



## 1. Project Data

<b>Project ID</b> P117947	<b>Project Name</b> CO Support Nat'l Urban Transit Program	
<b>Country</b> Colombia	<b>Practice Area(Lead)</b> Transport	
<b>L/C/TF Number(s)</b> IBRD-80830	<b>Closing Date (Original)</b> 30-Nov-2016	<b>Total Project Cost (USD)</b> 159,412,193.34
<b>Bank Approval Date</b> 21-Jul-2011	<b>Closing Date (Actual)</b> 30-Sep-2020	
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	350,000,000.00	0.00
Revised Commitment	198,000,000.00	0.00
Actual	159,412,193.34	0.00

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## 2. Project Objectives and Components

### a. Objectives

The Project Development Objective (PDO) was to enhance the efficiency, affordability, quality, safety, and environmental sustainability of the provision of public transit services in the participating cities (Loan Agreement page 6 and Project Appraisal Document (PAD) para 21).

### b. Were the project objectives/key associated outcome targets revised during implementation?



Yes

**Did the Board approve the revised objectives/key associated outcome targets?**

Yes

**Date of Board Approval**

20-Jun-2018

**c. Will a split evaluation be undertaken?**

No

**d. Components**

Note: The first restructuring approved on June 21, 2013 added a new Technical Assistance component. The components were renumbered as follows: Component A – Implementing Capacity Building (the new component), Component B – Integrated Mass Transit System, and Component C – Strategic Public Transit Systems (ICR para 23).

**Original Component A (or revised component B): Integrated Mass Transit Systems** (estimated cost US\$ 253 million, actual cost US\$67 million). This component included the following activities:

- revision of detailed engineering designs;
- construction of bus rapid transport segregated busways;
- construction of bus stops, terminals and transfer centers;
- construction of mixed-traffic lanes adjacent to busway corridors;
- construction of sidewalks and bicycle paths;
- rehabilitation of feeder routes;
- construction of pedestrian ways along busway corridors, including pedestrian bridges;
- construction or adaptation of complementary transport corridors to the segregated busways;
- carrying out required adaptation and/or relocation of public service networks adjacent to the construction areas;
- the construction of bus workshops and parking;
- review and upgrading of technical designs; and
- carrying out supervision of construction works.

This component would also finance the acquisition of land and compensation for resettlement of affected persons; and the design and implementation of Environmental Management Plans (EMPs).

**Original Component B (or revised component C): Strategic Public Transit Systems** (estimated cost US\$154.0 million, actual cost US\$99.0 million). This component included the following activities:

- development of detailed Project engineering designs of integrated transport systems;
- construction and rehabilitation of road networks;
- construction and rehabilitation of sidewalks, public space, pedestrian ways along bus corridors and bicycle paths;
- construction of pedestrian bridges;



- construction of bus stops, terminals and transfer centers;
- construction of bus workshops and parking places;
- acquisition of control centers for strategic public transport systems, including fleet control, traffic lights and traffic signaling;
- rehabilitation and renewal of historic centers;
- provision of equipment and training for the Implementing Entities;
- hiring of specialized technical staff for the Implementing Entities for the implementation of the project;
- financing of Operating Costs; hiring of project auditors; (
- design and construction of centers of public citizen services;
- design and implementation of broad communication strategies; and
- supervision all these activities.

This component would also finance the acquisition of land and compensation for resettlement of affected persons; and the design and implementation of Environmental Management Plans (EMPs).

**New Component A – Implementing Capacity Building** (estimated cost US\$15 million, actual cost US\$8.68 million). This component was added in the first restructuring in 2013. It involved the strengthening of the institutional capacity of the Ministry of Transport (MoT) at the national level through the provision of Technical Assistance (TA) to its Project Coordination Unit (PCU) - the Ministry of Transport Implementing Unit (UMUS), to support the Borrower's formulation of national urban transport programs and strategies pursuant to the National Urban Transport Program (NUTP). The component sought to: (i) strengthen the technical, functional, and operational capacity of the UMUS; (ii) strengthen the implementing entities of each city managing the systems (Metroplús in Medellín, Metrolinea in Bucaramanga, SIVA in Valledupar, MetroSabana in Sincelejo, and Transfederal in Neiva); and (iii) provide technical support to Integrated Mass Transit Systems (IMTS) and Strategic Public Transit Systems (SPTS) in the design of urban mobility and operational plans, and the implementation of marketing strategies (ICR para 24).

#### e. **Comments on Project Cost, Financing, Borrower Contribution, and Dates**

**Project Cost.** The actual project cost was US\$198.0 million, substantially lower than the appraisal estimate of US\$ 407.0 million (ICR page 59). This was due to initial reduction of the scope of original components because of delays in reaching effectiveness, as well as implementation delays and changes in exchange rate which resulted in the cancellation of resources (ICR para 32). The project's effectiveness date was delayed by more than two years after approval, primarily to accommodate the new Colombian law, *vigencias futuras* (future budget allocations). The law affected the co-financing arrangements between national and local governments.

**Financing.** The original loan amount was US\$350.0 million. The actual disbursements were US\$169.49 million. A total of \$152 million of loan funds were cancelled in the 2013 and 2016 restructurings.

In 2013, a US\$58.0 million was cancelled. This included a full cancellation of the loan allocation to Pereira and Cartagena and partial cancellation (and reallocation) of the loan allocation to Bucaramanga and Medellín under Component B. The loan amount was reduced from US\$350 million to US\$292 million (ICR para 25).



In 2016, US\$94.0 million was cancelled, including a partial cancellation (and reallocation) of the loan allocation to Bucaramanga, Medellín, Sincelejo, and Valledupar. The loan amount was reduced from US\$292 million to US\$198 million. The undisbursed amount at project closure was US\$36.82 million.

**Co-financing.** None.

**Borrower Contribution.** The actual borrower contribution was US\$78.69 million, significantly lower than the appraisal commitment of US\$118.0 million.

**Dates.** The project was approved on July 21, 2011, became effective on October 18, 2013, and closed on September 30, 2020 after a four-year delay. This was due to capacity constraints, which caused implementation delays (ICR para 34). Constraints were due to significant staff turnover, a lack of resources at the PCU at the national level, as well as significant challenges to attract and retain qualified staff for technical, fiduciary, and project management.

### **Restructurings**

The **first restructuring** approved on June 21, 2013 added a new Technical Assistance component. The components were renumbered as follows: Component A – Implementing Capacity Building (the new component), Component B – Integrated Mass Transit System, and Component C – Strategic Public Transit Systems (ICR para 23). There was cancellation of financing (US\$58.0 million).

The **second restructuring** approved on August 25, 2016 resulted in changes in component costs and loan closing date, and cancellation of financing (US\$94.0 million).

The **third restructuring** approved on June 28, 2018 simplified the results framework by eliminating the redundancies in the intermediate indicators, and introduced revised indicators to measure the outputs or intermediate outcomes rather than procurement processes (ICR para 28).

**Split Rating.** The objectives were not revised. The methodology for measuring the outcome targets was substantially modified in the third restructuring approved on June 28, 2018, and the outcome target values were lowered. However, because the ambition of the outcomes remained the same, a split evaluation was not conducted.

## **3. Relevance of Objectives**

### **Rationale**

**Country and Sector Context.** Colombia is an upper-middle income country with a relatively good economic performance. It has experienced high population growth in the urban areas. At the national and local levels, urban transport was regarded as a catalyst for higher productivity, greater access to economic opportunities, and social inclusion (ICR para 3). However, public transport had been a long-standing concern for planners and decision makers in Colombia. At appraisal, public transportation was characterized by an institutional arrangement that led to an oversupply of buses and low-quality service.



In 1997, the Government of Colombia published Decree 3109 to regulate mass passenger transport services. In 1998, the city of Bogotá embarked on a radical program to improve the quality of public transit services by implementing the *TransMilenio* bus rapid transit (BRT) system. The system aimed to build new infrastructure consisting of dedicated lanes, large-capacity buses, and elevated bus stations that allowed pre-board ticketing and fast boarding. It also implemented a prepaid method of payment (off-board fare collection) and an integrated fare system that allowed free transfers.

### **Alignment with Country Strategy.**

The PDO was aligned with the National Development Plan (2018-2022), which seeks to strengthen public transportation systems. The PDO was also aligned with the 2020 National Urban and Regional Mobility Policy, which outlines a road map to achieve more resilient, sustainable cities by providing good quality public transport. According to the ICR (para 39), the third objective of this policy aimed to strengthen the institutional framework of local administrations and the Government of Colombia's in the planning, execution, control, and monitoring of mobility in cities and urban agglomerations to effectively implement comprehensive urban and regional mobility strategies.

**Alignment with Bank Strategy.** The PDO was fully aligned with objective 8 of the current 2016-2021 Country Partnership Framework (CPF) for Colombia. The PDO supports CPF Objective 8 "Improved infrastructure services and enhanced urban planning to develop competitive cities" by increasing the capacity of the Government of Colombia and municipal governments to analyze urban mobility and options to strengthen planning, management, operations, and financial sustainability of integrated public transport systems (CPF page 43).

**Previous Bank Experience.** The Bank has had a long-term engagement in Colombia's urban transport sector. The Bank's engagement with the Government of Colombia on urban transport dates back to the mid-1990s when the government was pursuing a series of regulatory reforms to promote private sector participation in infrastructure, when the city of Bogotá was first embarking on the implementation of Transmilenio. The Bank has supported the National Urban Transit Program through three loans in 2004, totaling US\$757 million (Integrated Mass Transit System Project and two subsequent Additional Financings) aimed at financing the governments commitments to large cities for the construction and implementation of BRTs (six out of the nine cities – Barranquilla, Bogotá, Bucaramanga, Cartagena, Medellín-Valle de Aburrá, and Pereira).

The Project continued to scale up the Bank's support to Colombia by financing the government's commitments to large and medium cities. For these cities, the project introduced urban transport interventions that focused less on infrastructure but addressed the negative incentives of the traditional bus system and tackled new issues such as informal public transport (motorcycle cabs and vans) (PAD para 17 -19).

Overall, the relevance of PDO was **high**.

### **Rating**

High



## 4. Achievement of Objectives (Efficacy)

### OBJECTIVE 1

#### Objective

To enhance the efficiency, affordability, quality, safety, and environmental sustainability of the provision of public transit services in the participating cities.

#### Rationale

The five sub-objectives are bundled together as they are the outcomes of the improved public transit services. This is discussed in detail in the theory of change below.

**Theory of change (ToC).** The projects ToC was based on the premise that the development of the Integrated Mass Transit System (IMTS) and the Strategic Public Transit Systems (SPTS) - would transform the urban transport sector and enhance the provision of public transit services in each of the subnational entities. This would be achieved through outputs, such as improved urban infrastructure, segregated BRT busways, mixed-traffic lanes, bus stops, terminals, transfer centers, renewal of historic centers, and urban renewal. These outputs were expected to result in outcomes such enhanced efficiency, affordability, quality, safety, and environmental sustainability of the public transit services.

The ToC presented on page 10 of the ICR is straightforward, robust and valid, and provides critical assumptions such as: (a) effective technical collaboration between the Government of Colombia and the sub-national governments; (b) effective concession contracts granted by the cities to private sector operators; (c) effective public-private partnership as private sector finances the operation, equipment and fare collection; and (d) each city establishes transportation entities which are responsible for planning, regulation and operation of the system. The main shortcoming is that many of the project infrastructure outputs were not fully completed or the outcomes were only partially attributable to the project activities (see detailed discussion in the M&E section 9 below).

#### Outputs

- For the Integrated Mass Transit System, 59.9 km of trunk road corridor was constructed, higher than original target of 30.7 km but lower than the revised target of 65 km: Medellin, actual 25.8 km, revised target was 31.0 km; and Bucaramanga, actual 34.9 km, revised target was 34.1 km (ICR page 44).
- For the Strategic Public Transit Systems, 88.5 km were constructed or rehabilitated substantially lower than the target of 160.6 km. None of the targets for the cities were achieved: Valledupar, actual 25.76 km, target was 27.8 km; Sincelejo, actual 42.0 km, target was 56.1 km; and Neiva, actual 42.0 km, target was 56.1 km (ICR page 46).
- As targeted, 3 terminals were constructed in Bucaramanga.
- 13.75 km of sidewalks were rehabilitated or constructed in Valledupar and Neiva, against the target of 35.5 km .
- 141,775 square meters of public space area was rehabilitated or constructed in Sincelejo and Valledupar, well under the target of 297,550.
- In Bucaramanga 8.9 km segregated BRT busways were completed, as targeted; 80.1 km feeder routes were completed, as targeted; 25 pedestrian bridges were completed, as targeted; 76 terminals



and stops were completed, as targeted; and 25,19 km mixed lanes corridors were completed, as targeted.

- In Medellin, none of the planned stations (5 stations Troncal Medellin, 19 stations Troncal Itagui, and 7 stations Troncal Envigado) were completed.

The ICR report (para 41) that many of the project infrastructure outputs under Component B and C (i.e., BRT busways, mixed-traffic lanes, feeder corridors) were not fully completed or have designs but lack resources. Also, some outputs that are key for the IMTS and STPS operation (i.e., control centers, fleet management systems and transfer centers) were not delivered by project closure.

The Project supported the capacity building and planning towards the operation of the IMTS and SPTS system through technical studies:

- Guide on climate change and urban transport;
- Technical assistance to Metro de Bogota Implementation;
- Technical assistance on urban transport indicators;
- Feasibility assessment on the use of motorcycles and tricycles for the provision of urban transport services;
- Financial sources for urban transport sustainability;
- Guidelines for implementation of exclusive lanes in Colombian cities.

## Outcomes

**The project modestly contributed to enhanced efficiency of public transit services.** In Bucaramanga, average travel time was reduced from 35.7 minutes (baseline) to 13.5 minutes, underachieving the target of 12.4 minutes. In Medellin, average travel time was reduced from 30.5 minutes (baseline) to 23.78 minutes, underachieving the target of 21.2 minutes. The indicator compared the average travel time on the intervened exclusive trunk corridors against the average time on the adjacent mixed traffic lanes. As noted by the ICR (para 42), the IMTS infrastructure is still not fully in operation; therefore, the time savings cannot be fully attributed to the project.

**The project did not enhance affordability of public transit services,** as the percentage of household expenditure spent on urban transport was higher than the target in all subnational entities other than Neiva (actual 13%, baseline 13%, target 13%). Bucaramanga: actual 18.7%, baseline 10%, target 13%; Medellin: actual 15.9%, baseline 9%, target 12%; Sincelejo: actual 13.7%, baseline 9%, target 12%; and Valledupar: actual 14.3%, baseline 9%, target 12%.

The ICR reports (para 43) that the urban transportation expenditure increased over time due to exogenous factors beyond the project's control because, as the income of the lowest two income quintiles (Stratas 1 and 2) grew slower than inflation, the target showed a higher percentage than the baseline in the first year.

**The project contributed to enhancing the quality of public transit services to a modest extent.** According to the satisfaction survey, in Medellín, 91% of those surveyed were satisfied (rated their trip as satisfactory or very satisfactory) with the public transit system compared to the baseline of 60% and target of 75%. In Bucaramanga, 73% of those surveyed were satisfied with the public transit services compared to the baseline of 67 percent and target of 75%. With regard to the STPS projects, satisfaction rates improved compared to a very low baseline of 50% in each city. In Neiva, the satisfaction rate of 81% significantly



exceeded the target of 70 percent, while Sincelejo achieved 73% satisfaction rate and Valledupar 67%, almost achieving the target of 75%.

The ICR notes (para 44) that there are attribution issues: (a) the data on the percentage of people satisfied with the system was collected from surveys that targeted users of the entire public transit systems (not only the corridors targeted under the project). Therefore, these figures are not directly attributable to the project; and (b) since the project infrastructure investments (i.e. trunk corridors, sub-trunk corridors, feeder corridors) under Component B and C were not yet in operation at project closure, it is unclear to what extent the improvements of quality can be fully attributed to the project.

**The project substantially enhanced safety of public transit services.** The number of deaths in accidents directly related to public transport decreased in all subnational entities except Bucaramanga where it remained the same. This was because the project interventions such as traffic measures, better road infrastructure, lighting, among others, helped reduce the number of deaths and traffic accidents. As highlighted by the ICR (para 45), the indicator measured only accidents in segregated corridors for the IMTS and accidents related to the public transport in STPS, which resulted in very small numbers. The ICR (para 76) adds that in the case of Medellín and Bucaramanga, beyond TA activities, there is no clear link between the infrastructure financed and accidents in segregated corridors.

**The project contributed to enhancing environmental sustainability of public transit services to a modest extent.** The targets for reduction in PM2.5 levels were achieved in all subnational entities, except Bucaramanga. This was due to a modal shift from private cars to public transport and to renewal in bus and car fleets. Modal shift was estimated at 5% for Medellín and Bucaramanga and 1% for Sincelejo, Valledupar, and Neiva.

The daily ridership in public transport was lower than the baseline for all cities, except for Medellín. The achievement against targets is as follows: Bucaramanga at 36%; Medellín at 50%; Sincelejo at 33.4%; Valledupar at 71%, and Neiva at 26% (ICR Table 2, page 17). The ICR (para 47) notes that the ridership was highly affected by the COVID-19 pandemic during 2020, but the projections for the near future are difficult to make and demand levels may take long to recover, even when the pandemic is over. As of June 2020, the demand level was between 40-60 percent of pre-pandemic levels (ICR, para 74).

**Rating**  
Modest

## **OVERALL EFFICACY**

### **Rationale**

The project modestly achieved its outcome targets, and the outcomes, as reported, are not fully attributable to the project. Overall, efficacy is **modest**.



**Overall Efficacy Rating**

Modest

**Primary Reason**

Low achievement

**5. Efficiency**

**Economic Efficiency**

At appraisal, cost benefit analysis was carried out for two large cities - Cartagena and Medellin-Valle de Aburrá, and two medium cities - Sincelejo and Valledupar. The analysis included all public and private costs associated with the implementation and operation of the new transport system (PAD para 49). Benefits include travel time savings for both bus users and private vehicles, efficiency improvement in transit operations due to scrapping of obsolete units, as well as modal shifts, trip generation, accident reduction and pollution abetments (PAD para 49). The Economic Rates of Return (ERR) are presented in table 1 below. The PAD did not provide an overall ERR.

At completion, the two Integrated Mass Transit Systems (IMTS) projects showed positive ERRs but only one Strategic Public Transit Systems cities (STPS) (Neiva) had a positive ERR with "COVID-19 scenario". The ex-post ERR was also calculated for "without COVID-19" scenario, and an average annual growth rate of 3% and 1% was applied for the SPTS and IMTS cities. This yielded a positive scenario for all cities (see table below). The ICR did not provide an overall ERR.

**Table 1. Economic Analysis\***

	<b>ex-ante ERR (12% discount rate)</b>	<b>ex-post ERR with COVID-19 scenario (4.5% discount rate)</b>	<b>ex-post ERR without COVID-19 scenario (4.5% discount rate)</b>
Cartagena (IMTS)	17%		
Medellin (IMTS)	9%	9.9%	11.9%
Bucaramanga (IMTS)		12%	13.7%
Sincelejo (STPS)	17%	-5.4%	4.9%
Valledupar (STPS)	13%	-3.7%	7%
Neiva (STPS)		10.3%	18.9%

\*The ex-post cost-benefit analysis used a low discount rate of 4.5%, while the ex ante comparison used a 12% discount rate, which was the recommended rate in 2011 at appraisal. Therefore, the methodologies were not strictly comparable.

**Administrative efficiency**

The project experienced delays prior to effectiveness and during implementation and closed four year behind schedule. This resulted in a high amount of unutilized loan resources - the project closed with 20% of undisbursed proceeds from the last structuring in 2018. The cost of supervision was high (ICR para 51).

Overall, project efficiency was **modest**.



## Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

\* Refers to percent of total project cost for which ERR/FRR was calculated.

## 6. Outcome

The relevance of objectives is high. The project modestly achieved its objective of enhancing the efficiency, affordability, quality, safety, and environmental sustainability of the provision of public transit services in the participating cities. The outcomes, as reported, are not fully attributable to the project. The project efficiency is modest. The project outcome is moderately unsatisfactory.

### a. Outcome Rating

Moderately Unsatisfactory

## 7. Risk to Development Outcome

The main risks to the development outcome are related to:

**Operations and Maintenance (O&M).** This risk is substantial as the subnational entities would require additional resources for maintenance of assets such as stations and fleet or even increased investment/expansion if demand were to increase dramatically. Currently, there is no budget allocation of resources for O&M.

**Competition from conventional routes.** There is a substantial risk that the modal shift to BRT may reverse with the increased use of motorbikes and the operation of moto-taxis. The subnational authorities need to create incentives for users to prefer the new systems.



**Impact of COVID-19.** The pandemic has had a strong negative impact on all public transport in Colombia, severely impacting ridership, thereby impacting revenues and financial sustainability. This poses a substantial risk.

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

The project had high strategic relevance and was a continuation of the Bank's engagement in the urban transport sector in Colombia. Despite this, the project design had several significant shortcomings:

- Rigid technical requirements did not adapt to local contexts and needs, nor did they provide incentives to ensure operation of the systems. The program for the IMTS was designed following the model of *TransMilenio* Phase I. No modifications were made to take into consideration the specific conditions and context of each city nor the current administrative or economic conditions of local operators. The specification of the systems was too rigid, and many had oversized technology requirements, especially for the STPS (ICR, para 67).
- Subproject structuring for the systems under Component C (STPS) was approved for implementation by the Government of Colombia based on pre-feasibility studies, which didn't include any commercial studies nor an in-depth analysis of the need for public policy for financing the operation of the public transport systems. In case the of SPTS, no realistic plans were put in place to foster operational efficiency (ICR, para 66).
- While some key risks were assessed adequately at appraisal (PAD, para 47) (i.e., implementation and supervision complexities stemming from the project's scope of activities and geographical coverage; weak implementation capacity in new medium-sized cities, and prevalence of informal transportation, including motorcycle taxis, that may hinder the reorganization and formalization of the transport sector by decreasing overall demand for public transit), this did not include other important factors, such as unwillingness of some political stakeholders; systematic overestimation of transport demand; no incentives or institutional strength to promote the integration between collective public transport and informal transport; and lack of public policy to ensure financial sustainability of the operations (ICR, paras 67, 69).
- Risk mitigation measures proved to be inadequate. The PAD (para 43) acknowledges that the project team expected to a greater extent some higher institutional risks in the implementation of the project in medium-sized cities as a result of their relatively weaker institutional and technical capacity, however, the planned capacity building, technical assistance, close supervision by MOT and PCU, along increased Bank supervision, were insufficient and failed to meet expectations.

**Quality-at-Entry Rating**  
Moderately Unsatisfactory

### b. Quality of supervision



The ICR notes (para 92) that the Bank conducted regular supervision missions and provided support for technical, fiduciary, procurement, and environmental issues. Specific support included hiring a senior consultant to support the five cities in launching the bidding processes and implementing the works according to schedule.

Capacity constraints at national and subnational levels delayed the implementation of the project and impaired support to the systems' operation. The NUTP required substantial supervision as envisaged at appraisal. The PCU-UMUS suffered from budgetary instability that resulted in a high staff rotation, poor project monitoring, slow TA, and low knowledge development (ICR, para 71). The World Bank continuously requested the Ministry of Transport to provide more budget allocation to the UMUS. Adequate funding was critical to allow UMUS to effectively support subnational entities and carry out the identified studies for supporting the systems' operation.

The Bank team failed to provide sufficient support either through TA or a better M&E framework to start the operation of the systems. The ICR (para 94) points to the fact that the slow or absent progress in setting plans for operating the project-provided infrastructure became evident in 2016/2017. The Bank and the UMUS made several efforts to emphasize the importance of such operations, including national workshops. However, these efforts were insufficient as the subnational entities lacked incentives/funding to commence the operations. The situation was aggravated by some of the program's requirements that were not revised during the implementation. The project team as well as the ICR noted in (para 103) that the National Economic and Social Council (CONPES) program specifications were too rigid and the process to request modifications to the initial specifications was complex and lengthy, resulting in delays in project execution (the CONPES are agreements between the national and subnational governments by which the national government commits to provide funding subject to compliance with program requirements. These agreements cannot be unilaterally modified, and subnational entities would not agree to include new requirements to ensure an operation they were not convinced to foster). Overall, the increased supervision and efforts during nine years of the project implementation could not address the deficiencies in design and ensure the achievement of the desired development outcomes.

The project team informed IEG (06/28/21) that in order to resolve implementation issues and work more closely with the clients to advance project execution, the World Bank significantly strengthened its supervision strategy and committed a high amount of resources to project supervision. For example, decentralization of project management and the assignment of a TTL based in the Bogota office. This was aimed at providing maximum handholding to project implementing agencies at both the national and subnational levels. Moreover, when implementation delays impacted project execution and the ability of the project to achieve its development outcomes by the closing date, the frequency of supervision mission was enhanced, beyond the standard two yearly general missions.

There were external factors that were out of the supervision teams control. These included: (i) increased informal transport services that would compete with the new systems, associated with increased internal migration; (ii) increased access to motorbikes affecting the demand for public transport; (iii) the COVID pandemic causing both delayed operation and a dramatic reduction of mobility demand (up to 80 percent close to the Project's closing date).

### **Quality of Supervision Rating**

Moderately Satisfactory



## **Overall Bank Performance Rating**

Moderately Unsatisfactory

## **9. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The M&E design included typical public transport outcome indicators to measure efficiency, affordability, quality, safety, and environmental sustainability. However, there were shortcomings: (a) the baselines and the targets were not designed in a way that allowed the impact of the indicator to be attributed to the project; (b) in most cases the methodology was too complex and did not match the capacity of the local authorities, which required a simplification of the M&E during project implementation; and (c) the affordability indicator was influenced by exogenous macroeconomic factors beyond the project's scope and control, generating issues with attribution (ICR para 75).

### **b. M&E Implementation**

During the 2018 restructuring, the Bank attempted to simplify the M&E framework by reducing the number of indicators, eliminating the redundancies in the intermediate indicators, and by making the indicators specific, measurable, achievable, relevant, and time-bound (ICR para 77). The UMUS also clarified responsibilities for the collection of indicators data according to the competencies of different agencies at the municipal level. However, the targets for the indicators were not reliably defined since specific analysis for project activities was not performed during project preparation. Such an analysis would have made available key metrics, including expected passenger demand in the opening year and a forecast trend for the future.

The ICR reports (para 78) that the implementation of the M&E framework proved to be difficult for local implementing entities because of the data and resources requirement. After the 2018 restructuring, subnational entities were more consistent in reporting intermediate indicators through progress reports. The ICR further notes that after the 2018 restructuring, M&E implementation improved over time and was better for intermediate indicators. However, outcome indicators still didn't have clear reporting procedures and methodologies, and required specific consultants and follow-up from the UMUS, which sometimes caused delays in reporting. The information in the M&E was not actual data, but estimates from feasibility studies - and was complemented with field visits, secondary sources of information, and stakeholders interviews.

### **c. M&E Utilization**

The UMUS and the Bank used output indicators to monitor implementation progress and guided project decision making. The outcome indicators were not utilized as the project needed to be fully operational to achieve the PDO. As mentioned above, the M&E information was not actual but estimated.

The ICR mentions that the output indicators were useful to monitor implementation progress, flag implementation problems between subnational entities, and provided justification for project extensions.



## M&E Quality Rating

Modest

## 10. Other Issues

### a. Safeguards

The project was assigned an Environmental Category "B" and the following four safeguards were triggered; Environmental Assessment (OP/BP 4.01); Natural Habitats (OP/BP 4.04); Physical Cultural Resources (OP/BP 4.11); and Involuntary Resettlement (OP/BP 4.12).

The Environmental Management Framework (EMF) was developed by the Bank in coordination with the Ministries of Environment and Transport, the National Planning Department, and the local implementing entities. The Environmental Management Plans (EMPs) were put in place for all infrastructure works to be contracted.

During implementation, the Ministry of Transport Implementing Unit maintained a qualified and proactive specialist who provided continuous support to local implementing agencies on the implementation of the environmental safeguards. This included regular documentation, reporting, and capacity building. **The ICR reports (para 84) that the project's environmental safeguards performance was satisfactory.** With the projects still ongoing, the Bank prepared a post-closure action plan to ensure continued compliance with environmental safeguards (ICR para 83).

The ICR does not report on Natural Habitats (OP/BP 4.04).

The ICR does not report on Physical Cultural Resources (OP/BP 4.11). The project team informed IEG that in Envigado in Valle de Aburra, there were several "chance findings". The Bank safeguards policy was followed.

**The ICR reports (para 85) that the social safeguards performance was satisfactory.** At project closure, there was only one pending social safeguards issue. This related to Metroplús Project involving construction of a box culvert for slope stabilization in the construction and complementary works in the south of the Valle de Aburrá Phase 1. For the ongoing projects, the UMUS would keep tracking social compliance and ensure that the resettlement continues to be delivered in accordance with World Bank policy since the Resettlement Policy Framework has been assumed by the Ministry of Transport.

### b. Fiduciary Compliance

#### Financial Management (FM)

The ICR reports (para 87) that the FM of the project was conducted in accordance with the arrangements set forth in the legal agreement. During the initial years, the FM performance was satisfactory. However, in 2016-2017 (when the implementation accelerated), there were minor shortcomings (the ICR does not



specify them). The project team informed IEG that the minor issues related to delays in providing information or clarifications. They occurred in a context in which implementation picked up and the PCU had to deal with more FM transactions and contracts than before. The Bank and the client agreed on an action plan to provide pending information that the client complied with.

At project closing FM issues outstanding related to the amortization of advances/return of unused funds to the World Bank in Medellin-Valle de Aburrá (US\$560,000), a pending clarification of the final audit, and a justification or refund of expenses. The project team informed IEG that audit issue is still pending. The issue with resources in Valle de Aburra is resolved.

**Procurement**

The 2018 restructuring paper instituted a requirement that the procurement regulations would apply (ICR para 29). This would allow for a greater focus on value for money and would foster competition (ICR para 35). The Ministry of Transport Implementing Unit (UMUS) maintained appropriate procurement capacity during project implementation. The ICR reports (para 86) that as implementation accelerated in 2016/17 (there were 16 contracts financed by the World Bank compared to just seven in previous years), there were more procurement challenges. This reflects an acceleration of implementation in all subnational entities.

**c. Unintended impacts (Positive or Negative)**

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**d. Other**

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**11. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Unsatisfactory	Moderately Unsatisfactory	
Bank Performance	Moderately Satisfactory	Moderately Unsatisfactory	There were significant shortcomings in quality at entry.
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

**12. Lessons**

Key lessons adapted from the ICR are as follows:

**For a national program to support urban transport, technical requirements should be flexible to adapt to local needs, and based on evidence** (i.e., systems should be made more attractive to users and financial sustainability ensured to facilitate private sector participation). Based on the



initial success of TransMilenio, the national policy established requirements (e.g., use of technology) or even objectives (e.g., fleet rationalization) that did not fit local needs. Cities across the globe (especially cities in Africa and Asia) have been implementing BRTs aiming to replicate the TransMilenio system without taking into consideration the local context and specific needs of the cities concerned. It is important to highlight the importance on providing customized transport solutions for each city. In Colombia, SPTSs were severely impacted by the influence of TransMilenio as they were overspecified in terms of technology requirements for smaller operations. Several cities suffered from an undersupply of public transport as informal services advanced while operators did not renew their fleets.

**A Technical Assistance (TA) component directly supporting subnational level implementing entities can help with implementation.** Project implementation suffered from delays due to instability and lack of capacity of the implementing agency as well as the low technical capacity of smaller cities. Including the TA component allowed the speeding up of the implementation. Such a TA component benefited the program implementation and built technically strong teams with experienced specialists at the city level.

**Early consolidation of the environmental and social management capacities is important to ensure timely project implementation.** Experience has shown that the earlier these teams are onboard and able to participate in project design and planning, the higher the rate of success for the particular project activity.

**It is important to go beyond building infrastructure and focus on achieving outcomes through systems operation.** Urban transport projects should explore system interventions to attract greater demand for public transport, especially in terms of disincentivizing motorcycles and moto-taxis or integrating informal transport into the system.

### 13. Assessment Recommended?

No

### 14. Comments on Quality of ICR

The ICR is clearly written with ample evidence to support its findings and ratings. It was candid about the flaws in the results framework and put forward a sound theory of change. The ICR is results-oriented and discusses attribution issues. It is nicely illustrated with before and after photographs, maps, and useful tables summarizing the achievement of outputs and outcomes by city that also reflect delays and risks of non-completion (Tables 2 and 3, pages 17-18). The ICR provides an excellent analysis and account of key factors that affected implementation and outcomes. The lessons are based on project experience.

Some shortcomings include: (a) the quality at entry rating of "moderately satisfactory" is not consistent with the narrative under "key factors during preparation" (pages 25 and 26); and (b) it does not report on natural habitats or physical cultural resources, even though they were triggered.



**a. Quality of ICR Rating**  
Substantial