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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT

FOR A PROPOSED DEVELOPMENT POLICY LOAN

IN THE AMOUNT OF US\$700 MILLION TO

THE REPUBLIC OF COLOMBIA

FOR THE

SECOND PROGRAMMATIC PRODUCTIVE AND SUSTAINABLE CITIES

OPERATION

November 17, 2014

Transport & ICT Global Practice Social, Urban, Rural and Resilience Global Practice Colombia and Mexico Country Management Unit Latin America and the Caribbean Region

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COLOMBIA - GOVERNMENT FISCAL YEAR

January, 1 – December, 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective October 31, 2014)

COP\$ 2,050.52 = US\$ 1.00

ABBREVIATION AND ACRONYMS

ANI	National Infrastructure Agency	Agencia Nacional de Infraestructura, formerly Instituto Nacional de Concesiones- INCO				
CONPES	National Economic and Social Policy Council	Consejo Nacional de Política Económica y Social				
CPS	Country Partnership Strategy					
DANE	National Administrative Statistics Department	Departamento Administrativo Nacional de Estadística				
DNP	National Planning Department	Departamento Nacional de Planeación				
DPL	Development Policy Loan					
FDI	Foreign Direct Investment					
GDP	Gross Domestic Product					
GEIH	National Integrated Household Survey	Gran Encuesta Integrada de Hogares- DANE				
GHG	Greenhouse Gases					
GoC	Government of Colombia					
IBRD	International Bank for Reconstruction and					
IDRD	Development					
IFC	International Finance Corporation					
IMF	International Monetary Fund					
INCO	National Institute for Concessions	Instituto Nacional de Concesiones				
LAC	Latin America and the Caribbean Region	Región de América Latina y el Caribe				
LOOT	Territorial Land Use Planning Law	Ley Orgánica de Ordenamiento Territorial				
MT	Ministry of Transport	Ministerie de Vinier de Cinde des Territorie				
MVCT	Ministry of Housing, Cities and Territories	Ministerio de Vivienda, Ciudad y Territorio				
NDP	National Development Plan					
NUTP	National Urban Transport Program					
PFM	Public Financial Management					
PKS	Programmatic Knowledge Services					
PPIAF	Public-Private Infrastructure Advisory Facility					
PPP	Public-Private Partnership					
SFLAC	Spanish Fund for Latin America and the Caribbean					
SoC	System of Cities	Sistema de Ciudades				
TDM	Travel Demand Management					

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COLOMBIA

DEVELOPMENT POLICY LOAN FOR THE SECOND PROGRAMMATIC PRODUCTIVE AND SUSTAINABLE CITIES OPERATION

TABLE OF CONTENTS

SUN	IMARY	OF PROPOSED LOAN AND PROGRAM	i
1.		DUCTION AND COUNTRY CONTEXT	
2.	MACR	OECONOMIC POLICY FRAMEWORK	
	2.1	RECENT ECONOMIC DEVELOPMENTS IN COLOMBIA	4
	2.2	MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY	6
	2.3	IMF RELATIONS	9
3.	THE G	OVERNMENT'S PROGRAM	10
4.	PROPO	OSED OPERATION	12
	4.1	LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION	12
	4.2	PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS	13
	4.3	LINK TO COUNTRY PARTNERHSIP STRATEGY (CPS) AND OTHER BANK	
	OPERAT	IONS	
	4.4	CONSULTATIONS, COLLABORATION WITH OTHER DEVELOPMENT PARTNE 24	ERS
5.	OTHE	R DESIGN AND APPRAISAL ISSUES	24
	5.1	POVERTY AND SOCIAL IMPACT	24
	5.2	ENVIRONMENTAL ASPECTS	26
	5.3	PFM, DISBURSEMENT AND AUDITING ASPECTS	30
	5.4	MONITORING AND EVALUATION	32
6.	SUMM	ARY OF RISKS AND MITIGATION	32
ANN	NEX 1. P	OLICY AND RESULTS MATRIX	35
ANN	NEX 2. L	ETTER OF DEVELOPMENT POLICY	39
ANN	NEX 3. F	UND RELATIONS NOTE	45
ANN	NEX 4. P	RODUCTIVE AND SUSTAINABLE CITIES PROGRAMMATIC	
		GE SERVICES (PKS)	
ANN	NEX 5. P	OVERTY AND SOCIAL IMPACTS ASSESSMENT	48
ANN	NEX 6. C	COLOMBIA SELECTED MACROECONOMIC INDICATORS	68
ANN	NEX 7. P	RIOR ACTION ANALYTICAL UNDERPINNINGS	70

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COLOMBIA SUMMARY OF THE PROPOSED DEVELOPMENT POLICY LOAN FOR THE SECOND PROGRAMMATIC PRODUCTIVE AND SUSTAINABLE CITIES OPERATION

Government:	Republic of Colombia						
Implementing Agencies:	Ministry of Finance and Public Credit and the National Planning Department						
Financing Data:	Total World Bank financing: US\$700 million. Terms: IBRD variable spread loan, repayment schedule linked to commitment, and all conversion options (Currency, Interest Rate and Caps/Collars). Bullet repayment on June 15, 2032 and payment dates June 15 and December 15 in each year. Front-end fee, Cap/Collar premium, and Commitment charge not capitalized.						
Operation Type:	Second in a series of two programmatic Development Policy Loans (DPLs). Single tranche disbursement.						
Operation Pillars and Program Development Objective	In line with priorities set by the Government, this Second Programmatic Productive and Sustainable Cities Development Policy Loan would support the implementation of reforms in four key areas: (a) sustainable and inclusive cities; (b) access to affordable housing; (c) institutional strengthening and regional coordination; and (d) connectivity across the urban system and regional infrastructure policy framework.						
(PDO):	The objective of the program is to support the strengthening of the Government of Colombia's policy framework on productive, sustainable, and inclusive cities.						
Results Indicators:	 Results indicators include: (a) sustainable and inclusive cities: The National Development Plan 2014-2018 is structured with a territorial/regional approach that takes into account the System of Cities framework. Number of conceptual designs or feasibility studies supporting travel demand management policies, including formulation of congestion charging schemes, parking, and non-motorized transit in cities with population greater than 300,000. Number of municipal inventories of settlements located at high risk areas formulated in accordance with Ministerial Resolution 0448 of July 17, 2014. (b) access to affordable housing: Number of low income families with access to affordable and safe housing solutions increases, as a result of the public housing and voluntary savings program. (c) institutional strengthening and regional coordination: Number of (i) Regional Contract Plans signed between territorial entities and (ii) number of Metropolitan Territorial Plans increases. (d) urban connectivity and regional infrastructure policy framework: The Transport Planning Unit and Transport Regulatory Commission are fully operational, as evidenced by the set-up of functional areas and hiring of staff. Number of Public-Private Partnerships (PPPs) structured with signed contracts and financing frameworks in place, under the Fourth Generation of Concessions. 						
Overall Risk Rating:	Moderate						
Operation ID:	P145766						

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT PROGRAM DOCUMENT FOR A DEVELOPMENT POLICY LOAN TO THE REPUBLIC OF COLOMBIA

1. INTRODUCTION AND COUNTRY CONTEXT

1. This Program Document presents a proposed Development Policy Loan (DPL) in the amount of US\$ 700 million for the Republic of Colombia. This is the second of a series of two single-tranche programmatic DPLs.¹ The objective of the program is to strengthen the Government of Colombia's (GoC) policy framework on productive, sustainable and inclusive cities. Specifically, the program will support policy and regulatory reforms that aim to: (a) strengthen urban and metropolitan management, address the externalities created by increased motorization and improve urban transport service provision, and mitigate vulnerability to natural disasters for the urban poor (Policy Area 1); (b) promote the provision of affordable and safe low-income housing solutions (Policy Area 2); (c) strengthen the ability of subnational entities to coordinate and finance the structuring and implementation of regional and metropolitan development initiatives (Policy Area 3); and (d) increase the productivity of the System of Cities (SoC) through improved connectivity within the network of cities and between cities and ports to external markets (Policy Area 4). The operation and proposed reforms build on the activities supported by the first DPL that targeted policies to boost productivity and improve sustainability of low-income populations in the urban and transport sectors, and on a broader programmatic engagement that includes knowledge, convening, and financial services, all in support of sustainable, productive and inclusive cities in Colombia. Annex 4 includes a detailed description of the World Bank broader programmatic engagement.

2. **Colombia has benefitted from sustained economic growth and poverty reduction.** Between 2002 and 2012, Colombia experienced steady and strong economic growth, with an annualized growth rate of real Gross Domestic Product (GDP) per-capita averaging 3.2 percent and a total estimated population in 2014 of 47.8 million.² Over the same period, Colombia also managed to attain an impressive decline in the prevalence of moderate, extreme, and multidimensional poverty. The number of poor people declined from 19.96 to 13.99 million between 2002 and 2013 (Figure 1). Yet this decline was not evenly distributed; the large urban areas³ experienced a sharper reduction in poverty in relative terms. The Multidimensional Poverty Index (MPI) declined from 49 percent in 2003 to 27 percent in 2012. In terms of sharing the benefits of economic prosperity, particularly during the second half of the decade, from 2008 to 2012, Colombia's less well-off people benefitted more from the country's economic growth than the average person, which resulted in important improvements in shared prosperity. In particular, real income per capita of the bottom 40 percent grew at 7.9 percent, while the mean growth rate was about 5.2 percent.⁴

¹ The first loan (P130972) for US\$150 million was approved in November 2012 and was fully disbursed in December 2012. Refer to Annex 1 for DPLI prior actions and results indicators.

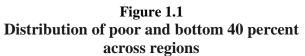
² Population figures published by DANE, Colombia National Statistics Department

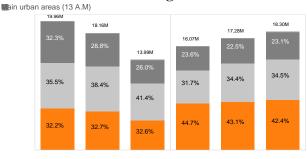
³ Defined as the 13 metropolitan areas.

⁴ Refer to Draft World Bank Colombia Policy Note (2014) on Poverty and Shared Prosperity.

3. Cities have played and will continue to play a very important role in continued poverty reduction and shared prosperity. The program's objective will directly contribute to advance this agenda. Colombia is a predominantly urban country, and urban activities have been important contributors to economic growth. More than 75 percent of Colombians live in cities, where 85 percent of the country's GDP is generated.

Despite the lower rate of poverty in urban areas vis-à-vis rural areas, the absolute size of the urban population still makes the urban poor an important target to reduce overall poverty. As of 2012, urban areas housed more population in moderate and extreme poverty (12 million) than rural areas (7.4 million). Hence, although the poverty rate is 40 percent higher in rural areas compared to urban areas, the number of people affected by a 1 percent reduction in the urban poverty rate is 68 percent higher than the same change in the rural poverty rate. Urban areas are also today more unequal than rural areas.⁵ These





Source: Authors' own calculations based on GEIH-MESEP (2002-2013).

numbers suggest that the policies supported by this operation, which will allow more equitable access to economic and social opportunities for urban citizens, will be essential for overall reduction in poverty levels and inequality, which is a key strategy to promote shared prosperity.

4. To harness the benefits from urbanization, Colombia needs to promote more inclusive, productive and sustainable policies and to address the negative externalities. Planning, coordinating and investing in infrastructure at the metropolitan level and in connectivity between cities, and increasing housing affordability are crucial to well-functioning cities. These are areas in which Colombia has progressed but important challenges remain. Despite the lower poverty levels versus rural areas, Colombian cities struggle to provide equitable access to basic urban services. In particular, safe, less polluting, affordable, and more efficient public transportation is vital to enhanced mobility, access to opportunities, and productivity in cities. Addressing the negative externalities of rapid motorization such as congestion, road safety and pollution is also critical, since these externalities are regressive because they disproportionately affect the poor.⁶ Deficits in public urban space and low income housing⁷ present serious challenges for security and quality of life. Improved inter-jurisdictional coordination is a key policy to enhance planning and efficiency in the provision of infrastructure and services. Finally, improved connectivity among cities is essential for increased productivity and trade, and to facilitate a more efficient system of cities.

⁵ Gini coefficients have showed a steady decline in both urban and rural areas in the past 5 years. Yet, coefficients show more pronounced inequality in cities (0.51) than in countryside (0.46).

⁶ Congestion is regressive— it disproportionately affects the poor and the bottom 40 percent that are at large captive users of public transit, and have to endure traffic congestion in mixed traffic. Road accidents also disproportionately affect the poor and most vulnerable in Colombia: 31 percent of those killed are pedestrians, and road fatalities are the leading cause of death amongst children and early youth (5 to 14 year cohort).

⁷ 41% of urban households earning up to two minimum wages are in need of a housing solution. Refer to GEIH 2011.

2. MACROECONOMIC POLICY FRAMEWORK

2.1 RECENT ECONOMIC DEVELOPMENTS

5. The Santos administration, currently entering a second term, has accumulated a strong record of structural reforms to promote macroeconomic stability and social progress. In recent years, the government was able to implement important fiscal and macro reforms (including the Fiscal Responsibility Law, the Fiscal Rule, and Comprehensive Tax Reforms to address loopholes, reduce distortions and encourage formal job creation). Reforms have strengthened the country policy management tools, promoted sustainability and resilience but increasing buffers against shocks. In parallel to macro and social reforms, the government has been advancing peace negotiations with guerrilla group FARC, reaching agreement on three out of five negotiation topics for ending the conflict:⁸ illegal drugs (May 2014), rural development (June 2013), and political participation (December 2013).⁹ Over more than five decades, the conflict has imposed severe economic and social cost, and the dividends from reaching peace are expected to be significant.

Colombia's sound economic performance, backed by the solid macro reforms and 6. favorable external context, helped consolidate the country's position among LAC's strongest performers. As a result of an enhanced macroeconomic framework, a commodity price boom, and better security conditions, Colombia's economy has grown strongly since the early 2000s. The country weathered the financial crisis robustly, sustaining high growth rates (above 5 percent) in the year before and after. This performance helped Colombia close the country's per capita income gap with top LAC economies and high income (OECD) countries. Growth moderated in 2012 (to 4 percent), in line with emerging markets' slowdown trend and less favorable external conditions. Government actions to support economic activity, including some of the prior action supported by the DPL, helped accelerate growth in the end of 2013 and beginning of 2014. Colombia's growth reached 4.7 percent in 2013, above LAC's average (3.5 percent) but still below the performance in the previous decade. In recognition of its important economic achievements, Colombia was invited to start its accession process to OECD membership (October 2013) and the country's risk rating was upgraded by all major rating agencies in the past 18 months.¹⁰

7. Unlike the last decade, the recent growth spell has been led by domestic demand. From a sectorial point of view, growth has been led by the construction sector (mainly due to infrastructure projects and a rebound in housing construction), social services (mostly public administration and defense), and the primary sector (favorable conditions in coffee production).

⁸ The remaining topics are the end of the armed conflict (pending) and the preparation of a strategy for the victims.

⁹ The first agreement on rural development aims to transform the living conditions in rural areas, reversing the negative effects of violence. The second agreement reached established the basis of an eventual participation of the FARC in Colombian politics. It included rights and guarantees for new political parties that may emerge after a final peace deal, mechanisms of citizen participation, and measures to promote engagement in politics. Finally, the FARC agreed through the third point of the agenda to break any relationship with the illegal drugs business, while the GoC compromised to continue fighting illegal drug and give greater priority to crop substitution and drug treatment programs.
¹⁰ Moody's upgraded Colombia debt rating on Jul 2014 (to Baa local currency, Baa2 foreign currency); Fitch upgraded on Dec

¹⁰ Moody's upgraded Colombia debt rating on Jul 2014 (to Baa local currency, Baa2 foreign currency); Fitch upgraded on Dec 2013 (to BBB+ and BBB, respectively), while S&P upgraded on Apr 2013 (also to BBB+ and BBB, respectively).

Breaking the trend during the decade, manufacturing industries resumed growth, taking advantage of local consumption and relatively low exchange rates. In contrast, extractive activities remain stagnant following low prices and disruptions in production linked to the conflict. From the demand point of view, gross capital formation, household and government consumption were the main drivers of growth. Growth has been accompanied by improvements in labor market outcomes. During the last four years unemployment has dropped consistently reaching a record low of 9.6 percent in 2013, the lowest annual figure in this century.

Monetary policy management has been adequate, the peso's appreciation cycle has 8. stopped and inflation has remained within the target band. The Central Bank has appropriately managed monetary policy tools, in response to fluctuations in economic activity, while maintaining inflation within the target range. In addition, sustained accumulation of international reserves helped relieve exchange rate pressures. Between August 2012 and March 2013, the interest rate was reduced by 200 basis points, reaching 3.25 percent. The rate remained constant until May 2014, when the Central Bank started a gradual increase in the policy rate following a pickup in economic activity and price increases. By July 2014, the rate had increased 100 basis points to 4.25 percent. The Colombian peso (in terms of both nominal and the real effective rate) grew stronger for almost a decade in response to significant capital inflows (primarily FDI). However, the dollar retracted in 2013 from an average of COP\$1772 in January to around COP\$1931 in December. This retraction was a result from both changes in policies and in the external environment. More recently, an increase in investment inflows led to a moderate appreciation, but the dollar remain close to COP\$1900. Fluctuations in Colombia's flexible exchange rate and accumulated international reserves (US\$45 billion) act as a shock absorber in times of crisis and uncertainty, strengthening Colombia's external buffers.

9. Colombia's external accounts remain broadly balanced, despite a recent drop in overall trade. In 2013, both exports and imports decreased as a share of GDP, leaving the current account deficit almost unchanged at 3.3 percent of GDP. Falling exports are mainly explained by the reduction in coal and gold exports (14 and 34 percent drop between 2012 and 2013). The decline in import primarily reflects a decrease in capital goods purchased from abroad. Nevertheless, terms of trade remained somewhat favorable and investment inflows reached record levels. Gross FDI flows—most of which targeted the oil and mining sector—increased by more than 8 percent in 2013, to US\$16.7 billion (4 percent of GDP). While FDI outflows also increased significantly, net FDI flows (2.3 percent of GDP) financed most of the current account deficit. Other financing sources include portfolio investment and public sector net inflows.

10. Colombia enjoys a relatively strong fiscal position and comfortable room to conduct countercyclical fiscal policy, with a low public debt level and manageable gross public financing needs. Fiscal results in 2013 remain aligned to Colombia's medium term consolidation goals: the Central Government fiscal deficit is almost unchanged at 2.4 percent of GDP, in line with the fiscal rule's target. The Consolidated Public Sector (CPS) balance dropped to minus 1 percent of GDP in 2013, from a surplus of 0.3 percent of GDP in 2012, but remained consistent with medium term goals. The drop was due to lower than expected revenues from the last tax reform, accelerated budget implementation across regions, and increased transfers to finance the unification of health benefit plans for the contributory and subsidized regimes. While better debt management helped lower interest payments, currency devaluation and an anticipation of bond issuance pushed the overall public debt from 32 percent in 2012 to 35.8

percent of GDP in 2013. Colombia's fiscal position has helped reduce the sovereign risk premium and strengthen the economy's resilience to external shocks. The fiscal account could still be temporarily affected by shocks, for example by a sharp decline in oil prices (oil related revenues represent 17 percent of total Central Government revenues), but the country has enough buffers and tolls (such as stabilization fund and the renewed US\$5.8 billion IMF flexible credit line) to prevent strong impacts in the rest of the economy.

11. Colombia's macroeconomic and financial stability have not been dented by increased volatility in international financial markets. Assets of the supervised financial system reached 75 percent of GDP at end–2013, with the banking sector accounting for over half of all financial system assets. Pension Fund Administrators (AFPs) are the most important non-bank financial institutions (NBFI), holding around 20 percent of financial system assets in 2013. Insurance premiums are still small (2.4 percent of GDP) but have been growing, while mutual funds are slowly growing to be the second largest player in capital markets (6.8 percent of GDP). Credit growth to the private sector has increased at an annualized rate of around 15 percent, among the highest in the region, but financial soundness indicators are robust. Capitalization is adequate (16.9 percent); provisions remain well above 100 percent, with non-performing loan levels below 3 percent. Today, Colombia's financial system is much better supervised and resilient, as demonstrated during the last global financial crisis. Capital markets have been rapidly increasing and are among the most developed in the Latin American region.

12. **Despite solid fundamentals, Colombia's economy still faces various challenges to achieve sustainable, inclusive, and higher potential growth.** During most of the 2000's, Colombia benefited from growing external demand, high commodity prices, and abundant FDI. These "tailwinds" have started to stall and -progressively- economic growth is likely to be driven by structural factors. Additional growth dividends from macro stability reforms are limited. However, the country faces considerable challenges to boost and sustain growth: (i) access to finance for firm and infrastructure investment is low and narrow compared to regional peers, limiting effective capital accumulation, and infrastructure provision; (ii) lack of adequate education and professional skills and skill matching mechanisms contribute to low levels of labor productivity, and weak labor market outcomes; (iii) the country lacks a coherent and integrated innovation financing system that will encourage productivity gains and sophistication of firms over time; and (iv) regulations and procedures increase business costs, limiting trade activities.

2.2 MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

13. LAC's economic outlook is projected to strengthen over the medium term, with GDP growth around potential level, but below the boom years before the crisis. Following a stable growth performance in 2013, the 2014 outlook for LAC is expected to be positive. Growth in high-income economies appears to be firming up, but developing countries showed a more mixed performance, largely due to differences in domestic factors. Against this backdrop, global assumptions about the near-term outlook have generally improved. Yet, significant uncertainty remains about how smoothly the recovery can play out in an environment where policy stimulus needs to be reversed. The expected withdrawal of global monetary stimulus therefore continues to pose a key risk to the global outlook. In addition, a slowdown in the economic growth of large developing economies like China and India might contribute to stagnant commodity prices. In this context, LAC faces a number of downside risks with possible implications to the external,

social, and fiscal sectors, as well as in the monetary and exchange rate front. The ability to mitigate those risks varies from country to county. Colombia is among the group best prepared to respond to such shocks due to a combination of strong macroeconomic buffers and a sound medium-term strategy to address structural bottlenecks affecting long-term growth.

14. **Colombia's sound macroeconomic framework helps build resilience against external shocks, while ongoing structural reforms help sustain growth in the medium term.** As discussed, Colombia's policy framework is based on: (i) a credible medium-term fiscal framework, supported by a fiscal rule; (ii) an independent Central Bank leading monetary policy based on an inflation-targeting regime alongside a floating exchange rate with moderate interventions; and (iii) sound macro and micro prudential policies combined with a robust financial system. This framework provides a solid basis for countercyclical policy responses and stability. In the medium-term, economic prospects will be also benefit from structural reforms carried out by the government, including the actions supported by this operation. For example, reforms to increase financing will allow for new infrastructure investments, training and better matching of workers to firms will improve labor outcomes, among others. The reforms should compensate for a less favorable external environment.

15. Owing to strong fundamentals, a sound policy framework, and some degree of policy flexibility, Colombia's economic prospects in the baseline scenario are expected to be solid. While the economic outlook is clearly subject to the downside risks discussed above, the most likely scenario for Colombia is described as follows:

- **Growth and inflation:** As growth accelerates in developed economies and structural reforms are implemented, real GDP is projected to increase to 4.8 percent in 2014, slightly above the estimated long-term rate of 4.5 percent. Private consumption and investment are expected to sustain domestic demand growth, led by the gradual implementation of infrastructure investment projects.¹¹ Inflation will stay on target at 3.4 percent in 2014 and 3 percent over the rest of the projection period, kept in check by timely Central Bank interventions.
- **Fiscal accounts:** Consolidated public sector expenditures are estimated to decrease in the coming years from a pick of 29.8 percent of GDP in 2014 to 28 percent in 2018. This decrease will slightly exceed that of revenues, which are estimated to drop from 28.2 percent of GDP in 2013 to 27.2 percent in 2018. Consequently, the NFPS fiscal deficit is projected to decline from a pick of 1.6 percent of GDP in 2013 to 0.8 percent in 2018. The Government is projected to meet the fiscal rule interim target for the central government structural deficit of 2.3 percent of GDP by 2014 and gradually decrease it afterwards to reach 2 percent of GDP by 2017. In light of Colombia's solid track record of fiscal management, the authorities are expected to take the necessary corrective policy measures needed to meet this target.
- **External accounts:** The external current account deficit remained unchanged in 2013 as a reduction in the trade balances was compensated by lower factor income outflows. In the medium term, the trade balance is expected to gradually narrow following a small but continued deterioration in terms of trade. The external deficit is expected to continue to be primarily financed by inflows of net foreign direct investment, although an increase in portfolio inflows is expected in the near term.

¹¹ The government is starting the implementation of a fourth generation of infrastructure projects (4G) with will be implemented through PPP, and is expected to help close Colombia's infrastructure gap.

16. The debt sustainability analysis indicates that public debt is expected to follow a declining path in the baseline case and in alternative scenarios. This analysis is consistent with the macroeconomic assumptions outlined in Table 1. In the baseline scenario, the combined public debt-to-GDP ratio is projected to decline from 35.1 percent of the gross combined public sector debt in 2013 to 29.8 percent in 2018 (Annex 4). This scenario is largely based on the government's consolidation plans supported by the medium term fiscal framework. Because a large share of central Government debt is in local currency and on fixed terms, shocks to the interest rate (a one standard deviation shock) and exchange rates (20 percent devaluation) have only a modest impact on the debt trajectory. At the same time, the debt outlook is not severely affected by shocks to economic growth (a one standard deviation shock) or if the primary balance is left unchanged. Contingent fiscal liabilities represent a potential risk to fiscal accounts, but after a simulated increase of 10 percent in debt creation flows, the public debt continues to decline. Even when historical figures are taken into account, the debt path still falls. These results suggest that public debt sustainability is not a major concern in the medium term.

17. In sum, Colombia's macroeconomic policy stance is deemed adequate for the purpose of this operation although a downside risk persists. Medium-term fiscal policy remains prudent, with proposed fiscal adjustments already well underway. Monetary and exchange rate policies are also supportive of macroeconomic and financial stability. Colombia is exposed to downside risks such as:(i) a sharper-than-expected decline in commodity prices which could affect fiscal accounts; (ii) a sharp slowdown in global growth, particularly in main trading partners such as the United States; and (iii) uncertainties in international financial markets that could reduce capital flows. As discussed, Colombia is well positioned to mitigate the impacts of these shocks. In contrast, the Colombian economy could benefit from positive shocks that are not accounted for in the baseline scenario, including a faster than expected implementation of the peace agreement or an acceleration in the execution of new infrastructure projects.

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Real GDP growth (%)	4.0	6.6	4.0	4.7	4.8	4.5	4.5	4.5	4.5
GDP Deflator (avg. %)	3.9	7.0	2.7	1.6	4.6	2.3	2.6	2.8	2.8
Oil price, Colombian mix (US\$/bl)	73.1	99.3	104.2	100.3	102.2	99.1	94.9	92.4	91.1
Gross national savings	22.1	23.8	24.0	24.2	24.4	24.4	24.7	24.7	25.1
Gross dom. investment	19.1	20.9	20.8	20.9	21.2	21.2	21.6	21.4	21.6
Export growth (FOB ⁺ , %)	22.2	35.7	8.7	0.8	5.8	4.6	5.6	5.6	5.2
- Oil exports growth (%)	60.9	72.3	10.8	1.6	2.4	2.5	1.9	1.8	1.2
Import growth (FOB, %)	-3.7	13.8	4.2	3.7	4.2	6.6	7.3	6.3	5.5
Current account balance	-3.0	-2.9	-3.1	-3.3	-3.8	-3.6	-3.5	-3.5	-3.4
Foreign direct investment (net)	0.5	1.4	4.3	2.3	3.0	3.0	3.2	3.1	2.9
Gross reserves (months of $G\&S^{++}$)	7.1	6.1	6.5	7.5	7.6	7.5	7.4	7.2	7.0
Total external debt +++	23.2	23.3	20.8	24.7	24.2	23.8	23.1	22.2	21.5
Combined public Sector (% of	Combined public Sector (% of GDP):								
Total Revenue	26.1	26.7	28.3	28.3	28.2	27.2	27.3	27.2	27.2
Tax Revenue	18.7	19.1	20.0	19.9	20.1	19.5	19.7	19.7	19.8
Non-tax	7.4	7.6	8.3	8.4	8.1	7.7	7.6	7.5	7.3
Total expenditures	29.2	28.5	27.9	29.2	29.8	28.7	28.6	28.2	28.0
Current expenditures	22.4	20.4	20.8	21.6	22.2	21.6	21.5	21.5	21.5
- Wages and salaries	5.8	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
- Other Consumption	2.4	2.2	2.7	2.7	3.0	2.5	2.5	2.5	2.5
- Goods and services	3.3	2.9	2.9	3.2	3.2	3.1	3.0	3.0	3.0
- Interest	2.9	2.8	2.7	2.6	2.8	2.8	2.8	2.7	2.7
-Transfers	8.1	7.4	7.3	7.8	8.0	8.0	8.0	8.0	8.0
Capital Expenditures	6.8	8.1	7.2	7.6	7.6	7.1	7.1	6.7	6.5
NFPS, Overall Balance	-3.3	-2.0	0.1	-0.9	-1.6	-1.5	-1.3	-1.0	-0.8
CPS, Overall Balance	-3.3	-2.0	0.2	-0.9	-1.5	-1.4	-1.1	-0.8	-0.6
Primary balance	-0.4	0.7	2.8	1.7	1.3	1.4	1.6	2.0	2.2
Public debt	37.0	35.7	32.0	35.8	34.0	33.3	32.4	31.1	29.8
o/w foreign currency	12.7	11.9	11.3	12.9	12.4	12.3	12.1	11.3	11.1
GDP (US\$ billions)	287.0	336.3	369.8	378.1	401.1	428.3	453.8	482.3	512.8

Table 1. Key Economic Indicators

Source: World Bank Staff projections based on DANE (official statistics agency), Banco de la *República*, Ministry of Finance and Public Credit, and the IMF numbers from June, 2013. Note that figures presented in this table may differ from official figures owing to differences in methodology and definitions

*: Central government capital expenditure will decrease by 1.2% of GDP between 2014 and 2016 despite the Governments massive infrastructure investment plan. This is understandable since not all the resources to fund it will come from the central government. PPPs are at the core of the investment plan, while royalty's resources are also taken into account. On the other hand, these projections in fact try to show the limited space the government will actually have to carry on by itself these investments.

Note: ⁺FOB = Free-on-board; ⁺⁺G&S = Goods and services; ⁺⁺⁺Public and private external debt.

2.3 IMF RELATIONS

18. In June, 2014, the IMF concluded its first review of the two-year US\$5.84 billion flexible credit line for Colombia. The review concluded that Colombia has maintained robust economic performance in recent years due in large part to its very strong policy framework. Well-anchored inflationary expectations, a flexible exchange rate, a structural fiscal balance rule, and effective financial supervision and regulation have contributed to the resilience of the Colombian economy to global uncertainty. The Flexible Credit Line (FCL), approved on June 24, 2013 as a two-year arrangement in an amount equivalent to SDR 3.87 billion (about US\$5.84 billion), has also allowed Colombia to restore orderly financial market conditions despite

increased volatility in financial markets over the past year by providing a buffer against future external shocks. The Colombian authorities indicated that they intend to treat the new arrangement as precautionary and not to draw on the FCL resources. The review confirms the findings of the last Article IV Consultation held on May, 2014.

3. THE GOVERNMENT'S PROGRAM

19. The 2010-2014 National Development Plan "*Prosperity for All*" recognizes the importance of cities and metropolitan areas as means to achieve growth, convergence and cross-regional development. The 2010-2014 National Development Plan (NDP) introduced a framework of three strategic areas – Sustainable Growth and Competitiveness, Equality of Opportunities for Social Prosperity, and Consolidation of Peace – and five key drivers for growth: (i) new sectors for innovation; (ii) agriculture and rural development; (iii) infrastructure for transport; (iv) mining and energy development; and (v) housing. The NDP further assumes the need to build more productive, sustainable and inclusive cities¹² to harness growth and reap the benefits from urbanization. As the Santos administration enters its second term the policies supported under the proposed operation are expected to be continued and, in some cases, deepened.¹³

20. In 2012, following the Colombia Urbanization Review – Amplifying the Gains from the Urban Transition¹⁴, the Government launched a high level initiative to define a national policy towards 2035 called the Misión del Sistema de Ciudades¹⁵, which served as basis for the formulation of a new urban policy for Colombia that is captured in the Urban Policy Document (or CONPES Document¹⁶). The Misión aimed to address the most important urban challenges, reinforcing the need to deepen economic connectivity, enhance coordination on a regional and metropolitan scale, and foster efficiency and innovativeness in how cities finance themselves. The main recommendation stemming out of the Misión is the need to complement sectorial policies with a System of Cities¹⁷ perspective to enable cities to operate as functional

¹² The *Ciudades Amables* initiative of the NDP, contemplates intervention in urban mobility, housing, water and sanitation, and institutional strengthening at the city, metropolitan and regional level.

¹³ The National Development Plan 2014-2018 is expected to become available by March, 2015. The Plan is expected to include the recommendations of the *Misión Ciudades*.

¹⁴ World Bank, 2012

¹⁵ The World Bank supported the *Misión Ciudades* (2012-2013). A council of national and international experts has been convened to provide cross-sector policy guidance to ensure that cities are engines of sustainable and inclusive economic growth in Colombia. The initiative is focused on the efficiency of the entire urban system. A total of 17 studies were commissioned to national and international experts under the *Misión* to better understand demographic trends, environmental and urban planning synergies, investment needs, productivity, and poverty and inequality trends of the system of cities.

¹⁶ The National Council for Economic and Social Policy (CONPES) is a governmental advisory body responsible for setting Colombia's policies on economic and social development. The CONPES is presided by the President and all sectorial Ministers. A CONPES Document is the result of the deliberative process and decisions adopted by the council and generally provide direct executive orders to create, reform, conduct policies and/or programs and public investment plans and set the basis upon which the national budget will be presented to Congress for the specific subject.

¹⁷ The proposed SoC framework defined and characterized the Colombian urban sub-systems in 151 municipalities corresponding to around 28 million inhabitants. The system includes 18 urban agglomerations that span over 113 municipalities and 38 nodal cities of more than 100,000 inhabitants. A distinct feature of Colombian cities is the tendency for most of them to become functional agglomerations; defined as those where at least 10 percent of the population commutes to another

and efficient agglomerations, enhance regional integration, and reduce regional inequalities. The CONPES document steaming out of the *Misión* will provide guidelines and incentives to the national, regional and local governments. Specifically, the CONPES document will mandate the relevant institutions to: (i) define and characterize the Colombian SoC as a framework for policy design within the sectorial ministries; (ii) strengthen the sustainability of the SoC through the requirement of environmental and territorial guidelines for the urban sub-systems identified; (iii) define new schemes to finance urban and metropolitan projects (such as guarantees, land-value capture schemes) and (iv) introduce incentives for city and metropolitan governance and competitiveness.

21. In parallel to the preparation and discussion of the analytical work undertaken under the *Misión* the Government has set in motion a comprehensive program of reforms and new initiatives in urban priority sectors. These include transport, housing and spatial planning which are crucial factors for enabling the economic activity and access to jobs, market and services that well-functioning cities can offer. The government has continued with the implementation of the National Urban Transport Program (NUTP)¹⁸, and is now focusing on a number of interventions to address the negative externalities associated with increased motorization and congestion in urban areas- revamping the institutionality to promote road safety; developing schemes to curb automobile use and manage its demand, and improve public transit services; promoting more environmentally sustainable modes of transport (walking or cycling), aiming towards better land-use transport planning integration. For the housing sector, a program of policy reforms, incentives and investments to address the country's large housing deficit --particularly housing options for the poor and bottom 40 percent of the population— has been implemented.¹⁹ In terms of disaster risk management, the adoption of Law 1523 of 2012 has been strategic to improve the institutional organization by creating the National System for Disaster Risk Management and to establish financial mechanisms. The Government is still working in the preparation of a National Plan and in the regulation of the national and local funds for supporting disaster risk management investments. In the area of regional coordination and planning, the GoC created a sub-directorate unit within DNP, responsible for, *inter alia*, coordinating regional planning and investment,²⁰ and issued a new instrument, termed Contract Plans to facilitate coordination for - and co-financing of investments between the national government and the territorial entities.²¹

municipality/jurisdiction for the purpose of employment. This definition was adopted by the Misión Ciudades and is expected to be formalized through the Colombian Urban Policy Document - CONPES de Desarrollo Urbano

¹⁸ The NUTP calls for the implementation of Bus Rapid Transit or Integrated Mass Transit Systems in large cities (more than 600,000 inhabitants) and Strategic Public Transit Systems (SPTSs) in medium-sized cities (between 250,000 and 600,000 inhabitants). The government has made important efforts to roll-out SPTS in medium-sized cities.

¹⁹ Two key initiatives are (i) Law No. 1537 of June 20, 2012, which allowed the provision of public housing for the poorest and most vulnerable, and (ii) an approved stimulus package for up to USD 2.5 billion Plan de Impulso a la Productividad y el Empleo (PIPE) which, among others, provides cash subsidies for the poorest who need access to housing, subsidizes lower interest rates for housing loans, and makes resources available for financing housing projects which aim at constructing up to 100,000 housing units (channeled by the private financial institutions).

²⁰ The sub-directorate now manages key policy areas that are concerned with subnational and regional development including: (i) Sistema General de Participaciones (SGP) - the national transfer system; (ii) Sistema de Regalias - the national royalties system; and (iii) cross-sector policy on infrastructure development and finance

²¹ With this new instrument, the government expects to support the development, financing and implementation of activities at a metropolitan and regional scale where national government participation is required. To date, 7 Contract Plans have been signed.

22. Finally, to strengthen connectivity within the SoC, the Government has undertaken a bold program of policy reforms, incentives and investments. The NDP acknowledges that the country's connective infrastructure lags behind regional peers and, as a consequence, high internal transportation costs undermine the ability of cities to function as complementary and efficient agglomerations, and impact the overall country's competitiveness. In 2011, the Government introduced reforms to the national transfer program from national natural resource extraction royalties (*Regalias*). Law 1530 of 2012, namely the *Ley de Regalias*, created, among other reforms, a dedicated fund to finance strategic regional infrastructure investments. In addition, the National Concessions Institute (*Instituto Nacional de Concesiones*, INCO) was transformed into a new National Infrastructure Agency (ANI), with expanded responsibility and increased capacity to manage concessions. A new Infrastructure Law and Public-Private Partnership (PPP) Law also complement the reform agenda, and are meant to address some of the most pressing bottlenecks to the development of transport infrastructure and improve the investment climate for private participation

4. THE PROPOSED OPERATION

4.1 LINK TO GOVERNMENT PROGRAM AND OPERATION DESCRIPTION

23. The proposed operation builds upon the reforms undertaken by the GoC and supported under the first Productive and Sustainable Cities DPL; and as such, it is structured around the same policy areas and medium term objectives. The objective of the Program is to support the strengthening of the GoC's policy framework on productive, sustainable and inclusive cities. The first loan under the Program recognized initial steps towards achieving the PDO through strengthening of the legal and institutional framework and through the adoption of measures to increase access to basic services, affordable housing, transport infrastructure and amenities for urban residents. After the first operation, the Bank and Government continued to work closely through an extensive analytical dialogue included within the Sustainable and Productive Cities Programmatic Approach (P130972). This close collaboration, as well as the Misión del Sistema de Ciudades set the ground for a next generation of reforms and allowed for the identification of relevant prior actions for the second DPL. As such some of the prior actions supported under the proposed DPL were not identified as part of the preparation of the first operation but rather were designed in a later stage as key measures to deepen and consolidate the path towards productive, sustainable and inclusive cities. In total, three of the eight indicative triggers identified during preparation of the first loan have been revised to reflect deepened understanding of key bottlenecks and alternative significant reforms taken by the GoC.

24. The second Productive and Sustainable Cities DPL covers major advances on policy, institutions, and the critical sectors of housing and transport. Under the first policy area (Sustainable and Inclusive Cities), the proposed second DPL supports actions to strengthen the national urban policy framework and launches the introduction of instruments to reduce congestion and achieve a better identification of hazard risks. Under policy areas two and three the proposed operation deepens the reforms undertaken by the first DPL towards increased access to housing and strengthened coordination in between cities and municipalities. Finally,

under the fourth policy area the proposed DPL strengthens urban connectivity and regional infrastructure policy framework.

4.2 PRIOR ACTIONS, RESULTS AND ANALYTICAL UNDERPINNINGS

25. The first Productive and Sustainable Cities DPL (P130972) for US\$150 million was approved in November 2012, fully disbursed in December 2012 and closed in June 2013. The development objective of the first DPL was to support the strengthening of the Government of Colombia's policy framework on productive and sustainable cities by supporting policy and regulatory reforms that aimed to: (a) improve access to basic water and sanitation and urban transport and mitigate vulnerability to natural disasters for the urban poor; (b) promote the provision of affordable and safe low-income housing solutions; (c) strengthen the ability of subnational entities to coordinate and finance the structuring and implementation of regional and metropolitan development initiatives; and (d) improve the productivity of the SoC through improved connectivity within the network of cities and between port cities and ports to external markets. The list of indicators and progress to date or the first operation under the program is presented in Annex 1. The first DPL was particularly successful in promoting municipal and regional coordination, structuring of PPPs for improved infrastructure, supporting a more robust institutional set-up for road safety and providing affordable and safe housing solutions. The indicators related to these prior actions have all been met. Progress is ongoing towards: (a) increase in water and sanitation connections; and (b) enacting maintenance contracts on the principal road network. The increase in the availability of public space has not been documented yet, since the specific survey to capture information from this action is only carried out once every two years (next survey: 2015).

26. For the proposed second DPL, along with three revised new prior actions, a number of results indicators have been added to strengthen the monitoring and evaluation framework and better track results. Each policy area and the proposed prior action and results indicators are described below (Refer to Annex 1 for the Policy and Results Matrix). For a list of Prior Action analytical underpinnings, see Annex 7.

Policy Area 1: Sustainable and Inclusive Cities

27. Prior Action 1— The Government, through a National Council of Economic and Social Policy (CONPES), approved the National Policy to Strengthen the SoC in Colombia (*Política Nacional para Consolidar el Sistema de Ciudades en Colombia*), which sets forth an action plan for strengthening, *inter alia*, the governance, financial management, physical and digital connectivity, and economic development of cities. Colombian cities have been drivers of economic growth in the last fifty years and have also provided many households with the opportunity of better infrastructure and services. Yet, structural and coordination problems persist that inhibit capturing more effectively the benefits of urbanization. Despite previous efforts to develop a medium term territorial development policy – within the country's decentralized framework— for the most part the national programs have been structured as sectorial strategies lacking a coherent integrated approach at the local level. At the same time, local governments often lack the capacity to promote integrated policies that make sense at metropolitan level and face important challenges to achieve coordination with other levels of government.

28. The main objective of the new urban policy is to strengthen the ability of cities to promote growth, regional and national competitiveness, and to increase the quality of life of the Colombian population. The policy defines six long term policy objectives: sustainability, physical and digital connectivity, productivity, improvement of equity amongst and within agglomerations and amongst the SoC, efficient financing, and inter-jurisdictional coordination. Specific recommendations to sector agencies and subnational entities include: (i) establish an information system at the SoC level;²² (ii) formulate water, sanitation and solid waste national Master Plans for the SoC; (iii) define the main ecological structure of the SoC; (iv) create metropolitan authorities to manage transport and public services following the agglomerations defined by the SoC framework; (v) prepare a long term national transport action plan to better connect the SoC, and to support the preparation of integrated urban transport systems within urban agglomerations; and (vi) develop instruments to increase access to finance for cities and for urban and metropolitan projects.

Results Indicator: The National Development Plan 2014-2018 is structured with a territorial/regional approach that takes into account the SoC framework and includes indicators to track progress at regional level. [*Baseline* = [0]/Target = [1] (December 2015)].

29. Prior Action 2— The Government, through Ministry of Transport (MT), has issued a regulation allowing its municipalities or districts with a population above 300,000 people to establish charges to motorists in connection with the use of urban areas with, inter alia, high traffic congestion and pollution in order to improve public transit. Due to continued urbanization, and, more importantly, an accelerated growth of motorization -particularly motorcycles-, Colombia's vehicle fleet has nearly tripled in the last 22 years (1990-2013), increasing from 3 million to 9.7 million vehicles.²³ The share of motorcycles in Colombia's vehicle fleet has increased dramatically, with data indicating an average annual fleet increase of nearly 14 percent from 2000 to 2010 decade, resulting in a current share of more than 45 percent of the total vehicle fleet.²⁴ While the current motorization rate (130 cars and light trucks per 1,000 people) in Colombia is low compared to similar middle-income countries in the region, trends indicate that the country's motorization rate will see a threefold increase by 2030. The increase is consistent with the worldwide trend in vehicle ownership and use which is highly correlated with increases in per capita income, declines in the inflation-adjusted cost of vehicles, and easier access to credit.²⁵ Furthermore, although the share of public transit and non-motorized transport still represents the majority of the total trips in large and medium-sized cities, there is growing evidence of substantial reductions in transit ridership due to increased purchase and use of automobiles and motorcycles.²⁶ With increased motorization and vehicle use intensity, a suit

²² This recommendation is also being supported as part of the efforts to join the OECD.

²³ 9.7 million vehicles refers to total number of vehicles, including cars and light trucks (4.2), motorcycles (4.9) buses and minibuses (0.216), trucks (0.350), machinery (0.014) and others (0.034). All numbers in millions. 2013 data from. Ministerio de Transporte, Anuario Transporte en Cifras - Estadísticas 2013. https://www.mintransporte.gov.co/descargar.php?idFile=11527.

²⁴ Colombian Ministry of Transport, *El Transporte en Cifras*, 2011.

²⁵ Colombia Clean Technology Fund Investment Plan, April 12, 2010.

²⁶ For instance, in Bogotá the effect of increased motorization could result in a complete shift in the city's modal split by 2040, away from predominance in the use of public transit in favor of the use of private cars (currently public transit represents 53% of the modal split, while private cars represent 22%). Presentation made by *Grupo de Estudios en Sostenibilidad Urbana y Regional. Universidad de los Andes.* August, 2011.

of negative externalities become more prevalent, including increase in traffic congestion, increases in Greenhouse Gases (GHG) emissions and local pollutants, aggravated road safety and security— all taxing the growth and competitiveness of cities and disproportionally affecting the urban poor.

30. Actions aimed at tackling congestion and other negative externalities generated by increased vehicle use, which disproportionately affect the poor and the bottom 40 percent, are aligned with the Bank's twin goals of reducing poverty and increasing shared prosperity. Mobility surveys in Colombian cities consistently reflect that more than 70 percent of transit users belong to lower income populations.²⁷ As captive users of public transit, they have to endure congestion in mixed traffic with excessive commuting times. Alternatively, many poor households choose to buy a motorcycle or an old car, which crowds out other household expenditures or savings, since they see their expenditure in transport increased as they pay for fuel, parking, maintenance and taxes. In Colombia, road fatalities and respiratory diseases associated with increased pollution also disproportionately affect the poor and most vulnerable. For instance, 31 percent of those killed in road accidents are pedestrians, and this is the leading cause of death amongst children and early youth (5 to 14 year cohort). Respiratory diseases are also one of the leading causes of child mortality, and the health costs associated with pollution have been estimated at slightly more than 1 percent of GDP.²⁸

31. Against this backdrop and in tandem with Colombia's commitment to increase the productivity, sustainability, and inclusiveness of cities, Colombia's 2010-2014 NDP acknowledged the negative externalities generated by higher motorization and private car use and called for discouraging its use while fostering²⁹ public transit systems and non-motorized modes (walking and cycling). The 2010-2014 NDP introduced the concept of congestion pricing schemes, which charge private automobile users for the right to drive through roads on congested areas of the city, especially at peak times. Colombian cities are now enabled to use this policy instrument to create better incentives that curb vehicle use and discourage the increasing vehicle owners who cannot easily afford the extra costs of driving, and "taxes" motorists for the inefficiencies and the associated public social costs (externalities) generated by their choice to use a private vehicle, which has disproportional negative impacts on public transport users.

32. To respond to the commitments laid out in the 2010-2014 NDP, the Ministry of Transport issued on December 2013 the Congestion or Environmental Charging Decree (Decree No. 2883), which authorizes municipalities of more than 300,000 inhabitants to implement user charges to curb private automobile use and the congestion they generate, and requires all proceeds collected by the charging scheme to be invested in the

²⁷ National Planning Department –DNP- Sistema Nacional de Evaluación y Gestión de Resultados, 2011. Surveys in Bogota, Cali, Pereira and Barranquilla show that on average 80 percent or more of transit users correspond to individuals from the poorest three socioeconomic strata (1 through 3).

 ²⁸ Presentation made by *Grupo de Estudios en Sostenibilidad Urbana y Regional. Universidad de los Andes.* August, 2011.
 Health costs are for 2009.

²⁹ The Colombia National Urban Transport Program -NUTP (which has received Bank technical support and finance) is implementing quality public transit and fostering non-motorized transport more than 18 cities. In this sense, the National Development Plan links the objectives of the NUTP with objectives that allow curbing private car use, creating a comprehensive sustainable mobility policy.

improvement of public transit systems. The Decree dictates that all resources collected from congestion or environmental charging schemes should be earmarked for investments aimed at improving public transit systems and non-motorized modes, which directly benefits the urban poor by reducing travel times, increasing modal integration, coverage and comfort. Decree No. 2883 is a key pillar in Colombia's commitment to more productive sustainable and inclusive cities, by fostering a low carbon development in urban areas and improving urban mobility, particularly for the poor that are captive transit users.

33. **Results Indicator.** Number of conceptual designs or feasibility studies supporting travel demand management policies, including formulation of congestion charging and parking schemes which are supported by (Prior Actions 2 and/or 3), in cities with population greater than 300,000. [*Baseline* = [0]/*Target* = [2] (December 2015)]

34. **Prior Action 3**—The Government, through MT, has adopted a national technical standard for Electronic Vehicular Identification Systems (*Proyectos de Recaudo Electrónico Vehicular*) aimed at collecting data to identify ground transportation vehicles through radiofrequency systems. Intelligent Transport Systems— the integrated application of information and communication technologies to the transport sector— is a key component of comprehensive traffic demand management policies³⁰ aimed at relieving congestion, and improving the operation, management and safety of transport systems. The development and application of ITS solutions to tackle Colombia's current transport and transit challenges has been incipient; however, the 2010-2014 NDP empowered the national government to adopt technical regulations, standards and technology protocols for ITS projects, among which the National Electronic Vehicular Identification System had a high priority. The government's rationale for moving forward with the definition of national ITS technical standards and protocols, is to ensure national interoperability between individual systems and set a foundation for future ITS policies at the national and local level.

35. Electronic identification devises can be used for different applications like electronic toll charges, congestion pricing, pollution charges and parking. For traffic management purposes, these devises can improve road safety by helping to identify offenders and track them, and can provide better information on location, speed and routes of vehicles for logistics and traffic management purposes. Decree No. 2846, which highlights the various applications for these devises, also defines a technology standard or protocol to be adopted nation-wide: the vehicular radio frequency identification system based on standard ISO11EC 18000-63³¹ or equivalent. To ensure verification, compatibility, interoperability and to enable system integration, the MT is expected to further adopt necessary regulations for all back office process, including information storage and access, data transfer and security, etc. Lastly, the Decree also stipulates that the MT will also specify the minimum testing and/or certification process required to demonstrate compliance with the technical standards, and ensure privacy concerns.

³⁰ Comprehensive Traffic Demand Management policies –TDM- also include enforcement, education and engineering components which operate in tandem to improve urban mobility and discourage private car use.

³¹ A radio frequency identification system (RFID) system consists of a tag reader (also called the interrogator) and a tag. All communication between the tag and reader occurs completely through a wireless link that is sometimes called an air interface. The ISO11EC 18000 is a type of RFID standard.

36. The Decree directly complements the congestion charging decree (refer to prior action 2), as it provides a technological platform for the implementation of such projects, since it allows for the identification and application of user charges to vehicles that enter predetermined congestion or high pollution zones. Similarly, the Decree provides a technological standard for the new tolls that have to be put in place as a result of the Fourth Generation of Concessions projects (refer to prior action 8). As a result, the adoption of this policy provides an opportunity to manage congestion and improve the operation of the nation's highways and urban roads, through better traffic management, congestion charging, toll-roads, and safety monitoring. This trigger was substituted from the indicative trigger included in the first DPL because of the urgency to define a technological standard for the above-mentioned applications. The results indicator proposed for this policy is the same as for Prior Action 2.

Prior Action 4: The Government, through the MVCT, has adopted a standardized 37. methodology to be used by its municipalities and districts to select, collect and consolidate, in a national inventory, information relating to human settlements located in areas prone to landslides and floods. Disaster Risk poses an important threat to sustainability of urban areas. To address this issue, the MVCT has been developing since 2012 a standardized methodology and associated tools for the development of a National Inventory of Settlements in High Risk Areas (NISHRA) with support from the World Bank in the form of technical assistance. The NISHRA will provide detailed information on settlements located in high risk areas prone to flooding and landslides. Hence, to advance towards implementation of the NISHRA, the MVCT will issue an administrative act that mandates municipalities to use the standardized methodology to collect and upload the information to produce this National Inventory. The implementation of the methodology and the consolidation of information under the NISHRA will have an important impact for the country as it will permit an understanding of the total number of households and community infrastructure which is at risk to two of Colombia's most recurrent hazards (flooding and landslides). This in turn will support the national government in defining evidence based approaches and strategies for managing these high-risk areas. In addition, regional and municipal governments will also benefit from the inventory's information for the formulation of their Development Plans and Land Use Master Plans, which will be able to more readily take into account issues of risk reduction and control of urban spaces. The platform is designed to collect municipal information that will be managed by the Ministry. Overtime this information will be combined with additional geographic and spatial data to be used in spatial and urban planning.

38. **Results Indicator.** Number of municipal inventories of settlements located at high risk areas formulated in accordance with Ministerial Resolution 0448 of July 17, 2014. [*Baseline* = $[0]/Target = [42 \text{ municipalities with population over 100.000 inhabitants]³² (December 2015)]$

Policy Area 2: Access to Affordable Housing

39. Prior Action 5: The Government, through the MVCT, has established the principles of regulation for the carrying out of the Priority Interest Housing Program for Savers (*Programa de Vivienda de Interés Prioritario para Ahorradores— VIPA*), which is aimed at providing different types of subsidies to selected families to facilitate the purchase of a house. Colombian cities are struggling to accommodate ever-larger populations with services,

³² Counting of this would only begin once the original 25 from the CAT DDO II has been accomplished.

employment and housing. The latter, along with neighborhood conditions, strongly influence the health, nutrition, and education of the population, the environment in which they live, and therefore their access to economic opportunities and vulnerability to social ills. Without policies that enable households and the private sector to interact effectively in a healthy housing market and to help poor households meet minimum housing standards, cities will confront ever growing slums, persistent inequality and exclusion.

In 2012, the MVCT launched the public housing scheme³³ to provide fully 40. subsidized housing for households in extreme poverty (earning between 0 and 1 monthly wages). The program has delivered around 65,000 units and is likely to be expanded in 2015. In addition, the MVCT recently launched the VIPA program intended for household earning between 1 and 2 monthly wages. The scheme articulates in a streamlined-product a combination of household savings, up-front subsidy, interest rate buy-down, credit insurance and a mortgage loan provided by a regulated financial institution. VIPA represents an important milestone in the housing policy. First, it is a recognition that housing programs should aim to work with market forces whenever possible; a concern that had been raised about the fully subsidized scheme. Second it is expected to overcome the operational challenges faced every year by the main upfront subsidy program (channeled through the Fondo Nacional de Vivienda – FONVIVIENDA) by making the subsidy and the loan available at the same moment in time.³⁴ Third, in contrast with previous programs (notably Macroproyectos and Programa de las 100,000 Viviendas) the Ministry is not directly implementing the scheme. Its role will be limited to instructing FONVIVIENDA to disburse subsidies to eligible households but it will not be responsible for provision of housing or for contracting of development projects. There are still important shortcomings in the housing sector in Colombia which need to be addressed through complementary instruments and policies, for example regarding foreclosure procedures, however the VIPA scheme is considered to be a step in the right direction and is expected to foster household savings, expand the origination of new loans to low-income households, and leverage resources from public and private sector financial institutions.

41. The VIPA Program has an assigned budget of US\$1.1 billion for 2014, which aims to allocated subsidies to 86,000 housing solutions for low income families. As of July 2014, the program has selected 147 housing development projects for a total of 64,760 housing units in 81 municipalities. The program is expected to have a significant impact on improving access to secure housing for the poor by helping banks and financial institutions become more familiarized with the low income segment. The Bank and the Government have identified the need to complement these programs with urban/metropolitan planning, infrastructure investments and social programs to ensure that communities increase their living conditions and will be better connected to public services and job opportunities. It is also advisable to create measures to mitigate unintended consequences and promote more dense, diverse and well-designed affordable housing.

³³ Law No. 1537 of June 20, 2012 that established the legal framework for the provision of public housing to the poorest and most vulnerable households. This policy action was a key trigger under the first operation.

³⁴ The FONVIVIENDA subsidies struggled operationally since the subsidy and the loan materialized at different moments in time, thereby not allowing the subsidy to act as down-payment effectively.

42. The indicative trigger considered under this policy area in DPL I has been modified to reflect the new government priorities in support of a more comprehensive housing policy. The indicative trigger was focused on issuing a decree that would quantify the net fiscal cost of the large housing developments built only under the *Macroproyectos* Program. However, the *Macroproyectos* Program is no longer a priority for government as the main mechanism to increase access to affordable housing as it faced important implementation challenges at local level. In turn, the government policy and budget allocation is now prioritizing the development of differentiated schemes of housing provision such as the VIPA scheme.

43. **Results Indicator.** Number of low income families with access to affordable and safe housing solutions increases, as a result of the public housing and voluntary savings Programs (VIPA) [Baseline = [0]/ Target = [86,000] (December 2015)].

Policy Area 3: Institutional Strengthening and Regional Coordination

44. **Prior Action 6**— The Government has adopted a legal framework establishing integrated political, administrative and fiscal regulations for the management of its metropolitan areas. Metropolitan coordination is a key challenge for the urban agenda. The Santos administration has placed strong emphasis on improving coordination amongst governments and levels of government as evidenced by the approval of the *Ley Orgánica de Ordenamiento Territorial* (LOOT) and its regulations, which create a new institutional set-up for regional coordination (*Comisión de Ordenamiento Territorial*). In line with this, financial resources are now available to support regional projects (*Ley de Regalias*). The metropolitan areas law allows improving the coordination of investments in housing and urban transport, which is critical to promote productivity and competitiveness. Strong metropolitan coordination reinforces the objectives under Policy Areas 1 and 2 by allowing better service provision to be integrated to urban development conceived within a metropolitan area perspective.

45. In tandem, Congress approved in April 2013 reforms to the Metropolitan Areas Law of 1994 to strengthen metropolitan planning and coordination. The key objective of the reform was to strengthen the institutional structure for collaboration for metropolitan areas by empowering them in critical areas such as land use planning and environmental sustainability. The new Law mandates metropolitan areas to prepare Strategic Metropolitan Land-Use Plans, which will provide the framework and become the main reference for the adoption of Land-Use Plans at municipal level (for municipalities within metropolitan jurisdiction). Joint land use planning at metropolitan level is essential to achieve the economic and population densities that facilitate harnessing the benefits of urbanization, including the provision of sustainable quality public transport, as described in Policy Area 1. For example, the location of housing and services-which are linked to jobs- are two main forms of land uses within a city which require joint planning to mitigate urban sprawl and improve livability and inclusiveness. The reform also allows for the possibility for Metropolitan Areas to create or participate in real estate funds or land banks for land management within its jurisdiction. This is important to foster large infrastructure projects with a metropolitan logic and to prepare the city for future areas of growth, including the development of large-scale, strategic affordable housing projects as envisioned in the VIPA program described in Policy Area 2. The new Law also increases the responsibilities for the metro areas on urban transport, environmental regulation, which is

expected to facilitate coordination in areas that are much better addressed at metropolitan scale. In addition, the Law promotes the use of the Contrato Plan, which is a planning tool for regional development that is embodied by a voluntary agreement between the different levels of government, structured around a shared vision and a list of priority projects. The objective of the new Law is to foster coordination amongst metro areas. But its impact will only be fully accomplished in the medium term as planning instruments are updated, and this will take several years (urban and territorial plans are updated every 10-12 years).

46. **Results Indicator.** Number of (i) Regional Contract Plans signed between territorial entities and (ii) number of Metropolitan Territorial Plans increases. [Baseline = [7]/ Target = [10] (December 2015)]

Policy Area 4: Urban Connectivity and Regional Infrastructure Policy Framework

Prior Action 7-The Governmet, through the MT, has created the Transport 47. Infrastructure Planning Unit (Unidad de la Planeación de la Infraestructura de Transporte) and the Infrastructure and Transport Regulatory Commission (Comisión de Regulación de Infraestructura y Transporte) to strengthen the Government's planning and regulatory capabilities in the transport sector. The Colombia Urbanization Review—Amplifying the Gains from the Urban Transition³⁵ identified important challenges of the SoC. Colombian cities need to better connect among themselves and with external markets, which would in turn promote higher levels of specialization. Significant physical and economic distances separate Colombian cities. Unlike many vibrant cities around the globe, Colombian cities are at a distance from ports and other cities in the urban portfolio. Bogota and Medellin are more than 500 kilometers away from a port. Better connecting Colombian cities will increase the economic efficiency of the urban system, allow cities to specialize, and result in cities performing a specific function in the system. The existing transport infrastructure deficit in Colombia undermines the SoC overall competitiveness and productivity aim that allows job creation and increased access to markets for producers to ship their goods.

48. The infrastructure and connectivity gap is both a function of persistent low levels of public and private investment³⁶, and a weak institutional and regulatory framework. These factors, coupled with a complex geography, remote demand centers, and recent extreme climate phenomena, which has taken a toll on an important percentage of the Colombian road network, have deepened Colombia's poor infrastructure provision and urban connectivity. In Colombia, 82 percent of all transport activities correspond to road transport, which evidences the country's high dependence on its urban and inter-urban road network. Most economic activities rely on the road system to access markets, and its low density and quality is frequently linked to reduced productivity for low income producers and a barrier to overcome the isolation of many Colombian regions that is at the root of the country's socioeconomic inequalities.

49. The Santos Administration has identified investments in infrastructure as a key pillar of its 2010-2014 NDP, and has taken important strides to address the challenges

³⁵ World Bank, 2012.

³⁶ Investment in transport infrastructure averaged 0.8% of GDP from 2001 to 2009, with recent investment rising to 1.2% of GDP in 2010 and 2011. Refer to "*Infraestructura de Transporte en Colombia: ¿luz al final del túnel?*" November, 2012.

faced by the sector. One such example was the appointment of an independent commission³⁷ to look into the transport infrastructure bottlenecks, both for projects under PPP arrangements and civil works. The commission's recommendations point to the need for improved planning and regulation in the transport sector, and the streamlining and clarification of key processes that are creating cost overruns in transport infrastructure projects and delaying their implementation. Following its recommendations, the Infrastructure Law (Law 1682 of November 27, 2013) was drafted to address such issues.³⁸ Law 1682 of November 27, 2013 empowers the executive to create two important agencies in the transport sector: the Transport Planning Unit and the Transport Regulatory Commission. The Government's Decrees No. 946 and 947 of May 21, 2014 establish both agencies.

The aim of the Transport Planning Unit is to provide the integrated, strategic, long-50. term vision and planning of the transport sector, formulate Colombia's Master Infrastructure Plan, and serve as the coordinating body for the planning of the sector at the subnational level. The Transport Planning Unit is required to perform key functions which strengthen the institutional and technical role of the National Government as the coordinating body for the planning of the sector (including the subnational level) and generate linkages with the actions conceived within the SoC. To do so, the Unit is assigned key functions, including: (i) manage the National Transport Observatory for the consolidation, reporting and publishing of transport-related data and information which is crucial for the formulation of transport policy; (ii) formulate Colombia's Master Infrastructure Plan and the elaboration of key recommendations, plans and programs for the development of the National Transport Infrastructure sector; (iii) adapt, develop and publish best practice guidelines for the socioeconomic cost-benefit evaluation of possible infrastructure projects as a tool for the strategic planning and prioritization of infrastructure investments; and (iv) evaluate and periodically publish progress on the achievement of the National Transport Infrastructure Plan.

51. The Infrastructure and Transport Regulatory Commission will design and define the framework for economic regulation of transport services and infrastructure in order to promote their efficiency and competitiveness, regulate monopolies and avoid abuse of dominant practices in the sector. The Regulatory Commission will play a crucial role upholding and monitoring the provision of quality transit services and infrastructure, overseeing dominant practices in the sector, which may translate into higher user fares, and enhancing the competitive environment for infrastructure provision and service concessions arrangements. Furthermore, this commission will also be responsible for determining cost-efficient transport tariff benchmarks, which is especially important for guaranteeing the affordability of public transport for the poor.

³⁷ President Santos appointed the Infrastructure Commission in 2012, which comprised 9 renowned experts— sector practitioners and academics. The independent commissions produced a report summarizing the major bottlenecks and challenges faced by the sector. Refer to "*Informe de la Comisión de Infraestructura*", October

²⁰¹² http://www.infraestructura.org.co/present/23 nov/STEINER.pdf

³⁸ Among the bottlenecks identified, the following were considered critical by the Commission: lack of a standardized methodology to carry out property valuations associated with land acquisition, lack of standardized Terms of Reference for carrying out environmental assessment and the granting and approval of environmental licenses too late in a project's cycle, lack of clarity on who takes responsibility for the intervention (and financing) of public utility networks during the construction of transport infrastructure.

52. This prior action was substituted from the indicative trigger included in the first DPL, to reflect the government's new priorities. The indicative trigger in the first operation contemplated the approval of a CONPES document that articulates a national policy on management contracts for the rehabilitation and maintenance of the national road system ('CREMA'). However, the government saw as greater priority in terms of sequencing of reforms the enacted of the Infrastructure Law, as it addresses the current institutional gaps and bottlenecks that permeated the whole transport infrastructure sector.

53. **Results Indicator.** The Transport Planning Unit and Transport Regulatory Commission are fully operational, as evidenced by the set-up of functional areas and hiring of staff. [*Baseline* = [No]/ *Target* = [Yes] (June 2016)]

54. **Prior Action 8**—The Government, through CONPES, has approved guidelines to develop a program to regulate its fourth generation of road concessions, which program is aimed at improving the existing national road network.³⁹ As previously mentioned, a host of studies have diagnosed how Colombia's lackluster transport infrastructure development and severe connectivity challenges have dragged on the country's growth and competitiveness. In response to these challenges, the current Government administration has implemented a number of sweeping regulatory and institutional reforms that improve the investment climate and foster enhanced public-private dialogue and partnerships, particularly in the transport sector. Reforms such as the transformation of the National Institute of Concessions into the National Infrastructure Agency and the enactment of the PPP Law (Law 1508 from 2012) and its related Ministerial Decrees (Decree 1467 from 2012), are expected to mobilize more resources and skills from private players into public transport projects.

55. In tandem with these reforms, and as a way to materialize these profound changes in a concrete set of PPP projects, the Government approved the CONPES Document for the Fourth Generation of Road Concessions. To date, this policy has allowed the GoC to identify a pipeline of road transport concessions (approximately 8,170 kilometers of the primary road network), which has been termed fourth generation (4G), and mandate the application of the following principles to the Government's new 4G program: (i) efficient project structuring to accelerate investments in infrastructure; (ii) a selection process that promotes transparent participation; (iii) contract management focused on results; and (iv) adequate risks assignment between the public and private sector. As part of this policy, the Government has also identified a set of "early wins" (4 projects, representing 551 kilometers) which are fairly advanced in terms of structuring and implementation, to generate demonstration effects and secure private investor appetite for subsequent projects.⁴⁰

56. The implementation of the Fourth Generation of road concessions is at present leveraging substantial public and private resources to boost investments in road infrastructure aimed at reducing Colombia's infrastructure financing gap (projections

³⁹ Note the complementarity between this Prior Action, and Prior Action 1 in the Colombia First Programmatic Sustained Growth and Income Convergence DPL, which supports a set of concrete instruments to mobilize private sector financing for the 4G pipeline of projects.

⁴⁰ Presentation made by ANI during the 9th Colombia Infrastructure Conference

http://autopistasprosperidad.com/cms/modules/presentaciones/view/files/Presentaci%C3%B3n%2003.pdf

indicate investment of 1 to 1.6% of GDP between 2015-2019 period). Estimates suggest that with increased infrastructure investments the country's economy could reach a long term growth trajectory of 5.0% to 5.3%, as opposed to 4.6% without the 4G program.⁴¹ Furthermore, the Government estimates that the program will create 180,000 to 450,000 jobs, generate travel time savings of around 25%-46% and reduce vehicle operating costs by approximately 16%-30% between Colombia's major urban centers, and bring positive environmental impacts due to lower pollution and GHG emissions from the transport sector.⁴²

57. Note that the indicative trigger included in the first DPL (approval of a Ministerial Decree regulating the PPP Law) was signed and approved on July 6, 2012. Hence, the Government has suggested that the previously mentioned 4G CONPES be included as a new trigger, as it signals a clear upstream commitment to implement the reforms considered in the PPP Law and Ministerial Decree. Furthermore, evidence shows that the implementation of key recommendations in the CONPES underpins the enabling financial, institutional and regulatory conditions by which the GoC, in partnership with private investors, is implementing a package of strategic infrastructure projects. The implemented recommendations allowed the approval by the *Consejo Nacional de Politica Fiscal* (CONFIS)⁴³ of *vigencias futuras* (earmarked budgetary commitments) totaling more than US\$10 billion for 9 projects. Bidding processes for these 9 projects are underway, and official announcements from the government suggest that 5 contracts will be awarded by September 30, 2014.

58. **Results Indicator.** Number of PPPs structured with signed contracts and financing frameworks in place under the 4G Program. [*Baseline* = [4]/Target = [8] (December 2015)]

4.3 LINK TO COUNTRY PARTNERHSIP STRATEGY (CPS) AND OTHER BANK OPERATIONS

59. The Country Partnership Strategy for the period 2012-2016 outlines a flexible framework to support Colombia's national development plan 2010-2014 through a portfolio of financial, knowledge, and convening services. The portfolio of services in the CPS is grouped under three strategic themes: (a) expanding opportunities for social prosperity; (b) sustainable growth with enhanced climate change resilience; and (c) inclusive growth with enhanced productivity. The proposed operation is fully aligned with the 2010-2014 NDP, which explicitly identifies a 'livable cities' pillar as one of five key drivers of sustainable and inclusive growth. The operation is fully consistent with the CPS, particularly the Sustainable Growth with Enhanced Climate Change Resilience theme, which explicitly references the challenges of fostering sustainable and productive cities as amongst Colombia's most pressing development challenges. To address such challenges, the CPS gives high priority to the improvement of access to high quality urban services for the least privileged segments of the population, and to the priority of achieving these goals in a sustainable and socially-inclusive manner. In addition, the proposed DPL includes a series of measures that support the Inclusive Growth with Enhanced Productivity CPS theme. These policy reforms aim to enhance the connectivity of Colombia's

⁴¹ CONPES Document 3760.

⁴² CONPES Document 3760.

⁴³ National Council for Fiscal Policy, *Consejo Nacional de Política Fiscal*.

inter-urban road network, reduce transport costs, and facilitate the competitiveness of Colombia's urban system.

60. The proposed DPL also complements the Bank's long-term partnership with the GoC on fostering sustainable, productive and inclusive cities and directly contributes to the twin goals of reduced poverty and shared prosperity. As Annex 4 shows, the DPL is part of a strategic, programmatic and multi-sectoral engagement, which is condensed in the Productive and Sustainable Programmatic Knowledge Services (PKS) that is currently being supported through a portfolio of financial, knowledge and convening services.

4.4 CONSULTATIONS, COLLABORATION WITH OTHER DEVELOPMENT PARTNERS

In addition to the consultation and participatory measures associated with the 2010-61. 2014 NDP, all prior actions were subject to additional consultation. The Misión Ciudades provided a strong platform for collaboration and consultation with other donors and relevant stakeholders throughout 2013. Technical inputs were provided from renowned experts and at least 20 seminars and workshop were carried out to discuss preliminary findings with relevant stakeholders (local and departmental governments, Asocapitales, and Confecamaras). In addition to the legally defined consultation required for the preparation of a bill of law, both the update of the Metropolitan Areas Law and the Infrastructure Law were subject to additional consultation -in the case of the Infrastructure Law, the Infrastructure Commission surveyed key stakeholders to understand Colombia's infrastructure lag and bottlenecks.⁴⁴The consultation process for the TDM and Vehicular Identification Decree was carried in tandem, and included a thorough process to garner the views of local stakeholders (authorities from Bogotá, Medellin, Cali and Barranquilla, cities that are considering implementation of charging schemes), and international experts.⁴⁵ Lastly, the 4G CONPES was created and drafted by several of DNP's Units⁴⁶ and resulted from a process of consultation and agreement between different GoC entities involved in the implementation of the new pipeline of road concession projects, including Ministry of Interior, Ministry of Finance and Public Credit, Ministry of Transport, Ministry of Environment and Sustainable Development, National Infrastructure Agency, and Environmental Licensing National Authority.

5. OTHER DESIGN AND APPRAISAL ISSUES

5.1 POVERTY AND SOCIAL IMPACT

62. The findings of the poverty and social impact assessment suggest that the GoC's policies supported by this DPL are expected to have a positive impact. The key findings of

⁴⁴ The Commission surveyed current and past national and local government authorities, representatives from the private sector, experts from the IADB, World Bank and CAF, and international experiences and case studies on relevant transport infrastructure matters. For a detailed list of individuals consulted refer to http://www.fedesarrollo.org.co/investigacion/investigaciones/previas/ ⁴⁵ International experts surveyed included Transport for London, Singapore's Land and Transport Authority, the US's

Department of Transport on ITS, the consulting firm implementing Stockholm's congestion pricing, specialists from the IADB and World Bank.

⁴⁶ Infrastructure and Sustainable Energy, Economic Studies, Urban Development, Public Finance and Investment and Legal Office

the assessment are summarized below. Annex 5 includes the full text of the Poverty and Social Impact Assessment.

- The policies supported by the SoC CONPES Document (Prior Action 1) are in accordance with best practices in urban development, and have the potential to create a virtuous cycle that promotes growth and the welfare of Colombians.
- The Congestion Charging Decree (Prior Action 2) and the Vehicular Identification Decree (Prior Action 3) are expected to benefit poor households and the bottom 40 percent in at least two ways: by decreasing congestion which is largely regressive, and improving public transit and non-motorize modes.
- Disaster risk management is essential to mitigate potential negative impacts on the population, especially for the lower-end of the income distribution, On this lines, the poverty and social impacts of the municipal adherence to standardized methodology for identifying municipal inventory of at-risk human settlements (Prior Action 4) will help the GoC reduce the extremely high levels of vulnerability in Colombia, preventing disasters from disrupting social gains observed in Colombia over recent years.
- The Affordable Housing with Voluntary Savings (VIPA⁴⁷) program (Prior Action 5) is expected to directly benefit the poor and the bottom 40 percent. In particular, increasing the availability of affordable homes will benefit the bottom 40 percent of the income distribution⁴⁸ not only by increasing their access to safe shelter, but also by increasing their access to services, such as water, sanitation, and electricity, thus leading to net monetary and multidimensional poverty reductions.
- A framework that establishes coordination and information sharing mechanisms, such as the Metropolitan Areas Law (Prior Action 6) is crucial to guarantee that the urbanization process brings positive outcomes, particularly for the poor.
- The Infrastructure Law and the 4G CONPES (Prior Action 7 & 8) will bring about positive outcomes for the poor and the bottom 40 percent, by creating jobs, reducing travel times and vehicle operating costs, and promoting regional convergence. The Government estimates that the program will create 180,000 to 450,000 jobs, generate travel time savings of around 25%-46% and reduce vehicle operating costs by approximately 16%-30% between Colombia's major urban centers. These outcomes, may have a direct effect on food prices in different regions based on a pure-pass through (or % discount) of the travel/operation savings for roads connected to this region.

63. The Infrastructure Law, with its new streamlined procedures, creates some risks for the poor and vulnerable, but it also calls for the adoption of a more robust property appraisal methodology for the estimation of resettlement compensations. The Infrastructure Law aims to streamline and standardize land acquisition and environmental licensing processes in transport infrastructure projects. The new streamlined procedures may generate a risk in which vulnerable project affected people might consider these processes to reduce their space of participation, particularly if they have complaints or disagreements with the property valuation. Notwithstanding, the Law mandates for the design of a new property appraisal system, in which

⁴⁷ Programa de Vivienda de Interés Prioritario para Ahorradores. See Conpes document 3746 of 2013

⁴⁸Among conditions to be eligible to participate in the program there is that household demanders must have earnings not superior to 2 minimum monthly salaries. A minimum monthly salary is about 616.000 COP (approximately 320 US dollars).

the appraisal method to be adopted, instead of market value, is that of full replacement cost methodology,⁴⁹ the latter being a more robust approach that takes into account other compensations (transaction costs, foregone income, etc.). This methodology is being developed by National Colombian Geographical Institute (IGAC⁵⁰), and its roll-out will be accompanied by a capacity building and dissemination campaign with property valuators to allow commercial practices to keep up with the property and compensation procedures which are being introduced. However, the Infrastructure Law does not deal with issues related to land tenants who occupy a plot or property without a proper land title to demonstrate ownership. Nevertheless, this issue is mitigated effectively in large transport infrastructure projects being implemented by the ANI⁵¹ or INVIAS, were most of the resettlement activities take place, since they are required to have a Social Management Plan that sets forth a strategy to deal with the management, compensatory and mitigation mechanisms in irregular land tenure cases where occupants do not possess proof of ownership. The ANI has also revamped its staffing levels and capacity with respect to social and resettlement management, to have the right competencies in place to improve management of social issues in the 4G Plan. In the urban realm, these issues are also effectively mitigated, since the National Urban Transport Program is being financed by the World Bank and the IADB, which require adoption of Social Management Plans. Lastly, Colombia also has a renowned and stable framework that guarantees a consultation processes and grievance redress mechanisms.⁵²

5.2 ENVIRONMENTAL ASPECTS

64. The overall net impact as a result of the implementation of the priority actions supported by this DPL is expected to be positive and, based upon the analysis performed there are no identified known significant negative effects on the Colombia's environment, forests, and other natural resources.

65. Environmental planning is a key pillar of the new SoC framework in Colombia, (Prior Action 1) and thus translates into a positive environmental impact. Under the sustainability thematic area, the *Misión* has identified key sustainability aspects that require consideration in the development of sustainable development policies thus increasing environmental sustainability and helping to mitigate climate change and improving disaster risk management.⁵³ Specifically, the *Misión* suggests the formulation of National Water, Sanitation and Waste Management Master Plans to guide policy and prioritize investment decision-making, and to adopt norms on disaster risk management at agglomeration level to guide municipal Land-Use Plans. Colombia has successful experience in developing and implementing similar plans, such as the *Estudio Nacional de Agua* developed by DNP. The *Misión* also requires the implementation of a program to improve air quality in large cities (more than 1 million)

⁴⁹ New methodology is fully aligned with Bank Safeguard policies. Not only includes the loss of asset, but also covers transaction costs.

⁵⁰ Expected to be published in the Official Gazette by July 20, 2014

⁵¹ ANI's guidelines on social impact studies– developed with technical support from the IFC – have been analyzed by the Bank and are robust. A Social Management Plan is required as set forth in ANI Resolution 545 of 2008.

⁵² For instance, in urban transport projects Centers for Public Attention are probably the most critical mechanism and point of contact with the local community for receiving questions, claims and complaints. Legal instruments, such as *tutelas* are also widely used to contest administrative acts. Capacity has been revamp in social management issues in urban transport with the implementation of projects in 12 cities, under the National Urban Transport Program, which the Bank and IADB have financed.

⁵³ Documento Técnico de Soporte, p. 89.

inhabitants). The CONPES Document will promote environmental sustainable economic development.

The Government's Congestion Charging Decree 66. (Prior Action 2) is transformational and progressive in that it allows Colombian cities to manage the negative externalities generated by higher levels of motorization, which disproportionally impact the urban poor, through the implementation of pricing schemes that curb automobile use, improve public transit and non-motorized systems and put transport at the core of the low carbon development agenda. The policy discourages the use of private vehicles in urban areas which will result in reduced congestion and enhanced urban mobility, leading to a reduction in GHG emissions and local pollutants from vehicle sources and reduced level of noise and acoustic contamination. Moreover, all resources collected from these pricing schemes will be earmarked to invest in improving public transit systems (its infrastructure and operation), and nonmotorized modes (walking and cycling). The potential negative environmental impacts of these urban transportation projects are relatively minor and will be prevented and managed in compliance with existing legislation and permitting that systems incorporate environmental criteria in design, development of environmental management plans in accordance with national environmental regulations and standard environmental practices. This initiative will be complemented by the reforms brought by the Vehicular Identification Decree (Prior Action 3), which allows for the implementation of amongst others, congestion charging schemes and electronic toll charges, through the use of technological applications which are part of a national technological standard. The potential environmental impacts are neutral to positive, based on previous experiences with charging schemes (e.g., London, Singapore, Stockholm).

67. The MVCT has been developing a standardized methodology and associated tools for the development of a National Inventory of Settlements in High Risk Areas (NISHRA) with support from the World Bank in the form of technical assistance (Prior Action 4) and this action should have a potential positive environmental indirect impact by helping to reduce development in high risk areas. Disaster risk poses an important threat to sustainability of urban areas and the inventory to be developed will assist in defining approaches and strategies for managing these areas. A potential indirect impact of this action could be the implementation of studies or works by municipalities to deal with buildings or infrastructure in high risk areas. Generally these works will have positive benefits on the environment by allowing the environmental restoration of degraded areas in high risk environments. Potential negative impacts of these works will be managed by the implementation of regulation-required environmental studies and plans. Also, municipal governments may include in its territorial plans measures to (a) prevent settlements in high-risk areas; and (b) mitigate the impacts of the works required to rehabilitate these areas (such as routine road rehabilitation) given the environmental risks that arise in these areas (including steep slopes, landslides, land movements, and flooding risk).

68. With the Affordable Housing with Voluntary Savings Program CONPES (Prior Action 5) the GoC is moving ahead with a comprehensive reform to the housing sector with numerous potential environmental benefits. The program targets the extreme poor who, without access to the program, are likely to locate in informal urban settlements with limited access to basic urban services. As such, the program has the potential to mitigate the growth of environmentally precarious urban settlements. Additionally, the policy will likely indirectly help

improve environmental and public health, enhance the well-being and quality of life of poor residents, and reduce water related diseases.

69. Existing public housing projects indicate that the potential negative direct impacts due to the development of the various new housing developments are not expected to be significant and are adequately managed: (i) as part of the established housing development planning process, with proper site selection in accordance with the municipal development and land use plans (as mandated by laws 388/97 and 507/99), and other sources of information such as risk areas for flooding and landslides; (ii) by the use of existing regulatory housing/building codes (Decree 926/2010); and (iii) by implementation of required environmental management/mitigation measures (associated with permitting process) and good construction practices established in construction contracts. Potential indirect environmental impacts of these housing developments could increase pressure on the basic service infrastructure (water supply, sanitation, wastewater treatment, urban transport), and hence are regulated by environmental licensing regulations (Decree 1220/05). These indirect impacts are not anticipated to be significant due to the relative size of housing development in relation to the municipalities where they will be located.

70. Under the new Metropolitan Areas Law (Prior Action 6) metropolitan areas will have increased defined responsibilities on environmental regulation and approaches to improve inter-jurisdictional coordination, which when implemented will result in positive impacts. This policy sets out that metropolitan areas should: (i) have the powers and act as environmental authorities, (ii) support their respective municipalities with the works related to emergency or calamity situations, (iii) mandate metropolitan areas to prepare Strategic metropolitan Land-Use Plans, and (iv)promote joint land use planning. The Law promotes the use of the *Contrato Plan*, which is a planning tool for regional development that can enhance consideration of environmental sustainability aspects. Improving coordination among municipal environmental authorities with the Regional Autonomous (environmental) Corporations (*Corporaciones Autónomas Regionales - CAR*), will allow having better coordinated management of natural resources and issuance of environmental licenses and permits.

71. Key challenges to achieve these positive impacts will be the establishment and resourcing of these environmental units/authorities, especially for small municipalities (less than one million inhabitants), and creation of coordination efforts among municipalities and other entities that actually result in more effective environmental management. In Colombia there are 6 large metropolitan areas: Aburrá Valley; Barranquilla-Soledad, Bucaramanga Giron-Piedecuesta; Cúcuta; Central-Western (Pereira) and the Valledupar metropolitan area. The first three have Secretariats of Environment with responsibilities as environmental authority within its area of jurisdiction, and there is evidence of adequate coordination between the areas and the CARs. Given the past experience and existing capacity in Colombia associated with establishing municipal environmental units, it is expected that other municipalities are able to coordinate environmental management efforts with other relevant entities.

72. Law 1682 improves institutional capacity with the creation of the Transport Planning Unit (Prior Action 7). The aim of the Transport Planning Unit is to provide the integrated, strategic, long-term vision and planning of the transport sector, formulate Colombia's

Master Infrastructure Plan, and serve as the coordinating body for the planning of the sector at the subnational level. The Transport Planning Unit is required to perform key functions which strengthen the institutional and technical role of the National Government as the coordinating body for the planning of the sector. These should help provide transport projects that better incorporate environmental sustainability both at the planning, program and project level. An example is the requirement for the development of a Colombia Master Infrastructure Plan and the elaboration of key recommendations, plans and programs for the development of the National Transport Infrastructure sector. It is anticipated that this Unit will have staff/resources to address environmental aspects.

73. The Fourth Generation of Concessions CONPES (Prior Action 8) will likely bring positive environmental impacts associated with reductions in GHG emissions due to road transportation and other positive impacts such as more efficient connectivity, reduced travel times and improved vehicle performance.⁵⁴ In order to mitigate potential negative environmental impacts and risks of the 9 projects entailing approximately 8,170 kilometers, the 4G CONPES establishes the requirements for environmental and social responsibilities for the new pipeline of road concessions contracts, including as part of the bidding process. For example, it establishes the Concessionaire's responsibility to obtain and comply with the environmental license (including EIA and Environmental Management Plan), environmental licensing and management of works needed by not originally envisioned in the project feasibility design (e.g., as part of the final design), and the costs related to environmental management.

74. The new Infrastructure Law recognizes the importance of harmonizing and standardizing the environmental requirements in transport projects. The Law establishes new procedures to help streamline the process of environmental licensing in infrastructure projects, including the construction projects in the national roads program envisioned in Prior Action 8 (4G CONPES). The law also establishes that the Ministry of Transport and Ministry of Environment and Sustainable Development are to develop standard Terms of Reference (ToRs) to undertake environmental impact assessments for road projects. These standard ToRs are complete and only pending formal final approved (expected by end of 2014). Once formally adopted, these ToRs will be compulsory for national road projects. The environmental licensing of road projects continues under the responsibility of the National Environmental Licensing Authority (ANLA-MADS) who approves the environmental impact assessment and issues the project-specific environmental licenses. ANLA is also responsible for the supervision and monitoring of compliance of works with the environmental permits and environmental management plans. The project structure under the 4G projects typically includes the contracting of third party construction supervisors and includes environmental, health and safety supervision. The ANI is responsible for the design and contracting of national highway projects, which includes consideration of environmental aspects. The ANI incorporates environmental and social contractual obligations in the bidding process and corresponding construction contracts for road concessions. The monitoring of compliance of environmental contractual obligations during the construction phase is performed by the ANI through auditing/supervision contractors (independent third party).

⁵⁴ The GoC estimates positive environmental impacts of COP15 billion of CO2e tons.

5.3 PFM, DISBURSEMENT AND AUDITING ASPECTS

Public Financial Management

75. The public financial management systems are adequate to support development policy lending. The national-level Public Financial Management (PFM) systems show advanced levels of performance that are moving toward good international practices, according to the most recent reports from the IMF and World Bank.⁵⁵ Notwithstanding, there remains areas for further strengthening of public financial management systems, such as information systems and budget management. In 2012, a new financial and administration system (SIIF II) was put into operation, and an effort is under way to adopt a Unified System of Investment and Public Finance. The Government has increased the coverage of SIIF II and it is in the process of harmonizing with the different PFM tools.⁵⁶ Colombia has an effective track record of implementing PFM reforms, which the Bank has supported. Salient features of the PFM systems are summarized below.

- The budget is comprehensive, well documented, and implemented as planned, with actual expenditures deviating only slightly from planned levels. Budget planning is based on a multiyear perspective,⁵⁷ and annual formulation reflects a mostly well-functioning policy-based system.⁵⁸ Execution of budgeted expenditures suggests a largely credible budget. The Government has published its annual budget in a timely fashion (Law 1687 of December 11, 2013).
- Revenue and expenditure controls are comprehensive, and there is a continuous effort to improve them. Of significant relevance are strong measures to safeguard the overall integrity and accuracy of revenue data by integrating or reconciling the different accounting systems used by the tax administrator, ensuring consistency between the information from accounting and statistical records, and guaranteeing timely recording of transactions. Records and controls on cash flows, balances, and public debt support sound fiscal management and provide public institutions with the tools for predicting funding to execute their budgets in an orderly manner.
- The consolidated public accounts are prepared within six months after the end of the fiscal year. They include full information on revenues, expenditures, and financial assets and liabilities. Year-end accrual-based financial statements are issued by the Accountant General and presented by May 15 of the following year to the Controller General for audit purposes. The Controller General's auditing policies and procedures provide for the application of

⁵⁵ See IMF (2012) and World Bank (2013), and Public Financial Management and Procurement Report (PEFA 2009).

⁵⁶ These include the National Development Plan (PND), the fiscal rules, the Public Investment Program (PIP), the MTFF, the MTEF, the Operative Annual Investment Plan, and the financial plan.

⁵⁷ The country has developed key PFM multiannual instruments since 2003, such as MTFF and MTEF. However, they are presently not used adequately since, instead being prepared sequentially with the budget, they are developed in parallel. That makes it impossible for CONPES to have an informed discussion on the strategic direction of the budget and the setting of hard expenditure ceilings early in the budget year (IMF 3/2012).

⁵⁸ As identified by IMF (2012) and World Bank reviews (2013), policies or priorities are explicit, but they are not directly linked to the budget, given budget classification problems. The economic and functional classifications are only available for planning purposes, not for budget tracking and reporting; it is expected to implement them by 2015/2016. There are current efforts to harmonize accounting chart of accounts and budget classifications at this time. The recurrent and investment budgets are independently prepared and executed (even institutionally/organizationally), and the classification varies between preparation and execution, and across ministries. This prevents the budget from being an effective policy decision tool.

financial, compliance, and performance procedures consistent with the National Government's auditing standards. Audit reports are submitted before July 1 of the following fiscal year to the Congress and the President.

76. **The GoC is implementing an accounting and auditing reform agenda to adopt and implement international accounting and auditing standards.** In the last two years, there have been significant developments towards implementing this reform, including new legislation, and an inter-institutional commission involving key government authorities to operationalize transitional arrangements towards completing implementation. There are still a few challenges for the GoC to overcome in the reform process, including establishing monitoring indicators to measure progress in the transition years, revamping and/or adjusting information systems, revising business processes establishing quality assurance mechanisms to ensure the quality of financial reporting by companies and the public sector entities, and defining a comprehensive country strategy for education and training of accountants and public officials involved in implementation. The implementation of the reform agenda will contribute to competitiveness and access to markets, enhancing governance and transparency in the use of public funds.

Disbursement and Auditing

77. **Disbursement arrangements.** Once the legal agreement becomes effective and the Government complies with any withdrawal tranche release conditions, and following the Government's request, the Bank would deposit the funds into an account denominated in US dollars of the Central Bank (*Banco de la República*) for subsequent credit into the Treasury Single Account of the MHCP, thus becoming available to finance budgeted expenditures, other than those excluded under the legal agreement. The MHCP will provide the Bank with a written confirmation of the transaction after the funds are disbursed by the Bank.

78. There is no evidence that the banking control environment into which the DPL proceeds would flow is other than adequate. This assessment is based on a review of the 2013 and 2012 external audit report of the *Banco de la República*, the latest IMF Central Bank safeguards assessment (2012), and the 2014 IMF Article IV Consultation. Because the Government's PFM systems and the fiduciary arrangements for this financing are assessed as adequate, the Bank will not require an audit of the designated account, and no additional fiduciary arrangements are considered necessary at this time.

Procurement

An assessment of the public procurement system concludes that Colombia has made progress over the past five years, but work remains in terms of consolidating gains and ensuring sustainability. One of the most relevant steps forward has been the creation (November 2011) of a Procurement Directorate (*Agencia Nacional de Contratación Pública, Colombia Compra Eficiente* –CCE) to oversee and lead the procurement reforms, replacing the Inter-Sectorial Commission of Public Procurement. To address remaining challenges the efforts of the new Procurement Directorate are directed, inter alia, towards the following objectives : (i) more emphasis on standards not only processes and alignment of procurement to expenditure policy – so far, the legal framework has been heavily focused on the administrative and compliance function; (ii) updating the electronic procurement system to become a transactional procurement platform, to improve transparency, generate competition, and streamline processes;

(iii) development of a professional, more strategic workforce to deliver best outcomes; and (iv) developing a set of indicators to monitor the procurement performance. In sum, the legal, institutional and operational framework must be dynamic and adaptable to respond to the challenges in the market as new technologies and ways of doing business develop in Colombia and around the world.

5.4 MONITORING AND EVALUATION

79. The preparation of this operation is being led by the National Planning Department, with participation from the Ministry of Transport and the Ministry of Housing, City and Territory. These agencies will be responsible for the overall implementation of the proposed program, and for reporting on progress.

80. The Program outcomes will be monitored through the measurement of the indicators included in the policy matrix (Refer to Annex 1). These indicators seek to assess progress towards the implementation of the reforms supported by the proposed DPL and will be evaluated one year following the disbursement of the loan. As suggested in the matrix, some indicators from the first DPL operation have changed to improve tracking of the policy reforms proposed by the second DPL.

6. SUMMARY OF RISKS AND MITIGATION

81. **The overall risk of the operation is moderate.** The operation is subject to the following risks:

- **Political and Governance Risks.** The June 2014 presidential elections resulted in the reelection of president Santos, which facilitates the continuity and implementation of the proposed reforms. These reforms also resonate with several stakeholder groups and public constituents, so strong support for implementation is expected.
- **Macroeconomic Risks**. The GoC faces significant fiscal pressures associated with increasing expenditures on several on-going commitments in security, infrastructure and support to agriculture. Likewise some of the country's main sources of revenue, which continue to be related to the oil and mining sectors, remain susceptible to macroeconomic fluctuations. Despite this, the country's macro resilience, its strong economic growth and the absence of significant domestic or external imbalances help shore up stability.
- Institutional & Implementation Risks. The SoC CONPES Document will require the important buy in of several ministries, agencies and municipalities, which implies a coordination risk. Moreover, implementation of the specific activities mandated in the CONPES Document will carry additional coordination and implementation risk. Mitigation measures include prioritizing reforms where institutional capacity is considered greatest, focusing on reforms that are of greater importance to the targets and objectives of implementary engagements (for instance, via the PKS engagement). Implementation risk is also relevant for the proposed mobility reforms and regional connectivity agenda. In particular, revamping of capacity at the local level will underpin the capacity of municipalities to achieve implementation of congestion charging zones in urban areas. In this respect, continuing with knowledge transfer and sharing of international experience will be crucial to mitigate these risks (the PKS can be used as a platform for this support). Finally,

institutional and coordination risk is highly relevant for the housing programs. Housing policy has been at the forefront of the Santos administration and several initiatives have been launched, some of which have faced implementation challenges with high visibility. This risk is mitigated partially by the fact that the program supported under the proposed loan is limited in scope (86,000 housing units) and is intended to serve as a demonstrative effort on how to achieve a more efficient provision of housing.

- **Operational Design & Sustainability Risks.** There are risks associated with the operation of congestion charging zones and the adoption of vehicle identification devices. Stakeholders, private sector and civil society groups might also oppose the measures and delay implementation. These risks are mitigated by supporting the process with technical assistance, involving users and civil society early in the process and during operation involving them in the performance monitoring process, by making all performance data public. Risks in the implementation of social housing programs are related to the appropriate targeting of beneficiaries and lack of financial information/education from potential beneficiaries. Mitigation measures include the use of well known, objective eligibility criteria using the SISBEN⁵⁹, and linkages to complementary World Bank engagement to improve the management of targeting systems, and the establishment of social working groups to provide information, channel consultations and manage expectations from potential beneficiaries.
- Environmental and social risks. There is a risk that some of the expected positive impacts associated with the prior actions may not occur if the various plans mentioned are not developed or properly implemented, or if municipalities - in particular the smaller ones - do not provide adequate resources to establish effective environmental units/authorities which do not allow creating actual coordination efforts among municipalities and other entities that result in more effective environmental management. The new streamlined procedures for land acquisition and environmental licensing in the Infrastructure Law may generate a social risk in which vulnerable people might consider these processes to reduce their space of participation. Notwithstanding, the adoption of full-replacement cost methodology for property valuation, the requirement of Social Management Plans in large road and urban transport projects, and Colombia's renowned and stable framework for consultation and grievance redress mechanisms, are effective tools to mitigate the associated risks that the poor and more vulnerable groups may face. There is an environmental and social risk associated with the 4G Road Concession contracts due to potential environmental and social impacts not being properly managed (prevented, minimized, mitigated, monitored) during the project design, construction and operation and maintenance phases, and includes potential existing environmental and social liabilities in the road prior to concession. The risk is also related to the capacity of transport and environmental authorities (e.g., ANI, ANLA-MADS) to adequately execute their responsibilities, adequacy of public participation during project development, and performance by the road concessionaire. The implementation of the VIPA program has a potential risk of causing urban sprawl creating more disperse, distant, and disconnected cities. If not properly planned and equipped, these affordable housing projects may exacerbate social exclusion and may induce the formation of ghettos outside the cities. This risk has been discussed by the Bank with the GoC, and the Ministry of Housing, Cities and Territory is discussing with the Department of Social Prosperity (DAPS) possible mitigation measures which could include social programs to facilitate insertion, adequate

⁵⁹ SISBEN is Colombia's National identification system for the poor and potential beneficiaries of social programs.

maintenance and support for the beneficiaries of the housing projects. Potential environmental risks of the housing developments include improper site location of the development and resultant impacts such as loss of or impacts on environmental resources (land, surface water) and potential indirect impacts due to increased population and resultant increased demand for potable water, increased waste water and solid waste generation, increased traffic, and increased demand on education and health services.

ANNEX 1. POLICY AND RESULTS MATRIX

Project Development Objective: The objective of the program is to support the strengthening of the Government of Colombia's policy framework on productive, sustainable and inclusive cities.

DPL 1- Prior Actions	DPL 2 – Prior Actions	Expected Results			
Policy Area 1— Sustainable and Inclusive Cities.	•				
Prior Action 1 : The Government, through DNP, has created a sub-directorate unit, within DNP, responsible for, <i>inter alia</i> , coordinating regional planning and investment.	Prior Action 1 : The Government, through CONPES, approved the National Policy to Strengthen the System of Cities in Colombia (<i>Política Nacional para Consolidar el Sistema de Ciudades en Colombia</i>), which sets forth an action plan for strengthening, inter alia, the governance, financial management, physical and digital connectivity, and economic development of cities.	Results Indicator. The National Development Plan 2014-2018 is structured with a territorial/regional approach that takes into account the SoC framework and includes indicators to track progress at regional level. [<i>Baseline</i> = [0]/ <i>Target</i> = [1] (December 2015)].			
		Responsible Entity: DNP.			
Prior Action 2: The Government, through MVCT, has		Results Indicator. Number of poor			
issued a regulation for the provision of subsidies for		households in cities with population greater			
household water and sanitation connections for low- income families (<i>strata 1 and 2</i>).		than 100,000 residents that have connected to neighborhood water and sanitation networks through availing connection subsidy. [<i>Baseline</i> = [0] / Status ¹ = [14,255]/ <i>Target</i> = [30,000] (December 2015)].			
		Responsible Entity: MVCT.			

Prior Action 3 : The Government, through MT, has adopted its national road safety plan for years 2011-2016 to increase urban and inter-urban road safety in its territory.	 Prior Action 2: The Government, through MT, has issued a regulation allowing its municipalities or districts with a population above 300,000 people to establish charges to motorists in connection with the use of urban areas with, inter alia, high traffic congestion and pollution in order to improve public transit. Prior Action 3: The Government, through MT, has adopted a national technical standard for Electronic Vehicular Identification Systems (<i>Proyectos de Recaudo Electrónico Vehicular</i>) aimed at collecting data to identify ground transportation vehicles through radiofrequency systems. 	Results Indicator. Number of conceptual designs or feasibility studies supporting travel demand management policies, including formulation of congestion charging schemes, and-or parking, and-or non-motorized transit, in cities with population greater than 300,000. [<i>Baseline</i> = [0]/ <i>Target</i> = [2] (December 2015)] Responsible Entity: Ministry of Transport.
 Prior Action 4: The Government, through CONPES, has approved its national public space policy guidelines in order to promote the creation of public spaces in urban areas. Prior Action 5: The Government has created a national urban redevelopment company to support the structuring of urban redevelopment projects. 		Results Indicator. Increase in availability of public spaces in cities with population greater than 100,000 residents as measured by square meters of public space per capita.[Baseline = [3.3] / Status²= [3.6] / Target = [3.9] (December 2015)]Responsible Entity: DNP.
	Prior Action 4 : The Government, through the MVCT, has adopted a standardized methodology to be used by its municipalities and districts to select, collect and consolidate, in a national inventory, information relating to human settlements located in areas prone to landslides and floods.	

Policy Area 2— Access to Affordable Housing.			
Prior Action 6 : The Government has established the legal framework for the provision of public housing to the poorest and most vulnerable households.	Prior Action 5: The Government, through MVCT, has established the principles of regulation for the carrying out of the Priority Interest Housing Program for Savers (<i>Programa de Vivienda de Interés Prioritario para</i> <i>Ahorradores</i>), which is aimed at providing different types of subsidies to selected families to facilitate the purchase of a house.	Results Indicator. Number of low income families with access to affordable and safe housing solutions increases, as a result of the public housing and voluntary savings Programs (VIPA)Public Housing: [Baseline = [0] / Status³ = [65,805] / Target = [100,000] (December 2015)]VIPA: [Baseline = [0]/ Target = [10,000] (December 2015)]	
Policy Area 3— Institutional Strengthening and Regio	nal Coordination	Responsible Entity: MVCT	
Prior Action 7 : Government, through MT and DNP,		Degulte Indicator Number of (i) Regional	
has issued a regulation for the implementation of the <i>Contrato Plan</i> .	Prior Action 6: The Government has adopted a legal framework establishing integrated political, administrative and fiscal regulations for the management of its metropolitan areas.	Results Indicator. Number of (i) Regional Contract Plans signed between territorial entities and (ii) number of Metropolitan Territorial Plans increases. [<i>Baseline</i> = [0]/ Status ⁴ = [7] / <i>Target</i> = [10] (December 2015)] Responsible Entity: DNP	
Policy Area 4— Urban Connectivity and Regional Inf	rostructura Daliay Framawark	Responsible Entity. DNP	
	Prior Action 7: The Government, through MT, has created the Transport Infrastructure Planning Unit (Unidad de la Planeación de la Infraestructura de Transporte) and the Infrastructure and Transport Regulatory Commission (Comisión de Regulación de Infraestructura y Transporte) to strengthen the Government's planning and regulatory capabilities in the transport sector.	Results Indicator. The Transport Planning Unit and Transport Regulatory Commission are fully operational, as evidenced by the set-up of functional areas and hiring of staff. [<i>Baseline</i> = [No]/ <i>Target</i> =[Yes] (June 2016)] Responsible Entity: Ministry of Transport.	
Prior Action 8 : The Government, through MT, has designated a national agency for infrastructure to structure regional infrastructure concessions.	Prior Action 8: The Government, through CONPES, has approved guidelines to develop a program to regulate its fourth generation of road concessions, which	Results Indicator. Number of PPPs structured with signed contracts and financing frameworks in place under the 4G	

Prior Action 9 : The Government has established the legal framework for the structuring and financing of public-private partnerships.	program is aimed at improving the existing national road network.	Program. [Baseline = $[4]$ / Target = $[8]$ (December 2015)]
r ··· · r ···· r ··· · r ···		Responsible Entity: Ministry of Transport (ANI).

¹ Data from November 2013 ² IBID ³ IBID ⁴ IBID

ANNEX 2. LETTER OF DEVELOPMENT POLICY

República de Colombia



Bogotá D.C., - 4 NOV 2014

Doctor JIM YONG KIM Presidente Grupo Banco Mundial Washington, D.C.

Asunto: Carta de Política - DPL II Ciudades Productivas y Sostenibles

Estimado Doctor Kim,

Las ciudades colombianas son y han sido el motor del crecimiento económico del país. En efecto, las actividades en los centros urbanos han aportado, en promedio, más del 50% del crecimiento del PIB nacional en los últimos 40 años. Actualmente, el 85% del PIB nacional se genera en las ciudades, producto de una marcada relación positiva entre el nivel de urbanización y la riqueza per cápita de los colombianos.

Esta dinámica del PIB es consistente con el crecimiento de la población urbana y de las ciudades. En 1951 Colombia contaba sólo con 6 ciudades de más de 100.000 habitantes, con una economía de estructura rural y con una población urbana que representaba el 39% del total nacional. Producto del rápido fenómeno de la urbanización, en 2010 el país contaba con 41 ciudades con más de 100.000 habitantes y 4 con más de un millón de ciudadanos.

De acuerdo con estimaciones realizadas para la Misión de Ciudades, se espera que para el 2050 el país cuente con 69 ciudades con más de 100.000 habitantes y 6 con más de un millón (con una población urbana de aproximadamente 86% del total), lo cual permite prever un aumento en la demanda de suelo, vivienda, transporte, y servicios públicos y sociales. Dicho aumento de la demanda debe ser analizado desde una escala supramunicipal (sistema de ciudades o aglomeraciones urbanas) para potencializar el desarrollo del país de forma equilibrada y complementaria en torno a las ciudades, sus áreas rurales y la estructura ecológica principal.

Dada la importancia de las ciudades para la dinámica de crecimiento del país, en el marco del Plan Nacional de Desarrollo 2010-2014 (Ley 1450 de 2011) se propuso formular una política de largo plazo para consolidar el sistema de ciudades en Colombia, que aproveche de mejor manera los beneficios de la urbanización y la aglomeración, el crecimiento verde, y a su vez, que considere una mayor integración regional.

Como complemento a la Ley del PND 2010 - 2014, la Ley Orgánica de Ordenamiento Territorial -LOOT (Ley 1454 de 2011) le fijó a la Nación competencias para definir lineamientos del proceso de urbanización y creó el concepto de Sistema de Ciudades. Asimismo, y con el ánimo de

Ministerio de Hacienda y Crédito Público

> Departamento Nacional de Planeación

armonizar e integrar la legislación territorial, esta ley determinó que es el Gobierno Nacional quien debe presentar al Congreso los proyectos de Ley sobre el Régimen Departamental, Distrital, de Áreas Metropolitanas, y Municipal.

Por lo anterior, es preciso que el Gobierno Nacional avance en el desarrollo de estas políticas, dentro de las que sobresalen la puesta en marcha de una política para el fortalecimiento del Sistema de Ciudades, la expedición de normas relacionadas que contribuyen a mejorar la movilidad urbana y reducir la congestión vehicular, el diseño de sistemas de recaudo electrónico vehicular, la generación de mecanismos de acceso a la vivienda y reducción de los asentamientos localizados en zonas de alto riesgo no mitigable, el desarrollo del régimen de las áreas metropolítanas, y acciones complementarias en materia de infraestructura, entre otras.

En la medida que las acciones anteriores requieren de la coordinación de esfuerzos entre diferentes entidades y sectores, y teniendo en cuenta el avance alcanzado en el DPL I, la segunda fase del Programa de Ciudades Productivas y Sostenibles le permitirá al Gobierno Nacional continuar avanzando en el desarrollo de las siguientes áreas de política: (i) promoción de la sostenibilidad y la inclusión en las ciudades colombianas; (ii) mejora del acceso a la vivienda por parte de los hogares con más bajos ingresos, (iii) profundizar la conectividad urbana y los esquemas de financiamiento de infraestructura a nivel regional, y ív) fortalecimiento de la coordinación interjurisdiccional y el fortalecimiento institucional

En el área de política de **sostenibilidad e inclusión en las ciudades colombianas**, se aprobó el documento CONPES de Política Nacional para Consolidar el Sistema de Ciudades en Colombia. Su objetivo es fortalecer el Sistema de Ciudades como motor de crecimiento del país, promoviendo la competitividad regional y nacional, el mejoramiento de la calidad de vida de los colombianos y la sostenibilidad ambiental, en un contexto de equidad y post conflicto¹.

Respecto al área de política de promoción del acceso a la vivienda por parte de los hogares de más bajos ingresos, se aprobó el CONPES 3746 de 2013. Mediante este documento de política, se declaró de importancia estratégica el Programa "Vivienda de Interés Prioritaria para Ahorradores", a través del cual se busca financiar la adquisición de vivienda por parte de los hogares con ingresos entre 1 y 2 Salarios Minimos Legales Mensuales Vigente.

Así mismo, con el fin de mejorar la calidad de vida de la población y reducir la vulnerabilidad ante la ocurrencia de desastres de origen natural, mediante la Resolución 448 de 2014 el Gobierno Nacional estableció los lineamientos para que los municipios y distritos recojan y suministren información para conformar el inventario nacional de asentamientos en alto riesgo de desastres.

En cuanto al área de política que mejorará la conectividad urbana y los esquemas de financiamiento de infraestructura a nivel regional, se han adelantado las siguientes acciones:

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¹ Para alcanzar este objetivo, se propusieron seis grandes ejes de política: i) planear el sistema de ciudades con una visión sostenible de largo plazo en función del ordenamiento territorial nacional, ii) mejorar la conectividad del sistema de ciudades, iii) aumentar la productividad del país desde las ciudades, iv) mejorar la colidad de vida en el sistema urbano nacional, v) promover esquemas sostenibles para el financiamiento, y, vi) promover la coordinación interjurisdiccional y los esquemas de asociatividad del , orden supramunicipal.

- Se consideró el aumento en el indice de motorización en el país, así como los niveles de congestión vial excesiva en las principales ciudades, y se expidió el Decreto 2883 de 2013 el cual busca mejorar los niveles de competitividad y productividad de las ciudades a través de medidas que disminuyen los tiempos de viaje, el consumo de combustible y la contaminación del aire.
- 2. Con el fin de promover e impulsar la implementación de tecnologías en los Sistemas de Transporte, el Gobierno Nacional efectuó estudios para la adopción de estándares de tecnología que faciliten la organización y funcionamiento de los sistemas de recaudo electrónico vehicular. Para ello se expidió el Decreto 2846 de 2013, el cual tiene como finalidad mejorar la seguridad y competitividad de las cadenas logísticas.
- 3. Para acelerar el proceso de conectividad urbana y de financiamiento de infraestructura a nivel regional, el Gobierno de Colombia promoverá la inversión privada y aumentará el desarrollo de proyectos de infraestructura de transporte en el país, a través del programa "Cuarta Generación de Concesiones Viales". Los lineamientos de este programa se definieron en el documento Conpes 3760 de 2013.
- 4. Con el fin de disminuir el rezago en infraestructura de transporte y fortalecer la conectividad urbana se busca agilizar la ejecución de los proyectos existentes. Por esto el Gobierno Nacional firmó la Ley 1682 de 2013, en la cual se adoptan medidas que regulan la gestión y adquisición predial, la gestión ambiental y el traslado de redes de servicios públicos, las tecnologías de la información y de las comunicaciones y la industria del petróleo, entre otros.

Respecto al área de política que busca *facilitar la coordinación interjurisdiccional y el fortalecimiento institucional*, se requieren mayores esfuerzos para lograr desarrollar varios aspectos de la Ley 1625 de 2013 la cual tiene por objeto reorientar, adecuar e integrar las normas sobre el régimen metropolitano, de forma que estas entidades administrativas estén realmente en capacidad de programar y coordinar el desarrollo armónico e integrado de su territorio.

Finalmente, es preciso resaltar la importancia de este Programa para el país, en la medida que contribuirá significativamente al cumplimiento de las metas del Plan Nacional de Desarrollo 2014-2018, fundamentalmente de aquellas relacionadas con las estrategias para consolidar el Sistema de Ciudades en Colombia.

Agradeciendo su atención, reciba un cordial saludo.

Ministro de Hacienda y Crédito Público Ministerio de Hacienda y Crédito Público

Simón Gevíria Muñoz Director General Departamento Nacional de Planeación

UNOFFICIAL TRANSLATION LETTER OF DEVELOPMENT POLICY

Bogotá D.C., November 4, 1024

Mr. JIM YONG KIM President World Bank Group Washington, D.C.

Dear Mr. Kim,

In 1951 the country's urban population accounted for 39% of the total. We only had 6 cities of more than 100,000 inhabitants, with an economy of rural structure. Product of the rapid urbanization phenomenon, in 2010 this level reached 76% of the total population of the country, located in 41 cities with more than 100,000 inhabitants and 4 with more than 1 million citizens.

Estimates for the Mission of cities indicate that by 2050 the population that will live in urban centres will reach 86%; and have 69 cities with more than 100,000 inhabitants and 6 with more than one million; with corresponding demands for land, housing, transportation, and public and social services, among others. These must be analyzed from a supra-municipal level (set of cities), to enhance the country's development in a balanced and complementary around cities, rural areas and the main ecological structure.

On the other hand, Colombian cities are and have been the engine of the economic growth of our country. Activities in urban centres have contributed in the past 40 years, on average, more than 50% of the national GDP growth. Currently, 85% of the national GDP is generated in cities and we found a strong, positive relationship between the level of urbanization and wealth per capita of Colombians.

Product of these conclusions, in the context of the National Plan of Development – NDP 2010-2014 (law 2011 1450), it was proposed to formulate a long-term policy to consolidate the system of cities in Colombia, which better take advantage of the benefits of urbanization and agglomeration, green growth, and in turn, to consider greater regional integration.

As a complement to the law of the 2010-2014 NDP, the organic law of Territorial Planning - LOOT (Act 1454 of 2011), set the nation with skills to define guidelines for the process of urbanization and created the concept of system of cities. Also, put as a task to the national Government, with a view to harmonize and integrate legislation territorial, submit to the Congress Act respecting the departmental projects, the district system, the regime of Metropolitan Areas, and the Municipal regime.

Therefore, the Government required to advance the development of these policies, among which highlight in particular putting up a policy for the strengthening of the system of cities; as also related standards, within which are improving urban mobility and reduce traffic congestion, vehicular electronic collection systems develop, generate mechanisms for access to housing and

reduce the settlements located in areas of high risk not reducible, develop the regime of the metropolitan areas, and complementary actions in the field of infrastructure.

As previous actions require coordinated efforts among different institutions and sectors, the national Government has designed the second phase of a programme of productive and sustainable cities which will focus on the development of the following policy areas: (i) promote sustainability and inclusion in Colombian cities; (ii) promote access to housing by households with lower income; (iii) promote inter-jurisdictional coordination and institutional strengthening, and;(iv) promote urban connectivity and schemes of financing of infrastructure at the regional level.

With regard to **the sustainability and inclusion in Colombian cities** se is in the process of socialization the document with the proposal for a national policy for the strengthening of the system of cities in Colombia, whose objective is to strengthen the system of cities as the country's growth engine, promoting regional and national competitiveness improvement of the quality of life of Colombians and environmental sustainability. To achieve this objective, proposed six main lines of policy that are related with: (i) planning system of cities with a sustainable vision of long term on the basis of national land use planning; (ii) improve the connectivity of the system of cities; (iii) increase the productivity of the country from cities; (iv) improve the quality of life in the national urban system; (v) promoting sustainable financing schemes; and (vi) promote inter-jurisdictional coordination and associativity of the supramunicipal order schemes.

With regard **to promoting access to housing by the lowest-income households**, was approved CONPES 3746 from 2013 through which strategic importance was declared the program "Housing of interest priority for savers" through which it seeks to finance the purchase of housing by households between 1 and 2 minimum wages.

Likewise in order to improve the quality of life of the population and reduce the vulnerability of the population to the occurrence of natural disasters, through the resolution 448 of 2014 the national Government established guidelines to municipalities and districts to collect and provide information to form the national inventory of settlements in high-risk disaster. This instrument will provide the dimensions of the problem of risk in the housing sector and will promote the design of programs aimed at their reduction, especially in big cities which are which concentrate greater proportion of the population at risk.

To promote urban connectivity and given the increase in the rate of motorization in the country, as well as the levels of excessive road congestion in major cities, was issued on December 11, 2013, the 2883 Decree which set the criteria for the determination of areas of high congestion, high pollution, or infrastructure built or improved to prevent urban congestion in municipalities or districts with population over 300,000 inhabitants. With the implementation of this measure, intends in the medium term, decrease users travel times, fuel consumption, the air pollution that impacts negatively on the health and well-being of the people and improve the competitiveness and productivity of the cities.

In order to promote and encourage the implementation of technologies in transportation systems, the national Government studied to adopt technology standards required in order to promote interoperability and enable the exchange of information, facilitating the Organization and operation of vehicular electronic collection systems, which was issued on December 6, 2013 (the

Decree 2846 of 2013 which are adopted standards of technology for vehicular electronic collection systems). Such systems are looking to improve the safety and competitiveness of logistics chains, and open opportunities to promote innovative and more efficient solutions allowing the operation of mobile applications such as the electronic toll collection or the imposition of fees for use of areas of high congestion, high pollution, or infrastructure built or improved to prevent urban congestion.

Similarly, to speed up the process of urban and financing of infrastructure connectivity to regional level, the Government of Colombia will promote private investment and increase the development of projects of transportation infrastructure in the country, developed the "Fourth generation of concessions vials" program. The guidelines of this program were defined in document Conpes 3760 of 2013 and are based primarily on a major maturation of previous studies of the projects, to remuneration according to the fulfillment of specific levels of availability and quality of infrastructure, better criteria of identification, distribution, and remuneration of the risks, among others. The projects defined within the programme were established according to studies previously carried out, which will help promote regional and national competitiveness by improving the connection between the cities, which play an important role in the growth of the country.

In order to expedite the implementation of existing projects, the national Government signed the law 1682 of 2013, which adopt measures regulating management and land acquisition, environmental management and the transfer of networks of public services, ICT, oil industry among others, allowing projects to develop more efficiently to achieve urban connectivity adequate according to the needs presented by the country and reducing the backwardness in transportation infrastructure.

In terms of inter-jurisdictional coordination and institutional strengthening (Act 1625 of 2013), are required to develop various aspects of the law as is the need to reorient, adapt, and integrate the rules on metropolitan regime, in a way that these administrative entities are actually able to schedule and coordinate the harmonic and integrated development of its territory.

Finally, we would like to highlight the importance of this programme for the country, to the extent that contributes significantly to the achievement of goals of the National Development Plan 2014-2018, mainly those related to strategies to consolidate the system of cities in Colombia.

Thanking them for their service, receive a cordial greeting.

Mauricio Cardenas Santamaria
Minister of finance and public credit

Simon Gaviria Director-General National Planning Department

ANNEX 3. FUND RELATIONS NOTE

IMF Executive Board Completes Review of Colombia's Performance under the Flexible Credit Line

Press Release No.14/288 June 18, 2014

The Executive Board of the International Monetary Fund (IMF) today completed its review of Colombia's qualification for the arrangement under the Flexible Credit Line (FCL) and reaffirmed Colombia's continued qualification to access FCL resources. The Colombian authorities have indicated that they intend to continue treating the arrangement as precautionary.

The current two-year SDR 3.87 billion (about US\$5.96 billion) FCL arrangement was approved on June 24, 2013 (see <u>Press Release No 13/229</u>). Colombia's first FCL arrangement was approved on May 11, 2009 (see <u>Press Release No. 09/161</u>), and two successor arrangements were approved on May 7, 2010 (see <u>Press Release No. 10/186</u>) and May 6, 2011 (see <u>Press Release No. 11/165</u>).

Following the Executive Board discussion of Colombia, Mr. David Lipton, Deputy Managing Director and Acting Chairman of the Board, made the following statement:

The Fund's Flexible Credit Line (FCL) arrangement with Colombia has helped reduce the perception of risks by providing Colombia with a buffer against adverse external shocks, and allowed Colombia to restore orderly financial market conditions despite increased volatility in financial markets over the past year. Today, the Executive Board reaffirmed that Colombia continues to meet the qualification criteria for access to FCL resources.

"Colombia has maintained a robust economic performance in recent years. This is underpinned by a very strong policy framework, anchored by an inflation-targeting regime, a flexible exchange rate, a sound fiscal rule, and effective financial supervision and regulation.

"At the same time, important downside risks remain for emerging market economies and they continue to present challenges even for strong and well-managed economies like Colombia. While Colombia has ample policy space to contain the fallout from normal external shocks, the additional buffer provided by the FCL arrangement would continue to play an important role in mitigating tail risks. The authorities remain committed to strengthening buffers, including international reserves, and plan to take further steps toward exit from the FCL arrangement when external conditions allow."

ANNEX 4. PRODUCTIVE AND SUSTAINABLE CITIES PROGRAMMATIC **KNOWLEDGE SERVICES (PKS)**

The overall objective of the Productive and Sustainable Cities Programmatic Knowledge Services is to support the Government of Colombia in its efforts to increase the population benefitting from improved transport, housing, and other urban services.⁶⁰ The objective is aligned with the National Development Plan 2010-2014, since one of its key goals is to improve the urban living environment, which includes improving access to and quality of basic services (such as transport, water, sanitation, and solid waste management), improving the urban environment, and expanding access to affordable housing. The following figure summarizes the key themes under the engagement, and Table A4.1 provides a detailed account of all activities being supported.

Figure A4.1					
Transport	Land & Housing	Other Services			
 Regulatory Framework Operation & Financial Sustainability of BRTs/SITPs Targeted Subsidies Road Safety Travel Demand Management TOD & Land Value Capture Non-motorized transport 	 Sub-national infra finance Strategic planning and urban renovation Support to <i>Misión</i> <i>Ciudades</i> Promoting "Green" low-income housing Savings programs <i>Macroproyectos</i> frameworks 	 Targeted support for Río Bogotá Wastewater Megaproject Modernization of water and sanitation services Municipal institutional strengthening and e- governance 			

Table A4.1. World Bank Engagement in Support of Productive and Sustainable Cities Agenda

Completed

- Water and Sanitation Sector Support (FY05)
- Cartagena Water Supply (FY00)
- Bogotá Urban Transport (FY96)
- Integrated Mass Transit (FY10)
- 1st Productive and Sustainable Cities DPL (FY13)

- Ongoing • Bogotá Urban Services (FY03)
- National Urban Transport Program Project (FY12)
- Low Income Land and Housing -
- Macroproyectos (FY10)
- Solid Waste Management (FY10) • La Guajira Water & Sanitation
 - (FY07)
- Rio Bogotá Environmental
- Infrastructure (FY11)

Planned

- CTF Urban Transport (FY15)
- 2nd Productive and Sustainable Cities DPL (FY15)

Financial Services

⁶⁰ Productive & Sustainable Cities PKS Progress Report. July 2013.

Urban Transport and Regional Connectivity:

- INCO Concession Unit Institutional Support Public-Private Infrastructure Advisory Facility (PPIAF)
- Regulatory aspects and capacity building for public transport, tariff setting and integration of public transport systems (PPIAF)
- Urban Transport project Video (BB)
- Bus Rapid Transit Accessibility Guidelines (TFESSD)
- Recent Economic Developments in Infrastructure—REDI Spanish Fund for Latin America and the Caribbean (SFLAC)
- Travel Demand Management Strategies for Bogotá (BB)
- Mainstreaming ICT to Design Targeted Subsidy Scheme for Public Transit (Korean ICT TF)
- Pro-poor targeting scheme for public transport (GPOBA)
- Strengthening the operational and financial sustainability of integrated public transport systems (BB)
- Rapid Assessment of Bogota's Integrated Public Transit System (SITP) Deficit Situation (BB)
- Support to GoC in the definition/update of a National Mobility Policy (Mobility CONPES) (BB)
- Support to GoC in the definition of a National Intelligent Transport System (ITS) CONPES (ESMAP)
- Support to the Ministry of Transport with the Reorganization/Creation of the Vice Ministry of Transport (BB)

Urban Services:

- Urbanization Review ESW (BB)
- *Macroproyectos*: Developing a Policy and Program Framework (Cities Alliance)
 Water:
- W2.1
 - W3: ICT-enabled services for Barranquilla (BB)

Urban Transport and Regional Connectivity:

- South-South Partnership with IE Singapore on
- Congestion Pricing Schemes for Bogotá
- Partnership with ITDP on Non-Motorized
- Transport (BB)
- PPP Workshop (BB)
- **Urban Services:**
- FBS workshop, forum on strategic planning on Urban Renovation

Source: Sustainable and Productive Cities PKS Progress Report. June 2013.

Urban Transport and Regional Connectivity:

- Public Transport Regulatory Framework (SFLAC)
- Tradable Air Rights Instruments (PPIAF)
- REDI Update (SFLAC)
- Support for the implementation of a Road Safety Agency in Colombia (GRSF)
- Bogota Metro Financing Options' Study (PPIAF)

Urban Services:

- Financing Infrastructure for Urban Re-development Sub-National Technical Assistance Program (PPIAF)
- Private Financing Window for Low-Income Housing Projects (PPIAF)
- Green Growth and Regional Economic Development Planning in the Cartagena – Barranquilla-Santa
- Marta Corridor (Korean ICT TF) – Support to *Misión Ciudades*
- Water:
- Advisory Services for the Rio Bogotá Wastewater Megaproject (SFLAC)
- Specialized Water Operators (SFLAC)

Urban Transport and Regional Connectivity:

- Bogotá Transit Oriented Development (Korea GG TF)
- Travel Demand Management Strategies (ESMAP TF)
- Strengthening the Operational and financial sustainability of integrated public transport systems (TBD)
- CTF Project Preparation Grant for Potential Urban Transport Project—Pereira and/or Cali (CTF TF)
- Support to the Implementation of Bogota's SITP (TBD)
- Support to the Implementation of Pro-Poor Targeting Scheme for Public Transit
- Big Data demo for Public Transit (TWICT Funds?)
- Institutional & Financing of PPP Projects Support to the Government of Colombia (PPIAF)
- Support to the Institutional & Operational Set-Up of Bogota's Metro Project
- **Urban Services:**
- Home Improvement National Savings Fund Contractual Savers Program (FIRST)
- Sub-National Urban Infrastructure finance (PPIAF)

Convening

ANNEX 5. POVERTY AND SOCIAL IMPACTS ASSESSMENT⁶¹

This Poverty and Social Impact Assessment (PSIA) is developed according to World Bank guidelines and is designed to provide an analysis of the potential effects of the policies supported by this operation on poverty reduction, employment and welfare of the Colombian population. It documents the expected impacts of each of the policy actions with regard to the key objective of this operation: promote sustainable, productive and inclusive cities. Specifically, the PSIA analyses how these outcomes have potential effects on monetary and multidimensional poverty reduction, regional convergence and employment.

Quantitative analyses specific to the policies supported by this operation were performed, along with literature reviews on previous studies relevant to the prior actions. Useful information to define parameters and assumptions to perform the quantitative analysis, as well as to organize the literature review, was gathered from policy reports of the Ministry of Finance and Public Credit (MHCP), the Ministry of Housing, Cities and Territories (MVCT), the National Planning Department (DNP), previous evaluations by the World Bank and other multilateral organizations, and from academic research papers. Several World Bank Group Global Practices also provided valuable inputs for this assessment.

Over recent years Colombia has experienced considerable economic growth and strong poverty reduction; however disparities between urban and rural areas persist. Between 2002 and 2013 extreme poverty declined from 17.7 to 9.1 percent in 2013; while moderate poverty fell from 48.7 to 30.6 percent. Despite these large reductions at the national level, both moderate and extreme poverty rates remain significantly higher in rural areas. In 2013 the moderate poverty rate in rural areas was 1.6 times the moderate poverty rate in urban areas. Furthermore, this rural-urban disparity in poverty has increased from 1.35 to 1.59, suggesting urban areas have been more effective at achieving poverty reduction. This finding is confirmed by the official multidimensional poverty index (MPI), in the last decade Colombia's MPI fell from 49 to 24.8 while the rural-urban ratio in multidimensional poverty has increase from 1.99 to 2.48.

Within urban areas there is a significant variation when comparing Colombia's main metropolitan areas to other cities. For instance, in 2013 the moderate poverty rate in medium and small cities (40.4 percent) was more than twice the moderate poverty rate of main metropolitan areas (17.5 percent) and very close to the rural poverty rate (42.8 percent). Thus, there are still some cities with high poverty levels, specifically those of medium and small size, which account for about a third of the total population of Colombia (31.3%).

Although poverty rates are higher in rural areas, most of the poor live in urban areas in Colombia. As of 2013, about 7 in 10 poor individuals in Colombia lived in urban areas (metropolitan, medium or small urban areas); while 6 in 10 belong to the bottom 40 percent of the national income distribution. Thus, the policies outlined in this DPL are expected to contribute significantly to poverty reduction and boosting shared prosperity in urban areas.

Most prior actions included in this DPL focus directly on improving outcomes for the lowest-income residents of cities. The policies that support a multi-sector framework based on

⁶¹ This PSIA was prepared by a World Bank team led by Carlos Rodríguez-Castelán (GPVDR) which included, Carlos Castañeda (Consultant), Giselle Del Carmen (GPVDR), Alan Fuchs (GPVDR), Lea Gimenez (GPVDR), Carlos Olarte (Consultant) and Daniel Valderrama (GPVDR).

the SoC and a stronger regulatory basis for urban areas will likely increase employment, investment, lead to better service delivery and improve quality of life for residents. Moreover, the resources collected from the congestion charging scheme are expected to improve the quantity and quality of public transport, reducing commuting times and benefiting its users, majority of which are lower middle class and poor. This congestion charge will function as a progressive indirect tax where those who consume will pay the tax, in this case the owner of cars circulating in a specific zone, and thus it should only have small negative effects on the poorest economic groups. Similarly, the improved affordable housing policy may result in potential benefits for vulnerable populations through increased access to safe shelter and services. Moreover it is expected to increase their household income and reduce multidimensional poverty by means of closing the gap on social deprivations, particularly on the dimension of access to public utilities and housing conditions. Better quality and quantity of infrastructure from the policies regarding 4G investments can result in significant improvements in regional convergence and reductions in poverty and extreme poverty through job creation. Lastly, even though the policy action for disaster risk management will indirectly affect poverty reduction and inequality, its implementation is a valuable input to minimize vulnerability of populations living in high risk areas.

POLICY AREA 1: SUSTAINABLE AND INCLUSIVE CITIES

Prior Action 1— The Government, through CONPES, approved the National Policy to Strengthen the System of Cities in Colombia (*Política Nacional para Consolidar el Sistema de Ciudades en Colombia*), which sets forth an action plan for strengthening, inter alia, the governance, financial management, physical and digital connectivity, and economic development of cities.

The development and implementation of a multi-sector policy framework based on the SoC approach will likely improve the livelihood of Colombia's poor. Those living in urban areas account for two in three of the poor and about three in five of the population belonging to the bottom 40 percent of the income distribution (Figure A5.1). Thus, improved management, provision, coverage, and regulation of services in these areas is likely to contribute to economic growth and benefit the poor disproportionately.⁶² Moreover, the actions proposed in the CONPES are expected to improve urban planning and service delivery; allowing cities to capture the benefits of urbanization.

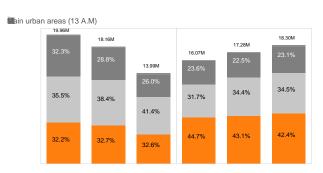
Correspondingly, improved institutional coordination across cities and developments in infrastructure will enhance welfare in Colombia. The resulting improvements in institutional coordination across and within cities are expected to increase their connectivity and functionality and therefore enhance the competitiveness and efficiency of their labor markets (i.e. improvements in labor market matching outcomes). Similarly, improvements in access to infrastructure are also expected to have a direct and positive impact on welfare and the Colombian economy. This will boost investment and employment, particularly in the construction and service sectors, and improve quality of life for residents (i.e. increase and improve the supply of quality services).

The foundations for the CONPES document outlined by *Misión Ciudades* are in accordance with best practices in urban development. The literature based on the Alonso-Mills-Muth model (AMM) explains that the concentration of economic activities in cities encourages the

⁶² Calderón, C., and Servén, L. 2004

sharing, matching and learning effects evoked by Puga and Duranton (2004); effects that create a virtuous cycle of economic growth.⁶³ The first mechanism refers to the sharing of indivisible goods and facilities (local public goods), sharing of gains and risks, all of which translate to benefits for economic agents. The matching mechanism refers to increasing the probability of successfully matching employees to firms according to their capabilities and specificities while mitigating hold-up problems.⁶⁴ Lastly, the learning effect refers to facilitating the creation and diffusion of knowledge in densely populated areas. The transmission of skills, ideas and information is easier in heavily populated areas. The overlap of the aforementioned effects, or virtuous circle, allows reaching better institutional and urban development coordination at regional and sectorial levels.

Figure A.5.1. Distribution of poor and bottom 40 percent across regions



Source: Authors' own calculations based on GEIH-MESEP (2002-2013).

The conclusions outlined bv Misión Ciudades are also in accordance to the concept of regional concentration externalities.65 The resulting spatial proximity has multiple positive impacts on the economic and social interactions of agents and gives rise to agglomeration economies enjoyed by producers and consumers; these justify the existence of a SoC and the need to improve the connectivity of regions and cities. Indeed, positive externalities lead to the phenomenon of "knowledge spillovers" that result in the formation of spatial networks.⁶⁶ generating several consequences such as "surplus" of knowledge and economies of

scale. In parallel it encourages agents to settle in the same place⁶⁷ or to be spatially closer or rapidly connected, increasing the efficiency of transport networks (particularly of public transportation system). The resulting connectivity has an enhancing effect on the productivity and quality of life of inhabitants that are part of the "System".

The policies outlined by *Misión Ciudades* also address the potential negative effects of urban agglomeration. Even though there are major economic benefits from urban agglomeration there are also diseconomies of agglomeration that can limit these gains. For instance, higher land prices and rents, congestion, pollution and environmental degradation are among these adverse effects. Most of these are currently present in Colombian cities and disproportionately affect the urban poor. The proposed prior actions intend to address these issues by strengthening the planning mechanisms to better leverage to agglomeration economies and reduce spatial segregation, improve physical and digital connectivity to facilitate knowledge spillovers, improve equity among cities through the provision of infrastructure services, strengthen access to financing for metropolitan and agglomeration-level infrastructure projects and improve urban planning and positively influence the urban spatial structure to capture the benefits of urbanization. Furthermore, other prior actions are also expected to enhance urban

⁶³ For instance, in Colombia 85 percent of GDP originates from urban areas (DNP 2012, System of cities).

⁶⁴ Hold-up problem refers to a situation where an agent (employee or employer) can directly influence the price of a product or a service (in this case wages); the agent is so important in the market that he is a "price-maker".

⁶⁵ Dixit, 1973; Henderson, 1974, Fujita, 1989; Glaeser, 2007

⁶⁶ Audretsch and Feldman, 1996; Kung and Wang, 2012

⁶⁷ Krugman, 1991

productivity as better transportation infrastructure such as a system of arterial roads and more and better run mass transit infrastructure generally, are strongly linked to greater agglomeration economies.

Overall, the six policy guidelines suggested by *Misión Ciudades* are in line with best practices as suggested by the literature. The institutional sphere of policy guidelines that refer to the sustainability of planning, institutional coordination and the financing of urban development assure the existence of the *sharing effects* mentioned above. Moreover, the remaining policy guidelines correspond to the matching and learning effects of "Micro-Foundations of Urban Agglomeration Economies:" the connectivity within and across the SoC, the promotion of productivity of each city and of the System itself, as well as the improvement of quality of life which assumes a decrease of social inequalities between cities.

Prior Action 2— The Government, through MT, has issued a regulation allowing its municipalities or districts with a population above 300,000 people to establish charges to motorists in connection with the use of urban areas with, inter alia, high traffic congestion and pollution in order to improve public transit.

Prior Action 3— The Government, through MT, has adopted a national technical standard for Electronic Vehicular Identification Systems (*Proyectos de Recaudo Electrónico Vehicular*) aimed at collecting data to identify ground transportation vehicles through radiofrequency systems.

The objective of a congestion pricing scheme is to internalize the negative externalities generated by the increasing traffic congestion. Drivers do not usually take into account the social cost of driving, which are considerably higher than their own direct cost. Externalities to society include rises in commuting times, loss of productivity of individuals, higher transport costs and increased levels of greenhouse gas –GHG- and other local pollutants. In line with economic theory, the proposed decree seeks to internalize these externalities by pricing those contributing to congestion and reduce car usage closer to an efficient level. Moreover, the collected proceeds from the scheme are earmarked for investments to improve the public transportation system. This guarantees the policy instrument improves and makes more attractive public transit, which is mainly used by the poor, as long as the increased demand and quality of public transportation does not lead to price increases.

By earmarking the collected resources for the re-investment and improvement of public transport, the proposed congestion pricing policy is ultimately beneficial for the poor and the bottom 40 percent. In the short-term, a reduction in congestion has the potential to decrease commuting times,⁶⁸ reduce transport-related emissions (associated with respiratory diseases) technologies, and reduce traffic related accidents. In the medium-term benefits are related to improvements in public transit service provision (coverage, timing, connectivity and integration of urban transport) resulting from the reinvestment of revenues collected.

In the analysis presented herein, Bogota was selected as a case study because it is the largest city in Colombia, and as such, currently faces significant mobility challenges due to increased traffic congestion. The city has also been developing a policy agenda to address these challenges. Bogota is the largest city in Colombia and one of the most densely populated cities in Latin America. The city has 7.65 million inhabitants, accounting for one fifth of Colombia's urban population.⁶⁹ Since 2002, private motor vehicle ownership and use has

⁶⁸ For instance, in a city like Bogota, the poor have twice as high a commuting time than the highest income groups.

⁶⁹ Authors own calculations based on GEIH (2013).

doubled⁷⁰ in Bogota. Projections based on this rate indicate it will double again over the next decade, which is feasible considering the high growth pace of the middle class in Bogota⁷¹ and the global trend in car ownership. The local administration has implemented a variety of successful and globally recognized transportation programs in order to improve public transport and tackle traffic congestion. These include, among others, more than 96 km of Bus Rapid Transit corridors (Transmilenio), a city-wide reform of the traditional bus system to improve service provision (called SITP), and more than 376 km of bike lanes, system limiting car circulation during peak hours by license plates (*Pico y Placa*).⁷² Studies are also underway to build the first, 26 km underground metro line.

The proposed congestion pricing scheme is seen as a complementary tool to an integrated transport demand management strategy and less restrictive than the current congestion policy of *Pico y Placa*. Policies implemented so far have been a step in the right direction to improve mobility in Bogota, but further measures are needed to keep abreast of the congestion resulting from the large increase in private vehicle ownership and use intensity. The congestion charging scheme proposed is less restrictive than the current *Pico y Placa*, particularly for those individuals that use a car for their daily economic activity. In other words the introduction of the congestion charge would give individuals flexibility to choose whether to pay to circulate or not depending on their perceived economic benefits or their willingness to pay for using a private car. The new policy can replace *Pico y Placa* in Colombia's largest cities to further reduce negative externalities.

In the end of 2012, the local administration, with the support from the Ministry of Transport, launched a study to guide the conceptualization of a congestion charging scheme in Bogota to substitute the *Pico y Placa*. The study was carried out by a consulting firm that helped Singapore with its scheme design and implementation.⁷³ It proposed three zones encompassing the city's central business district where the congestion pricing may be adopted, varying from 26 km² to 63 km². These charging zones encompass the Urban Planning Zones (UPZ) with the highest levels of employment and income in the city (in fact more than 40 percent of the city's economic activity is found in these zones).⁷⁴ The study advises that only road users commuting into these zones in private vehicles are to be charged, residents in the proposed zone should be exempt.

⁷⁰ Secretaría de movilidad Bogotá (Movilidad en cifras 2012).

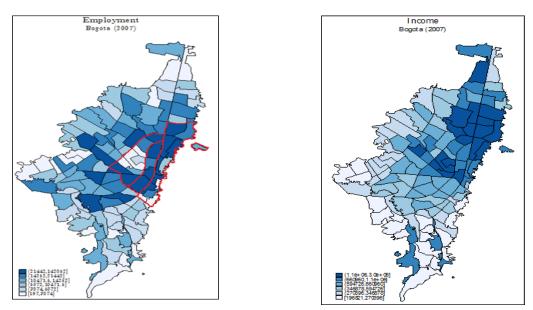
⁷¹ See Angulo et al., 2011

⁷² Traffic restriction system "Pico y Placa" is based on the number of the plate of each private on peak hours.

 ⁷³ See "Bogota Travel Demand Management Strategies and Action Plan" (CPG consultants. 2012).
 ⁷⁴ Figure A.6.2 displays the UPZ that makes part of pricing zones.

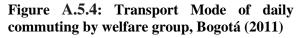
Figure A.5.3: Average Income

Figure A.5.2: Proposed Congestion Pricing Zone and Concentration of Employment



Source: Authors' calculations based on data from *Encuesta de Calidad de Vida* (ECV) 2007. Note : The red line is the proposed congestion zone. Note: The Map displays the three different areas proposed. Layering of blue color indicates the concentration of employment on each UPZ: the darker the blue, the higher the concentration of employment in each zone. The Map displays the average income of inhabitants of each UPZ: the darker the blue, the higher the average income.

The decrease in congestion is expected to benefit the poor and bottom 40 percent the most, who are captive users of public transport and non-motorized modes. More than 90 percent of Bogota's poorest households (the lowest quintile) use public transport as their mode of transport for daily commuting, whereas about 78 percent of high-income households use a car (Figure A.5.4). The congestion tax is progressive given that the fee is charged to private-vehicle owners who tend to be non-poor higher-income individuals and because the revenues collected are used to improve public transit, which is mainly used by the poor. Furthermore, given that the poor face longer commuting times (Figure A.5.5), improvements in traffic congestion and better public transit provision will disproportionately benefit them.



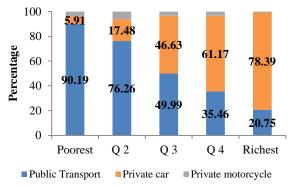
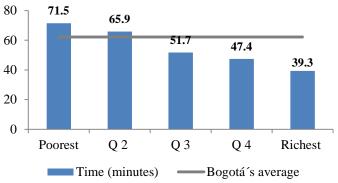


Figure A.5.5: Minutes of daily conmuting by income groups, Bogota (2011)



Source: Authors' calculations based on EMOB2011, this graph includes Private car, Private motorcycle and public transportation. Given that the surveys do not have continues measure of income the definition of the groups is explained in the Box A.5.1.

Source: Authors' calculations based on EMOB2011, this graph includes Private car, Private motorcycle and public transportation. Given that the survey does not have continuous measure of income the definition of the groups is explained in the Box A.5.1.

The re-investment of toll revenues from the congestion tax on improvements in urban transportation is expected to benefit the poor the most. According to the CPG Study (2012), the planned fee of around COP\$5,000 (roughly US\$2.7), approximately the hourly cost of parking, would generate monthly revenues between COP \$8,189 million (US\$ 4.4 million) and COP\$12,218 million (US\$6.6 million).⁷⁵ The benefits of the investment of these revenues may take many forms Those worth noting are: (i) further reduction in commuting time due to increased frequencies, regularity, punctuality and reduced total journey times, which imply more income considering the opportunity costs of time;⁷⁶ (ii) reduction of public transport costs associated with optimized use of the bus fleet, lower fuel consumption, and lower accident risk probability; (iii) increase in spatial and temporal coverage (including night buses) of the transportation system, greater integration between systems and routes (decreased transfer costs and transfer times); and (iv) improvement and construction of additional bike lanes and walking strips for non-motorized modes, which are expected to result in lower emissions, less pollution and positive health benefits for the affected populations.⁷⁷

 Table A.5.1: Increase in Government Revenues Resulting from the Congestion Tax

 ('000 COP)

	(000000)				
	Assumed level of substitution betwee	een private and public transportation			
Tariff Scheme	eme 25 50				
2,000	4,979,469	3,336,552			
5,000	12,218,677	8,189,814			
8,000	19,336,081	12,940,616			

Source: Authors' calculations based on EMOB 2011.

The congestions tax is expected to have virtually no impact on moderate or extreme poverty. Given that the congestion charge is an indirect tax, it will be paid only by those private car owners commuting to congestions zones. In order to estimate the extent to which the poor will be affected a simulation analysis was conducted. The simulation considers that the tax will reduce the disposable income of people who use a private car and decide not to switch to public transport. In addition the policy will also increase the income for those who decide to switch from private to public transport, given the reduction of expenditure in transportation of those households (See Box A.5.1 for more details). Because the poor mainly rely on public transportation as their mode of transport, the policy is expected to have only a small negative effect on their income.

The results show that the effects of the congestion charge on poverty headcount are negligible and that the total tax collection is mainly paid by the better-off households. The results indicate that the levels of extreme and moderate poverty will not increase as a result of the introduction of the congestion tax (Table A.5.2). Only under the relatively more extreme scenario that assumes that 25 percent of car users shift from private to another mean of transportation, the policy results in a marginal increase 0.01 percentage points in both moderate and extreme poverty. To contextualize this impact, note that the average yearly poverty reduction in Bogota has been roughly 2 percentage points. Moreover, the results show that the congestion

⁷⁵ See Table A.6.1. The exact amount will depend on the substitution away from private transport and towards public transport given the change in relative prices generated by the congestion tax.

⁷⁶ Zacharias, A., Antonopoulos, R., and Masterson, T., 2012

⁷⁷ Currie, J., and Walker, W. R., 2009

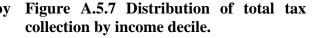
tax is expected to be progressive in absolute terms (Figure A.5.6), that is the better off are expected to contribute more than the less well off. In particular, according to the simulation results, the richest quintile (the top 20 in the income distribution) will contribute 71.6% of total amount collected of the congestion tax (Figure A.5.7).⁷⁸

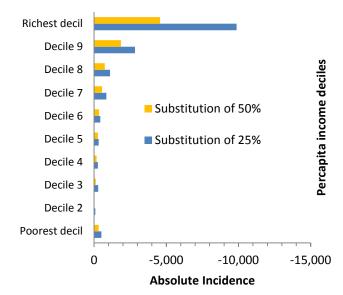
Welfare measure	Baseline	Percentage of substitution between private and public transport		
		25	50	
Extreme poverty (%)	5.01	5.02	5.02	
Moderate Poverty (%)	16.45	16.46	16.45	
		Differences respect to the baselin		
Extreme poverty (percentage points)		0.01	0.01	
Moderate Poverty (percentage points)		0.01 0.0		

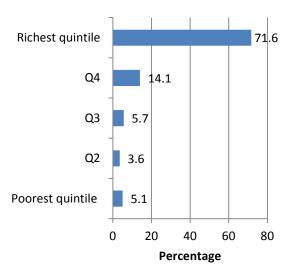
Table A.5.2 Estimated Im	pact of Proposed Conge	estion Tax on Povert	v and Income Measures.

Source: Authors' calculations based on EMB 2011, to estimate the effect on welfare measures and EMOB 2011 to estimate the number of people affected at the locality-level by the congestion charge.

Figure A.5.6 Expected average tax paid by Figure A.5.7 Distribution of total tax income decile (numbers in COP).







Source: Authors' calculations based on EMB 2011.

Source: Authors' calculations based on EMB 2011.

⁷⁸ One potential explanation of why the poorest decile may contribute more of the congestion charge than other income groups (income deciles 2 to 5) in absolute terms (See Figure A.6.6) is that because of data limitations poverty is measured by income and not consumption, and thus the poorest decile may include the frictional poor which may own a car (frictional unemployed, students and individuals that depend of seasonal income generation activities such as tourism services).

Box A 5.1 Measuring the Direct Effect of the Congestion Charge on Poverty.

The congestion charge is an indirect tax that private car owners commuting to congestions zones will have to pay. In order to estimate the extent in which it will affect the less well-off a static micro-simulation is developed. Multiple scenarios of the willingness to pay the congestion tax are evaluated, considering the percentage of substitution between private and public transportation.

The study uses Bogota as a case study, it incorporates information of daily commuting provided by the Bogota Commuting Survey -2011- (EMOB 2011) and information about welfare and socioeconomic indicators provided by the Bogota Multi-purpose Survey -2011- (EMB 2011). Both surveys are done at the individual level and are representative by locality.

Previous studies about demand for transport indicate some areas where the congestion charge should be applied; these areas are mainly business centers (CPG 2012). The study selects the congestion area 1 to develop the simulation. Using the EMOB (2011), the simulation estimates the number of people of locality and income level who commute daily to this area by private transport. Residents in this business area are exempt from this tax.

In a second step the simulation uses the EMB 2011 to select from locality and income level, individuals who will be taxed. Selection is done randomly for people that use private transport for their daily commute. Once these are selected, two opposing effects are applied on household per-capita income:

- i) Reduction to household per-capita income in the amount of the monthly congestion tax (compute on base 5000 COP daily)
- ii) Increased welfare for people who change from private to public transportation; this is mainly due to savings on fuel and parking resulting from the selection of public transport.

Even though the simulation was not able to estimate shifts in commuting times, it is expected that due to reduced congestion and improved public transport users will experience lower commuting times.

After these changes in per-capita income, the new poverty measures are estimated. This simulation is developed for two scenarios of private car users who change to public transport: 25% of substitution and 50% of substitution.

Limitations: i) Selection to pay the tax could not be random. ii) Information about the use of private transport to get to work is not available in the surveys.

Prior Action 4: The Government, through the MVCT, has adopted a standardized methodology to be used by its municipalities and districts to select, collect and consolidate, in a national inventory, information relating to human settlements located in areas prone to landslides and floods.

The development of a National Inventory of Settlements in High Risk Areas (NISHRA) will help the GoC reduce the extremely high levels of vulnerability in Colombia. As many as 84.7 percent of Colombian citizens and 86.6 percent of the country assets are located in areas exposed to two or more natural hazards. These include both high (earthquakes, volcanic eruption, and hurricanes) and low impact events (floods and landslides). Colombia has an average of over 600 reported disasters triggered by natural events every year– this is the highest in Latin America. More importantly, since natural hazards disproportionately affect the agricultural sector, there are significant losses that impact production and markets. Rapid urbanization, the growth of urban populations and assets coupled with poorly or unplanned development are the main drivers of the costs associated with disasters in Latin America.⁷⁹ In the case of Colombia, it is estimated that a major earthquake near any of its major cities could generate losses of US\$12.7 billion for Bogota, US\$7.5billion for Medellin, and US\$6.4 billion for Cali.⁸⁰

⁷⁹ The World Bank, 2013a

⁸⁰ Cardona, et al. 2004a and 2004b.

Strengthening risk mitigation and adoption of a standardized methodology across municipalities can prevent disasters from disrupting social gains observed in Colombia over recent years. The inventory will consolidate the minimum information necessary for decision-making on high risk areas. Moreover, it will identify and include up to date information on population, number of households, infrastructure, public space, and equipment located in high risk zones. This information is a valuable input for the design and implementation of effective policies and actions at the national, regional and local level to lessen risk and guarantee the wellbeing of residents.⁸¹ It will give the GoC a broad overview of settlements in perilous areas with predominantly poor populations. Through this policy more preventive measures can be taken to protect the less-well off in Colombia.

Exposure to weather-related risks is positively associated with poverty levels. A recent study for the LAC region shows evidence of positive correlation between natural disasters and higher incidence of poverty and other welfare indicators.⁸² In the case of Colombia, a study on poverty and natural disasters shows that hazards increased the percentage of the population that suffers hardships associated to "educational conditions in the home" and "conditions of children and youth." The analysis also specifies that natural disasters between 1996 and 2005 increased a household's probability of being poor.⁸³ Overall losses generated by disasters in the most vulnerable municipalities affect education and health and deepen poverty factors due to the low recovery capacity of local governments and the population affected.⁸⁴ These results highlight the vulnerability of poor populations to external shocks and the importance of stronger risk management in Colombia.

Disaster risk management is essential to mitigate potential negative impacts on the population, especially for the lower-end of the income distribution. Poorer socioeconomic conditions make households more sensitive to the impact of hazards and less able to respond, cope and adapt to disasters. The poor have a lower threshold for enduring external shocks and barely have financial resources or capital, if any, to rely on.⁸⁵ The regions with the highest propensity for floods also have the highest indices of poverty, qualitative housing deficits, lowest coverage of water supply and sewage, and highest backwardness and rurality indices.⁸⁶ The development of a national risk inventory can reduce this vulnerability by giving the government knowledge regarding the magnitude of the problem and thus design public policies to mitigate risks. Even though the planned inventory will not directly contribute to poverty or inequality reduction it is an important tool to protect these groups from unforeseen events.

POLICY AREA 2: ACCESS TO AFFORDABLE HOUSING

Prior Action 5: The Government, through MVCT, has established the principles of regulation for the carrying out of the Priority Interest Housing Program for Savers (*Programa de Vivienda de Interes Prioritario para Ahorradores*), which is aimed at providing different types of subsidies to selected families to facilitate the purchase of a house..

⁸¹ The World Bank; Ministry of Housing, Cities and Territories Government of Colombia, 2014

⁸² The World Bank, 2013b

⁸³ Sanchez, F. and Calderon, S., 2012

⁸⁴ García et al. 2011

⁸⁵ Lal, P.N., Signh, R., Holland, P. 2009

⁸⁶ García et al. 2011

The Affordable Housing with Voluntary Savings (VIPA⁸⁷) program is expected to directly benefit the poor and extreme poor. In particular, increasing the availability of affordable homes will benefit the bottom 40 percent of the income distribution⁸⁸ not only by increasing their access to safe shelter, but also by increasing their access to services, such as water, sanitation, and electricity. These outcomes will lead to net monetary and multidimensional poverty reductions. Increasing the availability of affordable homes will also allow low-income beneficiaries to access a relatively low-risk financial investment otherwise inaccessible to them. It will also increase their disposable income and thus their consumption, leading to a reduction of poverty and social inequalities in the country. Additionally, the increased demand for construction services implied by VIPA is expected to result in job creation.^{89, 90} In particular, the introduction of affordable housing policies in developing countries reduce urban poverty indices and boost the activity of the construction sector creating more jobs that are likely to benefit the less well-off (Figure A.5.8) during and after the implementation of the program.⁹¹

Particular attention should be given to the adoption of complementary measures to ensure the new housing developments are integrated into the urban fabric. While VIPA can successfully increase the supply of housing for lower income segments, the program should include mechanisms to ensure new developments are part of a sustainable urban plan and are adequately connected to jobs, markets and amenities. Complementary policies and programs, such as local economic development strategies and public-private models for basic infrastructure services provision, will be needed to tackle potential challenges that may arise as a result of the increase in access to affordable housing.⁹² In the absence of such complementary policies, the program is at risk from lack of adequate maintenance, poor provision of public services, overcrowding, decrease of neighboring property values, and lack of complementary infrastructure (education, health, recreation, etc.). The MVCT has already identified the need to complement the housing programs to this end and is in the process of designing new schemes or linking with existing initiatives.

VIPA represents an important landmark in housing policy in Colombia as it targets poor and vulnerable households. The scheme encompasses household savings, a housing subsidy, credit insurance and a mortgage loan provided by the financial market. In particular, the subsidy allows beneficiaries to demand houses, thus effectively allowing them to enter the housing market where suppliers (developers) compete to capture the demand for their products (homes). Competition and robust urban and construction standards ensure that homes purchased in the market are good-quality homes (well-equipped and built in relatively good locations). On the other hand, the eligibility requirements (i.e. savings) as well as the mortgage increase the sense of ownership and reduce the risk of vacancy. The program was also designed to overcome the important operational challenges faced previously by the main up-front subsidy program⁹³. Finally, by incentivizing both saving and lending to low-income households, the program also represents a step towards linking the less-well off to financial markets and services.

92 Gilbert, 2014; Isalou, Litman and Shamoradi, 2014

⁸⁷ Programa de Vivienda de Interés Prioritario para Ahorradores. See Conpes document 3746 of 2013

⁸⁸Among conditions to be eligible to participate in the program there is that household demanders must have earnings not superior to 2 minimum monthly salaries. A minimum monthly salary is about 616.000 COP which is approximately 320 US dollars.

⁸⁹ VIPA program expect to create 100.000 jobs during the construction of houses. See Conpes document 3746 of 2013.

⁹⁰ Joshi and Khan 2010

⁹¹ Joshi and Khan 2010, Govender, Barnes and Pieper 2011, Rodriguez and Sugranves 2011, Medrano and Spinelli 2014

⁹³ The FONVIVIENDA subsidies struggled operationally since the subsidy and the loan materialized at different moments in time, thereby not allowing the subsidy to act as down-payment effectively.

By design, households that fit the income eligibility requirements are concentrated at the lower end of the per-capita income distribution. About 89.2 percent of households that meet the income eligibility criteria either belong to the bottom 40 percent (66.7 percent) or to the vulnerable class (10.8 percent) (Figure A.5.8). Moreover, the majority of households that belong to the bottom 40 percent are either poor or extremely poor. The remaining eligible households belong to the 4th and 5th quintiles of the per-capita income distribution. Given that demand for homes is likely to exceed supply,⁹⁴ VIPA's final selection of beneficiaries among eligible households could be improved particularly if the program is to be continued or scaled-up. The target rule could focus on: (i) trying to exclude better-off households⁹⁵ and (ii) incorporating poor households but with the capacity to pay the mortgage loan.

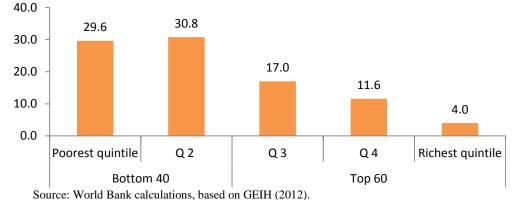


Figure A.5.8 Distribution of potential beneficiaries by quintiles of per capita income

Simulation results based on household data⁹⁶ from 2012 show that VIPA is expected to have a positive impact on shared prosperity and poverty reduction. In order to determine the impact of VIPA on monetary poverty, poverty rates implied by the national poverty line are reestimated after the implicit value of rent is added to the per-capita monthly income of benefited households.⁹⁷ Under the least optimistic scenario, where the assignment of beneficiaries from the pool of eligible households is random (Scenario B in Table A.5.3), there is a 0.18 (0.08) percentage point reduction in poverty (extreme poverty) relative to the baseline scenario. In other words, participation in the program allows 0.26 percent of households to graduate out of poverty or extreme poverty. The program also leads to an increase in the shared prosperity indicator by 0.50 percent. this is a sizable change given the annualized growth of this indicator between 2008 and 2013 was 6.6 percent. Lastly, the positive impact of VIPA on poverty reduction and extreme poverty is anticipated to be felt nationwide,⁹⁸ which is in favor of the reduction of disparities between departments as shown in Table A.5.4.

⁹⁴ In Medellin alone there were 6,257 households hoping to register for the program but only 2,320 of these would ultimately become beneficiaries of the program.

http://www.elcolombiano.com/BancoConocimiento/1/1698_familias_se_anotaron_en_la_feria_de_vivienda_vipa/1698_familias_se_anotaron_en

distribution.

⁹⁶ The analysis of the impact of the policy on monetary poverty is based on the Gran Encuesta Integrada de Hogares.

⁹⁷ In particular, an imputed housing value, which is the mean rent paid by households of similar socio-economic characteristics and that live in the same region, is added to the income of selected households. For the simulations, households are selected a "beneficiaries" following two different subsidies allocation assignments: under the first, beneficiaries are randomly selected from the eligible population; under the second, the population of beneficiaries is further restricted to include only those that are poor (i.e. households whose monthly per-capita income falls below the national poverty line of Colombia).

⁹⁸ This is likely the result of Resolution 948 of 2013, which calls for the regional allocations of subsidies.

Walford maggings		After	VIPA
Welfare measures	Baseline	Scenario A	Scenario B
Extreme poverty	10.42	10.10	10.34
Moderate poverty	32.72	32.63	32.54
Per-capita income of the bottom 40 (COP 2012)	165,817	167,763	166,647
	Change respect to baseline		
Change in Extreme poverty (pp)		-0.32	-0.08
Change of Moderate poverty (pp)		-0.09	-0.18
Share prosperity (growth rate)		1.17	0.50

Table A.5.3 Im	pact of VIPA o	on welfare meas	sures by different	scenarios
	pace of the first			Section

Source: Own computes, based on GEIH (2012). Share prosperity is defined as the growth of the per capita income of the bottom 40%. Note: Scenario A, scenario selects the beneficiaries based on their per-capita income, from the less well-off B selects the beneficiaries randomly between the set of potential beneficiaries.

	E	xtreme pove	rty	Moderate poverty		
Department	Base Line	Change respect to Baseline (pp)		Base Line	Change respect to Baseline (pp)	
	(%)	Scenario A	Scenario B	(%)	Scenario A	Scenario B
Antioquia	8.19	0.06	0.03	26.98	0.06	0.09
Atlántico	4.71	0.84	0.11	34.18	0.09	0.27
Bolivar	13.27	0.07	0.01	44.42	0.05	0.11
Boyacá	10.98	0.12	0.02	35.67	0.02	0.16
Caldas	10.4	0.16	0.04	35.51	0.01	0.16
Caquetá	10.25	0.12	0.05	42.25	0.04	0.06
Cauca	34.07	0.06	0.14	62.13	0.03	0.12
Cesar	16.1	0.79	0.3	47.03	0.09	0.48
Chocó	40.79	0.04	0.14	68.14	0.04	0.04
Cordoba	27.52	0.41	0.11	60.65	0.03	0.08
Cundinamarca	7.09	0.32	0.12	23.09	0.14	0.23
Guajira	27.78	0.06	0.09	58.53	0.05	0.12
Huila	16.73	0.04	0.02	45.68	0.03	0.04
Magdalena	17.48	0.03	0.02	52.52	0.01	0.04
Meta	9.2	0.12	0.05	29.61	0.07	0.12
Nariño	17.22	0.03	0.01	50.96	0.01	0.1
Norte Santander	10.72	0.66	0.12	40.49	0.06	0.37
Quindío	12.16	0.28	0.19	39.1	0.09	0.39
Risaralda	6.43	0.18	0.12	28.56	0.07	0.14
Santander	4.64	0.14	0.03	20.92	0.05	0.1
Sucre	12.81	0.03	0	51.83	0.05	0.08
Tolima	15.36	0.11	0.28	42.54	0.2	0.25
Valle del Cauca	7.45	0.11	0.01	27.03	0.02	0.1
National	10.42	0.32	0.08	32.72	0.09	0.18

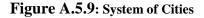
Table A.5.4 Effects of VIPA Monetary Poverty at department level.

Source: Authors' own estimates, based on GEIH 2012

Prior Action 6— The Government has adopted a legal framework establishing integrated political, administrative and fiscal regulations for the management of its metropolitan areas.

Strengthening the legal framework of metropolitan areas is expected to improve the planning, coordination and information sharing across jurisdictions and administrative boundaries to ensure that resources are managed effectively and public service delivery is both adequate and efficient.⁹⁹ The planned development of metropolitan areas in Colombia is expected to expand the possibilities of economic agents to both access services and reach employment centers at minimum costs. The poor are usually the most affected by inadequate access to services and markets,¹⁰⁰ either due to their poor coverage or quality. Therefore, ensuring there are coordination mechanisms in place within and across urban area municipalities is likely to benefit them disproportionately. This is expected to have a significant impact on the reduction of inequality of access to services¹⁰¹ and consequently affect the future poverty status of individuals.¹⁰²

The growth of urban areas over the last decades exceeded the existing administrative has municipal boundaries. Following the Duranton (2004) methodology to define functional cities based on daily migration of population, the mission of cities defined 18 agglomerations conformed by 113 municipalities (out of 1,123 municipalities registered in the country according to the DANE). These municipalities represent 81 percent of Colombia's total urban population. In other words, 81 percent of the urban population interacts daily neighboring cities. Therefore with policies addressing the provision of urban services should be developed within the context of metropolitan areas for two reasons: first, the policies of one city generate direct spillovers on the welfare of neighboring cities, and second, the policy design under a SoC allows the achievement of economies of scale thus reducing the implementation costs of the various policies. This is particularly true for





Source: Misión Ciudades (2013).

urban services such as urban transport, solid waste and wastewater which benefit from economies of scale and can become more attractive for public and private investment.

Improvement in the efficiency of basic service provision associated with the existence of a stronger regulatory framework for urban areas will allow for the extension of coverage and improvements in quality of services, which are generally lower among low income households. As shown in Figures A.5.10 and A.5.11, there is a difference between the Human Opportunity Index (HOI) and coverage rates, which means Colombians face inequality of opportunities in access to some services. This is mainly explained by parent's education and per-

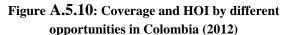
⁹⁹ Lall, S.V., 2013; Bahl et al., 2013

¹⁰⁰ Indeed, this is part of the definition of poverty in the multi-dimensional sense.

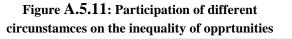
¹⁰¹ Iwanami 2008, Calderón and Servén, 2004

¹⁰² Ferreira, 2012

capita income, which suggests the poor (who have lower levels of education and lower income) have the lowest access to the different services (i.e. sanitation, electricity etc.). The reduction of inequality of opportunities is particularly relevant for improving current as well as future levels of inequality in Colombia, a country where the inequality of opportunities in access to services faced by the poor explains the inequality in labor market outcomes.¹⁰³ Overall, better provision of basic services through a stronger regulatory framework for urban areas can contribute to lower inequality of opportunities by reducing inequality in circumstances and will eventually translate into lower income inequality and higher intergenerational equity.









Source: Own elaboration based on World Bank (2014) using SEDLAC (CEDLAS and the World Bank). Note: SEDLAC use GEIH household survey for Colombia. The circumstances used in this analysis are the gender of the child, parents' education, family per capita income, number of siblings, presence of both parents, gender of the household head, and urban or rural residence. The nearest year to 2000 or 2012 is used for countries in which data are not available in that year.

Prior Action 7— The Government, through MT, has created the Transport Infrastructure Planning Unit (*Unidad de la Planeación de la Infraestructura de Transporte*) and the Infrastructure and Transport Regulatory Commission (*Comisión de Regulación de Infraestructura y Transporte*) to strengthen the Government's planning and regulatory capabilities in the transport sector.

Prior Action 8— The Government, through CONPES, has approved guidelines to develop a program to regulate its fourth generation of road concessions, which program is aimed at improving the existing national road network.

The recently approved national policy for Colombia's Fourth Generation (4G) of Road Concessions as well as the new Infrastructure Law, aim to address transport infrastructure projects' delays which represent important bottlenecks to growth and competitiveness in Colombia. The resulting investments in infrastructure are expected to have a direct and positive impact on the economy, boost public-private partnerships, and employment generation across the country, particularly in the construction sector. The related and much needed improvements in infrastructure are also expected to increase competitiveness and environmental outcomes, reduce accidents and crime- which occur disproportionally among individuals from low socio-economic status- and to decrease the operating costs of vehicles. Moreover, the proposed investments are also projected to have a positive impact on the reduction of inequality by increasing connectivity, boosting tourism and jobs in traditionally isolated regions, and improving access to markets and

¹⁰³ In particular, according to Ferreira (2012), over 20 percent of total inequality in Colombia is attributable to inequality of access to basic services, as measured by the Human Opportunity Index (HOI).

the supply of quality public services in rural areas. The overall positive impact on growth and income inequality suggest infrastructure development can be extremely effective to combat poverty. Better quality and quantity of infrastructure can result in economically significant improvements in inequality and growth.¹⁰⁴

The investment scheme proposed by 4G will generate at least 180,000 jobs throughout the national territory. DNP-DEE (2013) uses a Competitive General Equilibrium (CGE) model to estimate the effect of the investments being generated by 4G on employment, growth and productivity. In terms of employment, it is estimated that these projects will generate between 180,000 and 450,000 jobs¹⁰⁵ that will be distributed across the 24 departments where the different corridors will be built. Approximately 35,000 to 180,000 jobs are in projects that are currently being procured, while the remaining 145,000 thousand originate from medium-term projects. The impact assessment of the policy is based on the most conservative assumption (i.e. assuming that the policy results in 180,000 new jobs) and in two stages: the first covers short-term investments;¹⁰⁶ the second stage covers the full set of investments (i.e. both short and medium term-investments).

Even under the most conservative scenario, employment generation results in significant reductions in poverty and extreme poverty. An analysis based on micro-simulation is used to estimate the effect of creating 180,000 jobs on the labor income of the affected households (See Box A.5.3).¹⁰⁷ With the conservative scenario, which only considers the effects of projects that will be developed in the short run, results indicate that new jobs will lead to a reduction of moderate and extreme poverty by 0.5 and 0.3 percentage points respectively. Under the more optimistic scenario, which considers the realization of both the expected short- and medium-term infrastructure projects, moderate and extreme poverty are reduced by 1.1 and 0.5 percentage points respectively

The improvements in infrastructure and poverty reduction occur across the national territory. Since investments are expected to take place throughout the country, poverty reduction is also expected to occur nationwide. The simulation results presented in Table A.5.5 reveal that poverty reduction exceeds 0.2 percentage points in 20 of the 24 *Departamentos*. Although the returns to infrastructure investments are expected to benefit the entire country, these are likely to have a greater positive development impact on *Departamentos* that were previously disconnected from the national and international economies. In other words, the policy is expected to promote regional economic convergence.

		Poverty			Extreme poverty				
Departmento	Baseline (%)	Short-term investments (%)	All 4G investments (%)	Baseline (%)	Short-term investments (%)	All 4G investments (%)			
Antioquia	27.1	25.9	25.5	8.3	8.0	7.3			
Atlántico	33.9	32.2	32.2	4.7	4.5	4.5			
Bogotá DC.	11.9	11.9	11.9	2.1	2.1	2.1			

¹⁰⁴ Calderón and Servén, 2014

¹⁰⁶ Short-term investments refer to ongoing investments that are expected to be developed in a 2-5 year window.

¹⁰⁷ For the simulation, a salary is randomly assigned to individuals who are unemployed and who, by their socio-economic and demographic profile, are likely to work in the construction sector. After salaries are assigned to these individuals (i.e. added to their total income), moderate and extreme poverty are recalculated using the official national moderate and extreme poverty lines.

¹⁰⁵ CONPES 3760.

Bolivar	42.8	41.3	41.1	12.4	12.2	12.1
Boyacá	33.8	33.0	32.5	9.6	9.6	9.6
Caldas	35.7	33.8	33.3	10.6	9.6	9.3
Caquetá	42.1	42.1	42.0	10.0	10.0	10.0
Cauca	61.1	61.1	59.5	33.6	33.6	32.7
Cesar	45.3	43.3	43.1	15.2	13.7	13.0
Cordoba	60.3	60.3	59.4	27.7	27.7	27.3
Cundinamarca	21.3	19.6	19.6	4.7	4.1	4.1
Choco	69.0	69.0	68.9	41.5	41.5	41.5
Huila	46.6	46.6	44.6	17.7	17.7	17.4
La Guajira	57.0	57.0	55.3	25.5	25.5	25.0
Magdalena	53.8	53.8	53.8	18.7	18.7	18.7
Meta	30.1	30.1	26.2	9.5	9.5	8.0
Nariño	50.2	50.2	49.1	17.4	17.4	16.6
Norte De Santander	40.7	38.6	37.8	11.2	10.7	10.5
Quindio	38.2	38.2	36.1	11.8	11.8	10.8
Risaralda	28.4	28.4	27.0	6.6	6.6	6.3
Santander	20.3	19.5	19.3	4.2	4.2	4.2
Sucre	52.1	52.1	49.9	12.8	12.8	12.4
Tolima	41.8	40.4	40.1	15.5	15.0	14.9
Valle Del Cauca	27.4	26.4	26.0	7.7	7.4	7.4
Total	32.7	32.2	31.6	10.5	10.2	10.0

Source : Own estimations based on DANE-MESEP, GEIH (2013)

A regional growth convergence analysis was conducted to estimate the potential impact of infrastructure investment on territorial disparities. The analysis follows the concepts of absolute and conditional convergence proposed by Barro and Sala-i-Martin (1991). First, an empirical analysis focuses on the trend of GDP per capita convergence among *Departamentos* from 2003-2012. This analysis is useful to determine whether growth rate of per capita GDP is correlated with initial levels of this same variable over time. A negative correlation indicates that poorer regions are catching up with richer ones while a positive one indicates the dispersion between departments is increasing. Furthermore, analysis of conditional convergence using the level of public investment in road infrastructure in each *Departmento* is used to identify the role of road infrastructure in the regional convergence process. Even though the policy focuses on infrastructure development, the variable level of public investment is utilized to approximate the effects of road infrastructure on income convergence. (See Box A.5.3).

Public spending on road infrastructure has been an important factor of the regional convergence process between rich and poor *Departamentos in* **Colombia.** For the period 2003-2012 there is evidence of a negative correlation between *Departamento* level growth rates of GDP per-capita and their initial level of income. This implies that the poorest *Departamentos* experienced higher economic growth than richer ones, but this relationship is not statistically significant.¹⁰⁸ Nonetheless, this association becomes statistically significant after taking into account the effect on the regional convergence process of public spending in road infrastructure by *Departamento.*¹⁰⁹ Thus, there is evidence of regional convergence in Colombia between poor and rich *Departamentos* conditional on higher investments in road infrastructure over the last decade.

¹⁰⁸ See Table A.6.6 Column 1.

¹⁰⁹ This result is robust to different specifications, See Column 2-4 of Table A.6.6

Box A.5.3 Prospective impacts of 4G infrastructure projects on Employment and Poverty Reduction

This analysis is based on the overall results of a Computable General Equilibrium Model, calibrated by DNP (2013) which estimates that the investments planned in the 4G project will create between 180,000 and 450,0000 jobs. The micro-simulation conducted will use the lower bound-conservative estimates (180, 000 jobs).

The 4G infrastructure investments could be grouped in two sets: (i) ongoing investments, those which are expected to be developed in a 2-5 year window, these will be referred to as short-term investments, and (ii) medium-term investments. According to DNP-(2013) the first will create around 32,000 jobs while the second will create the remaining 148 thousand jobs. All simulations will be done separately by short- and medium-term investment. The results of these simulations are based on the data of the 2012 labor force survey (GEIH).

The micro-simulation model distributes the total number of jobs at the national level (N) by *Departamento* (n_d) using the proportion of road kilometers of 4G in each *Departamento* relative to total kilometers planned in the entire 4G policy.

In order to assign jobs to the unemployed a logistic model is computed for each *Departamento*. The model uses as a binary dependent variable that defines if an employed individual belongs to the construction sector. Based on the model's coefficients the likelihood of being hired by the construction sector is computed for the unemployed.

Finally, two variables are used to determine the draw of the n_d jobs, the first is a dichotomous variable that flags unemployed individuals that have previous experience in the construction sector, and the second one is simply the probability of being hired. The micro-simulation sorts by both variables; it will hire the first n_d unemployed who has experience in the construction sector and also has the highest probability of being hired within the same sector. Once individuals are hired, the micro-simulation imputes wages based on the hot-deck method and re-estimates the household per-capita income and poverty indicators.

Limitation and assumptions: (i) the number of workers in the construction sector is low in the labor survey. (ii) The simulation assumes that all employment is created simultaneously and is not a smoothing process. (iii) Job creation is lineal with respect of expected number of kilometers in each *Departamento*. The DNP result is robust in the lower bound estimations.

The implementation of investments on road infrastructure defined under the 4G policy is expected to speed up the process of regional convergence in Colombia over the next five years. When controlling for other factors that are relevant determinants of GDP growth at the *Departamento* level, such as education, health and other public services, the results of a prospective conditional convergence model show that implementation of 4G investments is expected to increase the rate of income convergence between poor and rich *Departamentos* over the 2013-2018 period.¹¹⁰

Table A.5.6. Absolute and conditional convergence in Colombian Departamentos, observed2003-2012 and simulated (2013-2018).

¹¹⁰ Column 5 and 6 Table A.6.6

			Unconditi converge 2003-20	ence	Conditional convergence 2003-2012			Condi Convergen 20	nce 2013-
								Without 4G	With 4G
log per-capita GDF	at t-1		-0.010	5	-0.091*	-0.101*	-0.0979^{*}	-0.0865***	- 0.0890 ^{***}
			(0.009))	(0.043)	(0.047)	(0.047)	(0.003)	(0.005)
log of Public inves infrastructure at t-1		on road				0.0011 (0.0007)	0.00132 (0.0007)	0.00120 ^{***} (0.00013)	0.0004 (0.0002)
log of Public inves education infrastru							0.00105 (0.0006)	0.0000428 (0.0003)	0.000575 (0.0006)
log of Public inves health infrastructur							0.00065 (0.0004)	-0.000607 (0.0005)	-0.00148 (0.0008)
log of Public inves public services infr 1							0.00001 (0.0003)	0.00094 ^{***} (0.00014)	0.00059 [*] (0.0002)
Fixed effects at department level		\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	
Constant 0.1	96	1.456*	1.583^{*}	1.578^{*}		1.	395***	1.450***	
Observations 26	51	261	261	261			156	156	

Source: Own calculations based on DANE for GDP, population and deflators. DNP-DDTS for public investments. Note: The models include robust standard errors. T values between parentheses. Bogota was not included given that the information of public expenditure on roads for Bogota includes a different kind of investments that the 4G projects. The projections of all independent variables was done with a linear projection based on the average growth rate and the projection of growth rate was done with more complete model but with a lag of 2 for the per-capita income in order to avoid the perfect prediction.

Box A.5.4 Regional Convergence and Prospective Impacts

The objective of the study is to estimate convergence patterns, given increased road construction in Colombia. The main analytical framework of this study is based on the contribution of Barro and Sala-i-Martin (1991), although it is not limited to this work. The study analyzes regional development patterns depending on the conditions of infrastructure in each department, what is defined by Barro and Sala-i-Martin (1991) as conditional convergence.

The variable utilized to approximate the effects of road infrastructure on income convergence is public spending in road infrastructure by *Departamento* from DDTS-DNP. The values of GPD by *Departamento* were produced by DANE. Other types of public investments related with economic growth are used as controls (public investments in health, education and public services). The period selected (2003-2012) corresponds to the years of data availability of public spending in road infrastructure.

The results from these sets of models allow us to conclude there is an intrinsic trend towards conditional convergence in per capita income in Colombia. Moreover, we can analyze whether this process has been hampered or accelerated by the convergence in some other fundamental variables, such as the road infrastructure projects. It is possible to estimate the potential effects of the approval of 4G projects and the improvement of the planning and regulatory capabilities in the transport sector.

Technical details:

We conduct regression analysis of the following type to analyze absolute β -convergence:

$$\frac{y_{it} - y_{i,t-\tau}}{\tau} = \alpha - \beta \ y_{i,t-\tau} + u_{it}$$
(1)

and the following for conditional β -convergence:

$$\frac{y_{it}-y_{i,t-\tau}}{\tau} = \alpha_i - \beta \ y_{i,t-\tau} + \delta \cdot x_{i,t} + u_{it}$$
(2)

Where is the log of per capita income in state or region *i* in period *t*; is a vector of variables related with road investments, health, education and public services; is a stochastic term; is a country specific fixed effect and τ is the period length under analysis. In both regressions, and robust standard errors are computed.

After estimating the patterns of convergence in Colombia between 2003-2012, the study analyzes the effect of the 4G policy on the previous convergence results. To do this a linear projection of per-capita GDP and investment variables is done for the period 2013-2018. With these projections, the conditional convergence model is estimated using the predicted series on road infrastructure investments and the counterfactual road investments with the 4G policy.

Limitations and assumptions: (i) The period of analysis is restricted by data availability, the test of long term convergence analysis was impossible; (ii) all variables continue the growth rate observed for the 2003-2012.

ANNEX 6. COLOMBIA SELECTED MACROECONOMIC INDICATORS

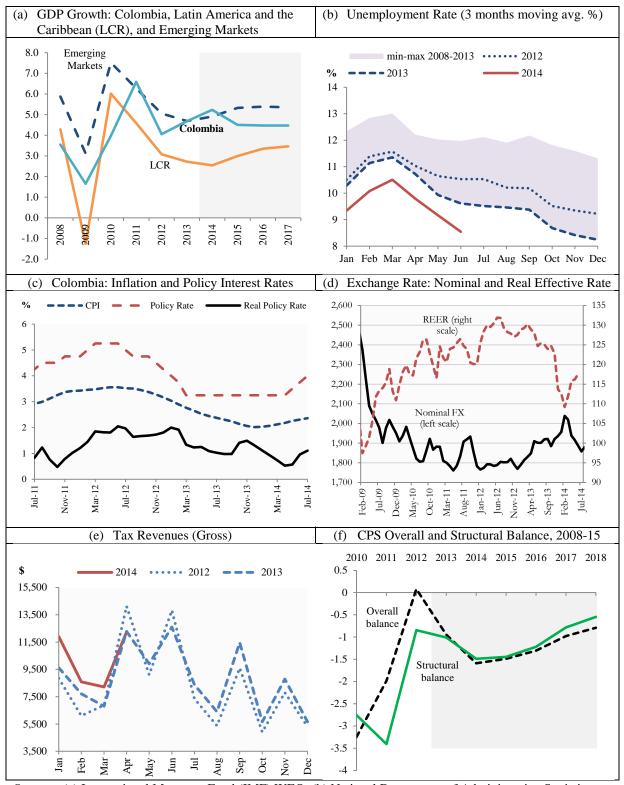


Figure A6.1. Colombia: Selected Economic Indicators

Sources: (a) International Monetary Fund (IMF) WEO; (b) National Department of Administrative Statistics, DANE; (c and d) *Banco de la República* and World Bank; (e) Tax and Customs Revenue Authority (DIAN); (f) IMF.

Table A6.1.	Kev	Economic	Indicators
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			v		nuicato					
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Real GDP growth (%)	4.0	6.6	4.0	4.7	5.2	4.5	4.5	4.5	4.5	4.5
GDP Deflator (avg. %)	3.9	7.0	2.7	1.6	4.6	2.3	2.6	2.8	2.8	3.1
Oil price, Colombian mix (US\$/bl)	73.1	99.3	104.2	100.3	102.2	99.1	94.9	92.4	91.1	90.2
Gross national savings	19.1	20.9	20.8	20.9	21.2	21.2	21.6	21.4	21.6	22.2
Gross dom. investment	22.1	23.8	24.0	24.2	24.4	24.4	24.7	24.7	25.1	25.4
Export growth (FOB ⁺ , %)	19.9	43.0	5.4	-2.4	4.4	4.2	5.1	5.4	5.1	4.5
- Oil exports growth (%)	60.9	72.3	10.8	1.6	2.4	2.5	1.9	1.8	1.2	0.0
Import growth (FOB, %)	22.0	35.7	8.7	0.8	5.8	4.6	5.6	5.6	5.2	5.1
Current account balance	-3.0	-2.9	-3.1	-3.3	-3.8	-3.6	-3.5	-3.5	-3.4	-3.3
Foreign direct investment (net)	0.5	1.4	4.3	2.3	3.0	3.0	3.2	3.1	2.9	2.8
Gross reserves (months of G&S ⁺⁺)	7.1	6.1	6.5	7.5	7.6	7.5	7.4	7.2	7.0	6.9
Total external debt ++++	23.2	23.3	20.8	24.7	24.2	23.8	23.1	22.2	21.5	20.8
Central Government (% of GDP)	<u>:</u>									
Total Revenue	13.8	15.2	16.1	16.9	17.0	16.1	16.3	16.3	16.3	16.2
Tax Revenue	12.3	13.5	14.3	14.3	14.4	13.8	14.0	14.1	14.2	14.1
Non-tax	1.5	1.7	1.8	2.7	2.6	2.3	2.3	2.2	2.1	2.1
Total expenditures	17.6	18.0	18.4	19.3	19.4	18.6	18.4	18.3	18.3	17.8
Current expenditures	14.3	13.7	14.2	14.6	15.6	15.8	15.8	15.7	15.7	15.7
- Wages and salaries	2.1	2.0	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1
- Goods and services	1.0	1.0	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
- Interest	2.7	2.7	2.6	2.3	2.4	2.3	2.3	2.3	2.3	2.3
-Transfers	8.4	8.0	8.7	9.3	10.2	10.4	10.4	10.4	10.4	10.4
Capital Expenditures	3.3	4.2	4.2	4.6	3.8	2.7	2.6	2.6	2.6	2.1
Overall Balance	-3.9	-2.8	-2.3	-2.4	-2.4	-2.4	-2.2	-2.1	-2.0	-1.6
Primary balance	-1.1	-0.1	0.2	0.0	0.0	-0.1	0.2	0.3	0.3	0.7
Combined public Sector (% of GDP):										
Total Revenues	26.1	26.7	28.3	28.3	28.2	27.2	27.3	27.2	27.2	27.2
Total Expenditures	29.2	28.5	27.9	29.2	29.8	28.7	28.6	28.2	28.0	27.9
NFPS, Overall Balance	-3.3	-2.0	0.1	-0.9	-1.6	-1.5	-1.3	-1.0	-0.8	-0.6
CPS Overall balance	-3.3	-2.0	0.2	-0.9	-1.5	-1.4	-1.1	-0.8	-0.6	-0.5
Public debt	37.0	35.7	32.0	35.8	34.0	33.3	32.4	31.1	29.8	28.1
o/w foreign currency	12.7	11.9	11.3	12.9	12.4	12.3	12.1	11.3	11.1	10.1
GDP (US\$ billions)	287.0	336.3	369.8	378.1	401.1	428.3	453. 8	482. 3	512. 8	546. 9

Note: $^{++}FOB = Free-on-board$; $^{++}G\&S = Goods$ and services; $^{+++}Public$ and private external debt.

Source: World Bank Staff projections based on DANE (official statistics agency), Banco de la República, Ministry of Finance and Public Credit, and the IMF numbers from June, 2013. Note that figures presented in this table may differ from official figures owing to differences in methodology and definitions.

ANNEX 7. PRIOR ACTION ANALYTICAL UNDERPINNINGS

Prior actions	Analytical Underpinnings
Pillar 1: Sustaina	ble and Inclusive Cities
Prior actions 1— SoC CONPES Document	• The CONPES is grounded in a solid analytical foundation, which includes analysis reflected in a 2012 World Bank report "Colombia Urbanization Review: Amplifying the Gains from the Urban Transition" and other economic and sector work relevant to each of the
Document	 Policy Areas of the DPL. The DPL is well aligned with the World Bank Urban Strategy, "Systems of Cities: Harnessing Urbanization for Growth and Poverty Alleviation (2009)". In addition, 17 analytical papers were prepared under the Misión, more than 12
	consultation sessions with academia, public and private stakeholders were convened and
	three international seminars were conducted where experts presented case studies and analyzed preliminary results of the commissioned papers. The main outcome of the Misión, which summarizes this broad technical consultation, is the <i>Documento Técnico de Soporte</i> —DTS.
Prior action 2—	• The Bank, through a number of knowledge and convening services, supported the
Congestion	formulation of the Congestion Charging Decree, including:
Pricing Decree	 Facilitation of a knowledge exchange between Singapore (IE Singapore) and Colombia
Thenig Deeree	(MT, and Bogota's Secretariat of Mobility) to share Singapore's experience with the
	implementation of a congestion charging scheme, and advise local authorities on a methodology, and action plan for cities to design such schemes.
	 Participation in a high-level steering committee that also included representatives from
	the IADB, to provide technical guidance and peer review the study "Bogota Travel Demand Management Strategies and Action Plan" December, 2012 produced by CPG Consultants.
	- Support from an experienced consultant in drafting the Travel Demand Management
	(TDM) Decree, and carrying out relevant stakeholder consultations to validate the scope of regulation/framework being proposed.
	 The UK, through a Prosperity Fund grant, supported the MT to carry out further technical review of the Decree by Professors from University College London, and the University of Los Andes.
Prior action 3— Vehicular	• The IADB supported the MT to carry out a technical assessment and alternatives analysis
Identification	of the different technological standards available worldwide for the implementation of a vehicular identification system. (Refer to GSD+ Study. "Comparación de los estándares
Decree	tecnológicos a usarse en un Sistema de Identificación Electrónica de Vehículos en Colombia". 2013).
	• The Bank facilitated a number of meetings with Bank specialists and experts from the US Department of Transportation (DoT), to discuss implications of different ITS systems and standards for vehicular identification, and the role of government regulation pertaining these
Drive action 1	systems. The World Bank, through the Clobal Equility for Disaster Bick Badystion supported the
Prior action 4—	• The World Bank, through the Global Facility for Disaster Risk Reduction supported the
Municipal	MVCT with the preparation, validation and dissemination of the standardized methodology
Adherence to	for the National Inventory of Settlements in High Risk Areas.
NISHRA	
	Affordable Housing
Prior actions 5—	• The Bank, through a number of studies related to access to affordable housing in
Affordable	association with the Macroproyectos Social Interest Program Project, point to both supply and
Housing with	demand side constraints as some of the most pressing challenges contributing to Colombia's persistent housing deficit. These findings were echoed in background studies during the first
Voluntary	phase of the Colombia Urbanization Review, and support the formulation of the proposed
Savings Program	policy intervention.
CONPES	
	onal Strengthening and Regional Coordination
Prior actions 6— Metropolitan Areas Law	• On institutional strengthening and regional coordination, the Bank has undertaken analysis with leading international experts for the Colombia Urbanization Review, which highlights the potential gains from improved coordination, as well as the importance of taking the opportunity provided by the recently approved Territorial Ordinance Law (LOOT).

Pillar 4: Urban Connectivity and Regional Infrastructure Policy Framework

Prior Actions 7—	• President Santos appointed an Infrastructure Commission comprised of renowned experts (practitioners and academics) to identify the major bottlenecks and challenges to the
Infrastructure	development of transport infrastructure, and provides recommendations to address them. The
Law	independent commission produced a report summarizing their findings, which became the
	basis of the approved Infrastructure Law. Refer to "Informe de la Comisión de
	Infraestructura", October 2013.
	• A number of diagnostic studies on the state of transport infrastructure in Colombia also
	supported the formulation of the Law, including: Fedesarrollo " <i>Infraestructura de Transporte</i>
	en Colombia: ¿luz al final del túnel?" 22 de noviembre, 2012.
	http://www.fedesarrollo.org.co/wp-content/uploads/2012/02/T-E-No-125.pdf ; IADB &
	CEPAL "Valoración de daños y pérdidas. Ola invernal en Colombia 2010-2011". Informe de
	la Comisión de Infraestructura, 2012.
Prior actions 8—	 The Fourth Generation of Concessions CONPES policy is largely based on a continuum
Fourth	• The Fourth Generation of Concessions CONFES poncy is largely based on a continuum of regulatory and institutional reforms carried out by the National Government to close
	Colombia's infrastructure gap and foster public- private partnerships in the sector, including
Generation of	the creation of the ANI, and the enactment of the PPP Law and the Ministerial Decrees that
Concessions	regulate it. The World Bank, IADB, CAF, Partnership UK, among others, helped the
CONPES	Government at different stages of this reform process.
	• The Bank, through a number of knowledge and convening services, supported the
	formulation of Fourth Generation CONPES, including:
	 As part of the <i>Misión Ciudades</i>, the Bank financed a study which was meant to diagnose
	and survey Colombia's major challenges to reaping the benefits of greater interurban
	connectivity (Roda, Pablo. " <i>Conectividad Interurbana en Colombia</i> " Misión Ciudades.)
	- The International Finance Corporation (IFC), through its Advisory Facility, has
	supported the structuring and bidding process of the Government's "early win"
	concession projects, which are part of the 4G pipeline.
	- The Bank, in response to a technical assistance request made by the <i>Financiera de</i>
	Desarrollo Nacional (EDN) and the Fondo Nacional de Provectos de Desarrollo

Desarrollo Nacional (FDN) and the *Fondo Nacional de Proyectos de Desarrollo* (FONADE), facilitated a workshop bringing together experts from around the world to discuss government support models to the structuring and financing of PPP projects in the infrastructure sector. The activity took place on May 30 and 31 of 2013.