

Douala, Cameroon

Partner city

Status of the project: Completed Sustainable Urban Mobility Plan



Basic Information

Urban area: 923 km²

Population: 3,663,227 | Growth rate: 3.6%

Region capital city

GDP per capita: USD 2,952

Modal Share:

Minibuses (paratransit): 1%

Walking: 35%

Private cars: 5%

Private motorbikes or 2-wheelers: 4%

Taxis (paratransit): 12%

Moto taxis (paratransit): 40%

Other: 3%

National GHG emissions per capita: 0.4 (tCO₂eq)

Exposure to climate change: HIGH

Context

The port City of Douala, the main economic hub of Cameroon, lies on a low coastal plateau, with many natural drains and flood prone valleys. With a population of more than 3.6 million inhabitants, which is expected to increase to 4 million by 2023, Douala is a dynamic, fast-growing city. Douala's rapid growth is particularly pronounced on the outskirts, where the access to formal public transport services is very low or non-existent. Urban sprawl is forcing people to travel further distances to access jobs, markets, health, and education. The low quality and inadequacy of infrastructure for walking and cycling adds up to the low provision of public transport services.

This combination of factors pushes travellers to rely on informal motorcycle taxis and mini-bus services, instead of more sustainable modes such as walking, cycling and higher capacity public transport. Informal transport services have taken an increasingly large modal share in outskirt areas but also in the city centre. This entails threats to the citizen health, safety, and comfort, as the precariousness of working conditions and high competitiveness of paratransit services are associated with higher risk of traffic accidents and sexual harassment toward women. Aging or badly maintained vehicles also lead to a significant increase in air and water pollution, and in greenhouse gas emissions.

Regulating and supervising urban development are major challenges for the public authorities, as a large percentage of the urban territory is subject to unsanctioned land use, associated with the isolation of working-class neighbourhoods, the lack of tertiary roads, saturation of industrial zones and growing informal settlements on often unsuitable land.

In addition to this, the lack of dialogue between the land-use planning, on the one hand, and mobility planning authorities, on the other, exacerbates the urban transport problem. Above all, it is necessary to create the conditions for a viable integration between urban and transport planning. This diagnosis was translated into the need to initiate a planning approach that is more operational than those previously at work, in order to be able to respond to the challenges resulting from the rapid development of the metropolitan areas.

Support from the Partnership

Technical assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission and FFEM

Funding amount: EUR 400,000

Implemented by: AFD through the MobiliseYourCity Africa Program

Local counterpart: Urban Community of Douala

Finance leverage: EUR 422,000,000

Supported activities:

- Organisation of Mobilise Days, in conjunction with Yaoundé, to officially launch SUMP development and raise awareness.
- Preparation of a Sustainable Urban Mobility Plan for Douala, with three main objectives:
 - » Improving citizens' access to destinations, activities and services offered in Douala;
 - » Improving the urban environment in Douala;
 - » Renewing the governance of Douala, its mobility, and projects.

Status of the SUMP process

Project start: 2018 Q1

Project completion: 2019 Q3

Completed outputs:

- Sustainable Urban Mobility Plan
 - » Diagnosis
 - » Vision and goals
 - » Action and financing plan

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Physical investments (infrastructure, rolling stock, etc.)	508 M€		
Road infrastructure projects	107 M€	Domestic financing	2021
Purchase of 283 Bus 12m 2021: 150 2024: 133	66 M€ 2021: 33 M€ 2024: 33 M€	World Bank & Domestic Financing	2021 2024
Bus facilities (stations)	24 M€ 2021: 4 M€ 2024: 20 M€	World Bank & Domestic Financing	2021 2024
Purchase of 164 BRT 18m 2021: 50 2024: 75 2029: 39	66 M€ 2021: 20 M€ 2024: 30 M€ 2029: 16 M€	World Bank & Domestic Financing	2021 2024 2029
BRT facilities (stations)	92 M€ 2021: 18 M€ 2024: 49 M€ 2029: 25 M€	World Bank & Domestic Financing	2021 2024 2029
Cable Car line	26 M€	World Bank & Domestic Financing	2024
Development of 5 major multimodal interchange centre and 15 transfer points	15 M€ 2021: 4 M€ 2024: 6 M€ 2029: 5 M€	World Bank & Domestic Financing	2021 2024 2029
Walking plan	15 M€ 2021: 3 M€ 2024: 7 M€ 2029: 5 M€	World Bank & Domestic Financing	2021 2024 2029
Investments for cycling	5 M€ 2024: 1 M€ 2029: 4 M€	World Bank & Domestic Financing	2024 2029
Reinforcement of river links to Manoka	4 M€	Domestic financing	2021
Development of river and rail transport infrastructure	5 M€	Domestic financing	2029
Centralised Control Centre	10 M€ 2021: 3 M€ 2024: 4 M€ 2029: 3 M€	World Bank & Domestic Financing	2021 2024 2029

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Project management, call for interest and contingency provision	63 M€	Domestic financing	2021
	2021: 15 M€		2024
	2024: 37 M€		2029
	2029: 11 M€		
Development of logistical hubs and truck parking spaces	11 M€	Domestic financing	2024
	2024: 7 M€		2029
	2029: 4 M€		
Complementary actions and policy reforms in three phases	38 M€		
	2021: 10 M€		
	2024: 10 M€		
	2029: 38 M€		
Technical (studies, plans, designs, etc.)			
Short term complementary studies and strategy setting			2021
Guidelines for logistics platforms and trucks parking			2021
Concerted plans and strategies for <ul style="list-style-type: none">• Upkeep and maintenance of the road network• Valorisation/distribution of the public space• Tariff and ticketing of public transport			2021
Integration of mobility and other urban networks (water, sewage, energy, waste)			2024
Municipal traffic and parking plans			2024
Anticipation of future plans after the SUMP			2029
Policy & regulation			
Informal transport project			
Continuous formalisation of moto-taxis and informal Buses through the establishment of a new institution Responsible for vocational training, schedules Regulation, the administrative formalisation		European Union	2024
Implementation of digital action plan <ul style="list-style-type: none">• Open data policy• Support to development of information and service platforms• Mobility Observatory			2024
Strengthening the capacity of police officers in relation to mobility			2024
Adaptation of public transport service and recruitment policy to tackle gender-related issues			2024
Improved road upkeep and maintenance			2024
Improved road signage			2024
Creation of a transport organising authority		European Union	2029
Monitoring and reporting of air quality and water pollution			2029
Emergence of new public transport operators			2029

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Public support to the adoption of clean vehicles through financial incentives			2029
Optimised integration of port activities and reconversion of industrial disused sites			2029

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures	CAPEX Estimate
Public transport and NMT	328 M€
Street shaping urban roads and traffic management	107 M€
Other measures	74 M€
Total	509 M€

Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process).

Description	Source of financing	Secured?	Amount
International loan for the BRT and other investments (associated)	World Bank		370 M€
Domestic contribution to the BRT and other investments (associated)	Government of Cameroon		50 M€
Grant for the implementation of SUMP soft measures	European Union		2 M€

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2019	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	-0,19 Mt CO ₂ eq -20 %	0.548 Mt CO ₂ eq	0.95 Mt CO ₂ eq	0.76 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO₂eq)	-36 kg CO ₂ eq / capita -20.7 %	161 kg CO ₂ eq / capita	174 kg CO ₂ eq / capita	138 kg CO ₂ eq / capita
Access Increase of the proportion of the population living 500 meters or less of a public transport stop	Improved but not quantified	Not quantified	Not quantified	Not quantified
Air pollution Decrease in mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	Improved but not quantified	Not quantified	Not quantified	Not quantified
Modal share Increase of the modal shares of trips by public transport, walking and cycling	Formal public transport: +5% Informal public transport: 0% Walking: +6% Cycling: 0% TOTAL: +6%	Formal public transport: 2% Informal public transport: 1% Walking: 35% Cycling: 0% TOTAL: 38%	Formal public transport: 1% Informal public transport: 0% Walking: 34% Cycling: 0% TOTAL: 35%	Formal public transport: 6% Informal public transport: 0% Walking: 40% Cycling: 0% TOTAL: 46%
Road safety Decrease of traffic fatalities in the urban area, per 100.000 inhabitants	Improved but not quantified	Not quantified	Not quantified	Not quantified

Perspectives for implementation

A research-action pilot project to improve moto-taxi services in Douala

A pilot project for moto-taxi professionalisation, identified soon after the adoption of the Douala SUMP in 2019, is expected to be implemented by Codatu to start in 2023. The objective of the project is to implement measures to improve the services of moto-taxis for both drivers and users, and provide the public authorities with a knowledge base to regulate the system. The project relies on a research-action approach, using a mixed methodology to collect data on the supply (drivers) and demand (users) of moto-taxis through GPS trackers, semi-directive interviews, questionnaires, and direct observation.

Insights from practice: lessons learned from the SUMP process

The three key strengths of Douala SUMP: it is integrated, realistic, and inclusive

It links mobility and urban planning, includes existing actors and modes of transport, and proposes innovative solutions beyond road infrastructure, such as the construction of a cable car line.

The SUMP's Action, Financing and Governance Plan is fully fundable through a mix of already available financial resources, identified new resources, and international finance. It is based on a transport investment plan from the previous 10 years, with additional revenues generated from increased taxation of fuel, car ownership, and car park. Funding occurs within the public budget, resulting in a positive revenue to expenditure ratio for the operation of the public transport network. The SUMP is also tailored to the context, location, and places, ensuring a progressive and realistic implementation of the plan.

The Douala SUMP is inclusive, with information workshops and thematic focus groups that include young people, women, and actors from both modern and informal private sectors. This participatory process identifies overlooked issues related to population groups and finds adequate solutions. These public and stakeholder consultations mobilised new actors to get involved in organising a car-free day.

Significant governance and institutional reforms are prerequisites to SUMP implementation

Although the Douala Sustainable Urban Mobility Plan (SUMP) has its strengths and opportunities, there are still structural and urban limitations that need to be acknowledged. The liberalisation of the economy and decentralisation have led to a proliferation of actors with different interests, sometimes conflicting with the existing laws and regulations, which complicates the organisation of the transport sector.

The management of regulatory urban planning is a significant challenge in Douala and other African cities of similar size, given the creation of new districts on the outskirts, requiring new infrastructure and improvements in urban transportation that may not be sustainable for the city's current investment and management capacity.

Additionally, mobility data is often outdated and unavailable in a format suitable for long-term urban planning. Institutional reforms are necessary, including the creation of a Transport Organising Authority, an Urban Planning Agency, and a Mobility Observatory to improve coordination between urban planning and mobility. These institutions should prioritise the representation of women and consider vulnerable groups such as children and elderly people, who face systemic mobility challenges such as safety and lack of suitable infrastructure, as identified by the diagnostic.