Facilitating long-term development in AFRICA
Africa, the world's second-most populous continent, is home to more than 1.1 billion people. The continent's population is projected to reach 2.4 billion by the year 2050. It is also the world's youngest continent, with more than 50 percent of its inhabitants under the age of 20. Given these facts, there is tremendous potential for social and economic development in Africa in the coming years.

The U.S. government, the World Bank, and numerous other public and private organizations recently pledged to invest a combined $33 billion toward Africa's long-term social and economic development. These investments are largely aimed at improving the continent's transportation, water and energy infrastructure.

Louis Berger has had a presence in Africa for more than 50 years and has worked on projects in every country on the African mainland. Since the firm's first assignment in Africa in 1961 — the design and construction of the 210-kilometer Calabar–Ikom Road in Nigeria — Louis Berger has remained committed to its social and economic well-being, undertaking a variety of infrastructure, environmental, institutional and social development projects throughout the continent.

With more than 70 current projects underway in Africa, Louis Berger is actively working to promote growth continent-wide. The firm is presently working in countries such as the Republic of Congo, Gabon, Ghana, Guinea, Niger, Nigeria, Rwanda, Togo, Uganda and many others. The company's solutions range from complex projects, such as managing the design and construction of a new seaport in Nigeria, to simple improvements, like handing out chlorine tablets near rivers in South Sudan to stem an outbreak of cholera.

Africans make up 75 percent of Louis Berger's corps of experts and project staff across the region. There are also 20 Louis Berger offices in operation throughout Africa, in Angola, Benin, Burkina Faso, Cameroon, Chad, the Democratic Republic of the Congo, Guinea-Bissau, Ivory Coast, Kenya, Madagascar, Mali, Mauritania, Mauritius, Mozambique and Senegal. The large presence of Louis Berger staff in Africa, combined with the substantial number of exemplary projects the firm has completed throughout the continent, is indicative of the firm's long-term commitment to this increasingly important region of the world.

In this issue of BergerWorld, we highlight some of the firm's signature projects in sub-Saharan Africa.
WATER AND WASTEWATER DEVELOPMENT  Water is the most precious resource on earth. Louis Berger has been increasing access to clean water in Africa for four decades in 40-plus countries. Recently, the firm has undertaken water and wastewater assignments in the Democratic Republic of the Congo (DRC), Mozambique, South Sudan, Cameroon and Ghana.

Clean water
Managing natural resources

Increasing access to potable water and adequate sanitation is paramount to improving people’s quality of life.
The DRC is one of Africa’s most water-rich countries, holding more than half of the water reserves of the entire continent in the Congo River. Despite this abundant supply of water, the United Nations estimates that fewer than 25 percent of the country’s 75 million inhabitants have access to clean drinking water, while only 9 percent have access to adequate sanitation systems.

Louis Berger, in joint venture with Tunisian firm SCET Tunisie, was selected by the Project Implementation Cell of the Project for Water Supply and Sanitation in Semi-Urban Areas to assist in bringing clean water to three towns in the DRC — Kasangula, Lisala and Tshikapa.

The project involved evaluating the DRC’s National Program for Water Supply and Sanitation, providing institutional development support to the various agencies involved with water delivery, and managing the rehabilitation and extension of water supply infrastructure. In addition, the project has laid the institutional foundation for increasing water supply in other semi-urban areas in the DRC.

Mozambique, a nation located on the southeastern coast of Africa, suffered through nearly three decades of conflict between 1964 and 1992. This period had a major impact on the condition of the nation’s water supply and sanitation systems. As a result, the country currently has one of the lowest per-capita water consumption rates in the world.

For more than a decade, Louis Berger has completed a variety of assignments aimed at increasing access to clean water and sanitation in Mozambique. The firm’s tasks have ranged from providing technical assistance under the First National Water Sector Development program in Mozambique’s five largest cities to preparing designs and supervising construction of irrigation and drainage systems at the Massingir Dam in Gaza province.

More recently, Louis Berger initiated water supply and sanitation projects in Maputo, Mozambique’s capital, and Beira, its second-largest city, serving a combined population of more than 2 million people. One assignment in Maputo resulted in nearly doubling access in its semi-urban areas.

Currently, the firm is providing design and construction supervision services for sanitation projects in Pemba, Nampula and Quelimane, three of the country’s provincial capitals.

Louis Berger’s commitment to increasing water supply and sanitation in Mozambique, the DRC and across Africa has the potential to vastly improve public health, facilitate economic growth and assist in meeting regional and national developmental goals.

The teams include (DRC) Youssef Cherif, deputy coordinator; Patrice Kaiser, administrative and financial management expert; Luis de Macedo, international procurement expert; Mohamed Ben Aed, regional procurement expert; and Berouba Guisse, environment expert; (First National Water Sector Development program) Luis de Macedo, program manager; Damiao Fernandes, financial manager; Zaida Cabral, human resources manager; Araujo Martins, procurement manager; Amaka Godfrey, social manager; and Edmundo Almeida, Abdul Ismail and Pedro Timba, regional professionals; (Massingir Dam) Pierre Le Norcy, project director; Vicente Miranda, resident engineer; and Maria Joao, inspector of works; (Beira) Duarte Torrao, team leader; David Rowe, sanitation engineer; Nelson Figueiredo, water treatment engineer; and Roland Brower, environmentalist; (Maputo) David James Buzzacott, team leader; John McLean, electrical engineer; Nathalie Bockel, environmental engineer; Cornelis Piket, mechanical engineer; and Bruno Rodrigues, project coordinator; (Pemba, Nampula and Quelimane) Grazianno Giovannello and Said Allauoi, project managers; Duarte Torrao and Bodo Goppert, resident engineers; Djamel Bauzane, Roland Hinderyckx and David Rowe, deputy resident engineers; James Woolery, mechanical and electrical engineer; Bjorn Brandberg, urban sanitation engineer; Juan Gstrada, finance expert; Alice Silva, resettlement expert; and Nathalie Bockel, public participation specialist.

PROFILE

David Buzzacott

David Buzzacott is a resident engineer and team leader in Louis Berger’s water and wastewater practice. He has more than 35 years of experience in engineering and project management for water supply and sanitation projects in Europe, Asia and Africa and is a member of the Institution of Civil Engineers, the Chartered Institution of Water and Environmental Management, and the Federation of Water Environmental Management.

In 1976, David graduated with honors with a bachelor’s degree in civil and structural engineering from London University and went on to receive his master’s in public health engineering from Newcastle University in the United Kingdom. Prior to joining Louis Berger, David worked for Babtie Group and Jacobs, where he worked on numerous water and sewer projects in the U.K., Romania, Turkey, Italy, Indonesia and the Czech Republic.

Since joining Louis Berger in 2010, David has worked on some of the firm’s most important water projects. In one of his first assignments, David served as resident engineer on a project to rehabilitate and modernize water supply and sewerage systems in Vrancea County in Romania. As team leader on Louis Berger’s recent water and sanitation projects in Africa, including Maputo, Pemba, Nampula and Quelimane in Mozambique, David is responsible for direct management of project teams throughout all phases of project delivery.

When not on the job in Africa, David resides in Yorkshire, England. In his spare time, he enjoys the outdoors, particularly walking in the Highlands of Scotland, and listening to opera.
AGRICULTURAL DEVELOPMENT In addition to ensuring proper health, clean water is essential to agriculture. Agricultural production is a major contributor to the economies of many African nations, employing nearly two-thirds of the continent’s labor force — even though more than 60 percent of its land area consists of drylands or deserts. It also enhances food security and provides Africa with valuable goods for trade.

Louis Berger has participated in agricultural development programs across Africa for decades. The company’s duties have involved providing engineering and construction management services for the development of agricultural systems; conducting stakeholder surveys, as well as economic and operational analyses for crop production; and supplying institutional support to relevant government agencies and nongovernmental organizations.

In Senegal, Louis Berger worked with the Ministry of Agriculture and Hydraulics to rehabilitate 1,700 hectares of irrigated land in Bakel, an important agricultural region of the country. The firm provided scientific and engineering services to the ministry for the construction or rehabilitation of pumping stations and irrigation systems in Moudaeri Diawara and Collengal, as well as associated roads, buildings and levees in the area.

In Mali, Louis Berger supported the government’s Rice Initiative, which aimed to stabilize food prices and increase food self-sufficiency in the country. The objective of the project included irrigating 100,000 hectares of land in the Segou region. The firm conducted topographic, hydrologic and hydraulic surveys; prepared preliminary and detailed designs; and developed tender documents for numerous irrigation systems to divert water from the Niger River to arable land.

Louis Berger was also contracted to provide economic and financial assessments for additional development programs in the region. This involved preparing projections for future water use and analyzing supply and demand for rice, both regionally and nationally.

The project will significantly increase the production of rice in Mali, where nearly half of the nation’s supply of the heavily consumed grain is currently imported.
During the 1990s, Ivory Coast experienced significant rural–urban migration, as young people in rural areas sought greater economic opportunities. In response, Louis Berger provided assistance to the Ivorian Ministry of Agriculture and Animal Resources to improve the quality of life in the nation’s rural areas.

The primary goal of this project was to increase the productivity of agriculture while also addressing non-agricultural factors such as small enterprise development and education improvement. The firm provided recommendations for numerous government programs aimed at making the agriculture sector more economically viable and encouraging the existing rural population to seek employment in food production.

In Madagascar, Louis Berger provided assistance to the nation’s Directorate General for Technical Activities for the Mandrare Upper Basin Development project.

Located in the Indian Ocean, Madagascar is the largest island in Africa. During the past two decades, extreme cycles of droughts, cyclones and floods have jeopardized the nation’s food security and adversely impacted the production of rice, the nation’s primary food crop.

The agricultural improvements implemented under the Mandrare Upper Basin Development project allowed farmers in the formerly arid area to grow enough rice to support the region’s food needs and to export up to 25,000 metric tons of rice annually to other parts of the country.

The teams include (Senegal) Joel Carn, team leader; Christian Grosse, works superintendent; Josef Pieters, electromechanical engineer; and Daouda Sow, hydrologist; (Mali) Cyrille Morgoulis and Michel Jolivalt, team leaders; and Emile Besson Rasolondraibe, food-processing industry expert; (Ivory Coast) Pierre Santoni, director; Jacques Guillaumaud, agricultural economist; Michel Custers, rural engineering specialist; Henrielle Esso Essis and Catherine Gislerd, planners; Jean-Noel Perrin, credit expert; and Paul Legast, home office support; (Madagascar) Allam Boualem, controller.
Proper management of natural resources is necessary to ensure quality of life for both present and future generations. Especially in developing countries, economic goals must be balanced with environmental sustainability.

One of Louis Berger’s core competencies is helping government and private sector clients manage the environmental aspects of projects while achieving desired economic goals.

Niger has suffered extreme deforestation since the 1970s, when droughts caused farmers to seek more fertile lands and loggers saw the opportunity to sell forest products as timber for construction and fuel.

Louis Berger, in joint venture with Cirad-Foret, provided technical assistance to Niger’s Ministry of Hydraulics and Environment to support its Natural Forest Development Project. The project aimed to manage the use of Niger’s forests by limiting the consumption of forest products and establishing markets for timber trade.

The team’s duties included conducting legal, land-use and economic studies for sustainable forestry development, as well as assisting in the establishment of local management structures in a number of villages throughout Niger.

The completed Natural Forest Development Project created 110 rural markets covering 220,000 hectares of managed forest.

Namibia’s mining industry accounts for more than 11 percent of its gross domestic product, with the extraction of diamonds, uranium and zinc ranking among the world’s highest.

Klohn Crippen Berger was recently commissioned to provide support for B2Gold’s Otjikoto Gold Mine project, located 300 kilometers north of Windhoek, Namibia’s capital. The objective of the project is to increase the country’s gold production.

The company provided independent design reviews for facilities to store tailings, the leftover waste material generated after minerals have been extracted. Klohn Crippen Berger reviewed the designs for regulatory compliance using the firm’s extensive experience on similar projects and industry best practices.

When production begins in 2015, the mine is expected to extract 112,000 ounces of gold per year over its life, storing its waste in the daywall-type tailings facility.
The Tasiast Project in Mauritania is one of Klohn Crippen Berger’s longest-running mining projects in Africa. Kinross Gold Corporation is developing Tasiast, located 300 kilometers north of Mauritania’s capital of Nouakchott in the Sahara Desert. Tasiast is the first gold mine in an under-explored and highly prospective greenstone belt.

Kinross selected Klohn Crippen Berger to provide engineering design and construction support services for the mine’s tailings storage facilities. The firm designed an 800-meter-by-800-meter facility that is fully lined with high-density polyethylene to prevent seepage. The company also provided construction quality assurance services and oversaw the commissioning of the facility in 2012.

Additionally, Klohn Crippen Berger developed feasibility designs for the potential tailings storage facility for the expansion of the Tasiast Mine and undertook geotechnical investigations and assessments associated with the proposed plant site foundations and infrastructure, including access roads, airstrip, port upgrades and water supply pipelines.

In addition to providing environmental and infrastructure support to mining projects, Louis Berger has unique qualifications in developing resettlement plans for populations affected by the mining industry.

In southeastern Guinea, the firm is providing planning, engineering and design services associated with the Simandou Iron Ore project for Fluor Corporation and Rio Tinto. Simandou has been called the largest integrated mine and infrastructure project in Africa’s history, with rail lines, a maritime port and villages to be built in addition to the open pit mine.

Louis Berger is preparing designs for the construction of housing, community buildings, water supply and sanitation systems, and access roads for resettled populations and mine workers.

Upon completion, the mine is expected to employ more than 4,000 people, many of whom will live in villages that Louis Berger designed.

The teams include (Niger) Hassan Kamil, range management expert; Ismael Toure, energy expert; Jacques Mercroiret, training expert; Joseph Sabet, forestry expert; Jean-Philippe Jorez, improved wood stoads expert; Jean-Claude Camillet, microfinancing expert; Claude Louis, wildlife and biodiversity expert; Margaret Hammer, sociologist; and Claudine Serre-Duhem, planner; (Namibia) Lawrence Clelland, project manager; and Howard Plewes, senior reviewer; (Mauritania) Lawrence Clelland, project manager and lead tailings engineer; Al Morrison, senior reviewer; Alan Poon and Ernesto Ruiz, design engineers; Carole Therrien, draftsperson; Fabien Rasselet, senior QA field engineer and manager; Rob Cross, senior QA field engineer; and Andrew Brooks, Alan Chou, Eliphanos Mayo and Kenneth Mulhall, QA field engineers; (Guinea) Florian Subey, civil engineer; Anne Hernandez, environmentalist; Jean-Baptiste Montaignies, GIS expert; Serge Nard, civil construction support; Thimothee Dierrickx and Julien Prachay, junior engineers; Marie-Yvonne Curtis, community relationships; Mohamed Magassouba, office manager; Angela Maricet, contract administrator; Helena Centofanti, HR assistant; Ingrid Lutumba, document controller; Jacky Lefevre, local buyer; Corinne Hakmoun and Joanne Nestor, administrative assistants; Ed Creegan, HSE coordinator; Marc Jobik, logistics air transport; and Didi Traore, drivers coordinator.
Connecting people

A modern transportation network — one composed of highways, railways, waterways and other modes — is vital to a nation’s well-being. Sufficient transportation infrastructure is essential to transporting people, animals and goods, facilitating economic development, and improving the quality of life.
Building South Sudan’s First Paved Highway

South Sudan, a landlocked nation located in Northeastern Africa, is the world’s newest country. Prior to gaining its independence from the Republic of Sudan in the summer of 2011, the region had experienced decades of political and military turmoil. As a result, the nation’s infrastructure was in poor condition, having suffered from years of underinvestment.

In an effort to improve South Sudan’s most critical infrastructure and facilitate trade with its neighboring countries and the rest of the world, the U.S. Agency for International Development (USAID) initiated the Sudan Infrastructure Services Program (SISP). Louis Berger was retained to complete a series of task orders under the program aimed at rehabilitating infrastructure and capacity building.

The team included Andy Bailey, principal in charge; Martin Steinson, deputy program manager; Tricia Graves, senior contracts manager; Mohammed Foz, administration/finance manager; Ana Vidal, staffing specialist; Kent Lande, quality assurance manager; Duraid Ahjil, controls manager; Matthew Harder, engineer; Sonia Moldovan and Eric Engelma, monitoring/evaluation specialists; Santi Duewel, community participation specialist; and Deborah Birch, communications manager.

Improving Transportation Infrastructure

The 192-kilometer Juba–Nimule Road is South Sudan’s most important highway. It links Juba, the country’s capital, with the border town of Nimule, located to the southeast, and serves as the nation’s primary trade corridor, accommodating goods to and from Uganda and Kenya’s Port of Mombassa.

Following years of neglect, the Juba–Nimule Road required major improvements. Louis Berger was responsible for preparing designs and managing the reconstruction of the vital highway. The team’s duties included performing engineering, economic, social and environmental assessments; managing the demining of a 26-meter-wide corridor; conducting land surveys and geotechnical investigations of the road’s alignment; and preparing plans and specifications for the procurement of goods and services. Additionally, Louis Berger developed and implemented an award-winning safety program for the project, which involved educating children, motorists, truck drivers and traffic police on road safety and safe driving.

The capacity-building component of the assignment included providing technical, management and business training for local contractors on road improvement and maintenance. Louis Berger also provided policy, planning, procurement and asset management assistance to the South Sudanese Ministry of Transport and Roads, the Southern Sudan Road Agency and various state ministries of physical infrastructure.

Inaugurated on September 12, 2012, the reconstructed Juba–Nimule Road became the nation’s first paved highway. The pavement has made the corridor more efficient and easier to maintain than the previous dirt corridor and has enabled access to the country’s main trade routes in all seasons. The strengthened road, which features eight modern bridges, is also capable of supporting heavy truck loads.

Since its inauguration, the Juba–Nimule Road has made a positive economic impact on the country, boosting trade and lowering the transport cost of goods. South Sudan has also seen its annual inflation rate decrease from more than 40 percent to less than 10 percent.

Mauro Donatelli

Mauro Donatelli is Louis Berger’s regional director for the Indian Ocean and Southern Africa region. In this capacity, he leads business development and project management throughout the region, providing administrative, financial and technical oversight on Louis Berger’s most critical projects in the area. He has more than 30 years of experience managing highway, bridge and rail projects throughout Africa.

Mauro earned a technical engineer degree from the Technical Institute A. De Nino in Italy in 1977 and an engineering degree from the Polytechnic School of Milan in 2003. He is a fellow of the Chartered Institute of Building. Prior to joining Louis Berger, he had two decades of experience with Italian engineering and construction firm ASTALDI working in Rwanda, Senegal, Guinea-Bissau, Somalia, Uganda and Angola.

Since joining Louis Berger in 2008, Mauro has worked on several significant projects in Southern Africa, including managing the rehabilitation of National Highways 12, 13, 25 and 45 in Madagascar and providing oversight for Louis Berger’s extensive activities in Mozambique. He has also provided planning and financial management for projects in Angola, Mauritius, Reunion and Comoros.

Mauro resides in Antananarivo, Madagascar, with his family. In his spare time, he enjoys music, travel and African arts. He is engaged in a variety of humanitarian and volunteer activities.
Strengthening the Northern Corridor

Africa’s Northern Corridor is a major multimodal transportation route serving the countries of Kenya, Uganda, South Sudan, Rwanda, Burundi and the Democratic Republic of the Congo (DRC). It spans from the Indian Ocean in Mombasa, Kenya, to the Atlantic Ocean at the Banana Port in the DRC.

The corridor — composed of a road network, railways, waterways and an oil pipeline — is the busiest route in East and Central Africa. It handles approximately 16 million tons of import/export cargo annually as well as an additional 3 million tons of intraregional trade.

To ensure that the Northern Corridor maintains its vital role in the socioeconomic development of the region, Louis Berger, in collaboration with Bearing Point Inc., assisted in the creation of a comprehensive infrastructure master plan.

Addressing urban transportation needs

Due to rapid population growth, numerous large sub-Saharan cities are experiencing unplanned urban sprawl. This has adversely impacted the region’s transportation sector, leading to increased vehicular traffic and travel times.

In recent years, Louis Berger has prepared plans to address urban transport needs in a number of locations in sub-Saharan Africa.

In Antananarivo, the political, administrative and economic center of Madagascar, Louis Berger prepared an urban transport plan to alleviate traffic congestion, increase access to and from the region’s rice paddies, and mitigate environmental impacts from vehicle emissions.

To address urban transport needs in Douala, Cameroon, Louis Berger prepared plans to develop the city’s bus rapid transit system, train its local highway authorities, develop primary urban roads, and enhance traffic and parking management in the downtown area.

In Yaounde, Cameroon’s capital city, Louis Berger implemented an urban transport plan aimed at relaunching the region’s public transportation program and reducing adverse environmental impacts from vehicular traffic.

Louis Berger was selected by the Ministry of Infrastructure in N’Djamena, Chad, to upgrade its existing roadway network. The objective of the firm’s transport plan involved ensuring the network could adequately meet traffic demand, improving its safety conditions and ensuring its regular maintenance.

Finally, Louis Berger assisted in the implementation of a large-scale national infrastructure master plan in Gabon. The plan involved designing and constructing a number of major roads throughout Libreville, Gabon’s capital and largest city. The work will consist of improving the existing 14-kilometer “Borde de Mer” coastal avenue, the 14-kilometer “Voie Express” and the 2-kilometer “Glass Road.” The project will also involve constructing a critical downtown bypass, seven pedestrian bridges, and a 12-kilometer bypass at Libreville International Airport.

By alleviating road congestion, increasing traffic speed, enhancing accessibility and improving road safety, the upgrades in these five cities will significantly benefit urban residents as well as positively impact the nations’ economies.
The team’s duties included evaluating the transportation corridor to ensure it can accommodate projected traffic until the year 2030. Louis Berger was also responsible for providing recommendations on how to improve the corridor, the region’s transport infrastructure policy and the institutional framework, taking into account its current development goals. Finally, the team prepared short-, mid- and long-term development plans for the corridor.

In a separate assignment, Louis Berger formulated a strategy for implementing Common Market for East and Southern Africa-compliant transport policy reforms; strengthening the Northern Corridor Transit Transport Coordination Authority (NCTTCA) committee for infrastructure and regional development; and developing a strategic plan for NCTTCA.

Finally, the team assessed the roles of the private sector organizations involved in the management of the Northern Corridor; assisted in the establishment of public-private partnerships in the region’s transport sector; and facilitated the organization of a regional workshop devoted to maintaining the corridor.

The completed master plan, and Louis Berger’s other work in the region, will ensure that the corridor continues to provide the transport services necessary to meet the region’s socioeconomic development needs. It will also help nations in the region grow and develop in a sustainable manner.

Louis Berger recently carried out a similar assignment in South Sudan, developing a nationwide transportation master plan. The objective of the comprehensive plan was to improve a variety of aviation, road, rail, river transport, and port and maritime infrastructure. The completed assignment is expected to facilitate the movement of goods and passengers, stimulate economic growth, decrease poverty, reduce isolation, and promote social integration and stability.

The team included Rene Cousin, vice president; Greg Gajewski, team leader; Derek Sherman, senior planner; Dan Mesnick, railroad specialist; Roger Colin, transport economist; Patrick Durel, ports specialist; Luis Macedo, roads engineer; and Maidadi Sabahana, traffic specialist.

The Northern Corridor — the route of opportunity — links approximately 200 million people to the global market.
REHABILITATING ZAMBIA’S GREAT EAST ROAD

Zambia, a landlocked country in Southern Africa, was recently recognized by the World Bank as one of the world’s fastest economically reformed countries. Though the Zambian economy has historically been based on the copper mining industry, the government is pursuing an economic diversification program that seeks to capitalize on other components of Zambia’s rich resource base by promoting agriculture, tourism, gemstone mining and hydropower.

To further the country’s socioeconomic development, Louis Berger was selected by Zambia’s Roads Development Agency to supervise the rehabilitation of a 99-kilometer portion of the 360-kilometer Great East Road, an important international corridor. The road connects the Eastern province of Zambia with the rest of the country and also creates strategic regional connections with neighboring Malawi and Mozambique.

Louis Berger’s duties include widening the existing carriageway; strengthening the road’s pavement; realigning two critical locations; and implementing various safety improvements through the installation of road signs, markings, street lights, reflectors and guardrails. The firm’s assignment also involves replacing or upgrading associated structures as well as implementing a road safety campaign.

This rehabilitation of the Great East Road will positively impact Zambia by spurring economic development and providing communities with better access to markets, schools and healthcare facilities. Beyond its economic benefits, the rehabilitation is expected to increase HIV/AIDS awareness and prevention through relevant campaigns as the country continues to battle this epidemic.

IMPROVING ROADS FOR ECONOMIC DEVELOPMENT IN SENEGAL

The Republic of Senegal, Africa’s westernmost country, is served by seven national roads, which serve as the country’s most important routes for transporting goods. In fact, 99 percent of goods produced in Senegal are transported by road.

In an effort to reduce poverty in Senegal and increase the country’s food security, the Millennium Challenge Corporation selected Louis Berger to provide engineering services for the rehabilitation of National Road 6.

The 250-kilometer National Road 6 spans the southern region of Senegal, connecting three of the largest and most important cities in the nation — Tambacounda, Kolda and Ziguinchor. The existing road links Senegal with Guinea-Bissau, Guinea and Mali, providing domestic land access to and from Casamance, an important area of Senegal typically accessible by ferry.

The rehabilitation involved pavement strengthening, road widening, road safety improvements, and the replacement or upgrading of bridges and culverts. Louis Berger’s project duties included verifying and finalizing the design and tender documents for the rehabilitation of the Velingara–Kolda–Ziguinchor section of the road; preparing and implementing the resettlement action plan for displaced populations; and providing technical assistance during the tendering and contractor-selection phases of the assignment.

The road improvements are expected to reduce poverty and spur economic development by improving farmers’ access to domestic and international markets. The upgrades will provide communities along these routes with better access to important services such as schools and hospitals. The project will positively impact nearly 1.5 million residents and generate approximately $473 million in economic benefits within the next 20 years.

Also in Senegal, Louis Berger, in conjunction with local partners SC Africa and GIC, is managing the construction of 45 kilometers of roadways to support the nearly completed Blaise Diagne International Airport. Located 40 kilometers southeast of Dakar, the nation’s capital, the greenfield airport will replace Leopold Sedar Senghor International Airport as Senegal’s principal aviation facility, increasing economic competitiveness by improving local accessibility, facilitating international trade and boosting tourism.
The DRC is Africa's second-largest country in area (2,345,409 square kilometers) and fourth-most populous. For years, the country has been embroiled in a series of internal conflicts, which have devastated the nation's economy.

As part of a post-conflict economic recovery program, the DRC, with funding from the World Bank and the Department for International Development, initiated the High-Priority Road Reopening and Maintenance Project. The objectives of the project include rehabilitating approximately 2,900 kilometers of roads, including 1,800 kilometers of priority roads in the Orientale, Katanga, Sud Kivu and Equateur provinces; providing institutional strengthening and training to the road authority responsible for implementing the works; and promoting economic growth through the improvement of access to markets and other basic services.

Louis Berger provided technical assistance to the transportation agency managing the project for a period of three years. During this time, the team assisted in building the capacity of the road authority, enabling it to better prepare tender documents, procure supplies, manage construction and maintain the completed roads.

The High-Priority Road Reopening and Maintenance Project is scheduled to be completed in 2016.

The rehabilitation of roads will provide millions of local citizens with improved access to schools and healthcare facilities. The completed project is also expected to have enormous long-term socioeconomic benefits, as the roads will increase trade and business opportunities, generating increased revenue and reducing poverty.

The teams include (Zambia) MD Amjad Hossain, team leader; Asteraye Tsige-hyman Molla, deputy team leader; Akunur Krishna Rao, materials engineer; and Mesfin Hailegiorgis Gebrehiwot, engineering surveyor; (Senegal, National Road 6) Joel Carn, project manager; Djibril Doucoure, team leader; Gilles Arlaud, structures engineer; Pascal De Giudici, environmentalist; and Pierre Le Norcy, contracts manager; (Senegal, Airport Motorway) Boulemchek Samir, team leader; Salmanah Bah and Malick Diaa, soils and materials engineers; and Andri Rabarijoana, structures engineer; (DRC) Jean-Claude Gautier and Jean-Yves Gallois, team leaders; Richard Candinella, Patrick Gallot, Maurice Gerbehaye and C.R. Randrianaisoa, highway engineers; and Yahia Ramze, construction materials management specialist.

Louis Berger has worked on more than 18,000 kilometers of roads in Africa during the last 10 years.
REALIZING TRADE POTENTIAL IN CENTRAL AFRICA AND BEYOND

Kinshasa, the capital and largest city of the DRC, is located along the Congo River. A large urban area, with a population of 9 million, Kinshasa is an important administrative and economic center. It is also home to numerous schools and healthcare facilities.

While Kinshasa is currently served by several urban railways, it lacks a connection with Ilebo, a critical transport hub located on the Kasai River to the east.

Louis Berger is presently evaluating the economic, technical, social and environmental feasibility of constructing a new 840-kilometer rail link between Kinshasa and Ilebo. The team’s initial duties involve preparing cost estimates, analyzing potential economic benefits, and conducting topographical, geological, geotechnical, hydrographical, hydrogeologic, bathymetric and hydro-technical surveys.

Upon the selection of a corridor for the track alignment, Louis Berger will prepare preliminary designs and provide recommendations on

BUILDING A SECOND BRIDGE ACROSS CAMEROON’S WOURI RIVER

In 1954, during Cameroon’s colonial period, the French built a bridge over the Wouri River, connecting Douala, Cameroon’s capital, with the city of Bonaberi.

For years, the structure served as the central link in Douala’s transport chain, accommodating automobile, truck and train traffic and facilitating 95 percent of the nation’s imports and exports.

In the 60 years since the bridge’s construction, the population of Douala has grown from 300,000 to 3 million. Given the area’s tremendous population growth, the single structure across the Wouri River can no longer accommodate the region’s traffic, which has risen from approximately 2,000 vehicles per day to more than 45,000 daily.

In response, the Ministry of Public Works of the Republic of Cameroon, with financing from the French Agency for Development, initiated the construction of a second bridge over the Wouri River. Louis Berger was selected by the ministry to serve as the independent checking engineer on the assignment. The team’s responsibilities include reviewing the preliminary and final designs of the new structure.
The project, led by the multinational road company Sogea-Satom, involves the construction of a five-lane, 820-meter-long highway and railway bridge; a 600-meter-long approach road on the Bonaberi side to the west; and a 1,500-meter-long approach road on the Douala side to the east.

In addition to reducing congestion, the project is expected to have a major impact on the local and regional economy. The new structure will improve access between West Africa and Central Africa, enabling more rapid transportation of goods for trade. The construction of the bridge is also expected to have a significant social impact, as more than 700 local residents will be recruited to serve as subcontractors on the project.

Bridge construction commenced in November 2013. It is scheduled to be completed by February 2019.

The team includes Eric Martinet, head of mission; Jacob Aboulantang, architect; Ebenezer Ngangang Meppa, environmental engineer; Bertrand Njeudi Yimga, geotechnical engineer; Damo Dourandi, inspector of works; Marcel Ramette, hydraulic expert; Theophile Yingaing Mayo, landscape designer; Hassane Mahamat, public lighting expert; and Norbert Mbouthieu, legal expert.

The project, which is scheduled to be completed by 2015, will link existing Southern African and Central African rail networks. It will also serve as a prelude to connections with North African rail networks in the direction of Libya.

The improved infrastructure is expected to increase the efficiency and capacity of the region’s existing transport sector, significantly facilitating trade and spurring economic growth in Central Africa and beyond.

In addition to its work in the DRC, Louis Berger has completed a variety of other rail assignments throughout Africa. Among other projects, the firm developed traffic forecasts for the proposed Nairobi Commuter Rail System in Kenya; evaluated the existing railway network in Gabon; prepared feasibility studies for a suburban rail line between Dakar and Bargny in Senegal; and assisted in the improvement of railway networks in the Horn of Africa.
CONSTRUCTING A NEW SEAPORT IN NIGERIA

With more than 174 million residents, Nigeria is the most populous nation in Africa and the seventh-most populous country in the world. Lagos, located on the Gulf of Guinea, is the nation’s principal port city. With an estimated population of 21 million, it is believed by some to be the fastest-growing city in Africa.

Louis Berger, in collaboration with BergerABAM, is currently assisting EuroChem Corporation to manage the design and construction of a greenfield, multi-use seaport 60 kilometers east of Lagos.

Louis Berger’s duties have included assisting in the selection of an engineering, procurement and construction contractor to finalize designs, construct and commission the port facilities; preparing cost estimates for port and marine infrastructure works; and conducting traffic studies of local access roads.

BergerABAM’s role, completed in 2012, involved developing preliminary designs for onshore port infrastructure and facilities; providing guidance during the preparation of bidding documents; and developing a comprehensive stormwater collection and treatment strategy for the complex.

During the construction phase, Louis Berger will supervise the works to ensure the port is completed on time, within budget and in accordance with client specifications.

Upon completion in 2017, Port@Lekki will feature a 1,500-meter-long main breakwater; a 6-kilometer-long, 14.5-meter-deep approach channel; a 1,500-meter-long quay wall; and cargo-handling equipment, enabling the facility to accommodate container vessels of up to 4,000 twenty-foot equivalent units (TEUs) and liquid bulk vessels of up to 45,000 deadweight tons. The port will be equipped to handle 1.5 million TEUs of containerized cargo during its startup phase.

The port will cover an area of 90 hectares and form an integral part of the new 220-hectare Lagos Free Trade Zone. The zone, which is currently in development, will serve as a multi-product industrial and logistics hub for the entire West African region. It is expected to encourage enterprise investment and trading as well as reduce Nigeria’s dependence on imported consumer goods.

Port@Lekki is expected to boost the national economy though the creation of more than 162,000 jobs for local Nigerians.

FACILITATING ECONOMIC DEVELOPMENT IN CAMEROON WITH THE CONSTRUCTION OF THE KRIBI DEEP-WATER PORT

Douala, Cameroon’s most populated city and the capital of its Littoral Region, is home to the nation’s largest seaport.

In order to improve the country’s shipping industry, the government of Cameroon initiated the construction of a deep-water seaport on a 26,000-hectare site off the shores of Kribi, a coastal town located 200 kilometers south of Douala on the Gulf of Guinea.

Louis Berger was selected by the Kribi Port Authority to supervise the earthworks for the platforms that will accommodate the port and its ancillary facilities. The team was also responsible for preparing project schedules, developing construction plans, conducting site investigations and creating other documentation.

The primary objective of the finished port will be to export approximately 35 million tons of iron ore annually from the mines in Mbalam, located 500 kilometers east of Kribi. The port is also projected to accommodate aluminum, hydrocarbons, liquefied natural gas and other minerals.

The port will play an integral role in the construction of the Kribi Industrial and Port Complex, an initiative aimed at facilitating sustainable social and economic...
design elements for dredging and reclamation; a pile-founded 490-meter quay and approach trestle; a 75-hectare storage yard; 11.5 kilometers of rail; 125,000 metric tons (MT) of dry silo storage for exported alumina; 100,000 MT of tank storage for fuel and chemicals; and approximately 220,000 MT of open storage for dry commodities. In addition, the design included the civil utilities and material-handling systems for all commodities on the terminal, including approximately 4.5 kilometers of conveyor systems.

At completion, BergerABAM assisted the owner in issuing tender documents for a design-build contract and providing program schedules for the project. In a related assignment, Louis Berger field teams provided dredging supervision services for the owner. The work involved dredging approximately 2 million cubic meters of river sand using a trailing head suction dredge and pumping the sand into the 75-hectare reclamation area.

Later, BergerABAM assisted BHP Billiton to identify a site for a new bulk alumina terminal along the Rio Pongo River channel leading to Boffa, Guinea, using information and knowledge gained at Kamsar. The project included conducting various site investigations and navigational studies; developing terminal layout plans; and preparing cost estimates and construction schedules.

The teams include (Nigeria) Nikhil Bhandari, principal in charge; V.K. Kumar, project executive; Bill Allen and Lee Ahlstrom, project managers; Ben Lieberman and Gerardo Ayazanoa, port planners; Vern Nielsen, civil design; Shawn Ellis, Philip Olson and Jon Mjelde, project engineers; and Eric Spurgeon, civil engineer; (Cameroon) Bill Allen, Andre Demauve and Mohamed El Fateh Sonni, team leaders; Roussos Zobanakis, vice team leader; Antoine Dufeu, geographic coordinator; Imed Lacheb, Paul Mangoua and Bertrand Njeudi Yimga, geotechnical engineers; Marcelle Ramette, hydraulics engineer; Dama Dourandi, structural engineer; Anne Hernandez and Ebenzer Ngongang Meppa, environmentalists; Paul Chapdie, topographical expert; Stanislas Bamas, road signing expert; David Colin, earthworks expert; Jacques Coulard, quarry and aggregates expert; Jean-Pierre Dupacq, legal expert; John Bardi, signaling expert; Marcienne Emouougou, environmental assistant; Jose Akonda, administrative and financial manager; Delphine Belanger, port technology expert; Georges Chauzaz, protective structures engineer; Maya Ayaj, concrete expert; and Mohamed Saizonou, quarry expert; (Guinea) V.K. Kumar, project executive; Bill Allen and John Bardi, project managers; Jack Bechly, dredge specialist; and Phillip Olson, project engineer.
DOUBLING COMMERCIAL CAPACITY IN LIBERIA’S CAPITAL

Monrovia is Liberia’s capital city and home to nearly 30 percent of the nation’s population. The Liberia Electricity Corporation (LEC), founded in 1973, is responsible for providing reliable electricity for the country, including the nearly 1 million people in the greater Monrovia area. Prior to 2010, LEC had an installed capacity of just 9.6 megawatts for the capital. The U.S. Agency for International Development (USAID) contracted Louis Berger and its joint venture partner, Cummins Power Generation, to design and build a 10-megawatt power plant in just 8 months in Monrovia.

Louis Berger constructed the power plant on an accelerated schedule as part of an emergency reconstruction program. The new power plant more than doubled the commercial capacity of LEC in Monrovia. It also met stringent performance and fuel-efficiency requirements designated by USAID to help the government of Liberia to implement its National Energy Policy, which incorporates clean and renewable energy technologies. Louis Berger trained LEC staff on plant operations and provided technical support to develop local capacity and ensure proper maintenance after commissioning.

As part of the project, Louis Berger also designed and built an aboveground fuel supply and storage system as well as a structural cover over the power system. Additionally, the firm synchronized the new 10-megawatt power plant with an existing power plant, providing a 22-kilovolt intertie to the existing grid.

The team includes Frank Jordano, senior vice president; Ray Mardini, project manager; Santanu Moitra and Mike Hurley, site managers; Mike Hampton, field equipment and installation manager, and Charles Hunter, electrical superintendent.
SUSTAINABLE ENERGY IN SOUTH AFRICA

In South Africa, USAID selected Louis Berger to implement the Increasing Sustainable Local Government Services Program. The program built capacity to deliver basic municipal services, such as housing, power and energy, water and sanitation, and solid waste management, to the country’s historically disadvantaged population.

The program’s power and energy component focused on providing energy-efficient, clean and renewable energy resources as well as promoting sustainable environmental practices to increase access to services and reduce greenhouse gas emissions.

Louis Berger provided institutional and technical support to the National Energy Efficiency Agency, the Central Energy Fund, Eskom (an electric public utility), the South African Energy Company and the South Africa National Energy Research Institute on a variety of national, municipal and private sector energy-efficiency and renewable energy initiatives.

One initiative involved retrofitting traffic lights with energy-efficient bulbs and providing uninterrupted power supply and/or solar photovoltaic cell units at key intersections though times of power interruption, reducing traffic congestion and greenhouse gas emissions.

Other initiatives included mobilizing funding for energy-efficient public lighting projects in 19 South African cities hosting the 2010 World Cup; reducing municipal water loss and waste, and associated energy costs; and promoting the use of biomass generators and mini-scale hydroelectric plants to provide on- and off-grid energy solutions in rural environments.

Louis Berger also provided training to local and international nongovernmental organizations on cleaner energy production, air quality, waste management, energy efficiency and climate change. Additionally, the company worked on policy reform allowing solar water heaters to be included in housing allowances.

Collectively, the power and energy component of the Increasing Sustainable Local Government Services Program resulted in energy savings of more than 140 million kilowatt hours of electricity and the leveraging of $155 million from public and private investors for energy infrastructure projects.

The team includes Charles Bell, group vice president; Steve Horn, chief of party; Suzanne Young, climate change advisor; Donna Boysen, senior energy specialist; Annie Andrianasolo, program administrator; and Carlo Espinoza, contracts administrator.
ELECTRICITY FOR DEVELOPMENT IN SOUTH SUDAN The USAID-funded Sudan Infrastructure Services Project (SISP) provided critical public infrastructure and capacity-building activities throughout South Sudan. As USAID’s implementing partner, Louis Berger worked in collaboration with the Republic of South Sudan to address a full range of physical and institutional needs, providing capacity building, developmental assistance, institutional strengthening, and sustainable infrastructure development in the transportation, urban water and sanitation, public buildings, and energy and natural resources sectors.

One of the main components of SISP was the improvement of electrical utility systems. South Sudan’s lack of basic electrical service constitutes a significant barrier to improving the livelihoods of a majority of the country’s population.

Louis Berger, as part of the Market Town Electrification Program within SISP, provided critical support for South Sudan’s electric systems through technical assistance on existing system operations, construction of new power and distribution systems, and capacity building and training to strengthen the sector. The program involved supporting the Yei Electric Cooperative (YECO), South Sudan’s first electrical cooperative, which successfully provided more than 870 service connections to the residents of the town of Yei. Louis Berger also worked with YECO to establish a sustainable revenue collection system. In Maridi, Louis Berger installed the market town’s first electric street lights. The corridor of lit roadway benefits both residents and businesses, as it provides improved safety and accessibility during the night.

Louis Berger also supported USAID with the construction of two new power plants in Kapoeta and Maridi. Each power plant includes new diesel generators with primary and secondary distribution lines. Louis Berger managed system operation and maintenance training, in addition to the training of the local construction contractors, to promote the long-term sustainability of these projects. The operational systems have the capacity to serve a minimum of 1,000 customers, providing economic, security, health and educational improvements.

ELECTRIFYING RURAL CAMEROON Cameroon’s energy sector is a growing industry with great potential. The country’s hydroelectric sector holds particular promise, given the existence of relevant infrastructure along the Sanaga River.

In order to tap into this tremendous potential, Louis Berger was selected to conduct studies, develop designs and prepare tender documents for the electrification of 33 rural communities located in four regions throughout Cameroon, serving approximately 85,000 residents. The project is being implemented as part of the country’s Growth and Employment Strategy Paper (GESP) framework. The objective of the framework is to reduce poverty through the creation of jobs. Another major focus is on the delivery of
basic services to the nation’s underprivileged. This includes a strategic investment in its energy sector.

By 2020, the government of Cameroon aims to have a 48 percent countrywide electrification rate, a 75 percent electricity access rate and a 20 percent rural electrification rate. The nation anticipates achieving these goals through the extension of interconnected local grids, the rehabilitation and construction of isolated diesel power and hydroelectric plants, and the development of a regional grid.

HYDROPOWER FOR THE DEMOCRATIC REPUBLIC OF THE CONGO

The Democratic Republic of the Congo (DRC) has enormous hydropower potential. Estimates of the nation’s hydropower capacity are upwards of 100,000 megawatts. A large portion of this potential (44,000 megawatts) exists at the Inga Dam site along the Congo River, located 125 miles south of Kinshasa, the nation’s capital city.

With energy resources on this scale, the DRC has the potential to play a pivotal role in meeting its own energy needs, as well as those of neighboring countries. The DRC’s government recently supported several priority projects aimed at improving its infrastructure. Louis Berger managed one of these ambitious initiatives: the Emergency Reconstruction and Rehabilitation Project (EMRRP).

The comprehensive EMRRP consisted of transportation, water, urban infrastructure and energy components. The energy component of the project involved rehabilitating the 1,775-megawatt Inga Hydropower Plant, three other hydropower plants, and small thermal and hydro facilities; installing transmission lines between Matadi and Kinshasa; upgrading the distribution network in Kinshasa and 11 other major cities; and strengthening the reliability of the existing 220-kilovolt line between Inga and Kinshasa.

As program manager, Louis Berger was responsible for overseeing the procurement of services, supplies and contractors; representing the Ministry of Finance and Budget throughout project implementation; training staff in the Central Office of International Contracts and SNEL, the DRC’s electric utility; and managing claims.

Revitalizing the DRC’s energy sector will support the nation’s local business needs and facilitate the exporting of electricity to neighboring countries, enabling its short-, medium- and long-term economic growth.

The teams include (South Sudan) Andy Bailey, principal in charge; and Eric Cook, project manager; (Cameroon) Ibrahim Coulibaly, team leader; Ambrose Toukam, electrical engineer; Valentin Elombat, thermal plant engineer; Paul Tchapdie, survey engineer; Francois Abessolo Kpwang, environmentalist; and Mahamadou Salissou, financial and administrative assistant; (DRC) Kim Nguyen, Philippe Harang and Andre Demauve, team leaders; William Rounds, supervisor; Lutfallah Tueni, director of operations; Paul D’Amour, resident engineer; Wahib Hamze, electrical engineer; Frederic Razonabola, highway engineer; Robert Seyferth, environmental expert; Patrice Kauer, financial management adviser; Richard Cancella, contracts specialist; Guy Laloux and Jean Maillot, procurement experts; and Pierre Le Norcy, claims expert.
IMPROVING AFRICA’S AIRPORTS Africa’s aviation industry is critical to the continent’s economic growth and social advancement. Improving the sector through the construction or rehabilitation of airports will facilitate business, trade, tourism and national integration. In recent years, Louis Berger has been involved with numerous aviation projects throughout Africa aimed at creating wealth and promoting sustainable development.

In Kenya, Louis Berger developed the National Airports System Plan, including Jomo Kenyatta International Airport, the nation’s principal aviation facility, as well as the Mombasa International, Wilson, Eldoret International, Kisumu, Malindi, Lamu, Lokichogio, Wajir and Ukunda airports. The primary objective of the plan involved guiding Kenya’s aviation industry through the year 2030 and focused on making the best use of existing airport facilities.

Following the successful completion of the plan, Louis Berger, in association with Ammann & Whitney and Runji & Partners Ltd., was selected to provide consultancy services for the construction supervision of a greenfield terminal at Jomo Kenyatta International Airport.

The new 178,000-square-meter terminal will comprise a central passenger processing center, an airside concourse with contact gates equipped with passenger boarding bridges, airline lounges, baggage-handling systems, staff offices and concession areas. The expansion of the facility is expected to increase the airport’s capacity to 13 million passengers annually upon completion in 2017.

In the Republic of Mauritius, Louis Berger, in collaboration with Ammann & Whitney, provided technical advisory services to Airport Terminal Operations Ltd., a company formed by Airports of Mauritius Ltd. and Aeroports de
Paris Management, for the construction of a new terminal at Sir Seewoosagur Ramgoolam International Airport.

The new 57,000-square-meter terminal, completed in May 2013, features a link to the existing terminal through a two-level connecting gallery, an aircraft parking apron with a dedicated taxi lane and service road, as well as vehicle parking facilities. Inside, the terminal includes 56 check-in counters for departing passengers, state-of-the-art baggage-handling systems, a departure hall and lounges, arrivals gallery, customs areas, retail spaces, and VIP lounges.

The facility’s design was inspired by the traveller’s palm, a native tropical plant, and includes a variety of environmentally friendly components, such as solar energy sources and thermal insulation. The building structure, facade and roof systems were designed to resist hurricane force winds.

The upgraded facility is expected to accommodate prospective passenger growth and facilitate increased tourism for Mauritius.

The teams include (Kenya) Javier Gonzalez, project director; Richard Greer, resident manager; Jorge Novo, project manager; Brian Eaton, associate vice president; Wenhan Xue, associate; and Douglas Tobin, airport systems specialist; (Mauritius) Javier Gonzalez, project director; John Borden, project manager; James O’Keefe, deputy project manager; Bal Cherwoo, senior vice president; Brian Eaton, associate vice president; Jorge Novo, design/planning manager; Douglas Tobin, facade and airport systems specialist; Claude Wong, health and safety manager; Geerish Sonah, senior quantity surveyor/claims specialist; Tarek Kewaisy and Wenhan Xue, associates; and Minkyu Park and Paul White, structural engineers.
PROTECTING THE BORDERS OF WEST AFRICA
The regulation and protection of a nation’s border is crucial to its well-being. These security measures are taken to control the movement of people, animals and goods into and out of a country, ensuring its safety and preventing adverse economic impacts.

Louis Berger recently supervised the construction of two one-stop border checkpoints in West Africa — one between Burkina Faso and Ghana and one between Niger and Benin.

The checkpoints consisted of two-story, 1,400-square-meter administrative buildings dedicated to processing passenger and cargo carrier documents; control facilities intended for checking cargo and paper compliance; and access/parking infrastructure. In addition to the main administrative buildings and other inspection facilities, numerous other buildings aimed at housing ancillary services and supporting the operation of the checkpoints were built.

The team includes Bernard Lana, chief of mission.

BUILDING A HOSPITAL IN THE DEMOCRATIC REPUBLIC OF THE CONGO
Former U.S. NBA basketball player Dikembe Mutombo is known as one of the game’s all-time greatest defensive players. He is also a well-known humanitarian.

Born in the Democratic Republic of the Congo (DRC), Mutombo, through his nonprofit organization, the Dikembe Mutombo Foundation, has sought to improve the health and living conditions of the people in his native country for years. The foundation’s many goals include promoting primary healthcare, disease prevention and health research.

Part of the foundation’s overall mission involved building a state-of-the-art hospital on the outskirts of Kinshasa, the nation’s capital. Louis Berger prepared designs and managed the construction of the facility.

Opened in 2007, the 300-bed hospital includes an administration complex, laboratories, emergency rooms, operating rooms and a 70-bed maternity area. Named after Dikembe Mutombo’s mother, who succumbed to a stroke in 1997, Biamba Marie Mutombo Hospital and Research Center will serve generations of people in the DRC.

The team includes Pierre Le Norcy, project director, Vicente Miranda, resident engineer, and Mario Joao, inspector of works.
ENCOURAGING SMART GROWTH IN SENEGAL

Dakar, the capital city of Senegal, is located on the Cap-Vert peninsula. Its strategic position at the westernmost tip of the nation makes it an advantageous departure and destination point for trans-Atlantic and European trade.

Although Dakar remains one of West Africa’s key economic hubs, the city suffers from overcrowding, inadequate commercial and industrial space, and traffic congestion, which deter foreign investment and prevent local industries from expanding.

In order to accelerate economic growth and reduce poverty in the country, the Millennium Challenge Corporation and the government of Senegal initiated the design and construction of a large-scale industrial, commercial and residential platform in the arrondissement of Diamniadio, located just outside of Dakar. Louis Berger was selected to develop conceptual designs, prepare cost estimates, and conduct financial, social and environmental analyses for the project.

The 2,620-hectare platform will be situated near a number of planned infrastructure projects, providing air, ground and port access to and from industries located on the platform. The finished site is expected to have a major economic impact on the country, attracting new business, as well as existing businesses in nearby Hann Bay, and significantly reducing poverty through job creation.

The team includes Joel Carn, civil engineer; Pascal De Giudici, environmentalist; Jerome Fillon, technical supervisor; Philippe Harang, water resources/supply engineer; Pascal Houdeau, geotechnical supervisor; Jean-Loup Houdry, road planner/traffic engineer; Pierre Le Norcy, wastewater engineer; and Medard Pourashraf, road design engineer.

MODERNIZING JUDICIAL FACILITIES IN CHAD

The legal system of the Republic of Chad, a landlocked country in Central Africa, is considered one of the weakest in the world. For years, the nation has been listed among the Fund for Peace’s Failed States Index, primarily due to the country’s high rate of corruption.

Louis Berger recently undertook a project aimed at improving Chad’s legal and judicial systems. The initiative involves constructing or rehabilitating numerous facilities, including police headquarters, courts and prisons in N’Djamena, the nation’s capital and largest city, as well as numerous other locations throughout the country.

The team’s duties include preparing designs, developing construction schedules, preparing cost estimates, selecting contractors and supervising construction.

The project will result in the construction of 15 800-square-meter courthouses, three 300-square-meter administrative buildings and three prisons with the capacity to accommodate between 200 and 400 detainees. It will also include the rehabilitation of four additional courthouses and an 800-inmate prison.

The team includes Jacques Cormier, team leader; and Azora Djassirangue and Yaga Mbassy, civil engineers.
INTEGRATING CAMEROON’S LEGAL SYSTEMS

Cameroon is located in the western region of Central Africa. Following World War I, the territory was divided between France and Britain. In 1960, the French-administered area of the country gained its independence as the Republic of Cameroun. A year later, the Republic of Cameroun merged with the British portion of the nation to form the Federal Republic of Cameroon.

Since 1984, the country has been known as the Republic of Cameroon. Despite its more than 50-year history as an independent nation, Cameroon’s current legal system employs both English common law and French civil law, making it one of the only dual legal systems in the world.

Louis Berger, in partnership with Justice Cooperation Internationale (JCI), is providing technical assistance in support of a program aimed at improving the institutional framework of Cameroon’s legal and judicial systems. Specifically, the objectives of the program are to enhance the operations of the commercial and administrative justice systems; build the capacity of judicial staff; upgrade and modernize the existing systems; and improve access to justice for local citizens.

The team’s duties include assisting in the construction or rehabilitation of court buildings and chambers of commerce; training judicial and auxiliary staff on administrative and commercial litigation; and modernizing existing commercial and civil law practices.

To date, more than 3,000 professionals — including judges, bailiffs and attorneys — have been trained, while dozens of courts and chambers of commerce have been constructed or rehabilitated. Louis Berger and JCI have also prepared and disseminated more than 38,000 justice manuals and guides.

In addition to upgrading the country’s legal system, the program promoted socioeconomic development through the encouragement of various economic activities and private investments.

As part of a separate assignment in Cameroon, Louis Berger provided technical assistance for the Program to Support Civil Society. The primary objective of the project was to enhance the capabilities of civil society organizations (CSO) responsible for implementing various political, economic and social development programs. The firm was able to accomplish this by creating and supervising a project management unit that assisted in facilitating CSOs’ access to information and improving their existing communication processes; supporting CSO-promoted governance and public–private partnership initiatives; and providing organizational, technical and institutional capacity building to CSOs.

ENHANCING THE FOUNDATION OF EDUCATION IN CAMEROON

Since establishing a national program for free primary education in 2000 in accordance with Millennium Development Goals, Cameroon has seen an increase in the number of students in its school system. In order to address the growing demand for education and facilities, Cameroon’s Ministry of Basic Education contracted Louis Berger to develop and implement strategies for the construction of new schools throughout the country.
Louis Berger was responsible for analyzing the ministry’s data on school capacity, identifying sites for new schools, prioritizing construction projects in the areas with the highest need, developing detailed designs and layouts for new schools, preparing tender documents, assisting in the selection of contractors, supervising construction, and monitoring budget and schedule performance.

The construction program will improve educational outcomes by reducing overcrowding in classrooms and increasing access to basic education in underserved areas. More than 200,000 students are expected to attend the new schools, strengthening Cameroon’s economy by broadening the educated workforce.

The teams include (justice) Fanny Leroy, project manager; Daphnee Benayoun, project director; and Antoine Dufeu, regional coordinator; (civil society) Veronique Jampy, project manager; Stephane Huc, project director; Antoine Dufeu, regional coordinator; and Bertin Lukanda, team leader; (education) Emmanuel Ngameni, team leader; Antoine Dufeu, project director; Theophile Yimgaing Moyo, study expert; Paul Hengue, environmental expert; and Charles Mbuyi, procurement expert.

PROFILE
Daphnee Benayoun

Daphnee Benayoun is the director of the institutional department for Louis Berger’s international operations. In this role, she is responsible for managing and developing the firm’s operations in public policy reforms, economic and private sector development, and civil society organization support. She has 10 years of experience with Louis Berger, notably in Africa.

Daphnee earned a master’s degree in international business and economics from the Institute of Political Sciences in Paris and a master’s in applied mathematics from Ecole Centrale Paris. She joined Louis Berger in 2004 as a transport economist, working on multimodal transportation master plans in Albania, Morocco and Vietnam before becoming a project manager and regional director for Louis Berger in Niger, Mauritania, Republic of Congo and Gabon.

Most recently, as director of the institutional department, Daphnee has led teams working on some of the firm’s most important institutional programs, such as the Program for Strengthening Trade and Entrepreneurial Capacities in Congo as well as other programs in support of justice systems in Cameroon and Mauritania.

In her spare time, Daphnee enjoys listening to and playing jazz and bossa nova music, traveling with friends, going to the movies, and debating a host of topics, particularly politics.
STRENGTHENING TRADE AND ENTREPRENEURIAL CAPACITIES IN THE REPUBLIC OF CONGO

The Republic of Congo, located in Central Africa, gained its independence from France in 1960. In the early 1980s, the country’s economy began making significant strides, as the nation received major investments from the World Bank and the International Monetary Fund. In 1997, however, the Republic of Congo became embroiled in a civil war, which had an adverse impact on its economic prosperity.

Louis Berger supported the Ministry of Trade, Consumption and Supply’s Program for Strengthening Trade and Entrepreneurial Capacities (PRCCE), an initiative that involved improving the country’s economic competitiveness by encouraging entrepreneurship, strengthening the private sector and creating an enabling business environment.

The program consisted of two separate components. The first included developing and implementing a nationwide strategy aimed at facilitating trade. Louis Berger achieved this by encouraging the Republic of Congo’s government to take a leadership role in the Central Africa region’s trade negotiations with the European Union. The company also trained approximately 1,000 individuals in government and the private sector on Economic Partnership Agreements and World Trade Organization negotiations.

The objective of the program’s second component was to improve the alignment of domestic law with OHADA law (Organisation for the Harmonization of Business Law in Africa) and conduct extensive training on OHADA Uniform Acts across the country. Louis Berger trained more than 400 civil servants, including judges and registrars, and prepared justice manuals and guides as well as legal documents on business competition, consumer protection and other pertinent topics. One major success of this component involved creating an alternative commercial dispute institution, the Congo Mediation and Arbitration Center (CEMACO), and recruiting and training approximately 80 arbitrators, mediators and supervisors to work at the facility.

Following the successful implementation of the first phase of the program, Louis Berger provided technical support for the program’s second phase. The focus of this assignment was to consolidate the achievements and to reinforce the sustainability of the program’s earlier activities.

Louis Berger’s duties included providing capacity building to different government, nongovernmental and private sector organizations on trade negotiations; supporting the start-up phase of CEMACO; and assisting in the operational development of the nation’s Competition Authority, Consumer Protection Council and the WTO Reference Center.

PRCCE was ranked first amongst EU-funded programs in the Republic of Congo according to the European Commission’s Results-Oriented Monitoring evaluation.

SUPPORTING REGIONAL INTEGRATION IN CENTRAL AFRICA

The Economic and Monetary Community of Central Africa (CEMAC) is an organization of six states — Cameroon, the Central African Republic, Chad, the Republic of Congo, Equatorial Guinea and Gabon. The objective of the organization is to promote economic integration among the countries that share a common currency, the CFA franc. Collectively, the states have a population of nearly 40 million people and a total surface area of 3 million square kilometers.

Louis Berger is currently providing technical assistance to CEMAC in support of its trade and economic integration program within the framework of the European Development Fund-financed Regional Indicative Program for the Central Africa region. The aim of the program is to enhance the economies of the countries and facilitate their smooth integration into the global economy in a sustainable manner that reduces poverty. This includes undertaking assignments to improve trade, promote the emergence of a common market for the region, and develop and modernize transportation and energy infrastructure.

Louis Berger provides a variety of services, ranging from ensuring that the program is implemented in accordance with the terms of financial agreements and technical and administrative provisions to delivering regular progress reports on the program’s status to all interested stakeholders. The team is also responsible for strengthening the institutional capacity of CEMAC and other participating organizations through on-the-job training and capacity-building activities.

The teams include (Republic of Congo) Daphnee Benayoun, project director; John Olympio, team leader; Sadjo Ousmanou, OHADA law specialist; Muriel Guiouillier, junior expert; Maidadi Sahabana, transport economist; and Jean Francois Sempere, trade defense mechanisms specialist; (CEMAC) Manuel Rodriguez Brito, project manager; Stephane Huc, project director; and Pierre Demba, team leader.
Solutions for a better world