

Transforming Urban Transport – The Role of Political Leadership
TUT-POL Sub-Saharan Africa
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Case: Kigali, Rwanda

Lead Author: Stefano Trevisan



Harvard University
Graduate School of Design

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Principal Investigator: Diane Davis
Senior Research Associate: Lily Song
Research Coordinator: Devanne Brookins
Research Assistants: Asad Jan, Stefano Trevisan,
Henna Mahmood, Sarah Zou

KIGALI, RWANDA

A. Development Backdrop

Rwanda has made substantial progress in economic, environmental, human, and social development after the devastation of the 1994 genocide. Government policy has focused on building institutional capacity, good governance, and supporting economic growth, resulting in an annual growth rate of eight percent between 2000 and 2013 – a 170 percent increase in real GDP – making the country among the ten fastest-growing economies in the world. Rwanda is one of the densest countries in Africa and one of the least urbanized, with approximately 17 percent of its 12 million people living in urban areas (World Bank, 2016). The urban population has steadily been growing over the past several decades – from two percent in 1960 to 16 percent in 2012. With an annual urbanization rate of 4.1 percent, the total urban population is expected to reach close to 30 percent by 2030 (NUP, 2015). Despite progress, access to basic infrastructure is a challenge in urban areas, due in part to the high cost of infrastructure, challenging topography, and inadequate urban planning. Rwanda’s high population density, scattered settlements, hilly topography, and low urbanization rates have put pressure on arable land and constrain the transition from subsistence to more productive large-scale commercial agriculture. The government views its low urbanization rates as an opportunity to create a more efficient urban system, and urbanization as a key driver to achieve the 11.5 percent annual economic growth needed to reduce poverty and move the country to middle-income status by 2020.¹



Topography of rolling hills in Kigali.

¹ Despite being landlocked and possessing limited natural resources, Rwanda has emerged as a regional leader chairing the African Union and pushing for greater integration in the East African Community. It has also sought to establish itself as an economic player, particularly becoming a hub for ICT.

Transport and Development

Following the genocide, development needs were particularly acute given the destruction of infrastructure. The rate of rural-urban migration also began to increase, putting a strain on already limited infrastructure and service provision. Local governments did not have the resources or capacity to manage and to provide for basic services. In response to this context, the Rwanda Urban Infrastructure and City Management Project, supported by the World Bank from 2006-2009, was developed to increase access to urban infrastructure and services in the primary city of Kigali and two secondary cities. To address the broader vision for development, Rwanda prepared the Economic Development and Poverty Reduction Strategy (2013-2018) to transform Rwanda's economic geography by facilitating urbanization and promoting secondary cities as poles of growth. Rwanda's National Strategy for Transformation set an ambitious target of doubling the urbanization rate to 35 percent by 2024 and of directing urban hierarchy and development across Kigali and six secondary cities. A new urban development project approved in 2016 has recently begun to build on this effort. In collaboration with Surbana Jurong, a Singaporean firm, Rwanda has articulated a number of transportation policies to support urban growth: the Public Transport Policy and Strategy (2012), the Transport Sector Master Plan for Rwanda (2013), and the Kigali Transport Master Plan (2013). Transportation plays a key role in Rwanda's plans for rapid urbanization outlined in the National Urbanization Policy (2015).

B. Urban Transport Context

Urban Transport in Historical Perspective

In the wake of the genocide, security and the adequate provision of public services became key issues for rebuilding the country. All transport services grapple with the topography of Kigali, a city dominated by rolling hills that pose numerous transportation challenges. In addition, only 17 percent of the 732-kilometer road network was paved as of 2013. The combination of challenging terrain lack of paved roads, and low car ownership (under two percent in 2013), means that the overwhelming majority of Kigali residents use NMT as their primary means of mobility. As such, congestion has yet to take over in the way it has in other African capitals. Regarding motorized transport, public transportation service was provided by ATRACOM, the state-owned transportation company. It operated old buses imported from Japan in the 1970s, that did not consistently run on a schedule and were unable to meet demand. As a result, private actors began to fill the void by importing minibuses and motorcycles to operate private buses and taxis. Motorcycles became the favored mode of transport as they were quick, inexpensive, and could navigate the hilly terrain and rising traffic congestion. In 2006, the Government of Rwanda (GoR) attempted to ban motorcycles; however, with significant public pushback, they had to cancel the ban after one day. Motorcycle use continued to proliferate, indicating a high demand for transport service as well as the low barriers to entry for operators.

C. Urban Transport Reform

The GoR formed the Rwanda Utilities and Regulatory Authority (RURA) in 2001. The approach employed regulatory controls to direct private operators to provide the type and quality of services envisioned by the state, rather than displace the operators and provide the service themselves. RURA began a series of incremental reforms and restrictions to influence transport behavior, particularly on the operator side. They began with licensing requirements for operators to provide transit service in

2003. Over the next several years, RURA gradually added requirements and restrictions (i.e. safety inspections, meters in taxis) as conditions for the issuance of these licenses. In 2010, RURA banned importation of minibuses, with the requirements that operators phase in higher-capacity vehicles and gradually phase out lower-capacity minibuses.

In 2013, a new policy for urban transport reform was adapted from the National Transportation Master Plan, prepared by Surbana Jurong. The core component of the 2013 reforms was the division of Kigali into four operating zones that would be granted to private operators in the form of monopoly operating concessions. They conducted an open bidding process in which operating companies were awarded contracts for 5-year periods that ended in 2018. This model of publicly sanctioned monopoly for private transport operators was adopted from Singapore where the city is divided into two monopoly zones to hold service providers accountable. One of our respondents described the philosophy regarding the zones: “Before [re]organizing the transport sector, passengers had trouble in filing complaints about the poor service because there was no one to turn to for help and no one to pin for the poor service. Today, complaints against poor service can be handled through companies and cooperatives making it easy for RURA to track poor service providers and penalize them or make them accountable. In short, we allow them to compete for the road, not on the road” (Respondent, 2019).

The Role of ICT in Reforms

Rwanda has foregrounded ICT as a key element of its economic development strategy as well as its urban strategy. The GoR has invested in developing online service delivery to reduce the amount of travel necessary for citizens to access services. Directly related to urban transport are improvements such as electronic ticketing for buses (with some offering mobile payment) and speed governors to address road safety concerns. RURA mandated that all buses in Kigali have free Wi-Fi as well as tap-n-go systems. The city is also partnering with other private entities to develop “smart bus shelters” that feature screens that provide real time information on the location of their bus and the time until arrival. Real-time data will be integrated into a plan for a new Bus Information System and a bus control center to monitor vehicle and passenger movements throughout the city. There are also new ride-hailing mobility services that are enabled by technology including Safemoto and Yegomoto, Yego cabs, and Wolvkswagon.



With the operating monopoly came a number of demands and restrictions from RURA. First, RURA shifted to a policy of issuing transportation licenses only to companies or cooperatives (as opposed to individuals). This last point was a means of dealing with the high number of applications and the fragmentation of the industry; the government sought to negotiate with leaders that could represent operators, rather than negotiate with large groups of solo operators. The creation of mototaxi cooperatives such as the Rwanda Federation of Taxi Moto Operators (Ferwacotamo) is a prime example of the results of this policy. Then, licensed operators were required to gradually change over their fleet, phasing out lower-capacity vehicles for fewer, larger, higher capacity vehicles. Minibuses, sometimes referred to as *Twegerane* (Kinyarwanda for “let’s get closer”) were considered unsafe, unreliable, and contributing to congestion. These vehicles were banned from trunk roads entirely and gradually phased out from smaller streets in favor of vehicles that had around 30 seats, which are referred to as “coasters.” Later, these coasters would likewise be phased out in favor of larger 70 seaters, Chinese-built buses, made by the manufacturer Golden Dragon. Currently, one can find a hybrid fleet in operation, consisting of a mix of coasters and Golden Dragon buses; however, the eventual goal is to have the high-capacity buses replace the small-capacity ones. Moreover, buses were required to stick to set routes and schedules dictated by RURA, and operators would be required to post the route number prominently on the front of the vehicle.² The logic of the monopoly concession is that bus operators operate on a regularized schedule, which both preempts competition from other operators and guarantees timely service to riders. According to the head of RURA’s Transport Department, these innovations have increased the number public transport passengers from 250,000 in 2013 to 450,000 in 2016 (Respondent, 2019). The number of routes in the public transport network in Kigali have likewise nearly doubled, rising from 42 in 2013 to 78 today, meaning that more city suburbs and neighborhoods are serviced by public transport than ever before.



People queuing Coasters.

² The first digit of the route number indicates the transport zone (e.g. 302 for zone 3 and 201 for zone 2), providing an easy check on operators running buses outside of their monopoly zones.

D. Governance and Politics of Urban Transport

Politically, Rwanda is highly centralized, with much of the decision-making that affects Kigali made at the national level. As such, the key stakeholders for urban transport are concentrated here. RURA, perhaps the single-most important entity, is the regulatory authority, setting fares and routes for public transit. The level of independence and autonomy that RURA enjoys is quite unique and likely goes a long way in explaining the unusual degree of sustained regulatory success. The entity has its own budget, its own board of directors, and does not report to any ministry. Instead, it reports directly to the Executive branch of the Central Government. This allows RURA the independence to both make policy choices and maintain continuity, avoiding costly policy reversals. Other key national-level actors include: The Ministry of Infrastructure (MININFRA), which develops national transportation policy and oversees transportation interventions in Kigali; the Rwanda Transport Development Agency (RTDA), in charge of road construction outside of Kigali; and the Rwanda Information Society Authority (RISA), responsible for some of the ICT interventions such as the CCTV cameras.

Despite the highly centralized national government, the City of Kigali also plays a key role. The city engineer directorate is responsible for much of the public infrastructure in the city such as the roads, bus shelters, sidewalks, etc., which are all owned and managed by the City. Thus, the interventions on Kigali streets, such as car-free day, the car-free zone, the pending dedicated bus lanes, the BRT study, and the road building projects, are managed by the City. The key players on the operating side are mixed. Kigali Bus Service (KBS) and Royal Express are privately-held companies that hold the monopoly concessions on Zones 1 and 2, respectively. Zones 3 and 4 were awarded to the Rwandan Federation of Transport Cooperative (RFTC), an umbrella association comprised of cooperatives and unions that coalesced at the national level around 2011 in order to compete more effectively. The previously mentioned Rwanda Federation of Taxi Moto Operators also plays a role (Ferwacotamo). Among other transport companies, there is also the AC Group, a Rwandan company that manages cashless payment of public transport fares.

E. Findings and Policy Implications

Kigali has made gradual progress since 2001 in improving urban infrastructure and transport, with significant change beginning in 2013. Not only has infrastructure has been expanded, but also the strategy developed to manage urban transport provision is being implemented with real success. Introducing regulatory limitations on minibuses has reduced their presence and begun shifting the fleet towards the preferred larger-capacity buses. The introduction of monopoly concessions for the process of procuring service providers to manage each of the zones, an innovation adapted from the Singaporean context, has been implemented successfully. The government, in conjunction with Surbana Jurong, recently updated the 2013 Transportation Master Plan in June 2019 to address the projected growth of Kigali from 1.5 million to four million by 2050. In doing so, it launched a seven-year program (2017 to 2024) to improve public transport services by increasing scheduled bus routes and a study of BRT, which is currently being finalized.

Despite Rwanda's robust regulatory and policing powers, several challenges remain as they continue to pursue transformation, not just of urban transport but of urbanization and development. One of these challenges is the limitations of urban transport to reach into many residential neighborhoods. Some of these areas lack the adequate road infrastructure, while others lack the density to provide service. In limited these areas, the primary means of transport for most of the population remains the moto-taxi. Another challenge to the advancement of the urban transport sector is the issue of

compliance with the reforms. As RURA has mandated improvements in vehicles, private operators have struggled to keep pace, particularly without financial support or subsidy. The cost of fleet change is left to the operators, who are forced to phase out low capacity vehicles for fewer higher capacity vehicles. A particular burden is the cost of new vehicles. Operators can try to access finance up to 70 percent to 80 percent of the cost, but the interest rates are high – around 20 percent. At the same time, they are phasing out old vehicles that may not be fully paid off yet. With no support from the government, the costs of “wasted” vehicles combined with the costs of updating the fleet are creating financial strain for operators (Respondent, 2019). RURA also controls bus fares, while varying costs such as fuel are covered by private operators. This puts operators in a difficult position as they are limited in their ability to respond to fluctuations in their operating costs. Kigali has sought to harness the presumed efficiencies of the private sector to rapidly improve urban transport, while keeping government expenditures low. While the public-private partnership approach is key to the Rwandan strategy, the sustainability of such an approach may be called into question without enough investment in supporting private-sector actors.

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Acronyms

Government of Rwanda (GoR)

Gross Domestic Product (GDP)

Kigali Bus Service (KBS)

Rwanda Information Society Authority (RISA)

Rwandan Federation of Transport Cooperative (RFTC)

Rwanda Transport Development Agency (RTDA)

Rwanda Utilities and Regulatory Authority (RURA)

The Ministry of Infrastructure (MININFRA)