# Transforming Urban Transport – The Role of Political Leadership TUT-POL Sub-Saharan Africa

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Case Note: Dakar, Senegal

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## DAKAR, SENEGAL

#### **SENEGAL**

**Population:** 15,020,945 (July 2018) **Population Growth Rate:** 2.36% (2018)

Median Age: 19

**GDP:** USD\$54.8 billion (2017) **GDP Per Capita:** USD\$3,500 (2017)

City of Intervention: Dakar

**Urban Population:** 47.2% of total population (2018) **Urbanization Rate:** 3.73% annual rate of change

(2015-2020 est.)

Land Area: 192,530 sq km

Total Roadways: 16,496 km (2017) Paved Roadways: 5,957 km (2017) Unpaved Roadways: 10,539 km (2017)

Source: CIA Factbook



#### I. POLITICS & GOVERNANCE

#### A. Multi-Scalar Governance

In 1996, Senegal launched the Local Governments Code which transferred powers to subnational level of governments. Senegal was divided into 14 regions which are further split into 103 arrondissements, 45 departments (comprising 550 municipalities), and 19 communes. The region of Dakar is further organized by four departments: Dakar City, Guediawaye, Pikine, and Rufisque. Within the framework of Decentralization Act III, enacted in 2013, each of the 19 communes of Dakar are autonomous and governed by an elected mayor. According to OECD, regions do not have taxation powers, unlike the municipalities, which can raise a variety of local taxes. Taxation in local governments is managed by the central state, which is responsible for tax collection and tax rates. Central governments provide several subsidies to local governments. The decentralization allocation fund, launched in 2007, aims to "compensate expenditures induced by the transfer of 'competences' and is dedicated to the funding of operating expenditures." The local government investment fund, launched in 1977, is a capital grant dedicated to the enhancement of local government investment capability and towards supporting special purposes investment programs. Coordination between the communes and departments, however, has become challenging. For example, Dakar was ready to issue its first municipal bond in 2015 to fund a "market hall" but was blocked by the Ministry of Finance out of concerns that the failure of the bond would hold the Ministry to blame.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> https://www.oecd.org/regional/regional-policy/profile-Senegal.pdf

<sup>&</sup>lt;sup>2</sup>https://www.citylab.com/equity/2015/03/why-africas-booming-cities-need-more-autonomy-in-urban-planning/386585/

# B. Urban Policy

Dakar is the fifth most populous city in West Africa. Sustained urban migration since the 1970s, along with a population growth rate of 2.6 percent, contribute to the rapidly increasing population of Dakar. However, less than 20 percent of Senegalese cities and municipalities have urban plans. In fact, many regulatory frameworks put in place are contributing to distortions in land and housing markets along with an increase in informal settlements.<sup>3</sup>

Plans and policies that govern urban development and transport planning across Senegal include:

- Plan for an Emerging Senegal (PES)
- National Territorial Management Plan (PNAT)
- National Transport Master Plan 2025 (PDUD 2025)
- Urbanization Code (Law No. 2008-43)
- Public-Private Partnership Law, 2014
- Urban Master Plan of Dakar and Neighboring Area for 2035 (JICA)
- Dakar Urban Development Master Plan 2025 ("the 2025 Master Plan")
- Master Plan for the Development of Dakar-Thies-Mbour Area 2030

The Plan for an Emerging Senegal (PES) recommends several policy changes including revising Senegal's territorial planning tools, enhancing urban economy, improving urban service provision and access, and improving governance. PES proposes several transportation-related actions such as a regional express train between Dakar-Diamniadio-Blaise Diagne International Airport that would serve 14 stations and carry up to 115,000 passengers per day, in less than 45 minutes, between Dakar and Blaise Diagne International Airport. PES also proposes the redevelopment of the Dakar-Kidira railway line over 644 kilometers. The **Urban Master Plan of Dakar and Neighboring Area for** 2035 is a study conducted by Japanese International Cooperation Agency (JICA) to prepare Dakar for an urban development master plan in 2035. The study outlines urban transportation goals such as mass transit systems, inter-modality, transit-oriented development for public transport corridors, and affordability of public transport fares. In addition, it looks at strengthening the function of the Dakar Port and increasing the capacity and efficiency of the Dakar-Bamako corridor, including the railway. The 2025 Master Plan pursued a number of transportation and infrastructural projects such as highway extensions (including toll highway), bus rapid transit, and renewal of minibuses, taxis and the Dakar Dem Dik bus fleet.<sup>5</sup>

# C. Climate Change and Sustainability

Climate adaptation and resilience are of critical importance in Senegal since a high concentration of Senegal's assets (i.e. fishing industry makes up 2.2 percent of GDP) and population lie in the coastal areas and since coastal tourism is seen as growth driver. Senegal has been very active in setting policies and participating in global climate governance: they released a National Adaptation Plan in 2006 and a National Strategy for Sustainable Development in 2005. They are also one of the key players behind

<sup>&</sup>lt;sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> http://open\_jicareport.jica.go.jp/pdf/12250007\_01.pdf

<sup>&</sup>lt;sup>5</sup> Ibid

the Great Green Wall Project, which aims to halt the "advance of the Sahara Desert." In addition, Dakar is the first African city to publish a resilience strategy with The Rockefeller Foundation's 100 Resilient Cities initiative and is integrating sustainable development principles in various national policies through the 2009-2015 Environment and Natural Resources Sector Policy Letter. Senegal is also restructuring their energy policy, as outlined in their "Letters of Policy Development of the Energy Sector," identifying the strategic role renewables could play in energy and transportation.

#### II. INFRASTRUCTURE & TRANSPORT

## A. Existing Infrastructure

Dakar's spatial planning was largely based on the French colonial model of five major zones of builtup areas interlinked by axes. Major infrastructures are located closer to the major urban centers and along the coast thus making distribution of transportation uneven.

During the 1990s, the Senegalese government privatized companies involved in the airline, water, finance, real estate, and telecommunications sectors. The government is still involved in ports and infrastructure projects but has increasingly resorted to public-private partnerships (PPPs). In 2004, the Senegalese parliament passed a law that formally authorized the use of PPPs in infrastructure projects. The 2004 Build Operate and Transfer Law, later amended by the 2014 Public Private Partnership Law, outlined formal procedures for the bidding process and created the Infrastructure Council to supervise the bidding process and safeguard against corruption.

**Air**: As of 2013, Senegal has 20 airports with the Leopold Sedar Senghor being the main international airport, which is served by most major airlines. In 2017, Senegal opened a new airport – Blaise Diagne International – as part of Plan Emergent Senegal. Blaise Diagne International includes a conference center, new research centers, hotels, and a special economic zone intended to lure new industries. All are along a new asphalt toll road leading from Dakar's center.

**Rail:** As of 2013, Senegal has 906 kilometers of railway with 713 kilometers being operational. The Dakar to Bamako rail line was privatized in 2003 and was run by Transrail which was owned by Canac (a Canadian company) until it was bought by Savage (a US company) who subsequently sold its stake to Vecturis (a Belgian company) who currently runs the line.<sup>9</sup>

**Ports:** The largest port in the country, Port Autonome de Dakar (PAD), serves as a national entry point for imports and exports. The PAD also plays a key role in regional integration: 70 percent of imports by Mali from overseas transit comes through the PAD.

**Roads/Highways:** Senegal has built 1,520 kilometers and rehabilitated 4,015 kilometers of roads over the past four years. In 2000, the Senegalese government gave the newly-established National Agency for Investment Promotion and Major Projects (APIX) the responsibility of supervising a proposed 32-kilometer toll highway that would connect Dakar to the economic hub of Diamniadio. In October 2015, after the tollway was completed, 45,000 vehicles on average were using the toll road

<sup>8</sup> The 2008 global financial crisis provoked a reduction of about 20 percent of FDI in 2009.

<sup>&</sup>lt;sup>6</sup> http://www.lse.ac.uk/GranthamInstitute/country-profiles/senegal/

<sup>7</sup> Ibid

<sup>&</sup>lt;sup>9</sup> https://dlca.logcluster.org/display/public/DLCA/2.4+Senegal+Railway+Assessment

every day with substantial reductions in the driving time between downtown Dakar and Diamniadio from over 90 minutes to 15-30 minutes. The non-toll traffic routes also remained in operation, allowing traffic to be split and creating more room for vehicles. Overall, 930 jobs (800 during the construction phase and 130 after the launch phase) were created by the project. The project became one of the first toll roads to be built through PPPs in Sub-Saharan Africa. The principal funding was provided jointly by the Senegalese government, the World Bank, Agence Française de Développement, and the African Development Bank. The Fonds d'Entretien Routier Autonome (Autonomous Second-Generation Road Fund) was also created in 2007 to secure and increase financing for routine maintenance of urban roads. The road fund was to be supported directly by user fees mobilized from existing and additional taxes on gasoline distribution. The secure and increase for the project became one of the first toll roads and additional taxes on gasoline distribution.

# B. Existing Transportation

Current modes of transport in Dakar are split between bus, minibus, rail, taxi, and independent operators licensed by the Executive Council of Urban Transport (CETUD). According to Ousmane Thiam, President of CETUD, the informal sector accounted for 80 percent of public transport in 2000, while today it has fallen to 39 percent.<sup>12</sup>

**Bus:** The *Dakar-Dem-Dikk* (DDD) is a formally structured bus company launched in 2000 whose capital stock is shared between the Senegalese government (76.6 percent) and private Senegalese investors (23.4 percent). They operate 24 urban and suburban lines and deploy roughly 100 buses per day for 120,000 passengers.<sup>13</sup> The government has subsidized DDD, but transfers have been irregular.

Dakar has an SMS-based transit information system, called *Dakar Dem Dikk Tracking*, that can predict the position of buses based on the number of remaining bus stops. <sup>14</sup> Last year, another transit mobile app called Sunubus was launched by four young developers. <sup>15</sup>

Cars Rapides: Cars rapides are 25 to 40-seater informal minibuses, typically over 30 years of age, and owner-driver operated, launched in response to DDD's low capacity. The majority of cars rapides are concentrated on the routes and secondary roads from the periphery to Dakar center, and mostly in the areas of Malika, Pikine, and Parcelles Assainies. There are currently 3,000 vehicles, which provide about 80 percent of the transport and are run by small cooperatives under the supervision of their Association de Financement des Transports Urbains (Urban Transport Financing Group). The government planned to phase out these vehicles in 2018 and worked with the World Bank on an initiative (still underway) in the 1990s to enable owners to replace their car rapides vehicles with higher-capacity AFTU (l'Association de Financement des professionnels du Transport Urbain) buses using a subsidized loan. To

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<sup>&</sup>lt;sup>10</sup> For more information on the tollway, see: <a href="https://www.centreforpublicimpact.org/case-study/senegals-dakar-diamniado-toll-highway/">https://www.centreforpublicimpact.org/case-study/senegals-dakar-diamniado-toll-highway/</a>

<sup>11</sup> http://documents.worldbank.org/curated/en/847101476984653723/pdf/108407-PPAR-PUBLIC.pdf

<sup>12</sup> https://www.uitp.org/news/dakar-transport-formalisation

<sup>13</sup> http://edmi.ucad.sn/~gueve/articles/ICSCC2018 c.pdf

<sup>14</sup> Ibid

<sup>15</sup> https://www.bbc.co.uk/programmes/p06974cb

<sup>16</sup> http://open\_iicareport.iica.go.ip/pdf/12250007\_01.pdf

<sup>17</sup> Ibid

*Ndiaga Ndiaye: Ndiaga ndiaye* are also informal minibuses, typically over 30 years of age, and owner-driver operated. They run only on major roads that are profitable, mostly in the areas of Rufisque, Keur Massar and Mbao.<sup>18</sup>

**Commuter Rail:** *Petit Train Banlieue* is a state-owned company that operates a light suburban rail line between Dakar, Rufisque, and Thies, with limited capacity due to unfinished work on a second track that is financed by the World Bank Urban Mobility Improvement Project. Other main railway agencies include Transrail and Société Nationale de Chemins de Fer du Sénégal (operates Senegal Railways).

**Taxis Clandos:** Taxis clandos are unregistered private cars operated as a taxi by someone who does not own the car but operates it when the car is not in use by its owner.

#### C. Infrastructure Stakeholders

**Government:** The Executive Council of Urban Transport (CETUD) is responsible for implementing and monitoring public transportation policies within the Greater Dakar Area. *Agence des Travaux et de Gestion des Routes* (AGEROUTE) is the national agency responsible for implementing all road infrastructure construction, rehabilitation, and maintenance on the national classified network. CETUD and AGEROUTE are coordinating on a bus rapid transit project with the World Bank; however, the World Bank has noted major capacity challenges with CETUD, which is still undergoing a restructuring that started in 2000.<sup>19</sup>

**International:** As noted in the section on ports, much of Senegal's infrastructure is financed, assisted, operated, or owned by many international stakeholders. The European Union is assisting in the preparation of a national road safety policy. VERITAS, a French private concessionaire company, is taking charge of vehicle registration. Systra, an international planning and engineering firm, is producing a study recommending the creation of a single state-owned transport (holding) company that would combine *Petit Train Banlieue* and *Dakar Dem Dikk*.

Unions, interest groups and savings associations: As a result of the World Bank Urban Mobility Improvement Project,<sup>21</sup> minibus operators organized themselves in *groupement d'intérêt economique* (economic interest groups) and formed a savings association, *Association de Financement des Transports Urbains* (Urban Transport Financing Group or AFTU) to handle lease and insurance payments. The World Bank asserts that this leasing scheme has helped improve the quality of service, formalization of the minibus sector, allocation of routes, and fare collection.

**Ride-hailing services:** Senegalese-based Ping! runs an exclusive fleet of hybrid cars, with a vision of becoming a 'Green Uber'.<sup>22</sup>

<sup>18</sup> Ibid

 $<sup>^{19} \ \</sup>underline{http://documents.worldbank.org/curated/en/847101476984653723/pdf/108407-PPAR-PUB} LIC.pdf$ 

<sup>&</sup>lt;sup>20</sup> http://open\_iicareport.iica.go.jp/pdf/12250007\_01.pdf

<sup>21</sup> Ibid

<sup>&</sup>lt;sup>22</sup>https://www.designindaba.com/articles/creative-work/senegal%E2%80%99s-taxi-industry-set-gain-eco-conscious-option-ping-app

## D. Interventions/Projects

Bus Rapid Transit: The Global Infrastructure Facility, World Bank, and International Finance Corporation are helping Dakar implement a rapid bus transit system through a public-private partnership. The BRT will consist of an 18.3-kilometer long segregated rapid bus lane, integrating a trunk and feeder system. It will also include the construction of build or provide terminals, metrostyle stations, bus fleets, and intelligent transportation systems.<sup>23</sup> It will be implemented through a 10-year concession with an estimated cost of USD\$55 million and annual operating costs of USD\$30 million.<sup>24</sup> The BRT is expected to reduce long-term greenhouse gas emissions by 1.5 million tons of CO2 emissions.<sup>25</sup>

**Dakar Regional Express Train:** As part of the economic development plan of Senegal, the regional express train is a railway line being built to connect Dakar city centre with Blaise Diagne International Airport through a 55-kilometer long track, with the eventual goal of replacing the Petit Train de Banlieue.

**Diamniadio City:** Announced in the PES, Diamniadio – a short drive east of Dakar – and its 1,644 hectares will be subdivided into four sectors of 400 hectares each. One section will be the Ministerial City, another section the "City of knowledge" with entertainment facilities and the Amadou Mahtar Mbow University that is fit for 30,000 students, a third international industrial park section, and a final "smart city" section. Housing will be built to accommodate 350,000 people, with luxury, middle-class, and economic buildings all near one another.

World Bank Urban Mobility Improvement Project<sup>26</sup>: The project (and succeeding Project for Supporting Transport and Urban Mobility) intends to support Dakar's road rehabilitation, pedestrian and traffic safety, minibus leasing, air quality management, and institutional development efforts. The project is responsible for financing a second track of the Petit Train de Banlieue and providing support to address illegal occupation by vendors of the railway right-of-way, increase number of railway carriages, and replace outdated infrastructure and equipment.

<sup>&</sup>lt;sup>23</sup> http://blogs.worldbank.org/transport/africa-paving-wav-climate-resilient-future

<sup>&</sup>lt;sup>24</sup> https://www.globalinfrafacility.org/sites/gif/files/GIFBriefs PPSA April2018 Senegal%20Dakar.pdf

<sup>&</sup>lt;sup>25</sup> Ibid

<sup>&</sup>lt;sup>26</sup> http://documents.worldbank.org/curated/en/847101476984653723/pdf/108407-PPAR-PUBLIC.pdf