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FOREWORD

COLOMBIA - WAKE UP AND SMELL THE COFFEE

I am delighted to have this opportunity to introduce this special report on Colombia showcasing the commercial opportunities available to UK businesses in the infrastructure sector.

This is an exciting time for UK-Colombia relations. Our relationship with Colombia is already close and has been for many years. President Santos' Guest of Government visit to London in November 2011 set out our determination to take our relationship to the next level.

The UK is the second largest overseas investor in Colombia. And we are seeing a growing number of UK companies operating in this market, in sectors ranging from retail to technology. Increasingly, UK companies are seeing Colombia as a hub for their operations in Latin America. Yet there is so much more that we could do.

During President Santos' visit, our countries agreed to double two-way trade to £1.75 billion by 2015. Yet I think our ambition should be even higher.

Colombia has the potential to be one of Latin America's great success stories.

It is already an emerging power with a diversified economy, a growing middle class and a strong, democratic government.

Colombia's economy grew by almost six per cent in 2011, with similarly strong growth forecast over the next five years. It has been highlighted by the World Bank as a 'top reformer' in five of the last eight years. President Santos is set on completing the challenging journey to membership of the Organisation for Economic Co-operation and Development, and this will put Colombia alongside Mexico and Chile as one of the leading free and open market economies in the region.

Infrastructure will be one of the key drivers that takes Colombia to the next level of economic development. The facts speak for themselves. The Colombian government has set out its ambition to secure US\$54 billion in investment over the next three years.

This presents huge opportunities for UK companies. Colombia is keen to draw on UK commercial expertise in large-scale finance and project management, engineering, professional services and sustainable construction.

This Infrastructure Journal Special Report on Colombia highlights the exciting opportunities for UK plc. There is no better time than now to invest in Colombia, and UK Trade & Investment can help firms to take those first steps.

Stephin Chein

Lord Green of Hurstpierpoint¹



¹Lord Green of Hurstpierpoint is Minister of State for Trade and Investment. He took up his appointment after a 28year career with HSBC which culminated in his appointment as Group Chairman of HSBC Holdings in 2006. He has been Chairman of the British Bankers' Association and Chairman of the Prime Minister's Business Council for Britain. He has also served as a trustee of The British Museum and an honorary trustee of Peking University.



NOTES FROM THE AUTHOR: WELCOME TO COLOMBIA

Long-standing perceptions of Colombia would perhaps have you believe that it is a country of fantastic natural wealth – in coffee and gold, in agriculture and in oil – but without the clear-headed direction and international clout to truly exploit these riches. Decades of political and economic unrest have led to doubts surrounding the country's viability as a destination for long-term investment.

Colombia's current administration has worked relentlessly to change this image. A slow and steady approach to fiscal policy, and a new, modernised administration have paid dividends, and the country is now growing at an unprecedented rate both in terms of its economic strength and in its ambition. The political troubles that have dogged its stability have now been pushed to the margins, and the country defied the global economic downturn to grow by almost six per cent last year.

But this growth will only be sustainable if Colombia has a network of roads and rail, homes and hospitals to support it. The Colombian government is well aware of this and over the past few years has entered into a programme of law drafting, has sought advice from other countries and is now establishing itself as part of the countries set to succeed the BRICS. These are the CIVETs – namely Colombia, Indonesia, Vietnam, Egypt, and Turkey – and they have the resources, growth and the young populations that more developed nations are starting to lack.

In particular, Colombia's new PPP programme looks set to usher in a new era of innovatively funded public and private projects that will change the face of the country. In the making of this report, Infrastructure Journal has spoken to those involved at every level in this step change – from government officials to bankers, to the specialist lawyers who helped draft the new regulations. What was unanimous from all of these experts was the belief that Colombia is a country on the rise – and that while challenges undoubtedly still exist for the country, its best years are yet to come. International studies and reports support this changing view of the country. And as Colombia's global standing increases, so too has international investor interest in becoming a part of its infrastructure revolution.

Some of the key findings of the report include:

- Billion-dollar road and rail PPP projects are set to be the biggest drivers for growth and foreign investment over the next decade, with a comprehensive pipeline of projects already established
- Lessons learnt from the UK's PPP schemes mean that Colombia's new regulations for the model will be familiar to UK and European investors
- Foreign Direct Investment has increased exponentially, as a result of eased trade laws and the Colombian government's dedication to welcoming foreign investors
- Opportunities for investment are huge, but sophisticated investment portfolios and specialist local knowledge still need to be developed to support international liquidity

As this report demonstrates, Colombia looks set to be one of the next decade's infrastructure success stories. Obstacles and barriers to investment still exist, but the political will to overcome these cannot be underestimated. Nor can the momentum at which the country is growing and investing in its infrastructure, and in its future as a powerful emerging market. It makes for a promising place to do business.

Olivia Gagan & Vanessa Buendia



Chapter 3

IJ Infrastructure Investment Guide: Colombia

KEY PILLARS OF THE COLOMBIAN MACRO-ECONOMIC ENVIRONMENT



3. KEY PILLARS OF THE COLOMBIAN MACRO-ECONOMIC ENVIRONMENT

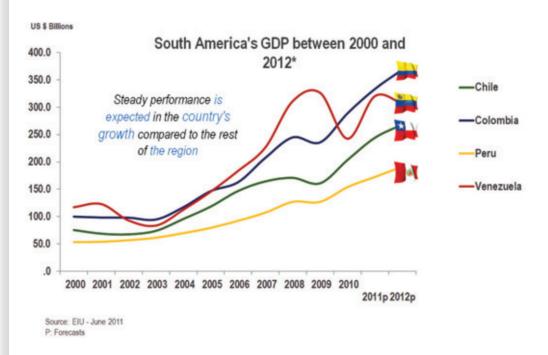
Colombia is the fourth largest economy in Latin America (LATAM) after Brazil, Mexico and Argentina. Though Brazil, Mexico and Chile are the leading contenders for attracting foreign investment for infrastructure, Colombia has decided to enter the race with a strong portfolio of projects.

Given the country's current economic climate, attracting investors should be relatively easy compared to how it was 10 years ago.

In 2009 Robert Ward, global forecasting director for the Economist Intelligence Unit (EIU) coined the term CIVETS, an acronym devised to identify the natural successors of BRIC economies. The CIVETS include Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa. South Africa has since formally joined the BRICS in 2010, but the remaining five CIVITs are noted for having diverse economies and young and growing populations.

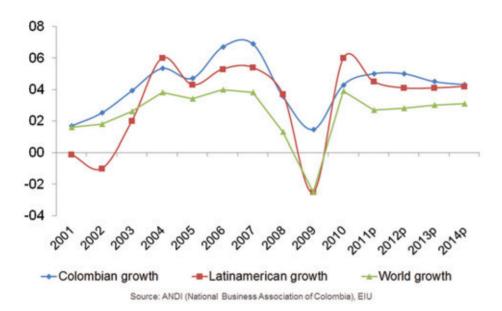
Colombia is located in the north western region of South America and has a total surface area of 1.14 million km², which makes it roughly five times the size of the United Kingdom with a population of almost 47 million and a workforce of 20.3 million. As a naturally rich country Colombia's exports depend mostly on commodities such as crude oil, coal, coffee and non-ferrous metals.

In 2011 the country's gross domestic product (GDP) equalled US\$470.7 billion making it the 29th largest economy in the world according to the CIA World Factbook – Brazil ranked eight, Mexico 12 and Argentina 22.





Growth of Colombia's GDP vs. Latin America 2001 - 2010 (%)



However, memories of drug lords, corruption, political assassination attempts and "guerrillas" still haunt investors and keep some of them at bay. The fact is that in the last 10 years – under the tenure of former president Álvaro Uribe and now president Juan Manuel Santos – violent crime has decreased significantly, terrorist groups have been restricted to specific areas outside urban populations, and foreign direct investment (FDI) has increased.

Notwithstanding during the late twentieth century the country grew at a steady rate of four per cent annually.

In 2011 Colombia reached a 5.7 per cent growth rate while the world economy averaged 3.2 per cent according to the World Bank. By the third quarter (3Q) of 2011 Colombia reached an impressive 7.7 per cent growth compared to the same quarter the year before. The country has also maintained low inflation levels at 3.7 per cent and lowered unemployment to 9 per cent. Sound fiscal policies by the current administration indicate these numbers will be maintained in the following years.

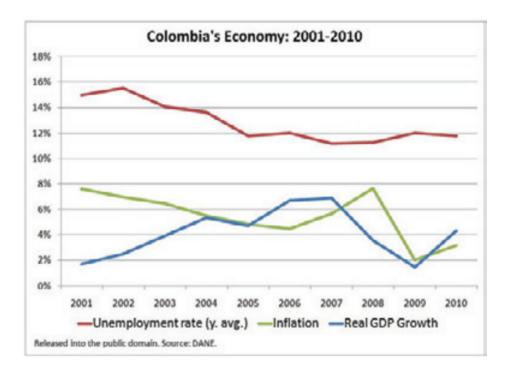
As a result all three rating agencies have upgraded the country to investment grade.

The country also has in effect 11 free trade agreements, has signed three more specifically geared towards Europe and the United States and is negotiating another three. As a result investment in Colombia and new business opportunities are skyrocketing. This leads to an increased demand for better infrastructure.

President Santos' new economic growth strategy for the country is focused on five key sectors or locomotives as he calls them which include housing, mining and energy, infrastructure, agriculture and innovation.

The coal mining industry in Colombia has showed impressive and steady growth in the last few years. In 3Q 2011 the industry showed a 27 per cent increase from the year before and the sector is poised to outshine other economic drivers at least until 2015. Given that most coal mines are located in the central region of the country, it's important to create new transport links that can take the product to ports for export.





Oil production also soared in 3Q 2011 with an 18 per cent increase from the previous year. On average in 2010 the country was producing 800,100 barrels per day (bpd) and exporting 400,700 bpd with prices reaching up to US\$103 per barrel. In 3Q 2011 oil exports reached a historical peak at 7.8 per cent of GDP.

Given country's climate and its high precipitation most of its energy is provided by hydroelectric plants and it still manages to export 1.294 billion kWh of electricity.

Though Colombian coffee is a prized commodity internationally speaking agriculture in general did suffer a contraction in 2011 and therefore is not considered by the Santos administration as an economic driver in spite of it growing 3.8 per cent in 2011.

The construction sector also saw impressive growth in 3Q 2011. The administration has set itself the target to build one million new homes between 2010 and 2014, 70 per cent of which are to be affordable housing. The sector in its entirety accounts for 6.9 per cent of GDP. The housing construction sector contracted by 6 per cent on 3Q 2010 but bounced back by 14 per cent the following year. The public works construction sector expanded by 20.9 per cent in the same period.

The government's ambitious infrastructure plan involves new inter-departmental highways, ports and airports to make Colombia more competitive. The plan requires over US\$50 billion investment for capital expenditures and significant support from the private sector.



Colombia Fact Sheet	
Surface Area	1.14 million Km ²
Territorial Maritime Waters	928,660 Km ²
Population	46.9 million
Capital	Bogotá
Major Cities	Bogotá (8.7 million inhabitants) Medellín (3.6 million) Cali (2.9 million)
Major Ports	Barranquilla (1.9 million) Cartagena (1.3 million) Santa Marta (0.6 million)
President	Juan Manuel Santos (7 August 2010 – four year term)
Official Language	Spanish
Main Exports	Crude oil, coal, coffee and non-ferrous metals
Total exports in US\$ (billions) Nov. 2011	US\$51.17 billion – increase of 42.3 per cent from Nov. 2010
Top Export Destinations	United States, China, Ecuador, Holland
GDP (Purchasing Power Parity)	US\$470.7 billion (2011 est.) US\$445.3 billion (2010 est.) US\$427 billion (2009 est.)
Growth rate 2011	5.7 per cent
Inflation	3.7 per cent
External Debt	US\$69.89 billion (31 December 2011 est.)
GDP per sector	Agriculture: 8.9 per cent Industry: 38 per cent Services: 53.1 per cent
Labour force	20.3 million
Unemployment Rate	9 per cent (2011 est.) 11.2 per cent (2010 est.)
Exchange Rates (Colombian Peso COP to a dollar)	COP 1,827.25 (average April 2012)
Foreign Direct Investment (FDI)	2011 – US\$14.4 billion (unofficial) 2010 – US\$6.7 billion 2009 – US\$7.1 billion (global recession) 2008 – US\$10.6 billion 2007 – US\$ 9 billion 2006 - US\$6.6 billion
Main investors in Colombia	United States, UK, Spain and Mexico
Free Trade Agreements (FTAs) in force	CAN (Peru, Ecuador and Bolivia), MERCOSUR (Argentina, Uruguay, Paraguay and Brazil), Chile, G-2 Mexico, North Triangle (Honduras, Guatemala and El Salvador), Switzerland, Liechtenstein, Canada
FTAs signed or in negotiation	United States, EFTA (Iceland and Norway) and European Union In negotiation with: South Korea, Panamá and Turkey
Country Ratings	S&P's: BBB- (16/March/2011) Moody's: Baa3, Not on watch (31/May/2011) Fitch: BBB- (22/June/2011)



Added to this, last year the country saw a series of floods that impacted its infrastructure severely. In April and September of 2011 the country saw a year's worth of rain pour down, which particularly affected its roads.

According to The Economist the flooding caused economic damage totalling US\$5.1 billion or 2 per cent of the country's GDP. Flooding is not new in Colombia, as such after the 2010 floods, the country set aside COP1.65 trillion (US\$928 million) for public works aimed at mitigating flooding damage.

Given the state of affairs, continuous investment to upgrade assets and build new ones is one of Santos' key economic drivers as noted by his infrastructure development plan.

3.1. LOCAL POLITICAL SCENE

The Republic of Colombia has a democratic representative government similar to the United States. This includes a judicial branch, a bicameral legislative branch and an executive branch led by the president.

The presidential term is restricted to four years. Since 2005, Colombian legislators approved re-election for one more term.

The current president, Juan Manuel Santos is part of the Social Party of National Unity, which is considered somewhat leftist. However, the president who succeeded Alvaro Uribe seems to have brought to the table more centrist policies than his predecessor.

President Santos' family has been historically active with the nation's liberals and the media. The Santos family used to own a local newspaper "El Tiempo". However, in 1991 he transitioned into politics and accepted the position as Minister of Foreign Trade.

Santos started distancing himself from the liberal party when it expelled 15 congressmen who voted in favour of re-election at the start of Uribe's term. Since then he has slowly continued separating his policies from his former allegiance and created his own path.

On 20 June 2010, Santos won the presidential election with 69 per cent support from the electorate. At the time, he seemed - as the natural successor - as if he would most likely continue Uribe's policies.

During his tenure, former president Uribe maintained a strict policy that favoured business development in the country. In order to achieve it, he used hard-line rhetoric to fight some of the country's key issues including security. During his time in office Colombia saw the dismantlement and weakening of the Revolutionary Armed Forces of Colombia (FARC), which included such operations as the rescue of former presidential candidate Ingrid Betancourt and the air strike assassination in Ecuador of FARC leader Raul Reyes.

Both operations were approved by Santos as at the time he was serving as Defence Minister.

However, the politicians have not seen eye-to-eye since Santos took office on 7 August 2010; reaching a breaking point last year, when during the elections Uribe's hand-picked candidates were defeated.

The problems facing Santos when he took office were completely different than those Uribe had to tackle at the beginning of his term. Uribe inherited a country still in the midst of terrorism and one that needed to recover after a two-decade war on drugs. By the time Santos reached the presidency, the FARC had

²http://www.economist.com/ node/21541419



been pushed out of urban areas and relegated to the southern Amazonian jungle near the border with Venezuela. Though they are still a threat, the risk of a terrorist attack has been significantly mitigated in the past 10 years.

Santos faced an economy hungry for development and which faced a very serious problem hindering its progress. Colombia was no longer facing drug lords or "guerrillas", rather the new conflict the country had to face was an internal one with corruption.

Therefore Santos developed a five point plan that would allow him to incentivise the economy and target specific areas which include agriculture, innovation, mining, housing and infrastructure.

Infrastructure concessions in Colombia are not new. The country has gone through four generations of concessions some of which have already fulfilled their lifecycles. The country had long established the National Institute of Concessions (known locally as INCO), an authority specifically geared towards procuring and awarding projects.

However, due to recent scandals, such as the development of the Transmilenio's second line – a pioneering bus rapid transit system in Bogota – in which a corruption investigation ensued involving the concessionaire and the Mayor of Bogota, it was clear that Santos needed to clean his house before proposing a new infrastructure programme.

Therefore President Santos led two initiatives that would bring about the fourth generation of concessions. The Santos administration proposed new legislation to regulate public-private partnerships and it also dismantled INCO.

As a result, the new regime successfully launched bill 1508, which was enacted on 10 January 2012.

To replace INCO, the administration created the National Infrastructure Agency (known locally as ANI). To lead ANI the government reached out to the private sector and hired Luis Fernando Andrade Moreno, who at the time was leading McKinsey Colombia.

ANI has been introduced as a complete restructure of the system in the sense that though it may not have as much personnel as INCO had they all meet certain educational prerequisites.

Under Andrade's leadership the agency has introduced a new PPP plan that will require an investment of c. US\$50 billion between 2011-2021.





Interview with His Excellency:

MAURICIO RODRÍGUEZ MÚNERA, Ambassador for the Republic of Colombia in the United Kingdom

> MAURICIO RODRÍGUEZ-MÚNERA, Ambassador of Colombia to the United Kingdom since October 2009. He is the founder and former director of Portafolio. Colombia's most prominent economic and financial newspaper, and a member of the Boards of Directors of organizations within the media, business, health and cultural sectors. He is also a former President and Professor of CESA business school and at Universidad de los Andes in Bogota. He holds a degree in Business Administration and is the author of six books on management, economics and leadership.

nfrastructure Journal: Due to its history, Colombia still seems as an odd choice for some foreign investors. What has changed in the country that makes it an attractive investment destination?

Mauricio Rodríguez Múnera: Over the past 12 years, Colombia has made huge progress in many aspects: for example, the crime rate has come down by 60 per cent, unemployment has been reduced from 18 per cent to nine per cent, and GDP growth was close to six per cent in 2011. And last year, Colombia was granted credit investment status by the three major rating agencies. These, and many other positive indicators, have attracted increased foreign investment, with its annual volume having been multiplied by 10 in the past decade. In 2011, Colombia received US\$13.5 billion in foreign investment.

IJ: What are the most important risks an investor should look out for when considering Colombia as an investment possibility and how can they mitigate those risks?

MRM: There is no special risk to be considered, just the normal risks that have to be analysed with any project in the developing world. Colombia is now part of the CIVETs – the group of most attractive emerging economies (after the BRICS) as coined by The Economist Intelligence Unit. And according to Newsweek and Time magazines, Colombia is a rising star. Its comeback story is the most compelling in the world today.

IJ: Why does the Santos administration have such an interest for infrastructure investment? What is the purpose and the actual immediate need for investment in this sector?

MRM: The quantity and quality of infrastructure in Colombia is quite low as over the past two decades we did not invest enough in it. Investment in this sector was just one per cent of GDP when it actually needs to be at least three per cent of GDP to produce the adequate infrastructure that will allow Colombia to continue growing at a high and sustainable rate.

IJ: Some LATAM markets are closed to foreign investors. We've seen in the past major concession deals awarded to local players. What guarantees do foreign investors have that the process will not be politically motivated to promote local investors?

MRM: The World Bank recognises Colombia as one of the most business friendly environments in Latin America and the country that has passed the most reforms to promote both foreign and domestic investment. There has been no case in which a foreign company has complained about political preference for local firms. Foreign Investment is very welcome in Colombia – a point reiterated by President Santos during his recent visit to London. Additionally, Luis Andrade, Director of Colombia's National Infrastructure Agency came to the UK in February with the specific purpose of attracting British investment in infrastructure. My country's regulations are very strict in guaranteeing levelled playing fields – there is no discrimination against or in favour of anybody.

IJ: Why would an infrastructure investor chose Colombia over other LATAM countries with a proven track record such as Mexico, Brazil, Chile or Peru? What does Colombia offer foreign investors that other countries in the region do not?

MRM: Colombia offers very attractive opportunities. We will invest £33 billion in infrastructure over the next decade, with very competitive game rules - including PPPs based on the British model. Colombia is now recognised by experts as one of the world's most dynamic economies, with a robust democracy, healthy institutions, social progress and full respect for the rule of law.



IJ: Seems like the Santos administration has a short-sighted investment plan in infrastructure, as it only considers investment during his tenure. What are the guarantees that an investment pipeline will survive after his administration leaves office?

MRM: As mentioned above, Colombia has a 10 year plan for infrastructure, with detailed objectives for the next 3 to 4 years but of course, we do have a long-term vision. Colombia has an excellent track record as a serious country in dealing with economic matters, our management of the economy has been praised for decades due to the fact that it has been in the hands of very well prepared technocrats that think and act in a responsible manner. Colombia's economy is one of the most stable and serious in the developing world - for example, we have never defaulted on the payments of our debts.

IJ: How much liquidity is there in the market? Can investors count on a functioning debt market in order to finance the deals or will they have to seek out international institutions for liquidity? Would that add an additional currency risk to the deals and if so how can it be averted?

MRM: The domestic financial market is large, sophisticated and very solid, as has been widely recognised by experts in these matters. But we welcome and need international liquidity to finance the huge projects that we will build in the coming years. All of the major international banks are present in Colombia and are rapidly expanding their activities. Currency risks in Colombia can be managed, as in other countries, with financial tools available in the banking system - both domestic and foreign - which are designed for such coverage.

IJ: The second line of the Transmilenio project was engulfed in a corruption scandal. What is the Santos administration doing to prevent other projects meeting the same fate?

MRM: Unfortunately in the previous Bogotá municipal administration there were some serious corruption cases that are now in the hands of the judges. We now have a new Mayor, Gustavo Petro, who won the elections mostly due to his past record in fighting corruption. More strict controls have now been put in place to avoid the mistakes of the past.

IJ: Colombia seems to favour a mix scheme of traffic and availability payment concessions for roads. How can the country secure payments to private partners over the lifecycle of an asset?

MRM: The answer to this question has to be made on a case by case basis. Colombia's government in any case will make sure that we have a competitive set of conditions to attract both domestic and foreign investors.

IJ: How is the government willing to assist its private partners in order to attract foreign investment?

MRM: Colombia's foreign investment promotion agency, Proexport, has offices across the world including, of course, one in London. At both Proexport and the Embassy of Colombia in the UK, we are ready to meet any investors interested in our country – to assist them in obtaining appropriate information and making contact with

government officials and local partners. Personally, I am available to meet any interested companies and can be contacted directly on m.rodriguez@colombianembassy.co.uk

IJ: How much do security issues and corruption play a role in the country and what is the government doing to improve the situation?

MRM: Serious security problems are a thing of the past; there is plenty of evidence that proves this. And corruption is not mentioned as a concern in any survey of the business community operating in Colombia. The best way to verify the truth of these two statements is by visiting Colombia and experiencing it first-hand. If you talk to foreign companies active in Colombia, all of them – without exception – will recommend investing in Colombia.

3.3. LEGISLATION AND REGULATORY REGIME

Law 1508 regulating PPPs in the Republic of Colombia was enacted on 10 January 2012.

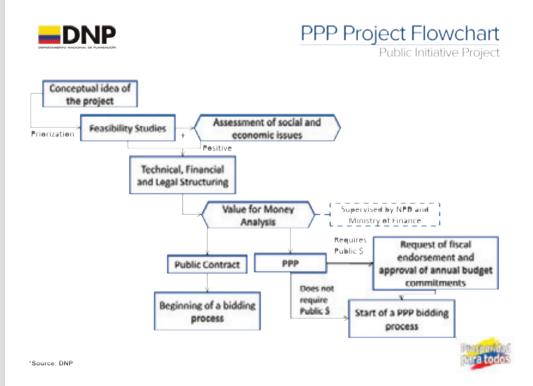
The law considers two main points:

- Only projects larger than 6,000 minimum wages (~US\$1.6 million) will be eligible for a PPP scheme, which in 2011 was set at c. US\$328 a month.
- · Concessions can only last up to 30 years including extensions.

Furthermore the bill divides regulation between public initiative projects and private initiative projects.

Public Initiative Projects will hit the market as soon as the public entity vying to procure it fulfils certain requirements such as the project's cost-benefit ratio study, project definition, classification, estimation and risk allocation. The entity must later make all documents public and proceed to select a partner by either a pre-qualification process, a public calling, or a public tender. The selection process for public initiative projects will be regulated by law 1150 of 2007 in order to be sure the government is selecting the best offer.

The public initiative projects will also not be able to disburse additional resources from the public budget that exceed 20 per cent of the originally agreed contract value.



Private Initiative Projects are in other words unsolicited proposals. According to the bill the proposer is expected to assume all the costs relating the initiative and submit it to the authority.

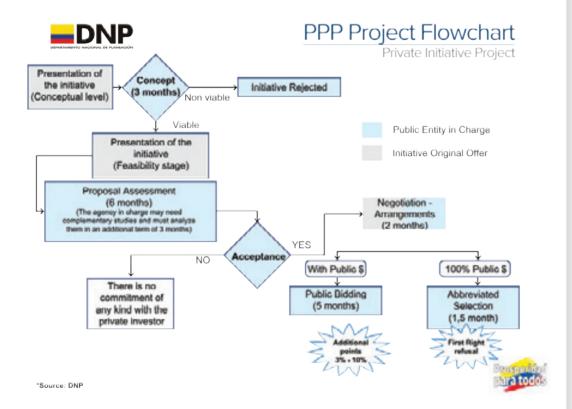
The process will be then divided in two stages which include the prefeasibility and the feasibility of the project. The prefeasibility portion will include basic designs, revenue studies, operations and



maintenance proposals, project costs and a proposed financing. The authority will have up to three months to assess the project. If the authority considers it viable then the proposer may be able to move forward to the next stage.

During the feasibility stage the proposer will have to prove his ability to finance the project and introduce the company's credentials. After all documents are handed over to the authority, the latter will have up to six months to assess the proposal.

The authority will also allow for an abbreviated selection, which will allow other interested parties to submit their own proposals for the project. However, if another proposer is selected then the originator of the idea will have the right to counter propose.







Colombia's new PPP revolution:

Interview with CARLOS SÁNCHEZ-GARCIA of Durán & Osorio Abogados

Carlos Sánchez-Garcia is junior partner at Durán & Osorio Abogados as the key contact of the firm for the UK/EU market. He has been the head of the legal teams appointed by the government for structuring a concession contract of six airports in Colombia, and defining the pricing policy of the radio spectrum in the same country. He has also worked on the structuring of large Colombian investment projects such as the concession contract of Bogotá International Airport, second phase of Bogotá's rapid bus system (Transmilenio) and two BOT contracts for toll-roads.

nfrastructure Journal: What has been your involvement in the new PPP regulations, and what were the main drivers behind the introduction of the new rules?

Carlos Sánchez-Garcia: Durán & Osorio, along with other Colombian law firms grouped in the Legal Services Chamber of the National Industrial Association (ANDI), submitted to the government a draft of a decree to develop Law 1508 in some of its most relevant parts.

Regarding the drivers behind this law, I would say there were two: Colombia was looking forward for a proper legal framework for big infrastructure projects requiring private funding, since the Public Procurement Law (Law 80) was a rigid act for traditional contracts. In that context, unsolicited proposals for PPPs had an unclear framework and non-traditional procurement processes such as competitive dialogue were impossible.

The second driver was a reaction against some corruption scandals in infrastructure projects we Colombians have had to witness.

That would be the reason why Law 1508 is full of restrictions and limitations for public organisations in charge of the procurement processes, even though this was supposed to be a flexible framework for complex projects. But I might say there is a cultural problem in the way public contracts are procured, and even more in the way they are executed rather than a lack of legislation. That cultural problem, unfortunately shared by most developing countries, is the root of most failures in infrastructure projects.

IJ: What were the biggest challenges to overcome when drafting the new regulations? Were there any issues and challenges that are unique to Colombia?

C S-G: The challenges the Congress tried to address with Law 1508 are the same we are facing now when discussing the Decree:

a) Infrastructure projects are complex, and in consequence a high level of information is mandatory when structuring them. Of course, the public organisation might get the information required from contracting studies before opening any tender process. However, sometimes it is difficult for these organisations procuring these studies, even more when schedules are against them. In that context, flexible procurement processes such as competitive dialogue and pre-qualifying might help public entities obtain an acceptable level of information before choosing any private partner, since it is possible to transfer the procurement (and the cost) of those kind of studies to the bidders. In the same fashion, as the level of information of the project increases allowing a better project conception, opportunistic behaviour might decrease, since bidders won't be tempted to take advantage of grey areas in the contract.

- b) It's important to allow the market to propose new projects, but only within a legal framework that protects public interests.
- c) Transparent public procurement and well-structured projects are a must.

IJ: What benefits does the new model offer over the existing methods for procuring projects in Colombia? What are the major differences between this current law and the existing regulations?

C S-G: Pre-qualifying and competitive dialogue are new ways to enrich projects, making the public organisation aware of the industry point of view and getting all the information required for the project. In addition we finally have a clear framework for unsolicited proposals.

IJ: As the economy of Colombia grows and stabilises, and wages presumably rise in line with this, is it possible that the stipulation that only projects larger than 6,000 minimum wages can go ahead could mean that smaller, but just as viable, projects cannot go ahead? What was the reasoning behind this stipulation?

C S-G: 6,000 minimum wages is a really small budget (about US\$1.6 million). The costs associated to structuring and procuring might be too high for smaller projects.

IIJ: How will the new PPP laws help tackle the risks that have historically been associated with investing in Colombia and help facilitate foreign investment?

C S-G: The better the projects are structured, the lower the perception of uncertainty is, and this law is heavily focused on improving project definition. I believe uncertainty is the most important barrier for foreign investors when considering Colombian projects, since we have no record of unfair acts or expropriations like Argentina or Ecuador.

IJ: What regulations are in place if a bidder decides to contest a preferred bidder decision?

C S-G: According to article 20, paragraph 3, Law 1508, only those who submitted an unsolicited proposal are allowed to improve a submitted offer if there was a better one. However, if a bidder considers the procuring process was not fair or claims public entities' decision was illegal, they are allowed to challenge that decision in court.

IJ: What support is available to emerging or new developers who want to proceed through Colombia's new PPP process? How has the law been designed to facilitate entry into the PPP market?

C S-G: Law 1508 treats all bidders as equals. However, taking the risk of submitting an unsolicited proposal would give a relevant advantage to anyone during the procuring process.

IJ: What should potential investors in Colombian infrastructure know about the PPP laws? How have the new regulations made the country a better place in which to invest in infrastructure?

C S-G: The new PPP law is just a part of a stable and strong legal framework for foreign investors. Other laws such as the Legal Stability Contracts Act, Investor Protection Treaties (the Colombian Congress recently ratified the UK-Colombia Treaty), Double Taxation Agreements with EU countries (Spain) and a flexible Companies' Law give the framework required for any foreign investor.

3.4. INSTITUTIONAL SETUP

Since president Santos took office, Congress passed decree 4165 on November 2011, which effectively eliminated the National Concessions Institute (INCO) and created the National Infrastructure Agency (ANI).

In the decree ANI is defined as a decentralized state agency, which is financially and technically autonomous from the government but ascribed to the Ministry of Transportation. ANI will have the responsibility of planning, coordinating, structuring, executing, administrating and evaluating concession projects and any other PPPs that include design, build, finance, operations and maintenance (DBFOM) aspects of transportation projects in the country.

The agency is led by the former head of McKinsey in Colombia, Luis Fernando Andrade Moreno. It is under his tutelage that transportation projects have been selected according to priority. Advisory procurements are now being undertaken. The purpose of ANI replacing INCO was to create a clean slate for the government.

INCO had fallen into disrepute due mostly to accusations involving corruption. As one official told IJ, the purpose of ANI was to repopulate the authority with a group of professionals who were more in tuned with concession structures and infrastructure development in order to maximise on opportunity. Therefore, the minimal educational requirements of ANI personnel are also considered to be of a better quality than former INCO employees.

The agency may be smaller than its predecessor in terms of employees but according to local officials wages are higher in order to prevent corruption.

The National Roads Institute (INVIAS), which is also ascribed to the Ministry of Transportation, serves more of a procurement agency for contractors. The agency is tasked with the execution of any policies or projects aimed at developing road infrastructure in the country.

In order for ANI to choose appropriate transportation infrastructure projects, it works closely with the Ministry of Finance, which is tasked with managing and creating fiscal policies and maintaining macroeconomic stability. As such, currently ANI is working with the Colombian Ministry of Finance in order to create a new bond instrument that will increase liquidity in the market as it is currently limited.

Private sector bonds in the country are generally inflation indexed. However, the terms and conditions of this new financial instrument are still on the drawing board. One possibility is that the bonds will provide local pension funds access to invest in infrastructure projects. However, fund managers in Colombia seemingly lack the knowledge on how to manage sophisticated infrastructure investment portfolios.

In terms of social infrastructure projects they are currently being handled and monitored by the National Planning Department (DNP). The DNP is the publicly-funded technical adviser of the national government that also works closely with ANI in terms of transportation infrastructure. Its function is to strategically develop a National Development Plan that will spearhead growth in the medium and long term. The DNP works with a series of public institutions in order to better develop strategies and policies that will protect and attract investment and will follow up with projects that have already been undertaken.

Part of the DNP's obligation is to help the president develop a growth plan during his tenure. As such, president Santos introduced his proposal plan named Prosperidad Para Todos 2010-2014 (Prosperity for All). By June the administration is due to submit a definitive 10-year plan to Congress.



The Prosperity for All plan highlights five key economic drivers including housing, mining and energy, infrastructure, agriculture, and innovation. As mentioned before, transportation infrastructure development is being led by ANI. The aggressive infrastructure plan is aimed at increasing public sector investment levels, which are currently at one per cent of GDP and could rise to up to three per cent. By 2014 the government expects to concession 100 per cent of the four-lane road network and 50 per cent of railways. By 2018, several greenfield projects are expected to have hit the market.

Investment Plan 2011-2014 - US\$ Billions									
		2011			2012				
	Private Sector	Other*	Total	Private Sector	Other*	Total			
Locomotives	27.64	6.54	34.18	29.51	7.65	37.16			
Innovation	0.00	0.03	0.03	0.00	0.03	0.03			
Agricultural and Rural Development	0.93	0.63	1.56	1.07	0.72	1.78			
Transport Infrastructure	2.05	2.66	4.72	2.56	3.10	5.66			
Mining and Energy	16.32	0.41	16.72	15.52	0.45	15.97			
Housing	8.35	2.81	11.15	10.36	3.36	13.72			
Infrastructure for competitiveness	1.99	0.45	2.45	2.22	0.45	2.67			

*National Central Government, Local Governments, General Participation System

**Source: EConcept, Análisis Económico Independiente. Colombia: Quarterly Investment Outlook 4Q 2011

Investment Plan 2011-2014 - US\$ Billions									
		2013			2014				
	Private	Other*	Total	Private	Other*	Total	Total		
	Sector			Sector			2011-		
							2014		
Locomotives	28.73	6.88	35.62	28.85	5.93	34.79	141.75		
Innovation	0.00	0.03	0.03	0.00	0.04	0.04	0.13		
Agricultural and Rural	1.12	0.74	1.86	1.14	0.76	1.90	7.09		
Development									
Transport Infrastructure	2.70	2.69	5.39	2.37	2.27	4.63	20.40		
Mining and Energy	13.08	0.51	13.58	11.28	0.62	11.89	58.17		
Housing	11.84	2.91	14.75	14.07	2.26	16.33	55.96		
Infrastructure for competitiveness	2.47	0.46	2.93	2.75	0.47	3.22	11.26		

*National Central Government, Local Governments, General Participation System

**Source: EConcept, Análisis Económico Independiente. Colombia: Quarterly Investment Outlook 4Q 2011

Housing and other social projects will be led by the DNP. Though development of that type of projects is not as aggressive Colombia still has interesting opportunities for investors, such as the Macropoyectos. The Macroproyectos are large affordable housing projects, currently the largest one, Ciudad Verde has the capacity to house up to 350,000 families. The country is also considering the procurement of various governmental offices and public schools projects.



Chapter 4

IJ Infrastructure Investment Guide: Colombia

TRANSPORT INFRASTRUCTURE



4. TRANSPORT INFRASTRUCTURE

In 2011 the Ministry of Transportation alongside ANI rolled out a list of proposed transportation infrastructure for the next 10 years, which adds up to US\$50 billion worth of investment. According to a study developed by EConcept, a local independent consultancy: "The main government objectives for 2018 are to generate a five-fold increase in km of double—lane highways, a three-fold increase in operational railways, duplicate the capacity of ports and increase 50 per cent the number of mobilised passengers in airplanes."

However, the government's goals for 2014 when Santos' first term ends are - according to ANI - a 100 per cent increase in four-lane highways, a 50 per cent increase in length of railways in operation, a 50 per cent increase in load capacity for ports and a 35 per cent increase in passengers mobilised in airports.

	Goverr	ment Target	s for 2014 ar	nd 2018	
Indicator	2010 Base	2014 Goals	2018 Goals	Variation relative to 2010 (Goals 2014)	Variation relative to 2010 (Goals 2018)
Kilometres under conces- sion	6,035	10,697	N/A	77.2%	N/A
Double-lane highways (km)	792	2,279	4,398	187.8%	455.3%
Operational railways (km)	846	1,341	2,353	58.5%	178.1%
Ports' capac- ity (millions of tons)	131.9	182.1	253.8	38.1%	92.4%
Air passengers mobilised (mil- lions)	20.1	26.9	33.6	33.8%	67.2%
**Source: Ministry	of Transport – Nat	ional Infrastructure	Agency Projects, a	as published by EC	oncept

Most of the US\$50 billion capital expenditure investment will be directed to the construction of new toll roads around the country. Revenue for these projects could potentially come from a hybrid model which includes up to 20 per cent in availability payments and 80 per cent on toll revenue.

Though some might worry about appropriations risk for Colombian toll roads, it is important to note the country has been undertaking road concessions since the 1980's and has a proven track record with availability payments.

The portfolio includes roads, rail, river and sea waterways, ports, airports and urban transportation projects. Given that the rail projects are all freight, most of the railway concessions are expected to be awarded as a private initiative to mining contractors in the area that already have considerable interests in the country. This would enable them to transport mining goods from the central region of the country to the major ports and reduce their export costs.

In regards to ports, most of the major ports in the country are already under some type of concession, therefore the majority of the deals proposed by the government are terminal expansions.



	2010-2014 USD Billions	2011-2021 USD Billions
Roads	9.6	27.9
Rail roads	0.7	10.5
River and sea	0.9	1.5
Ports	1.0	1.5
Airports	0.5	1.0
Urban	3.25	7.1
Total	16	50

*Source: Colombian Infrastructure Chamber

4.1. DEAL PIPELINE PER SUB-SECTOR

41.1. TOLL ROADS

Colombia has already signed 25 contracts that include more than 5,800km worth of roads under concession. Currently there are 875km of four-lane highways under construction, and 670km of four-lane highways in operation under a concession structure.

By 2014, the country should have 2,280km of four-lane highways and by 2018 that number should increase to 3,400km.

Therefore the country still expects to procure more than 6,000km in order to complete the national road network. In total, the aim is for the government to concession more than 10,000km of roads.

Currently one of the country's main projects is the Autopistas de la Prosperidad, a project formerly known during Uribe's administration as Autopistas de la Montaña. The project was awarded to Interconexión Eléctrica (ISA), Colombia's state-owned transmissions firm and a major participant in the Latin American power and telecommunications sectors. It operates a high voltage transmission network of some 39,000km, deployed throughout Colombia, Peru, Bolivia and Brazil, and interconnections between Venezuela and Colombia, Colombia and Ecuador, and Ecuador and Peru.

When the project was originally awarded its cost was estimated at COP5 trillion (US\$5.8 billion). It comprises the construction of several interlinked single- and dual-carriageway highways totalling just over 760km. It is Colombia's second most important corridor with a complexity that few other projects have. The road needs to cross two large mountain chains, which are geologically young and prone to instability, in order to connect Boqotá, Medellín and Choco.

ISA's project envisions that 152km will be built as tunnels or bridges. ISA plans to build 131 tunnels and 696 bridges.

This has led the price of the project to increase dramatically to COP12-13 trillion. As a result, president Santos announced last April that the government would finance up to COP10 trillion, raising the question



of how the remaining COP2-3 trillion will be financed. Multilateral agencies may be able to leverage the remaining equity stake.



The following list provides a guideline of projects that will either come out to tender in the next couple of years or have been considered by the government as potential candidates for concession projects, which include greenfield and brownfield elements.



The projects include:

Region	Road	Existing	Work	Bid	CA-	ADT*	Esti-
		Length	Required	Start	PEX		mated
		(km)			(US\$		Yearly
					Mill)		Income
							(US\$
							Mill)
Centre- West	lbagué – La	a Paila				4,700	32.3
	Ibagué -Caja- marca	40	46km of green-field four-lane highway 1km bridge Improvements on 40km	2013 2Q	333.3		
	Caja- marca - Calarcá	46	Improvements on 46km	2013 2Q	76.7		
	Calarcá – La Paila	62	62km of green- field four-lane highway	2013 2Q	345		
Centre - West	Buga - Bue	naventura				5,500	14.9
	Buga - Bue- naventura	211	 24km of green-field four-lane highway 10km of green-field single-lane highway Improvements on 25km 	2013 2Q	401		
Centre - West	Santander	de Quilichao -	Chachagüi			3,700	29.9
	Santander de Quilichao - Chacha- güi	293	 74km of green-field four-lane highway 63km of green-field single-lane highway Rehabilitation of 219km 	2013 2Q	839		
Centre - South	Neiva - Gira	ardot				4,250	4.7
	Neiva - Gi- rardot	166	81km of green- field four-lane highway Improvements on 85km	2013 2Q	592		



Centre - South	Girardot –	Puerto Salgar	– Ibagué Corridor			3,500	41.3
	Girardot – Puerto Salgar	167	 5km of green-field single-lane highway 2km bridge Improvements on 128km Rehabilitation of 16km 	2012 4Q	268		
	Puerto Salgar - Ibagué	145	Exclusive O&M contract	2012 4Q	0		
Centre – South	Mocoa – N	eiva Corridor				3,160	4.3
	Mocoa – Neiva Corridor	316	• N/A	TBD	225		
Centre - Northeast	Manizales -	- Honda -Ville	ta			4,950	12.8
	Honda - Villeta	84	Improvements on 34km	2013 2Q	344		
	Manizales - Mariq- uita	122	 10km of green-field single-lane highway Improvements on 82km Rehabilitation of 30km 	2013 2Q	200		
Centre - Northeast	Antioquia I	Highway Corri	dors			N/A	N/A
	Antioquía Highway Corridors	1,200	• N/A	TBD	8,100		
Centre - Northeast	Bogotá – B	ucaramanga -	- Cúcuta Corridor			4,700	82.7
	Bogotá – Bucara- manga – Cúcuta Corridor	568	• N/A	TBD	1,300		
Centre - Northeast	Bucaramar	iga – Barranca	abermeja - Remedios			3,700	6.4
	Bucara- manga – Bar- rancab- ermeja - Remedios	223	90km of green-field four-lane highway 20km of green-field single-lane highway Improvements on 120km Rehabilitation of 90km	2013 2Q	852		



Centre - Northeast	Norte de Sa	antander Corr	idors			N/A	N/A
	Norte de Santander Corridors	219	• N/A	TBD	361		
Centre- East	Villavicenc	io – Arauca Co	orridor			1,600	5.3
	Villavi- cencio – Arauca Corridor	662	 24km of green- field single-lane highway Rehabilitation of 662km 	2013 2Q	645		
Centre- East	Chocontá -	- El Secreto				N/A	N/A
	Cho- contá – El Secreto	141	Improvements on 50km	2013 2Q	159		
Centre- East	Eastern Cu	ndinamarca C	orridor			3,750	4.8
	Eastern Cundina- marca Corridor	150	• N/A	TBD	311		
Centre- East	Meta's Roa	d Network				27,450	13.3
	Meta's Road Network	219	• N/A	TBD	278		
Centre- East	Puerto Gait	tán – Puerto C	arreño			N/A	N/A
	Puerto Gaitán – Puerto Carreño	700	• N/A	TBD	1,600		
Centre- East	Barbosa-Tu	ınja-Villapinzó	n			N/A	N/A
	Barbosa- Tunja-Vil- lapinzón	110	Rehabilitation of 64km	2013 2Q	53.3		
Centre- East	Zipaquirá -	Bucaramanga	1			N/A	N/A
	Zipaquirá - Bucara- manga	330	80km of green-field four-lane highway 50km of green-field single-lane highway Improvements on 50km	2013 2Q	939		
Northeast	Pamplona -					N/A	N/A
	Pamplona - Duitama	304	Improvements on 273km	2013 2Q	455		
Northeast	Cuestabob					N/A	N/A
	Cuesta- boba - Cúcuta	123	2km tunnelImprovements on 123km	2013 2Q	288		



Northeast	Cúcuta – A	guaclara				N/A	N/A
	Cúcuta – Aguaclara	259	• N/A	2013 2Q	361		
Northeast	Villavicenc	io - Granada				N/A	N/A
	Villavi- cencio - Granada	73	• Rehabilitation of 73km	2013 2Q	60.8		
Northeast	Villavicenc	io – Puerto Ar	imena			N/A	N/A
	Villavi- cencio – Puerto Arimena	257	Improvements on 179kmRehabilitation of 78km	2013 2Q	363		
Northeast	Puerto Arin	nena – Puerto	Carreño			N/A	N/A
	Puerto Arimena – Puerto Carreño	650	 200km of green- field single-lane highway Improvements on 500km 	TBD	1,611		
Centre	Briceño - C	aqueza				N/A	N/A
	Briceño - Caqueza	87	Improvements on 87km	2012 4Q	145		
Centre	Choachí – I	Bogotá. La Ce	lara - Bogotá			N/A	N/A
	Choachí – Bogotá. La Celara - Bogotá	77	 10km of greenfield single-lane highway 1.2km tunnel Improvements on 77km 	2012 4Q	2,006		
Centre	Bogotá – V	illavicencio Co	orridor		,	23,750	60.9
	Bogotá – Vil- lavicencio Corridor	69	 55km of green-field four-lane highway 16km tunnel Rehabilitation of 14km 	2013 2Q	1,067		
West	Camilo C –	Bolombolo –	La Pintada – Tres Pu	ertas		N/A	N/A
	Camilo C – Bolom- bolo – La Pintada – Tres Puertas	206	 156km of green-field four-lane highway 50.1km of green-field single-lane highway 20.4km tunnel 	2013 1Q	2,373		
West	Tunel de O	ccidente – El 1	Гigre			N/A	N/A
	Tunel de Occidente – El Tigre	280	 279.4km of greenfield single-lane highway 38km tunnel 	2013 1Q	2,353		
West	San José d	e Nus – Puert	o Berrio			N/A	N/A
	San José de Nus – Puerto Berrio	51	50.8km of greenfield single-lane highway 3.5km tunnel	2012 3Q	470		



West	San José d	e Nus – Zarag	osa - Caucasia			N/A	N/A
	San José de Nus – Zaragosa - Caucasia	224	224km of green- field four-lane highway 28km tunnel	2012 3Q	3,449		
North	Barran- quilla - Carta- gena					N/A	N/A
	Barran- quilla - Cartagena	120	• 78km of green- field four-lane highway	2013 2Q	433		
North	Caucasia –	La Ye				N/A	N/A
	Caucasia – La Ye	120	120km of green- field four-lane highway	2013 2Q	600		
North	Valledupar	– La Paz				N/A	N/A
	Valledu- par – La Paz	32	32km of green- field four-lane highway	2013 2Q	64		
North	O&M Corri	dors				N/A	N/A
	O&M Cor- ridors	700	Exclusive O&M contracts	2013 2Q	350		
North	Caribbean	Road Network	(3,079	N/A
	Caribbean Road Network	438	• N/A	TBD	1,500		
North	Cesar – Gu	ajira Corridor				N/A	N/A
	Cesar – Guajira Corridor	251	• N/A	TBD	141		

^{**} All information is subject to change. Sources: ANI & EConcept



4.1.2. RAILWAYS

Colombia has already signed 2 contracts that include a total of 625km worth of railways under concession out of 846km that are already in operation. The government also has 980km under rehabilitation and is planning for the structuring of 753km of rail going from Carare and Chiriguaná to Puertos de la Guajira.

By 2014 the government expects to have 1,341km of railways in operation and by 2018 that number should increase to 2.343km

Rail projects in Colombia are closely tied to coal mine and oil production as their main function will be to transport goods from the central region of the country, which is rich in minerals, to the ports. With the country's current infrastructure, 80 per cent of coal prices are linked to the cost of transporting the cargo to a port. The price of a barrel of crude oil triples for the same reason. In total, the government expects to increase its cargo movement through freight rail from the current 35 million tons annually to 90 million tons by 2018.

The Colombian Ministry of Mines and Energy expects that by 2014 the country will be producing 124 million tons of coal annually and by 2020 that number should increase 152 million tons.

According to local press reports ANI has already received private initiative proposals from interested international and local bidders including:

- Santa Marta Alternate Port Access: The proposal includes an alternative access to the Port of Santa Marta with an intermediate station 4km away from the city. The point being to keep the railway far away from the city and tourist attractions. The offer has been submitted by the Sociedad Portuaria de Santa Marta, a special purpose vehicle (SPV) of which Odinsa, a local key infrastructure investor, owns 10 per cent
- Pacific-West rail rehabilitation and expansion: Part of this project is already underway by the
 original sponsor Israel's Mariverdo. The sponsor is currently spending c. US\$700 million in order to
 rehabilitate railways in the western region of the country. The new proposal will create new rail links
 that connect the Pacific-West railway to the Pacific and Atlantic Oceans. It is estimated the project
 could cost up to US\$3.3 billion.
- **Dibulla link:** A project proposed by Brazilian MPX and the owners of the Port of Brisa, a nearby coal port where operations are currently delayed.
- Carare rail link: The Carare train link would connect a small community with the capacity of
 producing 10 million tons of coal annually to the central railway system. The 257km proposal crossing over a heavily mountainous region is expected to require a CAPEX of c. US\$2.8 billion. A
 formal submission by Brazil's Votorantim was due in May.

After each submission is delivered to ANI, the authority will have up to three months to evaluate the proposals and determine whether to go forward with the project or create a new procurement process and call for public bidding.

ANI has structured other Public Initiative Projects that are expected to come out for procurement. The following list provides a guideline of projects that will either come out to tender in the next couple of years or have been considered by the government as potential candidates for concession projects, which include greenfield and brownfield elements.



New Railways Concessions Chiral Concession Existing concession Improvement Construction Construction

The project includes:

Project	Existing Length (KM)	CAPEX (US\$ millions)	Work required	Bid Start
Zipaquira – Barbosa	350	350.4	Development of 166km of single lane rail	2013 1Q
Belencito – La Viz- caina	354	1,494	Development of 354km of single lane rail	2013 1Q
Chiringuaná – Santa Marta	245	67	Development of 45km of a second line	2013 1Q
Chiringuaná - Dibulla	310	654	Development of 310km of single lane rail	2013 1Q
Chiringuaná - Carta- gena	270	409	Development of 270km of single lane rail	2013 1Q
La Dorada - Chirin- guaná	524	388.5	Improvement of 524km of rail	2013 1Q
Cabañas – Puerto Berrio	32	10.1	Improvement of 32km of rail	2013 1Q
Bogotá - Belencito	263	139	Improvement of 263km of rail	2013 1Q
*Sources: ANI and EConcept				



4.1.3. PORTS

Most ports in Colombia are privately owned or are already under a concession agreement. Therefore the amount of opportunities in this sector is limited.

ANI is proposing two main projects:

- Port of Cartagena Bay: The project envisions the dredging of 19 meters of a second access channel for an estimated US\$96 million. The procurement for the project located on the Atlantic coast is expected to launch on 4Q 2012.
- Port of Buenaventura Bay: The project includes the dredging of a 16 meters access channel for an
 estimated US\$50 million. The procurement for the project located on the Pacific coast is expected to
 launch on 1Q 2013.

In terms of public service ports, several will be either constructed or expanded by private firms including seven ports on the Atlantic coast and three on the Pacific coast.

Port/Department	Load	Capacity MM ton/ year
Existing Ports		
Puerto Bolivar/Guajira	Coal	18 (additional)
Palermo/Magdalena	Multipurpose	2 (additional)
New Ports		
Puerto Nuevo/Magdalena	Coal	30
River Port/Barranquilla	Coal	2
Puerto Bahía/Bolívar	Multipurpose	0.9 (general and bulk)
Turbo (Puerto Bahía Colombia de Urabá)	Multipurpose	2.2 general load
Agua Dulce/Valle del Cauca	Multipurpose	2.7 (general, dry bulk and coal)
Delta del Rio Dagua/Valle del Cauca	Multipurpose	2.7 (general, dry bulk and coal)
Dibulla	Coal	35
Cupica	Coal	35
Source: EConcept/National Planning Department		



4.1.4. AIRPORTS

Airport projects are also not a high priority. However, some projects are included in the pipeline. In total, according to the Ministry of Transport's "Infrastructure for Prosperity" plan, US\$561 million will be invested in a new concession for Barranquilla's airport, civil works projects in Cali's airport due in 2014, the construction of the Ipiales airport. This budget also includes the improvement of 23 other local airports and the structuring of two projects - one for Bogota's alternate airport and another for the Flandes airport.

- Barranquilla airport: ANI announced that a procurement process for this small project is due to start on 2Q 2013. The estimated value for the project is US\$32 million.
- Bogotá Alternate Airport: Aerocivil, Comobia's civil aviation authority is currently undertaking studies for the development of a second airport in Bogotá. Currently Bogotá is served only by El Dorado International Airport, which is the largest LATAM airport in terms of cargo movements and the third in terms of passenger traffic, only behind São Paulo-Guarulhos International Airport and Mexico City's Benito Juárez International Airport. El Dorado transported 20,427,603 passengers in 2011. Therefore studies to develop a second airport in the city are expected to be ready by 2014. The project is expected to require an investment of at least US\$375 million.

4.1.5. URBAN TRANSPORTATION

Colombia has been a pioneer in urban transportation projects as it was the first in the world to implement a Bus Rapid Transit System in the city of Bogotá. However, the project, which is divided in three phases and two lines, has been tarnished by corruption issues in its third phase which was tendered as a public works contract.

Notwithstanding the procurement of the second phase as a PPP was successfully tendered and the private partner has moved forward with the project under a DBFOM model.

According to EConcept several urban transportation projects are being considered by the administration including:

- Cúcuta Bus Rapid Transit System (BRT): The City of Cúcuta is planning an Integrated Massive
 Transportation System (IMS) to serve the whole of the Metropolitan area. The city has a population
 of nearly 1.2 million inhabitants and is located in the northeast of the country on the border with
 Venezuela. The BRT would be the first stage in the implementation of the IMS and the second of its
 kind in Colombia.
- Public Transportation Strategic Systems: A total of 12 cities have submitted documents to
 Colombia's National Council of Social and Economic Policy (Conpes), which has approved their plans
 to improve and upgrade public transportation systems. This includes better fare collections systems,
 fleet acquisition, bus operations and parking lots.
- Bogotá Subway: The long awaited project is currently being structured with an initial line that will
 cover 34km at an estimated cost of c. US\$2.5 billion. The project will be built in two phase, the first
 20km will include 12km of underground service and 8km over ground going from the north-eastern
 border of the city to downtown Bogotá. The second phase will include 14km going from downtown



- to the southwest border of the city. The subway is expected to have the capacity to service up to 600,000 passengers a day by 2018 at an average speed of 35km/h. Bogotá's metropolitan area has a population of 9 million, giving the subway project options for expansion.
- Commuter train for Bogotá and surrounding areas: The project includes an 81.2km commuter rail
 network aimed at connecting Bogotá to neighbouring municipalities with an estimated price tag of
 US\$2.1 billion. A renowned Colombian Engineering Consultancy, Concol, is currently developing
 designs and structuring the project.

4.1.6. WATERWAYS

According to EConcept a couple of waterway projects are being considered by the administration including:

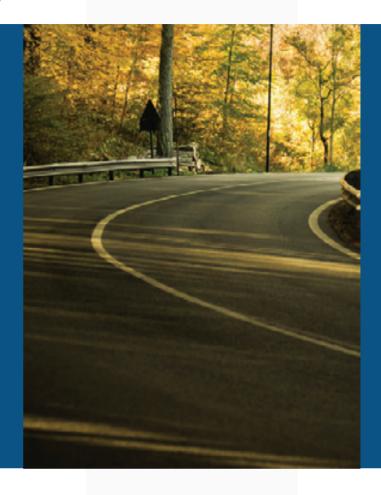
- Waterway Network: The Río Magdalena is the principal river of Colombia, flowing northward
 about 1,528 km through the western half of the country. It has historically been used a commercial
 waterway so much so that estimates say that 86 per cent of the country's GDP is somehow produced
 there or its production is related to the river's waterway functions. The administration is planning
 the creation of a Río Magdelan waterway corridor network that will streamline services on the river.
 Alongside, the government is considering similar projects for the Orinoco River and the Amazon.
- Water Studies: The country is also interested in undertaking studies in the navigability of the
 Putumayo and Meta rivers as well as the deepening of the San Antonio Lagoon in the Cauca Valley
 and complementary studies for the Port of Victoria Regia in the region of Leticia.



Good highway infrastructure is essential to economic development. The Colombian government backed this concept in July 2010 when it awarded the concession of the third and final section for the construction and expansion of the US\$2.7 billion Ruta del Sol highway. This 1,071km road connects the capital, Bogotá, with other large urban areas of the country's interior and Caribbean coast. When completed, Ruta del Sol will help foster the country's competitiveness in these sectors and improve road and travel conditions for passengers and goods.

Ruta del Sol was initially conceived by the government as a single project. It was later divided into three concessions to adapt to market conditions, to ease its construction and financing, and to mitigate single-operator risk. The winner of Sector 1 will be responsible for building a new 78km double carriageway road in mountainous terrain and for maintaining it for seven years. The winners of Sectors 2 and 3 will undertake the rehabilitation, expansion to double carriageway, maintenance and operation of 528 and 465km of existing roads, respectively, for up to 25 years.

The Public-Private Advisory Infrastructure Facility (PPIAF) and the IFC-US Department of the Treasury Trust Fund are provided funding for the project.



BACKGROUND

Like other countries in Latin America, in the last 20 years Colombia has been expanding its road network through different concession models. As a result, a number of projects have been awarded under a broad range of contractual structures. Over the years, however, many of these projects suffered construction and maintenance delays, leading to contract renegotiations and in some cases early termination. In addition, these projects attracted very limited participation from international investors and local pension funds. This situation led Colombia's National Concessions Institute (INCO) to seek assistance from IFC.

Extending more than 1,000km, Ruta del Sol was one of the most important missing pieces of Colombia's concession programme. Following a failed attempt to concession it in the early 1990s, in 2007 Colombia's Ministries of Transport, Finance and Planning jointly requested IFC assistance to structure a new concession for the project and help prepare a bidding and contractual structure that could become a model for future road concessions.

An IFC Success

Story: COLOMBIA'S RUTA DEL SOL HIGHWAY PROJECT

IFC'S ROLE

IFC was the transaction advisor to INCO for the structuring of the three concessions which were tendered in two bidding processes. IFC's involvement included selecting and leading a group of consultants who helped carry out the project's due diligence and prepared detailed studies for structuring and market information purposes.

IFC's role also included preparing the project's financial model and evaluating different structuring alternatives. These analyses also determined the level of support required to develop a public private partnership, to help the government make an informed decision on its subsidy contribution.

TRANSACTION STRUCTURE

The Ruta del Sol project rapidly became LATAM's largest PPP road project, mobilising US\$1.9 billion in private sector debt and equity alongside the US\$800 million in government funding and toll revenues, which will be collected over a period of several years.

The project was structured in three parts:

- Sector 1: A 78-kilometer double lane greenfield project. The due diligence phase included a deep engineering analysis and an assessment of potential alignments. Given its risk profile, Section 1 was structured as a medium-term concession of seven years with availability payments (five years for construction and two years for operation). The intention is to retender it as a toll road concession at a future date.
- Sector 2: This project covers 528km in flat terrain and revenues include toll collections and government availability payments. This was structured as variable-term concession, so the concession will expire once the concessionaire's requested Net Present Value (NPV) of revenues is reached (maximum term is 25 years).
- Sector 3: This project covers 465km of semi-flat terrain and revenues include toll collections and government availability payments. Similar to Sector 2 this was also structured as variable-term concession limited to a maximum term of 25 years.

Government subsidies for all sectors consisted of yearly, project specific budgetary allocations assigned by the Ministry of Finance to each concession. These allocations will be transferred every year to individual concession trusts and funds would be payable to the concessionaires upon completion of contractually defined construction milestones. Deductions could be applied to the payments if the concessionaire does not meet minimum road condition and operational performance parameters. This plan creates an incentive for compliance with construction and operation and maintenance goals.

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BIDDING

Sector 1 was awarded to Consorcio Vial Helios, a consortium led by Colombia's Grupo Solarte and ConConcreto together with Argentina's lecsa. The government contribution requested was US\$770 million, 20 per cent less than the maximum-approved government contribution to this concession.

Sector 2 was awarded to Concesionaria Ruta del Sol, a consortium led by Brazil's Constructora Norberto Odebrecht and the Colombian financial group Corficolombiana. NPV of revenues requested totalled US\$1.047 billion, which represented 6.5 per cent less than the maximum-allowed bid value.

Sector 3 was awarded to Yuma Concesionaria, a consortium led by Italy's Impregilo, which included Colombia's Bancolombia and the Protección Pension Fund. NPV of revenues requested totalled US\$1.039 billion for Sector 3, which was 9.5 per cent less than the maximum-allowed bid value.

Expected post-tender results

- Ruta del Sol will reduce travel time, costs, and accidents along Colombia's main road
- It will link agricultural, industrial, and urban centres with Car ribbean ports, fostering the country's competitiveness.
- Ruta del Sol is a model for future road and other infrastructure concessions in Colombia.

Chapter 5

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SOCIAL INFRASTRUCTURE



5. SOCIAL INFRASTRUCTURE

Social infrastructure projects are not as predominant as their transportation counterparts. However, there still some interesting opportunities in the housing, government buildings, penitentiaries, waste and educational sectors.

Most projects are being managed by the DNP and are at best at the very early stages of development. Most are still undertaking some type of feasibility and viability studies and/or are seeking advisers.

5.1. DEAL PIPELINE PER SUB-SECTOR

5.1.1. EDUCATION

In February 2011, President Santos announced his Early Childhood Development (ECD) plan called De cero a siempre (From Zero to Forever) an effort being led by his wife María Clemencia Rodríguez de Santos. Currently there are 2.8 million children younger than six years of age who are part of the most vulnerable and poor group of society. According to the first lady, previous efforts by the state to provide an integral and safe upbringing to children only proved successful for 600,000 of them.

The new ECD plan, which is part of the overall DNP strategy, aims to provide integral education to 1.2 million children by 2014 by building care centres under a PPP scheme. According to Santos' original estimates this could require an initial investment of up to COP5.6 trillion, which is thrice as much as what was invested in the last four-year term under Uribe's administration.

Alongside the De cero a siempre strategy, the government is also teaming up with various charities to kick off the programme and give it exposure in the mainstream media. In April 2012, a similar programme called Primero es lo Primero (First things First) had the first lady team up with public and private initiative charities in order to develop 13 attention centres for children from zero to five years of age.

The charities included Fundación Julio Mario Santo Domingo (FMSD), Fundación América Latina en Acción Solidaria (ALAS), la Fundación Pies descalzos (led by international pop star Shakira), and aeioTU-Fundación Carulla along 30 other institutions.

The initial investment includes US\$36 million from both charities plus US\$25 million from the government. The plots of land for the development centres are also being provided by the public sector free of charge.

The initiative will serve 5,920 children in urban areas around the country.

However, the government is still some distance from its goal of providing ECD to 1.2 million children.



Therefore, Colombia is working with the Inter-American Development Bank (IDB) and the World Bank developing an integral pilot programme for PPPs that will include the construction, finance, operations and maintenance of such assets.

According to the IDB: "As part of the technical support to the government of Colombia, current ECD services and delivery mechanisms are being assessed to identify strengths and weaknesses and to increase coverage, quality, financing, and intersectoral coordination. Global best practices are also being revised comparing the most innovative a range of institutional arrangements and program experiences relevant to Colombia. Also, the bank will provide technical assistance to the newly created ECD Commission in the operationalization of the newly developed ECD Action Plan."

The structuring process for the pilot programme began in December 2011.



Each Early Childhood Care and Development
Centre will serve up to 300 children thereby
potentially creating 4,000 new facilities all located
in urban areas around the country. The final goal of
the government is creating long-term contractual
relationships with their private sector partners.

The price tag for each of these projects is still to be determined. It is expected that a project scope will be introduced by the government by the end of the year.

Local investment bank, Valfinanzas, is advising the DNP.

5.1.2. PUBLIC SECTOR ADMINISTRATIVE BUILDINGS

As part of the DNP the Colombian government is considering the redevelopment of three public sector administrative buildings which include some urban regeneration in Bogotá and Cali. Though the projects are still in very early stages they include:

• Superintendence of Notaries, Registry and Judicial Offices – The project includes the construction, administration, operation and maintenance of these entities in Bogotá. The construction area includes 52,000 m² plus 28,000 m² of underground parking. The area will be distributed as 10,000 m² allocated to the Superintendence and Notaries Registry Offices, 34,000 m² of Judicial Offices and 8,000 m² of commercial infrastructure. The DNP, according to a study issued by Valfinanzas, the project's



adviser, estimates the initial construction cost to be around US\$98.5 million. However, EConcept an independent consultancy raise the price tag up to an estimated US\$150 million. The private partner may also offer complementary services such as parking lots, private offices and a food court.



- Urban Renovation of the National Administration Centre (CAN) The project includes the renovation of the National Administrative Centre in Bogotá. It is being managed and procured by government owned Empresa de Renovación Urbano Virgilio Barco Vargas, which was created in November of 2011. The public enterprise is a financially autonomous vehicle though it is linked to the Administrative Department of the Presidency. The project includes the expansion to 1.7 million m² from the current 394,000 m². This includes adding seven floors to three that are already built and building up to 11,826 parking spaces of which there are currently only 4,324. The project is currently under Phase 1 of development, which includes technical, legal and financial structuring studies and an institutional coordination strategy to develop the project. Phase 2, which is expected to be undertaken between 2012 and 2015, includes the actual procurement and financial close of the project with a private partner. The goal is to deliver the first building by 2015. The project has already secured a US\$110 million agreement with the Corporación Andina de Fomento (CAF). It also has in its coffers COP1.35 billion which served as initial capital for the enterprise and COP7.25 billion from Minvivienda, the housing Ministry. All these funds will serve to hire and pursue design and feasibility studies. Most recently, engineer Andrés Escobar has been appointed as head of the enterprise.
- Attorney General's Office in Cali The project includes the renovation, construction, administration, operation and maintenance of the Attorney General's Office in the City of Cali, which includes the provision of connected services in urban regeneration. The project will be developed in what is known as the Global Centre of the city. The project has an estimated cost of US\$45 million and will be developed in 17,000 m². It is currently undertaking feasibility studies. The private developer will have to take into account the staff of 946 people which are currently in the headquarters in case they need temporary reallocation. Other potential services the private partner may be able to offer are parking lots, private offices and food courts. The bidding process is expected to be launched on 4Q 2012 at the earliest. The DNP is currently seeking a financial adviser for the structuring of the project.

5.1.3. PENITENTIARIES

The DNP is planning to tender seven penitentiaries in bulk. However, the government has already built five, which will be awarded under an operate and maintain (O+M) contract.

The objective of the project is to expand Colombia's capacity in its penitentiary centres. In total the assets are expected to service between 20,000 to 25,000 inmates.

The private partner will be expected to participate in the construction, maintenance, supply of equipment, operation and the provision of related services such as food, laundry, pest control and social rehabilitation, among others.

Currently the Colombian Ministry of Justice and the National Penitentiary Institute have signed a technical cooperation agreement with CAF for the technical, financial and legal structuring of the first group of facilities that will come out to tender.

Phase 1 of the project includes the structuring of the project and is expected to last a total of six months. Phase 2 includes the procurement up to the awarding of the project and it is expected to last nine months. According to the DNP the tender should come out to market by June 2012.



5.1.4. OTHER POTENTIAL PROJECTS

Since the administration introduced its intention to procure projects as PPPs, the DNP and other public sector institutions have considered other projects that may come to tender eventually or that have been presently suspended. However, they are not officially part of the project portfolio offered by the DNP. These projects include:

- Bogotá Garbage Collection project Contracts for six garbage collection areas were due to
 be awarded by September 2011. The process had originally started on 28 May 2011 and has an
 estimated worth of US\$1.4 billion. On 18 August the Constitutional Court of Colombia suspended
 the process given that the project had a lack of guarantees that would allow the participation of
 recyclers. Recently, Colombia has been trying to implement a greener agenda in its infrastructure
 development and though it's not currently mandated by law, the country is trying to shift its best
 practices to be more environmentally friendly.
- Renovation of the National Institute of Health (INS) and the National Institute of Food and Drug
 Monitoring (INVIMA) The contract would include the technical, financial and legal structuring for
 the renovation, operation and maintenance of the physical headquarters as well as the updating of
 technology implemented at the INS and INVIMA. This would include the construction of c. 15,000 m²
 of administrative buildings, 18,000 m² of common areas and 7,700 m² of laboratories. The project is
 estimated at COP300 billion.

5.1.5. MACROPROYECTOS (SOCIAL HOUSING)

The Macroproyectos de Interés Social Nacional is a government housing scheme that aims to provide one million units of cheap housing for the most vulnerable sectors of Colombian society. Particularly those known as the desplazados, which are a low-income part of the population forced to leave their land and houses during the still on-going military operations against armed guerrillas.

Colombia's violent confrontations with FARC have led to the relocation of entire populations. This issue quickly created a severe housing deficit. Though the violence has diminished significantly, homes are still needed. Recent floods have also left many families homeless.

According to Colombia's National Department of Statistics (DANE) by 2005, the country had a housing shortage of 3.8 million. Out of these numbers 2.5 million included low income houses that didn't meet sanitary standards and 1.3 million families had no physical houses. Furthermore 57.9 per cent of this shortage is concentrated in urban areas and 42.1 per cent in rural areas.

Therefore Santos' government has set the objective of creating one million new homes between 2010 and 2014 to help ease the situation. Macroproyectos alone expect to provide 650,000 units of social and affordable housing over 4,000 hectares of land.

The Macroproyectos are defined as urban integral and efficient housing projects, which aim to expedite



urban land use in order to facilitate affordable housing within specific municipalities and districts around the country. These projects should in theory be self-sustainable and will be led by the municipalities.

On 19 May 2011 the Colombian Construction Chamber (CAMACOL) and the UK Government signed a memorandum of understanding to promote sustainable construction. On the same day, a similar agreement was signed with the World Bank and IFC to elaborate a Sustainable Construction Code for housing.

The Macroproyecto projects are expected to become small urban cities within larger metropolitan areas, cities within cities. But one of the biggest challenges they find is access to utilities that will serve these new communities.

In January 2011, the World Bank approved a US\$40 million loan to kick-off these projects. Given that the construction industry relies mostly on credit financing, the housing units will also receive hefty subsidies from the government. The subsidies can be as much as 35 per cent of its commercial value.

Currently the government has identified 32 Macroproyectos, which are all at different levels of development. The first, Ciudad Verde, is being developed and financed by local firm Amarilo. The project will develop 350,000 units with costs ranging from US\$20,000 to US\$35,000. The Ciudad Verde project, located in the small town of Soacha south Bogotá, is unique since it includes its own hospitals, schools and hydroelectric power sources all funded via PPPs. It also includes security and a social reintegration programme for newcomers.

The small city will also connect to the Transmilenio second line, which will serve those residents working in the Bogotá. Until the second line opens the firm will provide transportation services to the main road where people can access buses. Currently, Amarilo which has a strong emphasis in marketing is selling an average of 500 units a month and it has developed phase one and two out of seven.



In recent years, Colombia has suffered a significant housing deficit for low income families, which is creating a tough burden on the welfare of future generations. However it also opens up the door to great opportunity, in this case in the form of the Macropoyectos government policy. These projects are focused on designing urban housing centres that will accommodate a variety of families from different social and economic backgrounds in one multipurpose area that will meet all their needs. In the Ciudad Verde case, it's not just about delivering homes.

The Ciudad Verde Macropoyecto has led the industry in this effort as it has demonstrated the feasibility of these projects and proved the potential presented by private sector participation in their development.

The project is being developed on 328 hectares of land and intends to serve as a future model for other similar projects based on its clever design and its resource management. Ciudad Verde has carefully used space in communal areas to serve the population while also creating a good environment. The project has also seen the construction of roadways systems in the development of a series of parks around the complex. The project also includes all the services an urban community could need including waste management, health and educational facilities, entertainment venues and cultural sites.

Additionally, the Ciudad Verde Macroproyecto will also improve neighbouring areas and provide access to basic services in the region.

The project integrates a social re-adaptation programme (PAS) for new residents, aimed at creating a residential culture that will guarantee and protect economic development, and social and environmental sustainability within the community.

This includes a youth programme called "Soccer for Peace", which is targeted at teenagers and hopes to provide them with a leisurely activity as an alternative to potentially unsociable and harmful behaviour. Children will also have the opportunity to join a group known as "Agents of Nature", in which they will be educated on social tolerance and environmental issues through workshops and field activities. The aim is to create future leaders within the community with a positive outlook on issues surrounding them and their families.

The development of the project has so far taken four years. Key dates include:

- 10 September 2008: The Ministry of Environment, Housing and Territorial Development announces the Macroproyecto via resolution 1577
- 3 September 2009: The Macroproyectos' guidelines are clearly defined via resolution 1687



Case Study:

AMARILO'S CIUDAD VERDE IN

SOACHA, CUNDINAMARCA

- May 2010: Construction of Phase 1 begins, which includes the construction of 7,338 housing units
- **June 2011:** Construction of Phase 2 begins, which includes the construction of 8,623 housing units
- August 2011: Delivery of Phase 1 units begins

FINANCING

The sponsor of the project, which includes Pinila Gonzalez Prieto abogados, Amarilo, Camilo Santamaría and Eduardo Pizano presented a real estate integration proposal to the government of Colombia. A special purpose vehicle (SPV) was set up with an initial capital investment, and the urbanised lots were then sold to the private developers. Bank debt filled the financing gap, and Amarilo, the project manager, provided part of the equity stake.

The financial resources are managed by Fiduciaria Bogotá, the executive arm of Fideicomiso Ciudad Verde (Ciudad Verde's trust). The trust commercialises the land and determines the urbanisation and construction of projects. It is also in charge of balance sheet debt and debt guarantees.

The Macroproyecto also created a joint venture with Corporación Responder, a non-profit organisation financed by the construction companies involved in the project in order to develop the PAS programme. This would enable off-balance sheet financing for the programmes, which are simultaneously supported by other non-profit organisations such as the Clinton Foundation, Corporación Minuto de Dios and Fundación Social.

Ciudad Verde's development is divided into three basic phases:

- Phase 1 iincludes the allocation of the land. The SPV introduced an economic and urban proposal to the Ministry of Environment, Housing and Territorial Development. The public sector then took a year to analyse the proposal's feasibility and determine the project's future..
- Phase 2 includes the implementation of new practices by the Municipality of Soacha. Since these projects are new, the municipality had to create and implement new financial and administrative processes that would enable it to move smoothly. This includes the creation of a municipal dependency in charge of conflict resolution and administration of parks.
- Phase 3 includes the social re-adaptation element of the new homeowners. In most cases, the new proprietors will come from a humble background and may not understand the basic rules of community engagement, which include the community's upkeep, maintenance fees and organisation as a whole.

PROJECT DESCRIPTION

The Ciudad Verde Macroproyecto has a total land extension of 328 hectares and is located west of Soacha's main square bordering Bogotá's locality of Bosa. The project has been called Ciudad Verde (Green City) because it will have 57 hectares of park and green areas connected through a network of boulevards, pathways and cycle paths. This will increase the amount of green space per dweller in the region, which is in high demand in Soacha.

The project is expected to be a new model for small cities. Ciudad Verde has allocated 70 per cent of its land mass to housing, 13 per cent to businesses and non-polluting industries, 10 per cent to private education facilities and seven per cent to commerce. This will allow residents to reduce their commute as they can easily find jobs in the vicinity or access public transportation nearby.

The main road network is planned to have a 1.5km extension, and will connect with the main highways of Soacha and Bogotá, with connectivity to other main highways in the area. It is expected that Ciudad Verde will have a connection to the Transmilenio BRT second line project, which will facilitate the commute for people working in Bogotá.

The lots allocated for preschool, elementary and high school public facilities, alongside with a university and recreational centres will all be interconnected by cycle paths and pedestrian boulevards.

The project is designed as a model for future Macroproyectos focusing on the quality of life of its residents.

CONCLUSIONS

- The successful execution of integral urban housing regeneration on 328 hectares of previously uninhabited land, which provided housing, commercial operations and public services. The effort required the unity of several stakeholders including the national government, the departmental government, the municipality and private investors.
- The creation of a model that leverages public spaces including parks with the amount of housing units. This includes allocating 30 per cent of land to green spaces and parks, which encompasses up to 15 m2 per inhabitant. It also includes the expansion and rehabilitation of the road networks with the compound and municipality of Soacha as well as the improvement of waterways.
- The integration of both the road networks and public services infrastructure between the two municipalities (Soacha and Bogotá).
- The creation of social re-adaption programmes such as PAS to encourage community living.

Chapter 6

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OTHER SECTORS



6. OTHER SECTORS

According to EConcept, an independent consultancy, the Colombian Ministry of Mines and Energy and the DNP projects that are expected to be developed between 2010 and 2014 include:

6.1. HYDROCARBONS, GAS AND DERIVATIVES

Project	Description	CAPEX (US\$)	Expected operational date
Master Plan for Cartagena's Refinery (Reficar)	Expansion and modernisation of current facilities in order to increase production	3.9 billion	June 2013
Modernisation of Barrancabermeja's refinery	Modernisation of facilities in order to process heavy crudes and increase production to 250 kbpd¹	3.4 billion	August 2016
Oil Pipelines	Four pipelines will be either built or modernised in order to reach a transport capacity of 1450 kbpd. These projects include the OCENSA, Bicentenary Oil, Colombia and the Transandino pipelines	5.7 billion (Bicentenary Pipeline is tagged at 4 billion)	2011-2013 (Bicentenary pipeline is expected to be operation by December 2012)
San Fernando Monterrey Pipeline	A 30 inch diameter pipeline between Campos de Castilla and Monterrey with a 390 kbpd capacity	745 million	December 2012
Coveñas Project	Increase the storage capacity of an oil terminal	383 million	December 2012
Sutamarchan — Apiay Oil Pipeline	53 kbpd pipeline used to transport solvent from Sebastopol station to Apiay station.	305 million	N/A



Gas Production Increase gas production in several gas plants to 1,350 kbpd. This includes plants in Gibraltar, Cupiagua, La Creciente		800 million	December 2014
Gas Pipelines expansion Cusiana – Vasconia - Cali	Increase capacity by 180 kbpd	380 million	N/A
Gasoline and Diesel storage	Increase storage capacity in Cartago, Sebastopol, Pozos Colorados and Tocancipá	540 million	N/A
Domiciliary Gas Connection	Improve the infrastructure of the domiciliary gas connection	161 million	N/A
Liquified Gas Import Terminal	Building the terminal is a priority given that it's needed to guarantee gas supply	250 million	Before 2015

6.2. MINING

Project	Description	CAPEX (US\$)
El Descanso Sur coal Mine	Project for the exploration and exploitation of coal in the locality of Cesar	438 million
Cerrejón South Zone	Project for the exploration and exploitation of coal in the locality La Guajira	17 million
San Jorge coal mine	Project for the exploration and exploitation of coal in the locality Córdoba	41 million
Gramalote gold mine	The project is still in the exploration phase and there is no set timeline for exploitation	N/A
Cañaveral coal mine	The project is still in the exploration phase and there is no set timeline for exploitation	N/A
Marmato, La Colosa and La Bodega	Three projects that will include the exploration and exploitation of precious metals in Caldas, Tolima and Santander	N/A



6.3. POWER GENERATION

Project	Description	CAPEX (US\$)	Expected operational date
Ituango hydroelectric plant	The project will have an initial capacity of 1200 MW, which should later be increased in a second phase to 2400 MW. The project will be located in the municipalities of Ituango and Briceño	2.3 billion	July 2017
Sogamoso hydroelectric plant	The project will have an installed capacity of 820 MW	1.5 billion	November 2013
Gecelca III	A coal-based energy plant with an installed capacity of 158 MW located in Puerto Libertador, Córdoba	236 million	December 2012
Cucuana hydroelectric plant	The project will have an installed capacity of 60 MW	110 million	December 2014
Termocol	A thermal generation dual plant, meaning it can work either on gas or diesel with an installed capacity of 251 MW. The project will be located in Santa Marta	125 million	December 2012
El Quimbo hydroelectric plant	The project will have an installed capacity of 396 MW and will be located in Huila	690 million	December 2014
Miel II hydroelectric plant	The project will have an installed capacity of 135 MW and will be located in Caldas	193 million	January 2013

6.4. OTHER OIL AND GAS OPPORTUNITIES

Project	Description	CAPEX (US\$)
Ecopetrol projects 2011 -2020	Ecopetrol plans to invest up to US\$80 billion during this period including US\$44 billion for increase in production, US\$20 billion for exploration, US\$6 billion in refining, US\$6 billion for petrochemicals and US\$5 billion for transport. Specifically investment will be focused on the following projects: - Increase capacity in the Apiay – El Porvenir, Castilla – Chichimene – Apiay and Polioriente pipelines - Feasibility study for an oil pipeline to a port in the Pacific - Integrated Petrochemical complex	1.2 billion
		3.5 to 5.5 billion



Ecopetrol investment	Ecopetrol plans to invest up to US\$8.5 billion out of which	
plan 2012	US\$7.5 billion will be invested in the company and the rest will	
	be allocated to other ventures owned by the company. This will	
	be invested in:	
	- Exploration (US\$1.4 billion)	
	- Production (US\$4.1 billion)	
	- Refining and Petrochemicals (US\$601 million)	
	- Transport (US\$2.02 billion)	
	- Other investments (US\$318 million)	
Exploration and	The government plans to grant 215 E&P contracts in the next	N/A
production contracts	four years both for conventional and non-conventional fuels.	
(E&P)		
Sale of electric	The government will sell off 99 per cent of its shares in the	
generators in	Gecelca plant, 99.7 per cent of Urrá and 99.41 per cent of EBSA.	
Gecelca, Urrá and	The first two represent 33 per cent of total installed thermal	
EBSA	capacity and 4.3 per cent of hydraulic energy.	
Liquified Natural Gas	The project which should be ready by 2015 should guarantee	500 million
Import and Export	gas supply and stimulate exploration activities.	
Terminal		

6.5. TELECOMMUNICATIONS

The projects include:

- ETB Bogotá Telephone Service firm Bogotá is planning to sell part of its stake in the firm, which is expected to be at least 50 per cent plus one of its shares. The sale is expected to take place as early as this year.
- Vive Digital Plan The project proposed by Prexport Colombia's government agency aimed at attracting foreign investment to the country and the DNP aims to increase Internet connectivity around Colombia. The ambitious proposal includes triplicating the number of municipalities connected to the Internet, connecting 50 per cent of all households and 50 per cent of small and medium sized businesses. This includes a US\$200 million investment to provide a fibre optic network to 500 municipalities. Currently only 325 municipalities have fibre optic. It also includes the development of Content Distribution Networks (CDN).



Chapter 7

IJ Infrastructure Investment Guide: Colombia

RISK ASSESSMENT & MITIGATION STRATEGIES



7. RISK ASSESSMENT & MITIGATION STRATEGIES

In making the case for Colombia as the Latin Americas' sweet spot for foreign investment, it is important to look at the myriad factors affecting the country's risk profile. The country is working hard to shake off the shadow cast by decades of poor regulation and political instability, and the fruits of this labour are already beginning to show through the solid economic growth the country has enjoyed since the early 2000's.

On the international stage, Colombia's risk profile has improved dramatically over the past few years. In January this year the Organisation for Economic Co-operation and Development (OECD) gave Colombia a country risk rating of four on a scale of zero to seven, where zero is the least risky and seven the most. Other South American countries including Bolivia, Argentina, Ecuador and Venezuela were perceived as much riskier, with Colombia rated as the fifth overall in South America after Chile, Brazil, Uruguay and Peru

Colombia's standing as a country worthy of serious consideration when it comes to investment was solidified last year when its sovereign debt rating was lifted by Moody's, Standard & Poor's and Fitch Ratings to investment grade. At the time, Fitch Ratings cited Colombia's prudent economic policies and increased resiliency to internal and external shocks as reasons for the upgrade, alongside the country's capacity to successfully navigate the weak current global economic climate.

As we have seen, the scale of the Colombia's ambition in creating sophisticated, modern infrastructure cannot be underestimated. Growth coupled with a strong government impetus to create a watertight, efficient regulatory system means that Colombia looks set to enter into one of the most productive and investment-heavy eras it has ever seen. And yet foreign investment in Colombia's infrastructure will only happen if investors have confidence that they understand the challenges unique to the country and how to price and invest accordingly. In analysing the country's risk profile, and looking at ways to mitigate it, there are a number of factors to consider.

7.1. RIGHT OF WAY

Under the 1508 law, investors must take responsibility for right of way risk, a practice likely to be uncommon to investors used to working on UK and EU PPP projects. This caveat may prove to be a significant one for private entities involved in Colombia's toll roads pipeline. Government officials have said that a new land acquisition law is being drafted, although whether the new regulations will mean that the Colombian government assumes more exposure to land acquisition risk, and whether it will become more involved in the acquisition process, is unclear.



7.2. ENVIRONMENTAL ISSUES

As with right of way, the investor must assume environmental risk as well as responsibility for any potential litigation. Colombia's National Code of Natural Renewable Resources and Protection of the Environment requires anyone who utilises natural resources to obtain an environmental permit. An influx of foreign investors means there has been a sharp increase in permit requests, and the current administration has ramped up efforts to expedite the environmental permitting process. Delays and bottlenecks to the system have been one of the key concerns for recent foreign investors.

As seen previously, the varied and challenging geography of Chile represents another environmental risk to be built into projects. Road and rail networks that traverse mountain ranges and inhospitable climates will be much more costly and time consuming to obtain environmental consent and permits for than more straightforward projects, and incoming foreign investors should be alert to the costing of such schemes. Another environmental/regulatory risk relates to future carbon reduction policies. Much of Colombia's infrastructure project pipeline supports the creation of carbon-intensive networks and facilities. This is somewhat inevitable in a developing country that cannot progress without the introduction of increased transport, building and energy production; but it must be carefully balanced against climate change imperatives. Changes to domestic environmental regulations could potentially be mitigated by formal legal stability agreements (LSA), effective for up to 20 years, which protect investors against future changes to regulations, ruling and laws that may have a negative impact on their operations.

The signs are there that once a comprehensive network of road, rail and air links are in place, Colombia will adopt a sustainably-minded approach to its infrastructure – a 2011 IMD World Competitiveness report ranked Colombia as Latin America's most sustainable country, with larger economies including Chile and Brazil lagging behind. Colombia was one of the first countries in Latin America to develop state environmental policy, including the introduction of environmental impact assessments for large projects and legal action against polluters. In September 2011, president Santos announced the yet-to-be created Ministry of Environment and Sustainable Development after splitting the environment, housing and sustainable development ministry in two, and designated a new Environment Minister, Frank Pearl.

Sustainable Development, 2011 1/ Scale 0-10. 0:it is not a priority - 10: it is a priority 6.18 Colombia Colombia is moving forward as a leader in Latin America toward sustainable development 5.84 Brazil Feru 5.05 Mexico 4.78



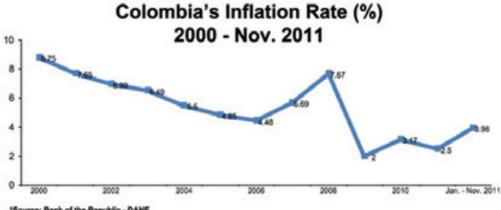
7.3. CORRUPTION

One of the key factors to consider when assessing Colombia's risk profile is the sheer newness of many of the laws, regulations and financial instruments that will come into play when investing there. The Colombian government has had to work hard in recent years to improve its reputation for transparency and watertight fiscal policy, and this will have to continue. Whilst the militant groups that have contributed to much of Colombia's economic and political instability in past decades have been pushed to the fringes of the country, lingering conceptions about the country's volatility and receptiveness to corruption remain. Transparency International's annual corruption index rated Colombia 80th out of 184 countries last year, but the current political administration has made giving Colombia's political standing a clean and clear reputation a key priority. A new corruption law, modelled in part on the British 2010 Bribery Act, came into effect in July last year. The law contains over 140 instruments against acts of bribery and corruption, with a focus on tackling discrepancies in infrastructure contracts.

Colombia's acceptance of the International Financial Reporting Standards, due to be fully enforced by 2014, requires international standards of accounting and auditing and is another step towards removing corrupt practices. Commercial disputes are settled in a three-tier system, with cases filed to a judge, who can refer them to a tribunal, and then to the Supreme Court.

7.4. CURRENCY RISK

Investing in Colombia includes a degree of currency risk. An on-going struggle with maintaining a steady rate of inflation, although much improved since the 1990s, means that there can be fluctuations in the value of cash invested in the country. In recent years there has been a downward trend in inflation rates (see graph below), and the Colombian peso has been appreciating against the US dollar. The central bank has said it expects the Colombian economy to grow at a rate of between four per cent and six per cent in 2012 and that the most likely outcome is for inflation at five per cent, the midpoint of that range. It had previously set a target of between two per cent and four per cent inflation for earlier this year and has been making a concerted effort to ensure that inflation is kept within steady, maintainable parameters.







7.5. TRAFFIC RISK

While this will not be an issue for most types of infrastructure, with the large large-scale roll out of toll roads, traffic risk will be one of the key risk factors for investors in roads and rail to consider. Although the Colombian government is yet to establish any government guarantees for traffic risk, the country's infrastructure gaps in outlying and metropolitan areas, alongside major traffic problems in cities including Bogota, are so pronounced that there is an acknowledged strong demand for new roads. And yet, with so many miles of road being rolled out, the chance of encountering low-income, low-traffic areas may be increased.

The Colombian government, as noted previously, has a strong track record of maintaining availability payments dating back to the first round of road concessions that were carried in the 1980's, which bodes well for the current round of PPP projects. But a preferred mix of revenue for toll road projects is yet to be decided. Risk may decrease once model schemes come through and investors may wait until the Colombian government offers a greater risk involvement in traffic risk. Neighbouring Latin American countries have successfully devised traffic risk schemes, which may prove to be a useful model for Colombia's newly-minted PPP regulations. The Chilean government, for example, offers minimum revenue guarantees that cover the debt portion of the capital spent on a project. Investors must pay a fee to sign up to the scheme. Once operational, investors agree to pay the government part of the profit if actual traffic exceeds predicted traffic.

7.6. GENERAL TECHNICAL RISK

Building a more sophisticated market will enable confidence in Colombia and help create stable new sources of foreign income. The country is open to recruiting international technical expertise to help build solid risk profiles for its companies and its projects. Earlier this year, Colombia's Financial Fund for Development Projects (FONADE) issued a request for qualifications (RFQ) for technical advisers, which will support the entity in the design of around 18 road PPP projects. The DNP also issued a call for international expertise in February for consultancy services that will support the PPP programme as a whole.

Colombia has a large number of domestic construction and design firms, which generally have a strong reputation. No major construction company has gone public and most companies are family-owned. However, historically there have been reports of unfair dealings between the government and construction companies that led in part to the introduction of the new PPP laws. Accordingly, stronger institutional and incentive frameworks could be considered such as contractor performance bonding, contractor equity commitments, minimum equity lock-up provisions, and a refusal on the part of the government to grant arbitrary extensions to project costs and contracts.



nfrastructure Journal: Apart from the strong pipeline of projects coming out from the government, what makes Colombia a potential market attractive to investors and lenders?

Steve Brundle: In recent years, Colombia has taken positive steps towards establishing appropriate legal frameworks that will encourage more private participation in the development of infrastructure, and has carried out important institutional reforms geared to provide confidence to developers, lenders and investors in infrastructure. One example of this is the creation of the Agencia Nacional de Infraestructuras (ANI) in 2011 to promote the economic development through investment in infrastructure projects following the PPP model.

IJ: As a potential technical adviser to lenders, what are the main areas of concern with transportation projects in Colombia?

SB: As with any transportation project, the areas of greater risk for the lenders include design and construction aspects and the commercial structure of the concession. Experience from other Latin American countries has demonstrated that unreasonable commercial structures can have a negative impact on debt pricing and can ultimately lead to loss of confidence from the private sector. However, Colombia has enacted a PPP law which seems to mirror commercial positions recognisable from mature PPP markets in Europe and Canada. Technical risks are somewhat mitigated, as

Colombian contractors are highly regarded in the fields of design and construction of transportation projects and the country appears to have also welcomed foreign players such as Odebrecht, TYPSA and FCC which is seen as a positive sign towards improving competitiveness in the market.

IJ: Colombia is a country not generally accustomed to road travel, as in the past issues concerning security were pressing. How does this create issues when forecasting traffic revenues? Will a scheme in which the government proposes a hybrid model, with 20 per cent of revenues coming from availability payments, and 80 per cent coming from fares, a viable one?

SB: Traffic-based transportation projects are relatively common in Latin America. Naturally traffic-based schemes, if not adequately structured, could attract less favourable financing terms, or may not be fundable at all. The current legal framework provides for 20 per cent of public subsidies or availability type payments, which is seen as a positive measure to increase interest in the Colombian market, although the issues you raise are likely to prove challenging.



Investment opportunities in

Colombia:

Interview with STEVE BRUNDLE,

Managing Director at Infrata

Prior to establishing Infrata, Steve led the 600-strong strategic consultancy business within URS Scott Wilson. Steve's background is in transportation consultancy, and he is acknowledged as an expert in his field. He acts as a high-level independent adviser to the banks and other financial institutions involved in many of the world's leading privately financed infrastructure projects.

IJ: Colombia's infrastructure programme focuses on highway development and rail infrastructure. Should it be focusing on other sectors, such as airports and ports too?

SB: Similar to other Latin American countries, transportation has always been at the forefront of pilot PPP projects. Mexico and Chile are good examples of this approach. Set up as an independent unit from the government, ANI seems to have an adequate structure, similar to that of other PPP units that we have seen succeed in other parts of the world. It seems entirely appropriate for ANI to demonstrate its ability to develop the proposed pipeline of PPP highway and rail concessions, as it is focusing on an area where there is local expertise and an established track record. Diversification into other sectors would naturally follow.

IJ: Colombia has a strong market for local institutional investors.

However, is this market mature enough to provide enough liquidity for the government's ambitious plans? Is the market mature enough to partner up with their European counterparts?

SB: Capacity of the local financial sector is certainly an important factor in contributing to the success of the Government's ambitious plans. In recent years, Colombia has been regarded as an attractive market for foreign investors not only European but also from Chile, Argentina, Brazil, Mexico and North America. Well-structured projects still have a tendency to be oversubscribed.

IJ: How much is corruption still of an issue for European investors and lenders? What can the government do in order to seem more transparent with their processes?

SB: Transparency in the process is key, especially in countries where competition law is not regulated. Examples such as Puerto Rico and Mexico, where the procurement agencies have appointed international, well known and reputable advisors to drive the process seems to have been given confidence to developers, lenders and investors. Positive results have been achieved following this approach.

Chapter 8

IJ Infrastructure Investment Guide: Colombia

MARKET LIQUIDITY



8. MARKET LIQUIDITY

A report issued by the United Nations Conference on Trade and Development (UNCTAD) this year indicated that Colombia is in fifth place in the world for greatest growth in Foreign Direct Investment (FDI). Over the past decade, the figure has doubled, to reach over US\$15 billion in 2011. International investors accounted for 8 per cent of Colombia's equity market last year. In the same year, Colombia's capital market had a record number of new IPOs totalling US\$7 billion, with a total trading volume of more than US\$37 billion. While the majority of this investment is in the oil and mining sectors, the vast Colombian infrastructure pipeline means that this sector also looks set to become a key destination for foreign investment over the next ten years.

Santos and his cabinet have focused heavily on attracting this investment and creating a pool of liquidity. Conservative financial growth plans combined with an emphasis on creating security for investors has paid off, with the World Bank ranking Colombia sixth in the world for investor protection in 2011. A number of tools to loosen the financial market for outsiders have been employed, including incentives and tax exemptions on businesses and sectors including renewable energy. Permanent and temporary Free Trade Zones offer lower corporate tax to eligible businesses too.

Free Trade Agreements (FTAs) will be key to opening up the country to foreign businesses and investors, and the Colombian government has been actively pursuing these. In September 2011, the US government approved an FTA between the two countries. Colombia now has FTAs in place with the US, China, South Korea, Japan, Canada, Switzerland and Mexico, among others. An FTA with the European Union is due to come in to effect in the autumn of 2012. The UK – with its City-based investors, insurers and bankers – is a known exporter of financial services and products to Colombia; this trend looks set to increase.



8.1. KEY LOCAL PLAYERS

The Colombian Securities Exchange is currently ranked fourth in Latin America in terms of liquidity, with an average daily volume of US\$120 million during Q1 2012. It is also the leading destination for regional investment in MILA (the combined Latin American stock market, composed of the Chilean, Peruvian and Colombian equity exchanges).

Private investment has played an important part in financing Colombia's existing infrastructure projects, primarily in the power and transport sectors. Government estimates suggest that as a percentage of GDP, investment in transport infrastructure in Colombia grew from 0.66 per cent in 2002 to 1.73 per cent in 2010. Of this spending, 35 per cent came from the private sector. Total infrastructure investment must rise to around four per cent of GDP if Colombia's pressing infrastructure deficit is to be effectively addressed.

Private equity funds have begun to circle Colombia as an investment destination; one such fund, the Ashmore Colombia Infrastructure Fund, has involvement from a mix of local and international banks and multilaterals (Inverlink, Macquarie, Andean Development Corporation and the Inter-American Development Bank) and is looking to raise US\$500 million. Other international private equity funds have emerged since 2009, including a US\$400 million Colombian infrastructure fund established by Brookfield Asset Management.

8.2. INFRASTRUCTURE BONDS AND PENSION FUND INVOLVEMENT

Andrade and the Finance Ministry are currently designing a new bond market which will cater to local pension funds, and manage around US\$60 billion. As noted in earlier chapters, though, there are concerns that local funds and investors do not have the experience to effectively manage complex funding mechanisms.

The Colombian domestic capital markets remain liquid. Pension funds tend to be the biggest source of private investment in the country, with leading Colombian newspaper El Colombiano estimating in 2011 that of the COP\$108.7 billion invested by pension funds in Colombia, about 17 per cent is invested in infrastructure. Changes in pension regulations in recent years across Latin America have enabled greater regional portfolio diversification, which has increased the ease of investment flow into the country. Providing reassurances on availability payments and end-user revenue as the new PPP law comes into full effect will also encourage investment from sovereign and local pension funds.

Leading Colombian bank Bancolombia told Infrastructure Journal that the Colombian government has discussed an 'Infrastructure Standard Bond' that, according to them, will resolve the current hold-up to a sector which requires funds that can be invested long-term.

The bank said "as interesting as this large-scale approach is, there are nonetheless a series of factors which can hinder the success of a bond project of this shape and size":

The current regulations on bonds in Colombia are such that there is limited manoeuvrability in the
event of a default on interest or capital payments, as either of these would constitute a breach of the
bond agreement.



- Since the bonds would be reliant on 'future income' and thus, subject to completion and meeting
 construction deadlines, the investors may see the construction as a risk. In Colombia, the investors
 are still very reluctant to face up to the risks that come with investing in construction due to negative
 experiences in the past. Consequently, investment companies would have to develop their ability to
 analyse and administer to the risks associated with infrastructural bonds on a day-to-day basis.
- Pension funds and insurance companies will be the major investors in these bonds, but the
 government and the AFP will have to decide whether or not these bonds will fall under the terms of
 public debt, given that they are also supported by 'future income'. If this is the case, there will be no
 space for investment and the government will be directly competing with the bond market.
- It will be necessary to use reserve funds (for the repayment of capital, interest payments and costs
 associated with the project). The size of the reserve fund could turn out to be burdensome in
 financing terms (terms which are determined when beginning the project and which are dependent
 on the risks involved).
- In order for the bonds to be issued on the capital market, the projects will have to be worth at least 120.000-150.000 million Columbian Pesos.

8.3. MERCHANT BANKS

International banks are making their entrance in to the Colombian market, and acquiring stakes in the relatively buoyant Colombian banking system may prove to be a safe investment for institutions entangled in the Eurozone's current woes. Canada's Scotiabank made its stake in Colombia this year through the purchase of a US\$1 billion, 51 per cent share in Banco Colpatria. Brazilian giant Itau opened offices in Colombia earlier this spring too, with its planned subsidiary, Corporacion Financeira Itau BBA Colombia SA, set to have capital of about 320 million reais (US\$180 million). The Colombian arm of Latin America's largest lender is expected to receive its banking license in the second half of this year.

Chile's CorpBanca agreed to acquire Banco Santander Colombia for US\$1.22 billion late last year, with the purchase due to complete this year. "We want to be a bank with certain relevance within the Colombian market, so we're looking to double our market participation through organic growth, to between 6 and 7 per cent by 2015 from a current 3 per cent," CorpBanca chief executive Fernando Massu told a Reuters summit this year. Massu also said CorpBanca was on the lookout for further expansion opportunities in Colombia and other LATAM countries. "We want to be a regional bank [...] if another (acquisition) opportunity presents itself, we're open to analyzing those opportunities," he said.

Domestic banks are currently highly active in financing Colombian infrastructure projects and this trend looks set to continue alongside the incoming wave of international banks.



nfrastructure Journal: Latin America as a region is becoming increasingly more attractive to investors. However, each country has its perks and its risks. So far, Colombia has proven itself as capable of maintaining good growth and low inflation levels. But still, the country poses risks and challenges. As a potential lender what would be the first concerns for you when considering a deal in Colombia as opposed to other countries in the region?

Ana Corvalan: Lenders think of Colombia as a country on the right path, but still in need of cementing their political stability. The other aspect to consider is transparency. The authorities (ie ANI) will need to confirm that international players are actually welcome to participate in the continued development of infrastructure in Colombia, and that the bidding process will be transparent to all stakeholders, both abroad and locally.

IJ: Deals in LATAM have traditionally been financed with the help of cheap loans from multilateral development banks. Does the participation of multilaterals limit participation from commercial banks or can commercial banks use these cheap loans to hedge investment risk and attract sponsors as clients? Are multilaterals friends or foes?

AC: Definitely friends. The presence of multilaterals in LATAM can only be attractive in that it provides a political umbrella cover, with tranche B loans under a multilateral facility providing lower cost of funding to the co-financiers.

IJ: These days banks around the world seem to have a limited lending capacity for PPP projects. So why, given harsh criticism towards "risky investments", would banks with liquidity chose to go to an emerging market, apart from the obvious return on investment that emerging economies offer? Would a more conservative approach be better?

AC: Leaving aside the higher ROI aspect, banks should bear in mind that the basis for LATAM's demand for infrastructure investment relates to their economic development. Also, the amounts involved in the region are quite considerable.

Colombia alone has an investment plan of US\$23 billion in the next 10 years, and this is just a base figure, most likely to increase substantially in the coming years as "projects under consideration" by the authorities get the green light.

Also, we should bear in mind that in addition to the presence of liquidity in the Colombian market, the other liquid rich banks are Japanese, Australian and Canadians. Scotia Bank has recently bought 51 per cent of Colpatria bank in Colombia and Bank of Tokyo-Mitsubishi has recently signed an MOU with Proexport Colombia to perform joint activities that promote, strengthen and support Japanese companies with interest in Colombia. My reading from this is that there is large appetite and banks with liquidity will be present in PPP projects going forward.



The international lender's

perspective:

Interview with ANA CORVALAN,

Espirito Santo Investment Bank

IJ: European institutional investors are seeking new debt instruments to fend off bank liquidity. Colombia has a considerable pension fund market that could be used to create some of these innovative tools. However, local fund managers seem to lack the experience for these. What would be the best way for these funds to be approached or what options should they be considering?

AC: The government and some of its agencies in Colombia are already having some dialogue with Infrastructure UK. This is a good initial step, although I would think that setting up some dialogue with the Canadian agencies could also be helpful, given their leading experience in PPP projects funded with bonds

IJ: Corruption, currency risk, right-of-way risk, environmental assessments, traffic and fare box revenues and security issues are all risks associated with the region. What should be the most pressing issues for an investor or lender considering entering the market and how could they mitigate such risks?

AC: The degree of currency risk will vary from country to country. I believe Colombia has proven to manage their macro policies pretty well and in this regard currency risk should not be at the top of the list. Right of way and environmental assessment risk should normally be taken by the authorities and in this regard the Colombian government may want to reconsider their allocation of this risk. Demand risk can be difficult to swallow in some economies, especially when projects are located in relatively poor areas and/or there is not enough control mechanisms to minimize or eliminate "free users". Although security issues so far have mostly applied to geographies far from the centre.

IJ: Some LATAM markets seem to be more closed off to foreign direct investment than others. Putting together a proposal could cost a sponsor or a lender millions of US dollars. How should an investor approach the market?

What can the government do to facilitate its entrance in the market?

AC: At a macro level, I feel the Colombian government could benefit by following up their conferences in London with workshops and roundtables which could bring together foreign developers and investors with key stakeholders in Colombia, including authorities, advisers, Colombian developers, banks, pension funds, and the like. At a micro level, the government could reconsider the reallocation of right of way and environmental risks from the private sector to the public sector, as these are difficult elements for any investor especially if not familiarized with the legal framework.

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IJ: Some infrastructure sponsors in Mexico and Brazil have in the last year issued IPOs in order to refinance their debt facilities and enable them to invest in a larger portfolio. However, would this be a viable option on Colombia? What other options would sponsors have?

AC: This question can only be of concern to sponsors with high leverage. My thinking is around a PPP in which the concessionaire will be a group of companies and the borrower/project company will be an SPV with a ring fenced structure. In this sense, I do not think the question is so relevant if Colombia is looking to expand their sponsor base from local to global.

IJ: The Colombian banking system still seems to use merchant banks as a mainstream model. How could that affect partnering up with their European or North American counterparts?

AC: The presence of high liquidity amongst the Colombian banks would present a good opportunity for them to team up with advisory teams of European banks/specialised boutiques which are less liquid but have high expertise in Project Financing and PPP in particular. Although it may take some time for the Colombian banks to become comfortable when supporting consortia in complex PPP bids, I see this gap as a good opportunity for mutual cooperation.

The strong economic growth and the coming into effect of a large number of trade agreements that have taken place in recent years have meant that Colombia has had to improve its infrastructure in order to ensure that competitiveness and growth are not adversely affected.

To make matters worse, the system known as 'future income' has broken down and has had to be reconsidered as a means of payment. In fact, it is currently up against significant short-term difficulties (2012-2015). This development has forced the government's hand. They must now take on several new large-scale projects such as the Ruta del Sol, the Transversal de las Americas and a fully integrated system of mass transportation, to name but a few.

Colombia has to carry on and must not leave investment in infrastructure to the mercy of legal and financial changes. They must introduce recruitment and funding schemes that are not only sustainable in the long term, but that will dovetail rapidly with the process of international integration that faces the country, all the while contending with the problem itself: that of an unstable infrastructure putting them at a disadvantage when compared with other countries.



WHAT IS THE SIGNIFICANCE OF THIS FLAW IN THE INFRASTRUCTURE?

Colombia has not been ignorant of investment in infrastructure; in fact it has one of the most stable investment flows as a percentage of its GDP in all of Latin America. Despite this, the quality of investment is not the best, which in turn becomes an obstacle for the growth of foreign trading, especially when it comes to developing and signing agreements on free trade.

Although investment has been steady, according to figures from the World Bank the average funds invested in the transport infrastructure between 1987 and 2011 oscillates between 0.6 per cent and 1.4 per cent of GDP, highlighting the necessity of imminent action on infrastructure. The World Bank estimates that Colombia will need to increase the aforementioned ratio to no less than 6 per cent of GDP per annum for close to a decade in order to find themselves on a par with the resources which South Korea currently enjoys.

The most obvious problem that has revealed itself in the last few years is a lack of planning and structural organisation. The issue refers to investments in and management of projects, prioritisation and the sources of funds. If only there was a magic formula which prevented hold-ups and mistakes in the workplace: mistakes which consequently cause delays and works going over budget; which in turn instils doubt in the private investors who finance infrastructural investments.

Colombia's infrastructure paradox

VELASQUEZ, Bancolombia

Santiago Moreno Velasquez is a mechanical engineer from the University Eafit and he also has an MBA in Finance and Marketing majors. He has over 13 years experience between real and financial sectors, of which 10 were in Group Colombia Renting Bancolombia, Leasing Bancolombia and Banca de Inversion Bancolombia. Santiago is a project manager in the Vice President of Investment Banking Origination Bancolombia for the Construction (Infrastructure and Buildings), Transportation, Automotive and Machinery.

Additionally, there are some snags established by the current regulations which cause holdups to projects, such as: obtaining environmental licences, preliminary consultations with communities (minorities), acquiring land and the redeployment of public service networks.

A further problem is the lack of a structured investment plan that can be used to minimise investor risk.

WHAT IS THE SIGNIFICANCE OF THIS FLAW IN THE INFRASTRUCTURE?

The current government has seen a change to the traditional model, by prioritising the development of projects over their completion. Before construction can begin, they have to carry out feasibility studies, budgeting and engineering designs as well as environmental, social, land and risk management.

Regarding funding, at the INVIAS (National Road Institute), changes were made so that contracts could not be awarded to bids made below the so-called 'lower bracket', but rather to those that were closer to the average value of all the bids. The former prevents bidders from unfairly lowering their offers to secure contracts; instead, they all come away with a suitable profit, therefore avoiding manoeuvres that could end in corruption.

Additionally, the government has set out the Public and Private Partnerships Act (APP), through which they look to regulate both the investors in the projects and the funds for its execution. In cases where the State can only contribute a limited amount of funds to certain projects, concessionaries will be remunerated based on the quality and availability of their services for the duration of the project on which they are working.

The reduced risk of the projects will also reduce the risks of the assets whose issue they will eventually finance. The securer assets could therefore attract with greater ease savings in the running of pension funds and other institutional investments, as well as investment portfolios for the rest of the finance system.

THE APPS

The lack of good organisation and of adequate research has left a very concentrated and unnecessarily high level of risk for the developer. The law of APP is a decisive step in the appropriate allocation of risk, allowing the participation of strategic and financial investors, project managers, building companies and their workers.

APP is an agreement between the state and private companies which allows the state to call upon private contractors when essential works are required, whilst minimising the level of risk for both parties.

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FUNDING FOR WORK

The national government estimates that in 2011 funds of nearly 6 billion Colombian Pesos (consistent with the 1 per cent of GDP mentioned previously) will be invested, divided 50/50 between concessions and public works. However, it has expressed that it hopes to raise this sum up to 18 billion Colombian Pesos (3 per cent of GDP) by 2018, producing therefore an investment of 40 billion between 2010 and 2014, and one of 100 billion between 2010 and 2020.

Funds of this magnitude will be far beyond the capacity of the country to finance itself with public money, since the Colombian state has its own running costs and some large contingency funds. As a result it will only have two alternatives: a tax hike or getting itself into debt. Neither of these alternatives sends out the right message, nor will it reflect the policy of stability and of attracting investment. So where will they find the money?

Currently Colombia provides additional administrative funds for the private sector, along with privileged access to external savings (even more with the awarding of a level of investment). The amount of funds that the economy will potentially have to invest in infrastructure is high, if one takes into account that the value of the finance system's investment portfolio is COP362 billion, (equivalent to 59 per cent of GDP) and the amount in pension funds is more than COP120 billion. Luckily, thanks to the new APP regulations the legislation has been adapted so that funds from the private sector can be put toward financing investment in infrastructure, as well as pension funds and other investors.

Loans have been and will continue to be the most flexible alternative. This is not to say that this is the only way for the finance system to fund projects, but rather that in this way they can tie themselves to investment companies in such a way where they can get purpose built loans. In any case, taking into consideration the magnitude and complexity of the projects, they will take on an unprecedented level of importance which will mean that sponsors will require professional structuring of their financing. Bearing in mind the huge costs required, tools such as project financing will take on a much larger role. Funds from sources as diverse as private capital funds specialising in infrastructure (for both equity and debt), multilaterals and the ECA, all of which until now have not been important, will take on greater significance.

Finally, Colombian projects have a marked tendency to be big and technically demanding (building viaducts, tunnels, dams, etc.) regardless of the contracting model: whether it be through grants, public deeds and APPs, which in turn creates opportunities for foreign parties. It goes without saying that the latter may take a slice of the action, and have about a year to prepare themselves for this. We strongly recommend sourcing good local partners to work with.

Infrastructure Journal (IJ) provides market intelligence data and analysis for businesses engaged in the investment and development of infrastructure assets.

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