

Technical Cooperation Document

I. Basic Information for Technical Cooperation (TC)

Country/Region:	Regional
TC Name:	Strategic Partnership with C40 ¹ and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) for the establishment of the LAC Major Cities Finance Facility (CFF) for Sustainable Infrastructure
TC Number:	RG-T2895
Team Leader/Members:	Horacio Terraza (CSD/HUD), Team Leader; Roberto Esmeral (CCS/CCO), Co-Team Leader; Maricarmen Esquivel, and Jennifer Doherty-Bigara (CSD/CCS); Christiaan Gischler (INE/ENE); Marcia Casseb (HUD/CBR); Veronica Adler (HUD/CUR); Francisca Rojas (HUD/CAR); Manuel Rodriguez Porcel (TSP/CCO); Natalia Sanz (INE/TSP); Ramiro Lopez-Ghio (FMM/CCO); Escarlata Baza (LEG/SGO); Ricardo De Vecchi, Andreas Wohlueter and Dianela Avila (CSD/HUD).
Taxonomy:	Research and Dissemination ²
Date of TC Abstract authorization:	November 23 rd , 2016
Beneficiary:	Eligible ³ cities from Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru
Executing Agency:	The IDB, lead through the Housing and Urban Development division in multi-sectoral collaboration with other Bank divisions
Donors providing funding:	Sustainable Energy and Climate Change IDB Special Program (SCI)
IDB Funding Requested:	US\$700,000
Local counterpart funding:	US\$175,000 in-kind contribution
Disbursement period:	40 months ⁴ , which includes execution period
Required start date:	January 1 st , 2017
Types of consultants:	Individual Consultants and Firms
Prepared by Unit:	Urban and Housing Development Division (CSD/HUD)
Unit of Disbursement Responsibility:	Climate Change and Sustainable Development Sector (CSD)
Update to the Institutional Strategy 2010-2020:	(i) social inclusion and equality; (ii) productivity and innovation; (iii) economic integration; (iv) climate change and environmental sustainability; and (v) institutional capacity.

¹ [C40](#) is a network of the world's megacities committed to addressing climate change. C40 supports cities to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change.

² Prior to the commencement of any of the activities in each participating country, the Bank shall obtain the corresponding non-objection from such country.

³ Eligible cities selected by the CFF partners.

⁴ Currently only one city has been identified and selected. Since the following cities and the nature of their projects to be promoted are yet to be defined, the disbursement period is expected to be 40 months.

II. Objective and Justification of the TC

- 2.1 **Problem and Justification.** A major challenge preventing cities from pushing forward their sustainability aspirations related to reducing their Greenhouse Gas (GHG) emissions and finding climate-resilient solutions is a lack of capacity to prepare suitable projects for investment. As a result, cities struggle to create 'bankable' proposals for investors⁵. The Cities Finance Facility (CFF) will act as an intermediary with cities, potential financiers and technical experts, helping to facilitate the development of bankable investment proposals. Another important challenge in the climate finance context relates to the general lack of coordination and funding fragmentation among donors, which tends to hamper the impact on the ground.
- 2.2 The partnership between C40, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Inter-American Development Bank (IDB) aims at: (i) improving the coordination of technical assistance and capacity development at the regional level avoiding funding fragmentation, to broaden the impact and to more effectively enable city administrations to identify and access most suitable financing for their low-carbon and climate resilient urban development projects; and (ii) strengthening the role of cities in the international climate change agenda, by developing workable financing solutions for cities to become effective actors in mitigating GHG emissions and improving climate resilience.
- 2.3 The partnership furthermore supports the Bank's efforts in promoting the multi-sectoral approach and its sectoral "non-mainstreamed" efforts such as interventions related to non-motorized transportation, complementing mass transit, and urban drainage coupled with urban development, etc.
- 2.4 The objective of this TC is to provide technical assistance through preparatory activities and pre-investment studies for selected cities within the C40 network in Latin America and the Caribbean (LAC) by preparing multi-sectoral sustainable urban infrastructure projects related to climate change mitigation and adaptation investments. This serves to support and finance the pilot phase of the CFF for sustainable infrastructure⁶ a partnership established by the C40, Germany (implemented by GIZ) and the IDB, launched at the C40 forum during the COP21 in Paris. This partnership aims at creating the enabling environment for bankable projects, which will then be executed at a subsequent stage. The Bank expects to leverage significant capital for investment from the public and/or private sector as a consequence of the pre-investment studies.
- 2.5 The C40 city members from LAC and thus the cities that are eligible for funding include: Bogotá, Buenos Aires, Curitiba, Lima, Mexico City, Quito, Rio de Janeiro, Salvador de Bahia, Santiago de Chile and São Paulo.

⁵ This is documented in UN-HABITAT (2009). Guide to Municipal Finance. Nairobi: United Nations Human Settlements Program; Alam, M. (2010). Municipal Infrastructure Financing: Innovative Practices from Developing Countries. London: Commonwealth Secretariat; Z/Yen Group (2015). Financing the Transition: Sustainable Infrastructure in Cities. London: Z/Yen Group Limited; ODI (2015). Climate Finance for cities. How can international climate funds best support low-carbon and climate resilient urban development? London: ODI.

⁶ [C40, Germany & IADB Achieve Major Breakthrough For Developing Cities.](#)

- 2.6 **Strategic alignment.** This TC is consistent with the Update to the Institutional Strategy (UIS) 2010-2020 (AB-3008) and is aligned with the development challenges of: (i) social inclusion and equality; (ii) productivity and innovation; (iii) economic integration; and with the cross-cutting themes of (iv) climate change and environmental sustainability; and (v) institutional capacity. Additionally, the TC is aligned with the associated sector frameworks⁷ and country strategies⁸.
- 2.7 Moreover, the TC underlines the increasingly important role of cities in the international climate change and sustainability agenda. It contributes to the 2030 Sustainable Development Agenda, in particular Goal #11, by promoting sustainable, resilient and inclusive urban development. The TC strongly relates to already existing bank efforts to mobilize climate finance in cities, such as the Emerging and Sustainable Cities (ESC) Program⁹ and the Inclusive Cities Program by the FOMIN. Additionally, it emphasizes the Bank's designated efforts in promoting its multi-sectoral approach represented by the recently established Climate Change and Sustainable Development Sector.
- 2.8 As this TC is funded by the Sustainable Energy and Climate Change IDB Special Program (SCI) it will support the implementation and attainment of the objectives set by countries in their Nationally Determined Contributions (NDCs) in alignment with the Sustainable Development Goals (SDGs), in close collaboration with the NDC Invest platform. As cities are key to tackle climate change challenges, it will foster the design and execution of projects related to renewable energy, energy efficiency, sustainable urban transport and mobility, climate-resilient water, wastewater and storm water systems on a sub-national level.
- 2.9 **Background.** The CFF provides support for upstream project preparation. It will finance the costs for preparatory activities, consulting services and pre-investment studies necessary for the preparation and design of selected infrastructure projects.
- 2.10 The IDB intends to support three cities under this partnership, which responds to the US\$1.5M, which were initially requested for this TC. The first identified city is Bogotá¹⁰, Colombia, which will be financed with this TC. The intention of the team is to finance the 2nd and 3rd cities partly with this TC and the rest with a complimentary TC in 2017.
- 2.11 The CFF steering team (IDB, GIZ and C40) shares the following working principles for its approach: (i) demand-driven; (ii) city-focused; (iii) strategic

⁷ The TC contributes to the priorities outlined in the following sector framework documents: Urban Development and Housing, Transportation, Water and Sanitation, Climate Change and Energy. This includes promoting projects in the areas of renewable energy, energy efficiency, sustainable urban transport and mobility, climate-resilient water, wastewater and storm water systems.

⁸ The TC is aligned with the country strategies of Argentina, Brazil, Chile, Colombia, Ecuador, Mexico and Peru and particularly strengthens their efforts in dealing with climate change, promoting sustainable and integrated urban development, and providing sustainable infrastructure.

⁹ Similar to the ESC program this TC supports cities in preparing critical infrastructure projects; however this TC emphasizes the necessity and the will of the division to broaden the scope of the program and work with megacities.

¹⁰ In the case of Bogota, the project selected is the *Quinto Centenario* Sustainable Bikeway over 25 kilometers connecting low, middle and high income neighborhoods with work, educational and recreational areas.

climate change action; (iv) financial and technical sustainability; (v) ownership and capacity development; (vi) catalytic nature; (vii) transparency; (viii) outcome-oriented; and (ix) added value to projects.

- 2.12 Bank city and project selection consists of deciding on the best project proposals received by eligible C40 cities from the LAC region, on a case-by-case basis. The main criteria to be eligible for funding are: (i) being a C40 member city; (ii) alignment with IDB sector priorities; (iii) major climate mitigation and/or adaptation component of the project; (iv) financial and technical feasibility of project; and (v) political will to work with CFF partners and take forward the project. The facility will then filter those requests and select the best projects according to the principals set forth by the donors. The Bank may also provide technical assistance through preparatory activities and pre-investment studies to individual C40 member cities, where GIZ and C40 may not directly contribute with own funding or technical assistance.
- 2.13 During the current pilot phase, C40 invites a selected number of cities to apply for support from CFF, in order to take forward their sustainability priorities. Then, the list of C40's prioritized projects is compared with IDB's priorities in the selected cities and a shared list of projects is being co-defined. At the stage of applying for support from the CFF cities already present a concrete project proposal. Therefore, when a city is selected, the project to be taken forward is already determined.
- 2.14 The facility will only accept requests for support from C40 member cities in the LAC region. When there is a request from an eligible city, C40 will consult with IDB at an early stage to see whether the request is consistent with IDB sector priorities and bank policies.
- 2.15 No donor will be granted any preference or limitation, in financing either the winning bidder for any project executed under this facility or the relevant city administration or any municipal authority in conjunction with a project approved under this facility. The private sector company or consortium that wins a bid shall have complete discretion to decide on its sources of financing. For any associated public sector financing, the relevant government (national, state or municipal) shall be free to choose the financing it prefers.

III. Description of activities, components and budget

- 3.1 **Component 1. Pre-investment studies for the identified interventions (US\$600,000).** This component will finance specific pre-investment studies (including technical analysis, engineering design, environmental, economic, financial or legal studies) needed to prepare the multi-sectoral urban interventions related to climate change mitigation and adaptation in the selected cities. The studies will contribute to facilitate concrete bankable investment proposals in fields such as: renewable energy, energy efficiency, sustainable urban transport and mobility, climate-resilient water, wastewater and storm water systems, etc. Divisions expected to participate and lead on technical aspects and specific sectorial dialogues with cities' counterparts are: Climate Change (CCS), Energy (ENE), Housing and Urban Development (HUD), Transport (TSP) and

Water and Sanitation (WSA). Given the shared objectives with the CFF, the team has identified synergies with the NDC Invest, and more specifically with its NDC Pipeline Accelerator component and will therefore closely collaborate with CCS to ensure cross fertilization of lessons learned and reduce duplication of efforts.

- 3.2 **Component 2. Operational support for the preparing and supervisory activities related to the pre-investment studies (US\$100,000).** This component will finance the identification of required studies and consulting services, the preparation of bidding documents, the realization of the bidding process, the review of technical proposals, the contract awarding, the review and approval of studies and of the project's executive design as well as the assisting and advisory services provided to the beneficiary city administration within the context of the defined project. Furthermore, IDB specialists contribute to promote the implementation of the defined interventions and to leverage external sources of finance, which is also covered by this component.

Indicative Results Matrix

OUTCOMES					
Outcome Statement: Improved project pipeline of the selected cities, through the preparation of bankable and sustainable urban infrastructure projects					
Outcome Indicators					
Indicator	Unit of Measure	Base line (2017)	Goal (2021)	Means of verification	
Number of prepared projects with a climate change character ready for sustainable financing	Project	0	1	2021 Municipal Budget	
OUTPUTS					
Indicators	Unit of Measure	Base line (2017)	Goal (2021)	Cost (US\$)	Means of verification
Component 1					
Technical study conducted	Study	0	2	600,000	Study delivered to IDB and approved by CFF
Component 2					
Bidding documents prepared	Bidding documents	0	1		Documents prepared and approved ready for bidding process

- 3.3 This TC aims at providing a first contribution to the CFF. The bank's intention is to engage in a larger funding relationship with C40 and its partners in the future¹¹. The total funding by the Bank is US\$700,000 with resources of the SCI. This fund requires the beneficiary to contribute with a co-financing share of at least 20%. The counterpart funding is expected in the form of in-kind-

¹¹ The contributions of GIZ and the Bank in each city will be analyzed on a case-by-case basis; however they will not necessarily be in equal parts. It is expected that each donor's contribution will be distributed to separate but complimentary studies within the framework of the same project.

contributions and includes the use of services and facilities, professional services or expertise in the form of staff time, provision of or access to equipment. The intention of the team is to prepare a complimentary TC in 2017 with a volume of US\$800,000 to reach a total amount of US\$1.5M.

Indicative Budget (in US\$)

Component	Description	Total IDB Funding (SCI)
Component 1	Pre-investment studies	600,000
Component 2	Operational support	100,000
Total		700,000

- 3.4 The disbursement of the IDB funds will be executed on a project-by-project basis and disbursed to consulting firms and/or individual consultants directly by IDB staff. The initial costs of the operation of US\$700,000 consist of the following two components: In coordination with C40 and GIZ, IDB will be in charge of the monitoring and evaluation of this operation, as well as responsible for providing technical supervision for the studies financed under this operation. The consulting firms will submit progress reports in accordance with the schedule for presentation of such reports provided in the relevant terms of reference.

IV. Executing agency and execution structure

- 4.1 This is a coordinated effort among three institutions: GIZ, C40 and IDB. These organizations commit to pool their financial and technical resources in order to prepare and enable third party participation from the public and private sector in sustainable urban infrastructure projects. Under this partnership GIZ is the main implementing agency, while C40 is responsible for building relationships with supported cities and partners. The Bank will act as an implementing partner for eligible C40 member cities in the LAC region.
- 4.2 IDB will not transfer TC funds to the CFF; instead funds will be administered by the Bank under the Bank's policies and procedures and in coordination with C40 and GIZ.
- 4.3 The CFF will be governed by a steering committee consisting of one member from each donor (C40, GIZ, and IDB). The committee members, complemented by sector specialists from each institution, will establish and maintain a close relationship through regular exchange in an effort to move forward in a coordinated manner.
- 4.4 Projects to be financed by the CFF will be executed in a coordinated effort by IDB, C40 and GIZ. IDB will draw on specialists in country offices and headquarters, while GIZ and C40 will be supported by a GIZ retainer consisting of technical and legal specialists. Additionally, a Senior Project Advisor (SPA) will be located in each city. Together, the partners are in charge of: (i) assisting and advising the relevant city administration in overseeing the activities related to the CFF; (ii) identifying and procuring necessary consulting services and studies; (iii) supervising the work of consultants and studies; and (iv) taking all required steps for the project's success and subsequent implementation.

- 4.5 The Bank will be the executing agency of this TC. All the proposed activities under this TC can be procured and implemented solely by the Bank. Aligning with IDB's role as an "implementing partner" under this partnership and given the designated multi-sectoral approach, the HUD division will be responsible for the execution of this TC and will strongly seek for cooperation with the other involved bank divisions, in particular with CCS, ENE, TSP and WSA. The project-specific technical work will be led by the "natural" sector to which the project belongs.
- 4.6 Technical Responsibility: The Bank through CSD/HUD will be responsible for the execution of this TC, in collaboration with CCS specialists and through technical leadership by the sectors. In the case of Bogota, Roberto Esmeral (CCS/CCO), and given the identified nature of the project (2.10) the Transport Sector specialists in Colombia assume this responsibility. The designated focal point in the country offices are Marcia Casseb (HUD/CBR); Veronica Adler (HUD/CUR); Francisca Rojas (HUD/CAR); and Ramiro Lopez-Ghio (FMM/CCO).

V. Project Risks and Major Issues

- 5.1 There are two key risks that may affect the results of the operation: institutional weaknesses and low technical capacity of local governments.
- 5.2 To mitigate the above-mentioned risk specific areas of intervention will be prioritized where beneficiary municipalities have previous experience, and demonstrate clear ownership.

VI. Exceptions to Bank policy

- 6.1 There are no exceptions to bank policies associated with this TC.

VII. Environmental and Social Strategy

- 7.1 There are no environmental or social risks associated with the activities outlined in this TC since it will not finance direct investments in infrastructure, but instead it will finance pre-investment studies, among which are technical, economic, legal, and environmental and social studies. Therefore, its classification is Category C, based on the [Safeguard Policy Filter Report](#) and [Safeguard Screening Form](#), Classification Toolkit.

Annexes:

- Annex 1. [Terms of Reference](#)
- Annex 2. [Procurement Plan](#)

REGIONAL

Strategic Partnership with C40 and GIZ for the establishment of the LAC Major Cities Finance Facility (CFF) for Sustainable Infrastructure (RG-T2895)

Pre-Investment Studies

TERMS OF REFERENCE

BACKGROUND

Established in 1959, the Inter-American Development Bank (IDB) is the main source of multilateral financing for economic, social and institutional development in Latin America and the Caribbean. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing member countries.

Access to finance is one of the most significant barriers that mayors and city leaders face in delivering on their climate change plans for their cities. This challenge is particularly acute in cities in developing countries and emerging economies where there is a shortage of expertise in securing investment for infrastructure projects. At the same time, these cities have enormous potential to reduce greenhouse gas (GHG) emissions while being highly vulnerable to the impacts of climate change.

In order to address this issue, the C40 Cities Climate Leadership Group (C40) and the German Federal Ministry for Economic Cooperation and Development (BMZ) initiated the C40 Cities Finance Facility (CFF) as a joint project. It is implemented by *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH* together with C40. The CFF supports C40 cities in developing and emerging countries to prepare and deliver sustainable, low carbon and climate adaptation projects. This is expected to contribute to meet the commitment of C40 cities to achieve 3.0 Gt in cumulative GHG emissions reductions by 2030.

The CFF was launched at the C40 Forum during COP21 in Paris in December 2015. The CFF is funded by BMZ and United States Agency for International Development (USAID). GIZ is the main implementing agency for technical assistance, while C40 is responsible for building relationships with supported cities and partners. The IDB works as an implementing partner in selected C40 cities in Latin America and the Caribbean. The CFF is cooperating with several sustainable development-focused investor groups and platforms to attract investment for its supported projects, as well as urban development networks and initiatives to make use of synergies, learn from and share best practices.

The ultimate objective of the CFF is to reduce GHG emissions and increase climate resilience in cities by mobilising financing for city-level climate change action. The CFF will aim to achieve the following high-level project outcomes: (i) Project preparation of urban climate change investment projects for sustainable financing, (ii) Capacity development of city administrations to mobilise and access a broad range of financing instruments, (iii) Knowledge sharing beyond CFF partner cities via peer-to-peer learning and CFF stakeholders, (iv) Partnerships between cities, investors/financiers and their representations.

The CFF provides support for upstream project preparation. In particular, it will finance the costs for preparatory activities, consulting services and pre-investment studies

necessary for the preparation and design of selected infrastructure projects. The first identified city and project under this partnership is Bogotá's *Quinto Centenario* project.

The *Quinto Centenario* project will be Bogotá's first bicycle highway. Conceived to commemorate the city's five-hundredth birthday, this 24 kilometer long corridor will traverse the city from south to north passing through the central business district. Connecting citizens from low, middle and high-income neighbourhoods with work, education and recreation opportunities, the *Quinto Centenario* will be a transformational project, increasing access opportunities and improving equity in Bogotá.

This one-of-a-kind project will position cycling above motorized transportation modes for many *Bogotanos* because it will provide a more direct route, guaranteeing them a safe, connected (both internally and to other modes), comfortable and accessible option to travel the city. *Quinto Centenario* will also change the way the city plans, designs, and implements cycling infrastructure because it will incorporate context-sensitive and low-impact design to make it sustainable, attractive, and resilient.

Looking to the future, the *Quinto Centenario* bicycle corridor will define Bogotá's transformation path, making it an example of sustainability and safety where children can travel safely in a tricycle or bicycle. A city for everybody.

To develop the *Quinto Centenario* bikeway, Bogotá needs the following technical and financial assistance to develop an implementation model, especially in terms of: (i) Detailed technical design of the project, (ii) Implementation strategy by phases, (iii) Economic and Environmental Analyses.

This consultancy will seek to develop the required technical studies and specifically addresses the issues outlined in the following sections.

OBJECTIVE OF THE CONSULTANCY

Perform the engineering design and other required studies for the *Quinto Centenario* bikeway corridor, including new and existing bicycle lanes along the defined area of intervention in order to increase the bicycle use in general.

Specific objectives of the study

- a) Engineering-level design of the proposed *Quinto Centenario* bikeway regarding to:
 - The network elements (crossings, parking, signage, etc.) necessary to ensure the proper functionality of the bicycle paths.
 - The elements of the bicycle path (pavements etc.) for the "set-up" of the bicycle lanes
- b) Engineering-level design of the physical connection of the new bikeway with the current existing bicycle, pedestrian and public transportation network
- c) Improvement of the public space by adding green areas and street furniture in the area of bicycle paths
- d) Proposal of a maintenance plan for infrastructure and green areas.

- e) Analysis of the socio-economic and environmental impacts of the proposed bicycle network.

Study Area. The project will be developed in the area depicted in figure 1, traversing the city of Bogotá from south to north, from *El Tunal Park* to 153th street, passing through the central business district, this 25 km-long bikeway will be a transformational project, increasing access opportunities and improving equity in Bogotá. The corridor will cover an area of the city, between *Avenida NQS* and Carrera 10, in the city south and center areas, where there is a lack of adequate coverage of the existing bicycle network. On the city's north side, around *Calle 92* and *Avenida NQS*, grade separation is proposed by elevating the bikeway to continue traveling north and thus, cover the demand for trips in the area up to 153th street, around the Carmel Club.

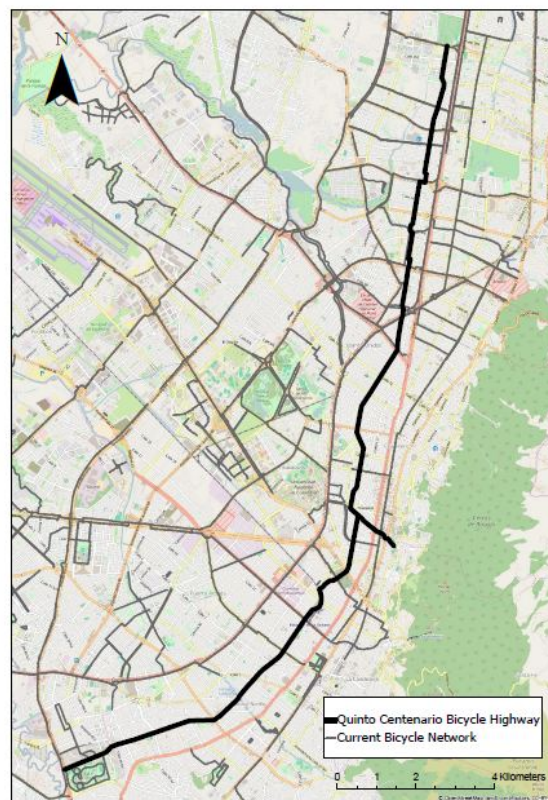


Figure 1. *Quinto Centenario Bikeway.*

Approach. A brief evaluation of the infrastructure in the study area reveals that at several intersections and at many points in the existing route, it is necessary to design/redesign the bicycle paths in order to provide road safety for cyclists. On the other hand, it is necessary to incorporate green areas and some urban furniture close to the bicycle paths, to make it part of the urban landscape and axis of the improvements of the public space. But there is also a need for a sustainable maintenance scheme for bicycle paths and green areas.

The design of the network of bicycle lanes and complementary services shall be formulated taking into account the needs of the users and allow for the following:

- a) Guarantee the sense of connectivity of the cycle path from the origin of travel to its destination (**coherence**).
- b) Encourage cycling trips for the shortest distances, in a fast and convenient way (**directionality**).
- c) Include concepts of environmental security and the physical environment that favor the use of the system (**attractiveness**).
- d) Incorporate in the standard safety designs for the cycle path and for its interaction with other forms of transport, analyzing the complexity of the risk (**safety**).
- e) Establish design criteria to make cycling comfortable.
- f) The design must determine how to: (i) Minimize resistance, the main requirement of comfort, minimizing lost energy as much as possible; (ii) Optimizing mental effort, (iii) Considering cyclists' vulnerability, (iv) Considering environment appreciation and planning (attractiveness), (v) Ensuring that infrastructure is distinguishable for other forms of transportation.
- g) The design should seek a correct balance between the shape, use and function of each element of the bicycle path.

MAIN ACTIVITIES

In order to structure the scope of the project, the work is separated into two categories: (i) Engineering design of the *Quinto Centenario* bicycle lane infrastructure, and (ii) Development of the maintenance plan and analysis of the impacts of the project. At all stages of the consultancy, the consulting firm is required to be closely coordinated with the *Secretaría de Movilidad* of Bogotá and the technical specialists from IADB and GIZ.

PART 1: ENGINEERING DESIGN OF THE QUINTO CENTENARIO BYCICLE LANE INFRASTRUCTURE

Task 1. Collection of Background Information

The Consulting firm shall compile and supplement all information required to achieve the objectives of the study, without limitation, data is expected from the project area on:

- Updated topography of the study area
- Soil mechanics
- Available accident information
- Information on traffic/mobility studies
- Socio-economic information on the area of influence, population, housing and predominant land uses.

Task 2. Analysis and diagnosis and proposition of alternatives

An important element of the diagnosis is the methodology, which the consulting firm proposes, to identify the areas of conflict between cyclist - motorized transport, pedestrian - cyclist and cyclist - tricycles.

In the case of the existing network along the corridor, a road safety audit will be carried out considering the functionality of the network. The firm should propose a methodology

to determine what elements of the network require a "redesign" and design the location of the required "bicycle parking".

The "set up" of the network requires that the consulting firm carries out a field inspection, for which they must propose a methodology that systematizes data on the condition of pavements, curbs, sidewalks, signs, green areas and others. It will also determine possible interferences with some elements of the public service network (electricity, water, communication, etc.).

Considering that it seeks to create high quality public spaces adjacent to the cycle paths, an analysis will be made from the point of view of the use of the public space, in order to incorporate green areas and urban furniture to it.

It will also determine the effects on the neighborhood and on the traffic that the infrastructure has caused in order to propose solutions to the conflicting interests of cyclists, neighbors, and transit in general. The solutions should include the intermodal exchanges between the analyzed corridor and the other forms of transportation, including other existing bicycle corridors, pedestrian paths and the public transportation system, existing and projected.

Analysis and diagnostics should conclude with the proposition of the various solution alternatives. Physical improvements to the infrastructure should include: (i) periodic interruptions of curbs, (ii) paving of adjacent sidewalks, (iii) bus stops, (iii) bicycle parking, (iv) designs of traffic calming, and others that the consultant deems necessary.

Alternative solutions must have measurable criteria that allow the decision to choose the most appropriate option in each case. For this, socio-economic, environmental and financial evaluations must be carried out.

At this stage, the firm shall work closely with the *Secretaria de Movilidad* of Bogotá and the technical specialists from IADB and GIZ.

Task 3. Design

Once the most suitable solution is elaborated, the consulting firm is expected to develop the designs.

The geometric design, based on an updated topography, will be summarized in the corresponding plans (plants, alignment, cross sections, longitudinal sections, details), the scale will be the usual in this type of projects.

The horizontal and vertical signaling plans must be developed and, if required, the signaling process as well.

Designs of urban furniture and green areas should be developed to allow the enjoyment, recreation and appropriation of the public space adjacent to the bicycle lanes. An irrigation system for green areas should be designed.

If relocations or modifications are required in the public services network (electricity, water, communication, etc.), the firm must carry out the required designs for the approval of the corresponding instances.

The firm should provide an implementation strategy by phases, considering the phases provided by the *Secretaria de Movilidad*.

Task 4. Bidding documents for the tendering of the construction works

The firm must submit the detailed work quantities per item, unit price analyzes, budget, technical specifications, schedule and valuable timetable of the works. The specifications must be clear, allowing to identify the construction processes, the measure and the corresponding form of payment.

With these inputs, the tender documents (terms of reference, bases, contracts) must be prepared for the execution of the works and for the supervision of the works. These documents will be prepared using the standard documents of the Inter-American Development Bank.

PART II. DEVELOPMENT OF THE MAINTENANCE PLAN AND ANALYSIS OF THE IMPACTS OF THE PROJECT

The consulting firm will design a plan that will allow the maintenance of bicycle paths and green areas in a sustainable manner. Different maintenance schemes should be studied, defining for instance if maintenance will be done by micro-companies in the neighborhood, by the local government, or by another third party. This plan must contain the costs, the technical specifications and an organizational scheme that involves the municipalities.

The consulting firm should estimate the socio-economic impacts associated with the increased bicycle traffic as well as the environmental benefits by quantifying the reduction of greenhouse gas emissions. For these purposes a valid calculation methodology has to be presented.

REPORTS / DELIVERABLES

The consulting firm will submit the following deliverables:

- Engineering design of the proposed *Quinto Centenario* bikeway, including new and existing bicycle lanes along the intervention area, by phases.
- Bidding documents for the supervision and execution of the construction works to be carried out.
- Definition of a maintenance program for bicycle paths and green areas involving municipalities and the neighboring communities.
- Socio- economic, financial and environmental analysis of the project.
- Reports from workshops that show the progress and conclusions of the study.

Work schedule and reporting plan. Upon signature of the contract, the consulting firm must submit a work plan, which includes the activities to be carried out to achieve the objectives of the Consultancy and the time in which these will be achieved.

The works will be organized in three phases:

- Phase 1. General studies of the proposed *Quinto Centenario* bikeway, including new and existing bicycle lanes along the intervention area; Preliminary socio-economic, financial and environmental analysis. At the end of this phase there will be a citizen participation workshop to present the project.
- Phase 2. Development of the designs.
- Phase 3. Drafting of technical documents for the bidding of works, elaboration of maintenance plan and analysis of the economic and environmental benefits of the project.

The following reports will be delivered by the consulting firm:

- **FIRST INTERMEDIATE REPORT** (1 month after signature of contract)
Results of the Compilation and Complementation of the basic information, both existing and new cycling routes along the *Quinto Centenario* corridor, as well as the proposal of the methodology and model for the calculation of the environmental benefits, as well as the methodologies to be used in the analysis and diagnosis.
- **SECOND INTERMEDIATE REPORT** (3 months after signature of contract)
Results of the task analysis and diagnosis and proposition of alternatives, both for existing cycle routes and of the extension. The approval of this report will allow progress with the following phases of the study.
- **THIRD INTERMEDIATE REPORT** (5 months after signature of contract)
Advance of technical design tasks.
- **FINAL REPORT** (9 months after signature of contract)
Results of the technical design tasks, the preparation of the bidding documents for tendering of construction works to be carried out, preparation of the maintenance plan and the economic and environmental benefits of the project. This report will contain the expected outputs with conclusions and recommendations. It will also present an executive summary.

RECOMMENDED INFORMATION

The bibliography cited below may be useful for the consulting work and is recommended to the consulting firm:

- Comisión europea (2002). En bici, hacia ciudades sin malos humos.
- Comisión europea (2002). La ciudad, los niños y la movilidad.
- Banco Mundial (2003). Ciudades en Movimiento.
- Goldsmith, S. A. (1992) Case study No. 1: Reasons why bicycling and walking are and are not being used more extensively as travel modes. National Bicycling and Walking Study. Federal Highway Administration. US Department of Transportation. Washington D. C.
- Hopkinson, P., Wardman, M. (1996) Evaluating the demand for new cycle facilities. *Transport Policy* 10, 4 241-249.
- Jones, M., Buckland, L. (2009) Estimating bicycle and pedestrian demand in San Diego. TRB 2008 Annual Meeting. 1-17.

- Martínez, V. (2004) Diseño de encuestas de opinión. Editorial Ra-Ma. Madrid, España.
- Ortúzar, J., Lacobelli, A., (1999) Estimating demand for a cycle-way network. Transportation Research Part A 34 (2000) 353-373.
- Ortúzar, J. (2000) Modelos de demanda de transporte. Universidad Católica de Chile. Alfa y Omega. México.
- Wardman, M., Tight, M., Page, M. (2007). Factors influencing the propensity to cycle to work. Transportation Research Part A 41, 339-350.
- Williams, J., Larson, J. (1996) Promoting bicycle commuting: understanding the customer. Transportation quarterly 50, 67-78.
- Xing, Y., Handy, S., Theodore, J. (2008) Factors associated with bicycle ownership and use: A study of six small U.S. cities. TRB 2008 Annual Meeting.

PAYMENT SCHEDULE

The contract amount will be paid according to the following schedule:

- a. 10% upon contract signature.
- b. 10% upon approval of the 1st intermediate report.
- c. 10% upon approval of the 2nd intermediate report.
- d. 20% upon approval of the 3rd intermediate report.
- e. 50% upon approval of the final report.

QUALIFICATIONS

For the development of this consultancy, it is considered necessary, to fulfil at least the following technical requirements:

- Urban Transportation Specialist: Graduated in engineering or architecture, with a minimum experience of 8 years. This professional must have relevant experience in urban transport planning.
- Road Design Specialist: Professional graduate in engineering, with a minimum experience of 8 years. This professional must have relevant experience in pavement design, road structure design, systems and preventive and corrective maintenance procedures.
- Urbanist: It is desired that this professional has at least 8 years of specific experience in projects related to the intervention of urban areas through the use of transport elements, and skills in the design of urban furniture elements and green areas.
- Environmental Specialist: Professional graduate with a minimum experience of 5 years. Preferably specialized in issues of air pollution and greenhouse gas emissions. Sufficient knowledge of the regulation of air pollution is recommended.
- Road Safety Specialist: Graduated in engineering, with a minimum experience of 5 years. It is desirable that this professional has experience

in road safety audits, design of road safety elements and knowhow about the regulations on the subject.

- Specialist in costs and budgets: Graduated in engineering, with a minimum experience of 5 years, must have experience in metrics, unit costs, technical specifications, and preparation of bidding documents according to IDB standards.

From the team of professionals, the consulting firm will appoint a suitable Project Coordinator with experience in the management of multidisciplinary teams.

CHARACTERISTICS OF THE CONSULTANCY

Consultancy Category and Modality: Contract for External Products and Services, Lump Sum.

Duration of Contract: 9 months.

Place(s) of work: International.

COORDINATION

The supervision of this contract, including approval for payments, will be the responsibility of Horacio Terraza (horaciot@iadb.org), Program Coordinator of the Emerging and Sustainable Cities Program of the Housing and Urban Development Division (CSD/HUD). The technical approval of the reports will be under the responsibility of the Transport Sector Specialists in Colombia (TSP/CCO) in coordination with Roberto Esmeral, Climate Change Specialist in Colombia (CCS/CCO), and Ramiro Lopez-Ghio, Fiscal and Municipal Management Specialist in Colombia (FMM/CCO).

Payments and Conditions: Compensation will be determined in accordance with Bank policies and procedures. In addition, applicants must be citizens of an IDB member country.

Consanguinity: Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouses) working for the Bank as staff members or Complementary Workforce contractuels are not eligible to provide services for the Bank.

Diversity: The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, race, disability, sexual orientation, religion and HIV/AIDS status. We encourage women, Afro-descendants and persons of indigenous origin to apply.

PROCUREMENT PLAN FOR NON-REIMBURSABLE TECHNICAL COOPERATIONS										
Country: Regional (Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru)					Executing agency: IDB				Public or private sector: N/A	
Project number: RG-T2895					Title of Project: Strategic Partnership with C40 and GIZ for the establishment of the LAC Major Cities Finance Facility (CFF)					
Period covered by the plan: 2017-2019										
Threshold for ex-post review of procurements:			Goods and services (in US\$):		0		Consulting services(in		700,000	
Item Nº	Ref. AWP	Description (1)	Estimated contract cost (US\$)	Procurement Method (2)	Review of procurement (3)	Source of financing and percentage		Estimated date of the procurement notice or start of the contract	Technical review by the PTL (4)	Comments
						IDB /MIF %	Local/other* %			
1		Component 1: Pre-investment studies for the identified interventions	600,000							
		Consulting Firms	600,000							
		Design of technical study in Bogotá	400,000	QCBS	ex post	80%	20%	May-17	ex ante	
		Pre-feasability study for 2nd city	200,000	QCBS	ex post	80%	20%	Sep-17	ex ante	
2		Component 2: Operational support for the preparing and supervisory activities related to the pre-investment studies	100,000							
		Individual Consultants	100,000							
		Project Coordination	50,000	CQS	ex post	80%	20%	Feb-17	ex ante	
		Technical Specialist	50,000	CQS	ex post	80%	20%	Feb-17	ex ante	
Total			700,000	Prepared by: Andreas Wohlhueter				Date: November 22nd 2016		
(1) Grouping together of similar procurement is recommended, such as computer hardware, publications, travel, etc. If there are a number of similar individual contracts to be executed at different times, they can be grouped together under a single heading, with an explanation in the comments column indicating the average individual amount and the period during which the contract would be executed. For example: an export promotion project that includes travel to participate in fairs would have an item called "airfare for fairs", an estimated total value of US\$5,000, and an explanation in the Comments column: "This is for approximately four different airfares to participate in fairs in the region in years X and X1".										
(2) Goods and works: CB: Competitive bidding; PC: Price comparison; DC: Direct contracting.										
(2) Consulting firms: CQS: Selection Based on the Consultants' Qualifications; QCBS: Quality and cost-based selection; LCS: Least Cost Selection; FBS: Selection under a Fixed Budget; SSS: Single Source Selection; QBS: Quality Based selection.										
(2) Individual consultants: IICQ: International Individual Consultant Selection Based on Qualifications; SSS: Single Source Selection.										
(2) Country system: include selection Method										
(3) Ex-ante/ex-post review: In general, depending on the institutional capacity and level of risk associated with the procurement, ex-post review is the standard modality. Ex-ante review can be specified for critical or complex process.										
(4) Technical review: The PTL will use this column to define those procurement he/she considers "critical" or "complex" that require ex ante review of the terms of reference, technical specifications, reports, outputs, or other items.										
(*) In-kind contribution: The resources for this TC will be withdrawn from SECCI funds, which require a co-financing share of at least 20%. This share is expected in the form of in-kind-contributions from the beneficiary.										



Safeguard Policy Filter Report

Operation Information

Operation		
RG-T2895 Partnership with C40 and GIZ for the establishment of LAC Major Cities Finance for Sustainable Infrastructure		
Environmental and Social Impact Category	High Risk Rating	
C	{Not Set}	
Country	Executing Agency	
REGIONAL	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Climate Chng & Sustainable Dev	SUSTAINABLE CITIES	
Team Leader	ESG Lead Specialist	
HORACIO CRISTIAN TERRAZA	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Technical Cooperation	\$0	0.000 %
Assessment Date	Author	
21 Nov 2016	andreasw Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	{Not Set}	
QRR (Estimated)	{Not Set}	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		



Safeguard Policy Filter Report

Potential Safeguard Policy Items

[No potential issues identified]

Safeguard Policy Items Identified

B.1 Bank Policies (Access to Information Policy– OP-102)

The Bank will make the relevant project documents available to the public.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation includes activities related to climate change adaptation, but these are not the primary objective of the operation.

B.2 Country Laws and Regulations

The operation is expected to be in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements).

B.3 Screening and Classification

The operation (including [associated facilities](#)) is screened and classified according to its potential environmental impacts.

B.4 Other Risk Factors

The operation is [specifically designed](#) to increase the ability of society and ecological systems to adapt to a changing climate.

B.4 Other Risk Factors

The operation [includes activities](#) to close current “adaptation deficits” or to increase the ability of society and ecological systems to adapt to a changing climate.

B.15. Co-financing Operations

The operation or any of its components is being co-financed.

B.17. Procurement

Suitable safeguard provisions for the procurement of goods and services in Bank financed operation will be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.

Recommended Actions

{Not Set}



Safeguard Policy Filter Report

Additional Comments

[No additional comments]



Safeguard Screening Form

Operation Information

Operation		
RG-T2895 Partnership with C40 and GIZ for the establishment of LAC Major Cities Finance for Sustainable Infrastructure		
Environmental and Social Impact Category	High Risk Rating	
C	{Not Set}	
Country	Executing Agency	
REGIONAL	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Climate Chng & Sustainable Dev	SUSTAINABLE CITIES	
Team Leader	ESG Lead Specialist	
HORACIO CRISTIAN TERRAZA	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Technical Cooperation	\$0	0.000 %
Assessment Date	Author	
21 Nov 2016	andreasw Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	{Not Set}	
QRR (Estimated)	{Not Set}	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

Operation Classification Summary

Overridden Rating	Overridden Justification
Comments	



Safeguard Screening Form

Conditions / Recommendations

Summary of Impacts / Risks and Potential Solutions

Disaster Risk Summary

Disaster Risk Level

Disaster / Recommendations

Disaster Summary

Details

Actions

STRATEGIC PARTNERSHIP WITH C4O AND DEUTSCHE GESELLSCHAFT FÜR INTERNATIONALE ZUSAMMENARBEIT
(GIZ) FOR THE ESTABLISHMENT OF THE LAC MAJOR CITIES FINANCE FACILITY (CFF) FOR
SUSTAINABLE INFRASTRUCTURE

RG-T2895

CERTIFICATION

I hereby certify that this operation was approved for financing under the **Sustainable Energy and Climate Change IDB Special Program (SCI)** through a communication dated November 23, 2016 and signed by Felipe Caicedo (ORP/GCM). Also, I certify that resources from said fund are available for up to **US\$700,000** in order to finance the activities described and budgeted in this document. This certification reserves resource for the referenced project for a period of four (4) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, represent a risk that will not be absorbed by the Fund.

ORIGINAL FIRMADO

Sonia M. Rivera
Chief

Grants and Co-Financing Management Unit
ORP/GCM

12/09/2016

Date

Approved:

ORIGINAL FIRMADO

Ellis J. Juan
Division Chief

Housing and Urban Development Division
CSD/HUD

12/12/2016

Date