The Bank is pursuing its policy of financing a diverse portfolio of major infrastructure projects. The 2017 investments in roads, railways, aviation, ICT and urban development will confer African countries a firm foundation on which to grow their economies, increase socio-economic development and deliver better services in areas such as health, education and trade.

Transport and ICT Infrastructure as well as Urban Development play a central role in supporting the Bank’s High 5 strategic priorities for the development of Africa. Major road and rail corridors projects are essential for intra-African trade and contribute to the Bank’s strategy to Integrate Africa. When coupled with ports and industrial parks, transportation and ICT can facilitate the Bank’s strategy to Industrialize Africa by reducing logistics costs and connecting the continent with global manufacturing value chains. The major trunk roads and their feeder roads financed by the Bank will help unlock Africa’s enormous agricultural potential by providing access to more farmland and indeed opening up new rural areas, reducing the costs of inputs, facilitating access to markets and contributing to the Bank’s High 5 strategy to Feed Africa.

Enhanced mobility and affordable transport help people in their daily lives. Better online access and connectivity ease access to employment opportunities, health and education services. ICT projects stimulate the job market, but more importantly offer new types of employment, more suited to the young people of Africa. Investing in ICT projects also fosters an enabling environment for innovative business start-ups, allowing the youth to seize new opportunities and be in charge of their own destiny.

Among this year’s highlights, the Bank’s contribution to the Tunisia Digital 2020 project will assist the country in achieving universal internet connectivity and facilitate access to online government services. In the Central African Republic, over 1,000km of fiber optic cable will bridge the Internet connectivity gap and connect to the Central Africa Backbone, linking with Chad and Cameroon.

In 2017, the Bank approved 16 transport, urban development and ICT projects worth USD 1.52 billion. Road projects accounted for the largest portion of the financing with USD 689 million, followed by aviation - USD 295 million, the railway sector - USD 288 million, urban development - USD 128 million and ICT for USD 109 million. Two studies, for a cross-border railway and a road corridor, were financed for USD 9 million.

Portfolio diversification continued to increase, with major investments in aviation and urban development - two strong drivers of economic growth, job creation and integration. Regional integration was at the forefront of our activities – six of the 16 projects were cross-border ones and accounted for 30% of the total project investments in 2017.

Looking forward to 2018, with the operationalization of the Bank reorganization and new Development and Business Delivery Model, the vast majority of public sector transport infrastructure projects will be piloted by the regions, with the exception of complex transactions and urban development projects. Indeed, being closer to the clients will allow project staff to deepen sector policy dialogue, increase business development opportunities, undertake closer monitoring of projects and improve quality, efficiency and development outcomes.

Amadou Oumarou
Director
Infrastructure & Urban Development Department
Disclaimer

Unless expressly stated otherwise, the findings, interpretations and conclusions expressed in this publication are those of the various authors of the publication and are not necessarily those of the Management of the African Development Bank (the "Bank") and the African Development Fund (the "Fund"), Boards of Directors, Boards of Governors or the countries they represent. Use of this publication is at the reader's sole risk. The content of this publication is provided without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement of third-party rights. The Bank specifically does not make any warranties or representations as to the accuracy, completeness, reliability or current validity of any information contained in the publication. Under no circumstances including, but not limited to, negligence, shall the Bank be liable for any loss, damage, liability or expense incurred or suffered which is claimed to result directly or indirectly from use of this publication or reliance on its content. This publication may contain advice, opinions, and statements of various information and content providers. The Bank does not represent or endorse the accuracy, completeness, reliability or current validity of any advice, opinion, statement or other information provided by any information or content provider or other person or entity. Reliance upon any such opinion, advice, statement, or other information shall also be at the reader's own risk.
CONTENTS

06 ○ 10
Key Messages

12 ○ 16
2017 Lending Achievements

18 ○ 36
Description of Transport, Urban Development & ICT Projects Funded 2017

38 ○ 40
Transport, Urban Development & ICT Active Projects Portfolio

42 ○ 46
Producing and Sharing Knowledge

48 ○ 52
About Infrastructure and Urban Development Department
The Bank’s High 5 strategic priorities have brought additional focus and clarity in support of the Bank’s Ten-Year Strategy for 2013-2022.

Transport and urban projects, carried by the Infrastructure and Urban Development Department of the Bank, contribute largely to the Integrate Africa and Industrialize Africa High 5 priorities, and also contribute directly and indirectly to the Feed Africa and Improve the Quality of Life for the People of Africa priorities.

The Bank estimates that Africa’s infrastructure requirements are between USD 130 and USD 170 billion a year and that the financing gap is between USD 68 and USD 108 billion a year.

USD 1.52 billion for 16 projects contributed to the vision and objectives of the Bank in 2017.
2017 projects lend strong support to the High 5s

During 2017, the Bank approved 16 projects in Transport, ICT and Urban Development of a total value of USD 1.52 billion. The projects gave strong support to four of the Bank’s High 5 strategic priorities - Integrate Africa, Industrialize Africa, Improve the Quality of Life for the People of Africa and Feed Africa.

Cross-border projects valued at USD 465 million were a major feature during the year, strongly contributing to Integrate Africa. Aviation and ICT projects were also a major feature of the work plan, helping to Improve the Quality of Life for the People of Africa, as a result of both direct and indirect project outcomes.

Six of the 16 projects approved in 2017 were cross-border projects, with a total value of USD 465 million or 30% of total approvals during the year and represent long strides towards integration in Africa.

The largest cross-border project by value is the road project linking Kapchorwa in Uganda to Kitale in Kenya through Suam at the border, which also includes a road bypassing Eldoret in Kenya. The project includes a One-Stop Border Post at Suam, further increasing integration between the two countries.

Another cross-border road project, approved in 2017 and boosting integration involves strengthening the passage between Burkina Faso and Niger, leading to an increase in WAEMU intra-community trade, a rise in crossing traffic and a reduction in travel time and costs.

The Lake Chad bridge and road project, connecting Chad and Cameroon over the River Logone, will have a dramatic and modernizing integration effect between the two countries. It will replace the current unsatisfactory ferry system that carries lorries across the river. The boats frequently break down, causing freight to make long and costly overland diversions. In addition, passengers will no longer have to cross in crude dug-out canoes, which often capsize. On average, 70 people drown every year.

Guinea will become better integrated with its neighbor, Sierra Leone, as a result of the project approved in October 2017 to repair the severely damaged 75km stretch of road leading to the border.

Rail also plays its part in integration through better transport linkages. In Senegal, the Regional Express Train project, approved in 2017, will provide a speedy rail journey from Dakar through Diamniadio to the new Blaise Diagne international airport. More rail-based integration is envisaged in the future, due to the Feasibility Study on the Cameroon-Chad Railway Line project. The study will review the railway between Ngaoundéré and N’Djamena and the potential for integrating the networks of both countries.

Aviation also contributes to integration. The Air Côte d’Ivoire Modernization and Expansion Program, with new routes, will boost integration across West and Central Africa and will shorten flight times.

One of the ICT projects will also add to integration. The Central Africa Backbone carrying fiber optics across the region will gain another link with the approval of the Central African Republic component in 2017. This component will close the missing link in the national fiber optic network and join the backbone at the Congo-Cameroon border.

By their capital-intensive, connectivity and integrative nature, the seven large-scale road projects approved in 2017 give a strong boost to Industrialize Africa.

Good roads are a key part of industrial infrastructure. Without them, goods and raw materials cannot be transported speedily and efficiently.

The strengthening of the border road between Burkina Faso and Niger, for instance, will speed the transit of goods to and from those two landlocked countries into bordering countries and also to ports in Ghana, Côte d’Ivoire, Togo and Benin.

Similarly, upgrading from gravel to bitumen of the road from Kapchorwa in Uganda to Kitale in Kenya, together with the One Stop Border Post, will speed the transborder passage of goods between the two countries.

The building of a bridge over the River Logone between Cameroon and Chad enables lorries to cross without having to rely on ferries, which frequently break down and in the past caused long and costly overland diversions.

The North-East Connectivity Road and Viaduct project in Tunisia will contribute to Industrialize Africa through improved connections in three industrial zones where more than 60% of facilities are export-led.
The upgrading of the road between Kibumbu and Gitega in Burundi is part of the government’s road infrastructure plan, which is viewed as a lever for developing the country’s economic and commercial activities.

The reconstruction and enlargement of the severely dilapidated road between the Coyah area in Guinea and the border with Sierra Leone will revive trade between the two countries, additionally aided by interconnectivity of customs information and joint import-export controls.

In the Comoros, the road network rehabilitation project will help economic diversification, promoting the tourism and fisheries sectors as an alternative to reliance on agriculture.

Many of the Bank’s road infrastructure projects contribute directly or indirectly to the Bank’s Feed Africa strategic priority. Feeder roads from farming areas to new and rehabilitated main road projects funded by the Bank give farmers easier and quicker access to markets and to their farmland for example.

Access roads to farming areas are included in the Sierra Leone-Niger border road project. The upgrading of the road between Kapchorwa in Uganda and Kitale in Kenya will help the farmers in this fertile area to get their crops to market more quickly. Similarly, one side benefit of the upgrading of the Kibumbu-Gitega road section in Burundi is the improved access to rural areas. The agricultural and pastoral community in east and central-east Burkina Faso will benefit from improved the border road project between Burkina Faso and Niger.

The Tunisia road and bridge connectivity project helps in upgrading local agricultural land.

New infrastructure, job creation, better and more affordable mobility by road, rail and air, faster transport of farm produce into cities and improved access to ICT services all improve the quality of life for the people of Africa.

One project, the Cities Modernization Program in Senegal, will have a significant effect on lives across the country. Senegal’s cities and towns have seen rapid growth, but infrastructure has not kept up. The first phase of a modernization program, which will take effect across 13 municipalities, will involve the rehabilitation of 78km of highways, the introduction of public lighting, and the establishment of school structures, health structures, sports centers and public spaces.

The bridge across the River Logone between Chad and Cameroon will improve people’s lives and indeed help save lives, by providing a safer crossing. Currently, people cross the river in crude dug-out canoes, which frequently capsize. Some 70 people drown every year as a result.

Another example is the road and bridge connectivity project in north-east Tunisia – the works include a 25,000m landscaped park to be built on the south bank of the bridge over Lake Bizerte.

The eight-country Intergovernmental Agency on Development (IGAD) seeks to enhance the lives of people in the region through an all-infrastructure improvement process. It will encompass, among others, transport, energy, ICT and transboundary water projects. Among the expected outcomes are job creation, increased business and economic opportunities and physical and economic integration in the IGAD countries of Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda.
During 2017, the Bank financed two aviation projects for USD 295 million, the second largest sector investment after roads.

**USD 135 million.**
This was the Bank’s contribution to the USD 253 million project with Air Côte d’Ivoire to purchase five new Airbus and train 77 more pilots and 126 aircraft technicians. The investment will allow the airline to improve safety and security, and service delivery.

The project will also contribute to regional integration by increasing air traffic to and from Côte d’Ivoire. Passenger capacity will be increased from an annual 3 million to 8 million. It will result in 1555 new direct and indirect jobs and boost revenue from tourism by CFA 217 billion (approx. 407 million USD).

**USD 160 million**
The Bank contributed USD 160 million to help finance a second runway at Jomo Kenyatta International Airport in Nairobi, Kenya, which will cut the current and costly frequent delays, support more passenger flights and tourism, increase cargo traffic and create 500 jobs. Nairobi is poised to become an aviation hub for...
The Bank contributed USD 260 million in 2017 to upgrade railways in African countries.
In 2017, the Bank approved 16 projects in Transport, Urban Development and ICT for a total of USD 1.52 billion. Road projects accounted for the largest sector with financing of USD 689 million, followed by aviation with USD 295 million. The railway sector accounted for USD 288 million, followed by urban development at USD 128 million and ICT at USD 109 million.

In line with the Bank’s policy of promoting integration across the continent, six of the 16 projects, amounting to 30% of total lending, were cross-border projects. The projects will have a direct positive effect on the lives of more than 32 million people. Countless more millions will enjoy the effects of more infrastructure, cheaper and quicker transport and improved services every day.

Entire national populations stand to benefit, for example in Tunisia where 100% of households will be connected online to e-government services through the Digital 2020 project. Similarly, the people of Senegal stand to gain from the national Cities Modernization Program.

The projects will also boost the economies of the countries benefiting from the projects as well as increasing trade and exports. Traffic flows will be eased, and cross-border journeys will be speeded up due to better roads and streamlined border and customs controls.

Projects were approved across all the African regions, helping 15 countries. They are Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, the Comoros, Côte d’Ivoire, Guinea, Kenya, Namibia, Niger, Senegal, Sierra Leone, Tunisia and Uganda.

Countries that will benefit from better cross-border integration because of 2017 projects include Chad-Cameroon, Sierra Leone-Guinea, Uganda-Kenya, Burkina Faso-Niger and Central African Republic-Chad-Cameroon.

The two aviation projects approved in 2017, one in Côte d’Ivoire with Air Côte d’Ivoire and the other in Kenya for a second runway at Jomo Kenyatta International Airport, will also add to integration through increasing intra-African air traffic.

One of the ICT projects, in Central African Republic, will help integrate the country by connecting fiber optic cable from there to its neighbors, Chad and Cameroon, at the borders. The rail and road project in Namibia will contribute to regional integration, involving its neighbors, especially the landlocked countries.

By their size, the seven road projects will have the greatest effect. The transit of goods and people between Burkina Faso and Niger and beyond, and between Uganda and Kenya, will speed up due to the strengthening of their border roads.

The road and bridge project between Cameroon and Chad will provide a more reliable crossing for freight and people. Similarly, the road and viaduct project in Tunisia will speed the movement of exports from industrial zones. In the Comoros, better roads will aid the country to diversify away from an over-reliance on agriculture to boosting tourism and fisheries.

Some of the road projects will open up the interior of countries, through feeder roads, allowing the freer movement of people, especially those looking for work, and also create better access to farming areas, allowing crops to reach the market quicker.
16 projects approved, totaling USD 1.52 billion

**Road projects**
- 723km of road construction and rehabilitation
- Building and improving roads across Africa to increase integration

**Aviation projects**
- 4.9km of new runway at Nairobi airport
- Creating new air routes in South West Africa
- Building new runway at Jomo Kenyatta airport in Nairobi
- Five new aircrafts for Air Côte d’Ivoire

**Urban Development project**
- 78km of new or improved roads for Senegal
- Modernizing towns and cities in Senegal

**ICT projects**
- Laying 1,050km of fiber optic cable in Central African Republic, closing missing links in national network and connecting with Chad and Cameroon borders
- Adding to Central Africa Backbone fiber optic network
- Creation of 25,000 jobs in technology every year in Tunisia from 2021

**Railway project**
- 282km of railway line
- Connecting Dakar to new airport in Senegal
- Speeding up trains to Walvis Bay in Namibia

**Feasibility and Planning study projects**
- Assessing new rail link between Chad and Cameroon and planning infrastructure for eight countries in North-East Africa
Emphasis on Aviation as Driver of Growth, Integration and Jobs

During 2017, the Bank financed two aviation projects for USD 295 million, the second largest sector investment after roads. These approvals represent an increased emphasis by the Bank on participating in aviation projects across the continent.

More investment in air transport in Africa is important because aviation is a powerful driver for economic growth and job creation. Globally, the aviation industry is a giant powerhouse, responsible for USD 2.7 trillion of economic activity and almost 63 million jobs.

The Bank's current active air transport project portfolio was valued at USD 572 million, a rise of 8% compared with USD 528 million in 2016.

Overall, the Bank has invested almost USD 1 billion over the past decade in the construction and expansion of airport terminals, runways, aircraft financing and aviation safety.

A common factor in the Bank’s aviation projects is to increase intra-African air connectivity, and therefore also regional integration. More intra-African flights result in shorter, direct flights between African regions and cities, cheaper fares and freight costs and increased demand.

Direct flights allow dramatic savings in journey times. A direct flight from Port Harcourt in Nigeria to Accra in Ghana would slash the journey time by 70% from five hours to 1.5 hours. Similarly, the journey time between Luanda in Angola to Durban in South Africa would be halved from seven hours to 3.5 hours.

One of the 2017 projects involved the Bank contributing a total of USD 135 million to Air Côte d’Ivoire. Most of the total USD 253 million invested by the Bank and co-financiers was to buy five new Airbus aircraft.

The project will result in 1,555 new direct and indirect jobs, boost tourism revenue by approximately USD 407 million and increase passenger capacity from 3 million passengers a year to more than 8 million. The project will also open up aviation in the south-west Africa region, currently poorly served, thereby increasing regional integration.

Also in 2017, the Bank contributed USD 160 million to help finance a second runway at Jomo Kenyatta International Airport in Nairobi, Kenya, which will cut delays, support more passenger flights and tourism, increase cargo traffic and create jobs. The project will result in Nairobi becoming a busier aviation hub for the region, boosting integration.

In 2016, the Bank approved a financing package of USD 159 million to partly finance Ethiopian Airlines’ fleet modernization program and expansion plan. The investment was rooted in the push for more aviation integration and improved air connectivity in Africa.

Also in 2016, the Bank contributed USD 11.7 million to support the air transport sectors in west and central Africa. It helped improve civil aviation safety by creating more efficient air navigation services in a unified airspace, and involved 69 airports in 25 countries.

In 2015, the Bank approved a USD 120 million corporate loan to Ghana Airports Company in support of its capital investment program. The program entails the building of a new terminal at Kotoka International Airport, serving the capital, Accra, and the rehabilitation of other airports managed by the company across the country. The program is aimed at upgrading airport as a gateway to West Africa and to boost the country’s economy, particularly the growing tourism and oil and gas sectors.

In 2013, the Bank approved financing of USD 38 million for the Praia Airport Expansion and Modernization Project in Cabo Verde.

The economic effect of improved aviation is substantial. A recent International Air Transport Association study modeled the impact of an open skies agreement between 12 African countries. Passenger traffic in those countries was projected to increase by more than 80% to 11 million passengers from 6.1 million. It also estimated a rise in GDP of USD 1.3 billion and the creation of 150,000 jobs.
Five years of aviation financing
2013-2017

CÔTE D’IVOIRE, Air Côte d’Ivoire
Modernization and Expansion Program
USD 135m
2017

GHANA, Accra
Kotoka airport terminal & other terminals
USD 120m
2015

CABO VERDE, Praia
Airport Expansion and Modernization Project Expansion Program
USD 38m
2013

Air Transport Support Project West & Central Africa
USD 11.3m
2016

ETHIOPIA
Ethiopian Airlines Fleet Modernization and Expansion Program
USD 159m
2016

KENYA, Nairobi
Jomo Kenyatta International Airport, 2nd Runway
USD 160m
2017
The Bank’s financing for Air Cote d’Ivoire in 2017 will increase the number of direct flights in south-west Africa and cut journey times.
Description of Transport, Urban Development & ICT Projects Funded in 2017
This road and rail project will help Namibia become an international logistics hub. The upgrading of the railway line between Kranzberg and Walvis Bay, including a direct link to the port, will speed up freight and passengers, clearing the current infrastructure bottleneck. The road upgrade will create a fast link between Windhoek and its international airport.
New Chad-Cameroon bridge over River Logone to boost trade and regional integration

Project Team Leader: J. K. N’Guessan – Chief Transport Engineer

This bridge and road project, connecting Chad and Cameroon over the River Logone, will replace the unreliable ferries that carry lorries across the river. They frequently break down, causing long and costly overland diversions. Also, passengers will no longer have to cross in crude dug-out canoes, which often capsize and sometimes lead to drownings.

**FINANCING**

- AfDB Group (loans and grants) € 66.11m
- Africa Investment Facility (EU) € 40m
- Governments of Chad and Cameroon € 6.68m

**Total cost:** € 112.79m

**OUTCOMES**

- 620m bridge
- 14.18km connecting road
- Social, health and economic benefits

**OUTPUTS**

- 15% Cameroon-Chad trade volume
- 349 CFA/Km Average light vehicle operating cost
- 20% rural access of population in project area
- 3 days Truck travel time Yaoundé – N’Djamena
- 285 CFA/Km Average light vehicle operating cost
- 30% rural access of population in project area
- 1 day Truck travel time Yaoundé – N’Djamena

**PROJECT SCHEDULE**

- **2017** Project Approval 3 December
- **2018** Civil works completed
- **2019**
- **2021** Project completion

**OUTCOMES**

- 2016
  - Cameroon-Chad trade volume
  - Average light vehicle operating cost
  - Rural access of population in project area
  - Truck travel time
- 2025
  - Cameroon-Chad trade volume
  - Average light vehicle operating cost
  - Rural access of population in project area
  - Truck travel time
Feasibility Study on Extension of Cameroon-Chad Railway Link

Assessing how to improve regional transport integration, reduce costs, and boost exports

Project Team Leader: J. K. N’Guessan – Chief Transport Engineer

This study will assess the socio-economic viability of the railway line between Ngaoundéré in Cameroon and N’Djamena in Chad. It is important for a landlocked country to explore other modes of transport than roads. Chad has problems with deteriorated roads that are used to transport supplies and exports. The mooted railway line between the two countries would add to integration. A railway option would ease the pressure on the road network.

Output:
- Feasibility study
- Establish technical assistance

Outcomes:
- 15% Cameroon-Chad trade
- 30% Cameroon-Chad trade
- Improve level of knowledge on project viability
- Increase capacity building in rail management and PPP (2020)

Financing:
- ADF loan UA 2m Cameroon
- ADF grant UA 2m Chad
- Total cost: UA 4m

Project duration:
- 2016
- Project Approval: November
- 2017
- 2020
Nairobi: Jomo Kenyatta International Expansion Project

New runway to boost airport capacity

Project Team Leader: G. Makajuma – Infrastructure Specialist

A second runway will cut the current and costly frequent delays, and will support more passenger flights, tourism and will increase cargo traffic. It will be a step towards Nairobi becoming aviation hub, boosting regional integration. It will also enable direct intercontinental flights to North America and Australia, increasing markets for popular Kenyan exports such as cut flowers.

FINANCING

- AfDB (loan) USD 160m
- Government of Kenya USD 29.6m

Total cost: USD 189.6m

OUTPUTS

- 4.9km of Runway constructed
- Creation of 500 jobs
- New weather station
- Air Traffic Control tower improved

OUTCOMES

<table>
<thead>
<tr>
<th>2016</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>231,000 tons of in international trade via JKIA</td>
<td>289,000 tons of in international trade via JKIA</td>
</tr>
<tr>
<td>15 min aircraft delays (minutes)</td>
<td>4 min aircraft delays (minutes)</td>
</tr>
<tr>
<td>End to diversions /cancellations</td>
<td></td>
</tr>
</tbody>
</table>

AfDB (loan) USD 160m
Government of Kenya USD 29.6m

Second Runway
Planned second runway

Nairobi: Jomo Kenyatta International Expansion Project

Project Approval
28 November

Project completion
2018

2017

2022

Annual Report 2017
PICU
22
Community Road Strengthening Project
CU2A Gounghin-Koupela-Fada N’Gourma-Piega-Niger

Improved road will boost regional integration and cross-border trade

Project Team Leader: Barnabé Yougbare – Infrastructure Specialist

This section of the road is in an advanced state of deterioration and impedes trade traffic from the landlocked countries of Burkina Faso and Niger to ports in Ghana, Côte d’Ivoire, Togo and Benin. This road improvement will provide better passage from the two countries, in particular the agricultural and pastoral regions in east and central-east Burkina Faso.
North-East Road Connectivity Support Project

Road and viaduct to boost connectivity and reduce traffic congestion in Bizerte

Project Team Leader: J. N’Guessan – Chief Transport Engineer

The road and viaduct project will ease congestion in the north east of Tunisia which is threatening the growing demand for the traffic of goods and the movement of people around Bizerte port. It will also lead to better mobility and connectivity.

FINANCING

<table>
<thead>
<tr>
<th>Source</th>
<th>Cost (€)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB (loan)</td>
<td>122m</td>
</tr>
<tr>
<td>EIB (loan)</td>
<td>123m</td>
</tr>
<tr>
<td>Government of Tunisia</td>
<td>32.29m</td>
</tr>
</tbody>
</table>

Total cost: €277.9m

OUTPUTS

- 7.34km two-lane, two-way highway
- 2.1km viaduct
- 14km of secondary roads

OUTCOMES

- 8.5 million time saving from cutting congestion in 2016
- 6.5 million time saving from cutting congestion in 2021
- 8 road deaths per year
- 4 road deaths per year
- 700 workers/month during construction
- -33,000 tons/year of CO2 emissions

RESULTS

- 25,000m landscaped park on the left bank of lake
- 8km rainwater drainage
- 300 public lights
- Construction and related employment

2017

Project Approval
Date: 25 October

2018

2022

Project completion

8km rainwater drainage

Construction and related employment

25,000m landscaped park on the left bank of lake

8km rainwater drainage

300 public lights

8.5 million time saving from cutting congestion in 2016

6.5 million time saving from cutting congestion in 2021

8 road deaths per year

4 road deaths per year

700 workers/month during construction

-33,000 tons/year of CO2 emissions
Air Côte d’Ivoire - Modernization and Expansion Program

New air routes across Central and West Africa to cut flight times and foster regional hub

Project Team Leaders: Ezekiel Odiogo – Principal Investment Officer; Aida Ngom – Chief Investment Officer; Mam Tut Wadda - Principal Transport Engineer

As part of a PPP (Public Private Partnership), the Bank supported the acquisition of five new Airbus aircraft. The program also included the training of new pilots and technicians. It will allow Air Côte d’Ivoire to introduce new routes and more direct flights across Central and West Africa, helping Abidjan to become a regional hub.

**OUTPUTS**

- **Acquisition of 5 Airbus 320 aircraft**
- **77 new pilots and 120 new aviation technicians**
- **Center of Excellence for Aviation**
- **684 jobs and 3,000 indirect jobs in total**

**FINANCING**

- **ACI Equity € 42.77m**
- **ADF-Loan € 4.26m**
- **ADF-PRG € 17.05m**
- **AfDB Non-Sovereign € 42.64m**
- **AfDB Sovereign € 51.16m**
- **Commercial Loans € 95.09m**

**Total cost: € 253m**

**OUTCOMES**

<table>
<thead>
<tr>
<th>2016</th>
<th>2026</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="720,000 Increased passengers" /></td>
<td><img src="image" alt="1 million+ Increased passengers" /></td>
</tr>
<tr>
<td><img src="image" alt="346 Boost in tourism revenue (CFA bn)" /></td>
<td><img src="image" alt="563 Boost in tourism revenue (CFA bn)" /></td>
</tr>
<tr>
<td><img src="image" alt="3 million Capacity of airport (passenger/year)" /></td>
<td><img src="image" alt="8 million+ Capacity of airport (passenger/year)" /></td>
</tr>
<tr>
<td><img src="image" alt="20% of local pilots and technicians" /></td>
<td><img src="image" alt="60% of local pilots and technicians" /></td>
</tr>
</tbody>
</table>
Coyah-Farmoreah-Sierra Leone Border Road Reconstruction Project

**Boosting regional integration**

Project Team Leader: Abdoulaye M. Tandina – Transport Engineer

This project will reconstruct, enlarge and improve 75km of border road between the Coyah area in Guinea and the border with Sierra Leone. This stretch of the highway had become severely dilapidated due to the effects of conflict and the Ebola epidemic. The project will revive and increase trade and, through the building of feeder roads, allow crops such as rice, cassava, corn, tubers, palm oil and fruit easier and quicker access to markets.

**FINANCING**

- **ADF (grant)**: € 21.4m
- **ADF (loan)**: € 26.62m
- **EU (grant)**: € 29.6m
- **Guinea Government**: € 460k

Total cost: € 78.08m

**OUTPUTS**

- **75km** of road including bridges rebuilt and improved
- Joint import-export controls and customs information
- Access roads to local farming areas

**OUTCOMES**

- **2016**
  - Travel time (light vehicle): 1.9h
  - Goods transport: 48h
  - Average border transit time: 1h
  - Direct jobs created: 0h/day
  - Vehicles per day: 925
  - Transport costs (heavy vehicle): 11,023 GNF/km

- **2021**
  - Travel time (light vehicle): 0.8h
  - Goods transport: 6h
  - Average border transit time: 1h
  - Direct jobs created: 75,000h/day
  - Vehicles per day: 2,013
  - Transport costs (heavy vehicle): 4,319 GNF/km

**2017 Project Approval 25 October 2018**
**Diaminiadio - AIBD Regional Express Train Project**

**New railway to cut journey time by over 50% and more than double passengers**

Project Team Leader: Ali Ismail Mohamed – Principal Transport Economist

The Regional Express Train project will provide a faster rail journey from Dakar through Diaminiadio to the new Blaise Diagne international airport. In addition, it will contribute to creating a transport hub at Diaminiadio with the building of motorways passing Diaminiadio. Together with the creation of a Special Integrated Economic Zone for Dakar, the project will help alleviate the problem of unemployment in the region, partly caused by the lack of communal transport.

**FINANCING**

- AfDB (loan) USD 316.23m
- IsDB (loan) USD 316.23m
- AFD (loan) USD 105.41m
- French Treasure (grant) USD 95m
- Government of Senegal USD 199.17m

**Total cost:** **USD 908.64m**

**OUTCOMES**

- **2016**
  - 20km/h Train speed
  - 2h Journey times
  - 25,000 Daily passenger levels

- **2019**
  - 60km/h Tripling of train speed
  - 45min Journey times
  - 113,000 Daily passenger levels

**OUTPUTS**

- **+0.6% Increase in GDP growth rate by 2025**
- **+3% growth in public transport usage**

**PHASE 1**

- 36km of railway between Dakar and Diaminiadio, with 8 stops, three stations and two interchange stations

**Through this project the AfDB finances also:**

- 15 multipurpose sports centers for young people
- 10 children’s playgrounds
- 5 health structures
- **300 young people trained in the railway service**
- **10 community centers for women**
- **7 markets**, one a large modern market
- **20 young people’s associations and 30 women’s groups** (providing equipment, training, etc)

**SENEGAL**

**African Development Bank**

---

Through this project the ADB finances also:

- 15 multipurpose sports centers for young people
- 10 children’s playgrounds
- 5 health structures
- **300 young people trained in the railway service**
- **10 community centers for women**
- **7 markets**, one a large modern market
- **20 young people’s associations and 30 women’s groups** (providing equipment, training, etc)
Road Network Rehabilitation Project

Road project to cut travel time and costs, boost trade and create 50,000 jobs

Project Team Leader: P. S. More Ndong – Principal Transport Engineer

This road rehabilitation project on both islands will improve traffic flow, movement of people and access to basic services. On a wider front, improving the current poor quality of road infrastructure will help economic diversification away from an over-reliance on agriculture to boost the tourism and fisheries sectors, which have been identified as growth areas for the national economy.

**2017**
- Project Approval
  - 23 January

**2018**
- Completion
  - 31 December

**FINANCING**
- ADF (grant) €15.63m
- ADF (loan) €3.39m
- EU (grant) €15m

Total cost: €34.02m

**OUTPUTS**
- 47 km of roads repaired
- 50,000 Jobs created

**OUTCOMES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Travelers</th>
<th>Tons of Trade</th>
<th>Travel Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>9m</td>
<td>3.6m</td>
<td>1.4h (RN2)</td>
</tr>
<tr>
<td>2021</td>
<td>12m</td>
<td>4.9m</td>
<td>0.9h (RN2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Travelers</th>
<th>Tons of Trade</th>
<th>Travel Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>536</td>
<td>3,639</td>
<td>0.9h (RN23)</td>
</tr>
<tr>
<td>2021</td>
<td>703</td>
<td>4,845</td>
<td>0.4h (RN23)</td>
</tr>
</tbody>
</table>

**Through this project the ADB finances also:**

- 12 sets of equipment and supplies for women’s associations working in post-catch fish handling
- 500 women trained in business management
- 5 km of coastline protected against maritime erosion
- 3 cold chain systems supplied, intended mainly for the transport of fish
- 20 officials trained in public procurement

**Grande Comore**
- RN2: 20.5 km of roads rehabilitated
- RN23: 26.5 km of roads rehabilitated

**Anjouan**
- RN23: 26.5 km of roads rehabilitated

Map of Comoros showing the rehabilitation areas and project locations.
Kapchorwa-Suam-Kitale and Eldoret Bypass Roads Project

Speeding Kenya-Uganda border travel and relieving congestion in Eldoret town

Project Team Leader: D. Gebremedhin, Chief Economist, Transport

Upgrading the Kapchorwa-Kitale road will have a dramatic effect on the journey time, which will fall from almost 6 hours to 2 hours and 15 minutes. Integration will be further improved through a One Stop Border post. Upgrading the road will allow farmers to get their produce to market more quickly and efficiently. The Eldoret bypass will cut congestion in the town and speed up traffic considerably.

**Outputs**
- Building and upgrading of road
- Emergency medical response along project road
- Construction of markets

**Outcomes**
- Speeding Kenya-Uganda border travel and relieving congestion in Eldoret town
- Kapchorwa-Suam-Kitale and Eldoret Bypass Roads Project
  - Project Approval: 27 March 2017
  - Project completion: 2021
  - Total cost: USD 224.06m

**Financing**
- AfDB loan USD 56.13m Uganda
- AfDB loan USD 82.00m Kenya
- AfDB loan USD 38.4 m Uganda

**Key Statistics**
- 5h30min Vehicle travel time Kapchorwa – Kitale
- 2h15min Vehicle travel time Kapchorwa – Kitale
- 4 USD Average passenger fare/person Kapchorwa-Kitale
- 3 USD Average passenger fare/person Kapchorwa-Kitale
- 33% increase of trade volume in using Suam border (by 2025)

**Through this project the AfDB finances also:**
- 5 km paved access road (Kenya)
- 20 km community road (Uganda)
- Reforestation campaign and community activities (400 people involved)
- Communities sensitized in HIV/AIDS, road safety and gender
- Training of Health workers

**Outcomes**
- 33% increase of trade volume in using Suam border (by 2025)
Nyakararo-Mwaro-Gitega (RN18) Upgrade and Asphalting Project/Phase II

New roads to lower transport costs and provide more rural access

Project Team Leader: J. Ndikumwami – Senior Transport Engineer

The combination of paving 24km of the RN18 and the rehabilitation of 15km of rural roads will speed up traffic, boost trade, and give better rural access for farmers bringing their produce to market. The project will also reduce the spatial exclusion currently suffered by the rural community and foster job opportunities through increased mobility.

FINANCING

- ADF (grant) UA 9.72m
- TSF (grant) UA 4.08m

Total cost: UA 13.8m

OUTPUTS

- 24km paved road on RN18 Kibumbu-Mweya
- 15km rural roads

OUTCOMES

- 2016:
  - 1.3h heavy vehicle journey time from Nyakakaro to Gitega
  - 100 vehicles/day
  - 5,748 BIF/km heavy vehicle cost
  - 25% of women using vehicles

- 2021:
  - 0.75h heavy vehicle journey time from Nyakakaro to Gitega
  - 250 vehicles/day
  - 2,931 BIF/km heavy vehicle cost
  - 40% of women using vehicles

TOTAL COST:

- ADF (grant) UA 9.72m
- TSF (grant) UA 4.08m
- Output Cost UA 13.8m

OUTPUTS FINANCING OUTCOMES

2017

Project Approval
23 January

2018

2019

Completion
31 December

2021

Project Approval
23 January

Completion
31 December
The rapid growth of cities and towns across Senegal has prompted the need for better infrastructure, particularly in transport. This first cities modernization program, launched in 13 municipalities, will involve the rehabilitation of 78km of highways, the introduction of public lighting, and the establishment of school structures, health structures, sports centers and public spaces.

**FINANCING**

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>AfDB (loan)</td>
<td>€ 114.34m</td>
</tr>
<tr>
<td>Government of Senegal</td>
<td>€ 21.36m</td>
</tr>
</tbody>
</table>

Total cost: € 135.70m

**OUTCOMES**

<table>
<thead>
<tr>
<th>Year</th>
<th>Road Visiblity in the Project Area</th>
<th>Vehicle Cost Lowered per km</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>20m</td>
<td>USD 0.8/km</td>
</tr>
<tr>
<td>2020</td>
<td>50m</td>
<td>USD 0.3/km</td>
</tr>
</tbody>
</table>

**OUTPUTS**

- 78km of roads built, paved or reconstructed
- 18 sets of computer equipment
- 35km/h faster traffic
- 50km/h faster traffic
- Road visibility in the project area

**PROJECT TIMELINE**

- 2017: Project Approval - 29 March
- 2018: Procurement ends
- 2020: Project completion

**AFDB is also financing:**

- 5 market structures, including a bus station
- 10 school structures
- 5 health structures
- 6 sports centers
- 10 public squares
- Street lighting
The Bank contributed USD 689 million in 2017 to African road projects.
Central Africa Backbone (CAB) project
CAR Component

1,050km of fiber optic to close missing links in Central African Republic

Project Team Leader: S. Omar Elmi - Senior ICT Engineer

The Central African Republic component of the CAB project will result in improved access and more affordable telecommunications and ICT services for the population, government services and businesses.

Outcomes

<table>
<thead>
<tr>
<th>Year</th>
<th>Internet services penetration rate</th>
<th>Mobile telephony spend as % of GNI per capita</th>
<th>No. of people accessing online admin. services</th>
<th>Users of Digital Community Centers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2.2%</td>
<td>18%</td>
<td>30,000</td>
<td>20,000</td>
</tr>
<tr>
<td>2021</td>
<td>20%</td>
<td>30%</td>
<td>40,000</td>
<td>30,000</td>
</tr>
</tbody>
</table>

Outcomes

- Total cost: € 33.28m
- ADF € 16.65m
- EU € 16.65m

Outputs

- 1,050km of fiber optic
- 50 admin services online
- 20 community centers equipped
- 20 ICT trainers trained

Financing

- African Development Bank € 16.65m
- EU € 16.65m

Timeline

- Project Approval: 15 December 2017
- Start of civil works: 2018
- Project completion: 2020

Central Africa Backbone (CAB) project CAR Component

Cameroon

Congo

CAR

DRC

Equatorial Guinea

Gabon

Congo
Support Project for Implementation of ‘Digital Tunisia 2020’ National Strategic Plan

Jobs in ICT to triple and 100% of households to have online access to government services

Project Team Leader: **S. Omar Elmi – Senior ICT Engineer**

The project will create online access for all Tunisian households to government services, such as e-finance, e-justice, e-local government, etc., where currently only 18% have such access. It will result in the tripling of digital jobs in the country. The project will radically cut the regional disparities between urban and rural communities, and between the north and south of the country.

**OUTPUTS**

- **500** computerized / online govt. services
- **1,600** Admin. sites connected to govt. network

**OUTCOMES**

- **2014**
  - **0.63** UN scale 0 – 1
  - **0.64** Use of e-participation platforms by citizens UN DESA index 0 – 1
  - **18.2%** (2015) Access to online govt. services

- **2021**
  - **0.77** UN scale 0 – 1
  - **0.84** Use of e-participation platforms by citizens UN DESA index 0 – 1
  - **25,000** digital tech. jobs created p.a.
  - **100%** Access to online govt. services

**FINANCING**

- **AfDB Loan** € 71.56m
- **Government of Tunisia** € 63.4m

Total cost: **€ 134.96m**
The project will establish infrastructure priorities across the eight-country International Agency on Development region in north-east Africa. The priorities will have the aim of enhancing regional physical and economic integration and spur broad socio-economic development. The areas for planned improvement include transport, energy, transboundary water projects and ICT.

**IGAD Regional Infrastructure Master Plan**

Preparation of regional infrastructure priorities for IGAD countries

Project Team Leader: **Michera Johannes Chirwa** - Chief Infrastructure and PPP Specialist

The project will establish infrastructure priorities across the eight-country International Agency on Development region in north-east Africa. The priorities will have the aim of enhancing regional physical and economic integration and spur broad socio-economic development. The areas for planned improvement include transport, energy, transboundary water projects and ICT.

**FINANCING**

- **Government of Tunisia**
- **ADF (grant)**: UA 2.5m
- **IGAD**: UA 0.14m

**Total cost:** UA 2.65 m

**OUTPUTS**

- **Regional Infrastructure Masterplan and Financing Strategy**
- **Project Management and Capacity Building**

**2017**
- Project Approval
- 13 February

**2018**
- 2019
- Completion
- March

**2022**

**Project Team Leader:**
- Michera Johannes Chirwa - Chief Infrastructure and PPP Specialist

**Government of Tunisia**

**ADF (grant)**: UA 2.5m

**IGAD**: UA 0.14m

**Total cost:** UA 2.65 m
Increased international trade requires greater investment in port infrastructure.
The Bank has an active project portfolio for road projects across Africa totalling USD 8.1 billion.
Transport, Urban Development & ICT

Active Projects Portfolio

At the end of 2017, the portfolio of Bank projects in the Transport, Urban Development and ICT sectors included 116 operations, valued at USD 11.06 billion. The active portfolio is spread across 44 of the Bank’s regional member countries. It is estimated that more than 100 million people in total in these countries will benefit from better, cheaper and safer transport, improved urban services and ICT access as a result of these projects.

Projects approved in 2017 changed the balance of regional financing. East Africa remained the region with the highest share of the active portfolio at 34.6%, or USD 3.8 billion, compared with USD 3.1 billion in 2016. However, active projects in West Africa were valued at USD 3.1 billion, or 27.7%, compared with USD 2.8 billion in 2016. Active projects in North Africa were valued at USD 1.2 billion or 11%, compared with USD 2.1 billion in 2016. Southern Africa active projects totalled USD 1.3 billion or 11.6% of the portfolio, a small increase on the 2016 share of 1.3 billion.

2017 also saw a change in the balance of financing by sector. Road projects continue to dominate the overall portfolio but the value of total active projects as at 2017 fell to USD 8.15 billion, or 74%, compared with USD 8.5 billion in 2016. Rail projects fell in overall value to USD 480 million in 2017, against USD 521 million the year before.

In line with the Bank’s increased concentration on aviation, active air transport projects rose in value to USD 571.7 million in 2017, compared with USD 528 million in 2016.


ICT projects continued to grow. The active portfolio rose by 35% to USD 411 million in 2017 compared with USD 304 million for the previous year. This follows a percentage growth of 85% between 2015 and 2016. Both increases reflect the Bank’s ICT strategy to modernize the continent and provide electronic access to the people of Africa.
East Africa region accounts for highest share of active project portfolio at 34%
Multinational projects make up more than one-third of the Bank’s transport, urban development and ICT portfolio

More than USD 4 billion, or 37%, of the Bank’s transport, urban development and ICT projects in 2017 were multinational projects. This percentage demonstrates the Bank’s actions in promoting regional integration and improving coordination between regional member countries.

The active portfolio represents more than 16,000k of road – 40% more than the distance between Casablanca in extreme north of Africa and Cape Town on the continent’s southern tip. 100m people enjoy better, safer and cheaper mobility due to the Bank’s investments.

Speedier rail links will help integrate Africa with new access to the South Atlantic at Walvis Bay in Namibia and connect Dakar to its new airport. Safety of 70 airports across continent improved. Five terminals built or rehabilitated. Three terminals built or extended, more than quadrupling container capacity. New linkage to Namibia’s Walvis Bay to increase access to South Atlantic.

Urban improvements are making life better for 25m town-dwellers and that number will increase with the modernization of towns across Senegal. More than 4,000km of fiber optic cable laid down across Central Africa.

The active portfolio: 16,000km of road – 40% more than the distance between Casablanca in extreme north of Africa and Cape Town on the continent’s southern tip. 100m people enjoy better, safer and cheaper mobility due to the Bank’s investments.

Multinational vs National Projects by region:

- **Central Africa**: USD 537 million (Multinational = 250 million, National = 287 million)
- **East Africa**: USD 1.1 billion (Multinational = 432 million, National = 668 million)
- **North Africa**: USD 2.2 billion (Multinational = 829 million, National = 1.371 billion)
- **Southern Africa**: USD 348 million (Multinational = 223 million, National = 125 million)
- **West Africa**: USD 1.5 billion (Multinational = 629 million, National = 871 million)
The Infrastructure and Urban Development Department complemented its project portfolio with, analytical and advisory with knowledge-sharing activities aimed at building capacity and sustainability.

One cross-cutting subject area was transport and urbanization. In October 2017, the department hosted the Africa Transport Policy Program (SSAT) event in Abidjan. A conference organized by the department discussed the implementation of its Third Development Program, for effective transport and urbanization solutions.

In July, the Nordic Development Fund approved a €4 million grant for the Urban & Municipal Development Fund for Africa, a project preparatory fund to be established by the African Development Bank, which will aid understanding of how to plan climate-resilient urban development.

Another special area for attention was how to bring aviation and aviation infrastructure in Africa up to pace with other continents. In November, the Bank co-hosted a major aviation forum in Abuja, Nigeria, along with the Nigerian government, the African Union Commission and the New Partnership for Africa’s Development.

During 2017, the Infrastructure and Urban Development Department contributed to 2 major reports. On the subject of Africa’s growing urban emissions problem, the African Development Bank commissioned a consulting group to carry out a pilot project and report on “Transport Emission Mapping, Monitoring and Capacity Building in 5 Selected African Cities”. The cities were Abidjan (Côte d’Ivoire), Dar es Salaam (Tanzania), Lusaka (Zambia), Rabat (Morocco) and Yaoundé (Cameroon).

On the subject of urbanization in Africa, the department contributed to the fourth “State of African Cities” report, with UN-Habitat, the IHS-Erasmus University of Rotterdam and UK Aid.
Africa has the fastest rate of urbanization in the world. By 2050, half of the continent’s population will be living in cities. To avoid bottlenecks in mobility, supplies and services as cities swell, it is important to put transport policy at the forefront of urban planning. More and better transport crucial as Africa’s population continues to flock to cities.

This was one of the topics discussed at the SSATP held in Abidjan in October 2017, by staff from the Infrastructure, Cities and Urban Development Department with colleagues from other parts of the Bank and members of the Africa Transport Policy Program (SSATP).

The objectives of the gathering were to review the implementation of the Third Development Program (DP3) of the SSATP, discuss the status of current cooperation between SSATP and the Bank, and review future proposals for collaboration between the two.

The SSATP is an international partnership to facilitate policy development and related capacity building in the transport sector in Africa. It is a wide-ranging partnership of 41 African countries, eight regional economic communities, various public and private national and regional organizations, together with UNECA and AU/NEPAD, as well as financing partners including the AfDB and the World Bank.

The discussions revolved around the three pillars of the SSATP. Pillar A is Integration, Connectivity, and Cohesion, Pillar B is Urban Transport and Mobility, and Pillar C is Road Safety.

The discussions began with a plenary meeting, after which the delegates split up for parallel group meetings on each of the three pillars.

Delegates noted the usefulness of SSATP in getting quicker action on transport policies, particularly when it came to border policies, as the SSATP could get various stakeholders around the table. They also emphasized the importance of aviation in Africa’s transport policy, both at passengers and freight level.
In order to address Africa’s fast urbanization and its inherent challenges such as the proliferation of unplanned habitat, insufficient access to essential services, and growing insecurity and poverty, the Bank is establishing a thematic multi-donor trust fund, The Urban & Municipal Development Fund (UMDF), to be housed in the Infrastructure & Urban Development Department (PICU). The Fund will provide technical assistance and capacity building to cities and municipalities to support urban planning and governance, project preparation, with an initial focus on global priority areas such as resilience, mobility and energy efficiency.

In July 2017, the Nordic Development Fund (NDF) was the first donor to approve a grant of €4 million for the Fund.

The UMDF is the Bank's first multi-donor trust fund uniquely positioned to deal with urban development issues in Africa, and it will strengthen the Bank’s Urban Development Strategy.

Part of the NDF grant will be used to finance a two-year technical assistance consultancy to join the UMDF team at the Bank. One of its tasks will be to increase knowledge and understanding of Nordic solutions to urban planning and climate change.

The consultancy will provide an opportunity for the NDF to transfer knowledge and experiences from successful urban projects with partners in the Mekong Basin countries and Latin America.

Stefan Atchia, Transport & Policy Officer in the Bank’s Infrastructure and Urban Development Department, said: ‘The new Urban Development Division in the Bank will provide a platform for it to provide a holistic response to Africa’s growing urbanization and the emerging challenges related to development issues across the continent.’
State of African Cities Report focuses on foreign direct investment

A major report, ‘The State of African Cities 2018’, published by UN-Habitat, in partnership with the Bank and DFID, the UK’s Department for International Development, was prepared in 2017. The report presents numerous opportunities for investment and growth, for the attention of political stakeholders, and in particular for local governments.

An earlier 2008 report remarked that, in many respects, Africa was not ready for rapidly advancing urban growth. The 2010 edition examined the mushrooming urban informal settlements in various cities. The 2014 edition emphasized that African urbanization should foster an altogether new ‘African urbanism’.

This fourth report in the series parallels the Addis Ababa Action Plan by looking at how Africa can consider financing its development strategy through foreign direct investment in African cities.

It argues that African nations should search for the best trajectories for their own development. This should take into account their country and city specific locational advantages and disadvantages in attracting more and more equitable investments from public and private sources.

Tackling Africa’s growing urban emissions problem

Africa has the highest urbanization rate in the world. As a result, its cities face various challenges. One of these is significant growth in emissions from transportation due to a rapid increase in vehicle numbers coupled with low institutional capacity to manage traffic and its impacts.

Accordingly, the African Development Bank commissioned a consulting group to carry out a pilot project and report on “Transport Emission Mapping, Monitoring and Capacity Building in 5 Selected African Cities”. The cities were Abidjan (Côte d’Ivoire), Dar es Salaam (Tanzania), Lusaka (Zambia), Rabat (Morocco) and Yaoundé (Cameroon).

The overall objective of the study was to develop a system for African cities to produce accurate transport emissions maps and to build capacity in traffic emissions mapping and monitoring. The task was undertaken with a view to rolling out the system to the entire continent.
About Infrastructure and Urban Development Department

The Infrastructure and Urban Development Department leads the AfDB’s work in supporting the Bank’s Regional Member Countries in developing their national transportation systems, cities and urban centers. The department formulates policies and strategies for appropriate interventions, which the Bank might finance on a regional, national or continental basis. It also provides policy advice to advance sector reforms and private sector participation and ensure that best practices are mainstreamed in sector policy, planning, programming, institutional governance, and maintenance and operation.

The department is organized into four divisions – Transport & Logistics, Urban Development, Infrastructure Partnerships, and Transport NSO (Non-Sovereign Operations) Divisions.
32 Infrastructure & Transport Specialists
based in AfDB Regional Centers and Field Offices
## In Abidjan

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
<th>EMAIL</th>
<th>DIVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PICU 0 DIRECTORATE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUMAROU Amadou</td>
<td>Director</td>
<td><a href="mailto:A.OUMAROU@AFDB.ORG">A.OUMAROU@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>KABANGUKA Jean Kizito</td>
<td>Lead Advisor / OIC PICU 1</td>
<td><a href="mailto:J.KABANGUKA@AFDB.ORG">J.KABANGUKA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>KALALA Jean-Pierre</td>
<td>Infrastructure Socio-Economist</td>
<td><a href="mailto:J.KALALA@AFDB.ORG">J.KALALA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>MALANDA Barthelemny</td>
<td>Business Analyst</td>
<td><a href="mailto:B.MALANDA@AFDB.ORG">B.MALANDA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>OUATTARA-COULIBALY Yéné</td>
<td>Team Assistant</td>
<td><a href="mailto:Y.OUATTARA-COULIBALY@AFDB.ORG">Y.OUATTARA-COULIBALY@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>N’GUESSAN Aya Blonde</td>
<td>Team Assistant</td>
<td>A.N’<a href="mailto:GUESSAN@AFDB.ORG">GUESSAN@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>BEZABEH Girma</td>
<td>Road Safety Specialist</td>
<td><a href="mailto:G.BEZABEH@AFDB.ORG">G.BEZABEH@AFDB.ORG</a></td>
<td><strong>PICU 1 TRANSPORT AND LOGISTICS DIVISION</strong></td>
</tr>
<tr>
<td>EKOTO Romain</td>
<td>Chief Aviation and Air Transport Officer</td>
<td><a href="mailto:R.EKOTO@AFDB.ORG">R.EKOTO@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>EREMUTHA Mena</td>
<td>Young Professional</td>
<td><a href="mailto:M.EREMUTHA@AFDB.ORG">M.EREMUTHA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>RUGUMIRE Patrick</td>
<td>Principal Transport Engineer</td>
<td>P. <a href="mailto:RUGUMIRE@AFDB.ORG">RUGUMIRE@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>EHOUMAN Lydie</td>
<td>Transport Economist</td>
<td><a href="mailto:L.EHOUMAN@AFDB.ORG">L.EHOUMAN@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>ATCHIA Stefan</td>
<td>Transport Policy &amp; Planning Officer</td>
<td><a href="mailto:S.ATCHIA@AFDB.ORG">S.ATCHIA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>FLATTAU Victoria</td>
<td>Young Professional</td>
<td><a href="mailto:V.FLATTAU@AFDB.ORG">V.FLATTAU@AFDB.ORG</a></td>
<td><strong>PICU 2 URBAN DEVELOPMENT DIVISION</strong></td>
</tr>
<tr>
<td>SIMUYEMBA Sherm</td>
<td>Coordinator - NEPAD IPPF</td>
<td><a href="mailto:S.SIMUYEMBA@AFDB.ORG">S.SIMUYEMBA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>CODO Pamphile</td>
<td>Principal Transport Expert</td>
<td><a href="mailto:P.CODO@AFDB.ORG">P.CODO@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>CHIRWA Mtchera Johannes</td>
<td>Chief PPP Infrastructure Specialist</td>
<td><a href="mailto:M.CHIRWA@AFDB.ORG">M.CHIRWA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>CARVALHO DE MELO Epifanio</td>
<td>Energy Specialist</td>
<td>E.CARVALHO @DE <a href="mailto:MELO@AFDB.ORG">MELO@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>NEZA Guillaume</td>
<td>Young Professional</td>
<td><a href="mailto:G.NEZA@AFDB.ORG">G.NEZA@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>OKERO Janet</td>
<td>Program Officer</td>
<td><a href="mailto:J.OKERO@AFDB.ORG">J.OKERO@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>ANON KOUADIO Annta Claire</td>
<td>Team Assistant</td>
<td><a href="mailto:A.ANON@AFDB.ORG">A.ANON@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>NJOCK OUKOUOMI Judith Laure</td>
<td>Operations Assistant</td>
<td><a href="mailto:J.NJOCKOUKOUOMI@AFDB.ORG">J.NJOCKOUKOUOMI@AFDB.ORG</a></td>
<td><strong>PICU 3 INFRASTRUCTURE AND PARTNERSHIP DIVISION</strong></td>
</tr>
<tr>
<td>ADERIBIGBE Promise Bolutife</td>
<td>Operations Assistant IPPF</td>
<td><a href="mailto:P.ADERIBIGBE@AFDB.ORG">P.ADERIBIGBE@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>KOUADJO Essui Viviane</td>
<td>Senior Administrative Assistant ICA</td>
<td><a href="mailto:E.KOUADJO@AFDB.ORG">E.KOUADJO@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>TOURE Ismael Beidari</td>
<td>Principal Investment Officer OIC PICU 4</td>
<td><a href="mailto:I.TOURE@AFDB.ORG">I.TOURE@AFDB.ORG</a></td>
<td><strong>PICU 4 TRANSPORT NON-SOVEREIGN DIVISION</strong></td>
</tr>
<tr>
<td>WILSON Géraldine</td>
<td>Investment Assistant</td>
<td><a href="mailto:G.WILSON@AFDB.ORG">G.WILSON@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>KIM Yeon-Su</td>
<td>Senior Investment Officer</td>
<td><a href="mailto:Y.S.KIM@AFDB.ORG">Y.S.KIM@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>SHUNDO Kenji</td>
<td>Senior Investment Officer</td>
<td><a href="mailto:K.SHUNDO@AFDB.ORG">K.SHUNDO@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>ABEDIER Charles Wilfried</td>
<td>Young Professional</td>
<td><a href="mailto:C.ABEDIER@AFDB.ORG">C.ABEDIER@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>El Gazzar, Ahmed</td>
<td>Senior Investment Officer</td>
<td><a href="mailto:A.ELGAZZAR@AFDB.ORG">A.ELGAZZAR@AFDB.ORG</a></td>
<td></td>
</tr>
<tr>
<td>BALDERRAMA Fernando</td>
<td>Senior Investment Officer</td>
<td><a href="mailto:F.BALDERRAMA@AFDB.ORG">F.BALDERRAMA@AFDB.ORG</a></td>
<td></td>
</tr>
</tbody>
</table>
## In Regional and Country Offices

<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
<th>REGIONAL CENTERS AND COUNTRY OFFICES</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGUMA Jermy Bassy</td>
<td>Principal Transport Economist</td>
<td>RDGE/Kenya</td>
<td><a href="mailto:J.AGUMA@AFDB.ORG">J.AGUMA@AFDB.ORG</a></td>
</tr>
<tr>
<td>AKYEAL Sheila Enyonam</td>
<td>Senior Transport Infrastructure Engineer</td>
<td>COGH/Ghana</td>
<td><a href="mailto:S.AKYEA@AFDB.ORG">S.AKYEA@AFDB.ORG</a></td>
</tr>
<tr>
<td>BIZONGO Désire Anatole</td>
<td>Infrastructure Expert</td>
<td>COCD/RDC</td>
<td><a href="mailto:D.BIZONGO@AFDB.ORG">D.BIZONGO@AFDB.ORG</a></td>
</tr>
<tr>
<td>BOCKARIE Abu Sandy</td>
<td>Senior Transport Infrastructure Engineer</td>
<td>COSL/Sierra Leone</td>
<td><a href="mailto:A.BOCKARIE@AFDB.ORG">A.BOCKARIE@AFDB.ORG</a></td>
</tr>
<tr>
<td>EDJODJOM’ONDO Jean Félix</td>
<td>Transport Specialist</td>
<td>COGA/Gabon</td>
<td><a href="mailto:J.EDJODJOMONDO@AFDB.ORG">J.EDJODJOMONDO@AFDB.ORG</a></td>
</tr>
<tr>
<td>GARBADO Erino Gunther</td>
<td>Infrastructure Specialist</td>
<td>COET/Ethiopia</td>
<td><a href="mailto:E.GARBADO@AFDB.ORG">E.GARBADO@AFDB.ORG</a></td>
</tr>
<tr>
<td>ISOOBA Daniel Mukunya</td>
<td>Infrastructure Specialist</td>
<td>RDGS/Pretoria</td>
<td><a href="mailto:D.ISOOBA@AFDB.ORG">D.ISOOBA@AFDB.ORG</a></td>
</tr>
<tr>
<td>KATALA Jumbe Naligia</td>
<td>Senior Transport Engineer</td>
<td>RDGE/Kenya</td>
<td><a href="mailto:J.KATALA@AFDB.ORG">J.KATALA@AFDB.ORG</a></td>
</tr>
<tr>
<td>MABOMBO Joao David</td>
<td>Infrastructure Specialist</td>
<td>COMZ/Mozambique</td>
<td><a href="mailto:J.MABOMBO@AFDB.ORG">J.MABOMBO@AFDB.ORG</a></td>
</tr>
<tr>
<td>MAKAJUMA Adongo George</td>
<td>Infrastructure Specialist</td>
<td>RDGE/Kenya</td>
<td><a href="mailto:g.a.makajuma@afdb.org">g.a.makajuma@afdb.org</a></td>
</tr>
<tr>
<td>MAKASA Davies Bwalya</td>
<td>Principal Transport Engineer</td>
<td>COMW/Malawi</td>
<td><a href="mailto:D.MAKASA@AFDB.ORG">D.MAKASA@AFDB.ORG</a></td>
</tr>
<tr>
<td>MALINGA Richard</td>
<td>Senior Transport Engineer</td>
<td>RDGS/Pretoria</td>
<td><a href="mailto:R.MALINGA@AFDB.ORG">R.MALINGA@AFDB.ORG</a></td>
</tr>
<tr>
<td>MOHAMED Ali Ismael</td>
<td>Principal Transport Economist</td>
<td>COMA/Morocco</td>
<td><a href="mailto:A.MOHAMED@afdb.org">A.MOHAMED@afdb.org</a></td>
</tr>
<tr>
<td>MORE NDONG Pierre-Simon</td>
<td>Principal Transport Engineer</td>
<td>COCM/Cameroon</td>
<td><a href="mailto:P.MORENDONG@afdb.org">P.MORENDONG@afdb.org</a></td>
</tr>
<tr>
<td>MUNYARUYENZI Philippe</td>
<td>Infrastructure Specialist</td>
<td>CORW/Rwanda</td>
<td><a href="mailto:P.MUNYARUYENZI@AFDB.ORG">P.MUNYARUYENZI@AFDB.ORG</a></td>
</tr>
<tr>
<td>MUSA Patrick Tamba</td>
<td>Senior Transport Engineer</td>
<td>RDNG/Nigeria</td>
<td><a href="mailto:P.MUSA@AFDB.ORG">P.MUSA@AFDB.ORG</a></td>
</tr>
<tr>
<td>MWILA Aaron</td>
<td>Principal Transport Engineer</td>
<td>RDGS/Pretoria</td>
<td><a href="mailto:A.MWILA@AFDB.ORG">A.MWILA@AFDB.ORG</a></td>
</tr>
<tr>
<td>NDIAYE DIOP Maimounatou</td>
<td>Senior Transport Engineer</td>
<td>COTG/Togo</td>
<td><a href="mailto:M.NDIAYE-DIOP@AFDB.ORG">M.NDIAYE-DIOP@AFDB.ORG</a></td>
</tr>
<tr>
<td>NDIKUMWAMI John</td>
<td>Senior Transport Engineer</td>
<td>COBI/Burundi</td>
<td><a href="mailto:J.NDIKUMWAMI@AFDB.ORG">J.NDIKUMWAMI@AFDB.ORG</a></td>
</tr>
<tr>
<td>N’GUESSAN KOUASSI Joseph</td>
<td>Chief Transport Engineer</td>
<td>RDGN/Tunis</td>
<td><a href="mailto:J.NGUESSAN@AFDB.ORG">J.NGUESSAN@AFDB.ORG</a></td>
</tr>
<tr>
<td>NYIRUBUTAMA Jean-Jacques</td>
<td>Chief Transport Economist</td>
<td>RDGS/Pretoria</td>
<td><a href="mailto:J.NYIRUBUTAMA@AFDB.ORG">J.NYIRUBUTAMA@AFDB.ORG</a></td>
</tr>
<tr>
<td>TAMBAH Prince Desea</td>
<td>Senior Transport Infrastructure Engineer</td>
<td>COLR/Liberia</td>
<td><a href="mailto:P.TAMBAH@AFDB.ORG">P.TAMBAH@AFDB.ORG</a></td>
</tr>
<tr>
<td>TANDINA Abdoulaye</td>
<td>Infrastructure Expert</td>
<td>COML/Mali</td>
<td><a href="mailto:A.TANDINA@AFDB.ORG">A.TANDINA@AFDB.ORG</a></td>
</tr>
<tr>
<td>TESSEMA Zerfa</td>
<td>Chief Transport Engineer</td>
<td>RDGE/Kenya</td>
<td><a href="mailto:Z.TESSEMA@AFDB.ORG">Z.TESSEMA@AFDB.ORG</a></td>
</tr>
<tr>
<td>WADDA Mam-Tut</td>
<td>Principal Transport Engineer</td>
<td>COGH/Ghana</td>
<td><a href="mailto:M.WADDA@AFDB.ORG">M.WADDA@AFDB.ORG</a></td>
</tr>
<tr>
<td>WADE Mohamed El Abass</td>
<td>Transport Infrastructure Specialist</td>
<td>COSN/Senegal</td>
<td><a href="mailto:M.A.WADE@AFDB.ORG">M.A.WADE@AFDB.ORG</a></td>
</tr>
<tr>
<td>WA-KYENDO Mumina</td>
<td>Chief Transport Engineer</td>
<td>RDGE/Kenya</td>
<td><a href="mailto:M.WA-KYENDO@afdb.org">M.WA-KYENDO@afdb.org</a></td>
</tr>
<tr>
<td>YOUGBARE Barnabe</td>
<td>Infrastructure Specialist</td>
<td>COBF/Burkina Faso</td>
<td><a href="mailto:B.YOUBARE@AFDB.ORG">B.YOUBARE@AFDB.ORG</a></td>
</tr>
</tbody>
</table>
Infrastructure and Urban Development Department
African Development Bank
CCIA Building
Avenue Jean-Paul II
01 BP 1387 Abidjan 01, Côte d’Ivoire
www.afdb.org