

The entrance to Corferías Bogotá,
the exhibition center in Bogotá,
the country's capital

PROJECTS ON THE MAP:

Colombia

Colombia's economy is burgeoning—
and so is its appetite for projects, which
are improving everything from the
country's roads to its reputation.

BY MATT ALDERTON



Colombia has emerged from its troubled past

"In 2000, the government started making political decisions to improve the development of the country. We began to see a new face of Colombia."

—Eugenio Jose Barrios Mendoza, PMP, Barranquilla, Colombia

with an elevated status as an economic influencer—one with a hunger for projects and a growing need for project practitioners.

"I am very optimistic," says Diego Sánchez Brand, PMP, a project manager at Piping Specialists International, a pipeline engineering company based in Bogotá. "There is a lot of investment in Colombia. There are new projects here every day."

New projects are symptomatic of a new Colombia. For Latin America's fourth-biggest country, the economic news has been good and getting better.

In 2014, it surpassed Argentina as the third-largest economy in Latin America behind Mexico and Brazil, according to research firm Capital Economics. In 2013, Colombia achieved 4.3 percent GDP growth, compared to 2.4 percent for the global economy. It has the third-most business-friendly economy in Latin America, behind only Chile and Peru, according to the World Bank. Meanwhile, foreign direct investment in Colombia grew from US\$1.8 billion in 2003 to US\$16.8 billion in 2013.

"Colombia in the last 14 years has seen many changes," says Eugenio Jose Barrios Mendoza, PMP, a project engineer who works in Barranquilla, Colombia. "In the '80s and '90s, we had many problems with insurgents and narcotics. Then, in 1998, we had an economic crisis. After that, in 2000, the government started making political decisions to improve the development of the country. We began to see a new face of Colombia."

If Colombia's old face belonged to FARC—a group of guerrillas that has engaged in illegal activity such as drug trafficking in the Colombian rain forest since 1964—its new face belongs to Juan Manuel Santos Calderón, who was elected to a second term as Colombia's president in June 2014.

"This president has been working on a peace treaty with the guerrillas, which is something we're very confident we'll achieve," says IT project manager Jorge Francisco Henao Pérez, PMP, who most recently served as Andean area IT manager in the Bogotá office of Amway. "This has given companies the confidence they need to invest here."

"In the last 10 to 15 years, our economy has grown much faster than other Latin American countries," says Rodrigo Vargas, PMP, a construc-

tion and engineering manager for Colombian engineering firm Conequipos Ing. Ltda. who is working on a gas pipeline project in Medellín, Colombia. "As a result, a lot of multinational companies are coming to Colombia to invest in projects. There are many, many opportunities."

It's not only projects that will benefit from those opportunities, but project practitioners as well.

"Everywhere you look, there's opportunities for project managers," says Gary Corbett, PMP, offshore projects leader at Colombia's state-owned oil company, Ecopetrol, based in Bogotá. Mr. Corbett says his employer hired him contingent on the requirement that he hold a Project Management Professional (PMP)® certification.

"The PMP" is quickly becoming the recognized mark of a project manager in Colombia," Mr. Corbett says. "A few years back, not many people were being certified, but that's changing. Companies and professionals in Colombia are now realizing the benefits of managing projects using recognized standards."

Project activity in Colombia is particularly effervescent in infrastructure, energy, and IT and outsourcing.

ALL SYSTEMS GO

Infrastructure offers some of Colombia's greatest opportunities—and challenges.

"Infrastructure in Colombia is 50 years behind where it should be," Mr. Sánchez Brand says. "Our capital, Bogotá, is the biggest business center in Colombia, and it's hundreds of kilometers from the coast. It's a very big problem."

A dearth of roads and railroads connects Colombia's interior production centers to its coastal ports. Only 20 percent of the nation's roads are paved, according to the U.S. Department of Commerce. For projects that import labor and supplies, the consequence can be greater delays and costs.

"One of the biggest obstacles to my projects is poor infrastructure," says electrical engineer Edgar J. Castro, PMP, Barranquilla-based project manager at WSP Group, a Canadian engineering consulting firm. "To access some places, you have to go by river because there are no highways to get there."

Although infrastructure challenges are holding some projects back, they're moving many more forward thanks to the National Infrastructure Agency, which President Santos established in 2011 to oversee a massive backlog of infrastructure projects in Colombia. The agency plans to invest US\$55 billion in infrastructure initiatives by 2021, including a US\$25 billion program to upgrade and pave roads and highways before the end of the decade.

Traditionally, political corruption has challenged transportation projects here. In the new Colombia, however, public outcry and legal rigor are keeping corruption in check, according to Mr. Henao Pérez, who cites as an example a

Colombia at a Glance

Population

48.3 million

Size

1.1 million square kilometers

(424,712 square miles)

GDP

US\$378.1 billion

GDP growth rate

4.3%

Primary industries

Oil and gas, mining, manufacturing, financial services

Gross national income per capita

US\$7,560

Source: The World Bank Group, National Administrative Department of Statistics

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—Gary Corbett, PMP, Ecopetrol, Bogotá, Colombia

Playas de Cartagena in Cartagena, Colombia





"The government and the people are fighting corruption. It's getting better."

—Jorge Francisco Henao Pérez, PMP, Bogotá, Colombia

2011 scandal involving the mayor of Bogotá, who was suspended and jailed for allegedly taking bribes to award public works contracts. "The government and the people are fighting corruption," he says. "It's getting better."

FULLY ENERGIZED

As Colombia's economy expands, so does its demand for energy.

"Right now, the country relies heavily on hydroelectric power, and there is an increasing need to provide alternative sources due to the seasonal nature of hydroelectric power," Mr. Corbett explains. "There's a rainy season and a dry season. The country needs diversified power generation to support hydroelectric power, especially during the dry season."

With that in mind, the Colombian government is investing heavily in oil and gas projects, including the Bicentennial Pipeline, a US\$4.2 billion crude oil pipeline that will be the country's longest pipeline upon completion in 2016, and a US\$6.47 billion project to expand and modernize one of the country's largest oil refineries: the Reficar Refinery in Cartagena.

Exploration is as important as distribution. "Ecopetrol has set a goal to increase its oil and gas production significantly to 1.3 million barrels of oil

Security Alert

asked Colombian project practitioners: **How do project managers in Colombia deal with security threats?**

"If you compare crime statistics in Bogotá with other North and South American cities, they're comparable. Colombia is a reasonably secure country. If you have projects in areas where there are terrorist activities, you work with local authorities to identify risks and make sure there are good protection plans in place. It's manageable. The authorities are very keen to work with private companies to help them deal with security risks."

—Gary Corbett, PMP, offshore projects leader, Ecopetrol, Bogotá

"Oil and gas companies especially are very concerned about security. They're in constant contact with state military forces about where the guerrillas are and where they're trying to strike. The state military forces inform companies which areas are safe to work in and which areas are not."

—Diego Sánchez Brand, PMP, project manager, Piping Specialists International, Bogotá

"Most of our oil fields are in areas that people would not go to in the 1980s and 1990s because they were afraid they might be kidnapped or killed. It's getting better, but there are still some security risks. To mitigate them, we do social outreach at the beginning of each project to get close to the community, to explain what we're doing and to let them know we're going to contract with local workers. The problems are not 100 percent corrected, but we're working on it."

—Rodrigo Vargas, PMP, construction and engineering manager, Conequios Ing. Ltda., Medellín



equivalent per day by 2020, from current levels of about 770,000 per day," says Mr. Corbett, adding that a growing number of exploratory projects are offshore. "Colombia has a successful oil industry, but most of it has been onshore. There are several wells being drilled over the next two years that are set to significantly expand the offshore industry here."

Offshore, the most significant risk facing oil and gas projects is the lack of an existing offshore industry, including equipment, personnel and established regulations. Onshore, it's FARC attacks, which are virtually nonexistent in population centers but still occur in remote areas where drilling takes place.

Still, the outlook remains strong. Bolstered by government reforms enacted over the past decade—foreign oil and gas companies now enjoy 100 percent ownership of their ventures, lower government royalties and longer exploration licenses—Colombia's production of oil and gas increased 77 percent and 56 percent, respectively, between 2007 and 2012, according to the U.S. Energy Information Administration.

If FARC peace talks succeed, investment and production are expected to increase even further—not only in oil and gas, but also in mining. Foreign direct investment in mining has more than quadrupled in the past decade, from US\$627 million in 2003 to US\$2.9 billion in 2013.

"Colombia is ripe for exploration," Mr. Barrios says. "Every year the mining sector is increasing. In 10 or 20 years, when we solve our security issues, we will have a big mining industry."

PLUGGED IN, SOURCED OUT

Colombia's natural resources make it a hot spot for oil and gas. Its human resources, meanwhile, make it a thriving destination for service industries, including software and IT services and business process outsourcing (BPO).

IT revenue grew 177 percent between 2007 and 2012, according to U.S. market research firm IDC, which says Colombia's software industry more than tripled in the same period. Likewise, exports in Colombia's BPO sector grew 77 percent between 2010 and 2012, according to the Colombian Association of Contact Centers and BPO.

"IT projects in Colombia are growing a lot, and many U.S. and European companies are outsourcing with Colombian people," says Mr. Vargas, who estimates that as many as four-fifths of Colombians with a PMP credential work in IT.

"Enterprise resource planning platforms and specialized software for pipelines and the oil industry are very, very popular," adds Mr. Sánchez Brand, who says demand for cloud integration platforms also drives IT projects in Colombia. So much so that IBM, in June 2014, opened a US\$17 million data center in Bogotá—its fourth in Colombia.



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PROJECT POWER

Notable initiatives in the works

Companies such as ADA and Digitex have chosen Colombia as their Latin American base for BPO services largely because of government incentives, including free-trade zones where companies receive preferential tax rates, according to KPMG. Other incentives include the government's Productive Transformation Program, which facilitates IT and BPO growth by working with industry to identify and address private-sector needs; the Digital Talent initiative, through which the government has allocated about US\$19 million for education grants to Colombians who want to obtain IT degrees; and

Vive Digital, a US\$2.45 billion program to increase high-speed Internet infrastructure and access across Colombia.

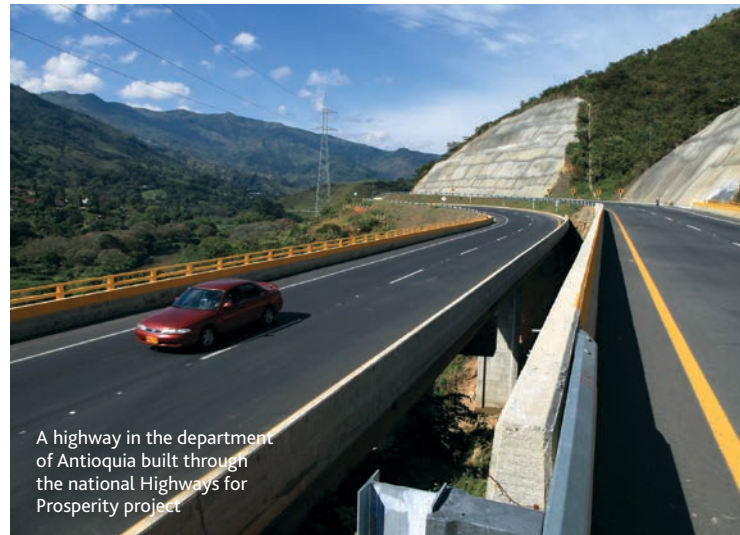
An abundance of educated, skilled and affordable labor is a major draw for IT and BPO companies—particularly those serving Spanish-language markets in the United States, Latin America

and Europe. A lingering challenge, however, is the demand for English speakers, according to the Colombian Commerce Ministry, which has established a bureau of bilingualism to teach English to Colombians so the country can attract more multilingual BPO firms.

As Colombia's project landscape flourishes, and its project management practices mature, the nation will reap the rewards, Mr. Vargas says. "I had an opportunity to work in the United States, but I decided to stay in my country because it is growing," he says. "Security and the economy are getting better and better, and opportunities for project managers are increasing. I'm very confident about the future of Colombia." **PM**

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A highway in the department of Antioquia built through the national Highways for Prosperity project.

HIGHWAYS FOR PROSPERITY

Colombia's largest-ever public works program, the US\$25 billion Fourth Generation of the Road Concessions Program, encompasses 47 projects to build about 8,000 kilometers (4,971 miles) of roads. Its largest project, Highways for Prosperity, is a US\$13 billion initiative to create a network of four-lane highways spanning 1,160 kilometers (721 miles) between Medellín and Colombia's ports, reducing travel time by more than half.



PORT OF CARTAGENA MEGA 2017 PROJECT

Aiming to become one of the world's 30 best megaports, the Port of Cartagena will invest US\$1 billion to overhaul and expand its facilities by 2017. The project will more than double the port's capacity.



CARTAGENA REFINERY

State-owned oil company Ecopetrol is engaged in a US\$6.47 billion project to expand and modernize one of Colombia's largest crude oil refineries: the Reficar Refinery in Cartagena. Scheduled for completion this year, the project aims to double refinery capacity to 165,000 barrels a day without increasing fixed costs.

BOGOTÁ METRO

Scheduled for completion in 2021, the Bogotá Metro will be the first underground rapid transit system in Colombia's capital city. At a cost of US\$3 billion, the system's electric trains will transport approximately 45,000 passengers per hour.

BICENTENNIAL PIPELINE

The US\$4.2 billion Bicentennial Pipeline will be Colombia's longest oil pipeline, connecting the interior city of Aruaney with the port city of Coveñas. The pipeline will be 1,545 kilometers (960 miles) long.



VIVE DIGITAL

To increase Internet access, the Ministry of Information and Communication Technologies launched Vive Digital in 2010. Completed in 2014, the US\$2.45 billion program increased the number of Internet connections in Colombia fourfold to 8.8 million by extending the national fiber-optic network, among other initiatives.