

## TERMS OF REFERENCE

### DEVELOPMENT OF THE INSTITUTIONAL TRANSPORT FRAMEWORK

PERÚ

PE-T1570

Support for the Bus Operation System Initiative in Huancayo, through PROMOVILIDAD Program

<https://www.iadb.org/en/project/PE-T1570>

#### **1. Background and Justification**

- 1.1.** PROMOVILIDAD under the Ministry of Transport and Communication (MTC) is charged to support the cities in Peru that have a population greater than 100,000 inhabitants and the departmental capitals to have a better public transportation infrastructure. It aims to ensure convenient and sustainable transportation systems as they are important for large cities, but providing such a service is often as challenging as it is desirable.
- 1.2.** In Peru, urbanization has led to the expansion of several cities into metropolitan areas, but the development of urban infrastructure is very slow compared to the population growth. In particular, the operation systems of local public transportation are often not organized. The disorganization produces externalities such as traffic congestion, lack of roads and parking spaces, and an increase of noise and air pollution. Furthermore, the absence of a proper management system often results in the inefficient organization of bus routes, leading to intense competition between public transportation operators. This situation adversely impacts the quality of service and compromises the safety and security of public bus operations.
- 1.3.** To address the aforementioned challenges, PROMOVILIDAD actively promotes public transportation infrastructure projects that should be operated by the cities themselves. However, many cities often lack the necessary capacity and technological solutions to effectively manage their public transportation infrastructure. For instance, none of the cities in Peru currently possess a transportation management system, including a Bus Management System (BMS), which is crucial for improving the efficiency and quality of public transportation services. Introducing a BMS has the potential to yield positive economic outcomes and facilitate evidence-based policy making. Notably, the municipality of Gyeonggi Province in South Korea experienced significant cost reductions of approximately US\$52,000 per year and observed a remarkable increase in work processing speed by 10 times following the implementation of their BMS.
- 1.4.** As such, there is a relevant need to support local governments in the operation and management of public transportation. The public transportation system can be improved through the implementation of policies that facilitate the management and operation of the bus systems and introduce Information and Communication Technology (ICT). Specifically, the introduction of a BMS designed for the specificity of each city could increase the level of service of the public transportation and help prepare the cities to operate the future investment of public mass transportation what PROMOVILIDAD is planning in their project portfolio.
- 1.5.** In this context, PROMOVILIDAD has put forth a proposal to implement a pilot project in Huancayo

to support the national initiative and address the economic and social issues arising from the inefficient transportation system. Huancayo has been specifically identified as a strategic city to launch the BMS project in Peru. With a population of 500,000 inhabitants, it is a crucial intermediate city where the majority of citizens rely on buses as their primary mode of public transportation. Additionally, the municipality of Huancayo's Department of Traffic and Transportation, known as the 'Gerencia de Tránsito y Transporte' maintains comprehensive records of the existing routes and fleet.

- 1.6.** Huancayo, situated in the center of Peru, holds significant importance as the capital city of Junin Province. It serves as a major hub where the main land traffic and cargo transportation networks converge within the central macro-region of the country. Also, the city shares strong socioeconomic ties with neighboring provinces in the Mantaro Valley, including Chupaca, Concepción, and Jauja. Moreover, Huancayo plays a crucial role in contributing to the nation's economy. According to the national productive structure of 2021, Junin Province, with Huancayo as its capital, accounted for 2.9% of the country's Gross Domestic Product (GDP), which corresponds to 3.2% of the National Gross Value Added. The region holds the 8th position in terms of its contribution to the national GDP.
- 1.7.** In terms of the public transportation structure, the total vehicle fleet in Huancayo amounts to 54,334 vehicles, as per the Huancayo Roads Regulatory Plan (2013). Among these, private vehicles account for 93%, taxis comprise 10%, and only 7% are dedicated to public transportation. It is important to note that the public transportation vehicles primarily consist of "coaster" models, measuring 7 meters in length, "combis" at 5 meters in length, taxis also at 5 meters, and collective cabs. As of 2022, the Provincial Municipality of Huancayo reported 22 coaster-type public transportation bus routes operated by 12 companies. The current public transportation operation system in Huancayo follows the "commissioner-affiliator" model, which is characterized by outsourced services. Under this model, each unit (usually drivers) pays a daily fee for the right to operate on specific routes, as registered beforehand. The drivers' and collectors' income depends on the number of passengers they can accommodate. In essence, the drivers' final profits are derived from the daily fares collected from passengers, with deductions for route fees, and, in some cases, payments to the vehicle owner and fuel costs. This model fosters an excessive competition among drivers to secure as many passengers as possible and operate their buses on the most profitable routes. Consequently, it results in inadequate budget allocation for vehicle maintenance, as well as reckless driving, signal violations, and an increased risk of road accidents. The cumulative effect of these circumstances generates poor quality service of public transportation and high emissions in the city.
- 1.8.** Sexual harassment is still an issue in Peru. Data from a study in Lima and Callao, shows the 74% of women public transport users have suffer this problem. Although the country has an attention protocol for sexual harassment in public transportation, cities need to take action. In addressing gender issues, the city of Huancayo is dedicated to reducing the gap and promoting equal opportunities. In February 2023, the provincial mayor announced the city's commitment to adopting the gender agenda proposed by the Women's Dialogue Table of Huancayo. This agenda, outlined in a comprehensive document encompassing demands and solution strategies for women's issues, reflects the city's proactive stance. Through the implementation of preventive municipal ordinances focusing on women's concerns in the province of Huancayo, authorities aim to mitigate the disadvantages faced by women, particularly in terms of the illiteracy rate. Currently, the illiteracy rate for women is 11%, significantly higher than the 3% observed for men. The document also delves into the employment and work sector, revealing that in Huancayo, the

percentage of unemployed women surpasses that of men by 13%. Additionally, a concerning 54% of women report not receiving any compensation for their current work, marking a 14% disparity compared to men in similar circumstances.

- 1.9.** The Seoul Bus Management System played a pivotal role in empowering bus operators to implement demand-oriented scheduling and operate routes more efficiently. By providing accurate data on traffic patterns, actual demand per route, section, and time period, as well as real-time traffic flow information, the BMS facilitated evidence-based decision-making in the public transportation sector. Over time, it has led to the development of evidence-based public transportation policies, improved punctuality of bus schedules, and increased overall bus profitability. Moreover, this transformation has brought about significant advancements in the city's public transportation system by enabling the integration of bus services, bus-subway services, the establishment of dedicated bus central lanes, and streamlining the integration of public transportation fares.
- 1.10.** Additionally, Seoul recently underwent another round of public transportation reform to modernize its existing system. The program comprised seven key elements, including the overhaul and development of the bus operating system and its supporting infrastructure, the restructuring of bus lines and types, the implementation of an electronically controlled/managed bus operation and monitoring system, the establishment of a city-bus joint business management center (referred to as the Business Management Center or BMC), the integration of bus transit with the Metro system in terms of fare, operating lines, schedules, time intervals, and station locations, the installation of regional bus-exclusive median lanes, and the acquisition of funds to optimize road space for flexible bus operations and compensate bus owners for any financial losses resulting from changes to bus routes and lines in the public interest.
- 1.11.** Drawing upon its impressive track record and extensive expertise in designing and developing intelligent integrated bus management systems, South Korea has been actively providing support to numerous countries worldwide. This support aims to establish the foundation for similar systems, as exemplified by initiatives such as the Establishment and Operation of an Integrated System of Automated Fare Collection System and Bus Management System in Colombia (2011) and the Building of a Smart Bus System in Mongolia (2015).
- 1.12.** The Inter-American Development Bank and PROMOVILIDAD have been collaborating on various projects within the framework of integrated transportation and sustainable, technological, and inclusive infrastructure, such as a program for investment in infrastructure in cities, and the definition of institutional policies to promote sustainable mobility in cities, among others. In collaboration with South Korea, the TC is anticipated to offer valuable technical and institutional support for the digital transformation and implementation of an integrated bus management system in an intermediate City of Peru.

## **2. Objectives**

- 2.1.** The objective is hiring a consulting firm to develop the institutional transport framework, comprising a system diagnosis and a roadmap to improve the governance of public transportation management in an intermediate city of Perú.

## **3. Scope of Services**

- 3.1. Diagnosis of the transportation system, including collective, interdistrict, interprovincial, and urban logistics, and the analysis of bus routes, schedules, fares, infrastructure (such as bus terminals, transfers terminals, bus stops), and passenger experience.
- 3.2. Diagnosis of the transport governance structure, focusing on the articulation of the different actors involved urban transportation, and defining their future role in management and operation processes.
- 3.3. Benchmarking of transport governance structure in cities of Korea such as Seoul or other international best practices.
- 3.4. Definition of the operation and management governance of public transportation.

#### 4. **Key Activities**

- 4.1. The consulting firm's activities are aimed at achieving the objectives. They are indicative and not exhaustive. To carry them out, collaboration and coordination with officials from the jurisdiction and other involved entities or organizations will be necessary.

#### 5. **Expected Outcome and Deliverables**

- 5.1. Work Plan: this activity involves the consulting firm creating a work plan for the execution of the consultancy.
- 5.2. Diagnosis of the transportation system: this activity involves the consulting firm conducting a diagnosis of the transportation system, considering collective, interdistrict, interprovincial, and urban logistics. The firm will conduct a thorough analysis of existing bus routes and schedules, including their efficiency, coverage, and any identified shortcomings. Additionally, the examination of the fare structure will consider affordability and competitiveness in the market. The evaluation of key infrastructure elements such as bus terminals, transfer terminals, and bus stops will be undertaken to identify any infrastructure gaps or areas that require improvement. The assessment of the overall passenger experience, including factors like comfort, accessibility, and safety, is also part of this comprehensive analysis. The diagnosis also includes an analysis of mobility situation by gender and people with disabilities in the face of a shortage of data on the subject.
- 5.3. Diagnosis of the transport governance structure: this activity involves the consulting firm presenting a comprehensive report detailing the diagnosis of the transport governance structure. The report will present an in-depth analysis of the existing urban transportation governance framework, offering a clear identification and analysis of key actors involved, including government agencies, regulatory bodies, private operators, and other stakeholders. The evaluation will extend to understanding how these diverse actors currently interact and articulate within the governance framework. Furthermore, the report will define the current roles and responsibilities of each actor in the management and operation processes of urban transportation. The overarching objective is to provide stakeholders with a nuanced understanding of the existing governance structure, pinpoint areas for improvement, and deliver actionable recommendations for fostering more effective and sustainable urban transportation management. The diagnosis also includes an

identification of gender-related issues in the face of a shortage of data on the subject.

- 5.4. Benchmarking of transport governance structure in cities of Korea such as Seoul: this activity involves the consulting firm presenting a detailed analysis of the transport governance structures in Korean cities, particularly Seoul, highlighting best practices and successful models, benchmarking against global standards and best practices in transport governance from other countries with successful urban transportation systems.
- 5.5. Definition of the operation and management governance of public transportation: this activity involves the consulting firm defining the overall operational framework for public transportation, encompassing key processes, workflows, and organizational structures, identifying key performance metrics and indicators to assess the effectiveness and efficiency of the public transportation system, and formulating strategies for identifying, mitigating, and managing risks associated with public transportation operations.

## 6. Project Schedule and Milestones

6.1. The deliverables that will be provided by the consulting firm are as follows:

- First report: the consulting firm will present a document that encompasses the work plan for the consultancy.
- Second report: the consulting firm will present the final version of the diagnosis of the transportation system and the diagnosis of the transport governance structure.
- Third report: the consulting firm will present the final version of the benchmarking of transport governance structure in cities of Korea such as Seoul and the definition of the operation and management governance of public transportation.

## 7. Reporting Requirements and Acceptance Criteria

- 7.1. All reports must be submitted to the Bank in an electronic file. The report should include a cover page, main document, and all annexes. Zip files will not be accepted as final reports due to the regulations of the File Management Section. Reports will be presented in English and Spanish.

## 8. Other Requirements

- 8.1. Education: Professional with a university degree in civil engineering or related fields with at least 15 years of professional experience. Master's degree desirable.
- 8.2. Languages: Spanish and English.
- 8.3. Areas of expertise: The contractor must have at least 15 years of professional experience and a minimum of 10 years of specific experience in transportation-related issues.
- 8.4. Skills: Proficiency in oral and written communication.
- 8.5. Must be a citizen of one of the 48 member countries of the IDB and not have relatives currently.

working in the IDB Group.

## 9. Supervision and Reporting

- 9.1. Contract Type and Modality: Consulting firm, lump sum.
- 9.2. Contract Duration: 6 months.
- 9.3. Start Date: August 2024.
- 9.4. Responsible Person: The work will be coordinated by the Transport Specialist Rafael Capristán ([rcapristan@iadb.org](mailto:rcapristan@iadb.org)).

## 10. Schedule of Payments

- 10.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
1. <i>Contract signing and delivery and approval of the First Report (consultancy work plan)</i>	20%
2. <i>Delivery and approval of the Second Report (final version of the diagnosis of the transportation system and the diagnosis of the transport governance structure).</i>	40%
3. <i>Delivery and approval of the Second Report (final version of benchmarking of transport governance structure in cities of Korea such as Seoul and the definition of the operation and management governance of public transportation).</i>	40%
<b>TOTAL</b>	<b>100%</b>

## TERMS OF REFERENCE

### GUIDE FOR THE IMPROVEMENT OF A BUS MANAGEMENT SYSTEM AND OPERATION SERVICES

PERÚ

PE-T1570

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- 1.4.** As such, there is a relevant need to support local governments in the operation and management of public transportation. The public transportation system can be improved through the implementation of policies that facilitate the management and operation of the bus systems and introduce Information and Communication Technology (ICT). Specifically, the introduction of a BMS designed for the specificity of each city could increase the level of service of the public transportation and help prepare the cities to operate the future investment of public mass transportation what PROMOVILIDAD is planning in their project portfolio.
- 1.5.** In this context, PROMOVILIDAD has put forth a proposal to implement a pilot project in Huancayo to support the national initiative and address the economic and social issues arising from the



inefficient transportation system. Huancayo has been specifically identified as a strategic city to launch the BMS project in Peru. With a population of 500,000 inhabitants, it is a crucial intermediate city where the majority of citizens rely on buses as their primary mode of public transportation. Additionally, the municipality of Huancayo's Department of Traffic and Transportation, known as the 'Gerencia de Tránsito y Transporte' maintains comprehensive records of the existing routes and fleet.

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- 1.8.** Sexual harassment is still an issue in Peru. Data from a study in Lima and Callao, shows the 74% of women public transport users have suffer this problem. Although the country has an attention protocol for sexual harassment in public transportation, cities need to take action. In addressing gender issues, the city of Huancayo is dedicated to reducing the gap and promoting equal opportunities. In February 2023, the provincial mayor announced the city's commitment to adopting the gender agenda proposed by the Women's Dialogue Table of Huancayo. This agenda, outlined in a comprehensive document encompassing demands and solution strategies for women's issues, reflects the city's proactive stance. Through the implementation of preventive municipal ordinances focusing on women's concerns in the province of Huancayo, authorities aim to mitigate the disadvantages faced by women, particularly in terms of the illiteracy rate. Currently, the illiteracy rate for women is 11%, significantly higher than the 3% observed for men. The document also delves into the employment and work sector, revealing that in Huancayo, the percentage of unemployed women surpasses that of men by 13%. Additionally, a concerning 54%



of women report not receiving any compensation for their current work, marking a 14% disparity compared to men in similar circumstances.

- 1.9.** The Seoul Bus Management System played a pivotal role in empowering bus operators to implement demand-oriented scheduling and operate routes more efficiently. By providing accurate data on traffic patterns, actual demand per route, section, and time period, as well as real-time traffic flow information, the BMS facilitated evidence-based decision-making in the public transportation sector. Over time, it has led to the development of evidence-based public transportation policies, improved punctuality of bus schedules, and increased overall bus profitability. Moreover, this transformation has brought about significant advancements in the city's public transportation system by enabling the integration of bus services, bus-subway services, the establishment of dedicated bus central lanes, and streamlining the integration of public transportation fares.
- 1.10.** Additionally, Seoul recently underwent another round of public transportation reform to modernize its existing system. The program comprised seven key elements, including the overhaul and development of the bus operating system and its supporting infrastructure, the restructuring of bus lines and types, the implementation of an electronically controlled/managed bus operation and monitoring system, the establishment of a city-bus joint business management center (referred to as the Business Management Center or BMC), the integration of bus transit with the Metro system in terms of fare, operating lines, schedules, time intervals, and station locations, the installation of regional bus-exclusive median lanes, and the acquisition of funds to optimize road space for flexible bus operations and compensate bus owners for any financial losses resulting from changes to bus routes and lines in the public interest.
- 1.11.** Drawing upon its impressive track record and extensive expertise in designing and developing intelligent integrated bus management systems, South Korea has been actively providing support to numerous countries worldwide. This support aims to establish the foundation for similar systems, as exemplified by initiatives such as the Establishment and Operation of an Integrated System of Automated Fare Collection System and Bus Management System in Colombia (2011) and the Building of a Smart Bus System in Mongolia (2015).
- 1.12.** The Inter-American Development Bank and PROMOVILIDAD have been collaborating on various projects within the framework of integrated transportation and sustainable, technological, and inclusive infrastructure, such as a program for investment in infrastructure in cities, and the definition of institutional policies to promote sustainable mobility in cities, among others. In collaboration with South Korea, the TC is anticipated to offer valuable technical and institutional support for the digital transformation and implementation of an integrated bus management system in an intermediate City of Peru.

## **2. Objectives**

- 2.1.** The objective is hiring a consulting firm to develop a guide to implement and operate a Bus Management System benchmarking the model of Seoul city and customizing it to Huancayo. The improvement of the routes and the operation will improve service levels of the bus system, together with other planned actions, it is expected that will increase the travels of public transportation.

## **3. Scope of Services**

- 3.1. Definition of the model of the Bus Management System for the Huancayo, based on a benchmarking study of Seoul and adapting the necessary functions to the local context, considering a gender equity (labor inclusion) and violence prevention.
- 3.2. Design of the architecture of bus operation and monitoring system.
- 3.3. Assessment of the need for restructuring bus lines and establishing additional transfers stations, bus stops or other relevant infrastructure, incorporating a care mobility perspective.
- 3.4. Definition of baseline indicators to establish the starting point for evaluating the impact of a Bus Management System, including gender related indicators.

#### 4. **Key Activities**

- 4.1. The consulting firm's activities are aimed at achieving the objectives. They are indicative and not exhaustive. To carry them out, collaboration and coordination with officials from the jurisdiction and other involved entities or organizations will be necessary.

#### 5. **Expected Outcome and Deliverables**

- 5.1. Work Plan: this activity involves the consulting firm creating a work plan for the execution of the consultancy.
- 5.2. Definition of the model of the Bus Management System for the Huancayo: this activity involves the consulting firm proposing a well-defined and customized model for the Bus Management System, incorporating best practices observed in Seoul and other benchmarked cities, adapting functions and features from the benchmarked systems to suit the specific needs and challenges of the Huancayo, Implementing functions aimed at enhancing operational efficiency, such as optimized routes, improved scheduling, and efficient fleet management.
- 5.3. Design of the architecture of bus operation and monitoring system: this activity involves the consulting firm presenting a detailed and comprehensive blueprint outlining the architecture of the bus operation and monitoring system, specifying key components, modules, and their interconnections.
- 5.4. Assessment of the need for restructuring bus lines: this activity involves the consulting firm presenting a detailed analysis of existing inefficiencies or challenges within the current bus line structure, identifying of opportunities for optimization, considering factors such as route efficiency, ridership patterns, and operational effectiveness, establishing additional transfers stations, bus stops or other relevant infrastructure.
- 5.5. Definition of baseline indicators to establish the starting point for evaluating the impact of a Bus Management System: this activity involves the consulting firm identifying and defining specific KPIs

#### 6. **Project Schedule and Milestones**

- 6.1. The deliverables that will be provided by the consulting firm are as follows:
  - First report: the consulting firm will present a document that encompasses the work plan for the consultancy.
  - Second report: the consulting firm will present the final version of the model of the Bus

Management System for the Huancayo and the design of the architecture of bus operation and monitoring system.

- Third report: the consulting firm will present the final version of the evaluation of the need for restructuring bus lines and the baseline indicators to establish the starting point for evaluating the impact of a Bus Management System.

**7. Reporting Requirements and Acceptance Criteria**

**7.1.** All reports must be submitted to the Bank in an electronic file. The report should include a cover page, main document, and all annexes. Zip files will not be accepted as final reports due to the regulations of the File Management Section. Reports will be presented in English and Spanish.

**8. Other Requirements**

**8.1. Education:** Professional with a university degree in civil engineering or related fields with at least 15 years of professional experience. Master's degree desirable.

**8.2. Languages:** Spanish and English.

**8.3. Areas of expertise:** The contractor must have at least 15 years of professional experience and a minimum of 10 years of specific experience in transportation-related issues.

**8.4. Skills:** Proficiency in oral and written communication.

**8.5.** Must be a citizen of one of the 48 member countries of the IDB and not have relatives currently working in the IDB Group.

**9. Supervision and Reporting**

**9.1.** Contract Type and Modality: Consulting firm, lump sum.

**9.2.** Contract Duration: 9 months.

**9.3.** Start Date: August 2024.

**9.4.** Responsible Person: The work will be coordinated by the Transport Specialist Rafael Capristán ([rcapristan@iadb.org](mailto:rcapristan@iadb.org))

**10. Schedule of Payments**

**10.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
1. <i>Contract signing and delivery and approval of the First Report (consultancy work plan)</i>	20%
2. <i>Delivery and approval of the Second Report (final version of the model of the Bus Management System for Huancayo and the</i>	40%

<i>design of the architecture of bus operation and monitoring system).</i>	
3. <i>Delivery and approval of the Second Report (final version of the evaluation of the need for restructuring bus lines and the baseline indicators to establish the starting point for evaluating the impact of a Bus Management System).</i>	40%
<b>TOTAL</b>	<b>100%</b>

**TERMS OF REFERENCE**

## STUDY TOUR IN SEOUL, KOREA

PERÚ

PE-T1570

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- 1.1.** PROMOVILIDAD under the Ministry of Transport and Communication (MTC) is charged to support the cities in Peru that have a population greater than 100,000 inhabitants and the departmental capitals to have a better public transportation infrastructure. It aims to ensure convenient and sustainable transportation systems as they are important for large cities, but providing such a service is often as challenging as it is desirable.
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- 1.4.** As such, there is a relevant need to support local governments in the operation and management of public transportation. The public transportation system can be improved through the implementation of policies that facilitate the management and operation of the bus systems and introduce Information and Communication Technology (ICT). Specifically, the introduction of a BMS designed for the specificity of each city could increase the level of service of the public transportation and help prepare the cities to operate the future investment of public mass transportation what PROMOVILIDAD is planning in their project portfolio.
- 1.5.** In this context, PROMOVILIDAD has put forth a proposal to implement a pilot project in Huancayo

to support the national initiative and address the economic and social issues arising from the inefficient transportation system. Huancayo has been specifically identified as a strategic city to launch the BMS project in Peru. With 500,000 inhabitants, it is a crucial intermediate city where most citizens rely on buses as their primary mode of public transportation. Additionally, the municipality of Huancayo's Department of Traffic and Transportation, known as the 'Gerencia de Tránsito y Transporte' maintains comprehensive records of the existing routes and fleet.

- 1.6.** Huancayo, situated in the center of Peru, holds significant importance as the capital city of Junin Province. It serves as a major hub where the main land traffic and cargo transportation networks converge within the central macro-region of the country. Also, the city shares strong socioeconomic ties with neighboring provinces in the Mantaro Valley, including Chupaca, Concepción, and Jauja. Moreover, Huancayo plays a crucial role in contributing to the nation's economy. According to the national productive structure of 2021, Junin Province, with Huancayo as its capital, accounted for 2.9% of the country's Gross Domestic Product (GDP), which corresponds to 3.2% of the National Gross Value Added. The region holds the 8th position in terms of its contribution to the national GDP.
- 1.7.** In terms of the public transportation structure, the total vehicle fleet in Huancayo amounts to 54,334 vehicles, as per the Huancayo Roads Regulatory Plan (2013). Among these, private vehicles account for 93%, taxis comprise 10%, and only 7% are dedicated to public transportation. It is important to note that the public transportation vehicles primarily consist of "coaster" models, measuring 7 meters in length, "combis" at 5 meters in length, taxis also at 5 meters, and collective cabs. As of 2022, the Provincial Municipality of Huancayo reported 22 coaster-type public transportation bus routes operated by 12 companies. The current public transportation operation system in Huancayo follows the "commissioner-affiliator" model, which is characterized by outsourced services. Under this model, each unit (usually drivers) pays a daily fee for the right to operate on specific routes, as registered beforehand. The drivers' and collectors' income depends on the number of passengers they can accommodate. In essence, the drivers' final profits are derived from the daily fares collected from passengers, with deductions for route fees, and, in some cases, payments to the vehicle owner and fuel costs. This model fosters an excessive competition among drivers to secure as many passengers as possible and operate their buses on the most profitable routes. Consequently, it results in inadequate budget allocation for vehicle maintenance, as well as reckless driving, signal violations, and an increased risk of road accidents. The cumulative effect of these circumstances generates poor quality service of public transportation and high emissions in the city.
- 1.8.** Sexual harassment is still an issue in Peru. Data from a study in Lima and Callao, shows the 74% of women public transport users have suffer this problem. Although the country has an attention protocol for sexual harassment in public transportation, cities need to take action. In addressing gender issues, Huancayo is dedicated to reducing the gap and promoting equal opportunities. In February 2023, the provincial mayor announced the city's commitment to adopting the gender agenda proposed by the Women's Dialogue Table of Huancayo. This agenda, outlined in a comprehensive document encompassing demands and solution strategies for women's issues, reflects the city's proactive stance. Through the implementation of preventive municipal ordinances focusing on women's concerns in the province of Huancayo, authorities aim to mitigate the disadvantages faced by women, particularly in terms of the illiteracy rate. Currently, the illiteracy rate for women is 11%, significantly higher than the 3% observed for men. The document also delves into the employment and work sector, revealing that in Huancayo, the percentage of unemployed women surpasses that of men by 13%. Additionally, a concerning 54%

of women report not receiving any compensation for their current work, marking a 14% disparity compared to men in similar circumstances.

- 1.9.** The Seoul Bus Management System played a pivotal role in empowering bus operators to implement demand-oriented scheduling and operate routes more efficiently. By providing accurate data on traffic patterns, actual demand per route, section, and time period, as well as real-time traffic flow information, the BMS facilitated evidence-based decision-making in the public transportation sector. Over time, it has led to the development of evidence-based public transportation policies, improved punctuality of bus schedules, and increased overall bus profitability. Moreover, this transformation has brought about significant advancements in the city's public transportation system by enabling the integration of bus services, bus-subway services, the establishment of dedicated bus central lanes, and streamlining the integration of public transportation fares.
- 1.10.** Additionally, Seoul recently underwent another round of public transportation reform to modernize its existing system. The program comprised seven key elements, including the overhaul and development of the bus operating system and its supporting infrastructure, the restructuring of bus lines and types, the implementation of an electronically controlled/managed bus operation and monitoring system, the establishment of a city-bus joint business management center (referred to as the Business Management Center or BMC), the integration of bus transit with the Metro system in terms of fare, operating lines, schedules, time intervals, and station locations, the installation of regional bus-exclusive median lanes, and the acquisition of funds to optimize road space for flexible bus operations and compensate bus owners for any financial losses resulting from changes to bus routes and lines in the public interest.
- 1.11.** Drawing upon its impressive track record and extensive expertise in designing and developing intelligent integrated bus management systems, South Korea has been actively providing support to numerous countries worldwide. This support aims to establish the foundation for similar systems, as exemplified by initiatives such as the Establishment and Operation of an Integrated System of Automated Fare Collection System and Bus Management System in Colombia (2011) and the Building of a Smart Bus System in Mongolia (2015).
- 1.12.** The Inter-American Development Bank and PROMOVILIDAD have been collaborating on various projects within the framework of integrated transportation and sustainable, technological, and inclusive infrastructure, such as a program for investment in infrastructure in cities, and the definition of institutional policies to promote sustainable mobility in cities, among others. In collaboration with South Korea, the TC is anticipated to offer valuable technical and institutional support for the digital transformation and implementation of an integrated bus management system in an intermediate City of Peru.

## **2. Objectives**

The goal is hiring a consultant to perform a study tour in Seoul, to gather opinions from government officials and reflect them in creating a Bus Management System model for the Huancayo.

## **3. Scope of Services**

- 3.1.** Preparation of the schedule.
- 3.2.** Data collection and coordination of meetings and interviews. Gender equity will be warranted for the tour to promote the participation of women.



**3.3.** Elaboration of study tour report.

#### **4. Key Activities**

**4.1.** The consultant's activities are aimed at achieving the objectives. They are indicative and not exhaustive. To carry them out, collaboration and coordination with officials from the jurisdiction and other involved entities or organizations will be necessary.

#### **5. Expected Outcome and Deliverables**

**5.1.** Work Plan and schedule: this activity involves the consultant creating a work plan for the execution of the consultancy and the preparation of the schedule.

**5.2.** Data collection: this activity involves the consultant collecting relevant data, conducting surveys, and gathering information from on-site visits to enhance understanding of the study topic. It includes scheduling meetings, interviews, and site visits with key individuals and organizations to gather information and insights. The consultant will coordinate with local counterparts to ensure smooth communication and collaboration during the study tour.

**5.3.** Study tour report: this activity involves the consultant compiling a comprehensive final report that includes a summary of the study tour, key findings, recommendations, and proposed actions.

#### **6. Project Schedule and Milestones**

**6.1.** The deliverables that will be provided by the consultant are as follows:

- First report: the consultant will present a document that encompasses the work plan for the consultancy and the schedule for the study tour.
- Second report: the consultant will present the preliminary version of the study tour report.
- Third report: the consultant will present the final version of the study tour report.

#### **7. Reporting Requirements and Acceptance Criteria**

**7.1.** All reports must be submitted to the Bank in an electronic file. The report should include a cover page, main document, and all annexes. Zip files will not be accepted as final reports due to the regulations of the File Management Section. Reports will be presented in English and Spanish.

#### **8. Other Requirements**

**8.1.** Education: Professional with a university degree in civil engineering or related fields with at least 15 years of professional experience. Master's degree desirable.

**8.2.** Languages: Spanish and English.

**8.3.** Areas of expertise: The contractor must have at least 15 years of professional experience and a minimum of 10 years of specific experience in transportation-related issues.

**8.4.** Skills: Proficiency in oral and written communication.

**8.5.** Must be a citizen of one of the 48 member countries of the IDB and not have relatives currently

working in the IDB Group.

**9. Supervision and Reporting**

- 9.1. Contract Type and Modality: External products and services contract, lump sum.
- 9.2. Contract Duration: 1 month.
- 9.3. Start Date: April 2025.
- 9.4. Responsible Person: The work will be coordinated by the Transport Specialist Rafael Capristán ([rcapristan@iadb.org](mailto:rcapristan@iadb.org))

**10. Schedule of Payments**

- 10.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
1. <i>Contract signing and delivery and approval of the First Report (consultancy work plan and schedule)</i>	20%
2. <i>Delivery and approval of the Second Report (preliminary version of the study tour report).</i>	40%
4. <i>Delivery and approval of the Third Report (final version of the study tour report).</i>	40%
<b>TOTAL</b>	100%

**TERMS OF REFERENCE**

## DISSEMINATION WORKSHOPS

PERÚ

PE-T1570

Support for the Bus Operation System Initiative in Huancayo, through PROMOVILIDAD Program

<https://www.iadb.org/en/project/PE-T1570>**1. Background and Justification**

- 1.1.** PROMOVILIDAD under the Ministry of Transport and Communication (MTC) is charged to support the cities in Peru that have a population greater than 100,000 inhabitant and the departmental capitals to have a better public transportation infrastructure. It aims to ensure convenient and sustainable transportation systems as they are important for large cities, but providing such a service is often as challenging as it is desirable.
- 1.2.** In Peru, urbanization has led to the expansion of several cities into metropolitan areas, but the development of urban infrastructure is very slow compared to the population growth. In particular, the operation systems of local public transportation are often not organized. The disorganization produces externalities such as traffic congestion, lack of roads and parking spaces, and an increase of noise and air pollution. Furthermore, the absence of a proper management system often results in the inefficient organization of bus routes, leading to intense competition between public transportation operators. This situation adversely impacts the quality of service and compromises the safety and security of public bus operations.
- 1.3.** To address the challenges, PROMOVILIDAD actively promotes public transportation infrastructure projects that should be operated by the cities themselves. However, many cities often lack the necessary capacity and technological solutions to effectively manage their public transportation infrastructure. For instance, none of the cities in Peru currently possess a transportation management system, including a Bus Management System (BMS), which is crucial for improving the efficiency and quality of public transportation services. Introducing a BMS has the potential to yield positive economic outcomes and facilitate evidence-based policy making. Notably, the municipality of Gyeonggi Province in South Korea experienced significant cost reductions of approximately US\$52,000 per year and observed a remarkable increase in work processing speed by 10 times following the implementation of their BMS.
- 1.4.** As such, there is a relevant need to support local governments in the operation and management of public transportation. The public transportation system can be improved through the implementation of policies that facilitate the management and operation of the bus systems and introduce Information and Communication Technology (ICT). Specifically, the introduction of a BMS designed for the specificity of each city could increase the level of service of the public transportation and help prepare the cities to operate the future investment of public mass transportation what PROMOVILIDAD is planning in their project portfolio.
- 1.5.** In this context, PROMOVILIDAD has put forth a proposal to implement a pilot project in Huancayo to support the national initiative and address the economic and social issues arising from the

inefficient transportation system. Huancayo has been specifically identified as a strategic city to launch the BMS project in Peru. With 500,000 inhabitants, it is a crucial intermediate city where most citizens rely on buses as their primary mode of public transportation. Additionally, the municipality of Huancayo's Department of Traffic and Transportation, known as the 'Gerencia de Tránsito y Transporte' maintains comprehensive records of the existing routes and fleet.

- 1.6.** Huancayo, situated in the center of Peru, holds significant importance as the capital city of Junin Province. It serves as a major hub where the main land traffic and cargo transportation networks converge within the central macro-region of the country. Also, the city shares strong socioeconomic ties with neighboring provinces in the Mantaro Valley, including Chupaca, Concepción, and Jauja. Moreover, Huancayo plays a crucial role in contributing to the nation's economy. According to the national productive structure of 2021, Junin Province, with Huancayo as its capital, accounted for 2.9% of the country's Gross Domestic Product (GDP), which corresponds to 3.2% of the National Gross Value Added. The region holds the 8th position in terms of its contribution to the national GDP.
- 1.7.** In terms of the public transportation structure, the total vehicle fleet in Huancayo amounts to 54,334 vehicles, as per the Huancayo Roads Regulatory Plan (2013). Among these, private vehicles account for 93%, taxis comprise 10%, and only 7% are dedicated to public transportation. It is important to note that the public transportation vehicles primarily consist of "coaster" models, measuring 7 meters in length, "combis" at 5 meters in length, taxis also at 5 meters, and collective cabs. As of 2022, the Provincial Municipality of Huancayo reported 22 coaster-type public transportation bus routes operated by 12 companies. The current public transportation operation system in Huancayo follows the "commissioner-affiliator" model, which is characterized by outsourced services. Under this model, each unit (usually drivers) pays a daily fee for the right to operate on specific routes, as registered beforehand. The drivers' and collectors' income depends on the number of passengers they can accommodate. In essence, the drivers' final profits are derived from the daily fares collected from passengers, with deductions for route fees, and, in some cases, payments to the vehicle owner and fuel costs. This model fosters an excessive competition among drivers to secure as many passengers as possible and operate their buses on the most profitable routes. Consequently, it results in inadequate budget allocation for vehicle maintenance, as well as reckless driving, signal violations, and an increased risk of road accidents. The cumulative effect of these circumstances generates poor quality service of public transportation and high emissions in the city.
- 1.8.** Sexual harassment is still an issue in Peru. Data from a study in Lima and Callao, shows the 74% of women public transport users have suffer this problem. Although the country has an attention protocol for sexual harassment in public transportation, cities need to take action. In addressing gender issues, Huancayo is dedicated to reducing the gap and promoting equal opportunities. In February 2023, the provincial mayor announced the city's commitment to adopting the gender agenda proposed by the Women's Dialogue Table of Huancayo. This agenda, outlined in a comprehensive document encompassing demands and solution strategies for women's issues, reflects the city's proactive stance. Through the implementation of preventive municipal ordinances focusing on women's concerns in the province of Huancayo, authorities aim to mitigate the disadvantages faced by women, particularly in terms of the illiteracy rate. Currently, the illiteracy rate for women is 11%, significantly higher than the 3% observed for men. The document also delves into the employment and work sector, revealing that in Huancayo, the percentage of unemployed women surpasses that of men by 13%. Additionally, a concerning 54%

of women report not receiving any compensation for their current work, marking a 14% disparity compared to men in similar circumstances.

- 1.9.** The Seoul Bus Management System played a pivotal role in empowering bus operators to implement demand-oriented scheduling and operate routes more efficiently. By providing accurate data on traffic patterns, actual demand per route, section, and time period, as well as real-time traffic flow information, the BMS facilitated evidence-based decision-making in the public transportation sector. Over time, it has led to the development of evidence-based public transportation policies, improved punctuality of bus schedules, and increased overall bus profitability. Moreover, this transformation has brought about significant advancements in the city's public transportation system by enabling the integration of bus services, bus-subway services, the establishment of dedicated bus central lanes, and streamlining the integration of public transportation fares.
- 1.10.** Additionally, Seoul recently underwent another round of public transportation reform to modernize its existing system. The program comprised seven key elements, including the overhaul and development of the bus operating system and its supporting infrastructure, the restructuring of bus lines and types, the implementation of an electronically controlled/managed bus operation and monitoring system, the establishment of a city-bus joint business management center (referred to as the Business Management Center or BMC), the integration of bus transit with the Metro system in terms of fare, operating lines, schedules, time intervals, and station locations, the installation of regional bus-exclusive median lanes, and the acquisition of funds to optimize road space for flexible bus operations and compensate bus owners for any financial losses resulting from changes to bus routes and lines in the public interest.
- 1.11.** Drawing upon its impressive track record and extensive expertise in designing and developing intelligent integrated bus management systems, South Korea has been actively providing support to numerous countries worldwide. This support aims to establish the foundation for similar systems, as exemplified by initiatives such as the Establishment and Operation of an Integrated System of Automated Fare Collection System and Bus Management System in Colombia (2011) and the Building of a Smart Bus System in Mongolia (2015).
- 1.12.** The Inter-American Development Bank and PROMOVILIDAD have been collaborating on various projects within the framework of integrated transportation and sustainable, technological, and inclusive infrastructure, such as a program for investment in infrastructure in cities, and the definition of institutional policies to promote sustainable mobility in cities, among others. In collaboration with South Korea, the TC is anticipated to offer valuable technical and institutional support for the digital transformation and implementation of an integrated bus management system in an intermediate City of Peru.

## **2. Objectives**

- 2.1.** The objective is hiring goods included in a consulting firm to impart dissemination workshops about the findings in the study tour.

## **3. Scope of Services**

- 3.1.** Preparation and Planning: coordinating the workshop agenda: papers, keynote speakers, academic presenters, and participants list, and planning engaging activities and discussions to facilitate effective communication of findings.

**3.2.** Workshop facilitation: present the study tour findings in a clear and organized manner, utilizing visual aids and interactive methods, encouraging participants to engage in discussions and soliciting feedback on the findings. Gender equity will be warranted for the workshops to promote the participation of women.

**3.3.** Follow-up documentation: collecting and documenting feedback received during the workshop and sharing workshop outcomes.

#### **4. Key Activities**

**4.1.** The consulting firm's activities are aimed at achieving the objectives. They are indicative and not exhaustive. To carry them out, collaboration and coordination with officials from the jurisdiction and other involved entities or organizations will be necessary.

#### **5. Expected Outcome and Deliverables**

**5.1.** Work Plan, preparation, and planning: this activity involves the consulting firm providing the final version of the workshop agenda and content.

**5.2.** Workshop facilitation: this activity involves the consulting firm facilitating the workshop.

**5.3.** Follow-up documentation: this activity involves the consulting firm sharing the final report with the workshop outcome and findings.

#### **6. Project Schedule and Milestones**

**6.1.** The deliverables that will be provided by the consultant are as follows:

- First report: the consulting firm will present a document that encompasses the work plan for the consultancy and the workshop agenda.
- Second report: the consulting firm will present the final version of all workshop content and materials.
- Third report: the consultant will present the final version of the final report with the workshop outcome and findings.

#### **7. Reporting Requirements and Acceptance Criteria**

**7.1.** All reports must be submitted to the Bank in an electronic file. The report should include a cover page, main document, and all annexes. Zip files will not be accepted as final reports due to the regulations of the File Management Section. Reports will be presented in English and Spanish.

#### **8. Other Requirements**

**8.1.** Education: Professional with a university degree in civil engineering or related fields with at least 15 years of professional experience. Master's degree desirable.

**8.2.** Languages: Spanish and English.

**8.3.** Areas of expertise: The contractor must have at least 15 years of professional experience and a minimum of 10 years of specific experience in transportation-related issues.

**8.4.** Skills: Proficiency in oral and written communication.

**8.5.** Must be a citizen of one of the 48 member countries of the IDB and not have relatives currently working in the IDB Group.

**9. Supervision and Reporting**

**9.1.** Contract Type and Modality: Consulting firm, lump sum.

**9.2.** Contract Duration: 1 month.

**9.3.** Start Date: February 2026.

**9.4.** Responsible Person: The work will be coordinated by the Transport Specialist Rafael Capristán ([rcapristan@iadb.org](mailto:rcapristan@iadb.org))

**10. Schedule of Payments**

**10.1.** Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
3. <i>Contract signing and delivery and approval of the First Report (consultancy work plan and workshop agenda)</i>	20%
4. <i>Delivery and approval of the Second Report (final version of the workshop content).</i>	40%
5. <i>Delivery and approval of the Third Report (final versión of the workshop outcomes and findings report).</i>	40%
<b>TOTAL</b>	<b>100%</b>



**TERMS OF REFERENCE**

## KNOWLEDGE PRODUCT PUBLICATION

PERÚ

PE-T1570

Support for the Bus Operation System Initiative in Huancayo, through PROMOVILIDAD Program

<https://www.iadb.org/en/project/PE-T1570>**1. Background and Justification**

- 1.1.** PROMOVILIDAD under the Ministry of Transport and Communication (MTC) is charged to support the cities in Peru that have a population greater than 100,000 inhabitant and the departmental capitals to have a better public transportation infrastructure. It aims to ensure convenient and sustainable transportation systems as they are important for large cities, but providing such a service is often as challenging as it is desirable.
- 1.2.** In Peru, urbanization has led to the expansion of several cities into metropolitan areas, but the development of urban infrastructure is slow compared to the population growth. In particular, the operating systems of local public transportation are often not organized. The disorganization produces externalities such as traffic congestion, lack of roads and parking spaces, and an increase in noise and air pollution. Furthermore, the absence of a proper management system often results in the inefficient organization of bus routes, leading to intense competition between public transportation operators. This situation adversely impacts the quality of service and compromises the safety and security of public bus operations.
- 1.3.** To address the challenges, PROMOVILIDAD actively promotes public transportation infrastructure projects that should be operated by the cities themselves. However, many cities often lack the necessary capacity and technological solutions to effectively manage their public transportation infrastructure. For instance, none of the cities in Peru currently possess a transportation management system, including a Bus Management System (BMS), which is crucial for improving the efficiency and quality of public transportation services. Introducing a BMS has the potential to yield positive economic outcomes and facilitate evidence-based policy making. Notably, the municipality of Gyeonggi Province in South Korea experienced significant cost reductions of approximately US\$52,000 per year and observed a remarkable increase in work processing speed by 10 times following the implementation of their BMS.
- 1.4.** As such, there is a relevant need to support local governments in the operation and management of public transportation. The public transportation system can be improved through the implementation of policies that facilitate the management and operation of the bus systems and introduce Information and Communication Technology (ICT). Specifically, the introduction of a BMS designed for the specificity of each city could increase the level of service of the public transportation and help prepare the cities to operate the future investment of public mass transportation what PROMOVILIDAD is planning in their project portfolio.
- 1.5.** In this context, PROMOVILIDAD has put forth a proposal to implement a pilot project in Huancayo to support the national initiative and address the economic and social issues arising from the

inefficient transportation system. Huancayo has been specifically identified as a strategic city to launch the BMS project in Peru. With 500,000 inhabitants, it is a crucial intermediate city where most citizens rely on buses as their primary mode of public transportation. Additionally, the municipality of Huancayo's Department of Traffic and Transportation, known as the 'Gerencia de Tránsito y Transporte' maintains comprehensive records of the existing routes and fleet.

- 1.6.** Huancayo, situated in the center of Peru, holds significant importance as the capital city of Junin Province. It serves as a major hub where the main land traffic and cargo transportation networks converge within the central macro-region of the country. Also, the city shares strong socioeconomic ties with neighboring provinces in the Mantaro Valley, including Chupaca, Concepción, and Jauja. Moreover, Huancayo plays a crucial role in contributing to the nation's economy. According to the national productive structure of 2021, Junin Province, with Huancayo as its capital, accounted for 2.9% of the country's Gross Domestic Product (GDP), which corresponds to 3.2% of the National Gross Value Added. The region holds the 8th position in terms of its contribution to the national GDP.
- 1.7.** In terms of the public transportation structure, the total vehicle fleet in Huancayo amounts to 54,334 vehicles, as per the Huancayo Roads Regulatory Plan (2013). Among these, private vehicles account for 93%, taxis comprise 10%, and only 7% are dedicated to public transportation. It is important to note that the public transportation vehicles primarily consist of "coaster" models, measuring 7 meters in length, "combis" at 5 meters in length, taxis also at 5 meters, and collective cabs. As of 2022, the Provincial Municipality of Huancayo reported 22 coaster-type public transportation bus routes operated by 12 companies. The current public transportation operation system in Huancayo follows the "commissioner-affiliator" model, which is characterized by outsourced services. Under this model, each unit (usually drivers) pays a daily fee for the right to operate on specific routes, as registered beforehand. The drivers' and collectors' income depends on the number of passengers they can accommodate. In essence, the drivers' final profits are derived from the daily fares collected from passengers, with deductions for route fees, and, in some cases, payments to the vehicle owner and fuel costs. This model fosters an excessive competition among drivers to secure as many passengers as possible and operate their buses on the most profitable routes. Consequently, it results in inadequate budget allocation for vehicle maintenance, as well as reckless driving, signal violations, and an increased risk of road accidents. The cumulative effect of these circumstances generates poor quality service of public transportation and high emissions in the city.
- 1.8.** Sexual harassment is still an issue in Peru. Data from a study in Lima and Callao, shows the 74% of women public transport users have suffer this problem. Although the country has an attention protocol for sexual harassment in public transportation, cities need to take action. In addressing gender issues, Huancayo is dedicated to reducing the gap and promoting equal opportunities. In February 2023, the provincial mayor announced the city's commitment to adopting the gender agenda proposed by the Women's Dialogue Table of Huancayo. This agenda, outlined in a comprehensive document encompassing demands and solution strategies for women's issues, reflects the city's proactive stance. Through the implementation of preventive municipal ordinances focusing on women's concerns in the province of Huancayo, authorities aim to mitigate the disadvantages faced by women, particularly in terms of the illiteracy rate. Currently, the illiteracy rate for women is 11%, significantly higher than the 3% observed for men. The document also delves into the employment and work sector, revealing that in Huancayo, the percentage of unemployed women surpasses that of men by 13%. Additionally, a concerning 54%

of women report not receiving any compensation for their current work, marking a 14% disparity compared to men in similar circumstances.

- 1.9.** The Seoul Bus Management System played a pivotal role in empowering bus operators to implement demand-oriented scheduling and operate routes more efficiently. By providing accurate data on traffic patterns, actual demand per route, section, and time period, as well as real-time traffic flow information, the BMS facilitated evidence-based decision-making in the public transportation sector. Over time, it has led to the development of evidence-based public transportation policies, improved punctuality of bus schedules, and increased overall bus profitability. Moreover, this transformation has brought about significant advancements in the city's public transportation system by enabling the integration of bus services, bus-subway services, the establishment of dedicated bus central lanes, and streamlining the integration of public transportation fares.
- 1.10.** Additionally, Seoul recently underwent another round of public transportation reform to modernize its existing system. The program comprised seven key elements, including the overhaul and development of the bus operating system and its supporting infrastructure, the restructuring of bus lines and types, the implementation of an electronically controlled/managed bus operation and monitoring system, the establishment of a city-bus joint business management center (referred to as the Business Management Center or BMC), the integration of bus transit with the Metro system in terms of fare, operating lines, schedules, time intervals, and station locations, the installation of regional bus-exclusive median lanes, and the acquisition of funds to optimize road space for flexible bus operations and compensate bus owners for any financial losses resulting from changes to bus routes and lines in the public interest.
- 1.11.** Drawing upon its impressive track record and extensive expertise in designing and developing intelligent integrated bus management systems, South Korea has been actively providing support to numerous countries worldwide. This support aims to establish the foundation for similar systems, as exemplified by initiatives such as the Establishment and Operation of an Integrated System of Automated Fare Collection System and Bus Management System in Colombia (2011) and the Building of a Smart Bus System in Mongolia (2015).
- 1.12.** The Inter-American Development Bank and PROMOVILIDAD have been collaborating on various projects within the framework of integrated transportation and sustainable, technological, and inclusive infrastructure, such as a program for investment in infrastructure in cities, and the definition of institutional policies to promote sustainable mobility in cities, among others. In collaboration with South Korea, the TC is anticipated to offer valuable technical and institutional support for the digital transformation and implementation of an integrated bus management system in an intermediate City of Peru.

## **2. Objectives**

- 2.1.** The goal is to hire a consultant to publish the findings from the study tour to Seoul and dissemination workshops.

## **3. Scope of Services**

- 3.1.** Developing a detailed plan for publishing findings, including the format and target audience.
- 3.2.** Compiling key insights and observations from the Seoul study tour and dissemination workshops into a comprehensive report, utilizing visual materials for clarity.

**3.3.** Implementing a multi-platform strategy for widespread information sharing and feedback collection.

#### **4. Key Activities**

**4.1.** The consultant's activities are aimed at achieving the objectives. They are indicative and not exhaustive. To carry them out, collaboration and coordination with officials from the jurisdiction and other involved entities or organizations will be necessary.

#### **5. Expected Outcome and Deliverables**

**5.1.** Work Plan: this activity involves the consultant creating a work plan for publishing findings, including the format and target audience.

**5.2.** Comprehensive report: this activity involves the consultant compiling key insights and observations from the Seoul study tour and dissemination workshops into a comprehensive report, utilizing visual materials for clarity.

**5.3.** Dissemination strategy: this activity involves the consultant implementing a multi-platform strategy for widespread information sharing and feedback collection.

#### **6. Project Schedule and Milestones**

**6.1.** The deliverables that will be provided by the consultant are as follows:

- First report: the consultant will present a document that encompasses the work plan for the consultancy.
- Second report: the consultant will present the preliminary version of the comprehensive report and the dissemination strategy.
- Third report: the consultant will present the final version of the comprehensive report and the dissemination strategy.

#### **7. Reporting Requirements and Acceptance Criteria**

**7.1.** All reports must be submitted to the Bank in an electronic file. The report should include a cover page, main document, and all annexes. Zip files will not be accepted as final reports due to the regulations of the File Management Section. Reports will be presented in English and Spanish.

#### **8. Other Requirements**

**8.1.** Education: Professional with a university degree in civil engineering or related fields with at least 15 years of professional experience. Master's degree desirable.

**8.2.** Languages: Spanish and English.

**8.3.** Areas of expertise: The contractor must have at least 15 years of professional experience and a minimum of 10 years of specific experience in transportation-related issues.

**8.4.** Skills: Proficiency in oral and written communication.

**8.5.** Must be a citizen of one of the 48 member countries of the IDB and not have relatives currently

working in the IDB Group.

**9. Supervision and Reporting**

- 9.1. Contract Type and Modality: External products and services contract, lump sum.
- 9.2. Contract Duration: 3 months.
- 9.3. Start Date: June 2026.
- 9.4. Responsible Person: The work will be coordinated by the Transport Specialist Rafael Capristán ([rcapristan@iadb.org](mailto:rcapristan@iadb.org))

**10. Schedule of Payments**

- 10.1. Payment terms will be based on project milestones or deliverables. The Bank does not expect to make advance payments under consulting contracts unless a significant amount of travel is required. The Bank wishes to receive the most competitive cost proposal for the services described herein.

<b>Payment Schedule</b>	
<b><i>Deliverable</i></b>	<b>%</b>
5. <i>Contract signing and delivery and approval of the First Report (consultancy work plan)</i>	20%
6. <i>Delivery and approval of the Second Report (preliminary version of the comprehensive report and dissemination strategy).</i>	40%
6. <i>Delivery and approval of the Third Report (final version of the comprehensive report and dissemination strategy).</i>	40%
<b>TOTAL</b>	100%