors of private buses, including the paratransit sector—gradually integrating the union into organized bus operations using high-capacity buses. Activities have encompassed the purchase of vehicles and organizing BRT operations, including the establishment of exclusive routes for franchised operators.

Regulators have sought to further consolidate operations for larger buses through route franchising. Now, more than five large bus operators (Primero, TSL, Amalgamated, LBSL, TJ) in metropolitan Lagos provide BRT and standard route services.

- More recently, LAMATA introduced a first/last mile (FLM) scheme, providing bus services for the first and last leg of commuter travels, with the aim of replacing *okadas* and three-wheelers. These routes have been assigned to private operators participating in the scheme.

The use of *okadas* has proliferated in recent years despite various attempts to control them. The hope is that assigning FLM routes to operators will help contain this.

- The state has purchased approximately 1,100 new buses in implementing its various schemes, including 300 FLM vehicles.

More recently, LAMATA has embarked on major commuter rail initiatives, envisioning seven rail lines. Construction of the first two lines—the blue and red lines—is under way, with the intention of completing the infrastructure in 2023.

On inland water transportation, LAMATA has overseen the reconstruction of various jetties, the procurement of more boats to move citizens via water, and the integration of the automated fare collection on both road and water transport.

5.4   **Authority**

While the Federal Government of Nigeria plays a significant role, the 1999 Constitution assigns many of the powers in the urban transport sector to the state level.

The 2003 establishment of LAMATA was spearheaded by the civilian administration of the then state governor, Bola Ahmed Tinubu (elected national president in 2023), and the transport authority has generally been well supported by successive governors. It is a semiautonomous government agency, established by the LAMATA Act, signed into law on January 13, 2002, and formally launched on December 2, 2003. Its powers were strengthened in 2007 to include planning and regulatory functions across the various modes of transport.

LAMATA has a 13-member board of directors. The board, appointed by the governor of the state, is a microcosm of the authority's stakeholders, consisting of representatives of transport operators, transport unions in Lagos State, the organized private sector, the general public, local government areas, and transport-related Lagos State government agencies. The only full-time member is the managing director/chief executive officer (MD/CEO), who heads the secretariat.

While accountable to the governor, LAMATA works with various public and private stakeholders. The Lagos State Ministry of Transport (LSMT) is responsible for overall policy development and planning in the state, while the Lagos State Ministry of Works and Infrastructure (LSMWI) is mainly responsible for the state road network (primary and secondary roads). The Lagos State Traffic Management Authority (LASTMA) is a parastatal of the LSMT charged with road traffic matters, while the Lagos State Vehicle Inspection Service (VIS)—responsible for vehicle roadworthiness—is a directorate within the LSMT.

Lagos State is made up of five administrative divisions (Ikeja, Badagry, Lagos, Ikorodu, Epe), which are further subdivided into 20 local governments and 37 local council development areas. Local government is in charge of implementation of local traffic schemes, maintenance of local roads, development of appropriate revenue generation policies, and coordination with planning and other relevant departments at the local level on transport-related matters.

The private operators, who dominate the public transport industry in Lagos, are mostly members of two major transport unions—the National Union of Road Transport Workers (NURTW), representing owners, drivers, and conductors of private buses, and the Road Transport Employers Association of Nigeria (RTEAN), which mostly represents owners of intercity bus owners. The larger NURTW wields considerable influence.

Key to the success of LAMATA have been the constitutional powers and resources of the state government—which has boundaries that largely coincide with the functional metropolitan area of Lagos—combined with the drive of Governor Tinubu in establishing the institution in combination with other reforms, and the support of subsequent governors. LAMATA has also been able to recruit high-quality, professional leadership to run the authority.

It has thus had both substantial authority, exercised over the whole metropolitan area, as well as strong leadership.

5.5   Capacity

i) Human resources—conditions of service

As a semiautonomous organization, LAMATA is able to act somewhat independently of normal Lagos State government civil service procedures in project implementation and staff recruitment, with no interference from the governors, starting with Governor Bola Tinubu. Combined with strong administrative leadership, this has given independence, focus, and flexibility to LAMATA staff when managing project implementation and has enabled better delivery.

Initial recruitment was well planned and executed, with some skilled and experienced senior officials returning to Nigeria from positions abroad.

A sound delivery record has helped build credibility, resulting in more capital projects being delegated to the organization.

ii) Financing

Although LAMATA has survived for two decades, its funding basis is somewhat insecure for an agency of its significance.

The Lagos State government, through LAMATA, has used innovative ways to fund transport infrastructure projects. This included the creation of a Transport Fund through which LAMATA was able to qualify for World Bank credit to commence and help sustain its functioning. An initial credit of US$100 million was followed by an additional US$50 million and US$190 million, and for the period of 2008–17, LAMATA was able to source US$63 million from the Transport Fund to meet its operational obligations. The Transport Fund proved essential in 2018 and 2019, when the Lagos State government budget allocation was not funded and there was no access to development partners funds. Without these resources, LAMATA might have collapsed.

Between 2004 and 2020, US$577 million in investment funding was mobilized from five resources:
- Lagos State government (10%)
- Transport Fund (13%)
- World Bank (57%)
- Agence Française de Développement (AFD) (19%)
- Green Climate Fund (GCF) (1%)

5.6   Concluding Observations

LAMATA can claim significant successes in making a positive impact on mobility in Lagos, including initially in road-based public transport, but now also in commuter rail services and ferries.

It has enjoyed a combination of substantial authority over the metropolitan area of greater Lagos, and very strong leadership at both the political and technical levels. The strength of Governor Tinubu's leadership has been demonstrated by his election as national president in 2023, but the organization also benefited from very strong administrative leadership. It is well located within governance structures, forming part of the state public sector and able to work closely with all agencies within it, while also having a measure of independence that has enabled it to avoid civil service human resource and management constraints.

Its funding model appears to be somewhat unstable. However, it seems to have been able to gain enough legitimacy and to be sufficiently valued by key players to be able to survive adverse financial conditions.

MAPUTO
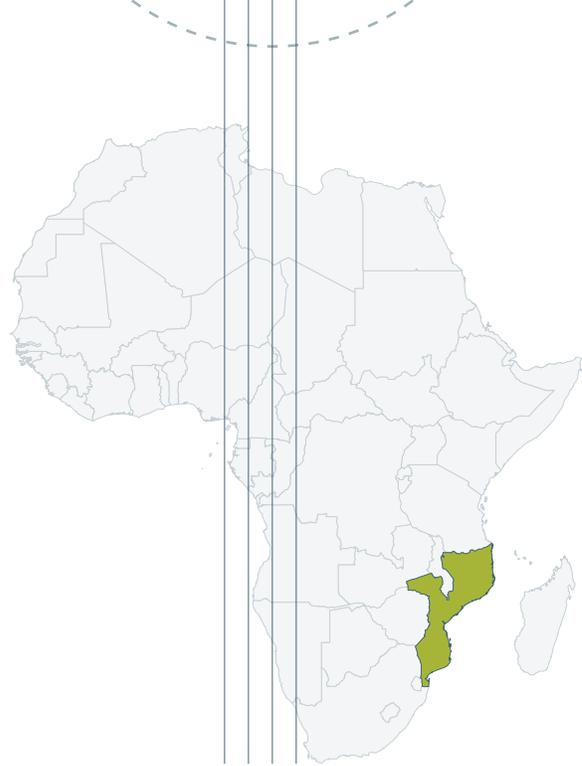
6.1   Name of Organizing Authority

Agência Metropolitana de Transporte de Maputo (AMT)

6.2   Summary of Key Features

- The Agência Metropolitana de Transporte de Maputo was legally established by central government decree in late 2017 and initiated in early 2018 to coordinate passenger transport across the multiple local government areas that make up the metropolitan area of greater Maputo.
- While the need for a metropolitan-scale transport organizing authority had been identified before, its establishment followed a JICA master plan drawn up in 2012–14 that, after general stakeholder discussion and buy-in, recommended the creation of such an authority.
- Its establishment occurred within the context of a national financial crisis that led to the withdrawal of fuel subsidies and—to compensate for this—public sector provision and financing of 350 buses.
- The provision of buses required the formation of cooperatives by independent, mostly *chapa* paratransit operators to run the buses and pay financing charges from fares earned, catalyzing the creation of the AMT, which was needed to help manage the process and establish some oversight over transport operations.
- The AMT is still at an early stage of development, making it difficult to give definitive assessments of its effectiveness.
- The AMT covers Maputo City, which is the original urban core, and the fast-growing Matola local government to its west (together, these two areas account for 88.5 percent of the metropolitan inhabitants); it also includes the semirural municipality of Boane to its southwest, and the district of Marracuene to the north, both of which are urbanized at their boundaries with Maputo/Matola.
- The AMT's position in relation to the local governments in its area remains somewhat unclear since many of its tasks are legally the responsibility of the local governments.

- The AMT has started performing some of its assigned functions, in particular mapping out bus and *chapa* routes within the envisaged network and mobilizing the new FAMBA cashless fare payment system on private and public buses.
- It is also engaging with the bus cooperatives to encourage corporatization and to renew operating contracts.
- Through the Maputo Metropolitan Area Urban Mobility Project (MMAUMP), the AMT is now becoming actively involved in the planning and delivery of Maputo's first BRT, which would significantly expand its role and profile.
- As of June 2021, the AMT had a staff of 19; the 12 core AMT staff were paid by the AMT and the remainder by various donor agencies and NGOs.
- It is envisaged that the AMT will be funded from transport route concessions, fees for ticketing and other services, and subsidies from central government and donations; however, there is as yet no official budget, with the AMT's current funding derived from occasional payments from central government, operators, and donors/NGOs.
- The national government established the Fundo de Desenvolvimento dos Transportes e Comunicações (FTC; Transport and Communications Development Fund)—the main source of which is currently a 5 percent tax on fuel—as a mechanism to provide investment funds to the transport and communications sector.

6.3   Scope

The AMT was established in early 2018, with its core mission being "to coordinate and implement the Maputo Metropolitan Area Transport and Mobility Master Plan."

It was established through Decree No. 85/2017 on December 29, 2017, following a JICA master plan drawn up in 2012–14 that, after significant stakeholder engagement, recommended the creation of such an authority. However, the issuing of the founding decree, with authorization by the Council of Ministers, and the establishment of the AMT soon after, was precipitated by the need to respond to a national financial crisis that led to the withdrawal of fuel subsidies. As part of the management of this crisis, the national government provided 350 buses to the Maputo area, funded from the Transport and Communications Development Fund it established.

Cooperatives were formed by independent operators to run the buses and pay financing charges from fares earned, and the AMT was needed to help manage the process and provide some oversight on transport operations, including encouraging the corporatization of the cooperatives.

Apart from these buses, public transport is provided largely by paratransit minibus-taxis (*chapas*) and open trucks (*myloves*), which operate in the areas where roads are too poor for ordinary vehicles. A small commuter rail service runs on a goods line.

As of 2021, the organization still had only a small staff of 19—with 12 staff funded by its own resources and the other 7 by donors and NGOs. The AMT has not been in existence long enough to make definitive statements about its impact. However, it has begun performing several intended functions, including the following:

- Mapping of the bus and chapa paratransit route networks
- Restructuring of the route network and defining a night bus service network
- Coordination with the municipalities on traffic management and related matters
- Implementation of a cashless fare collection system (FAMBA)

- Establishing a passenger information and web portal
- Oversight of eight cooperatives, established in greater Maputo to run the approximately 350 recently purchased buses on six corridors, which are being formalized, and their contracts (still only at a high level)
- Developing regulations and performance indicators for bus operations by cooperatives and municipal enterprises (still in development)
- Development of next generation of bus route contracts
- Negotiations with cooperatives to consolidate and transform to corporate entities
- Research into the full costs of bus operations and the economic tariff
- Promotion of projects contained in the AMT Business Plan, including the first BRT corridor
- Preparation for transport planning at the metropolitan level

The implementation of FAMBA, the automated, cashless fare system, procured through a public-private partnership, is seen as a strategically important project. If successful, it will enable fare revenue to be collectivized, which will be critical in supporting the shift from individual operators earning directly from their own bus to a corporatized model. It is also envisaged that the AMT will be financed through a small portion of the fare revenue collected.

The AMT has recently become involved in the planning and delivery of Maputo's first BRT, intended to start running in 2024, through the Maputo Metropolitan Area Urban Mobility Project (MMAUMP). This should significantly expand the AMT's role and profile.

6.4   Authority

There is no greater Maputo entity—neither a mandated super authority n a functional mechanism developed by the municipalities and districts—for the AMT to work with. Indeed, the AMT represents the first metropolitan-wide institutional initiative in the area.

The municipalities in the AMT's area of coverage are at varying administrative levels in Mozambique's local government hierarchy: Maputo City has a provincial status, while all the others have different levels of sub-provincial status. The relationship between the AMT and the municipality in its area is somewhat ambiguous, since local governments have responsibility for the following functions:

- Regulation and registration of all motor transport vehicles
- Regulation and supervision of public transport services
- Development, maintenance, and management of local roads (that is, non-national)
- Traffic management regulations, including parking control
- Municipal police, including traffic police and enforcement

All local government units have departments and dedicated personnel for these functions. Each municipality has a transport councillor (vereador) in its organizational structure. This is most notable in Maputo Municipality, which has established an internal joint traffic and transport department (EMME), responsible for traffic management and public transport management functions. Matola Municipality has two divisions in its Transport Department, one dealing with mobility, the other with licensing of commercial vehicles, including passenger transport.

It is not clear whether the AMT will eventually gain authority over all such municipal transport functions in the Maputo Metropolitan Area, or whether it will only perform the intermunicipal dimension of these functions.

The AMT, which is accountable to the national Ministry of Transport and Communications, clearly has national government support and seems to have sound relationships with the municipalities in its area. For the continuation of the latter, it is critical that the AMT is viewed not as a competitor but as a facilitator of improvements that benefit the municipalities, whether directly or indirectly.

Indications are that the AMT has a strong leader, with good networks that make it possible to solve problems and address issues across government. However, this makes the organization vulnerable were this individual to leave for any reason.

6.5 Capacity

i) Human resources—conditions of service

AMT employees do not work under standard public service conditions, and they receive salaries approximately a fifth higher than public sector employees.

ii) Financing

Article 11 of the AMT Decree makes the following provisions for financing the AMT:

1. The AMT's sources of revenue shall be the following:

    a) The concession rates for the Maputo Metropolitan Area routes

    b) Rates for ticketing services

    c) Fees and other revenue collected for services provided by the AMT

2. Additional AMT revenue consists of:

    a) Donations and other forms of financial support

    b) Any other revenues from its activity or that the AMT legally owns

    c) Subsidies from the national budget

In practice, the foreseen revenues have not materialized. There is not yet an official budget, so the AMT is still at the stage where money must be found wherever possible. The FAMBA automated fare system is not yet operating, so the percentage of fare revenue it will generate to help run the AMT is not yet available. The current financing of the AMT and its activities comes from occasional funds from government and from operators, while donors/NGOs fund seven staff members (2021).

Given the low margins earned in the public transport sector in Maputo, it remains to be seen whether it will be feasible to generate revenue from the sector to finance the AMT as well as desired system improvements. With regard to the currently envisaged funding mechanisms, much depends on the success of the FAMBA fare system now being implemented.

6.6   **Concluding Observations**

The AMT is a young organization. Although there appears to be some ambiguity about its authority in relation to the municipalities in the area, it has the support of the national government and appears to have good relations with the municipalities in its area.

The transport challenges in Maputo are significant and the AMT may suffer from unreasonable expectations, especially given its relatively poor resourcing. It has been an achievement that the cooperatives continue to function and largely make repayments for the buses they use.

Both the FAMBA fare system and the BRT line are challenging projects. The fare system is a key lever in the shift from individualistic competition among operators to a cooperative, corporatized approach. However, shifting from cash-based payments to virtual payments is a significant change for both operators and users. BRT projects are notoriously more complex than anticipated. If the AMT makes a reasonable success of these two projects, it should be able to establish credibility and make further advances.
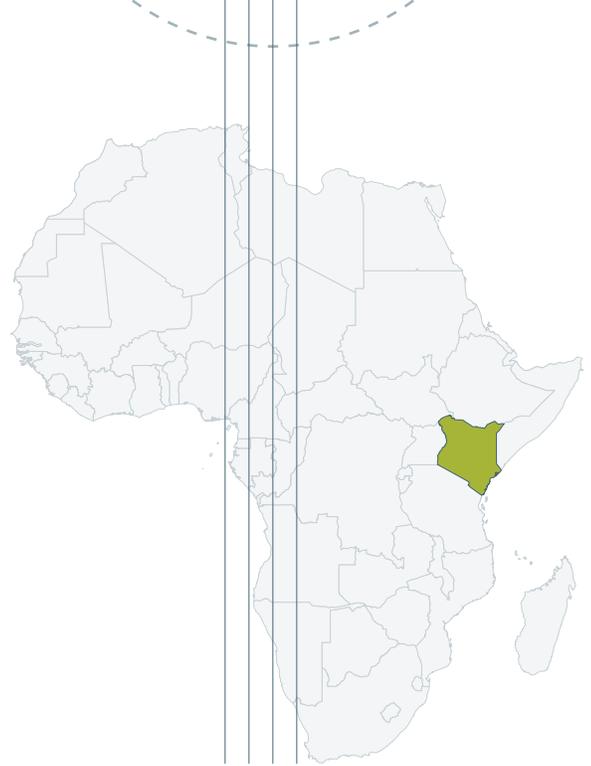
KENYA
NAIROBI

7.1   Name of Organizing Authority

Nairobi Metropolitan Transport Authority (NaMATA)

7.2   Summary of Key Features

- NaMATA was formally established through presidential executive order made under the State Corporations Act on February 17, 2017.
- Its key purpose is to "oversee the establishment of an integrated, efficient, effective and sustainable public transport system within the Metropolitan Area."
- Its establishment dovetailed with a national focus on metropolitan governance, which saw the establishment of a Ministry of Nairobi Metropolitan Development in 2008 and the adoption of a vision document titled Nairobi Metro 2030 and an associated Nairobi Metropolitan Spatial Plan.
- In 2010, in a process parallel to the engagements around the need to address issues at a metropolitan scale, a new national Constitution was adopted that created 47 counties across the country with strong original powers. While the Constitution gives the counties entrenched constitutional powers, it also locks in the boundaries of Nairobi City County, which covers less than two-thirds of the functional metropolitan area.
- NaMATA's governance arrangements seek to create a partnership between national government, the Nairobi City County, and the four surrounding counties into which the functional metropolitan area extends.
- The process was initiated through a memorandum of understanding among the five counties and the cabinet secretary for transport and infrastructure in 2014 and the subsequent creation of a NaMATA Steering Committee in 2015 supported by a secretariat, leading to NaMATA's establishment in 2017.

- NaMATA is governed by a seven-person council, made up of the governors of the five counties and the cabinet secretaries for transport and finance, and a 12-person board, consisting of a chair appointed by the president and technical officials.
- While there was a constitutional challenge in 2018 to the formation of NaMATA on the grounds that it usurped county powers, the Constitutional and Human Rights Division of the High Court found in September 2021 that its formation was constitutionally permissible.
- NaMATA's current primary focus is on the implementation of a BRT project, which is under construction; its secondary focus is on a commuter rail service that uses and expands a set of mainly single-track goods lines.
- The national government currently covers NaMATA's core costs, with NaMATA personnel provided for in the budget of the national Department of Transport, and finance for the BRT project provided for by development partners.
- It is still early to assess the success of NaMATA; however, while it had a slow start and was initially undermined by doubts over its constitutionality, the resolution of this in NaMATA's favor and the strong support the organization is being given, including financial support, by the new government elected for a five-year term in August 2022 are significant positive developments.

7.3   Scope

NaMATA was formally established on February 17, 2017, as a state corporation, through presidential executive order made under the State Corporations Act. It creates a structured partnership between the national government, Nairobi City County, and the four counties of Kiambu, Kajiado, Machakos, and Murang'a into which the greater Nairobi Metropolitan Area extends. Nairobi City County is fully urbanized with a population of 4.4 million, while a further 2.8 million urban dwellers live in the surrounding counties, although some live beyond what might be described as the metropolitan functional area.

The main mandate of NaMATA is to "oversee the establishment of an integrated, efficient, effective and sustainable public transport system within the Nairobi Metropolitan Area (NMA)." However, this is conceived in relatively broad terms.

NaMATA's mandate, as articulated in the executive order, includes the following actions:[6]

a.   Develop, formulate, and implement strategies, plans and policies in relation to public transport.
b.   Coordinate with other government agencies and other parties for the development and operation of transport infrastructure, facilities, and works necessary for the discharge of the functions of the authority, including the development, management, and maintenance of a mass rapid transit system (MRTS).
c.   Regulate and enter into agreements with MRTS operators and service providers.
d.   Integration of all modes of transport, as well as facilitating the integration of transport and land use planning.
e.   Develop an inventory and undertake continuous evaluation of the declared road network status within the metropolitan area.
f.   Formulate strategies to ensure overall improvement in traffic flow, planned and programmed traffic engineering and traffic management works within the metropolitan area, including making better use of existing road space for all modes and reducing the need for the construction of new roads within the metropolitan area.

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6.   This is a shortened list of the functions set out in the executive order.

g. Regulate both on-street and off-street parking on declared corridors and impose fees and penalties with respect thereto.
h. Ensure optimal utilization of intermodal means of transport including air, road, rail, and nonmotorized transport and any other modes targeting mass movement within the metropolitan area.
i. Assist in poverty alleviation by increasing economic efficiency through lower transport costs and prices within the metropolitan area.
j. Research and development, including to provide an effective, evidence-based MRTS network.
k. Improve the environmental sustainability of the transport system in the metropolitan area.
l. Develop appropriate and sustainable funding mechanisms in order to achieve the objectives of the authority.

There is a set of declared MRTS corridors with five BRT lines and seven commuter rail lines. These were adopted from a study undertaken in 2014 by the government of Kenya.

The initial focus of NaMATA is on the first two BRT corridors, although some attention is being given to scoping the commuter rail projects. The current lines that would form the basis of the commuter rail system are mostly single-track goods lines.

Construction of the first BRT line is under way.

NaMATA will work with a different international partner on each BRT line. While this is being done partly to source the capital required for the system, the proliferation of development partners may present challenges for coordination and consistency.

The focus of NaMATA is currently mainly on the MRTS. However, as indicated above, its scope extends well beyond this to traffic management and parking and the facilitation of transport and land use integration.

7.4 Authority

In 2010, Kenya adopted a Constitution that creates 47 counties and devolves significant power to them. Through this process, the legacy municipality of Nairobi was reconstituted as a county, referred to as Nairobi City County. Had the boundaries of the municipality been expanded at that point to encompass the whole metropolitan area, this would have created a metropolitan government with strong, constitutionally embedded powers. However, while Nairobi City County is fully contained within the functional metropolitan area, it only accounts at most for about two-thirds of the economy and population of the functional metropolitan area. Meanwhile, much of the new metropolitan growth is taking place within the adjacent counties of Kiambu, Kajiado, Machakos, and Murang'a.

The adoption of the new Constitution thus strengthened the powers of decentralized government in greater Nairobi but fragmented it among five counties. NaMATA thus needs the cooperation of all five counties to establish its authority. Furthermore, the counties are institutionally somewhat weak. While Nairobi City County has a long administrative tradition, service levels have been poor, particularly in recent years. The four other counties mostly have more limited administrative histories. Thus, for NaMATA to have the required authority and resources, it is vital that central government also play a significant role.

The concept of metropolitan government was already part of national discourse when the 2010 Constitution was adopted. A Ministry of Nairobi Metropolitan Development had been established in 2008 and had led the compilation and adoption of a vision document titled Nairobi Metro 2030. This was followed by an associated Nairobi Metropolitan Spatial Plan. However, NaMATA is the only metropolitan-level institution that has been established.

The roots of NaMATA's establishment can be traced to the creation by the Minister of Transport in 2003 of an inter-agency committee that developed an Integrated National Transport Plan approved by the Cabinet in 2009 recommending an MRTS for the metropolitan area of Nairobi and the creation of institutional arrangements for this purpose. In 2014, through an initiative of the cabinet secretary[7] for transport and infrastructure, a memorandum of understanding was agreed between the national government and the five counties. This led to the establishment through a national Gazette of the Nairobi Metropolitan Area Transport Authority (NaMATA) Steering Committee in February 2015 supported by a secretariat, leading, in turn, to the establishment of NaMATA through a presidential executive order made under the State Corporations Act on February 17, 2017.

NaMATA is governed at a political level by a seven-person council, composed of the governors of the five counties and the cabinet secretaries of transport and finance.[8] The cabinet secretary for transport is the chair, while the governor of Nairobi is the deputy chair. Reporting to the council is a 12-person board, headed by a chair who is appointed by the president. It includes the principal secretaries responsible for transport and finance,[9] and the county executive committee member responsible for transport in each of the five counties.[10] It also includes three technical specialists appointed by the council.

NaMATA was established through clause 189(2) of the Constitution, which provides for cooperation between national and county governments and for the setting up of "joint authorities" for that purpose. Nevertheless, its establishment was contentious, and in 2018 it was challenged on constitutional grounds by parties believing that it usurped county powers. While NaMATA was established by presidential decree as a state corporation under the State Corporations Act, there was an intention to reestablish it through a law in the national Parliament. Resistance to this on the grounds that it compromised county powers has prevented this from occurring.

However, in September 2021 the Constitutional and Human Rights Division of the High Court found that NaMATA's formation was constitutionally permissible. While it is unfortunate that it took more than three years to resolve this issue, the High Court judgment has significantly enhanced perceptions of NaMATA's legitimacy. There are areas where its establishment as a state corporation effectively weakens the powers it might have had if established through an act of Parliament—some regulatory powers being most significant—but these are limited. While the Nairobi City County governor has at times been opposed to NaMATA's establishment, all five county governors now support it.

The new government elected for a five-year term in August 2022 has moved swiftly in support of NaMATA, shifting administrative responsibility for NaMATA to the Transport Department, and supporting the appointment of new personnel at a senior management level and a new organizational structure. Most of NaMATA's personnel as well as a range of other costs are provided for in the core budget of the national department.

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7.   A cabinet secretary is the political head of a ministry, appointed to the national Cabinet by the president.
8.   The governor is the political head of a county, appointed by the County Assembly.
9.   A principal secretary is the administrative head of a national department.
10.   The county executive committee member is the executive head in a county, appointed by the county governor.

Dialogue continues in Kenya about the possibility of creating a metropolitan authority for Nairobi. If so, it would most likely be established on a similar basis to NaMATA, possibly through expanding NaMATA's range of responsibilities rather than creating a separate institution.

In carrying out its mandate, NaMATA needs to work with the counties as well as other national agencies, such as the Kenya Urban Roads Authority (KURA), which has traffic and road responsibilities; the Kenya National Highways Authority (KeNHA), which is responsible for major roads; and Kenya Railways.

7.5   Capacity

In its original strategic plan, NaMATA provided for an establishment of approximately 120 people. These were mostly to be filled through secondments from the various participating institutions.

After the new government came to power, a new organizational structure was agreed to.

While the founding order envisages that the counties will contribute to the financing of NaMATA, this has not been forthcoming.

7.6   Concluding Observations

The establishment of NaMATA, while initially contested and somewhat slow, has resulted in a clearly structured set of governance arrangements that provide for a strong partnership between national government and the five counties, and clear authority on a wide range of transport-related issues, further legitimized by the High Court ruling.

The strong financial commitment from the national government, whereby NaMATA's core organizational structure is funded through budget lines integrated into the national Transport Department's budget, gives it a stability that many other transport organizing institutions lack.

Its authority in future will now depend on it building further legitimacy through delivery.

Its current strategic approach, prioritizing the implementation of a number of BRT corridors, with a secondary focus on a commuter rail service based on using and expanding a set of mainly single-track goods lines, appears to be a logical approach. However, BRT projects can be more challenging than anticipated, creating a danger of not fully meeting expectations. NaMATA will also have to find ways of working with the paratransit *matatu* industry, which currently accounts for most public transport services in Nairobi.

NaMATA's functions, as laid out in the presidential executive order, extend beyond a purely public transport mandate and aim to address issues such as traffic congestion and parking. Thus far, NaMATA has been focused mainly on the MRTS; however, the transport authority has the power to widen its focus, and may do so as its understanding of the mobility challenges deepens.
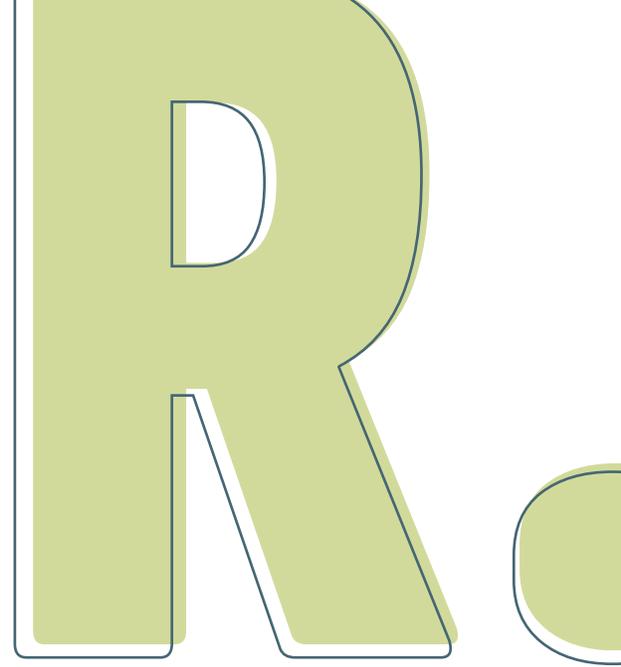
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