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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

COLOMBIA

SUPPLEMENTARY FINANCING FOR THE INTEGRATED MASS TRANSIT SYSTEM (IMTS) FOR SANTIAGO DE CALI

(CO-L1101)

LOAN PROPOSAL

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ELECTRONIC LINKS	
REQUIRED	
1.	Annual work plan (AWP) http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35831004
3.	Monitoring and evaluation arrangements http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35830993
4.	Environmental and Social Management Report (ESMR) http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35830971
OPTIONAL	
1.	Economic assessment prepared by Metro Cali S.A. http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36092221
2.	Updated economic assessment http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36371071
3.	CONPES document 3504 http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=35831001
4.	Population distribution by ethnic group http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36076765
5.	Program financing table http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36076899
6.	MIO IMTS user satisfaction survey (November 2010) http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36078712
7.	MIO IMTS user satisfaction survey (June 2010) http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36078678
8.	Cali population by strata http://idbdocs.iadb.org/WSDocs/getDocument.aspx?DOCNUM=36135969

ABBREVIATIONS

BRT	Bus rapid transit
CONPES	Consejo Nacional de Política Económica y Social [National Economic and Social Policy Council]
ESMR	Environmental and Social Management Report
GHG	Greenhouse gas
ICAS	Institutional Capacity Assessment System
IMTS	Integrated Mass Transit System
IPCP	Índice de precio de la construcción pesada [heavy construction price index]
MC	MetroCali S.A.
MIO	Masivo Integrado de Occidente
PNTU	Programa Nacional de Transporte Urbano [National Urban Transportation Program]
OC	Ordinary Capital

PROJECT SUMMARY

COLOMBIA SUPPLEMENTARY FINANCING FOR THE INTEGRATED MASS TRANSIT SYSTEM (IMTS) FOR SANTIAGO DE CALI (CO-L1101)

Financial Terms and Conditions			
Borrower: Republic of Colombia		Amortization period:	20 years
Executing agency: Ministry of Transport, acting through MetroCali S.A. (MC)		Grace period:	3 years ¹
Source	Amount (US\$ millions)	Disbursement period:	3 years ²
IDB (OC) CO-L1101	105.0	Inspection and supervision fee:	*
Supplementary financing		Credit fee:	*
1659/OC-CO	200.0	Interest rate:	LIBOR-based
Local contribution	136.0 ³	Currency:	U.S. dollars from the Single Currency Facility of the OC**
Total	441.0	LCF:**	Option for conversion to Colombian pesos
Project at a Glance			
Objective: The objective of the supplementary financing is to provide resources additional to those under loan 1659/OC-CO, so that the program can achieve the proposed development objective, which is to improve the transportation options of the population of the city of Cali, in particular low-income segments. To this end, the program will finance a modern bus transport system that will connect the low- and middle-income areas of Cali with the areas where job-generating activities and social services are concentrated, improving service quality, reducing travel time, accidents, and pollution of the environment, and increasing service frequency and reliability in a sustainable manner.			
Special contractual clauses: None.			
Exceptions to Bank policies: A partial exception is requested to the policy on Financing Increase of Cost Overruns for Operations in Execution (OP-310), point (vii), “maintain the original ratios approved in the project financing matrix,” inasmuch as the local counterpart for the additional financing is slightly less than the local counterpart for the original financing (see paragraph 1.21).			
Project consistent with country strategy: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Project qualifies as: SEQ <input type="checkbox"/> PTI <input checked="" type="checkbox"/> Sector <input type="checkbox"/> Geographic <input type="checkbox"/> Headcount <input checked="" type="checkbox"/>			
Procurement: See paragraph 3.2			

* The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank’s lending charges, in accordance with the applicable provisions of the Bank’s policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

** Local Currency Facility (LCF).

¹ The payment dates for amortization and interest will be made to coincide with the corresponding dates of loan 1659/OC-CO.

² The disbursement period of loan 1659/OC-CO will be extended to coincide with the final disbursement date of three years of this supplementary financing.

³ Of this amount, US\$100 million corresponds to the local counterpart obligation under loan 1659/OC-CO, and US\$36 million corresponds to an additional local counterpart commitment in respect of this supplementary financing.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem, and rationale

- 1.1 **General.** Since 2002 the Government of Colombia has been providing support to improve public passenger transportation service through implementation of a national urban transportation policy, initially established under Law 105 of 1993. This public policy is delineated in the National Urban Transportation Program (known by its Spanish-language acronym, PNTU), under which the government provides technical and financial support to cities for improvement of their public mass transit systems. This support includes the commissioning of preliminary studies for projects, sharing of experiences and best practices, and cofinancing (up to 70%) of the required infrastructure investments. The PNTU is based on collaboration between the Government of Colombia and the municipal governments, which assume other responsibilities such as eliminating the transportation oversupply, redefining the relationship between the government and transportation companies, preparing project designs, building infrastructure works, and operating the projects.
- 1.2 The projects supported by the PNTU are divided into two groups, based on the size of the city: (i) in cities with a population of over 600,000, the PNTU supports Integrated Mass Transit Systems (IMTSs), which serve the needs of cities with higher demand through the implementation of bus rapid transit (BRT)⁴ projects. Since the program began, the Colombian government has invested nearly US\$1 billion, and six BRT systems have been launched, in Bogotá, Cali (first corridor), Pereira, Cartagena, Bucaramanga, and Barranquilla; and (ii) in cities of 250,000 to 600,000, the PNTU supports Strategic Public Transportation Systems, which are aimed at improving public transportation service and achieving orderly urban growth.
- 1.3 In this context, the Colombian government requested financial support from the Bank for the IMTS system for Cali, which has a population of 2.2 million. The Bank approved the loan in 2005 (loan 1659/OC-CO).⁵ The Municipio of Santiago de Cali, acting through Metro Cali S.A. (MC), is developing the Cali IMTS as the solution for reorganizing the city's chaotic existing public transportation system⁶

⁴ The lessons learned from these projects, confirmed through impact studies of BRT systems conducted by specialized firms (GTZ, TDP), are illustrated in the following findings: (i) lower vehicle operating costs; (ii) faster commercial vehicle speed as new features are introduced, such as prepaid fares, same-level access, multiple doors, etc.; (iii) fewer traffic accidents with public transportation involved; and (iv) transportation formalized through a concession system strengthens transport operators and increases collection of taxes evaded under the traditional operating system, while providing a high degree of citizen security in the areas where projects have been implemented.

⁵ In September 2005, the Bank approved a US\$200 million loan (1659/OC-CO) to provide partial financing for the Cali IMTS (CO-L1001), with a local counterpart contribution of US\$100 million.

⁶ Cali generates 1.4 million trips per day on public transportation. Traffic in the city is chaotic, with streets and avenues congested most of the day, owing in part to the proliferation of vehicles with small carrying capacity. These vehicles create longer travel times and higher costs for users, as well as more accidents and high pollution levels for all citizens.

and making it safe, economically and socially accessible, and energy efficient, with low carbon emissions and low air pollution.

- 1.4 **The country's strategy.** The Cali IMTS is included in Colombia's 2006-2010 National Development Plan and is considered strategically important in accordance with documents 3369 (August 2005) and 3504 (December 2007) of the Consejo Nacional de Política Económica y Social [National Economic and Social Policy Council] (CONPES), and the 2010-2032 Transportation Master Plan. The program's priority was confirmed in the 2010-2014 National Development Plan.
- 1.5 **The Bank's country strategy with Colombia.** The original project was deemed consistent with the Bank's country strategy with Colombia at the time, and is included in the current country strategy for 2007-2010 (document GN-2474), which establishes that the Bank will provide technical and financial support to promote domestic competitiveness by supporting public mass transit systems and improving traffic conditions and roadway infrastructure. Moreover, by contributing to environmentally sustainable transportation, this program addresses one of the pillars of the Bank's Ninth General Capital Increase (GCI-9), which prioritizes operations that promote climate change mitigation measures. This operation also qualifies as a poverty-targeted investment (PTI) according to the headcount criteria, since 52% of the population is in the low and very low income segments that are the heaviest users of public transportation. This operation is included in the Bank's country program document for 2012.

B. The Integrated Mass Transit System (IMTS) for Santiago de Cali

- 1.6 The IMTS is a modern bus transportation system that connects the low-⁷ and middle-income areas with the areas where job-generating activities and social services are concentrated, improving service quality, reducing travel time, accidents, and pollution of the environment, and increasing service frequency and reliability. The system also helps improve public spaces by enhancing the IMTS's collector streets and access roads, bikeways, traffic lights, and road safety. Better traffic organization, reduced congestion, and better use of urban spaces improve the quality of life of the population and reduce emissions of pollutants and greenhouse gases.

⁷ The low-income population segments are the heaviest users of public transportation and often have to make longer trips and trip combinations. Integration terminals and stations, as well as combined fares, result in savings of transportation costs that represent a significant part of their daily expenditures.

1.7 The IMTS, which began partial operation in June 2009, is composed of a number of trunk lines⁸ with segregated thruways intended exclusively for the operation of high- and medium-capacity buses.⁹ This network of trunk lines is connected to networks of secondary lines¹⁰ and complementary corridors,¹¹ which offer passenger transportation service using lower-capacity vehicles.

1.8 Traffic planning and control of vehicles is done at an operations center, which regulates the supply provided by bus operators and monitors station performance, in order to make real-time adjustments in the number and frequency of vehicles in service as dictated by demand.

1.9 Cali's IMTS, called Masivo Integrado de Occidente (MIO), was designed as an integrated citywide plan of operations. The practical limitations of carrying out renovation work in heavily travelled urban areas, as well as the availability of financing, led the municipio to develop a plan to implement the works in two continuous, successive phases of execution. Both phases include rehabilitation of trunk, secondary, and complementary lines.

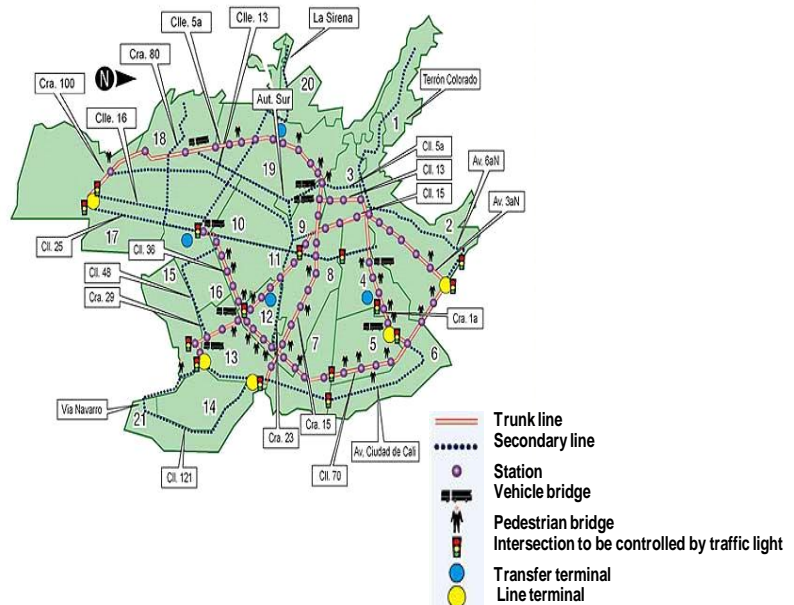


Table 1. Execution phases		
Area	Phase 1	Phase 2
Trunk lines	Cra 1 - Cra 4 (7.0 km) South trunk (17.3 km) CII 13 – CII 15 (3.4 km)	Aguablanca trunk (6.7 km) Av. 3N and Av. Américas (4.2 km)
Secondary and complementary lines	150.5 km	92.5 km
Terminals	4	5
Demand met	46%	100%

⁸ Routes where the transportation demand exceeds 60,000 passengers per day.

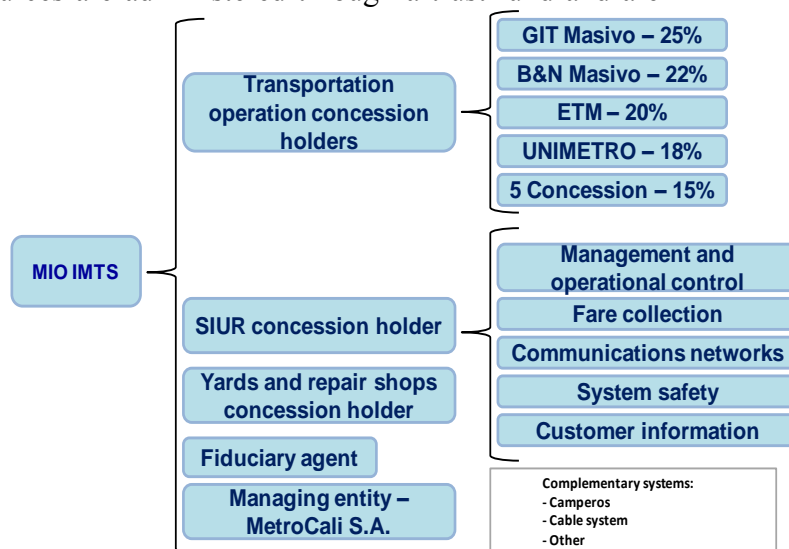
⁹ Articulated buses with a capacity of 160 passengers, and buses for 100 passengers.

¹⁰ Routes where the transportation demand ranges from 20,000 to 60,000 passengers per day.

¹¹ Routes that serve as feeders for the trunk and secondary lines.

1.10 Concessions for bus operation were granted to private operators, who are responsible for providing the vehicles and operating the yards and repair shops. They are paid for their services in accordance with the kilometers traveled by their vehicles in compliance with the schedules and frequencies set by the operations center; that center is administered by MC, which also oversees service quality and takes charge of customer service. The bidding process took place between June and September 2006, and the contracts were signed in December of that year.

1.11 Fare collection was awarded through competitive bidding to Unión Temporal de Recaudo y Tecnología in 2009. This private company is independent of the bus operating companies. The resources are administered through a trust fund and are used to: (i) make payments to bus fleet operators, in accordance with the terms of the corresponding concession contracts; (ii) cover the expenses of the fare collection system; (iii) cover MC's administration and operation costs, including oversight and control of operations and safety in the corridors; and (iv) establish a reserve fund for contingencies. Thus, the entities involved in Santiago de Cali's IMTS are the managing entity (MetroCali), the holders of the transport operations concession, the holder of the fare collection and operational control concession (SIUR), and the fiduciary agent.



C. Project outcomes and impact

1.12 The IMTS began partial operations with the first corridor completed on 12 March 2009, with: (i) 103 high-capacity articulated buses (of the planned 196) operating on the trunk lines; (ii) 236 standard buses¹² operating on the secondary lines; and (iii) 131 buses on the feeder routes. All of these buses have Euro III clean technology, which ensures a low-emissions standard, complemented by a smaller fleet of vehicles and fewer kilometers travelled. From March 2009 to December 2010, the IMTS moved 92 million passengers (25.6 million in 2009 and 66.3 million in 2010).

¹² **Standard bus:** These buses operate in mixed traffic corridors and some sections of trunk lines. They have two high left doors and three low right doors, air conditioning, visual and auditory information for users, capacity for 80 passengers, and a length of 12.5 meters.

- 1.13 The MIO is transforming public transportation in the city by making it more efficient and comfortable for passengers and substantially reducing pollution and noise. It has become the most important change in the city in a long time, substantially improving quality of life for Cali residents. Bikeways and improvements to public spaces have laid a foundation to support the building of a new city, and a cultural and political transformation. Bringing public spaces into contention with the other attributes of a city is a new concept for Cali that prioritizes citizens over individual transportation, enabling them to identify with their surroundings and make them their own. The benefits of the MIO are obvious: substantial improvement in mobility, safety, savings in travel times, comfort, security, and trust.
- 1.14 Implementation of the MIO entails a reduction in the number of vehicles that provide public service. This factor, combined with cleaner technology of higher-capacity vehicles and optimized routes, results in a significant reduction in greenhouse gases, primarily CO₂, and significantly reduces other pollutants that can affect health, such as particulates, and oxides of nitrogen and sulfur. Projections are that the changes to the transportation system will ostensibly reduce the air pollution generated by greenhouse gases, which was initially calculated at 270,000 tons of CO₂ per year. To that end, MC has begun the necessary steps under the Clean Development Mechanism (CDM) to obtain emission reduction certificates, which can be sold, thus ensuring additional revenue.
- 1.15 **Level of user satisfaction.** MC commissioned surveys of users' satisfaction with the MIO during March, June, and November 2010, in four areas: (i) service in general; (ii) waiting time; (iii) service frequency; and (iv) route coverage. The scores of 4 or higher (with 5 very good, and 1 unsatisfactory) as a percentage of users were 88%, 59%, 76%, and 84%, respectively. On the basis of these results, MC has concluded that citizens are increasingly perceiving a better quality of life since the arrival of the MIO.

D. Need for supplementary financing

- 1.16 During the program implementation, there were cost overruns on the works contracts due to three concurrent factors: (i) increases in the quantities of works, caused by required changes to the original designs due to deterioration of the existing roads between the works design and construction phases, and the relocation of public utilities networks; (ii) the time elapsed between the original budgets and financing agreements (2002) and the contracting (2006); and (iii) increased construction costs and exchange rate appreciation, and the

Table 2			
Year	IPCP (1)	Exchange rate (2)	Ratio 1/2
2004	100.0	100.0	1.00
2005	102.3	86.4	1.18
2006	109.3	97.5	1.12
2007	115.6	72.6	1.59
2008	126.6	71.2	1.78
2009	126.4	80.0	1.58
2010	127.7	71.0	1.80
2011	133.2	66.2	2.01

resulting shortfall of the loan proceeds. Table 2 shows the ratio between the heavy construction price index (known by its Spanish-language acronym, IPCP) and the exchange rate since 2004, when preparation of the operation began.

- 1.17 The operational and functional modifications to the scope of the program made it possible to: (i) improve the technical and social viability of the IMTS; and (ii) expand mass transit coverage to meet the full demand, so that the entire city will be integrated into the system. This latter decision, not envisaged in the original loan, is also aimed at eliminating problems related to interagency and technical coordination stemming from the transition to mass transit and the subsequent coexistence of the two systems, particularly given that under the previous scenario, once the IMTS/MIO is up and running, the traditional public transportation system would serve less than 10% of demand.
- 1.18 The changes introduced improved the technical specifications for the IMTS infrastructure, in particular: (i) road safety, through the construction of more pedestrian bridges (from 3 to 17); (ii) system operation, through the construction of overpasses (from 6 to 9); (iii) system access, through the expansion of feeder routes (the length of these routes was increased by 37 km, and the number of bus stops was increased from 665 to 882); and (iv) the supply of alternative and supplementary modes, through the construction of bikeways (50 km).
- 1.19 It is important to note that the final costs of the system are within reasonable parameters for other equivalent mass transit systems in other Colombian cities.

Table 3. Costs of similar projects				
City	Population (millions)	Total cost (US\$ million)	Trunk line (km)	Cost/trunk km (US\$ million/km)
Bogotá (NQS)	7.2	367	18.0	20.4
Cali	2.3	523	39.0	13.4
Cartagena	0.9	264	15.1	17.5
Bucaramanga	1.2	139	8.7	16.0
Barranquilla	1.7	363	13.2	27.5

- 1.20 The requested supplementary financing will cover these modifications in scope and cost overruns, and meets the conditions set in operational policy OP-310, "Financing Increase of Cost Overruns for Operations in Execution" (document GN-2329): (i) the cost overruns are the result of circumstances beyond the executing agency's control for works viewed as necessary to improve the system's functionality and the safety and quality of service offered, an increase in the original costs owing to the time elapsed between completion of the designs and the contracting of the works, and increases in the price of materials; (ii) the supplementary financing is being requested within the disbursement period; (iii) program execution is satisfactory; (iv) a reduction in the program's coverage would not be an appropriate solution because it would jeopardize the objectives of the program, which is by nature indivisible; (v) the activities to be financed strengthen the institutional and environmental conditions of the program as

approved; (vi) the economic conditions, with the increased investment cost, remain within ranges satisfactory to the Bank; and (vii) the Government of Colombia does not have access to additional financing sources that offer transaction costs or maturities comparable to those provided by the Bank. The government is also interested in continuing the program's investments with the Bank's technical and financial assistance.

- 1.21 This operation complies with the policy cited above on nearly every point. The exception relates to condition (vii), which establishes the borrower's obligation to provide additional counterpart resources in order to maintain the original ratios (financing to local counterpart) approved in the project financing matrix. The first loan operation had a proportion or *pari passu* of 67% Bank financing and 33% local counterpart contribution, whereas the proposed supplementary financing would have a *pari passu* of 74% Bank financing and 26% local counterpart contribution. Thus, a partial exception is requested to the policy on Financing Increase of Cost Overruns for Operations in Execution (OP-310), solely in respect of the condition to maintain the original ratios approved in the project financing matrix.
- 1.22 The proposed supplementary financing will make it possible to execute the program in accordance with the adjusted targets and to meet the program objectives, by facilitating the execution of specific projects and activities for which additional resources are needed (works and consulting engagements under way or in the procurement phase). This financing will enable program continuity, create economies of scale in regard to management, and lower transaction costs. The supplementary financing will make it possible to meet the program objectives.
- 1.23 **The Bank's involvement.** The Bank has had a significant presence in urban transportation: (i) in 2005 it approved the program for Cali's IMTS (loan 1659/OC-CO, US\$200 million); (ii) beginning in 2010, the Bank has provided support to the Bogota city government for its Integrated Public Transport System (loan 2136/OC-CO, US\$10 million); this project seeks to integrate all of the city's public transportation services by means of an integrated control and monitoring system, a flat fare structure, and award of route concessions based on competitive bidding processes; and (iii) mobility plans, conceptual designs, and fare structure, fare collection system, and fleet scheduling, control and management system studies have been conducted in the 12 cities included in the Strategic Public Transportation System (see paragraph 1.2), all of them financed with the proceeds of technical-cooperation loans in Support of Privatization and Concessions in Infrastructure (loans 927/OC-CO and 1592/OC-CO) and an InfraFund technical-cooperation operation (ATN/10925-CO).

E. Objectives, components, and costs of the program and the supplementary financing

- 1.24 **Background.** Loan 1659/OC-CO, which is financing Cali's IMTS, was declared eligible for disbursements on 6 July 2006; to date, approximately US\$170 million (85% of the loan proceeds) has been committed, and US\$152 million (76% of the

loan amount) in investments have been made. The date for the last disbursement is 9 December 2012. The initial delays in construction, due mainly to program planning and management issues, have been overcome, and the timeline has been fully adjusted with respect to the initial operating plan, with a two-year extension. As of 31 July 2011, 32 km of trunk lines (82%), 152 km of secondary lines (54%), and one terminal (14%) have been completed. Work has also begun on the last trunk line (called Aguablanca, 7 km in length), which would complete the work on the proposed trunk lines and the Puerto Mallarino and Calima terminals. Several projects are in various stages of the works design preparation and competitive bidding process, and are scheduled to be awarded in 2011 and 2012 (overpasses, terminals, secondary lines, upgrading of public space, and mixed-use lanes). The MIO works are expected to be completed in the second half of 2013.

- 1.25 In terms of institution-strengthening, 90% of the proposed activities have been completed, in particular the development of: (i) the legal and regulatory framework for MC to serve as the management, regulatory, and compliance enforcement agency for the new transport system, and strengthening to perform those tasks; (ii) manuals for specific procedures, organization, staff recruitment, etc.; (iii) training for inspectors to supervise service operations and for staff to serve customers at stations and terminals and on buses; and (iv) an environmental and social management and occupational health system, now in the process of certification, to supervise and govern the activities of contractors and the operator at maintenance facilities, and for general system operation and customer service.
- 1.26 **Objective.** The general objective of the program will remain unchanged, namely, to improve the transportation options of the population of the city of Cali, in particular low-income segments. The Cali IMTS has and will continue to improve service quality, reducing travel time, accidents, and pollution of the environment, and increasing service frequency and reliability. In particular, with the implementation of a modern bus transport system that will connect the low- and middle-income areas of Cali with the areas where job-generating activities and social services are concentrated, the IMTS will benefit primarily the lowest socioeconomic segments in strata 1 to 3 (low-low to medium-low), which account for 85% of the system's users, and the Afrodescendent population, which represents 26% of Cali's urban population ([see optional link 4](#)).
- 1.27 **Components.** The operation will consist of a supplementary loan for the components already financed by the Bank under loan 1659/OC-CO, to enable the project to meet its objectives. The scopes of the components are presented in the table below.

Table 4. Program components	
Loan 1659/OC-CO	CO-L1011
Component 1	
Studies and supervision of works.	Technical, socioenvironmental, and financial supervision of works execution on the Aguablanca trunk line, including stations, overpasses (3), pedestrian bridges, and terminals (7) of the IMTS.
Component 2	
Improvement of mobility and the urban environment, including: (i) execution of road work to improve 39 km ¹³ of trunk lines, vehicle bridges, 150.5 km of secondary and complementary lines; (ii) construction of stations on the trunk lines, two line terminals, and one transfer terminal; (iii) supplementary works, road safety devices, and information and warning signs along all corridors; (iv) works to upgrade and improve urban spaces throughout the corridors so as to ensure proper use of such space; (v) construction of sidewalks and bikeways to facilitate station and transfer terminal access by pedestrians and nonmotorized transport; (vi) infrastructure for pedestrian access to stations on trunk lines, pedestrian overpasses or tunnels, level crossings with traffic lights, and adequate signposts to improve user access; and (vii) road safety along corridors and their feeder routes and streets in the direct area of influence.	Financing for the following activities: (i) implementation of 2 km of urban public transport trunk lines (Aguablanca); (ii) road surfacing and upgrading of secondary and complementary lines (50.5 km); (iii) line terminals (2) and transfer terminals (2); (iv) construction of stations (14); (v) infrastructure for pedestrian access to stations on trunk lines; (vi) overpasses, level crossings with traffic lights and adequate signposts to improve user access; and (vii) road safety along corridors and their feeder routes.
Component 3	
Environmental viability, including introduction of environmental issues such as the air-quality and noise monitoring system and additional studies included in the strategic environmental evaluation of the project.	No activities to be financed.
Component 4	
Institutional strengthening, including development of the legal and regulatory framework for MC, manuals for specific procedures, organization, staff recruitment, etc.; and training of MC staff.	No activities to be financed.
Component 5	
Social viability, including activities relating to mitigation, relocation, and compensation of low-income population groups affected by the IMTS, monitoring of indicators and evaluation of short-term socioeconomic impacts, and social management of the IMTS.	No activities to be financed.
Component 6	
Financial auditing.	No activities to be financed.

1.28 **Supplementary cost and financing.** The Board of Executive Directors approved the original program for a total of US\$300 million, of which US\$200 million corresponded to the Bank loan. The requested supplementary financing is estimated at US\$141 million equivalent, of which US\$105 million will be financed with Ordinary Capital (OC) resources,¹⁴ and US\$36 million with local counterpart

¹³ Includes 7 km of the Aguablanca trunk line to be financed with proceeds from both loans.

¹⁴ Option for conversion to Colombian pesos under the Local Currency Facility (LCF).

resources. The total amount of the supplementary financing added to the amount of the original program will be US\$441 million. Additionally, the Government of Colombia and the Municipio of Cali have contributed US\$79 million in additional resources to the program, which are not included in the above sum. The table below presents a breakdown of costs, including the current budget by investment category for loan 1659/OC-CO and the proceeds of the supplementary financing.

Table 5. Program cost and financing (US\$000s)										
Item	Investment category	(1659/OC-CO)			CO-L1101 ¹⁵			Consolidated		
		IDB	Local	Total	IDB	Local	Total	IDB	Local	Total
1	Studies and supervision	700 ¹⁶	15,650	16,350		5,100	5,100	700	20,750	21,450
2	Improvement of mobility and the urban environment	195,950	83,205	279,155	105,000	30,900	135,900	300,950	114,105	415,055
2.1	Trunk, secondary, and complementary lines	171,950	54,055	226,005	45,000	27,000	72,000	216,950	81,055	298,005
	Bikeways, pedestrian bridges, and traffic lights			-	33,000	-	33,000	33,000	-	33,000
2.2	Line terminals	16,000	5,000	21,000	18,000	500	18,500	34,000	5,500	39,500
2.3	Transfer terminals	8,000	2,000	10,000	9,000	400	9,400	17,000	2,400	19,400
2.4	Land purchases		22,150	22,150		3,000	3,000	-	25,150	25,150
3	Environmental viability	445		445				445		445
4	Institutional strengthening		1,145	1,145					1,145	1,145
5	Social viability	2,200		2,200				2,200		2,200
6	Financial auditing	705		705				705		705
TOTAL		200,000	100,000¹⁷	300,000	105,000	36,000	141,000	305,000	136,000	441,000¹⁸

¹⁵ The exchange rate used to provide supporting documentation for expenditures will be the rate used for the conversion of resources disbursed in U.S. dollars into Colombian pesos (conversion rate). The rate used for the counterpart resources will be the exchange rate as of the date of the request.

¹⁶ Includes transfer of US\$300,000 from category 1 to category 6, "Financial auditing."

¹⁷ The Government of Colombia and MC have contributed US\$79 million in additional resources to the program, which are not included in this sum.

¹⁸ If the additional US\$79 million are included (see footnote 18), the total cost of the project increases to US\$520 million.

F. Results framework with key indicators

- 1.29 In addition to covering the cost overruns of the original program, the supplementary financing involves an expansion in the scope of the program. The Results Matrix in Annex II presents the results separately for each loan. The consolidated results are: (i) physical, consisting in the execution of the works; (ii) operational, such as shorter travel times and wait times; (iii) environmental, in the form of improved urban air quality and reduction of CO₂; and (iv) urban space recovery, in the form of improved sidewalks, pedestrian bridges, bikeways, bus stops, and access areas.

Table 6. The MIO by the numbers Consolidated expected outcomes	
Segregated corridor	39 km
Secondary and feeder routes	243 km
Bikeways	50 km
Improved public space	400,000 m ²
Tree planting	15,000 units
Green space	170,000 m ²
Reduced travel time	20%
Reduced CO ₂ (year 2014)	270,286 tons/yr

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 The supplementary financing, like the original program, is an investment loan under the multiple-works modality. The total cost of the program is US\$105 million, which will be financed according to the breakdown shown in the cost table, and the Bank loan will draw upon the resources of the Ordinary Capital (OC). The planned disbursement period for this operation is three years. In addition, the disbursement period for loan 1659/OC-CO will be extended to coincide with the last disbursement date of three years for this supplementary financing.

B. Environmental and social safeguard risks

- 2.2 There will be no changes in the program's environmental strategy. The types of works to be financed are similar to those included in the original project, so the environmental strategy and the Environmental and Social Management Report (ESMR) originally approved will remain applicable for this supplementary financing. The Bank recently conducted an evaluation of the program's environmental and social management, finding it satisfactory and recognizing the successful implementation of the environmental and social management and

MC good practices for social programs

- a. Relocation/resettlement: Based on public consultations, the alignment of certain routes was adjusted so as not to affect dwellings.
- b. Dissemination: Metro Cali S.A. has closely monitored the community outreach and dissemination programs. At all work sites there are offices for filing complaints or learning project details. Metro Cali has prepared booklets, brochures, educational handbooks, and information on works progress that are distributed locally in the area of influence of the works. It also keeps detailed records of consultations and complaints.
- c. Compensation for social issues during construction: In the event of noncompliance of any kind with environmental and social safeguards that is deemed to exceed the limits agreed upon in the environmental and social management plans by 5% (but less than 10%), some contractors have developed work training programs for the local population in the immediate vicinity of the projects, with support from entities such as Fundación Carvajal (e.g., cosmetology, manicure and pedicure), as compensation.

occupational health systems. In view of the very positive outcomes of the program's management, there are plans to extend the supervision to system operations activities.¹⁹

- 2.3 The program now in execution completed all the steps of review, studies, environmental assessments, environmental management plans, and public consultation before it was approved by the Bank and prior to starting the works. The Bank will seek ways to capture these experiences as good practice guidelines for this type of project. In this way, the necessary precautions will continue to be taken to ensure compliance with the Bank policies on environment and safeguards compliance (OP-703), involuntary resettlement (OP-710), and disclosure of information (OP-102). Details for all of the programs are given in the updated Environmental and Social Management Report ([ESMR](#)) at required electronic link 4.

MC good practices for environmental programs

- a. Environmental management of works: The contractor has staff dedicated to implementing the environmental and social management plans supervised directly by inspection (works supervision) staff. Contractor performance is rated, and a compliance score lower than 95% generates sanctions.
- b. Vegetation management: The management of cutting and moving trees and vegetation has been effective and has compelled modifications in engineering projects so as to avoid cutting down protected trees. Green areas and public spaces have been recovered.
- c. Waste and noise management: All aspects related to waste are managed in accordance with strict guidelines, using special companies authorized for waste management when necessary. Nighttime schedules are restricted on most works projects, and there is strict compliance with the use of proper protective equipment for all construction activities. No visitors are allowed without such equipment. The accident rate is low in comparison to other civil works projects not managed by MetroCali.

- 2.4 **Road safety, air pollution, and climate change.** The MIO has transformed the public transportation system by improving road security, improving public health by reducing emissions of other air pollutants, and generating quantifiable benefits in the reduction of greenhouse gas emissions. The program has been registered with the Clean Development Mechanism and expects to raise funds through the reduction of CO₂ emissions by selling carbon credits on the international market. Emissions of greenhouse gases and other pollutants are reduced through a combination of factors, including: (i) the efficient organization of routes and the elimination of the “penny war;” (ii) a decrease in the number of public transport vehicles; (iii) shorter travel times and higher speed, resulting in fuel savings; (iv) renewal of the public service fleet with Euro III vehicles; and (v) introduction of driving techniques that improve vehicle efficiency.

C. Fiduciary risk

- 2.5 An institutional capacity assessment based on the ICAS tool determined that MC has effective procedures in all key areas, support from human resources with experience in program execution, and sufficient planning and organization of activities. These factors mean that it possesses the institutional capacity to execute the supplementary financing and ensure that resources are properly managed.

¹⁹ Vehicle maintenance activities including noise control, handling of oils and lubricants, treatment of wash water, emission control, waste disposal at stations, terminals, and parking areas, handling of claims, etc.

However, the assessment identified several opportunities for improvement and control activities for the ongoing execution of the program, which were included in the strengthening plan. The implementation of these activities will be monitored during the program execution phase.

- 2.6 In addition, the project's most significant risks were identified using the Project Risk Management (PRM) tool. The entity prepared a mitigation plan, which is being implemented as part of loan 1659/OC-CO.

D. Other key issues and risks

- 2.7 **Economic assessment.** The economic assessment was updated on the basis of the proposed new costs and additional investments, using project impact data to quantify the most significant direct impacts. The direct benefits of improvements in public transportation include savings in vehicle operating costs and time saved by users. The benefit from a reduction in operating costs was determined on the basis of the reduced distance travelled by buses and the increased commercial vehicle speed, with and without the system. The benefits from the savings in travel time were calculated on the basis of the difference between the average trip time prior to the new system and the average trip time with the IMTS in place, in person-hours weighted for the different reasons for travel. This calculation yielded an internal rate of return of 30% and a benefit/cost ratio of 2.25, thus confirming the project's viability. The most significant variables were subjected to a sensitivity analysis, which confirmed the soundness of the project.
- 2.8 **Execution risk.** This supplementary operation has low risk for construction, since most of the works are currently in progress and do not present a high level of technical difficulty. For the works pending procurement, there is a strong domestic and international market for construction firms trained in the type of work to be financed. Moreover, these contracts have relatively short execution periods (less than one year), they will have final designs, and they will be bid at lump sum prices. These factors will mitigate the risks associated with term extension, lack of technical details, and additional costs. If additional costs are incurred, they will be covered by the Municipio of Cali. One lesson learned has been the importance of having sufficient engineering detail at the time of bidding, to reduce uncertainty in bid prices; future construction works for the segregated thruways should include as sum to cover unforeseen works, given the difficulty of gathering reliable cadastral information related to the relocation of public utilities. In addition, the capacity to contract and manage large works using the Bank's procurement procedures has been strengthened.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Execution mechanism

- 3.1 The execution mechanism will remain unchanged from the original program. The borrower will be the Republic of Colombia, and the executing agency will be the

Ministry of Transport. The Ministry of Transport will coordinate project execution with MetroCali S.A. (MC), a corporation owned the Municipio of Santiago de Cali and responsible for developing and implementing the IMTS. As with loan 1659/OC-CO, MetroCali will be directly responsible for: (i) commissioning technical studies; (ii) conducting bidding processes, contracting, managing execution, and supervision of works; (iii) institutional strengthening activities and social and environmental viability actions; and (iv) program management, supervision, and monitoring.

- 3.2 **Procurement.** Consulting services, works, and goods to be financed with the loan proceeds will be procured in accordance with the “Policies for the procurement of works and goods financed by the IDB” (document GN-2349-9) and “Policies for selection and contracting of consultants financed by the IDB” (document GN-2350-9), both of March 2011. The bidding processes will continue to be subject to ex ante review.
- 3.3 **Retroactive financing.** The Government of Colombia has requested retroactive financing from the Bank, to cover program progress on the works under program component 2, due to the fact that this is a supplementary financing operation with some works fully in execution with expenditures already made. The loan will finance eligible expenditures for works within 18 months prior to its approval, but subsequent to 24 February 2011 (approval date of the project profile), that have met requirements substantially similar to those established in the loan contract, in accordance with Operational Policy OP-504. The estimated value of these works is US\$20 million. Moreover, up to US\$36 million in eligible program expenditures, incurred prior to program approval by the Board of Executive Directors, but subsequent to 24 February 2011, will be recognized against the local counterpart.
- 3.4 **Disbursements.** Resources will be disbursed under the advance of funds modality, based on the project’s liquidity needs for a period not to exceed six months, in accordance with the investment timetable, the flow of funds required for such purposes, and the executing agency’s proven capacity to use the loan proceeds. The Bank may make a new advance when at least 80% of the total disbursed advances has been substantiated. Resources from loan 1659/OC-CO that have not been disbursed at the time of the signing of the amending agreement will also be disbursed via advance of funds.

B. Summary of monitoring and evaluation arrangements

- 3.5 The monitoring arrangements will be the same as for the original loan, including: (i) administrative missions; (ii) six-monthly progress reports; and (iii) annual work plan and annual external audits. Details of these activities are presented in the required electronic link, “Monitoring and evaluation plan.” A summary of these activities is given below.

1. Monitoring

- 3.6 MC will deliver program monitoring and progress reports within 60 days after the end of each calendar six-month period. The principal indicators of these reports are presented in the Results Framework. The reports will describe at least the following: (i) progress in relation to the execution indicators and agreed disbursement schedule; (ii) performance of contractual clauses; (iii) data and information on system operation; (iv) detailed program of activities and action plan for the following two quarters; and (v) issues that could adversely affect program progress. No later than 30 November each year, MC will deliver the annual work plan for the following year, including activities and projects to be financed, timetable, and projected budget.

2. Supervision and monitoring

- 3.7 The Bank will monitor the program through its Country Office and administrative missions. One annual Bank supervision and evaluation mission is planned. These evaluations will provide an opportunity to assess: (i) works execution; (ii) MC's performance and progress with institution-strengthening; (iii) suitability of the procedures employed; (iv) accounting for the investment made, institutional proposals to be executed, and action plan; (v) status of works contracting; (vi) budget for the following year; (vii) program execution timetable and performance indicators; and (viii) corridor operations commenced. In the event that the evaluation by the Bank and MC finds that execution has not been satisfactory, MC will prepare an action plan with measures to remedy the defects found within two months after receiving notification from the Bank.

3. Evaluation

- 3.8 The program evaluation system comprises two stages or reports, the scope and sequence of which are as follows:
- 3.9 **Evaluation of short-term socioeconomic impacts.** No later than 31 December 2012, an evaluation to assess the short-term impact of the IMTS on the living conditions of the user population will be conducted, using resources from loan 1659/OC-CO, now in execution. Specifically, the evaluation will review the relationship between the improvements to the transportation system and variables such as transportation cost, travel times, environmental quality, the cost of providing the service, user compliance, and access by vulnerable population groups, among other factors. The scope of the evaluation will include a breakdown by gender.
- 3.10 **Project completion report.** Upon conclusion of the consolidated program, the Bank will prepare the project completion report, including an ex post economic evaluation.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	The operation contributes to the lending program related to support climate chance initiatives, renewable energy and environmental sustainability.		
Regional Development Goals			
Bank Output Contribution (as defined in Results Framework of IDB-9)	The operation will contribute to the following Bank output: number of people given access to improved public low-carbon transportation systems (% of people that are afro descendants).		
2. Country Strategy Development Objectives	Aligned		
Country Strategy Results Matrix	GN-2474	The operation is aligned with the country strategy (2007-2010) The intervention contributes to the creation of a platform that fosters competitive enterprise development. Infrastructure Development (Transport).	
Country Program Results Matrix	GN-2617	The operation is included in the 2011 Country Program Document.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	9.3		10
3. Evidence-based Assessment & Solution	9.9	25%	10
4. Ex ante Economic Analysis	10.0	25%	10
5. Monitoring and Evaluation	7.4	25%	10
6. Risks & Mitigation Monitoring Matrix	10.0	25%	10
Overall risks rate = magnitude of risks*likelihood	Low		
Environmental & social risk classification	B		
III. IDB´s Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)			
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor	Yes	The program has implemented training activities for operators/drivers that will be affected by the implementation of the bus rapid transit system.	
Environment	Yes	The program has conducted a series of dissemination activities and has implemented a grievance system as part of the socio-environmental management of the program.	
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project			
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan.			

This operation provides supplementary financing to Loan 1659/OC-CO which seeks to implement a modern bus rapid transit (BRT) system in Cali. The BRT will connect medium and low income populations with areas of economic activity and provision of services.

The diagnosis clearly identifies the reasons for this supplementary financing and explains the causes that lead to it. The logic of the intervention is clear. The results matrix includes impact, outcome and output indicators that are SMART. The program's cost-benefit analysis was updated for this supplement. A reflexive (before and after) evaluation and an ex post cost benefit analysis is foreseen at the end of the project. The monitoring and evaluation plan is complete. Risks have been identified together with mitigation measures and their metrics.

CONSOLIDATED RESULTS MATRIX

Goal	Contribute to improve the quality of life of the population of Santiago de Cali, in particular those low-income groups who will be served by the Integrated Mass Transit System (IMTS).				
Objective	Design, structuring, and implementation of an integrated public transport system that prioritizes movement on high-capacity buses in dedicated lanes (BRT).				
Program results		Baseline	CO-L1001	CO-L1101 ¹	Comments
Impact indicator					
<u>Outcome:</u> Reduction of CO ₂ emissions along the public transport trunk corridors <u>Indicator:</u> Volume of CO ₂ emissions generated by public transport (tons/year)		Year 2009: 335,106	Year 2011: 280,416	Year 2012: 277,006 Year 2013: 273,629 Year 2014: 270,286	Implementation of the project will help improve environmental quality in the city of Cali, ensuring the environmental sustainability of the project. (The reduction is determined on the basis of buses eliminated and the estimated unit reduction per bus.)
Outcome indicator					
<u>Outcome:</u> Increase in satisfaction levels among public transport users <u>Indicator:</u> Percentage		Year 2004: 45%		Year 2013: 60%	Surveys will be commissioned using program resources at the end of 2012.
<u>Outcome:</u> Reduction of travel time for public transport users <u>Outcome:</u> Average minutes per trip		Centro-sur line Year 2005: 50 minutes Norte-centro-sur line Year 2005: 65 minutes	Year 2010: 40 minutes. (Achieved) Year 2011: 50 minutes		The first measurement was taken before the work began, and the achievement of the first indicator was determined on the basis of data obtained at the Control Center.
<u>Outcome:</u> Reduction of wait time at bus stops <u>Indicator:</u> Average minutes waiting		Year 2005: 15 minutes average		Year 2013: 12 minutes	The measurement was taken at program start; surveys will be conducted at the end of 2012.
<u>Outcome:</u> Number of passengers transported in the system <u>Indicator:</u> Number of passengers/year		Year 2005: 0	Year 2010: 66.3 million/year	Year 2014: 162 million/year	Data to be obtained and/or already obtained from the Control Center semiannually.
<u>Outcome:</u> Afrodescendent population with access to sustainable mobility <u>Indicator:</u> Number of Afrodescendent passengers transported		Year 2005: 0	N/A	Year 2014: 550,000 persons	Data for 2014: Passengers transported per day: 1,900,000, Population transported per day: 1,400,000 (1.36 trips/person-day) Afrodescendent population transported per day: 350,000 (25% of the urban population of Cali is Afrodescendent) <u>Estimated</u> Afrodescendent population with access to sustainable mobility: 875,000 (2.5 persons with access to mobility per passenger transported) <u>Actual</u> Afrodescendent population with access to sustainable mobility: 550,000 (estimated population may not exceed total population)

Indicator: Number of cities with mass transit systems in operation.	Year 2006:1		Year 2014: 2	To be obtained for all works included in both loans completed and in operation.
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¹Includes outcomes for both loans

Components 1 and 2. Improvement of mobility and the urban environment								
Objective of Components 1 and 2: Improvement of infrastructure and the urban environment			Design, construction, installation, and startup of works, systems, and technical solutions enabling the operation of the IMTS and its urban surroundings					
Indicators	Baseline	CO-L1001 (Achieved)	CO-L1101				Consolidated target ⁱ	Comments
			Year 1	Year 2	Year 3	Target		
Outputs Organization of the bus rapid transit (BRT) system infrastructure	0%	100%					Technical, engineering, economic, environmental, and restructuring designs for the IMTS	Completed prior to approval of loan 1659/OC-CO
Trunk lines	0Km	32 Km	2			2	39 km ⁱⁱ	Six-monthly PSR
Secondary and complementary lines	0 Km	150.5 Km	km	30 km	22.5 km	92.5 km	243 Km	Six-monthly PSR
Line terminals and transfer terminals	0	2	1	1	2	4	3 transfer terminals 4 line terminals ⁱⁱⁱ	Six-monthly PSR
Stations to access the trunk system and bus stops	0	42	15			15	57 stations	Six-monthly PSR
Urban improvement works: public space recovered (m ²)	0	300,000	50,000	50,000		100,000	Public space recovered: 400,000 m ²	Six-monthly PSR
Green space recovered (m ²)	0	170,000					Green space: 170,000 m ²	Six-monthly PSR
Tree planting (units)	0	15,000					Tree planting: 15,000 units	Six-monthly PSR
Pedestrian overpasses	0			5	6	11	17 pedestrian bridges ^{iv}	Six-monthly PSR
Network of bikeways	0			25	25	50	50 km of bikeway networks	Six-monthly PSR
Intersections	0	6	1	1	1	3	9 intersections	Six-monthly PSR

Component 3. Environmental viability								
Objective of Component 3		Introduction of environmental issues						
Indicators	Baseline	CO-L1001	CO-L1101				Consolidated target	Comments
			Year 1	Year 2	Year 3	Target		
Air-quality monitoring points in operation	0	5					5 stations operational	Six-monthly PSR
Component 4. Institutional strengthening								
Objective of Component 4		Establishment of institutional, legal, and regulatory framework						
Indicators	Baseline	CO-L1001 (Achieved)	CO-L1101				Consolidated target	Comments
			Year 1	Year 2	Year 3	Target		
Establishment of specific institutional, legal, and regulatory frameworks	None	Implemented					-Development of technical and operational manuals for specific procedures. -Modeling of demand. -10 MC staff trained in transport planning, environmental impact, demand modeling, economic and financial analysis, concession analysis. -50 officers trained for security at bus stops.	
Support for Transit Department	N/A	Implemented					Study of route restructuring, legal clearance of permits and concessions.	
Control Center in operation (technological platform)	None	Implemented					Management and Control Center in operation	
Concessions awarded for transportation, fare collection, and fleet optimization systems	None	Implemented					Launch of: -Transport system -Fare collection system -Fleet size optimization system	

Component 5. Social viability								
Objective of Component 5	Implementation of mitigation actions and compensation of the population affected by the IMTS; social management and monitoring of indicators							
Indicators	Baseline	CO-L1001 (achieved)	CO-L1101				Consolidated target	Comments
			Year 1	Year 2	Year 3	Target		
Operators affected by BRT implementation have received business training and technical assistance.	0	1,344		100		100	1,444 entrepreneurs trained and given technical assistance	Six-monthly PSR
Impact evaluation completed.						100%	Evaluation will be commissioned no later than 31 December 2012.	Evaluation expected to be available in first half of 2013.

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- i Consolidates the original loan (CO-L1001 and its counterpart), the supplementary financing (COL1101 and its counterpart), and the additional resources financed by the Government of Colombia and MC.
 - ii The remaining 5 km will be financed partially with additional resources of the Government of Colombia and MC.
 - iii The IMTS calls for 7 terminals. The Calima terminal, now in execution, will be financed partially with resources from loan 1659/OC-CO and additional contributions from the Government of Colombia and MC.
 - iv The remaining 6 bridges will be financed partially with additional resources from the Government of Colombia and MC.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Colombia
Project:	Supplementary Financing for the Integrated Mass Transit System (IMTS) for Santiago de Cali
Project number:	CO-L1101
Executing agency:	Ministry of Transport, acting through MetroCali S.A. (MC)
Prepared by:	Mylenna Cárdenas, Financial Management Specialist; and Rodolfo Gastaldi, Procurement Specialist

I. EXECUTIVE SUMMARY

- 1.1. A fiduciary management assessment was conducted of MetroCali S.A. (MC), the entity responsible for project implementation, using the following Bank tools: (i) Detailed Evaluation of the Executing Agency's Capacity to Manage Procurement; (ii) Institutional Capacity Assessment System (ICAS); and (iii) Project Risk Management (PRM). The evaluation concluded that the entity possesses sufficient capacity to perform the activities of fiduciary management and administration of the loan proceeds. However, the evaluation did identify certain opportunities for improvement and risk mitigation control activities to be undertaken by MetroCali, and these were included in the Strengthening and Risk Mitigation Plan ([see document](#)) and are being implemented in preparation for the supplementary financing. The implementation of these plans will also be monitored during the project execution phase. The most significant fiduciary risks identified are: (i) Loss of financial information system capacity (Medium); and (ii) Low level of monitoring and supervision of the implementation of recommendations proposed by the external control entities (Medium).
- 1.2. According to the Public Expenditure and Financial Accountability assessment, Colombia's public financial management system is mature and performs well in most areas, but is not yet fully aligned with international standards. In addition, the public procurement system is deemed adequate from a regulatory standpoint and consistent with internationally accepted practices, but its operational practices still fall well short of these standards. The Ministry of Transport uses the SIIF Integrated Financial Information System for budget control and cash management, and uses the Helisa accounting software for the project accounting information received from MetroCali, the subexecuting agency. For its project accounting, MetroCali uses the "AWA SOLUTIONS" financial information system, an integrated system with online modules for accounting, budget, cash management, accounts payable, and assets. MetroCali has made the decision to change financial information systems and is evaluating the possibility of using the SIIF Nación integrated financial information system.
- 1.3. The project does not include financing from other multilaterals.

II. PROCUREMENT MANAGEMENT

- 2.1 For the Executive Summary, Fiduciary Context of the Executing Agency, and Fiduciary Risk Evaluation and Mitigation Measures, the following procurement considerations apply:
- 2.2 The proposed program execution plan includes general guidelines for management. In that regard, it is reported that MetroCali S.A. has been executing the program using the procurement policies of the Inter-American Development Bank. However, a fiduciary evaluation has been deemed necessary to determine the executing agency's procurement capacity. As part of that process, the risks will be identified and, if applicable, the risk mitigation matrix will be updated. The cost of this evaluation will be financed under the transactional budget.
- 2.3 The procurement agreements and requirements presented in this annex are based on information available at the time.
- 2.4 Once the elements described above have been established, an institutional capacity assessment for procurement can be conducted, and the potential procurement risks and the corresponding mitigation matrix will be redefined on that basis.
- 2.5 The PRM will be updated whenever necessary and at least once per year, under the responsibility of the project team leader.
- 2.6 The project does not envisage other sources of financing, whether multilateral or counterpart.

III. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

- 3.1 Financial management responsibilities will reside with the Coordination Unit, which reports to the Office of the Deputy Minister of Transport, and the coexecuting agency, MetroCali S.A. (MC), with the support of a fiduciary agent to make payments. The primary responsibility of the Ministry of Transport includes coordinating financial procedures related to budget, cash management, accounting, and reporting.
- 3.2 MetroCali uses the "AWA SOLUTIONS" financial information system, an integrated system with online modules for accounting, budget, cash management, accounts payable, and assets. Since this system is losing capacity because of the high volume of transactions, MetroCali has decided to make a change and is evaluating the possibility of using the SIIF Nación II integrated financial information system. For its part, the Ministry of Transport controls the project accounting information sent by MetroCali in order to generate reports using the Helisa accounting software, which operates adequately.
- 3.3 Both the Coordination Unit under the Office of the Deputy Minister of Transport and the coexecuting agency, MC, have the necessary capacity and experience for program execution, as they have been executing loan 1659/OC-CO. Although the program operating manual is being updated, the processes within the Ministry of Transport and MC are well defined, as assessed during the preparation of the

institutional capacity assessment. However, certain opportunities for improvement were identified; these were included in the Strengthening Plan and are being implemented in preparation for the supplementary financing.

IV. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

- 4.1 The following fiduciary risks were identified using the Project Risk Management (PRM) tool.

Risk	Rating	Mitigation measure	Budget
Loss of financial information system capacity	Medium	Implement the SIIF Nación II software, which handles high volumes of information and supports multiple online users.	<ul style="list-style-type: none"> - Training (5) persons: \$6,000,000 (1659/OC-CO) - Dedicated broadband channel: \$3,000,000 per year (1659/OC-CO)
Low level of monitoring and supervision of the implementation of recommendations proposed by the external control entities	Medium	Application, monitoring, and evaluation of improvement plans.	N/A

- 4.2 No high-impact irremediable risks that hinder effective project execution were identified. The risk mitigation plan is being implemented as part of the loan in execution. As a result of the institutional capacity assessment conducted using the ICAS tool, some opportunities for improvement were identified and were included in the strengthening plan, establishing actions, timelines, responsible parties, and costs associated with the plan. Implementation of these plans will be monitored during the project's execution phase. The budget for these plans will be financed with counterpart resources from the institutional strengthening component of loan 1659/OC-CO.

V. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE CONTRACTS

- 5.1 There are no special conditions precedent to the first disbursement.
- 5.2 The Bank will disburse project resources under the advance of funds modality to Colombia's central bank, Banco de la República, based on MC's liquidity needs for a period not to exceed six months, in accordance with the investment timetable and the flow of funds required for such purposes.
- 5.3 The exchange rate used to account for the loan proceeds will be the rate used for the conversion of resources disbursed in U.S. dollars into Colombian pesos (conversion rate). The rate used for the counterpart resources and reimbursement of expenditures will be the exchange rate as of the date of the request.
- 5.4 The annual financial statements and the eligibility of project expenditures will be audited each year by a tier I independent auditing firm acceptable to the Bank, to be commissioned by MC. The project's audited financial statements will be delivered

to the Bank no later than four months after the close of each fiscal year of MC, or as otherwise agreed by the parties, in accordance with the procedures and terms of reference previously agreed upon with the Bank.

- 5.5 The fiduciary agent shall open an exclusive account for managing the proceeds of the supplementary financing.

VI. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 6.1 The fiduciary agreements and requirements for procurement execution establish provisions applicable to all project procurements.
- 6.2 The program has three components (1. Studies and supervision, 2. Improvement of mobility and the urban environment; and 6. Financial auditing) calling for resources to be executed using procurement processes for works and consulting services. The procurement policies and procedures of the Inter-American Development Bank will be used for procurements financed with loan proceeds.

1. Procurement execution

- 6.3 The procurement of works financed with loan proceeds will be conducted in accordance with document GN-2349-9, "Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank."
- 6.4 The selection and contracting of consulting services provided under the project will be conducted in accordance with document GN-2350-9, "Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank."
- 6.5 Procurement plan execution and updates, procurement execution, and review of the technical specifications are the responsibility of the project's sector specialist.
- a. **Procurement of works, goods, and nonconsulting services:** The contracts for works, goods, and nonconsulting services¹ generated under the project and subject to international competitive bidding (ICB) will use the harmonized documents for Colombia agreed upon with the Bank. Procurement processes subject to national competitive bidding (NCB) will be use the harmonized documents for Colombia agreed upon with the Bank.
 - b. **Selection and contracting of consultants:** Contracts for consulting services generated under the project will use the harmonized standard request for proposals (RFP) for Colombia agreed upon with the Bank.
 - **Selection of individual consultants:** The selection methods provided in document GN-2350-9 will be used.
 - **Training:** The selection methods provided in document GN-2350-9 will be used.

¹ Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (document GN-2349-9), paragraph 1.1: Nonconsulting services will be treated similarly to goods.

2. Table of threshold amounts

WORKS			GOODS ²			CONSULTING	
ICB	ICB	Shopping	ICB	ICB	Shopping	International publicity consulting services	Short list with no nationality restrictions
Greater than or equal to US\$10 million	US\$ 350,000 to US\$10 million	Less than or equal to US\$350,000	Greater than or equal to US\$1 million	US\$50,000 to US\$1 million	Less than or equal to US\$50,000	Greater than or equal to US\$200,000	Less than or equal to US\$500,000
THRESHOLD FOR EX POST REVIEWS							
Works			Goods			Consulting services	
N/A			N/A			N/A	

3. Main procurements

The main procurements projected for a period of 18 months are as follows:

Main procurements

ACTIVITY	TYPE OF BIDDING	ESTIMATED DATE	ESTIMATED AMOUNT (US\$000S)
GOODS			
N/A			
WORKS			
Glorieta station (connection Av. Américas – Av. 3N)	ICB	May 12	17,600
Overpasses: Calle 13 Cra 100	ICB	Nov 12	15,750
Overpasses: Calle 5 Cra 80	ICB	Nov 12	13,700
Aguablanca line terminal	ICB	May 13	16,400
Julio Rincon – Calypso transfer terminal (Villahermosa)	ICB	Jun 12	8,750
Guadalupe transfer terminal	NCB	Jan 14	9,100
Vía Navarro secondary line Section 1	NCB	May 13	7,000
Secondary and complementary lines with over 10,000 passengers/day	ICB	Apr 13	8,850
Secondary and complementary lines with fewer than 10,000 passengers/day	ICB	Apr 13	7,100
Calle 48 - Carrera 46 secondary line	ICB	Feb13	9,850
Aguablanca trunk line	ICB	Jan 10	90,000 ³
NONCONSULTING SERVICES			
N/A			
FIRMS			
N/A			
INDIVIDUALS			
N/A			

* To access the procurement plan: [IDBDOCS-#36345906-COL1101 Plan de Adquisiciones](#).

² Includes nonconsulting services.

³ Work in execution, partially financed with loan 1659/OC-CO and additional resources from the Government of Colombia and MC, and with the supplementary financing.

4. Procurement supervision

Procurements will be subject to ex ante review in accordance with section 1 of this annex.

5. Special provisions

N/A.

6. Records and files

When the institutional capacity assessment for procurement is conducted, the mechanisms used for records and files will be analyzed in order to make the appropriate recommendations, if any.

VII. FINANCIAL MANAGEMENT

A. Programming and budget

- 7.1 The national government, acting through the Office of the National Public Budget and the National Planning Department, is responsible for budgetary programming, which concludes with passage of the Annual Budget Law by the Congress of the Republic. The loan proceeds are included in the national budget under the heading of the Ministry of Finance (MHCP), and the municipal contribution is included in the budget for the Municipio of Santiago de Cali. MC inputs the project budget into the AWA SOLUTIONS financial information system by source (Nation, Municipio, Syndicated Loan).

B. Accounting and information systems

- 7.2 The apex agency for public accounting in Colombia is the Office of the Comptroller General of the Nation (CGN), which issues accounting directives to the entities included in the national public budget. The official public accounting system is the SIIF Nación integrated financial information system, which is a source for downloading information submitted to CGN through the Finance and Public Information Consolidation system (CHIP). Project accounting will be the responsibility of MC, and entries are recorded by the accrual method using the AWA SOLUTIONS financial information system, an integrated system with online modules for accounting, budget, cash management, accounts payable, and assets. Since this system is losing capacity because of the high volume of transactions, MetroCali has decided to make a change and is evaluating the possibility of using the SIIF Nación II integrated financial information system. For its part, the Ministry of Transport uses the Helisa accounting software to control the project accounting information sent by MC. The Ministry of Transport will deliver the project's audited financial statements to the Bank on an annual basis.

C. Disbursements and cash flow (in coordination with the use or nonuse of the country cash management system).

- 7.3 The resources from the external loan, like all resources of the national government, will be executed through the SIIF Nación system. For program cash management, a

special bank account (designated account) in foreign currency will be opened at Banco de la República, for the exclusive use of the loan proceeds. The Bank will disburse project resources under the advance of funds modality to the central bank account, based on MC's liquidity needs for a period not to exceed six months, in accordance with the investment timetable and the flow of funds required for such purposes. In addition to the flow of funds projection, the disbursement request should be accompanied by the bank reconciliation statement for the project account at the fiduciary agent and the status of implementation of commitments related to technical and fiduciary performance. The Bank may make a new advance when at least 80% of the total disbursed advances has been substantiated. The Ministry of Transport will order the Ministry of Finance to transfer funds (in Colombian pesos) to the fiduciary agent on a quarterly basis in accordance with the cash flow projection, through the SIIF Nación system. The fiduciary agent must open an account exclusively for managing the proceeds of the supplementary financing.

- 7.4 The exchange rate used to provide supporting documentation for expenditures will be the rate used for the conversion of resources disbursed in U.S. dollars into Colombian pesos (conversion rate). The rate used for the counterpart resources will be the exchange rate as of the date of the request. No supporting documentation for expenses or payments made will be required when rendering accounts, but this shall not be construed as Bank approval of such payments. If an expense is identified as ineligible by the Bank or the auditors, the corresponding amount must be returned to the designated account or repaid directly to the Bank. There are no special conditions precedent to the first disbursement.

D. Internal control and internal audit

- 7.5 The Internal Control Office is responsible for internal audits, which it reports to the Office of the President. It is staffed by five professionals with extensive experience from several disciplines, and is responsible for reviewing and evaluating the processes and mechanisms of the internal control system on an ongoing basis, as provided by law, advising on the implementation of the programs at the agency in relation to the internal control system, and implementing quality in the entity's processes. MC uses the MECI 1000:2005 Standard Internal Control Model, as defined in Colombian law, which provides the basic structure for evaluating the strategy, management, and own evaluation mechanisms of the administrative process. The core purpose of the MECI standard internal control model is to provide entities with guidance in meeting their objectives and contributing to the key goals of the State. It has three major subsystems: strategic control, management control, and evaluation control. The Internal Control Office is responsible for independent evaluation of the internal control system and for making recommendations and suggestions that contribute to its improvement and optimization. The reliability of the internal control system is moderate, due to the fact that the low level of monitoring and supervision of the implementation of recommendations proposed by the external control entities has been identified as a medium risk. Implementation of the improvement plans will be monitored during the project preparation and execution phase.

- 7.6 During the life of the program, the Internal Control Office will conduct semiannual evaluations of the relevance and effectiveness of the project's internal control and will monitor compliance with the recommendations of the external auditor.

E. External control and reports

- 7.7 External control will be conducted by the Office of the Comptroller General of the Republic (CGR) through public audits of entities to be conducted on a selective and ex post basis, for the purpose of verifying compliance with standards, proper use of resources, observance of processes and procedures, targets and objectives met, etc. The auditing methods used by the CGR are in line with international best practices. However, such practices are not fully employed by the auditors, so their audit opinions are unreliable in that they lack depth and are poorly documented. Thus, the CGR is ineligible to audit Bank-financed projects.
- 7.8 MC has the following external audits: (i) the Office of the Comptroller General of the Republic (annual), (ii) the Office of the Municipal Comptroller (annual), (iii) the external auditor (KPMG) of loan contract 1659/OC-CO (annual), and (iv) the BDO statutory auditor (ongoing). The entity has issued improvement plans based on the recommendations of the external control bodies, however, there was found to be a low level of monitoring and supervision of the implementation of those recommendations. Implementation of the improvement plans will be monitored during the project preparation and execution phase.
- 7.9 The annual financial statements and eligibility of project expenditures will be audited annually by a tier I independent auditing firm acceptable to the Bank, to be commissioned by MC. Audit services will be financed with proceeds of the supplementary financing at an approximate cost of US\$300,000. The project's audited financial statements will be delivered to the Bank no later than four months after the close of each fiscal year of MC, or as otherwise agreed by the parties, in accordance with the procedures and terms of reference previously agreed upon with the Bank.

F. Financial supervision plan

- 7.10 On the basis of the ICAS institutional capacity assessment and the PRM project risk assessment, the financial specialist will conduct one onsite review per year and desk reviews of the audited annual financial statements. The financial supervision visits will include verification of financial and accounting arrangements used to administer the project, monitoring of the strengthening plan based on the findings of the ICAS assessment, monitoring of the fiduciary risk mitigation plan, and monitoring of the implementation of recommendations made by the project's independent auditor.

G. Execution mechanism

- 7.11 The borrower will be the Republic of Colombia, and the executing agency will be the Ministry of Transport, acting through the Coordination Unit, which reports to the Office of the Deputy Minister of Transport. The coexecuting agency will be the company MetroCali S.A. (MC), a corporation owned the Municipio of Santiago de Cali and responsible for developing and implementing the IMTS of the city of Cali.

As with loan 1659/OC-CO, MetroCali will be directly responsible for: (i) commissioning technical studies; (ii) conducting bidding processes, contracting, managing execution, and supervision of works; and (iii) institutional strengthening activities and social and environmental viability actions. Financial management responsibilities will reside with the Coordination Unit, which reports to the Office of the Deputy Minister of Transport, and the coexecuting agency, MC, with the support of a fiduciary agent to make payments. The primary responsibility of the Ministry of Transport includes coordinating financial procedures related to budget, cash management, accounting, and reporting.

H. Other agreements and requirements for financial management

7.12 There are no agreements additional to those mentioned above.