

Kumasi, Ghana

Status of the project: ongoing technical assistance



Basic Information

Urban area: 2,603 km²

Population: 3,490,000 | Growth rate: + 4.43%

Type of city: Region capital city

GDP per capita: USD 4,700 (National)

Motorised Modal Share (Road Space Usage)

Formal public transport (Bus): 15%

Informal public transport (Trotro): 53%

Private cars: 14%

Taxis: 12%

Freight vehicles: 1%

Other (LDV): 4%

National GHG emissions per capita: 1.5 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

Since the 2010s, more than half of the population in Ghana lives in urban areas. Despite their rapid expansion in size and population, most cities remain small by world standards.

In the last few years, institutions have been unable to cope with the rapid urban transition and Ghana has started to see the side effects of rapid urbanization, including congestion, unregulated urban expansion, and limited access to services and affordable quality housing.

The second largest city in Ghana is Kumasi. The greater Kumasi Metropolitan Area (gKMA) is the result of multiple extensions of the cities perimeter, including inner Kumasi (KMA) and twelve additional municipalities and districts. It covers a total land area of 2,603km² with a total population of 3,190,473.

Kumasi is set to more than double its population. The population density is expected to substantially increase from 159 people per hectare (in 2010) to 279 per hectare in 2033.

Transport system

Rapid urbanization in Ghana has implications for urban mobility. Severe traffic congestion and road safety issues are the consequence of over-reliance on low-capacity passenger vehicles, inadequate traffic management, heavy dependence on informal public transport services, inadequate facilities for walking and cycling, occupation of roads by hawkers, and so on.

The predominant mode of transport in Kumasi are trotros, minibuses carrying between 14 and 23 passengers, and shared taxis which take four passengers. These vehicles do not provide scheduled services and they operate with the 'fill and go' principle, preventing passengers from planning their trips effectively.

The limited capacity of these vehicles is compensated by their large number. Distribution of the vehicles on routes depends on the preferences of the operators, usually linked with the conditions of the roads, leading to an uneven distribution of transport services.

A study carried out in 2011 found that 68% of users travel by trotro/buses, 12% by taxis. By contrast, trotros occupy less than 30% of road space usage, while private vehicles carrying only 14% of passengers account for 33%. The congestion level also affects the route choice for drivers.

The city has received 60 buses from the Ministry of Transport for the introduction of a mass transit service (pilot BRT), but only 20/25 are operated as the rest of the fleet waits for full study and implementation.

Institutional context

The different Metropolitan, Municipal, or District Assemblies (MMDAs), which are part of gKMA, are empowered by law with legislative responsibilities to make policies, including the enabling legislative instruments, to provide leadership for local transport policy and planning, pass common bye-laws on passenger transport and facilitate a fair and efficient regulatory environment, by providing priority for operators using traffic management measures.

There is an existing Greater Kumasi Urban Development Master Plan, which was sponsored by JICA and coordinated by the Spatial Planning Department of KMA in collaboration with the 6 adjoining Assemblies that formed the gKMA. Unfortunately, there have been neither formal coordination among them nor any higher-level authority to regulate inter-MMDA transport.

At the national level, the Ministry of Roads and Transport (MoRT) is responsible for road infrastructure, the Ministry of Port, Harbors, and Railway is in charge of the mass-transit railway.

The Local Counterpart does not have the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate and report on urban mobility.

Challenges and main aim of the SUMP

The main urban mobility challenges Kumasi is facing are described below:

- Poor integrated land use planning and control procedures, resulting in urban sprawl, traffic congestion on major roads and poor road safety
- Poor traffic management and poor condition of existing road network, connected with a low traffic capacity, misuse of road space and parking issues, and lack of continuity of pedestrian space
- Inadequate facilities and general inefficiency of the public transport system, which is unable to meet the demand
- Institutional framework not optimised for mobility operators and organisations, affecting profitability and preventing fleet renewal and enforcement of policies
- An excessive level of air pollution, because of the exhaust gas from a fleet of vehicles that is mainly old and poorly maintained

The main aims of the SUMP are to produce a high-quality document, ready for adoption by the different assemblies of the gKMA that identifies different measures to:

- Regulate public transport (incl. paratransit) for efficiency, safety and affordability;
- Improve traffic management and traffic safety measures, particularly reducing traffic congestion in the city center;
- Improve pedestrian/Non-Motorized Transport facilities for walkability and safety;

- Improve the institutional and financial framework in view of greater effectiveness for planning, designing, building, regulating and operating the mobility system in the city;
- Improve technical capacity of the professionals in the area of transport and GHG reduction;
- Build capacities of local experts and other mobility actors in Kumasi to implement, monitor and revise the Sustainable Urban Mobility Plan, serve as advocates of sustainable urban mobility planning, and transfer gained knowledge and experience with other cities in Ghana or subregion.

The technical assistance contributes to institutional strengthening by: inter alia, providing training sessions on selected topics.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 500,000

Implemented by: AFD and CODATU through the MobiliseYourCity Africa Program

Local counterpart: Kumasi Metropolitan Assembly (KMA)

Supported activities:

- SUMP for Kumasi (including support for inception, diagnosis, vision and strategic objectives, scenario development and action planning, financing requirements and public participation)
- Specific mission: Establishment of an Observatory on urban mobility data and GHG emissions

Status of implementation

Project start: Q1 2021

Expected project completion: Q3 2022

Completed outputs:

- Signature of a Memorandum of Understanding between a delegate of Kumasi Metropolitan Assembly (KMA) – representing the different assemblies of the Greater Kumasi Metropolitan Area (GMA) and AFD (June 30th, 2020)
- Support for the tender and selection of consultants
- Inception phase. Inception report submitted in October 2021 (validation process on-going).
- MobiliseDays organized on November 30th and 31st 2021.

Next expected outputs:

- Completion of diagnosis phase (Q2 2022)
- Completion of vision/scenario phase (Q3 2022)
- Completion of action plan phase (Q4 2022)

Core impact indicators baselines

Indicator	Baseline – 2020
Annual transport related GHG emissions per capita (kg CO ₂ eq)	280 kg CO ₂ eq / capita (country wide average)
Access to public transport	
Proportion of the population living 800 meters or less of a public transport stop	95%
Road safety	
Annual traffic fatalities in the urban area, per 100,000 inhabitants	9,61 fatalities / 100,000 hab

Highlights in the past year

SUMP activities were kicked-off in 2021 with Mobilise Days – need for an integrated approach highlighted

The SUMP process in Kumasi was initiated in 2021 with a first inception mission of the SUMP consultant team in April 2021. In addition, Mobilise Days were set up in November 2021 in Kumasi as part of kicking-off the SUMP process. As part of the Mobilise Days it became particularly apparent, that inclusive strategies for targeting sustainable mobility in Kumasi will be key for a success of the SUMP process. This does not only refer public participation, which will be essential, but also covers broader aspects related to developing an integrated approach to transport on a territorial level. This will be needed to ensure the inclusion of all greater Kumasi municipalities as well as all actors that are intervening more or less directly in the transport sector.