

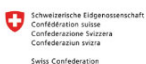


DIAGNOSTIC STUDY

Policies for Sustainable Accessibility and Mobility in the Cities of Burkina Faso

October 2019

An international partnership supported by:



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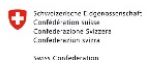
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Policies for sustainable mobility and accessibility in cities of Burkina Faso



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* * * * *

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Introduction

Urban transportation and mobility form one of the pillars of the African Transport Policy Program (SSATP), whose objective is to provide African decision-makers with the tools to develop affordable, safe, and sustainable urban transport in Africa for primary and secondary cities. This falls within the framework of Sustainable Development Goal No. 11: "*Make cities and human settlements inclusive, safe, resilient and sustainable.*" The expected outcome of this pillar is to provide secure universal access to sustainable transport for urban populations.

To achieve this, the SSATP has launched a program to devise a set of policies designed to improve accessibility and mobility in Africa's urban areas, based on an empirical study in a representative sample of cities in the region.

This study led to the publication of Working Paper No. 106 entitled "Policies for sustainable mobility and accessibility in urban areas of Africa"¹. This paper describes an approach called the "EASI conceptual framework," which comprises a set of specific policy actions grouped in four categories: effective governance (Enable), effective land use (Avoid), efficiency of the multimodal transport system (Shift), and efficient use of roads and vehicles (Improve). In each of these categories, the paper proposes specific measures that could be adopted by African cities.

As a follow-up to this publication, an additional work program was established to implement these guidelines in eight program-member countries. The goal is to foster the emergence of a political vision for urban mobility and transport.

The present study aims to prompt a change in thinking about accessibility and mobility and to raise awareness among decision-makers so that they will implement strong policies, strategies and operational practices that make an effective contribution to improving urban transport and mobility in African cities.

This report aims to identify the main mobility and accessibility issues in Burkinabe cities by analyzing five priority themes:

- Strengthening the institutional framework for urban transport management;
- Bolstering funding sources devoted to urban transport management;
- Improving the performance of public transport and increasing ridership;
- Fostering meaningful participation of the private sector in urban transport management;
- Improving multimodal planning and the functioning of city centers.

It was drafted at the conclusion of an initial mission to Ouagadougou and Bobo-Dioulasso to gather data and talk to local and national stakeholders. It is the result of an in-depth analysis based on the EASI conceptual framework. It includes a diagnosis of urban mobility in Burkina Faso based on the existing literature, an analysis of obtained data and interviews.

This assessment report precedes a memorandum of recommendations that will be drawn up for discussion and improvement within the framework of an urban mobility workshop that is being held in Ouagadougou on 14 and 15 November 2019. Following this workshop with national and local stakeholders, a policy letter and a strategy for urban mobility in Burkina Faso will be put forward.

¹ Stucki M. (2015), Policies for sustainable mobility and accessibility in African cities, SSATP Working Paper n°106, available online: https://www.ssatp.org/sites/ssatp/files/publications/SSATPWP106-Urban%20Mobility_FR.pdf

Urban mobility issues in Burkina Faso

Urban development at the national level

National trends

Rapid uncontrolled urbanization

Burkina Faso, a landlocked country bordered by Mali, Benin, Togo, Côte d'Ivoire, Niger and Ghana, has an area of approximately 274,500 km².

The following table introduces some indicators of comparison with the 3 other countries covered by this study:

Table 1: Statistical data from the four countries of the study

	BENIN	TOGO	MALI	BURKINA FASO	SOURCES
DEMOGRAPHY					
National population (million, 2018)	11,5	7,9	19,1	19,8	World bank
Population projection (million, 2030)	16,1	10,9	23,3	26,5	UN-Habitat
Population density (pop. / km ² , 2018)	102	145	16	72	World bank
URBANIZATION					
Rate of urbanization (% , 2018)	47%	42%	42%	29%	World bank
Urban growthy rate (% , 2018)	3,9%	3,7%	4,9%	5,0%	World bank
Urban areas of more than 300'000 inhabitants (2018)	4	1	2	2	World bank
ECONOMY					
PIB per inhabitant (\$PPA, 2018)	2 421	1 761	2 314	1 975	World bank
Economic growthy rate (% / year, 2013-2018)	5,4%	5,3%	5,2%	5,5%	World bank
Proportion of the population living below the international poverty line (PPA, % de la pop.)	49,5% (2015)	49,2% (2015)	49,7% (2009)	43,7% (2014)	World bank
Human development index (0-1 scale, 2018) 0 - low, 1 - strong human developpement	0,515	0,503	0,427	0,423	UNDP
PUBLIC FINANCE					
State budget (in billions FCFA US\$, 2015)	1 507 2,50	806 1,34	1 785 2,97	1 516 2,52	Financy law 2015
Proportion Budget / Population (in FCFA, 2015)	139 666	117 922	100 174	82 168	Financy law 2015 Africapolis
GOVERNANCE AND BUSINESS					
Doing Business (Distance from the border, 2019) 0 - Lowest performance, 100 - Highest performance or "border"	51,4	55,2	53,5	51,6	Doing Business World bank
Corruption perception index (1-100, 2016) 1 - Low transparency or High corruption, 100 - High transparency or Low corruption	36	32	32	42	Transparency International
MOTORIZATION					
Petrol / Diesel Prices (US\$ / L, 2016)	0,72/0,72	0,71/0,71	1,12/0,98	0,98/0,86	World bank
Private vehicules in use (2015)	210 000	140 000	170 000	200 000	OICA
Motorization rate (private vehicules / 1 000 inhabitants, 2015)	20	19	10	11	OICA - World bank
Road accident mortality (mortality / 100 000 inhabitants, 2016)	28	29	23	31	World bank
Rate of households owning a motorcycle and/or scooter (%)	56,1%	36,8%	55,0%	35,8%	EDSBF-IV Burkina Faso - 2010

While the country has one of the lowest urbanization rates among West African countries - 29.4% of its population was living in an urban area in 2018 compared with 45.6% on average² - it has experienced rapid urban growth (sustained by strong demographic growth) since its independence. The table below shows the changes over the same period in the urban and rural populations, relative to the country's overall population growth.

Table 2: Urban and rural population growth in Burkina Faso between 1960 and 2018

Year	1960	1995	2006	2018
Share of urban population	4.70 %	15.1 %	22.3 %	29.4 %
Urban population (in millions)	0.23	1.53	3.09	5.79
Rural population (in millions)	4.60	8.56	10.70	13.90
Total population nationwide (in millions)	4.83	10.10	13.80	19.70

Source: United Nations Population Division, 2018

With an annual average rate of growth above 5.8%, the number of urban centers has increased from two in 1960 to 33 in 1995 and 49 in 2006, according to the Burkina Faso Urban Development Program (PDU).³ This trend will likely continue over the coming years. In 2018, the United Nations Population Division estimated an urban population growth rate of 4.75% for the period 2020-2025.

Ouagadougou and, to a lesser extent, Bobo-Dioulasso, the second most populated city, account for the bulk of the country's urbanization. In 2015, these two cities represented 16.4% of the national population, with a total of 59.2% of the urban population.⁴ By comparison, the other cities did not exceed a total of 0.1 million inhabitants.⁵

Public authorities note that this rapid urbanization is endured rather than planned. The proliferation of informal housing areas and the takeover of outlying urban land by certain private stakeholders contribute to a process of uncontrolled and not so eco-friendly urban sprawl. Consequently, an Urban Development Program (PDU) was drawn up to coordinate urban development activities at both the national and local levels and to match priority urban development project programs with urban and regional development planning tools. It falls under the Burkina National Urban Program (PPUB) (2014-2016) and should capitalize on the PPUB's achievements and work to bring about the provisions in the National Economic and Social Development Plan (PNDES 2016-2020), the National Master Plan for Territorial Planning and Development (SNADDT for 2040) and the urban master plan for urban centers.

The PDU has the following specific objectives:

- expand urban and intercity flows;
- control urban growth and preserve the environment;
- promote urban services and agricultural product processing centers;
- improve administrative services, training and professionalization of urban stakeholders;
- enhance the planning and management capabilities of urban centers.

² Data: United Nations Population Division, 2018

³ Ministry of Housing and Urban Planning (2019), Burkina Faso Urban Development Program

⁴ United Nations Population Division, 2018

⁵ Africapolis, 2018

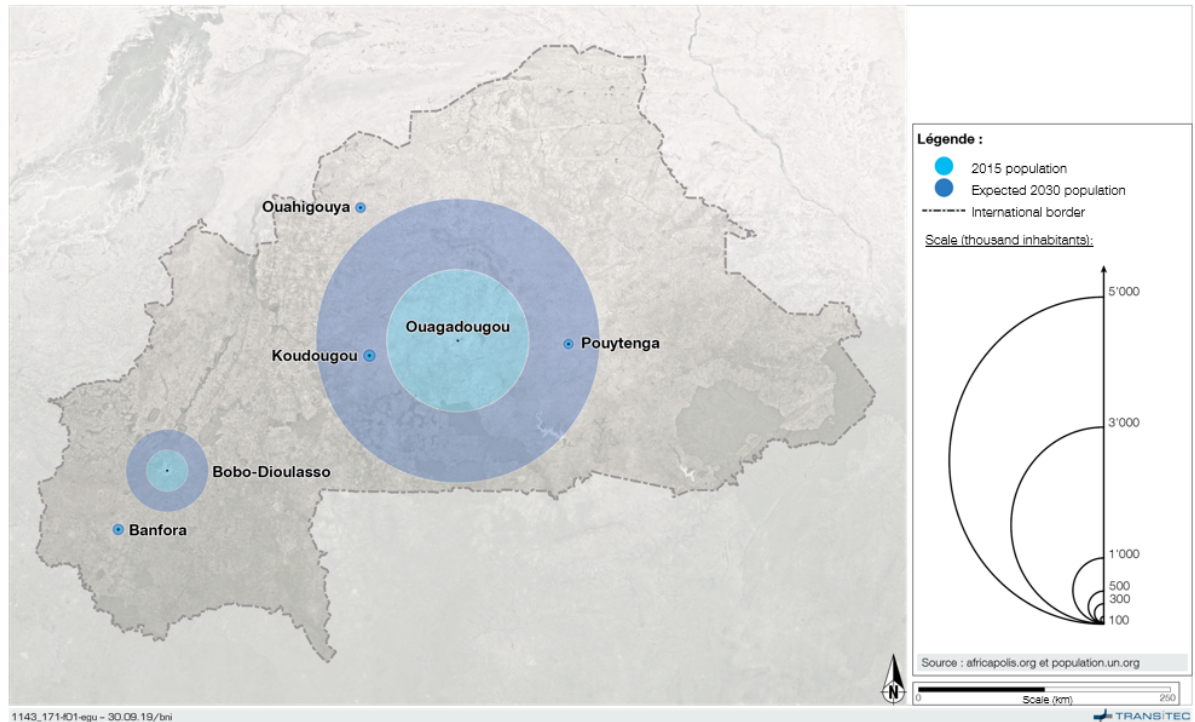


Figure 1: Population map of Burkina Faso's major cities in 2015 and projection up to 2030

An economy dependent on external trade

Burkina Faso is a Sahelian country with few natural resources. Its economy is based mainly on agriculture and animal husbandry, which represented 35.2% of its GDP in 2014, and on gold mining. Its economic performance is therefore subject to the vagaries of the weather and world prices for gold and cotton, which is the preeminent cash crop. The economy is highly dependent on hydrocarbons as a source of energy, which exacerbates its vulnerability to external crises.

The country's landlocked position hinders its access to international markets. Traded goods must go through ports in neighboring countries - notably Abidjan (Côte d'Ivoire), Tema (Ghana), Lome (Togo) and Cotonou (Benin) – all located at least 1,000 kilometers from Ouagadougou, which leads to increased costs for imported supplies and a negative effect on export competitiveness.

Consequently, the transport sector takes on an important role in the nation's economy and notably in Burkina Faso's international trade. In fact, most imports are conveyed by truck from ports in neighboring countries. The Burkinabe government initiated a reform in 2014 aimed at modernizing road transport, which had been dominated by the informal sector until then, by making it mandatory to obtain a public road transport license.

A railroad - operated by the private company SITARAIL since 1995, with its government contract recently renewed through 2030 - connects Ouagadougou and Abidjan. It is 1,260 kilometers long (620 of which are on Burkinabe territory). It carries 20 to 30% of goods transported between Côte d'Ivoire and Burkina Faso. Several programs to rehabilitate and extend the rail network are in the process of implementation.⁶

⁶ WTO, (2017)

National urban structure

Ouagadougou, a concentric-zone capital

Ouagadougou is one of Burkina Faso's two urban centers. It has experienced significant growth resulting from both rising birth rates and rural exodus. Thus, its population increased from 180,000 inhabitants in 1975 to 700,000 in the 1996 census that was carried out by the National statistics and demographics institute (INSD). The city's population has doubled in the course of the last 15 years, going from 1.2 million inhabitants in 2004 to 2.53 million in 2018, representing more than 13% of the country's total population.⁷

At the same time, the city experienced rapid urban sprawl to seven neighboring municipalities, now grouped into Greater Ouaga.⁸ If the same population density is maintained into the year 2025, then the metropolitan area and its 3.2 million inhabitants will spread out over 700 km² compared with 400 km² in 2014. Figure 2 shows this evolution as well as the spread of the city's radius from 10 km today to 15 km then.

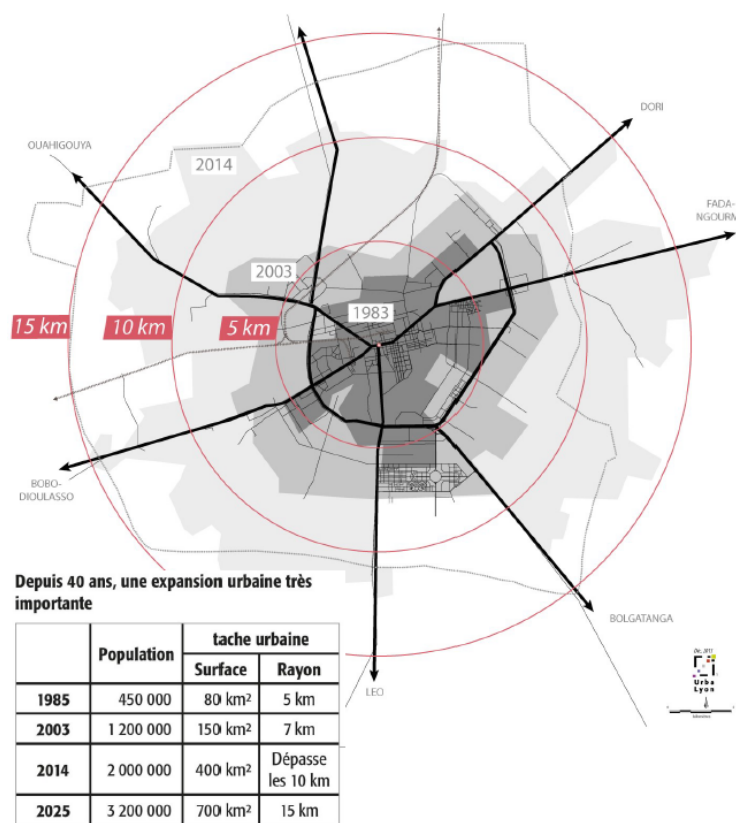


Figure 2: Growth of Ouagadougou between 1983 et 2025 (Source: UrbaLyon, City of Ouagadougou, 2015)

The Ouagadougou urban area has grown along a concentric zone pattern, with low density (37 inhabitants/ km² for the city of Ouagadougou in 2012). Economic and administrative activities are concentrated in the downtown area whereas residential areas extend over the rest of the metropolitan area. Access to the center is constrained by the airport to the south, the military camp to the west and waterways to the north and west. The road network is shaped by major national roads converging toward the city center and a ring road that has not been completed in the north.

The Ouaga 2000 neighborhood outside the ring road, southeast of the city, is an exception to the urban structure. It was built up in the second half of the 1990s. It is home to the presidential palace as well

⁷ United Nations Population Division, 2018

⁸ Greater Ouaga comprises the city of Ouagadougou and the towns of Koubri, Komsilga, Komki-Ipala, Saaba, Pabré and Tanghin Dassouri (province of Kadiogo) and the town of Loumbila (province of Ouhimbé).

as luxury villas, administrative buildings and embassies. This neighborhood, which was designed as a showcase of the Blaise Compaoré regime, boasts an infrastructure density higher than in other outlying neighborhoods.

Urban sprawl creates many challenges underscored in urban master plans. Faced with ever-increasing urbanization, the Greater Ouagadougou Urban Master Plan (SDAGO), revised in 2010, sets the following fundamental goals for the territory by 2025:

- control and administer the space;
- develop infrastructures;
- develop production activities distributed across the territory;
- control and preserve natural resources;
- offer better access to social services and decent housing.

The Structural Plan (SDS) set out in the Land Use Plan (POS) gives direction to urban development and growth. It establishes seven decentralized centers within the Ouagadougou city limits to accommodate new activities while preserving their primary housing role. By giving more vitality to these secondary centers, the SDS aims to redistribute activities so as to reduce the distance between residential areas, businesses, other service points and zones of employment in general, so that by 2025 Ouagadougou takes on a multi-hub form.



Figure 3: Location of secondary centers (Source: POS, 2012)

Bobo-Dioulasso, the southern metropolis

Bobo-Dioulasso, the country's second urban center after Ouagadougou, has also experienced rapid demographic growth. It grew from 490,000 inhabitants in 2006 to 900,000 in 2019 (United Nations Population Division, 2018).

The capital of the Hauts-Bassins region, Bobo-Dioulasso lies at the crossroads of international roads to Niger (RN1), Côte d'Ivoire (RN7), Mali (RN8, RN9 and RN10) and Ghana (RN27). The Ouagadougou to Abidjan railroad line also runs through Bobo-Dioulasso. This position has contributed to its economic expansion, but the city also has significant industrial production capacity, for a secondary African city. Activities related to cotton production dominate the region but other businesses (cardboard industry, metallurgy, chemicals) also operate in the industrial zone along the railroad.

Other cities

Apart from Ouagadougou and Bobo-Dioulasso, Burkina's towns are modest in size, as are their economies. Their economies are primary based on exporting agricultural products (cotton, peanuts, shea nuts, market gardening) and importing industrial products. Border cities, such as Banfora, Bitou, Orodara, Ouahigouya, Leo and crossroad cities such as Koudougou, Dedougou, Koupela, Pouytenga and Fada N'Gourma take advantage of their geographic location by trading with neighboring regions and countries. The problem of urban mobility is emerging in these cities due to a relatively minor rate of households owning two-wheel vehicles.

Two-Wheel Motorized Vehicles

According to the International Organization of Automobile Manufacturers (OICA), the motorization rate (four wheels and more) in 2015 was 16 vehicles per 1,000 inhabitants. However, if two-wheel motorized vehicles are included, the rate of motorization is approximately 116 vehicles per 1,000 inhabitants. Vehicle ownership in Burkina Faso is thus mostly comprised of two-wheel vehicles.

In its 2017 annual report, the National Statistics and Demographics Institute (INSD) noted a motorized vehicle fleet of approximately 375,000 automobiles and 2,329,400 two-wheel vehicles subject to registration. Figure 4 and Table 1 below show the evolution of the motorized vehicle fleet between 2008 and 2017, broken down by categories. They show the rapid rise of individual motorbikes, whose numbers increased fivefold between 2008 and 2017, representing an average annual rate of growth of 20% while the rate for automobiles was around 10% over the same period.

In 2017, there were 278,000 new registrations for individual motorbikes and 21,000 for private automobiles. Annual growth rates for registrations are high, at 7.3% from 2012 to 2017 for private automobiles, and 6.3% for motorized two-wheel vehicles.

There are no vehicle production plants in Burkina Faso and so they must be imported. The table below underscores the rise in vehicle imports, which is more pronounced for automobiles (81% growth) than for two-wheel vehicles (64%) between 2010 and 2015.

However, these statistics do not show the recent trend for motorized tricycles. These vehicles were introduced in Burkina Faso in the early 2000s by Nestle and SIBEA, which used them to sell their products in areas where road infrastructures had greatly deteriorated. Since then, their numbers have grown to either transport goods or persons, especially in secondary cities. Nationally, between 2012 and 2018, the Customs Service reported having cleared approximately 100,000 motorized tricycles; 71% by the Ouagadougou customs office and 28% by the one in Bobo-Dioulasso.

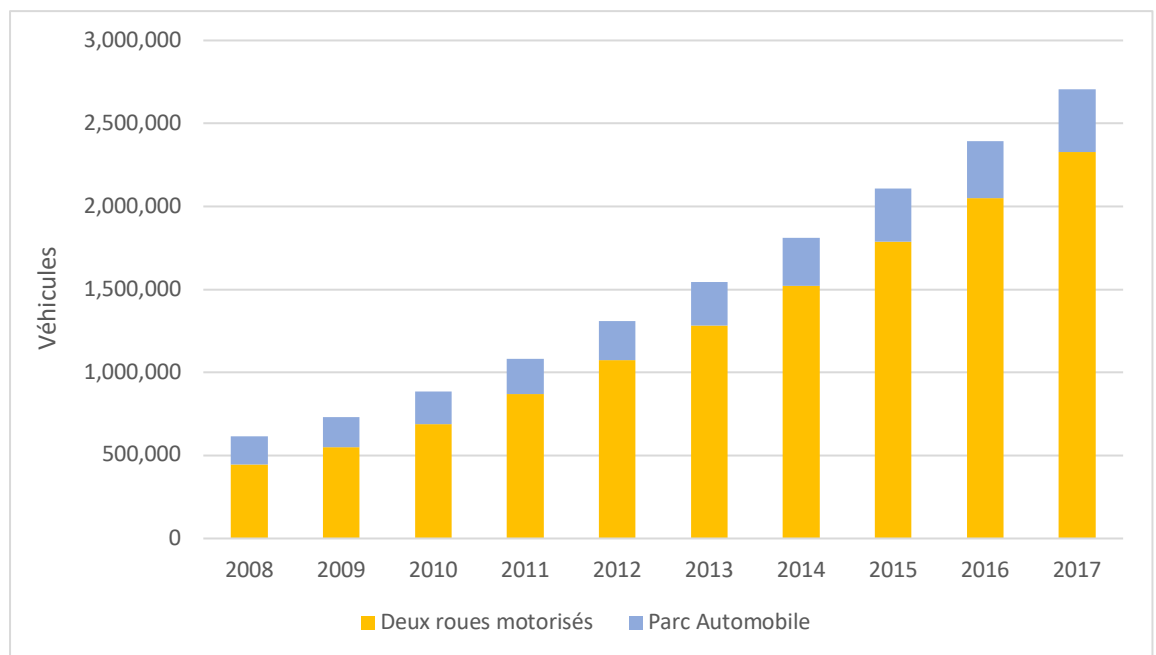


Figure 4: Evolution of automobile and motorized two-wheel vehicles subject to registration

Table 1: Number of vehicles on the road by category between 2008 and 2017 according to the INSD's 2017 annual statistics report

Year	Private cars	Small vans	Public Transport	Heavy vehicles*	Other automobiles	Motorized two-wheel vehicles	Total
2008	103,623	24,576	6,678	33,819	316	447,426	616,438
2009	110,931	26,130	7,034	35,712	324	551,252	731,383
2010	120,209	27,949	7,494	38,962	328	689,808	884,750
2011	131,452	30,134	8,032	43,559	331	868,088	1,081,596
2012	146,076	32,915	8,816	49,474	338	1,072,966	1,310,585
2013	162,417	35,285	9,615	55,542	343	1,282,706	1,594,908
2014	179,832	37,493	10,296	61,440	379	1,521,048	1,810,488
2015	198,488	39,491	10,952	67,794	386	1,789,181	2,106,292
2016	217,331	41,304	11,596	73,567	386	2,051,103	2,395,287
2017	238,180	43,504	12,383	80,708	388	2,329,427	2,704,590

**Heavy vehicles: Trucks, Tractor units, Trailers, Semi-trailers, Special Vehicles, Farm Vehicles

Source: MTMUSR / Directorate General of Land and Maritime Transport

Table 2: Change in the number of imported motorized vehicles according to the annual Customs Service statistics report for 2015

	2010	2011	2012	2013	2014	2015
Motor vehicles	10,843	13,865	16,505	19,744	17,909	19,573
Motorized two-wheel vehicles	118,981	179,672	168,124	183,357	174,625	195,043

Source: Customs Service Directorate General, 2017

Urban mobility assessment

Ouagadougou

Existing data

The following tables show the existing national and local data on urban mobility:

Data	Scope/area	Mode and year of acquisition	Owner/custodian of data	Availability and format of data	Regular updates	Comment
Land use						
Spatial distribution of population and jobs	Ouagadougou	Land Use Plan, 2012	Municipality of Ouagadougou	Report		
Travel demand						
Modal split	Ouagadougou Bobo-Dioulasso	2011 (PAMO), 2014 et 2016: Road counts 2010 : Road counts : "The urban passenger transport in Bobo-Dioulasso"	Municipality of Ouagadougou K.Aminata	Report	Yes No	
Origin-Destination data	Ouagadougou	Origin destination survey in Ouagadougou	Municipality of Ouagadougou	Report	Yes	
Traffic						
Traffic counts	Ouagadougou Bobo-Dioulasso	2011 (PAMO), 2014 et 2016: Road counts 2010: Road counts: "The urban passenger transport in Bobo-Dioulasso"	Municipality of Ouagadougou K.Aminata	Report	Yes No	
Parking						
Occupation and rotation data						
Public transport						
Route itineraries and stops	Ouagadougou	2011, PAMO	SOTRACO	SIG and Report	No	
Level of service	National	Annual operations reports	SOTRACO	Reports	Yes	

Users satisfaction data						
NMTs						
Pedestrian/bicycle counts	Ouagadougou	Household travel survey, 1992		Quotes et extracts	No	
Users satisfaction data						
Models						
Traffic model						
Transport model						
Externalities						
Road Safety	Ouagadougou Bobo-Dioulasso	Traffic accident analysis bulletins, 2015 Traffic accident in Ouagadougou, an indicator of management urban Traumatic investigations, Ouagadougou, 2015	Nikiema, A., Bonnet, E., Sidbega, S. & Ridde, V. - 2017 ONASER, 2018 National Police IRD	Traffic accident analysis bulletins ONASER	Yes	Not complete collection of traffic accident data
Air Quality	Ouagadougou	Urban Air Quality Studies : the case of Dakar and Ouagadougou	World Bank SSATP	Report Available online	No	
Gender issues						

	Mobility needs	Public transport	Traffic	Parking	NMT	Model	Externalities		
	<i>Modal split, origin-destination, trip purpose, etc.</i>	<i>Operational data (route itineraries and stops, level of service, etc.)</i>	<i>Traffic counts and surveys</i>	<i>Rotation and occupation data</i>	<i>Pedestrian / bicycle counts and user satisfaction survey</i>	<i>Multimodal model (traffic and public transport)</i>	<i>Road Safety</i>	<i>Air quality</i>	<i>Gender issues</i>
Lomé, Togo		● annual	●				● annual		
Bamako, Mali	● 1993	● 2010 et 2019	● 2015 et 2016				● 2019	● 2004, 2008 et 2019	
Ouagadougou, Burkina Faso	● 2011, 2014 et 2016	● 2011	● 1992, 2011, 2014, 2016 et 2018		● 1992		● 2017	● 1998	
Cotonou, Bénin			● 2016			● 2016	● annual		

Legend

- No data available
- One-time data collection
- Regular updates

- Regular updates and public availability
-

Assessment of road infrastructures

According to the municipality's road data base, in 2015, the Ouagadougou road network consisted of 2,300 km of roads of which only 20% (approximately 450 km) were asphalted and 400 km had lighting. Most of the paved roads are located within the ring road and at Ouaga 2000. Beyond the challenges of laying out new roads, the upkeep and maintenance of existing roads remains a major challenge. Generally speaking, handling rainwater run-off is crucial for travel conditions during the rainy season and to prevent the deterioration of road surfaces. In ill-equipped neighborhoods, pedestrian and vehicle traffic is impeded by large puddles of stagnant water.

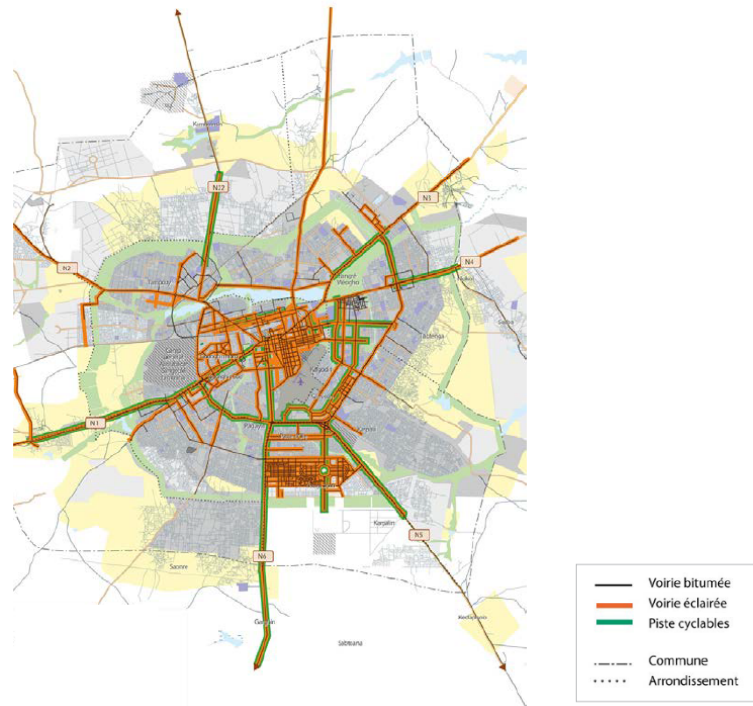


Figure 5: Map of asphalted and/or lit road network (Source: SMTUSR, 2015)

Both municipal and state authorities have made significant efforts over these past years. They have upgraded existing primary roads (road surfaces, road signs, lighting...) and increased the length of paved surfaces, notably in peripheral neighborhoods. However, from time to time, certain "vehicle-oriented" infrastructures have been built to the detriment of the neighborhoods they pass through. Other than bicycle lanes, no accommodation has been made or any measure taken in favor of alternatives to the car. Buses are subjected to the vagaries of traffic and congestion (no reserved lanes, no priority at intersections), while the need for pedestrian crossings or safe access to businesses and services is rarely taken into consideration. Road markings and horizontal signage are rare.

Approximately 50 downtown intersections have been equipped with traffic lights. Drivers generally abide by these lights, which significantly improves traffic flows. The system could be optimized: some intersections have only rudimentary or even dangerous settings.



Figure 6: Intersections in Ouagadougou regulated by traffic lights

The downtown road pattern is structured by:

- Axial roads – the seven main roads (N1 to N6 and the N22) - converge toward the downtown area. Designed as major traffic roads, they take no account of the reality of neighborhoods crossed and no distinction is made between areas inside and outside the ring road;
- An urban bypass around the heart of the city by way of Avenue de la Liberté, Avenue du Mogho and Avenue Naba Zombre;
- A ring highway (incomplete and heterogeneous) located between 3 to 5 km from the city’s central market does not completely play its role as a bypass because the northern portion has not been built.

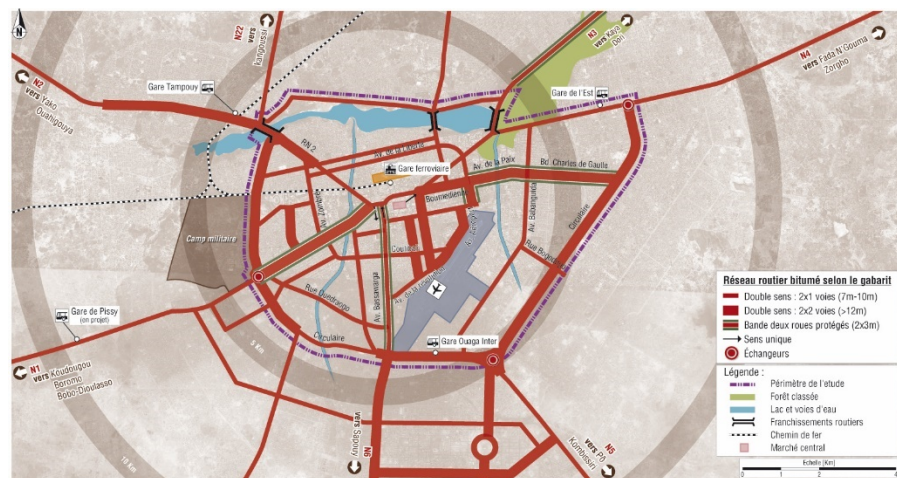


Figure 7: Primary road network system providing access to the city center (Source: Transitec, 2011)

The Ministry of Infrastructures has built several interchanges to connect axial roads with the ring highway. The latest is the north interchange. This monumental undertaking was built to relieve traffic congestion at Baskuy Bridge, but its size is mostly a function of the perceived prestigious nature of such an investment. Other interchanges are still at the planning stage for Patte d'Oie and the United Nations traffic circle.

Traffic dominated by two-wheel vehicles

A road traffic counting campaign was carried out in 2014 out by the Municipality of Ouagadougou and conducted by the Road Infrastructures and Mobility Directorate (DIRMO). The campaign made it possible to measure changes in travel since the 2011 campaign at 18 key intersections and to provide data to the Urban Travel Observatory (ODUO).

Since administrative and economic activities are concentrated downtown, flows of commuters are particularly high from the residential areas on the outskirts. But due to various constraints (a dam, military camps, airport, canals), there are only 10 access points to downtown,⁹ which become bottlenecks because of the high demand.

Approximately 1,000,000 people travelled in or out of the downtown area in 2014. This represents an increase of 10% relative to 2011, meaning that the number of trips could double by 2030 if this rate of traffic growth continues. These trips produced 600,000 entering/exiting movements from downtown Ouagadougou in 2014. Two-wheel vehicles represented 82 % of this vehicle traffic, compared with 75% in 2011, which reflects a clear progression in their use to the detriment of passenger cars, whose modal share of transportation was 23% in 2011.

The arrival of Chinese motorbikes on the market - inexpensive and therefore accessible to young people - led to a sharp increase in the number of individual motorbikes on the road. In 2017, more than 100,000 motorbikes were put into circulation in the Center region, bringing the fleet of motorized two-wheel vehicles subject to registration to nearly 1 million. These motorbikes are primarily for personal use. The government has banned the hire of motorbike taxis for public transport in Ouagadougou and Bobo.¹⁰

Bicycles are still well-used (16%) due to the flexibility of movement and their low cost. However, usage is declining because it is considered old-fashioned compared with ownership of an individual motorbike.

Motorized tricycles are still a recent phenomenon in Ouagadougou. They represent approximately 1% of the vehicles on downtown streets. In spite of the ban on transporting passengers, the practice exists, especially in the outskirts of the city.

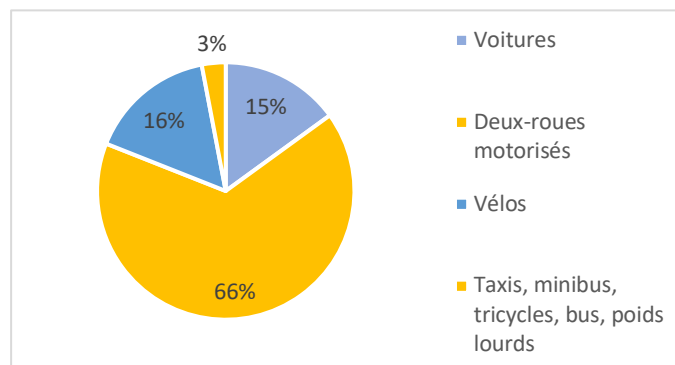


Figure 8: Results of the vehicle count in the center of Ouagadougou (districts no.1 and 2) (Source: City of Ouagadougou road traffic counts, 2014)

The campaign noted a sharp increase in traffic on major axes all the way to the urban bypass and the ring road, which have also had an increase. The bypass routes seem to be fulfilling their role and the transfer of traffic has resulted in a reduction in average daily traffic downtown.

⁹ Approximately 28,000 passenger cars per hour, according to the plan to improve incoming traffic to downtown Ouagadougou (Feasibility and Impact Studies of the Project to Support Mobility in Ouagadougou – PAMO)

¹⁰Decree no.2012-559 of July 5, 2012

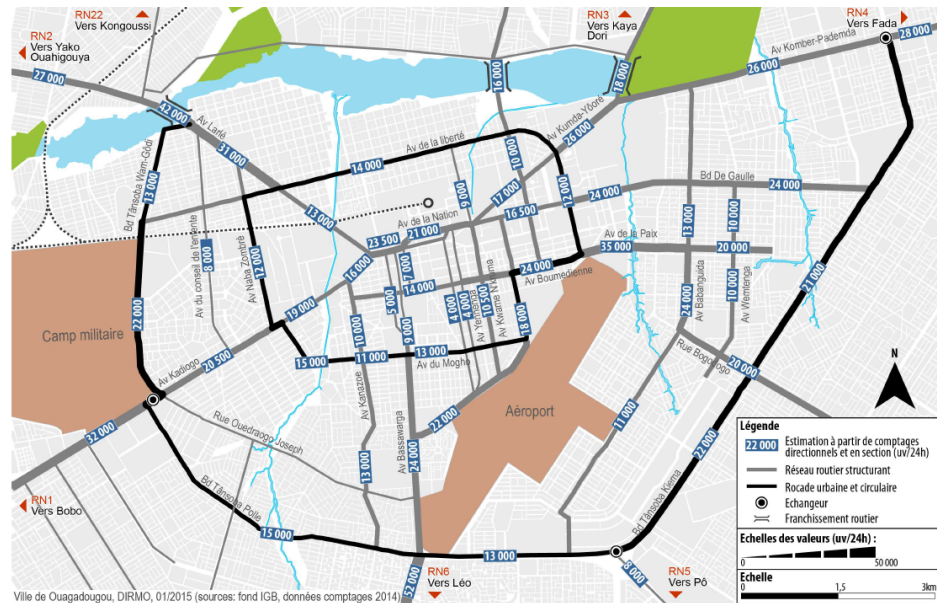


Figure 9: Daily traffic load (TJMO, in vehicles/24h) in 2014

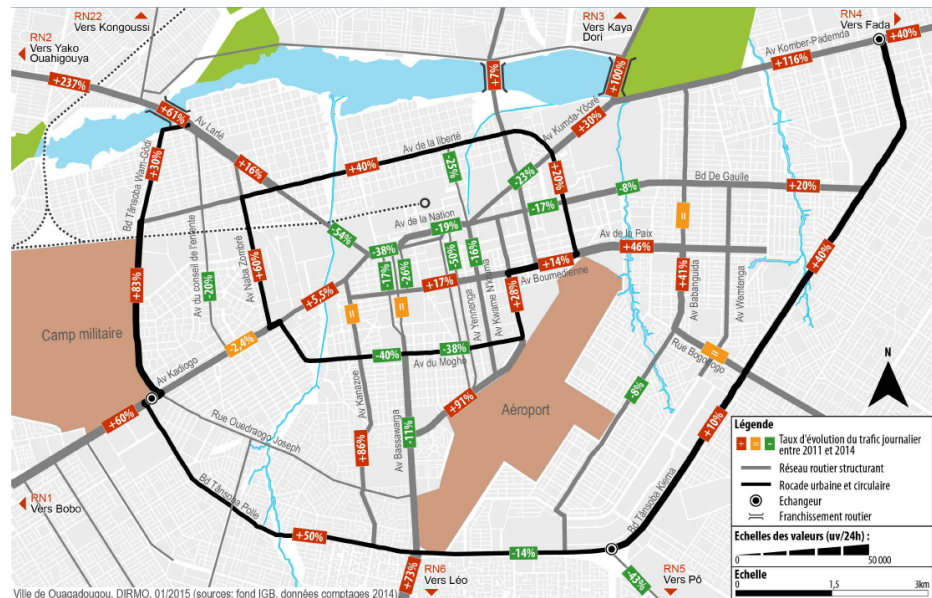


Figure 10: Change in daily traffic between 2011 and 2014

Road sharing favors the automobile

Public roads are not systematically equipped with sidewalks. When they do exist, they are often narrow, badly maintained and encumbered by parked vehicles and retail activities, which render them inaccessible. Pedestrians are often forced to walk on the road. Moreover, crosswalks are not very safe: long, barely visible, insufficiently marked, without traffic islands, forcing pedestrians to adapt to traffic. At intersections with traffic lights, no provision is made for a pedestrian phase in the traffic signal cycles, nor are there any call buttons to push. Finally, the newly created interchanges have also been built primarily for vehicle traffic, without any thought given to pedestrian crossings. Because of the density and widespread use of motorbikes, Ouagadougou has been known since the early 2000s¹¹ as one of the West African capitals where people walk the least, but the situation is made worse because the layouts are not favorable for walking.

¹¹ Olvera, L. D., Plat, D., & Pochet, P. (2005). Marche à pied, pauvreté et ségrégation dans les villes d'Afrique de l'ouest. Le cas de Dakar. Concentration économique et ségrégation spatiale [Walking, poverty and segregation in West Africa's cities. The case of Dakar. Economic concentration and spatial segregation], Brussels, Éditions De Boeck, 246-261.

On the 70 km of road where lanes are dedicated to two-wheel vehicles, only a quarter of the road width is reserved for them while the remaining three quarters are reserved for cars and buses, even though they constitute a minority of the traffic.

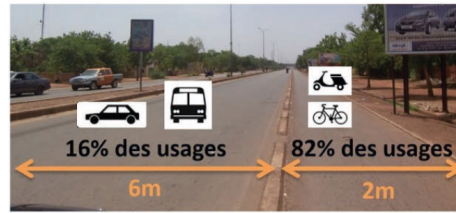


Figure 11: Share and use of roads

Concerning parking for automobiles, there are few constraints. Cars are parked in a relatively anarchistic manner. This contrasts with two-wheel vehicles which have remarkably orderly parking areas run by attendants. In the downtown area, road shoulders are over-occupied by long-term parking close to offices, shops and public services. Pedestrians are forced to walk out on the street and the maneuvering hampers traffic. On most main streets, particularly the most recent ones, vehicles park on the roadway because no provision was made for parking space. This situation arises from the shortcomings in managing, controlling and incorporating parking in the design phase of urban roads.

Demand for parking is very high in the heart of the city, near the central market and various downtown shopping streets. Uncontrolled parking by trucks blocks streets. Parked taxis are a problem in certain cases, notably at bus stops, which are often used as taxi stands. Parking for motorbikes and bicycles is well organized over vast lots.

Critical road safety issues

National Police data show accidents increasing in line with the increase in traffic. The number of accidents almost tripled from 2005 to 2018 to reach more than 13,000 recorded cases. However, these figures fall short of reality. A large share of the accidents is settled amicably between the people involved. The number of deaths from road accidents has also increased to a total of 191 in 2018,¹² representing a twofold increase in comparison to 2005.

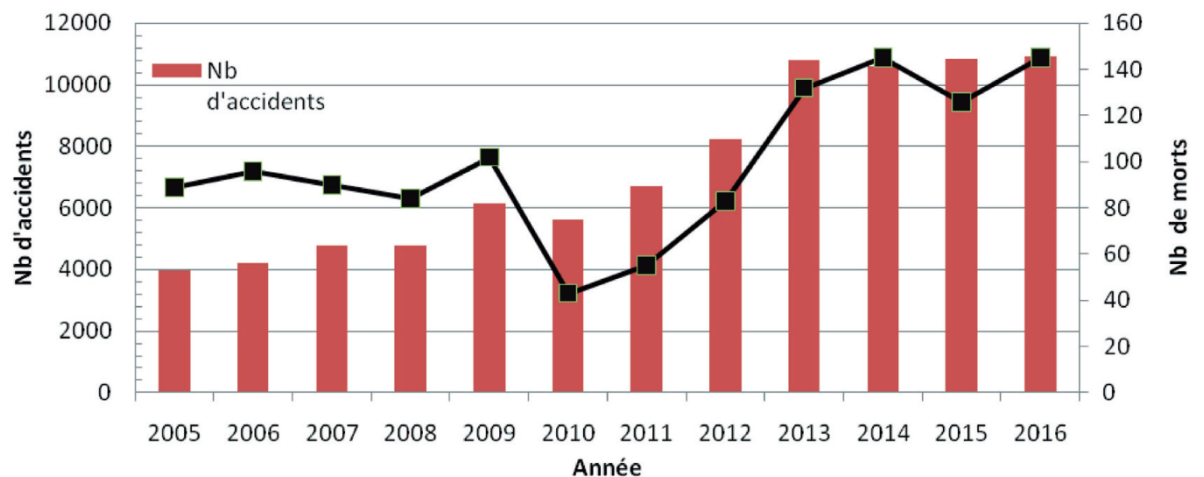


Figure 12: Increase in number of road deaths and accidents in Ouagadougou between 2005 and 2016¹³

The 2015 map of road accidents (Figure 13) based on road accident analysis reports (BAAC), shows the network's main black spots at the intersections along the major axial roads and the ring road. The high frequency of accidents is mainly due to traffic density, where motorbikes and bicycles are especially numerous traveling in mixed traffic or on scanty bicycle paths.

¹² Source: ONASER/DSI/SS

¹³ Source: National Police, from: Nikiema, A., Bonnet, E., Sidbega, S. & Ridde, V. (2017). Op. cit.

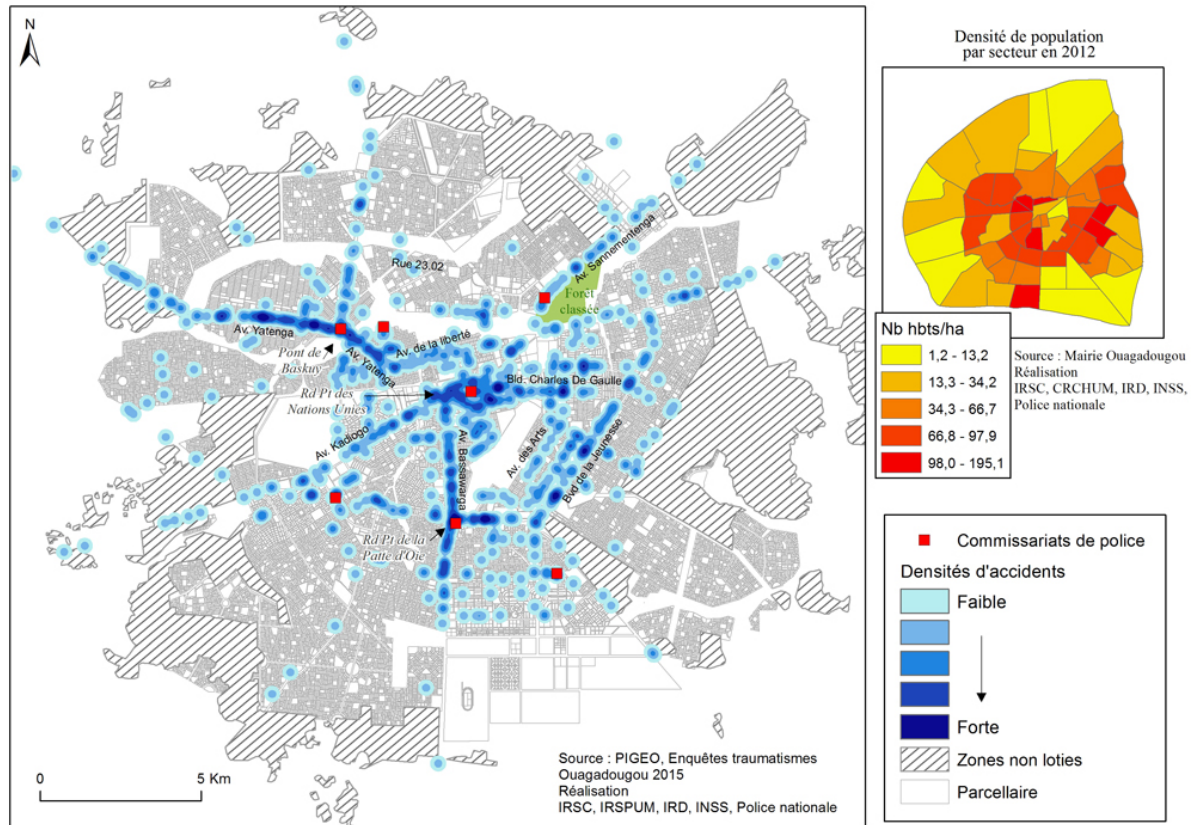


Figure 13: Map of road accidents in 2015¹⁴

More than half of the traffic accidents recorded involved two-wheel vehicles. According to the authors of the report, "a study of the accident victims who had been admitted to the Yalgado University Hospital's emergency trauma unit showed that 80% were two-wheel vehicle users, the majority of whom were under the age of 30."

Despite the obligation to wear a helmet decreed in 1978, there is little compliance. In 2005, a decree made it mandatory to include a helmet in the sale of a two-wheel motorized vehicle. This has not improved the situation. These past few years, during a turbulent political period, the obligation to wear a helmet has been very unpopular.

Poor level of transport services

Public transport in Ouagadougou consists of urban buses and collective taxis. The urban bus service is delegated to SOTRACO (Ouagadougou Public Transport Company), a company created in 2003 that is publicly (25% stake held by the Burkinabe government¹⁵ and the Municipality of Ouagadougou) and privately owned (mainly intercity carriers). SOTRACO - like the two companies that preceded it, the X9 National Public Transport Authority followed by the SOTRAO, both of which went bankrupt in 1994 and 2000 respectively – ran operating deficits over the first three fiscal years. After recapitalizing several times, SOTRACO continued to run a deficit. Its operating deficit in 2016 was 477 million FCFA.

A five-year agreement was signed in 2011 between SOTRACO and the Ministry of Infrastructure, Accessibility and Transport and the Ministry of Finance. The latter exempted the public transport company from certain taxes (VAT, business license tax, customs duties on the importation of new buses and spare parts), granted a 50% corporate tax reduction, eliminated the insurance policy registry fee and allocated an annual subsidy of 650 million FCFA. This five-year agreement offered the operator some financial visibility, but has not enabled SOTRACO to get back on the right track.

The vehicle fleet initially consisted of 40 buses, 35 of them new. Difficulties with upkeep and maintenance on an aging fleet of vehicles, plagued by recurring technical failures, led to the lowest

¹⁴ Source: Nikiema, A., Bonnet, E., Sidbega, S. & Ridde, V. (2017). Op. cit.

¹⁵ Through the Burkinabé Economic and Social Fund (FBDES)

number of buses (8) on the road in 2017. Fleet obsolescence had a knock-on effect on frequencies, which exceeded 50 minutes on some lines, with no assurance of service. This led to a decrease in ridership, which fell from 9.5 million passengers in 2005 to its lowest level (0.8 million passengers) in 2017.

As for bus stops, only 64 out of 560 stops have shelters for riders to ensure that they can get safely on and off buses and provide satisfactory waiting conditions. Pull-out stops exist on some primary road networks (national roads and the ring road), but they cause difficulties for buses that must maneuver to get out of the stop and back in the flow of traffic. These stops are sometimes taken over as a parking space or stands for taxis and haulers.

The efficiency of bus service also depends on road traffic conditions. The absence of bus-only lanes and of a right-of-way at intersections penalize public transport, which is impacted strongly by the growing traffic congestion. With no space to turn around at the end of the line, a lack of park & ride areas, multi-modal exchange hubs or a proper central terminus, bus operations cannot achieve efficiency.

SOTRACO has benefited from new vehicles provided in 2018 by the Ministry of Secondary and Higher Education and Research (MESSR). Prompted by student protests, the ministry acquired a fleet of 130 Indian buses¹⁶ whose operation in Ouagadougou and other cities (Bob-Dioulasso, Koudougou, etc.) was entrusted to SOTRACO. The MESSR also pays SOTRACO an operating subsidy in addition to the one it receives as part of a contract.

Operating approximately 30 buses in the capital, SOTRACO’s service covers a 229-kilometer network with 13 standard lines and 3 special lines for students that serve university residence halls in Patte d’oie, Kossodo and the 4 August Stadium area. Ridership increased from 80,000 to 150,000 passengers per month between December 2018 and June 2019.



Figure 14: The SOTRACO urban bus network in 2019

In 2018, a new fare schedule was also put in place. The price of a single-ride ticket was increased to 200 FCFA in Ouagadougou, and rate adjustments were made for student passes. Students represent three quarters of the ridership. Operating results were up in 2018 compared with 2017 but SOTRACO is still having difficulty achieving financial equilibrium. The level of service remains minimal and does not respond to customer expectations.

Table 3: SOTRACO fare schedule in Ouagadougou in FCFA

	Pupils, students, elderly or handicapped persons	Other users
--	--	-------------

¹⁶ Manufactured by Ashok Leyland

Weekly pass	1,000	2,500
Monthly pass	3,000	7,000
Quarterly pass	-	20,000
Annual pass	35,000	-

Source: SOTRACO, 2018

Taxis have taken on an increasing role as a complement (or competitor) to the bus network. The number of taxis has grown constantly over the past few years, with an estimated fleet of 2,000 in 2011. The ODUO recorded approximately 5,000 that charge by the trip in 2006. Because of the strong demand for mobility that, on the whole, is not being provided by the bus network, most taxis operate as collective taxis. There are four main trade unions: SYNTAB, SYNTASO, SYNTAPT and SNTTUB. The use of motorized tricycles is also expanding in neighborhoods on the outskirts of the city.

Outlook

The Ouagadougou municipal council has made urban mobility a priority on its agenda for the 2016-2021 term of office. Four mobility projects have been identified to improve the lives of Ouagadougou residents. They are part of a strategy aimed at integrating urban planning and mobility. This strategy has taken shape over the last 20 years, notably through the SDAGO, POS and PAMO planning documents.

Box 1: Planned urban mobility policies (extract from the Ouagadougou Municipal Council's 2016-2021 term of office plan)

Four mobility projects are planned:

■ Traffic fluidity

- Create a functional body to organize urban transport;
- Improve vertical and horizontal signage (traffic lights, road markings, etc.);
- Set up a plan for traffic and parking downtown and in secondary centers;
- Organize road safety awareness campaigns (I.E.C.) and promote traffic safety manuals;
- Step up checks and fines for traffic regulation offenses;
- Boost traffic regulation personnel (manpower, training, enhancement);
- Promote driver education training in secondary schools to facilitate obtaining a driver's license;
- Create a traffic monitoring center.

■ Road infrastructure improvements

- Perform street improvements in the city's downtown area;
- More timely repairs;
- Use road surfacing materials paving in city's districts;
- Create paved pedestrian areas along road shoulders;
- Pack / reshape dirt roads (25 km/district/year);
- Develop roads with asphalt surfacing (35 km of newly asphalted roads).

■ Enhance public transport

- Increase the density of the collective transport network and improve the fleet of urban public transport vehicles;
- Revamp the bus stops to integrate multimodal transport (motorbike, bicycle, car and bus);
- Create bus corridors in anticipation of the rollout of express buses or BRT and, in the long term, a tramway;

- Take into consideration persons with reduced mobility when revamping transport infrastructure.
- **Enhance parking infrastructures**
 - Select and develop parking areas for heavy vehicles at entrances to national roads;
 - Restore and build 3 public bus stations (Ouagarinter, Tampouy, Bobo road);
 - Reorganize the layout of private bus stations;
 - Set up a sales yard for second-hand vehicles;
 - Set up a municipal vehicle pound.

The Municipality of Ouagadougou defined its strategic mobility policies in terms of four principles:

- **Tiered network:** the layout characteristics for a road depend on its function as determined by the road network tiers. Ouagadougou's roads can be grouped into three levels:
 - Level 1: Main roads (national roads and the ring road) with high transit and intercity traffic flow capacities;
 - Level 2: collector roads with moderate capacity that provide inter-sector access;
 - Level 3: neighborhood access roads.

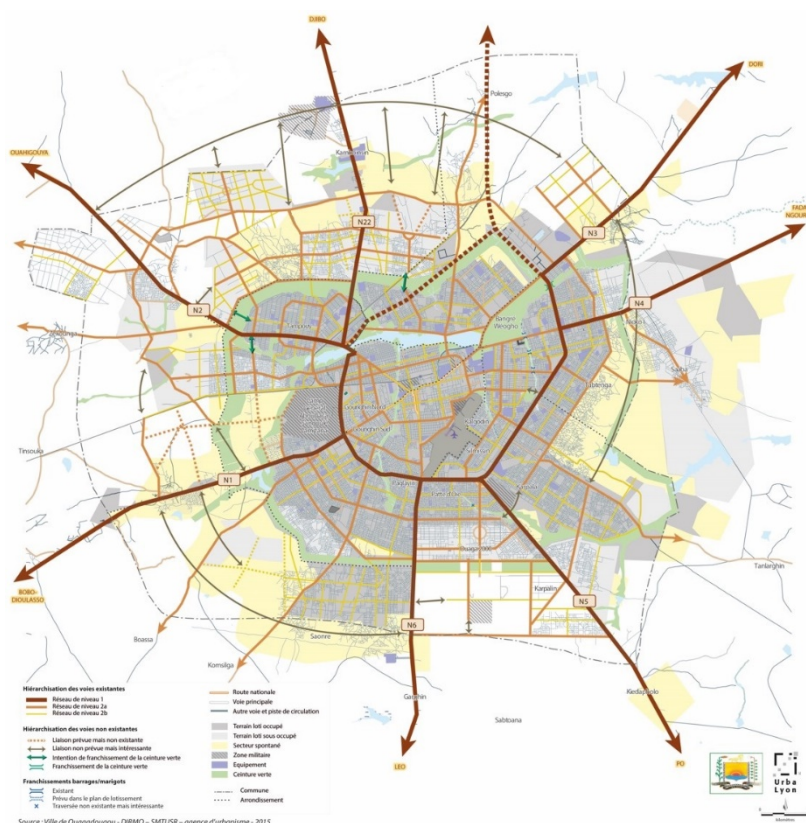


Figure 15: Tiered road network (Source: City of Ouagadougou, UrbaLyon, 2015)

- **Shift transit flows to bypass routes:** Given downtown Ouagadougou's peak-hour congestion, it is necessary to shift transit flows toward the ring road and the urban bypass road to ease congestion on city streets. A plan for downtown traffic and parking is currently under study.
- **A modal shift to public transport and walking will contribute to easing downtown traffic.** The municipality and the central government are cooperating on a bus network modernization plan to reinforce public transport offer. A memorandum of understanding was signed in June 2018 between the Burkinabe government and the companies RATP and SCANIA. The OPTIS project (Ouagadougou Public Transport Implementation Study) aims to create a high-capacity and

attractive public transport network, starting in 2020, that will eventually include 460 new buses. This ambitious project calls for facilitating bus traffic on roads and creating Bus Rapid Transit (BRT) corridors. A BRT system study has been initiated.

- **The decentralization of the downtown area** has been set out in the land use plan (POS), which establishes seven secondary hubs. The second phase of the Ouagadougou Sustainable Development Project (PDDO 2) aims to support balanced territorial development for the Ouagadougou urban area by promoting mobility and the emergence of secondary hubs in keeping with the POS and the provisional traffic plan for downtown Ouagadougou. To this end, three components - with earmarked budgets - have been defined:
 - Improve accessibility to and from peripheral neighborhoods and improve the living conditions for their inhabitants by developing (asphalting, draining, lighting, urban greening, bus stops) 12 km of primary access roads for peripheral neighborhoods;
 - Among the seven selected hubs, three will be developed as secondary centers, in an effort to decentralize the city;
 - Strengthen the Municipality's ability to implement its development policy.

Within the POS guidelines, the Municipality of Ouagadougou is also carrying out a technical study of 145 km of roads. An assessment of needs based on traffic and whether there are shops, businesses and public amenities will be carried out with a view to establishing priorities and look into a 5 to 7-year program to improve the capital's road network.

Secondary cities: Bobo-Dioulasso

The mobility context in the city of Bobo-Dioulasso has several particularities that distinguish it from other African cities: low share of pedestrian traffic, preponderance of motorized two-wheel vehicles and bicycles and weak collective transport. In 2010,¹⁷ the share of trips made by two-wheel vehicles was estimated at 60%, with 43% on motorized two-wheel vehicles, and 17% on bicycles, followed by pedestrian traffic (23.66%). Travel by private passenger car was in the minority with 8.34%. The use of collective transportation provided by taxis was 8%.

Few urban roads asphalted

The primary road network of Bobo-Dioulasso consists of a ring-road and six axial roads: the international roads from Niger, Ivory Coast and Mali as well as those from Orodara, Dinderesso and Dedougou. Their width ranges from 40 to 70 meters. Secondary roads, with widths that vary from 20 to 30 meters, connect the various neighborhoods to the national (main) roads. A large portion of these streets are neither asphalted nor properly laid out. Their poor condition makes it difficult to access the neighborhoods. Tertiary roads, with an overall width of 12 to 15 meters, provide direct access to dwellings and facilities.

Evolution of urban transport in Bobo-Dioulasso

Walking is the primary mode of mobility for portions of the population lacking the resources to make use of any other mean of transport. Most pedestrians are children going to and from school, and merchants in the informal sector collecting, transporting and distributing various goods. Walking generally takes place on short neighborhood trips. Unlike in other African cities, there are very few pedestrians on the city's main roads. The main difficulties they encounter are the near total absence of sidewalks and the overflow of small shops onto the streets. Pedestrians therefore find themselves walking on the roadside in proximity to motorized vehicles, which increases the risk of accidents.

Two-wheel vehicles have been the main mode of transport in Burkina's cities for several decades. Motorized two-wheelers offer flexible use, door-to-door transport, and relative speed.

Collective taxis are operated in an independent manner by private individuals. They have been the sole providers of public transport since Sobutrans buses stopped running in 1992. Independent taxis serve roads leading to downtown, which generates the highest demand for rides, or those leading to markets on the city's outskirts. Few taxis cruise about the city's main streets in search of fares.

The taxi trade union leader puts the number of taxis operating in the city of Bobo-Dioulasso at approximately 1,000. The average cost of a fare varies between 300 and 400 francs. Taxi drivers pay owners a set daily fee that varies between 3,500 and 5,000 francs. Consequently, they must make at least 15 runs in order to make money for themselves. In addition to obtaining the standard administrative documents, taxi operations are also subject to an annual parking tax and license fee of 20,000 francs each.

Motorized tricycles appeared in Bobo-Dioulasso's urban landscape in 2011. They compete fiercely with collective taxis on their traditional routes - markets located on the city's outskirts - as well as SOTRACO buses. It is believed that most of them operate across the Hauts Bassins region, whose capital is Bobo-Dioulasso. Since January 2014, over a four-year period, 13,640 motorized tricycles have had their first safety inspection at the Bobo-Dioulasso Motorized Vehicles Inspection Center.

The exact number of motorized tricycles offering a public transport service in Bobo-Dioulasso is estimated at 3,000 vehicles, according to their trade union. The municipality is seeking to regulate these self-organized services. Bobo-Dioulasso's special commission introduced a parking fee in 2015 of 10,000 FCFA per year and per tricycle.¹⁸

The municipal police also impound many vehicles but, in the wake of numerous protests from tricycle drivers, the number of police checks has greatly diminished. Vehicle impoundments have gone from 789 in 2015 to 321 in 2018. Mixed passenger-cargo transport constitutes the bulk of the recorded offenses (non-observance of traffic lights, lack of insurance, failure to have vehicle inspected,

¹⁷For those 14 years of age and over, according to Kaboré Aminata, Passenger urban transport in Bobo-Dioulasso. Master's dissertation Geography Department, University of Ouagadougou, 2010.

¹⁸ Payable at the latest by 31 March of each year or 30 days after all new purchases.

transporting an oversized load, failure to present a driver's license, overloaded vehicle and failure to show payment of parking and passenger transport tax).

Thanks to a partnership with the Ministry of Education, SOTRACO put its first **buses** on the road in Bobo-Dioulasso at the end of 2018, covering a network of 11 urban lines as well as an inter-city line serving Bama County approximately 30 kilometers away. The Bobo-Dioulasso network has three special lines for students and serves Nazi-Boni University located 15 km from the city. An annual pass costs 3,000 FCFA for students and pupils. It is valid in all cities where there is a SOTRACO network. The ministry provides an ample subsidy for these passes.¹⁹ A single one-way fare is 150 FCFA in Bobo-Dioulasso and Koudougou and 200 FCFA in Ouagadougou. SOTRACO also provides transport between the city and the Anatrans and Timini factories (with respectively three and two buses) for people working at these industrial sites on the outskirts of Bobo-Dioulasso.

There was notable passenger growth after SOTRACO put 18 buses on the road officially at the end of 2018. The number of passengers grew from 50,000 to 110,000 passengers per month from January to June, while the numbers in Ouagadougou went from 105,000 to 150,000 over the same period.²⁰

Road safety in Bobo-Dioulasso

The number of road accidents recorded by the national police within the city limits remained stable between 2012 and 2018. Compared with Ouagadougou, the proportion of accidents involving two-wheel vehicles is much higher because of the small number of cars on the road in Bobo-Dioulasso. Statistics started including motorized tricycles only since 2018, so it isn't possible yet to analyze the role of these vehicles in accidents. Meanwhile, national police statistics show that deaths per year dropped from 103 to 44 from 2013 to 2018.

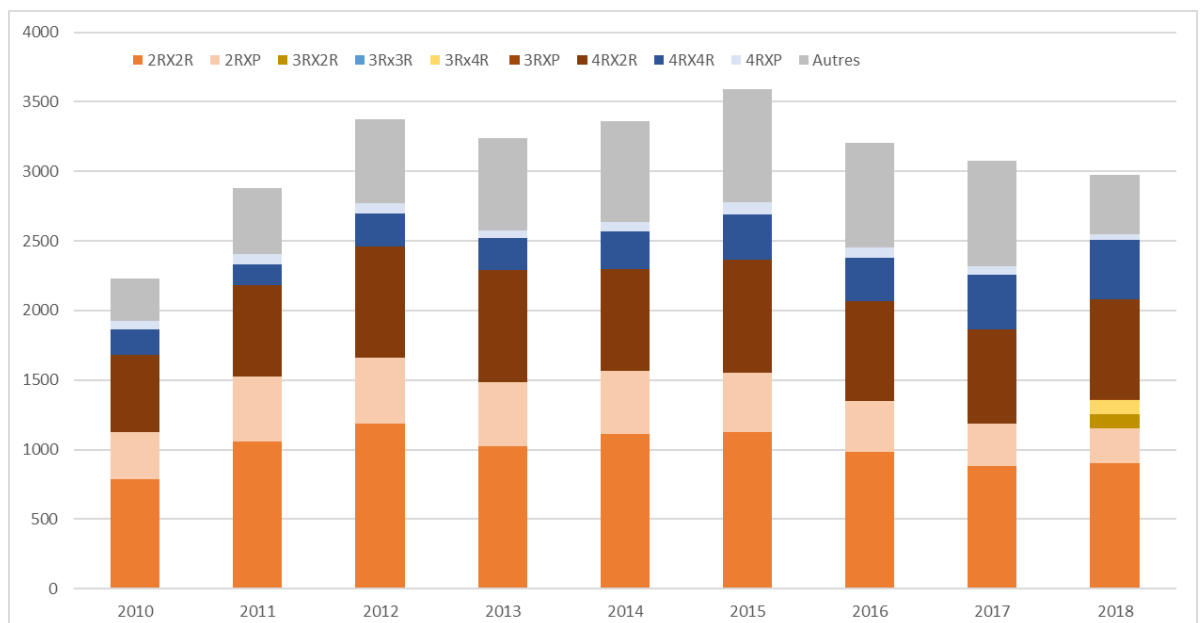


Figure 16: Accident statistics for Bobo-Dioulasso (2010-2018)²¹

Raised awareness at Bobo-Dioulasso City Hall

Two planning documents, the Urban Master Plan (2012) and the Land Use Plan (2017), have identified six secondary centers: the Ouagadougou Road, the dry port, Bobo 2010, Sarfalao, Belleville and Leguema Road. In an initial phase, the first three centers should benefit from new roads and a public transport station.

Unlike Ouagadougou, the urban mobility problem does not appear explicitly in the Bobo-Dioulassou Municipal Council's urban development plan for 2017-2021. On the other hand, it is clearly stated in the Urban Mobility and Sustainable Development Program, drawn up in September 2018. The overall

¹⁹ This fare is not as high as the X9 Authority's monthly fare rate of 1992.

²⁰ SOTRACO: General management activity report of June 30, 2019.

²¹ Source: National Police

objective of this document is to facilitate access to local public services by: (i) laying out roads to improve internal and passing traffic flows while taking into account the mobility habits of inhabitants and access to socio-economic services; (ii) increasing access to local urban services and consolidating the economic fabric of outlying neighborhoods by completing infrastructures and amenities in the city's secondary centers. Four aspects in particular are developed:

- Expansion of urban road infrastructures and related structures (rainwater catchments, public lighting...) in the secondary centers;
- The development and modernization of public transport and urban logistics;
- Road, traffic and road safety management;
- Improvement of the institutional and regulatory framework for urban transport.

It should be noted that the reorganization of city hall departments in 2017 attributed special importance to urban mobility, with the creation of the Road Infrastructures and Mobility Department (DIRMO). It is chiefly responsible for implementing the municipality's policies in matters of urban transport and mobility while taking into consideration issues related to road safety.

National Context

Legislative Framework

Legislative texts of reference

- The **Framework Ground Transport Law (LOTT)** is, to this day, the main reference document providing guidance on urban transport. It emphasizes that urban transport planning, organization, management, monitoring and assessment should be performed in compliance with the legislation on the distribution of responsibilities between the central government and the other development agents. Moreover, the LOTT recommends that urban transport activities be organized within the urban scope - as determined by the municipal authority - following consultation with the ministers in charge of territorial affairs and transport. Orders and decrees reinforce and complete this law:
 - Decree No 2018- 0784 /PRES/PM/MTSUR promulgating the organization of the Ministry of Transport, urban mobility and road safety;
 - Order No 2019 MTMUSR/SG/DGMU promulgating the organization and functioning of the General Directorate for Urban Mobility;
 - Order No 2014-038 CO/CAB promulgating the creation, powers, composition and functioning of a consultation framework among urban planning agents.
- On matters of decentralization, article 32 of the December 21, 2004 **Law n°055-2004/AN** promulgating the **General Code for Local Administrative Units** stipulates that local authorities , together with the central government, contribute to territorial administration and planning, economic, social, educational, health, cultural and scientific development as well as the protection, management of natural resources and improving the living environment. In this regard, urban municipalities have jurisdiction over the organization and promotion of (urban) transport in their territory.

Main urban mobility actors

Several public and private institutions, professional and civil society groups participate in the organization and managing of urban mobility.

Ministries

- **The Ministry of Transport, Urban Mobility and Road Safety** implements and monitors the government's urban mobility policy. It is responsible for improving the urban mobility system, improving road safety, regulating and controlling vehicle traffic in urban environments. A department of about 20 civil servants is directly responsible for urban mobility.
- **The Ministry of Infrastructures** is responsible for drawing up, coordinating and monitoring urban road construction and structural engineering projects.
- **The Ministry of Town Planning and Housing** coordinates projects in urban environments. It is responsible for supporting local administrative units in managing urban space, drafting and implementing urban planning documents and the nation's urban planning policy.
- **The Ministry of the Environment, Green Economy and Climate Change** is responsible for environmental protection and monitoring compliance with international environmental conventions ratified by Burkina Faso, creating and monitoring environmental education programs and coordinating activities to combat damage to the environment. It drafts regulatory texts to fight pollution and nuisances, notably with regard to urban transportation.
- **The Ministry of State in Charge of Territorial Administration, Decentralization and Domestic Security** oversees the municipalities or, more broadly, local administrative units, which have a very important role to play in matters of organizing and managing urban mobility.

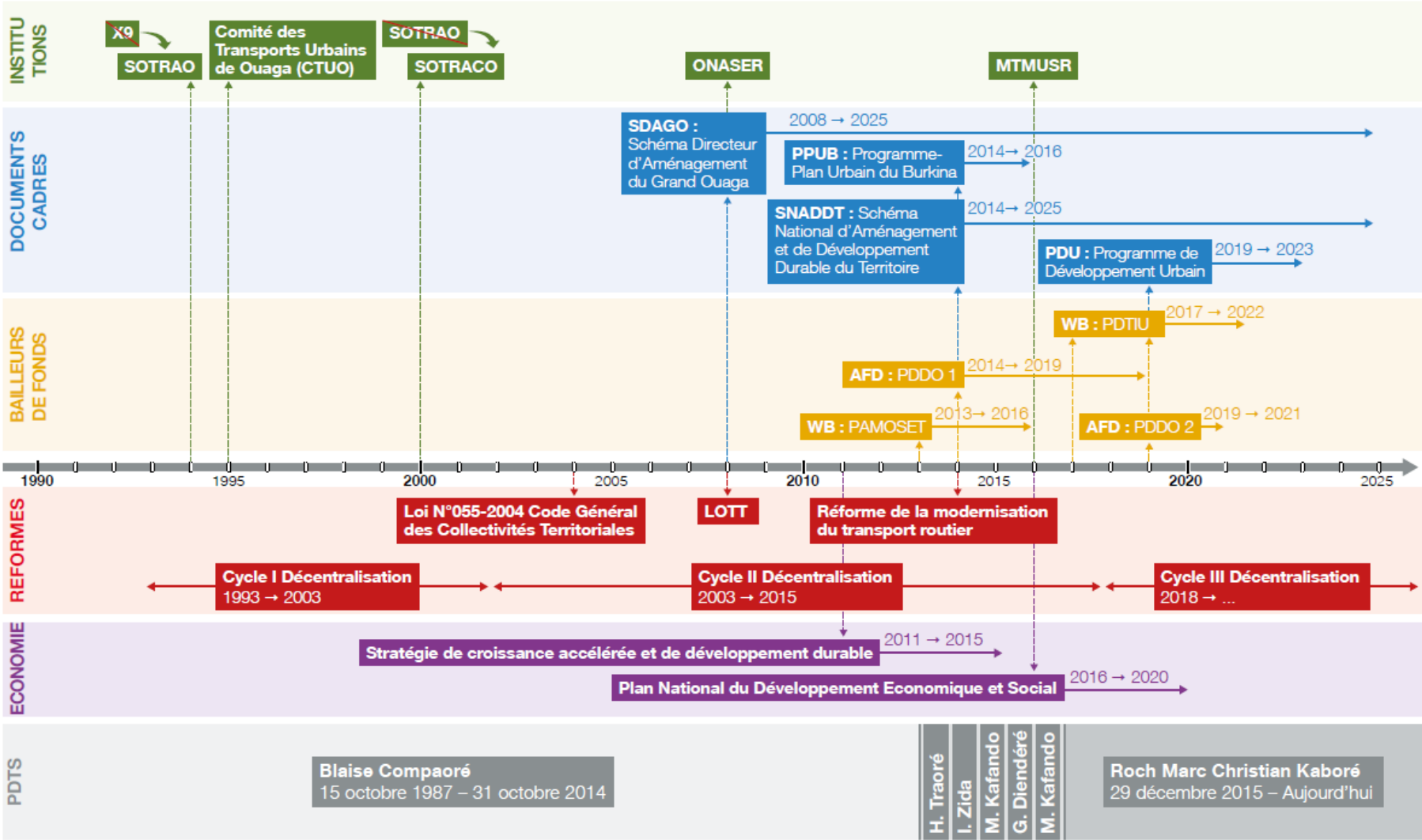


Figure 17: Chronology of institutions in Burkina Faso

Local authorities

A process of decentralization was initiated in 1995 to give increasing responsibility to local authorities, particularly in the field of urban planning and urban mobility. In urban areas, they are responsible for the construction and upkeep of the road network, registration of vehicles for hire, collecting the parking tax for taxis and other transport vehicles. They also manage vehicle traffic.

Ratification of the General Code of Local Administrative Units in Burkina Faso (CGCT) in 2005 officially opened the second cycle of the process. It gave rise to the full incorporation of the nation's territory into municipalities (351 towns, of which 49 are urban communities, two of which - Ouagadougou and Bobo-Dioulasso – have a special status), as well as the creation of 13 regions.

Nevertheless, a 2015 progress report on decentralization and the assessment of the Strategic Framework for Implementing Decentralization (CSMOD 2006-2015) revealed that the transfer of powers and the distribution of responsibilities were incomplete. The non-attribution of roles is a source of friction between the central government and municipalities, not to mention dysfunctions in the field of urban planning and urban mobility. Moreover, devolvement to local authorities is not always accompanied by a transfer of adequate resources - both financial and human - creating distortions in terms of capacity consolidation.

A third decentralization cycle was initiated in 2018. This cycle introduced direct universal suffrage for electing the presidents of local authority councils and it clarified support mechanisms for development partners and the adoption of a financial planning law that should provide local authorities with more visibility.

Public and private transport companies

- **SOTRACO** is a private sector company whose shares are held by the Burkinabe government (10%), the municipality of Ouagadougou (15%) and private sector stakeholders (75%), especially haulers. Today, SOTRACO operates 13 lines in Ouagadougou and runs a fleet of 130 buses, the vast majority of which were provided by the Ministry of Secondary and Higher Education and Research. It had previously focused its bus service in the capital, but it is currently expanding into Bobo-Dioulasso, Koudougou and in the university cities of Ouahigouya, Fada N'Gouma and Dedougou.
- **Paratransit operators: metered taxis and "green taxis":** unlike metered taxis that operate on demand, "green taxis" or ordinary taxis provide collective transport on dedicated or predefined routes. They can also offer personalized service. They now have an aging vehicle fleet. Most are organized through trade unions: SNTTUB, SYNTAXCO, SYNTAPT, SYNTAB. Motorized tricycles should now be added to the list of paratransit operators. Their numbers are growing and operators have also organized themselves within an association.
- **Agencies and public institutions under ministerial control**
 - The National Road Safety Bureau (ONASER);
 - The Permanent Secretary of the Transport Sector Program (SP-PST);
 - The Permanent Secretariat for Urban Development Program Coordination (SPC/PDU);

International partners

Several development partners provide technical and financial support to improve Burkina Faso's urban mobility:

- The World Bank is involved through the Transport and Urban Infrastructure Development Project (PTDIU);
- The Swedish Fund that finances the OPTIS study;
- The African Development Bank (ADB) and the Islamic Development Bank, which finance road infrastructures;
- The French Development Agency (FDA) provides support through the Ouagadougou Sustainable Development Project (PDDO1 and 2).

Urban mobility challenges in Burkina Faso

Institutional framework and urban transport management

- **The Ministry of Transport, Urban Mobility and Road Safety (MTMUSR) that must confirm its strategic role.** Over a period of ten years, the Ministry of Transport came under several other ministries (the Ministry of Transport and Tourism; the Ministry of Infrastructures, Transport and Housing; the Ministry of Transport; the Ministry of Transport and Post Office and Digital Economy and most recently the Ministry of Infrastructures, Accessibility and Transport). These repeated changes show how the ministry's missions were deemed peripheral to other subjects. The creation of the MTMUSR in 2016 should allow it to assert its central role in the strategic issues of urban mobility and road safety, though its budget is one-tenth the size of the Ministry of Infrastructure's budget.
- **A decentralization process to be completed.** Decentralization in Burkina Faso, as in many African countries, is being pursued through a transfer of powers, but without receiving the necessary resources to exercise them, and in a context of insufficient expertise within the local authorities' agencies. The Ouagadougou municipality's special status - and to a lesser extent that of Bobo-Dioulasso – does make it possible to have a structured local authority in these large urban areas. A third cycle of decentralization was initiated by the Ministry of Territorial Administration and Decentralization in 2018. This phase should offer local administrations access to new sources of funding and includes local tax reforms.
- **A vision shared by the Ministry of Urban Mobility and the Municipality of Ouagadougou to transform urban mobility in the capital.** A vision concerning urban mobility has emerged since 2016, the year the President of the Republic took office and the Ouagadougou mayor was elected. The Ouagadougou Municipal Council has made public mobility a primary strategic objective. Investments for roads, traffic management and the development of a modern public transport network are priorities for the 2016-2021 term.
- The Ministry of Transport is considering a plan to **create a Public Transport Authority (PTA).** For many years, Burkinabe stakeholders have been advocating a plan to create a Ouagadougou Urban Transport Executive Council (CETUO) modeled on the one in Dakar. This was never achieved, notably due to diverging views of the central government and the Municipality of Ouagadougou over its institutional grounding. After the early idea of creating a national PTA, a draft decree was finally drawn up to allow local authorities to create PTA on a metropolitan scale.
- **A plan to create a Public Transport Authority for "Greater Ouaga" is currently being promoted by the Municipality of Ouagadougou.** The Greater Ouagadougou Transport Council (CTGO) will have the task of planning, organizing, financing and developing urban transport within the Greater Ouagadougou urban transport perimeter. Since the capital's urban development perimeter exceeds the municipality's administrative boundaries, this initiative takes on an intermunicipal character. By choosing the Ouagadougou urban area master plan (SDAGO) perimeter, this organization should be able to fully integrate the transport plan in the city's planning project.
- **Dysfunctions in defining the regulatory framework.** Many decrees or ordinances have been drafted, and sometimes approved at a high level of decision making, but they have been neither promulgated nor published. These texts have gone through all technical validation processes and serve as references for technicians and administration officials, yet they have no official value.
- **A lack of regulatory controls for paratransit services provided by motorized tricycles.** In the outskirts of Ouagadougou, as in secondary cities, independent transport using motorized tricycles is spreading without being taken into consideration in the regulatory texts at this time.
- **The highway code is not implemented, especially in matters of road safety.** Despite a high accident rate for motorized two-wheel vehicles, the mandatory use of helmets is not enforced. The human toll is catastrophic and despite the existence of the National Road Safety Bureau, implementation of a policy promoting the widespread use of helmets for bikers is a long time coming

Sector		Urban Planning	Public transport					Public space				
			Institutional Public Transport		Urban buses terminals	Paratransit	Taxis (shared taxis, mototaxi and three-wheelers)	Road infrastructure and network	Traffic management	Parking	Active modes	
			Buses (Standard lines)	Buses (Special lines of students)							Walking	Cycling
Strategical level <i>What are the goals and the resources available?</i>	Planing and design	Ministry of Town Planning and Housing (SDAGO) + Municipality of Ouagadougou	Municipality of Ouagadougou	Ministry of Higher Education, Scientific Research and Innovation + SOTRACO	Municipality of Ouagadougou	Non-existent (recent development)	Municipality of Ouagadougou + Ministry of Infrastructures	Municipality of Ouagadougou				
	Financing	Municipality of Ouagadougou	Ministry of Transport, Urban Mobility and Road Safety	Ministry of Higher Education			Municipality of Ouagadougou					
Tactical level <i>Which services need to be developed in order to reach the objectives?</i>	Regulation	Ministry of Town Planning and Housing	Ministry of Transport, Urban Mobility and Road Safety					Ministry of Infrastructures	Ministry of Transport, Urban Mobility and Road Safety			
	Licensing, permits and contracting	Municipality of Ouagadougou	Municipality of Ouagadougou	Ministry of Higher Education, Scientific Research and Innovation	Ministry of Transport, Urban Mobility and Road Safety					Municipality of Ouagadougou		
	Fare system		Ministry of Transport, Urban Mobility and Road Safety		Municipality of Ouagadougou							
	Infrastructure, Equipment	Ministry of Town Planning and Housing (SDAGO) + Municipality of Ouagadougou	Municipality of Ouagadougou + SOTRACO			Project Management of infrastructures (Buses and taxis station) : almost non-existent	Municipality of Ouagadougou + Ministry of Infrastructures	Municipality of Ouagadougou		Municipality of Ouagadougou + Ministry of Infrastructures		
Operational level <i>How do you efficiently deliver these services?</i>	Operations / Maintenance		SOTRACO		Union/companies			Municipality of Ouagadougou				

Issue

Unsatisfactory

Irrelevant

Figure 17 - Ouagadougou urban mobility governance matrix

<p>Strengths</p> <ul style="list-style-type: none"> ■ A degree of decentralization allowing urban mobility issues to be handled by local elected officials. ■ A limited number of institutions involved, which should make some efficiency possible. ■ A shared vision among Ouagadougou local authorities and the ministry. 	<p>Weaknesses</p> <ul style="list-style-type: none"> ■ The process of drafting, approving and publishing ministerial decisions is not always finalized and texts do not go into effect. ■ Low level of inter-ministerial coordination between the Ministry of Infrastructures and the Ministry of Transport, Urban Mobility and Road Safety. ■ Obligation to wear a helmet is not respected despite fatal consequences.
<p>Opportunities</p> <ul style="list-style-type: none"> ■ A decree is being drafted to promote the creation of a metropolitan-level PTA at municipal initiative. ■ A PTA is being created at the Greater Ouagadougou level 	<p>Threats</p> <ul style="list-style-type: none"> ■ Paratransit growth using motorized tricycles

Figure 18 : SWOT matrix of the issues connected with the institutional framework and management of urban transport

Funding sources devoted to urban transport management

- **Optimization of road investment expenditures.** Over the last decade, building interchanges was considered a mark of prestige for cities in the sub region. Yet, in terms of mobility, the benefits of Ouagadougou's north interchange are meager relative to its cost. Construction of road infrastructures, which represent 14.5% of government tenders, absorb a very significant part of transport sector budgets, to the detriment of investments to develop public transport in urban areas.
- **Public transport funding is limited and falls short of a national strategy.** State funds for public transport are currently limited to the subsidies granted to SOTRACO (approximately 2 billion FCFA) and the purchase of buses by the Ministry of Higher Education, Scientific Research and Innovation.
- **The recent implementation of a motor vehicle tax (TVM) collected by local authorities.**²² Since January 1, 2019, this tax is paid by owners of vehicles, with the exception of motorbikes. The annual rate - based on engine cubic capacity - is between 7,000 FCFA and 30,000 FCFA for private vehicles. Truck owners have to pay an annual tax ranging from 20,000 to 50,000 FCFA. However, this new tax revenue is not allocated to funding urban mobility.
- **A source of funding discussed at government level to support the PTA.** The city of Ouagadougou and the MTMUSR have proposed establishing a tax on motor vehicles to finance investing in a fleet of 250 buses, expanding depots and the network operations. Due to constraints imposed by the West African Economic and Monetary Union (UEMOA) rules, it was not possible to impose a tax on imported vehicles. So, the plan is to tax the registration of all vehicles in the country, including two-wheel vehicles and tricycles. The amount would be 10,000 FCFA for motorbikes and 50,000 FCFA for other vehicles. In this manner, 6 billion FCFA could be raised annually.
- **Revenue loss from downtown motorbike and car parks.** In Ouagadougou, as in Bobo-Dioulasso, downtown motorbike parking is relatively well organized, with parking lots in public spaces. Cars must also pay a fee to park but there is no bookkeeping trail of the revenues collected. The creation of parking areas for two-wheel vehicles and automobiles is subject to authorization from the city. All recipients of authorizations must pay a tax of 600 FCFA for occupation of public domain per linear meter.
- **Potential for land value enhancement to finance investment in the public transport network.** Many public plots of land in the metropolitan area, either owned by the state or the city, could be used to increase land values along major lines of mass public transport earmarked for the medium term.
- **Budget resources are limited and focused on matters of national interest since 2016.** Since the terrorist attacks of 2016 and the repeated militia attacks in the north of the country, a much larger share of the state budget has been allocated to domestic security. This, combined with poorer economic vitality, automatically results in a drastic reduction in the capacity to invest in the transport sector.

²² Law N°042-2018/AN promulgating the finance law to execute the state budget for the 2019 fiscal year.

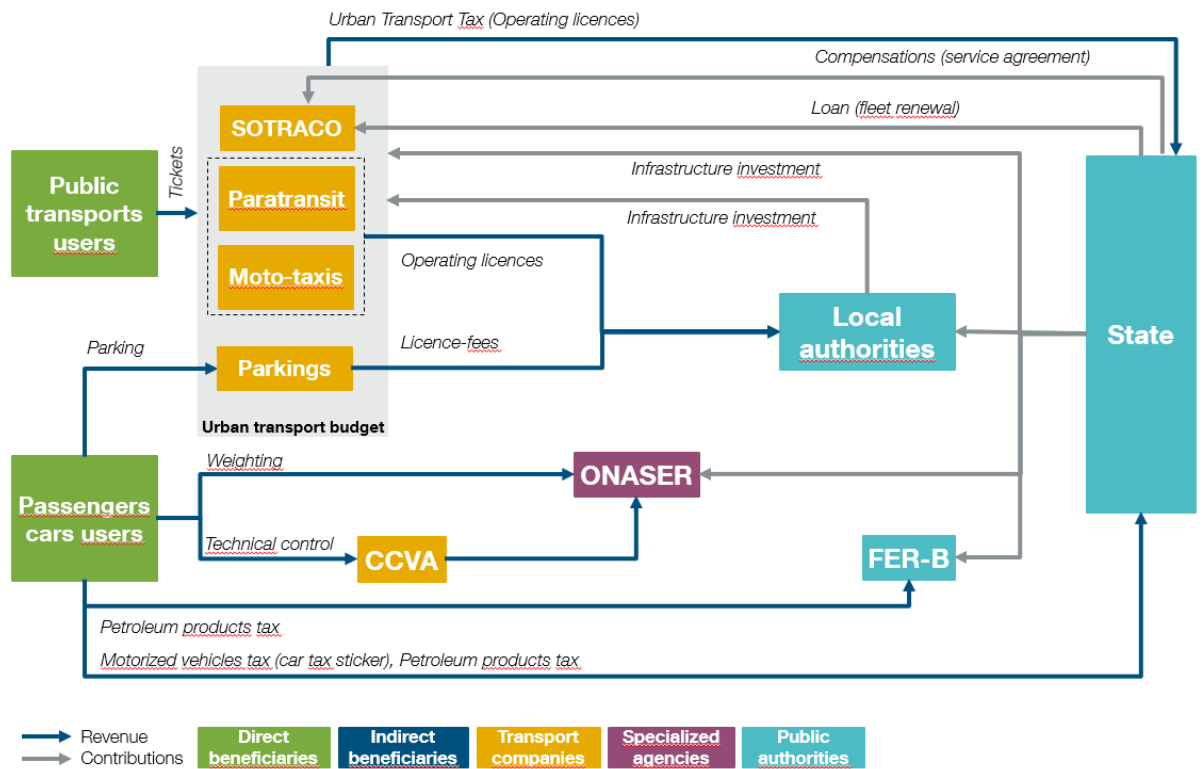


Figure 19: Diagram of funding mechanisms for urban transport in Burkina Faso

Strengths	Weaknesses
<ul style="list-style-type: none"> Significant financial resources recently allocated to road projects in the urban environment; Recent implementation of a tax on motorized vehicles. 	<ul style="list-style-type: none"> Strained financial resources due to the economic and security situations; Funding directed toward roads; No durable long-term mechanism exists for the funding of public transport.
Opportunities	Threats
<ul style="list-style-type: none"> A plan to tax 2 and 4-wheel vehicles to finance public transport in Ouagadougou; Enhancing land values on plots of land owned by public entities may help finance transport projects; Organizing the management of paid parking. 	<ul style="list-style-type: none"> Considering interchanges and grand road projects as an appropriate response to travel needs; Burdening public investment and operational spending with oversized public transport projects.

Figure 20: SWOT matrix of issues linked to funding sources allocated to managing urban transport

Performance and ridership of public transport

- **The appeal of public transport in Ouagadougou diminished with the drop in the number of vehicles operated by SOTRACO.** In 2017, with fewer buses than lines in the network, SOTRACO provided only a tiny share of daily trips in the city by responding to a captive demand. In the eyes of the vast majority of Ouagalais, buses are not a credible alternative to the motorbike.
- **The contract between the public transport operator and the central government does not encourage service efficiency.** The state provides relatively sizeable financial support, yet this support is not linked to production in terms of distances traveled or to the number of vehicles on the road. Though the contract mentions "discount rates for pupils, students, senior citizens and the handicapped",²³ no mention is made of ridership goals for these specific categories of clientele. Also, in spite of its traffic management role, the municipality of Ouagadougou is not associated in this partnership.
- **The partnership between the Ministry of Higher Education, Scientific Research and Innovation and SOTRACO is also not defined in terms of performance objectives.** The ministry invested in 130 buses, which were made available to the company to provide services to university sites in various towns throughout the country (Ouagadougou, Bobo-Dioulasso, Koudougou, Ouahigouya, Fada Ngourma, Dedougou). Complementary funding will be provided for running these services (about 1.3 billion FCFA per year). Nevertheless, no provision is made within the framework of the contract to condition operating support for SOTRACO on performance targets in terms of service frequency, revenues or distance traveled.
- **Up to now, secondary cities had no institutional public transport available.** Only paratransit services have been more or less meeting the needs of inhabitants. Operators see motorized tricycles as the most effective vehicles in terms of revenue relative to running costs, but they offer passengers very limited comfort and represent a safety risk.
- **Revenues from fares turn out to be limited but the financial performance is improving with the increase in the number of buses on the road.** With 75% of ridership consisting of students and given discounts the low cost of student passes, revenues from fares are limited. In 2019, the revenue/expenditures ratio is 35%. This is nonetheless an improvement over 2018 (24%), with one-fourth as many service miles that year.
- **The Ouagadougou municipality is undertaking a vast public transport project to modernize the bus network (project OPTIS).** This project - initiated through exchanges with a European bus manufacturer - aims to put 250 buses on the road starting in 2020, building to a total of 460. The objective is to offer the inhabitants of Greater Ouagadougou a credible alternative to the motorbike. This could lead to the creation of a reserved lane for buses on the city's main streets. This type of adaptation is already being anticipated around certain infrastructure projects (the road being financed by the Islamic Development Bank, the dam bridge in the north).
- **A BRT project is also being considered for the capital in the longer term with financing from the World Bank.** A feasibility study should soon define ridership prospects as well as the specific aspects of such a mass transport project in a city that has low population density.

²³ 2015-2019 Contract plan between the Burkinabe government and the Public Transport Company of Ouagadougou, June 2015.

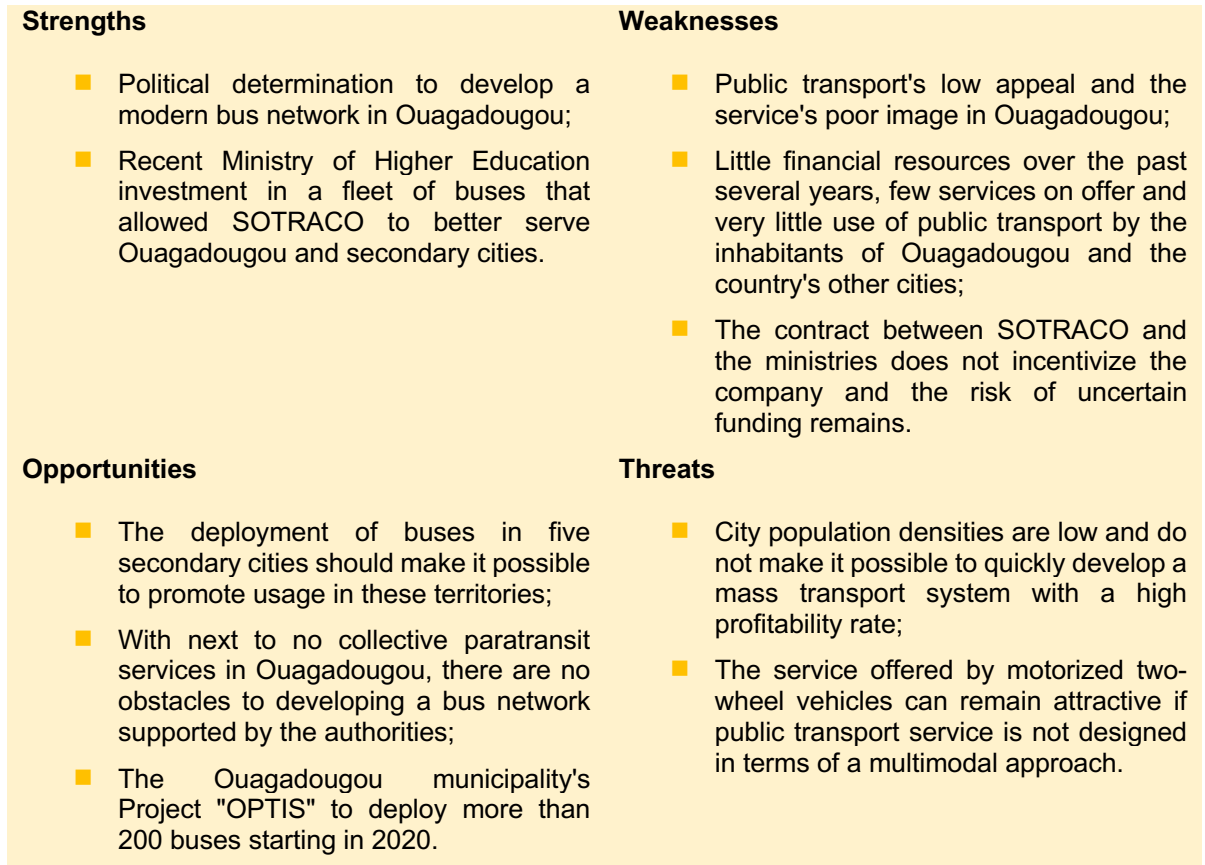


Figure 21 : SWOT matrix of issues linked to public transport performances and ridership

Private sector participation in managing urban transport and engagement of civil society

- **SOTRACO has several private shareholders.** 75% of the transportation company's shareholders are from the private sector, including intercity transporters. This arrangement is a legacy of earlier companies that sought to round out their income by providing urban and intercity services.
- **Paratransit services are growing in all cities nationwide.** Shared taxi or motorized tricycle trade unions represent the transport operators before the authorities. Their integration in a multimodal public transport network is still difficult to achieve; they see themselves as competing with public transport. Nevertheless, in Ouagadougou as in Bobo-Dioulasso, complementarity can be beneficial for passengers.
- **Many associations are working to promote road safety.** They sometimes receive funding from ONASER or the CCVA as well as donations from businesses or private individuals. These associations work at the grassroots level with users but they do not seem to participate within the framework of a defined strategy.
- **Student protests regarding accessibility to university facilities led to increased availability of public transport.** By mobilizing their forces in 2018, students succeeded in obtaining public transport services for their everyday mobility.

<p>Strengths</p> <ul style="list-style-type: none"> ■ Private shareholders have a stake in SOTRACO; ■ Many associations involved in road safety issues; ■ Students who demanded buses to travel to the universities. 	<p>Weaknesses</p> <ul style="list-style-type: none"> ■ Very few private sector participants in the industry.
<p>Opportunities</p> <ul style="list-style-type: none"> ■ There are shared taxis that can be redeployed to bring passengers to the public transport network; ■ Development of a paid parking management service; ■ Intercity transporters are companies that deliver an efficient service. 	<p>Threats</p> <ul style="list-style-type: none"> ■ Motorized tricycle services are growing in Ouagadougou and in other cities and could become difficult to organize.

Figure 22: SWOT matrix of issues linked to private sector and civil society participation in the running of urban transport

Multimodal planning and the functioning of city centers

- **The 1999 Urban Master Plan for Greater Ouagadougou (SDAGO) was revised in April 2010.** This planning document for the capital of Burkina Faso proposes a polycentric development scheme across Greater Ouagadougou's urban districts. Although this document serves as a reference for planners, it has never been approved by the authorities.
- **Recent urban development planning in secondary cities can serve as a base for mobility planning.** An urban development program undertaken by the Ministry of Town Planning and Housing has provided 13 regional capitals and the urban municipality of Pouytenga with master plans that identify priority investment programs totaling 155 billion FCFA worth of road investments between 2019 and 2023. These master plans provide a solid base for planning mobility.
- **The possibility of a sustainable urban mobility plan for Ouagadougou, as the number of projects increases.** In addition to road projects and the dam bridge project, a study is being planned to define the structure of the Ouagadougou transport network in the short, medium and long term. It includes a feasibility study for a BRT. All these projects are in keeping with a vision that has not yet resulted the drafting of a plan. However, Ouagadougou has joined the Mobilize Your City initiative to take advantage of support in conducting a planning operation. The stated goal, once the PTA is in place, is to make it the prime contractor for a study encompassing Grand Ouagadougou.
- **Uncoordinated roadwork by different contracting authorities.** There is no obligation for state contracting authorities to submit projects to the municipality before they intervene on its territory. In Ouagadougou, the city had passed an ordinance in 2013 establishing a coordinating committee of contracting authorities (city, ONEA, SONABEL, Ministry of Infrastructures, Ministry of Urbanism, etc.). This committee offered a framework for dialogue that disappeared after the insurrection.
- **Management of traffic and parking is distinctly superior to other capitals in the sub-region.** Some 50 intersections on the Ouagadougou municipality's territory are controlled by traffic lights, with a good level of compliance on the part of car and motorbike drivers and cyclists. The lights organize traffic flows by phasing the passage of cars and two-wheel vehicles at intersections. Regarding parking, motorcycles benefit from organized spaces in city centers.
- **The Ouagadougou municipality's road network has been given a tiered structure and significant investments.** The municipality's investments are tailored to a predefined road reference system: primary roads (axial and thoroughfares) are being resurfaced and widened; resurfacing of secondary roads is being considered, to help the capital make up for the fact that, in 2015, only 20% of the secondary network was surfaced.
- **Low modal share for walking but a good number of cyclists.** There are few pedestrians in Ouagadougou. The use of motorbikes considerably reduces the habit of walking. On the other hand, bicycles, which had been the most widely used mode of transport before the motorbike imposed itself, are still being used. Although this mode of transport has lost prestige, many cyclists are on the roads, sharing bicycle lanes with motorbikes.

<p>Strengths</p> <ul style="list-style-type: none"> ■ Existence of a master plan for Greater Ouagadougou; ■ There is genuine traffic management in Ouagadougou; ■ There is quality management of motorbike and bicycle parking. 	<p>Weaknesses</p> <ul style="list-style-type: none"> ■ The council of ministers has never ratified the master plan for Greater Ouagadougou; ■ Road infrastructures are built without necessarily being provided for in planning documents; ■ A coordination committee of contracting authorities was created by Ouagadougou City Hall, but it has not been reconvened in several years.
<p>Opportunities</p> <ul style="list-style-type: none"> ■ Setting up an AOTU on a Greater Ouagadougou scale makes it possible to structure urban planning and transport policies on the urban agglomeration scale; ■ A Ministry of Urbanism program permits investment schedules to be drawn up once master plans have been completed; ■ The Ouagadougou municipality has joined Mobilize Your City and could get support for mobility planning. 	<p>Threats</p> <ul style="list-style-type: none"> ■ Continuation of a monocentric urban development process driven by informal settlements (“zones non-loties”).

Figure 23: SWOT matrix of issues linked to multimodal planning and running city centers

Transversal themes

Environment and quality of life

- **Traffic is the primary source of local pollutant emissions, but no air quality measurement system has been set up in the city.** Even though two-stroke engines have been replaced by four-stroke engines, motorbikes are obviously the main source of pollution in the transport system.
- **A significant portion of the fuel used is smuggled into the country.** While fuel quality has improved over these past years, a good share of it enters the country illegally, circumventing the monopoly of the Burkinabe National Hydrocarbons Company (SONABHY). These low-quality fuels produce more pollutant emissions.
- **There is no industry for reutilizing or recycling motorized two-wheel vehicles.** Yet, these imported vehicles have a service life of only a few years. Two waste dump projects (one at Ouagadougou and the other at Bobo) were considered within the framework of the Pamoset program.

Road safety

- **While the law makes helmets mandatory, they are almost never worn.** In 2006, an attempt to make helmets mandatory was aborted because of opposition from the general public. Yet, motorcyclists are the primary victims of accidents and a considerable number of deaths could be avoided by the systematic use of helmets. No large-scale concerted effort – from the inception of a strategy to its implementation – has been made to change mentalities.
- **The centralized accident recording system does not provide an exhaustive list of the number of accidents and victims.** While ONASER recorded approximately 1,000 deaths in 2018, it would appear that the real number is much higher.²⁴ A draft decree to formalize an Accidents and Traffic Analysis Report (BAAC) is being examined.
- **Associations carry out awareness campaigns.** However, their coordination and impact appear to be limited. A road safety caravan, partly financed by insurance companies, has recently traveled around the country to raise awareness about the use of helmets.

²⁴ The WHO has posted a figure, probably overestimated, of 5,000 deaths per year.

Summary

With only 29.4% of its population living in urban areas in 2018, Burkina Faso has an urban population growth rate of nearly 5% per year which suggests that it is catching up with neighboring countries. Statistics predict that the country's two largest cities, Ouagadougou and Bobo-Dioulasso, which themselves only represent 59.2% of the urban population and 16.4% of the country's overall population, will see their demographic growth doubled.

In recent years, urban growth has generated an increase in mobility needs which have mainly been met by the use of motorized two-wheelers. Households have rapidly equipped themselves with these vehicles to such an extent that the number of motorized two-wheelers increased from 450,000 in 2008 to close to 2,330,000 in 2017. They represent 86% of motorized vehicles in circulation. This mode is highly accessible to users. However, given that the obligation to wear a helmet is not widely respected, the rapid increase in traffic has led to an increase in the number of traffic accidents and fatalities. Furthermore, the air quality – though it is not measured – has deteriorated mainly due to the use of poor quality fuel that is smuggled into the country.

The urban areas have a very limited asphalt road system and, even in the capital, only 20% of municipal roads had an asphalt surface in 2015. The municipal and state authorities have made significant efforts to increase the length of paved surfaces in Ouagadougou. However, the extension of the road system has mainly been built to accommodate motor vehicle traffic which has priority over the other modes of transport on the roads, notably two-wheelers (motorized and bicycles) which represent 82% of traffic in Ouagadougou. The same is true for pedestrians – the building of sidewalks alongside new infrastructures is not yet widespread. In contrast, Ouagadougou's intersections have been equipped with traffic lights which, although there is still room for improvement, play an important role in organizing the traffic. However, traffic has become particularly dense, and certain intersections between the city's thoroughfares have been identified as the network's major black spots. The sharp increase in the flow of commuter traffic into the city center, linked to the concentric urban development model, is likely to exacerbate these problems which the construction of new road infrastructures will not solve in the long term.

Public transport, which is nonexistent in the secondary cities, has been in decline in Ouagadougou for several years. However, it was given a boost in 2018 by the Ministry of Higher Education which, in response to student protests, invested in new vehicles with the aim of providing services to university sites throughout the country. SOTRACO was commissioned with operating these buses in the capital and in other towns and cities in the country. This new fleet of vehicles and an operating subsidy enabled the private company, which is a quarter-owned by the state, to stay afloat.

Beyond this initiative, the municipality of Ouagadougou is implementing a more ambitious urban mobility and road safety project with the support of the Ministry of Transport. The aim is to roll out a network of modern buses in Greater Ouagadougou to offer a credible alternative to the motorbike in a city where paratransit collective transport is virtually nonexistent. The aim of this network is to promote bus traffic which will travel through Bus Rapid Transit corridors along the main arterial roads. There is a transformational dimension to this project through its magnitude and its integration into an urban vision which aims to establish secondary hubs and modify the traffic and parking plan in the city center. The institutional framework will also be renewed with the creation of a metropolitan authority responsible for urban transport, and a tax mechanism is currently being developed to finance this operation, etc.

The country's other cities are also becoming aware of the challenges for urban mobility. The motorization of households in Bobo-Dioulasso and other secondary cities is accelerating, and paratransit services, provided by tricycles in particular, are rapidly evolving to meet the needs of the population.

In 2018, Burkina Faso initiated a third cycle of decentralization which began in 1995. This new phase is intended to offer local authorities access to additional sources of funding, enabling them to implement the actions required in their areas of jurisdiction. A national program has facilitated the creation of urbanization master plans for the regional capitals which should be able to step up their efforts in terms of mobility and accessibility based on these plans. A draft decree has been drawn up to promote the creation of local public transport authorities on a metropolitan scale. With its Department for Urban Mobility, the Ministry of Transport, Urban Mobility and Road Safety is prepared to support

these initiatives. However, resources will have to be made available to ensure implementation of the transport policy and achievement of the projects.

Appendix – Interpretation grid for the governance matrix

Sector	Urban Planning	Transport public					Public spaces					
		Institutional collective transport (train, metro, bus, boats, etc)	Bus stations (or bus terminals)	Paratransit		Taxis (shared taxis, mototaxis and three-wheelers)	Road infrastructure and road network	Traffic management	Parking	Non-motorized modes		
				Professionalized	Non professionalized (minibus, shared taxis)					Walking	Cycling	
Strategical level <i>What strategies? With which resources?</i>	Policy and planning	Definition of a general Urban Development Master Plan	Corridor-based or network-based project definition	Bus station (or bus terminals) planning	Network and bus stops definition		Road network infrastructure Master Plan (or similar) definition	Traffic management strategy definition (traffic plan, traffic calming, traffic lights regulation strategy, etc.)	Parking strategy definition	Non-motorized modes policy and related infrastructure plan		
	Funding	Urban project financing	Capital investment and eventual operational deficit financing	Infrastructure financing	Recapitalization or renewal program		Infrastructure and facilities financing					
Tactical level <i>What services ought to be developed? How to go about it?</i>	Regulation	Urban planning regulatory framework	Public transport services supervision and regulation				Builders' standards definition	Highway (or road) code regulatory framework definition and enforcement by responsible entity				
	Licensing, permits and contracting	Drivers' permit	Authority - operator contracting		Operational licensing				Parking operators contracting			
	Fare system		Fare policy for users	Fare policy for operators	Fare policy for users		Tolls		On-the-road or off-road parking fare setting mechanisms			
	Infrastructure, Equipment	Urban networks' infrastructures besides transport infrastructures	Infrastructure project management and vehicle and facility ownership	Project management and infrastructure ownership	Infrastructure project management (bus stops, ranks, etc.)		Road infrastructure general management	Project management for traffic lights facilities and infrastructures	Project management for parking infrastructure construction and/or for parking meters	Project management for sidewalks	Project management for bicycle paths	
Operational level <i>How to produce services efficiently?</i>	Operations / Maintenance		Vehicle and infrastructure operations and maintenance	Bus stations (or bus terminals) management, if by a private company or a union	Vehicle operations and maintenance		Maintenance	Traffic lights and road signage maintenance	Operations and maintenance of on-the-road or off-road parking	Cleaning and maintenance of non-motorized modes infrastructures		

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Legislative texts

Arrêté No 2014-038 CO/CAB portant création, attributions, composition et fonctionnement d'un cadre de concertation entre les acteurs d'aménagement urbain ;

Arrêté No 2019 MTMUSR/SG/DGMU portant organisation et fonctionnement de la Direction Générale de la mobilité urbaine ;

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Décret No 2018- 0784 /PRES/PM/MTSUR portant organisation du Ministère des transports, de la mobilité urbaine et de la sécurité routière ;

Loi n°055-2004/AN du 21 décembre 2004, portant Code Général des Collectivités Territoriales ;

LOI N°042-2018/AN portant Loi de Finances pour l'exécution du budget de l'Etat, Exercice 2019.