

MobiliseYourCity Global Monitor 2025

2

For more information

MobiliseYourCity Secretariat, Brussels

www.mobiliseyourcity.net

email: contact@mobiliseyourcity.net

Title: "MobiliseYourCity Global Monitor 2025"

Published and distributed: May 2025

Authors: Sasank Vemuri, Eléonore François-Jacobs, Giuliana Ambrosino, Nicolás Cruz González, Milnael Gómez, Zofia Bochinska, Solène Baffi, Lucile Boudet, Alexandra Heitplatz, Angel Almendros Salerno

Contributors: Valentine Monnier, Clement Musil, Anne Chaussavoine, Guillermo Madrid, Mouhamadou Diene, Louis-Guillaume François, Héloïse Chaumier, Patricia Calderón, Maryfely Rincón, Issaree Jitrpatima, Natcha Pattanatananon, Abigail Wenninger, Karine Andriamiraho, Arnauld Ndzana, Natalia Cárdenas, Francesca Gail, Julio Arturo Briones, Pauline Bogey, François Carcel, Anne-Laure Ullmann, Martin Schlecht, Rigobert Kilu, Thomas, Bafoil, Ludovica Marangoni, Dominika Kalinowska, Edder Shamir Borges Lopes Samedo, Véronique Pescatori, Jean-Marc Mirailles, Jacopo Giavoli, Carine Assaf.

Layout: Giuliana Ambrosino - MobiliseYourCity Secretariat and Stefany Salazar

Photo credits

Cover: Pierre Laborde

P. 9, 40: Victor Rosario

P. 13: Aldin Nasrun

P. 17: Mateo Jimenez

P. 19: De ca

P. 21: Zoshua Colah

P. 37, 44: Giuliana Ambrosino

P. 45: Shaokatul Choyon

P. 46: Thomas G.

P. 47: UlisesCasarez

P. 49: Roger Ce

P. 51: Gabriel Guillén

P. 52: Humphrey Muleba

P. 55: md rifat

P. 57: Guido HN

P. 63: Jack Prommel

P. 64: Kevin Olson

P. 65: Alexis Rodriguez

P. 68: Joshua Rawson-Harris

P. 69: Raju Kumar

P. 71: Parabol | The Agile Meeting Tool

Copyright

This publication is subject to copyright of the MobiliseYourCity Partnership and its Contributing Partners and authors. Partial or total reproduction of this document is authorised for non-profit purposes, provided the source is acknowledged.

Disclaimer

The content presented in this document represents the opinion of the authors and is not necessarily representative of the position of the individual partners of MobiliseYourCity.

Donors













Implementing partners



















Knowledge and Network Partners





















In collaboration with



















Foreword

Dear MobiliseYourCity Community,

We have been working on the MobiliseYourCity Global Monitor 2025 against the backdrop of a profoundly shifting international development landscape. Funding priorities have been evolving in response to geopolitical, economic, and security challenges. The dismantling of USAID and the reallocation of British Official Development Assistance (ODA) to defense signal a broader trend of governments reassessing their commitments to global development.

These global shifts directly impact the context in which we operate, necessitating the evolution of funding structures, priorities, and partnerships.

For organisations like MobiliseYourCity, it is more important than ever to remain agile and proactive in securing permanent support for our members. In this rapidly changing landscape, being a partnership with multiple donors strengthens our resilience, enabling us to maintain stability and adaptability.

The present challenges also offer opportunities for partnerships like ours, underscoring the need for cost-effective and impactful actions that bring visible results. That's what we hope you will see from the MobiliseYourCity Global Monitor 2025- a shared effort to ensure transparency and accountability.

The MobiliseYourCity Global Monitor 2025 provides a comprehensive overview of our achievements in advancing sustainable urban mobility worldwide. Donor support from the EU and the governments of France and Germany has led to tangible activities in our member cities and countries, which are presented in over 60 factsheets.

2024 was a pivotal year for the Partnership, marked by reflection, renewal, and growth. The addition of nine new member cities reflects the trust placed in us by urban leaders. At the same time, the high participation in our training programs, the widespread use of our methodologies, and a growing online community underscore the ongoing need for capacity building and knowledge sharing.

Throughout 2024, we conducted a stocktake of our first ten years, which helped us assess our impact and identify our strengths and weaknesses, allowing us to refine our strategy. An additional milestone was the European Union assuming the chair of the Partnership, bringing a new orientation and strategic direction.

Building on this momentum, we are introducing a new way of working with our partners by launching thematic working groups to foster collaboration on key mobility topics and deepen our collective expertise.

This turning point is backed by increased funding focused on implementation. While our initial emphasis was exclusively on mobility planning, we are now also supporting the implementation of Sustainable Urban Mobility Plans (SUMPs) on selected topics through pilot projects, thanks to 6 M€ from the European Commission, 1.1 M€ from BMZ and 240K€ from ADEME. This evolution reflects our commitment to enabling tangible on-the-ground improvements in urban mobility and quality of life.

As we look ahead, the unity of the Partnership will be key to navigating the current dynamic world. Our collective voice and joint actions help ensure that sustainable urban mobility remains a top priority on the development agenda—especially in a time when global support for sustainable mobility requires visible impact, strategic alignment, and consistent advocacy.

The year 2025 will mark the 10-year anniversary of the MobiliseYourCity Partnership. Over the past decade, we have built a strong community of cities and countries committed to sustainable mobility. In a world where access to solutions is becoming increasingly vital, we reaffirm our commitment to ensuring that our expertise, tools, and methodologies remain openly available to those who need them.

We thank our partners, donors, and member cities for their unwavering trust and collaboration. Together, we will continue to make urban mobility more sustainable, inclusive, and resilient for the years to come.

Sasank Vemuri Coordinator of the MobiliseYourCity Partnership



Table of contents

EX	Recutive Summary	
1.	The MobiliseYourCity Global Partnership	8
2.	Mastering Mobility: Capacity Building and Methodologies	24
3.	Mobility Planning: Supporting SUMPs and NUMPs	40
4.	Advocacy and Outreach: connecting and communicating for a systems' transformation	56
5 .	Implementation support	63
6.	Looking Forward	68
7 .	City and Country Factsheets	72
	Africa	74
	Asia	163
	Eastern Europe	218
	Latin America and the Caribbean	233



List of figures

Figure 1.	MobiliseYourCity's 4 service areas	10
Figure 2.	Our members and donors	15
Figure 3.	Global attendance at the Mastering Mobility Series	26
Figure 4.	Mastering Mobility Series Training Participants by region	28
Figure 5.	Cities attending the 2025 MobiliseYourCity African meeting in Kigali, Rwanda	35
Figure 6.	Knowledge Platform Activity Overview	39
Figure 7.	SUMP and NUMP cycle	41
Figure 8.	Evolution of Leveraged Financing	41
Figure 9.	Leveraging Finance from SUMPs and NUMPs	42
Figure 10.	Financed investments and projected impacts	43
Figure 11.	Availability of paratransit emissions information in selected cities.	53
Figure 12.	Paratransit GHG emissions in selected cities.	54
Figure 13.	Knowledge platform users by country and gender	62
List of	tables	
Table 1.	City and Country members	12
Table 2.	Donors' contributions	16
Table 3.	Implementing Partners	17



Executive Summary

In 2024, MobiliseYourCity accelerated the implementation of sustainable mobility solutions by intensifying project preparation, fostering capacitybuilding initiatives, and directing investments toward active mobility and paratransit reform. Our enhanced commitment goes beyond planning, extending to direct technical assistance, institutional strengthening, and piloting innovative projects that demonstrate the effectiveness of sustainable transport systems. Thanks to €62.1 million mobilised through donor contributions, we supported the development of 32 Sustainable Urban Mobility Plans (SUMPs) and 9 National Urban Mobility Policies and Investment Programs (NUMPs). These efforts culminated in completing 21 SUMPs and 6 NUMPs, securing €2.3 billion in financing for implementation, marking significant progress in transforming urban mobility landscapes globally.

This year, we are thrilled to welcome nine new member cities - Aizwal (India), Davao (Philippines), Harare (Zimbabwe), Kaduna (Nigeria), Kinshasa (Democratic Republic of Congo), Nairobi (Kenya), Toamasina (Madagascar), and Antsirabe (Madagascar) - further underscoring the growing global relevance of our Partnership and the importance of sustainable urban mobility worldwide. In addition, we are pleased to introduce two new Knowledge and Network Partners, CONCITO and Despacio, whose invaluable expertise and insights will further strengthen and enrich our community.

To better harness the collective knowledge and expertise of our donors, implementing partners, and knowledge and network partners, we have established three working groups: urban logistics, paratransit decarbonisation, and private sector engagement. These groups serve as platforms for exchange and collaboration, focusing on knowledge management and advocacy to drive progress in these critical areas. The working groups are designed to support cities in turning plans into action: the climate adaptation group, which explores how to make urban mobility systems more resilient to climate risks; the **urban logistics group**, which focuses on strengthening local capacities for integrating freight and last-mile delivery into mobility planning; and the private sector engagement group, aimed at identifying ways to better collaborate with businesses and financial actors to scale sustainable urban mobility investments, particularly through initiatives like the Global Gateway.

Our advocacy and outreach efforts in 2024 positioned MobiliseYourCity as a key player in the global dialogue on sustainable urban transport. We were central to **11 major events**, contributing to discussions on transport decarbonisation, informal transport integration, and sustainable financing. At the Asia and the Pacific Transport Forum, alongside partners such as the ADB and ITDP, we championed investment in walking and cycling as essential components of urban transport systems. In Kigali, we held a landmark regional exchange on minibus electrification, advancing discussions on paratransit reform. Additionally, our roundtables at the Hamburg Sustainability Conference helped shape global policy commitments on road safety, informal transport, and investment strategies for the Global South.

In terms of capacity building and knowledge dissemination, we saw significant expansion, solidifying MobiliseYourCity as an essential hub for technical expertise and peer learning. In 2024, we conducted over 20 online training sessions, engaging 829 urban mobility practitioners with insights into climate adaptation, paratransit professionalisation, and sustainable transport financing.

Our Knowledge Platform, which attracted 44,610 visitors this year, continues to be a crucial resource for cities and practitioners worldwide. We also marked a significant milestone with the launch of a web-based Emissions Calculator, providing cities with a user-friendly, data-driven tool to assess and mitigate their transport-related greenhouse gas emissions. This new tool enhances the accessibility and functionality of emissions monitoring, empowering cities to set and track their climate goals with greater precision.

As we celebrate the tenth year of existence of the MobiliseYourCity Partnership, we focus on scaling up implementation, strengthening governance frameworks, and integrating climate adaptation strategies into urban mobility planning. The forthcoming governance toolkit will offer cities structured guidance on overcoming institutional barriers, enabling smoother decentralisation processes and fostering more effective service delivery. We will continue to expand our engagement with European and global networks, ensuring that knowledge exchange remains at the heart of our mission.

The ongoing commitment of our partners, implementing organisations, and member cities is central to ensuring MobiliseYourCity's continued leadership in shaping the future of sustainable urban mobility, creating cleaner, more inclusive, and climate-resilient transport systems worldwide.



The Mobilise Your City Global Partnership

Launched at COP21 in December 2015, the MobiliseYourCity Partnership has established itself as the foremost global initiative for promoting sustainable urban mobility planning, shaping policy, and boosting investment in sustainable transport within developing and emerging economies.

Our Implementing Organisations, led by the Agence Française de Développement (AFD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), collaborate with cities and countries worldwide to create scalable solutions for enhancing mobility in complex environments.

As of today, the MobiliseYourCity Partnership includes 79 member cities, representing a combined population of over 155 million people across 39 countries. With generous support from the European Union (EU), the Agence Française de Développement (AFD), the French Ministry for the Ecological Transition (MTE), the German Federal Ministry for Economic Cooperation and Development (BMZ), the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUV), and the French Facility for Global Environment (FFEM), the Partnership has secured €62.1 million in grants as

of December 2024. These funds have been used to provide technical assistance and project preparation support to 45 member cities, 11 member countries, 4 non-member countries, and 8 non-member cities, helping to mobilise additional loans for concrete sustainable urban mobility projects.

The Partnership was founded by Agence de l'Environnement et de la Maîtrise de l'Energie (ADEME), Agence Française de Développement (AFD), Coopération pour le Développement et l'Amélioration des Transports Urbains et Périurbains (CODATU), Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement (Cerema), and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. It operates as an international transport initiative under the UN Marrakesh Partnership for Global Climate Action and is a member of the SuM4All Consortium.

Our vision

A climate compatible and socially just future mobility

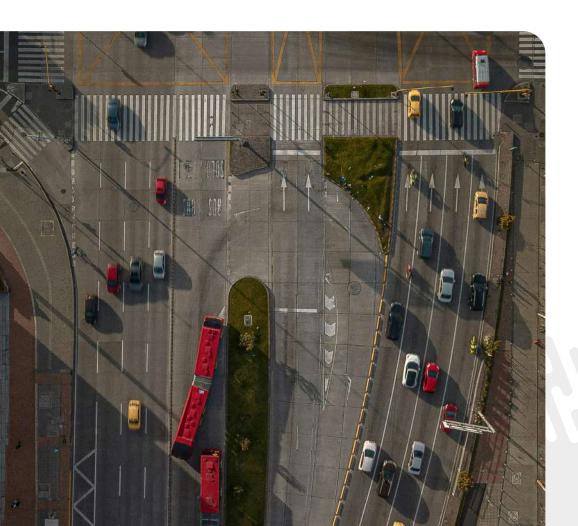
We work together as partners to shape low-carbon mobility systems that contribute to economically vibrant, safe, and just cities for all urban residents of today and the future.

Our mission

Paving the way through collaborative planning and action

Our mission is to develop scalable solutions, speed up the implementation of proven strategies, and support complex change processes to revolutionise urban mobility.

As a Partnership, we are committed to driving transformative change in urban mobility. By harnessing the diverse expertise of a broad network of organisations, we serve as a knowledge hub and collaborate to create solutions that surpass individual capabilities, enabling lasting and impactful change.



How we support cities and countries

The MobiliseYourCity Partnership supports member cities and countries through four main service areas. Already 62.1 million euros have been raised to fund projects in these four service areas.

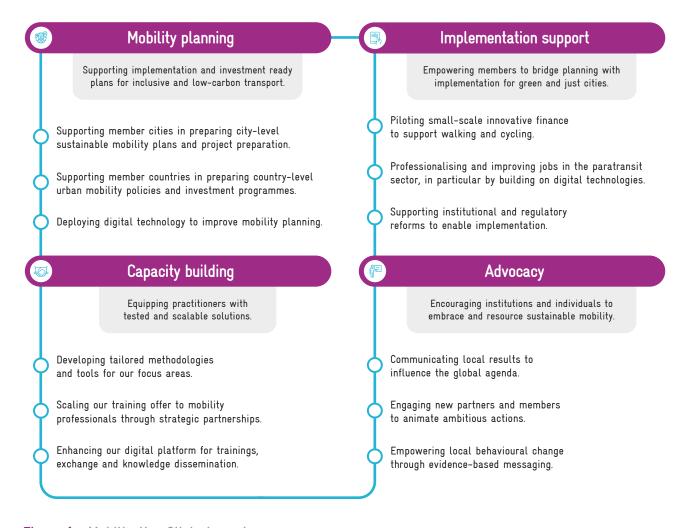


Figure 1. MobiliseYourCity's 4 service areas

'Our goal is to deepen the connection between the Partnership and the Global Gateway strategy by positioning MobiliseYourCity as a central instrument for delivering sustainable urban mobility globally.'

Sergio Oliete Josa

Head of Unit for Sustainable Transport and Urban Development, European Commission (DG INTPA)



Mobility planning

Advancing implementation-ready plans and investment-ready projects for inclusive, low-carbon transport

Our Implementing Partners, led by the Agence Française de Développement (AFD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), assist member cities and countries in shifting from road-focused transport planning to people-centred mobility planning that meets the needs of all while respecting the planet. They work globally with cities and countries to develop implementation-ready mobility plans and finance-ready projects to enhance mobility in complex environments. This includes supporting member countries in crafting (NUMPs) and helping member cities design Sustainable Urban Mobility Plans (SUMPs), leveraging digital technology to optimise mobility planning.

Facilitating access to finance

Following technical assistance for mobility planning and project preparation, member cities and countries are guided in identifying accessible and affordable financing solutions. This support includes direct funding of specific components of SUMPs and NUMPs by our banking partners and/or connecting investments with other potential financiers for mobility infrastructure and equipment.



Implementation support

Empowering members to bridge planning with implementation for green and just mobility

We offer targeted implementation support to bridge the implementation gap for small-scale and critical measures that is due to low local capacities to allocate finance and, generally, too small amounts to attract external financiers. We focus on three areas: walking and cycling, paratransit, and policy and regulatory reforms.



Capacity building

Equipping practitioners with tested and scalable solutions

Our partners work together to develop tailored methodologies and tools to develop the capacity to plan, finance and implement sustainable mobility solutions. We bring together global experts and local practitioners to generate ambitious, adaptable and achievable solutions. By acting as a knowledge hub, we ensure methodologies are constantly improved, knowledge is scaled, and insights are extracted from the SUMPs.

Trainings and training materials: We offer our members access to webinars and trainings to develop their skills to improve mobility in their city or country. All the materials from the trainings that we offer are made available for anyone to deliver the trainings themselves.

An online knowledge platform: An online knowledge platform: To allow local partners access to the latest knowledge on sustainable mobility, our website offers a mobility library gathering resources on mobility from all our partners. The platform offers guidance to the most relevant resources for each step of the planning process.



Advocacy

Encouraging institutions and individuals to embrace and resource sustainable mobility

We promote a transformative approach to mobility planning by advocating for the enable-avoid-shift-improve (EASI) model, which prioritises people's need for connection and access. Believing this model to be highly effective in enhancing urban mobility and decarbonising transport, we call for greater investment in technical assistance to expand its application and for increased financial resources to implement it. Our advocacy is firmly rooted in the practical experience gained from applying this model through SUMPs and NUMPs in our member cities and countries.

Who the Partnership brings together

The MobiliseYourCity Partnership brings together partners working together to support cities and countries in advancing sustainable urban mobility. The modes of participation can be distinguished into four different partnership categories:

- Member cities and countries
- Donors
- Implementing partners
- Knowledge and Network Partners

Member cities and countries

The MobiliseYourCity Partnership has 79 member cities and 16 member countries. Our Implementing Partners are supporting 32 cities and 9 countries in preparing SUMPs and NUMPs, respectively.

	Member cities	SUMPs	Member countries	NUMPs
Population	136 million people	73 million people	725 million people (urban population)	210 million people (urban population)
Africa	40	12	9	2
Asia	16	8	4	2
Latin America	18	91	3	6^2
Eastern Europe	6	3	0	0
Worldwide	79	32²	16	92

Table 1. City and Country members

¹ Three NUMPs supported in non-member countries

² Two SUMPs supported in non-member cities

Expanding the MobiliseYourCity Partnership: 9 New Cities Joined in 2024

As MobiliseYourCity marks its 10-year anniversary, the Partnership continues to grow, welcoming 9 new member cities in 2024. Aizawl, India; Antsirabe, Madagascar; Chisinau, Moldova; Davao, Philippines; Harare, Zimbabwe; Kaduna, Nigeria; Kinshasa, Democratic Republic of Congo; Nairobi, Kenya; and Toamasina, Madagascar bring the total number of member cities to 79 across 39 countries. This marks the third-largest year for new memberships, demonstrating sustained commitment to sustainable urban mobility globally.

The addition of these cities reflects the growing recognition of sustainable urban mobility as a key driver of climate resilience and inclusive development. With representation from Africa, Asia, and Eastern Europe, new members bring diverse contexts, challenges, and opportunities that will enrich knowledge exchange within the Partnership.



New Member Cities and Their Priorities

Each new member city is engaging with MobiliseYourCity to address specific urban mobility challenges:

Davao, Philippines

Facing high congestion and dependence on private vehicles, Davao is advancing its *Davao Bus Project* and developing a Non-Motorised Transport Plan to improve pedestrian and cycling infrastructure.

Harare, Zimbabwe

Confronted with an inefficient and largely informal transport system, Harare is developing a SUMP to formalise public transport and integrate land-use planning into mobility strategies.

Aizawl, India

With steep terrain and limited road space, Aizawl is leveraging technical assistance from the ADB to explore cable car systems, enhance bus services, and expand non-motorised transport infrastructure.

Kaduna, Nigeria

Rapid urbanisation has led to severe congestion and air pollution. Kaduna is developing a SUMP and exploring Bus Rapid Transit (BRT) solutions with support from the AFD.

Nairobi, Kenya

Nairobi is seeking technical assistance through the Partnership to develop a SUMP in coordination with the Millennium Challenge Corporation.

Toamasina & Antsirabe, Madagascar

Both cities face increasing congestion and are prioritising capacity building and training on sustainable urban mobility as a foundation for future planning efforts.

Kinshasa, Democratic Republic of Congo

The largest city in sub-Saharan Africa, Kinshasa is working to formalise its transport sector and improve access to reliable and inclusive mobility options.

Chisinau, Moldova

Seeking to modernise its transport system, Chisinau is focusing on enhancing public transport, pedestrian infrastructure, and cycling networks.

MobiliseYourCity's 10-year milestone is not only a celebration of progress but also a reaffirmation of the urgent need for sustainable mobility solutions. With each new member, the Partnership strengthens its collective impact, supporting cities in developing evidence-based policies and scaling up effective mobility strategies.



'Becoming a member of MobiliseYourCity aligns perfectly with Kinshasa's objectives and ambitions. By joining this dynamic community of partners, we hope to access valuable resources, expertise and best practices that will help us implement innovative mobility solutions tailored to the specific needs of our city. As a member of MobiliseYourCity, we will cooperate with other cities and organizations to share knowledge, experiences and learn from success stories.'

Bob Amisso Yoka Lumbila, Democratic Republic of CongoProvincial Deputy (elected representative of Barumbu) and Provincial
Minister of Transport and Urban Mobility of Kinshasa

The MobiliseYourCity Global Partnership

Our members and donors





6 Donors

Latin-America and the Caribbean

Countries

Colombia Dominican Republic Ecuador

Cities

Córdoba, Argentina Ambato, Ecuador Baixada Santista, Brazil Cuenca, Ecuador Belo Horizonte, Brazil Loja, Ecuador Brasilia, Brazil Quito, Ecuador Curitiba, Brazil Puebla, Mexico Fortaleza, Brazil Arequipa, Peru Recife, Brazil Trujillo, Peru Teresina, Brazil Ibagué, Colombia Havana, Cuba Santo Domingo, Dominican Republic

Eastern Europe

Cities

Chisinau, Moldova Chernivtsi, Ukraine Lviv, Ukraine Poltava, Ukraine Vinnytsia, Ukraine Zhytomyr, Ukraine

Africa

Donors

European Union

France (AFD, FFEM, MTE)
Germany (BMUV, BMZ)

Countries

Burkina Faso Cameroon Ethiopia Madagascar Morocco The Gambia Togo Tunisia Uganda

Cities

Bobo Dioulasso, Burkina Faso Ouagadougou, Burkina Faso Douala, Cameroon Yaoundé, Cameroon Kinshasa, Democratic Republic of Congo Dire Dawa, Ethiopia Hawassa, Ethiopia Kumasi. Ghana Abidjan, Ivory Coast Bouaké, Ivory Coast Nairobi, Kenya Antananarivo, Madagascar Antsirabe, Madagascar Mahajanga, Madagascar Toamasina, Madagascar Nouakchott, Mauritania Beni Mellal, Morocco Casablanca, Morocco El Jadida, Morocco

Kenitra, Morocco Khemisset, Morocco Khouribga, Morocco Marrakech, Morocco Oujda, Morocco Sefi, Morocco Settat, Morocco Maputo, Mozambique Windhoek, Namibia Niamey, Niger Kaduna, Nigeria Dakar, Senegal Mbour, Senegal Thiès, Senegal Dodoma, Tanzania Mwanza, Tanzania Lomé, Togo Sfax, Tunisia Harare, Zimbabwe

Fes, Morocco

Asia

Countries

India The Philippines Sri Lanka Thailand

Yerevan, Armenia

Cities

Phnom Penh, Cambodia Tbilisi, Georgia Ahmedabad, India Aizawl, India Kochi, India Nagpur, India Medan, Indonesia Mandalay, Myanmar Abbottabad, Pakistan Mingora, Pakistan Peshawar, Pakistan Davao, Philippines Kurunegala, Sri Lanka Ankara, Türkiye



Donors

Our funds to support cities and countries come from the European Union and the governments of France and Germany.













Donors		Amount
The European Union		27.5 M€
	MobiliseYourCity India/AIF	3.5 M€
European Commission's Directorate-General for International Partnerships (DG INTPA)	MobiliseYourCity/Intra-ACP	3.0 M€
	EUROCLIMA+ Mobility Component	13.0 M€
	EUROCLIMA+ Country Dialogue	2.0 M€
	Urban Nodes	5.0 M€
European Commission's Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR)	Urban Nodes	1.0 M€
France		16.5 M€
Agence Française de Développement (AFD)	MobiliseYourCity Africa	3.0 M€
	MobiliseYourCity Asia	5.0 M€
	MobiliseYourCity Global	2.5M€
	MobiliseYourCity Asia II	2.5 M€
French Ministry of Ecological Transition (MTE)	MobiliseYourCity	1.5 M
French Facility for Global Environment (FFEM)	MobiliseYourCity	2.0 M€
The French Agency for Ecological Transition (ADEME)	Climate adaptation	0.11€
	Paratransit decarbonisation	0.13€
Germany		16.7 M €
The German Federal Ministry for economic cooperation and development (BMZ)	Transformative Urban Mobility Initiative (TUMI)	0.7 M€
	Contribution to EUROCLIMA+	10.1 M€
German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUV)	IKI TRANSfer III	7.0 M€
TOTAL		62.1M€

Table 2. Donors' contributions

Implementing partners

Implementing partners provide our city and country members with technical assistance to elaborate Sustainable Urban Mobility Plans and National Urban Mobility Policies or investment programmes.



















Implementing partners	SUMPs supported	NUMPs supported	Total volume of projects
AFD	24³	3	23.8 M€
GIZ	84	8§	30.0 M€ ⁶

Table 3. Implementing Partners

⁶ Includes a 9.1M contribution from BMZ for SUMPs in Ukraine, prior to BMZ joining the Partnership.



 $^{{\}tt 3}$ $\,$ $\,$ Including collaborations or subcontracting with ADEME, ADB, Cerema and CODATU

⁴ Two in non-member cities

⁵ Three in non-member countries

The Agence Française de Développement (AFD) is

the French public institution in charge of implementing France's policy in the areas of development and international solidarity. The AFD funds, supports, and accelerates the transition to a fairer and more sustainable world. The AFD has supported the development of 14 SUMPs and 3 NUMPs in Cameroon, Tunisia and Ecuador. With 23.8 million euros for implementing MobiliseYourCity-related related activities, AFD has supported the development of SUMPs and NUMPs, as well as pilot project and other technical assistance, in 33 cities and 5 countries, respectively.

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is Germany's leading organisation for international cooperation services. As a federal enterprise, it supports the German Government in advancing its sustainable development objectives globally. GIZ plays a key role in the MobiliseYourCity Partnership by supporting the development of SUMPs and NUMPs and providing staff for the Partnership's Secretariat. With a funding commitment of €30 million for MobiliseYourCity-related activities, GIZ has aided the creation of SUMPs and NUMPs in 7 cities and 8 countries, respectively, and supported 5 pilot projects and other technical assistance initiatives. On behalf of the German Federal Ministry of Economic Cooperation and Development, GIZ has also assisted 3 MobiliseYourCity member cities in Ukraine with the preparation of their SUMPs.

Codatu (Cooperation for Urban Mobility in the Developing World) is an international association committed to advancing sustainable urban mobility policies. It achieves this through training programmes, scientific exchanges, technical assistance, and advisory services for local and national authorities. Codatu plays an integral role in the MobiliseYourCity Partnership by providing staff for its Secretariat under an agreement with AFD. Its diverse membership includes local governments, transport authorities, research and training institutions, private sector organisations, and individual experts.

The Asian Development Bank (ADB) supports its members and partners by offering loans, technical assistance, grants, and equity investments to drive social and economic development across the Asia-Pacific region. ADB enhances the developmental impact of its assistance through policy dialogues, advisory services, and mobilising financial resources via co-financing arrangements that leverage official, commercial, and export credit sources. In collaboration with AFD, ADB supports the development of SUMPs in four MobiliseYourCity cities located in Indonesia and Pakistan, demonstrating its commitment to fostering sustainable urban mobility solutions.

ADEME (Agence de la Transition Écologique) is a French public agency dedicated to advancing ecological transition efforts. It plays a vital role in implementing public policies related to the environment, energy, and sustainable development. ADEME provides expertise and support to both public and private sector actors to address climate challenges and promote resource-efficient solutions.



"Our incentive for supporting MobiliseYourCity is that the Partnership allows AFD to link with cities and knowledge partners, develop state-of-the-art methodologies and do advocacy on different levels. MobiliseYourCity Partnership is a way to enhance urban mobility projects."

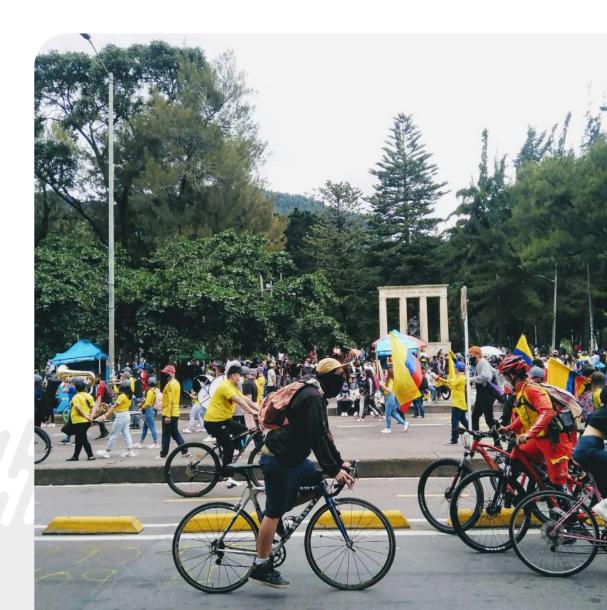
Reda SouirgiHead of Digital and Mobility Division, Agence Française de Développement

Cerema (Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement) is a French public institution tasked with supporting public policies. Operating under the authority of the French Ministry of the Ecological and Inclusive Transition and the Ministry of Territorial Cohesion, Cerema provides expertise in sustainable mobility, infrastructure, urban planning, and environmental management to aid local and regional authorities in achieving their objectives.

The European Bank for Reconstruction and Development (EBRD) operates across three continents, promoting the transition to market-oriented economies and fostering private and entrepreneurial initiatives. EBRD supports sustainable development by financing infrastructure projects, encouraging private sector growth, and prioritising environmental and social sustainability in its operations.

KfW, Germany's state-owned development bank based in Frankfurt, is dedicated to promoting sustainable prospects for people, businesses, the environment, and society. Its operations align with the United Nations' Sustainable Development Goals (SDGs), focusing on areas such as climate action, poverty alleviation, and economic development. KfW provides funding and expertise for impactful projects worldwide, including initiatives that foster sustainable urban mobility.

The Wuppertal Institute is an internationally renowned think tank specialising in sustainability research. It focuses on the practical application of transformative processes to build a climate-friendly and resource-efficient world. The institute's work spans areas such as energy transition, sustainable urban development, and the circular economy, offering valuable insights to policymakers and stakeholders striving to achieve sustainable futures.



Knowledge and Network partners

Knowledge and Network Partners are internationally- or regionally-operating or country-focused not-for-profit organisations, institutions, think tanks, affiliated technical assistance programs or other organisations associated with the MobiliseYourCity Partnership.



















ITDP (Institute for Transportation and Development Policy) is a global organisation at the forefront of innovation, dedicated to using technical expertise, direct advocacy, and policy guidance to address climate change, improve air quality, and support prosperous, sustainable, and equitable cities. ITDP has worked with over 100 cities in more than 40 countries, helping design and implement transport and urban development systems as well as policy solutions that make cities more sustainable, fair, and liveable.

PLATFORMA is the pan-European coalition of towns, regions, and their national, EU, and global associations, focusing on city-to-city and region-to-region development cooperation. It serves as a hub of expertise for European local and regional governments' international actions and strives to enhance their contributions to EU development cooperation policies and international frameworks. PLATFORMA advocates for the global role of European local and regional governments in fostering sustainable development.

UCLG (United Cities and Local Governments) is a global network representing cities, local, regional, and metropolitan governments, and their associations. UCLG is committed to defending and amplifying the voices of local and regional governments, ensuring that no one and no place is left behind. The organisation advocates for the importance of local governance in shaping inclusive, sustainable urban policies worldwide.

UN-Habitat works with partners to build inclusive, safe, resilient, and sustainable cities and communities. UN-Habitat views urbanisation as a positive transformative force, aiming to reduce inequality, discrimination, and poverty. It focuses on shaping cities that are equitable, sustainable, and capable of offering opportunities for all.

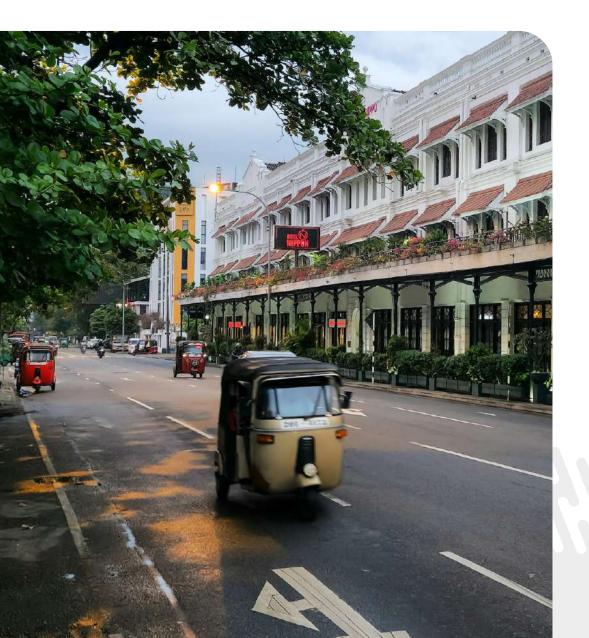
The European Cyclists' Federation (ECF) has been advocating for cyclists in Europe for nearly 40 years. As the largest pro-cycling federation in Europe, ECF represents organisations across 40 countries, with over 500,000 active members. ECF is committed to ensuring that cycling reaches its full potential in promoting sustainable mobility and public well-being. The federation works to change attitudes, policies, and budget allocations at the European level, fostering a cycling culture and stimulating the exchange of information on cycling-related transport strategies.

The Global Partnership for Informal Transportation (GPIT) collaborates closely with informal urban transportation systems across the Global South to drive innovation, improve services, and transform business models. By leveraging new technologies and innovative policies, GPIT helps informal networks combat climate change and make cities work for everyone, enhancing mobility in underserved areas.

Truffi Association is a non-profit NGO focused on improving access to public transportation through the provision of free geographical data and software. Truffi's work aims to make public transportation more accessible, efficient, and user-friendly, enabling better urban mobility for all.

CONCITO is Denmark's green think tank, aiming to translate relevant knowledge into climate action and thereby accelerate the green transition at local, national, and global levels. Through science- and knowledge-based analyses and information, the aim is to show how it is possible to create a climate-neutral and climate-resilient society. CONCITO's work is organised into concrete programs and initiatives addressing main climate challenges with a focus on: energy, food, buildings, mobility, cities, youth, economy, behaviour, and European and international climate policy.

Despacio is a Bogotá-based organisation focused on creating sustainable and inclusive cities through people-centred urban development. They specialise in research, capacity-building, and policy design, with a focus on promoting sustainable mobility, urban planning, and environmental resilience. Working closely with governments, NGOs, and international partners, Despacio champions practical, innovative approaches that prioritise quality of life, community engagement, and long-term sustainability in urban environments.



The MobiliseYourCity Secretariat

In 2024, the MobiliseYourCity Partnership welcomed new members to its team, bringing fresh perspectives and energy to its mission. Zofia Bochinska joined as the new Junior Project Officer, Alexandra Heitzplatz as the GIZ Capacity Building Intern, and Angel Salerno as the Codatu Capacity Building Intern. These additions complemented the existing team, which includes

Sasank Vemuri, Coordinator of the Partnership and Head of the Secretariat; Eleonore François-Jacobs, Partnerships and Outreach Manager; Nicolas Cruz, Sustainable Mobility Expert; and Solene Baffi, Sustainable Mobility Expert. Together, the expanded team continues to drive forward the Partnership's goals of transforming urban mobility worldwide.







Our contribution to the SDGs

By assisting cities and countries in the planning and implementation of effective measures to decarbonize urban transport, the Partnership supports the goals set forth under the UNFCCC dialogue and many urban-related goals specified in the New Urban Agenda as well as the Sustainable Development Goals (SDGs). We also support countries in meeting their Nationally Determined Contributions (NDCs) targets by reducing GHG emissions.



3 GOOD HEALTH AND WELL-BEING —

Ensure healthy lives and promote well-being for all at all ages

3.6 - By 2030, halve the number of global deaths and injuries from road traffic accidents

MobiliseYourCity Contribution

The member cities of Antofagasta, Bouaké, Dakar, Douala, Medan, and Trujillo have projected that the successful implementation of their SUMP will improve road safety and lead to saving together over 890 lives every year.



INDUSTRY, INNOVATION AND INFRASTRUCTURE



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Targets

- 9.1 Develop quality, reliable, sustainable, and resilient infrastructure
- 9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced FA and TA

MobiliseYourCity Contribution

Developing reliable, sustainable, and resilient infrastructure is at the heart of the MobiliseYourCity Partnership. In just nine cities (Douala, Yaoundé in Cameroun, Santo Domingo in Dominican Republic, Lviv, Poltava and Zhytomyr in Ukraine, Casablanca in Morocco, Curridabat and Montes de Oca in Costa Rica, San Juan de Comalapa in Guatemala), 3 metro lines, 7 BRT corridors, 7 bus corridors, 6 tram lines, 1 cable car, and more than 34 transport hubs, stations and depots will be financed through mobilised investments by the Partnership.

62.1 million euros in TA provided by the Partnership has leveraged 2.3 billion euros to build quality, reliable, sustainable, and resilient infrastructure. An additional 16 billion euros in investments in infrastructure have been identified and are ready to be developed.

SUSTAINABLE CITIES AND COMMUNITIES A



Make cities and human settlements inclusive, safe, resilient, and sustainable

- 11.2 By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations
- 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality

MobiliseYourCity Contribution

In just eight member cities, an additional 9.5 million people will benefit from improved access to safe, affordable, accessible, and sustainable Public Transport. MobiliseYourCity is directly supporting an additional 41 cities with a combined population of 78 million people.

In Santo Domingo, \$600,000 have been secured for improving access to Public Transport for disabled persons. Another \$600,000 will be invested in conducting a study to develop a tariff subsidy for the most vulnerable populations.

MobiliseYourCity contributes to improving air quality in cities. A MRV approach has been developed by the Partnership, but data is not yet available.

13 CLIMATE ACTION



Take urgent action to combat climate change and its impacts

Targets

- 13.2 Integrate climate change measures into national policies, strategies and planning
- 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

MobiliseYourCity Contribution

MobiliseYourCity implementing partners are supporting 10 countries to integrate climate change measures into national policies through NUMPs.

Successful implementation of SUMPs is expected to lead to annual GHG emissions reduced by an average of -16% (ranging from -3% to -38%), compared to business as usual. 6 cities with calculated projections will achieve a total reduction of annual GHG emissions of 3.79 Mt CO2 in 2030, compared to business-as-usual (BAU).

MobiliseYourCity developed and supports its GHG Emissions Calculator, a free-to-use tool for transport-related emissions inventory, for BAU projection and for comparison with climate/SUMP/NUMP scenarios. 5 member cities and 2 member countries have already used it for their GHG emissions projections. In total at least 26 cities and 7 countries worldwide are using the Emissions Calculator.

17 PARTNERSHIPS FOR THE GOALS



Strengthen the means of implementation and revitalize the global partnership for sustainable development

Targets

- 17.3 Mobilise additional financial resources for developing countries from multiple sources
- 17.9 Enhance international support for implementing effective and targeted capacity building in developing countries to implement all the sustainable development goals
- 17.19 Enhance the global partnership for sustainable development to share knowledge, expertise, technology and financial resources, to support the achievement of the SDGs

MobiliseYourCity Contribution

The technical assistance provided by the Partnership to the first completed SUMPs and NUMPs has already leveraged 2.3 billion euros (secured finance) and is expected to leverage an additional 6.4 billion euros (planned finance).

MobiliseYourCity is a global partnership for sustainable development that mobilizes and shares knowledge, expertise, technology, and financial resources to support the achievement of the SDGs in 16 member countries and 79 member cities.

The Partnership offers capacity building on sustainable urban mobility and shares training materials, tools and methodologies through a knowledge platform.

Empowering mobility practitioners and decision-makers to transform urban mobility has been at the heart of MobiliseYourCity's service orientation since its inception in 2015. To master mobility for green and inclusive cities, individuals and institutions require strong skills, knowledge, tools, and the opportunity to exchange and share their ideas. This is why methodology development, capacity building, communities of practice and mobility planning go hand in hand in MobiliseYourCity.

Our toolkits are based on extensive global implementation experience.

Our methodological framework synthesises relevant knowledge to transform urban mobility with an emphasis on planning at different levels of government to build green cities. The Secretariat has coordinated the elaboration of a comprehensive methodological framework capsuled in toolkits. MobiliseYourCity toolkits provide decision-makers and mobility practitioners with a comprehensive methodology that highlights both the benefits and purposes of sustainable mobility planning and, most importantly, guides them through a highly practical and tested planning process ready to be used in every context. We have condensed knowledge about Sustainable Urban Mobility Plans (SUMPs), National Urban Mobility Policies and Investment Programmes (NUMPs), Emissions calculator and MRV, and Paratransit into guidelines, tools, training materials, and case studies.

Our training sessions are designed to be freely available, readily adaptable, and easily scaled.

Capacity building brings in the human touch. A highly committed team of urban mobility experts engages with practitioners, decision-makers, advocates and students through training sessions and workshops to address key pressing issues on sustainable urban mobility and disseminate the MobiliseYourCity full methodological offer. We scale our capacity building offer by delivering training that connect experiences at the local level with global partners and audiences. MobiliseYourCity training sessions can be replicated and scaled up by using the training materials made available by the Secretariat.

Our Communities of Practice enable peer learning, and facilitate experiences exchange.

Regional Communities of Practice in Africa, Asia and Latin America are platforms in which urban mobility practitioners with a common identity, a common goal, and common interests can learn from each other by sharing their experiences and co-creating. The Secretariat coordinates Communities of Practice on sustainable urban mobility to propose new knowledge and solutions to common challenges of city and country members.

With a new format, the MobiliseYourCity Secretariat has facilitated a working group to advance climate change adaptation

The impacts of climate change are increasingly threatening urban areas, with risks such as flooding, heat waves, and droughts affecting millions of people. In regions where MobiliseYourCity operates, cities face heightened vulnerabilities, including intensified storms, rising sea levels, and prolonged dry seasons.

In 2024, the MobiliseYourCity Secretariat launched a thematic working group on climate change adaptation for urban mobility. This initiative addresses climate adaptation as a critical challenge and strategic

opportunity for urban mobility in Africa, Asia, Eastern Europe, and Latin America. It reflects the Partnership's agility in responding to emerging needs and fostering collaboration among partners. By drawing on the expertise of its donors, implementing partners, and knowledge and network partners, MobiliseYourCity aims to amplify its impact, develop practical insights, and produce resources that no single actor could achieve alone. Participants of the working group include:



























This working group was set to:

- Integrate climate resilience into Sustainable
 Urban Mobility Plans (SUMPs) and National Urban
 Mobility Policies and Investment Programmes
 (NUMPs) processes.
- Identify actions and measures adapted to withstand future climate challenges.
- Raise awareness and elevate the topic of climate adaptation on urban mobility locally and internationally.

Through these efforts, the working group lays the foundation to equip practitioners to enhance the adaptive capacity of urban mobility systems and ensure the long-term sustainability of mobility services and infrastructure in the face of climate change.

During 2024, this working group confirmed the urgent need to integrate climate adaptation into urban mobility planning processes. The group also highlighted the relevance of developing tools and methodologies to include early considerations of the climate dimension in project propositions from MobiliseYourCity donors and implementing partners.

These tools and methodologies include:

- The nine principles for effective climate change adaptation of urban mobility.
- The guidelines for MobiliseYourCity geographies to integrate climate adaptation into SUMPs.
- Actions to adapt urban mobility systems in the Global South.

These tools and methodologies will contribute to the development of actions carried out by our implementation partners in our different geographies and reduce the impacts caused by climate.

Besides the working group on climate change adaptation, the Secretariat held the first meeting for two new working groups: urban logistics and private sector engagement. To know more, check <u>Looking</u> Forward.

Through 20 online training sessions, 829 urban mobility practitioners were trained on different topics around the SUMP cycle.

The MobiliseYourCity Secretariat has positioned the Partnership as a key platform for learning, knowledge sharing, and peer-to-peer exchange between urban mobility practitioners in the Global South. In 2024, the Secretariat held a series of online training sessions addressing relevant topics to advance in

low-carbon and resilient urban mobility systems: climate adaptation in urban mobility, communications strategies for SUMPs, and paratransit reform. These topics were prioritised by donors, implementing partners, and city and country members based on current needs.

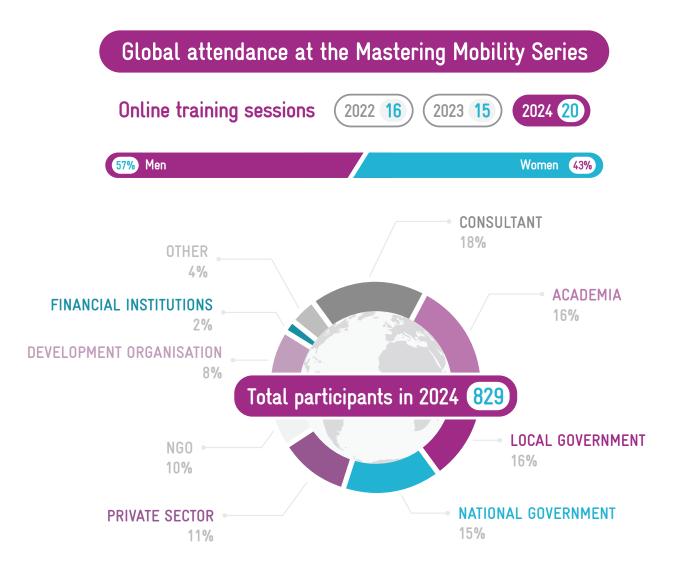


Figure 3. Global attendance at the Mastering Mobility Series

MobiliseYourCity Global Monitor 2025



The session on **SUMP communication strategies** responded to a request from the French-speaking MobiliseYourCity African Community of Practice. It was then deemed relevant globally for other cities, as effective communication is key to SUMP's successful ownership and implementation.

⊥ ENGLISH

FRENCH

SPANISH



Climate adaptation was addressed, given that urban mobility practitioners, particularly transport planners, often lack the skills to integrate adaptation strategies into their projects. Thanks to support from ADEME, the Secretariat contributed to addressing this gap, equipping cities with the knowledge on how to make mobility systems more resilient. The session "Introduction to Climate Adaptation for Urban Mobility" was delivered in English, French, and Spanish. We received valuable contributions from Resallience and our Knowledge and Network partners Cerema and Despacio.

⊥ ENGLISH

FRENCH

SPANISH



Lastly, paratransit reform remains one of the most urgent challenges in MobiliseYourCity cities and countries. The training series not only allowed members to learn from each other but also showcased the experience of Kumasi, Ghana and Lagos, Nigeria, fostering a deeper understanding of strategies for reforming and decarbonising the sector. The training series "**Driving change**" was conducted in English – The Vital role of Paratransit in Sustainable Urban Mobility, Paratransit reforms in Lagos and Kumasi, and Hands on the MobiliseYourCity Paratransit Toolkit.

 \underline{ullet} download the vital role of paratransit in Sustainable urban mobility

<u>**→**</u> DOWNLOAD PARATRANSIT REFORMS IN LAGOS AND KUMASI

 \underline{ullet} download hands on the mobiliseyourcity paratransit toolkit



With over 50 sets of training materials, MobiliseYourCity has a full-capacity development offer ready to be used to replicate and scale up training sessions in different languages. The complete list of training materials is available in our MobiliseYourCity training materials catalogue. The catalogue describes each module and its content and presents the way MobiliseYourCity can support the use of the materials at the local level.

The Secretariat has used systematically these training materials to deliver training sessions in a more efficient way



Attendants to MobiliseYourCity online training sessions joined from different geographies, especially from African cities. This shows the interest from African practitioners in getting the latest knowledge on urban mobility that MobiliseYourCiy makes available and in acquiring skills to effectively plan urban mobility in their own context. Participants from at least 22 different countries joined at least one MobiliseYourCity online training session.

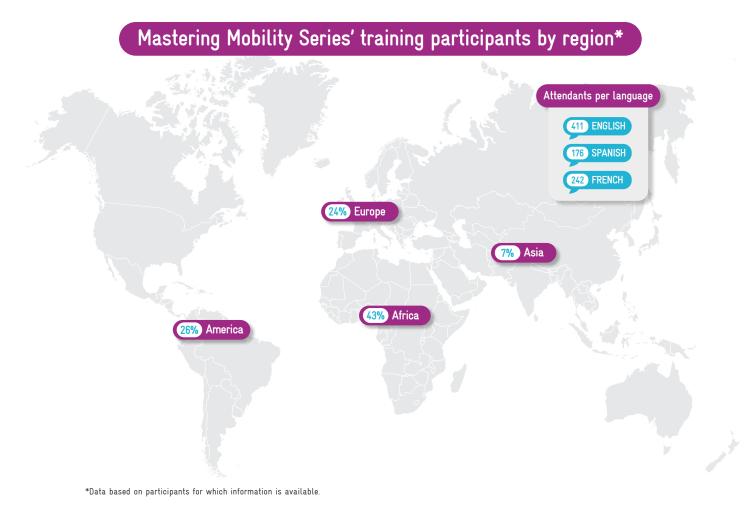


Figure 4. Mastering Mobility Series Training Participants by region



Regular participants to the MobiliseYourCity online training sessions



"I have gained valuable insights into the processes involved in preparing SUMPs, as well as access to research conducted by industry leaders. The webinars also provided an opportunity to hear from other cities that have successfully prepared and implemented their SUMPs. I even reached out to some of these cities directly and applied a few lessons learned."

Randy Wilson

Kumasi County [MobiliseYourCity member]

Attended 5 training sessions

"Attending these sessions has been an excellent way to stay updated on innovative solutions and learn from global experts. The insights gained have been particularly beneficial for my work on the Kaduna Bus Rapid Transit (BRT) Project, helping to shape strategies for improving public transport in my city."

Musa Luka Kaduna County [MobiliseYourCity member] Attended 5 training sessions



Organisations see added value in delivering trainings and co-creating knowledge with MobiliseYourCity

More than nine organisations reached out to the Secretariat to deliver 12 training sessions. This demonstrates the importance of MobiliseYourCity as a knowledge hub for sustainable urban mobility and a very relevant platform to access training globally.

The Secretariat worked closely with various Implementing partners, and Knowledge and Network partners to deliver training sessions and integrate local urban mobility knowledge into training materials. Beyond Secretariat-led sessions, we collaborated with a diverse range of organisations to provide trainings, highlight key topics, share real-world experiences, and advance sustainable urban mobility knowledge.



MOOC Urban mobilities in Africa (FR)

The Secretariat teamed up with AFD, CODATU, AUF, and Université Senghor to deliver an online course to train African practitioners in the most recent trends of sustainable urban mobility policy and planning. The Secretariat hosted two live webinars in the MOOC's framework focusing on walking and cycling, and climate adaptation.



Webinar: Urban Mobility Forums to drive urban mobility transitions – The case of Madagascar (FR)

As a regular MobiliseYourCity practice, the Secretariat showcased efforts from a city member (Antananarivo), an implementing partner (CODATU), and a donor (AFD) in transforming urban mobility in fast-changing contexts. The webinar presented the results of the Urban Mobility Forum in Antananarivo and shared lessons learned on how this type of low-cost action contribute to improving urban mobility governance.

Other webinars and training sessions on various topics

The Secretariat contributed with expertise and knowledge to strengthen the capacity-building efforts of other partners, demonstrating the added value of MobiliseYourCity training know-how and the interest of such partners.





Transport and Climate Change Week







Besides the training sessions co-hosted with partners, the Secretariat was invited to provide technical inputs to international working groups. ITF invited the Secretariat to participate in the <u>informal transport roundtable</u>, which led to a <u>policy paper</u> that reflected the sector situation and advocated for professionalisation. Additionally, encouraged by the French Ministry for Ecological Transition (MTE) – one of MobiliseYourCity donors - the Secretariat officially joined ITF's working group on Transport Demand Management, which aims to gather global research and insights on the impacts and effectiveness of travel demand management policies from economic, social, and environmental perspectives, aiming to identify best practice design principles for urban policymakers.

The Secretariat continues actively engaging in UITP's working group on paratransit which main objective is to understand and advocate for the integration of paratransit as part of any sustainable and integrated mobility planning approach in contexts where it is prevalent.

The MobiliseYourCity Secretariat focused on enabling more access to existing knowledge to reach a broader audience

The MobiliseYourCity Secretariat has taken significant steps to reach a broader audience by compiling and sharing essential resources on key urban mobility topics. These efforts align closely with the established working groups and aim to enhance knowledge dissemination and accessibility. Below are some of the key initiatives:

The Secretariat has developed and published comprehensive compilations of resources on crucial mobility themes



Active Modes - Compilation of Resources

This compilation offers a variety of materials focused on promoting walking and cycling in urban environments. It includes courses, guides, methodologies, and webinars from relevant organisations to assist cities in enhancing active transportation and advancing sustainable mobility. The compilation is easily accessible through the MobiliseYourCity website and is available in English but contains references to documents in English, French, and Spanish.

→ DOWNLOAD IN ENGLISH



Urban Logistics - Compilation of Resources

As urban logistics and freight play an increasingly vital role in sustainable mobility, this comprehensive compilation offers over 60 publications from different organisations to support local and national authorities in transforming their logistics systems. Covering topics from low-carbon freight strategies to logistics hub planning, the collection includes practical case studies and policy recommendations from leading organisations.

The compilation of resources is the first output elaborated in the framework of the MobiliseYourCity Working Group on Urban Logistics.

Organised in an Excel format for easy navigation and filtering, the compilation is regularly updated. This publication is available in English but contains references to documents in English, French, and Spanish.

→ DOWNLOAD IN ENGLISH



Paratransit Decarbonisation - Compilation of Resources

Addressing the need to decarbonise informal transport systems, this compilation includes over 25 knowledge products from different partner organisations ranging from diagnostics and reform strategies to policy recommendations.

The compilation of resources is the first output elaborated in the framework of the MobiliseYourCity Working Group on Paratransit Decarbonisation.

Also organised in an Excel format, it allows users to filter content by key parameters. It is open for further contributions. This publication is available in English, but contains references to documents in English, French, and Spanish.

⊥ DOWNLOAD IN ENGLISH

The MobiliseYourCity web-based Emissions Calculator went live in 2024 to reach an even broader audience

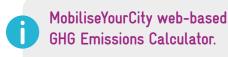
The MobiliseYourCity Excel-based Emissions Calculator continues to be the most popular tool made available by the Partnership. With over 9,500 views on the MobiliseYourCity Knowledge Platform, it has supported greenhouse gas (GHG) emissions analysis in at least 26 cities and 7 countries worldwide.

In 2024, the Secretariat launched a <u>web-based version</u> of the Emissions Calculator, complementing the original Excel-based tool. This new platform brings several innovations to improve accessibility and usability:

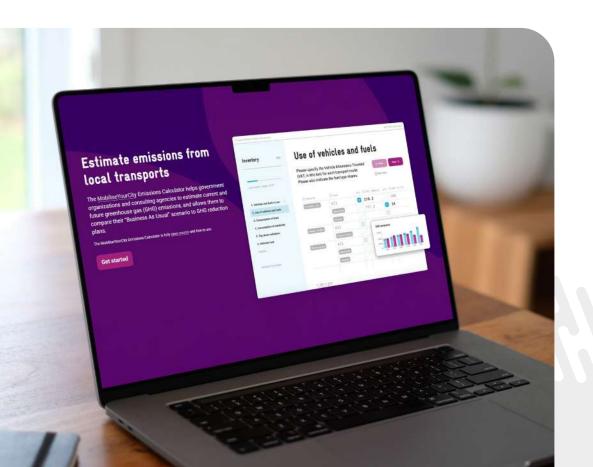
- A user-friendly interface for easier navigation
- Quick data downloads and image exports
- Online user profiles for project management and data sharing

While the Excel-based tool (version 1.5) remains available, the web version allows users to compare data across cities, fostering collaboration and shared learning. This transition to an online format ensures that more practitioners can access and benefit from the tool's capabilities.





☑ VISIT HERE



The Secretariat translated key publications to increase access to sustainable urban mobility knowledge worldwide

MobiliseYourCity continues to make available its methodological resources in our three working languages: English, French, and Spanish. In 2024, the Secretariat translated key documents to improve access for city and country members, ensuring they are available in their preferred language.



Intégrer l'aménagement du territoire et la planification de la mobilité urbaine

⊥ DOWNLOAD



Processus participatifs dans la planification de la mobilité

⊥ DOWNLOAD



Options de passation de marchés de transport artisanal

业 DOWNLOAD



Paratransit Toolkit 2.0

业 DOWNLOAD



Caja de herramientas del paratránsito 2.0

⊥ DOWNLOAD

MobiliseYourCity has expanded its knowledge in 2024 to better equip practitioners in implementing proven and scalable solutions for sustainable urban mobility

This year, the MobiliseYourCity Secretariat has launched new knowledge products that strengthen the Partnership's methodological offer. Besides the three compilation of resources, four new MobiliseYourCity publications were launched in 2024, including different types of knowledge production:



Adaptation of urban mobility and the built environment to climate change: Nine principles for effective action

This publication proposes nine principles for effective adaptation actions, focusing on urban mobility and the built environment. These principles are expected to be implemented within urban transport planning processes and projects, facilitating adaptation strategies at different levels.

The formulation of these principles stems from an analysis of adaptation enriched by a collaborative process within the working group on climate adaptation of urban mobility.

→ DOWNLOAD IN ENGLISH

<u>↓</u> DOWNLOAD IN FRENCH

→ DOWNLOAD IN SPANISH



Policy brief Paratransit Decarbonisation: Why It Matters and How to Achieve It

This Policy Brief is a practical resource for urban mobility practitioners to identify what decarbonising the paratransit sector means, its practical implications, and theoretical insights into how to achieve it. It highlights the importance of paratransit in urban mobility with a focus on climate mitigation challenges. The Policy brief introduces the EASI framework to explain paratransit decarbonisation beyond electrification. It outlines practical measures that reduce emissions from paratransit services, including route optimisation, fleet modernisation, and policy integration.

■ DOWNLOAD IN ENGLISH



SUMP Readiness Checklist

The SUMP Readiness Checklist is a crucial tool designed to assist cities in evaluating their preparedness for developing a Sustainable Urban Mobility Plan (SUMP). It helps cities identify their strengths and areas that need further efforts to implement the MobiliseYourCity SUMP approach effectively. This checklist is particularly useful during the early stages of SUMP development, providing clear guidance on what actions must be taken before formal planning begins. It also outlines the necessary requirements for external support and highlights the tasks that local authorities should handle versus those that may require external expertise during the SUMP development process. The readiness checklist has been used by the city of Harare in Zimbabwe, which recently joined the Partnership as a member and intends to develop a SUMP.

■ DOWNLOAD IN ENGLISH

→ DOWNLOAD IN FRENCH

→ DOWNLOAD IN SPANISH



Movilidad Urbana Euroclima: Resultados y lecciones aprendidas de la implementation

After 6 years of supporting SUMPs, NUMPs and pilot projects in Latin America, Colombian NGO Despacio (also MobiliseYourCity Knowledge and Network partner) worked together with AFD and GIZ to elaborate a lessons-learned publication to share their experience and learn from practical implementation on the ground. It is a collaborative publication that brings together the expertise of 33 authors from Latin America, presenting a detailed analysis of the work carried out in the framework of the urban mobility component of the Euroclima Programme between 2018 and 2024.

→ DOWNLOAD IN SPANISH

The MobiliseYourCity Communities of Practice convened at regional events to share experiences and acquire knowledge.

The English-speaking African Community of Practice gathered to discuss perspectives for mini-bus electrification in the continent.

Leveraging the momentum created by the First regional exchange on minibus electrification in Africa,

MobiliseYourCity reunited its English-speaking African Community of Practice in Kigali, Rwanda, between 11 and 13 June 2024. Together the GIZ and the MobiliseYourCity Secretariat summoned a large community of urban mobility practitioners from African cities to gather and exchange experiences and knowledge on minibus electrification.

Over 20 city and country representatives of the MobiliseYourCity English-speaking African Community of Practice and other city and country representatives from East Africa -partners of the Mobilise Net-Zero Project- participated in the meeting. This meeting focused on linking paratransit reform processes with electrification and understanding how to integrate paratransit electrification into comprehensive urban mobility planning processes.

The First Regional Exchange on minibus electrification in Africa was held as part of the GIZ's IKI-funded Mobilize Net-Zero Project, jointly organised with VREF, and the Transformative Urban Mobility Initiative (TUMI). This event addressed a critical gap in the global efforts to electrify transportation, where the paratransit sector has often been overlooked. While electrification is gaining momentum for smaller vehicles like 2-and 3-wheelers in Africa and Asia, the challenge of electrifying minibuses and larger-capacity vehicles remains significant.



Figure 5. Cities attending the 2025 MobiliseYourCity African meeting in Kigali, Rwanda



With a new Executive Secretariat, the Latin America and Caribbean Community of Practice has gained regional autonomy

The MobiliseYourCity Community of Practice in Latin America and the Caribbean has evolved from gatherings of EUROCLIMA beneficiaries into a consolidated network of urban mobility practitioners from the region. Today, it brings together local and national governments, NGOs, development organisations, international financial institutions, and other key actors committed to sustainable mobility. This year, the community gathered in Person in La Paz, Bolivia, strengthening its role as a regional platform for collaboration. A major milestone was the consolidation of its governance structure, defining how members benefit from the exchange and how they can actively contribute to shaping discussions and activities.

The Executive Secretariat of the Community of Practice is now fully operational, thanks to the support of the German Federal Ministry for Economic Cooperation and Development (BMZ) and its implementation by GIZ. This marks a transition towards the Community's integration with the EU's Global Gateway strategy, reinforcing long-term engagement in Latin America and the Caribbean. The Executive Secretariat of SoMoS LAC plays a crucial role in facilitating exchanges, fostering capacity building, and ensuring the network's sustainability.

Throughout the year, MobiliseYourCity actively participated in knowledge dissemination and awareness-raising activities within the Community of Practice, co-organising three training sessions with the format the CoP Invites7. Key discussions covered paratransit reform, highlighting the challenges and opportunities for integrating paratransit services into sustainable urban mobility strategies. Economic appraisals for land transport projects were also addressed, providing cities with methodologies to assess financial and social benefits in mobility planning. Moreover, MobiliseYourCity contributed to equipping practitioners with tools and insights to mainstream adaptation measures into their mobility policies, ensuring that urban transport systems in Latin America and the Caribbean are not only low-carbon but also climate-resilient.



⁷ The CoP Invites – La CoP invita, is an online exchange format designed to share experiences from members of the Latin America Community of Practice. It creates a collaborative space to discuss and develop solutions tailored to local contexts. Organised every two months by the SoMoS LAC Executive Secretariat, these sessions foster peer-to-peer learning and knowledge sharing among urban mobility practitioners..

After centring Toolkits on the redesigned Knowledge Platform, there has been an impressive increase of 118% in visitors to MobiliseYourCity knowledge products.

In 2024, the MobiliseYourCity website continued to serve as a comprehensive and user-friendly platform for our knowledge products. It offered a wealth of resources aimed at supporting cities, countries, and partners in transforming urban mobility. The toolkits on our priority topics – <u>SUMPs</u>, <u>NUMPs</u>, <u>Emissions calculator and MRV</u>, and <u>Paratransit</u> – are neatly organised into four key sections:

- 1. Guidelines and methodologies
- 2. Operational tools
- 3. Training materials
- 4. Case studies and sample documents

These resources are designed to provide clear, practical guidance on transformative urban mobility planning processes at various government levels, sectors, and areas of analysis.



Most downloaded MobiliseYourCity publications

Emissions Calculator

MobiliseYourCity Emissions Calculator

9.728

User Manual for the MobiliseYourCity Emissions Calculator

1,949

MobiliseYourCity Monitoring and Reporting Approach for GHG **Emissions**

1,798



SUMP

7,461

7,173

Developing Sustainable Urban Mobility Plans - Guidelines 2,703 for MobiliseYourCity geographies

1,736

SUMP Model Terms of Reference

Annotated Table of Contents for Sustainable Urban Mobility Plans (SUMPs)

Sustainable Urban Mobility Plans FAQs

SUMP Readiness Checklist

1,169

Core Indicators and Monitoring Framework

1,122

516

215





NUMP

4,896

National Urban Mobility Policies and Investment Programmes 1,969 (NUMP) - Guidelines

Topic guide - Participatory processes in urban mobility planning

1,296



Core Indicators and Monitoring Framework

1,122

509

Paratransit

NUMP Model Terms of Reference

2,312

Tool I | Understanding Paratransit

669

Tool II | Conducting a paratransit diagnosis Tool III | Reforming Paratransit

525 509

Tool IV | Examples of paratransit reform - Case Studies

430 179



Topic guide - Paratransit contracting options HUUHL,

Knowledge Platform Activity

PROGRESS IN 2024



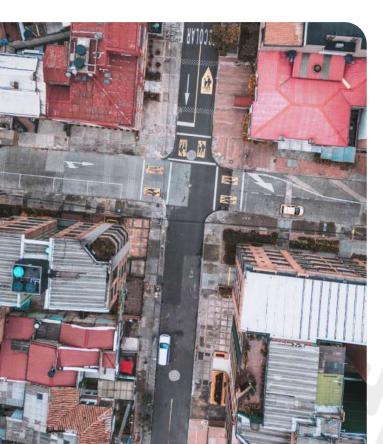
The website hosts over 540 knowledge products, of which 30 were added in 2024., demonstrating the continued relevance and importance of MobiliseYourCity as a central knowledge hub for sustainable urban mobility.

Figure 6. Knowledge Platform Activity Overview



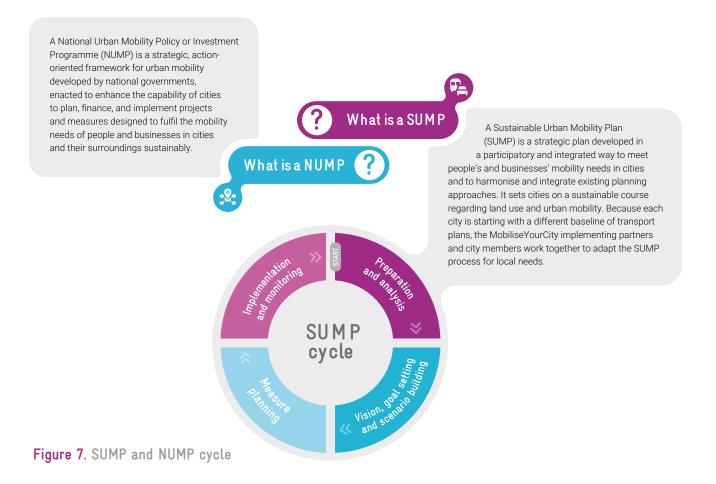
Mobility Planning: Supporting SUMPs and NUMPs

The central service offered to member cities and countries is support for developing investment-ready plans aimed at creating inclusive, low-carbon urban mobility systems. MobiliseYourCity's implementing partners assist city and country members prepare Sustainable Urban Mobility Plans (SUMPs) National Urban Mobility Policies and investment programmes (NUMPs) respectively.Our implementing partners, particularly the Agence Française de Développement (AFD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) have worked with 32 local and 9 national governments around the world to prepare implementation-ready mobility plans and finance-ready projects.



In 2024, five Sustainable Urban Mobility Plans (SUMPs) supported by MobiliseYourCity were completed in Arequipa, Peru; Cordoba, Argentina; Kumasi, Ghana, as well as Mingora and Peshawar, Pakistan. By the end of the year, the Partnership had supported the development of 32 SUMPs and 9 National Urban Mobility Policies and Investment Programs (NUMPs) across various cities and countries worldwide.

This chapter explores the collective impact of *MobiliseYourCity*-supported SUMPs and NUMPs, highlighting achievements in sustainable mobility planning, including leveraged financing and anticipated improvements in urban transport systems. Beyond reporting figures, the chapter identifies emerging trends, common challenges, and innovative solutions found across local and national planning processes. It provides a meta-analysis based on SUMP synthesis reports, with a particular focus on the Partnership's key priority topics: paratransit, active mobility (walking and cycling), and urban mobility governance.



Evolution of secured financing leveraged through SUMPs and NUMPs

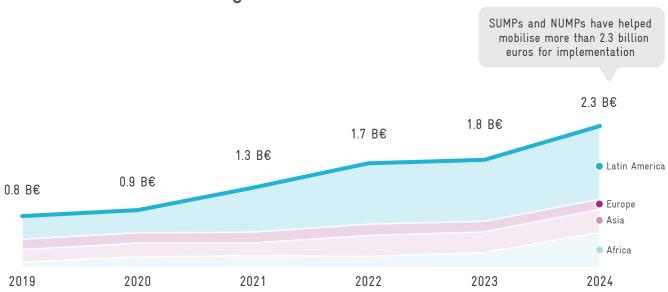


Figure 8. Evolution of Leveraged Financing

In 2024, MobiliseYourCity saw an additional 540 million euros leveraged by the adoption of SUMPs and NUMPs, resulting in a total of 2.3 billion euros for implementing sustainable urban mobility projects in our city and country members.

As in previous years, leveraged finance continues to be dominated by investments in public transport infrastructure, accounting 54% of the total leveraged finance by SUMPs and NUMPs. More than 2.25 billion euros have been secured for public transport investments identified through SUMPs. These investments include metro lines, BRT and bus corridors, cable cars, tramlines, stations, hubs, depots, and rolling stock, including buses. Public transport projects often include expanding service coverage, increasing service frequency, and modernising facilities, accounting for approximately 75.4% of the estimated expenses.

In addition to investments in public transport, SUMPs have also identified the need for 2.8 billion euros to improve the road infrastructure, nearly 827 million euros for dedicated walking and cycling facilities, and around 40 million euros to support port-area logistics investments.

Identified investment needs in SUMPs and NUMPs

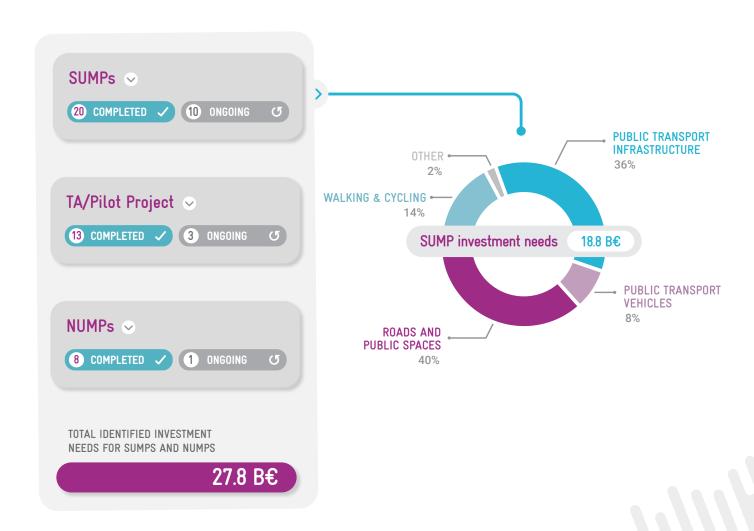


Figure 9. Leveraging Finance from SUMPs and NUMPs

Mobility plans are key in securing financing

SUMPs and NUMPs help our city and country members identify the right projects or programmes for their needs, and we are able to identify the selected measures with cost estimates.

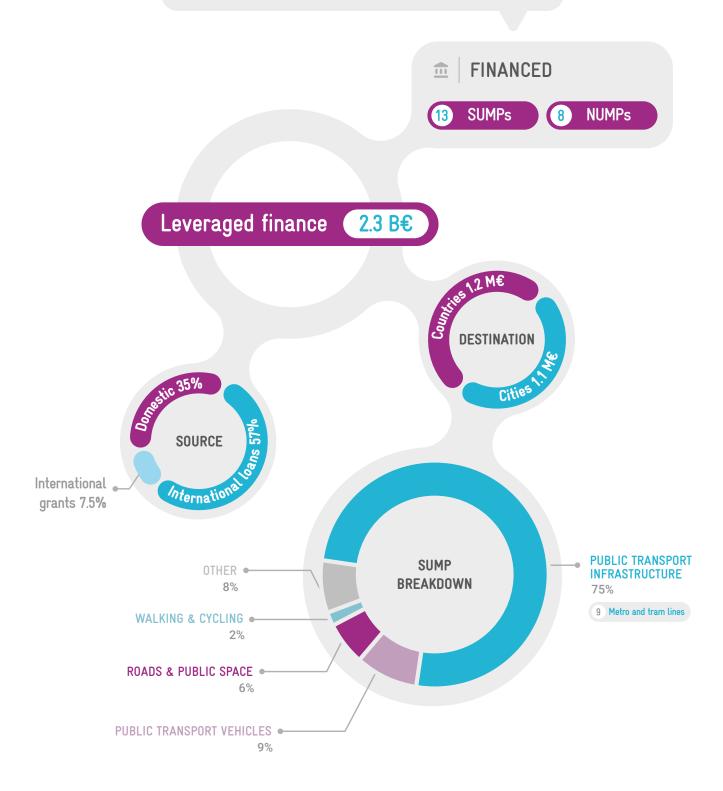


Figure 10. Financed investments and projected impacts

SUMP and NUMP elaboration enhance urban mobility governance

The effectiveness of sustainable and inclusive urban mobility systems largely depends on well-functioning and integrated governance structures.

Urban mobility challenges often stem from a lack of coordination among stakeholders, misalignment in vision, or difficulties in mobilising necessary resources. These issues are particularly pronounced in cities of the Global South, where rapid urbanisation has led to a surge in complex transport projects involving multiple actors at different levels. To address these challenges, it is crucial to establish mechanisms that enhance stakeholder coordination, clarify responsibilities, and align efforts toward a shared vision for urban mobility.

The development of Sustainable Urban Mobility Plans (SUMPs) and National Urban Mobility Policies (NUMPs) is a key step in improving urban mobility governance. These frameworks go beyond strategic planning—they help formalise coordination between local, regional, and national authorities by bringing into the conversation the need for a clear vision and an actionable plan for urban mobility, fostering long-term institutional commitment. Even when SUMPs and NUMPs are not officially adopted or lack legal binding force, they still play a vital role in structuring decisionmaking processes, defining responsibilities, and promoting collaboration among key stakeholders. In Bouaké, for example, the SUMP development process led to the creation of a dedicated working group, which later evolved into the city's transport department. This demonstrates how SUMPs can directly contribute to establishing lasting governance structures that extend beyond the planning phase.

SUMPs and NUMPs function both as a product and as a process, embedding governance improvements at multiple levels. By bringing together municipal leaders, technical experts, transport operators, and civil society, these processes create platforms for dialogue and joint decision-making, ensuring that urban mobility policies are both inclusive and adaptable. In Yaoundé, the structured approach to SUMP development has guided strategic planning and strengthened institutional coordination during implementation. The iterative nature of the process allows for ongoing SUMP adjustments based on stakeholder feedback, reinforcing governance structures that can support mobility reforms well beyond the SUMP or NUMP adoption.

A well-designed SUMP process enables cities to rethink urban governance through the lens of sustainable mobility. It encourages the integration of transport policies with broader urban planning objectives, such as social inclusion, climate resilience, and economic development. Even in cases where a SUMP is not formally adopted, the governance improvements gained through the planning process, such as enhanced institutional collaboration, capacity building, and stakeholder engagement, remain valuable. MobiliseYourCity's experience shows that strong governance structures, shaped through the SUMP process, are essential for turning strategic planning into effective, long-term urban mobility solutions.



8 MobiliseYourCity city and country members have moto-taxis as a paratransit service, bringing additional challenges for integration

The prevalence of moto-taxis in MobiliseYourCity partner cities reflects the importance of this paratransit service worldwide. Several Sustainable Urban Mobility Plans (SUMPs) developed with MobiliseYourCity support acknowledge moto-taxis in Sub-Saharan Africa (Bouaké, Ivory Coast; Yaoundé and Douala, Cameroon), Asia (Medan, Indonesia; and Ahmedabad, Pakistan), and Latin America (Arequipa, Peru; Guadalajara, Mexico; and Santo Domingo, Dominican Republic). Notably, the highest modal shares are found in Sub-Saharan African cities, where moto-taxis often play a central role in urban mobility—accounting for 24% of daily trips in Bouaké in 2020.

The role of moto-taxis varies depending on the local context. In some cities, they serve as the primary mode of transport; in others, they complement mass transit by acting as feeder services. Their operations can range from serving dedicated routes or zones to functioning as fully flexible services that address unmet transport demand across broader areas. A key advantage of moto-taxis is their ability to navigate through traffic congestion, making them a fast and efficient mobility solution. Efforts to regulate the sector through dedicated lanes have largely been unsuccessful, as their flexibility and manoeuvrability are essential to their appeal.

Typically operated by young men who either own or rent their vehicles, moto-taxis often function within the informal transport sector serving areas with limited transport accessibility. Whether due to poor road conditions, challenging topography, or the remoteness of peripheral neighbourhoods, moto-taxis often provide the only available motorised transport option. In many cities, regulation is either insufficient, poorly adapted, or not enforced, leading to widespread unlicensed operation. However, in some cases—such as in Santo Domingo and Medan—the introduction of e-hailing services has contributed to the professionalisation and formalisation of the sector.

Estimating the number of jobs created by the moto-taxi industry is challenging, as many operators work seasonally or on an irregular basis. However, in cities like Douala, the moto-taxis sector is believed to employ around 26,000 people, highlighting its significant economic, social, and political influence. Many moto-taxi drivers are organised into professional associations that help manage operations, protect workers' rights, and advocate for their interests. These organisations often serve as key contact points for local and national authorities when seeking to regulate or integrate moto-taxis into the broader urban transport system.

Challenges to regulate and professionalise moto-taxis are diverse. Most efforts to regulate moto-taxis focus on issuing permits and driver licenses and enforcing basic road safety measures. Due to their speed and physical exposure, drivers and passengers face heightened risks. Yet, fundamental safety requirements, such as wearing helmets, limiting rides to one passenger, and following proper driving behaviour, are often not observed.



Another major challenge is the lack of dedicated infrastructure, particularly designated parking areas where operators can wait between trips. In many cases, moto-taxi stops emerge spontaneously, occupying pedestrian spaces and contributing to road safety hazards. This creates conflicts with local residents and increases risks for passengers, who may have to board and alight in unsafe conditions. These issues are further exacerbated by operators' tendency to position themselves near high-traffic areas—such as roundabouts or intersections—to maximise visibility and attract customers, often at the expense of overall traffic safety.

Sustainable Urban Mobility Plans (SUMPs) and National Urban Mobility Policies (NUMPs) offer strategic opportunities to regulate and improve the moto-taxi sector. Several key measures are considered in SUMPs to enhance safety, efficiency, and integration within urban transport systems. First, establishing a clear and consistent regulatory framework at the national and local levels is essential. This facilitates the identification of operators and

supports the transition of moto-taxis toward a more formalised sector. Secondly, SUMPs play a crucial role in gathering detailed data on the sector, including the number and condition of vehicles, the profiles of operators and owners, the organisation of services, and passenger demand patterns. A better understanding of how moto-taxis operate and the needs they address allows cities to plan appropriate infrastructure, such as designated stops, parking areas, and waiting spaces. This, in turn, opens opportunities to integrate moto-taxis into the broader transport network through improved intermodality.

Finally, SUMPs can serve as a platform to introduce professionalisation measures, as outlined in the MobiliseYourCity Paratransit Toolkit. By fostering structured training programs, safety standards, and organisational improvements, cities can enhance the reliability and sustainability of moto-taxi services while ensuring they contribute to a well-functioning urban mobility system.



The cable car is an innovative solution for urban connectivity proposed in MobiliseYourCity-supported SUMPs and NUMPs

Cable cars are an aerial, guided mode of transport that can bypass physical barriers such as mountains or rivers, improving connectivity in urban areas. By providing access to isolated districts, they enhance mobility and travel conditions for residents. This solution has been especially deployed in Latin American cities, with Medellín, La Paz, and Bogotá serving as notable examples. Recognising its potential, several other Global South cities plan to implement cable transport systems. This measure has been integrated into MobiliseYourCity-supported SUMPs in Santo Domingo, Dominican Republic; Douala, Cameroon; and Lviv, Ukraine; as well as in Ecuador's NUMP, reflecting a growing interest in this mode of transport as a means to address urban accessibility challenges.

While cable transport offers a valuable solution for overcoming urban barriers, its effectiveness depends on specific conditions and careful implementation.

These systems are most suitable for crossing challenging landscapes, such as rivers or steep terrain, rather than serving as a broad urban transport solution. The success of cable transport projects relies on several key factors: rigorous planning, transparent governance, early operator identification, seamless urban integration, intermodality with other transport modes, and a sustainable economic model. Without these elements in place, cable transport systems' long-term viability and efficiency may be compromised.

In many countries, cable cars remain an unfamiliar technology, and stakeholders often lack awareness of its characteristics and operational requirements. Since these systems involve flying over urban areas, existing regulations may need to be adapted and local standards revised to ensure safe and efficient operation. Additionally, some residents may initially hesitate to use an aerial transport system due to safety concerns or unfamiliarity.

Addressing these challenges early on is crucial to ensuring the successful implementation of cable car transport projects. This includes training local teams to operate and maintain the system, adapting legislation for cable car systems and conducting public awareness campaigns to inform residents and build trust in the new infrastructure.

Successful cable transport projects are often linked to broader urban development initiatives. The introduction of this mode of transport to underserved or isolated neighbourhoods provides an opportunity to integrate new services, public facilities, and public spaces around stations or towers. Several Latin American examples demonstrate that cable transport can be a powerful urban and social transformation tool. By improving accessibility, air quality, safety, and access to services and employment, cable transport can significantly enhance residents' quality of life, fostering economic and social growth in these areas.



Urban logistics: A challenging sector with great potential for leapfrogging towards sustainable transport

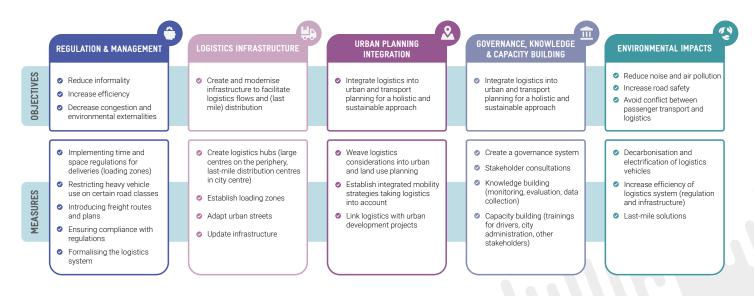
Logistics and freight are gaining increasing importance in the Global South. Presently, numerous investments are being made to enhance the extent and efficiency of logistics infrastructures and operations in these regions, as they are regarded as crucial engines for development and economic performance. Noteworthy initiatives, such as the EU's Global Gateway strategy and the Strategic Africa Corridors, exemplify international development cooperation explicitly targeting this sector.

However, the logistics and freight sectors are not without their challenges. Freight transport significantly contributes to global greenhouse gas (GHG) emissions, estimated to account for 8% of the total transport emissions⁸. Road transport is particularly alarming, with trucks responsible for 80% of the global increase in diesel consumption.⁹ Moreover, logistics exacerbates congestion, pollution and road safety concerns in urban settings, accentuating the urgent need for sustainable solutions. Yet, for cities in emergent economies there remains a significant knowledge gap on urban logistics and freight.

An analysis of 19 MobiliseYourCity-supported SUMPs has highlighted four main challenges related to urban logistics. The most urgent issue is the lack of regulations governing logistics activities. Many SUMPs point out the absence of clear guidelines for (un)loading times and locations, as well as restrictions on the use of heavy vehicles in city centres, among others. This regulatory gap is further exacerbated by inadequate infrastructure, such as the absence of designated (un)loading zones and streets properly designed to accommodate heavy vehicles. Additionally, the informality of logistics operations creates risks for road safety and complicating oversight by local authorities. The degree of informality, however, varies significantly from city to city. Finally, the poor integration of logistics into urban planning results in land use conflicts and hinders the development of long-term, strategic visions for urban logistics systems.

Most MobiliseYourCity SUMPs propose measures to enhance the efficiency of urban logistics and freight, both in terms of local connectivity and broader regional networks, while also reducing negative impacts like congestion, road safety issues, and air pollution. While their focus is primarily on improving regulations and logistics infrastructure, many SUMPs also emphasise the importance of integrating logistics and urban planning, reforming governance structures, building capacity, and addressing environmental concerns.

Measures on Urban Logistics and Freight in MobiliseYourCity SUMPs



International Energy Agency. CO2 Emissions from Fuel Combustion (2018).

⁹ International Transport Forum. Is Low-Carbon Road Freight Possible? (2018).

While this sector faces many challenges, it also offers significant opportunities for leapfrogging. The informality characterising logistics operations in the Global South can be an advantage compared to the rigid, large-scale systems in the Global North. This informality allows for greater flexibility in responding to logistics needs and reduces reliance on highly polluting

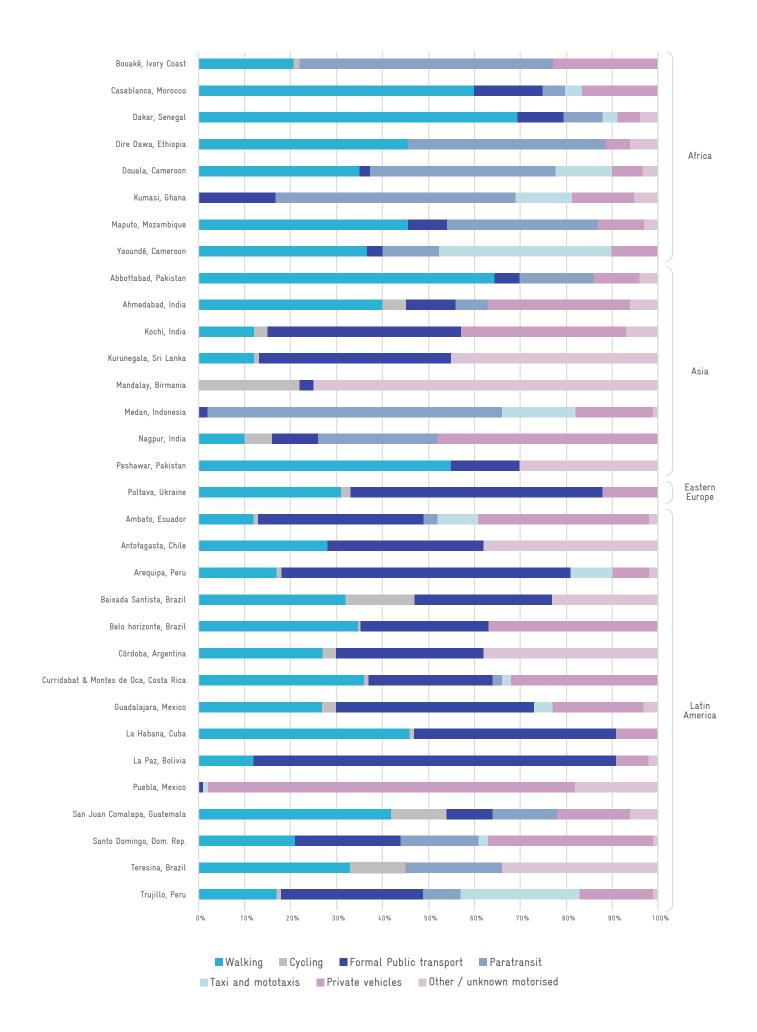
vehicles—both key aspects of sustainable last-mile solutions. Moving forward, it will be essential for cities to leverage these strengths while addressing the sector's challenges. The potential for transformation in urban logistics is clear, and mobility planning will play a pivotal role in realising this potential.

Mobilising Active Mobility: Walking and cycling as key contributors to sustainable and just mobility systems in SUMPs and NUMPs

The MobiliseYourCity Partnership emphasises the crucial role of prioritising walking and cycling as primary and impactful elements in transforming urban mobility. As a general rule, walking and cycling have a significant share in the modal split of cities in the Global South. However, decision-makers often underestimate these modes of transport, neglecting their potential positive impact on reducing emissions, increasing mobility justice and urban life quality. To address this

oversight, the Partnership has advocated for allocating resources for walking and cycling throughout the urban mobility planning cycle. This strategic approach has enabled thorough data collection on walking and cycling patterns in the framework of developing Sustainable Urban Mobility Plans (SUMPs) supported by MobiliseYourCity and the identification of measures dedicated to walking and cycling.





Sustainable Urban Mobility Plans (SUMPs) adopted in MobiliseYourCity member cities present strategies to elevate walking and cycling as core elements of urban transport systems. Notable measures focus on enhancing the safety and comfort of pedestrians and cyclists, integrating these modes more seamlessly with public transport, and ultimately raising public awareness about their benefits.

Although strategies vary from city to city, there are also common threads: Measures addressing walking often outweigh those for cycling. Many initiatives concentrate on improving essential infrastructure, such as sidewalks and pedestrian crossings, to build the baseline of active mobility. Cycling initiatives are more exploratory, often involving awareness-raising campaigns or pilot projects to establish bike networks or bike-sharing systems. Some cities address questions of accessibility and inclusion, yet more significant emphasis on equity, accessibility, and inclusion is needed to ensure that all citizens benefit from the reshaped mobility systems. By comparing different cities' SUMPs, we identified the distinct approaches to promoting active transport modes across continents.



In African cities, SUMPs strongly focus on walking, particularly in cities where a modal split of pedestrians constitutes a dominant share of trips—such as Dakar, where 70% of travel occurs on foot. SUMP measures in MobiliseYourCity African member cities often centre on enhancing pedestrian comfort and safety, with measures like improved crossings and rehabilitated sidewalks gaining traction. Moreover, these cities increasingly recognise the need for immediate improvements and long-term network developments. For instance, Dakar's strategy involves pilot projects and establishing a comprehensive pedestrian plan. Other examples include Bouaké's efforts to upgrade pedestrian crossings or Douala's proposals to rehabilitate sidewalks. Moreover, plans to integrate participatory mechanisms, like communitybased associations, stand out as a successful practice to embed active mobility culture within communities.

Latin American cities often illustrate their vision through the mobility pyramid, placing pedestrians at its apex, followed by cyclists and public transport, and private motorised options at the bottom. This framework illustrates a commitment to prioritising walking and cycling in relation to the other modes. Cities such as Guadalajara and Ambato are improving cycling and pedestrian infrastructure while implementing intelligent transport systems to ensure safe transitions between transport modes. Nonetheless, while safety and accessibility are often prioritised, for example, in Trujillo, where access to low-cost bikes will be facilitated, enforcement and community engagement are essential to ensure the full potential of these measures.

In SUMPs developed in Asian MobiliseYourCity member cities, measures reflect a clear commitment to integrating cycling and walking into the broader transport and urban planning framework. Cities like Ahmedabad and Abbottabad illustrate an integrated approach, embedding cycling and walking considerations into broader public transport planning. Cities like Abbottabad and Ahmedabad are not only focusing on dedicated projects and infrastructure but also on embedding non-motorised transport (NMT) considerations into public transport corridors, such as BRT systems. This indicates an understanding that successful walking and cycling projects require a holistic approach that combines physical improvements with supportive policies. Furthermore, measures skilfully blend immediate tactical interventions with longer-term strategic planning. While Medan's approach of establishing both permanent and temporary car-free zones offers quick wins in reducing

vehicular dominance, the broader initiatives—such as developing integrated masterplans, enacting urban sprawl restrictions, and exploring land value capture mechanisms—suggest a commitment to rebalancing urban space over the long haul.

As cities worldwide make strides in advancing walking and cycling, the focus now shifts toward ensuring adequate financing and capacity for implementation. The MobiliseYourCity Partnership reaffirms that numerous low-cost, high-impact measures can be deployed, such as monthly car-free days that raise awareness and encourage citizens to adopt more sustainable travel habits. By prioritising walking and cycling today, cities can forge a more sustainable, equitable, and vibrant urban future, laying the groundwork for a new era of urban mobility that benefits all residents.

SUMPs have demonstrated that the paratransit sector has a great potential for decarbonisation, though data is scarce

MobiliseYourCity SUMPs provide valuable data for assessing the contribution of the paratransit sector to transport-related GHG emissions in member cities. However, an analysis of available SUMP data from Africa and Latin America by the Secretariat highlights significant gaps, as shown in the graph below: depending on the city, paratransit data is entirely

missing (red), incomplete (yellow), or fully available. Available data —collected from both primary and secondary sources during SUMP development for GHG emissions calculations—demonstrates the crucial role of planning instruments like SUMPs in identifying challenges, improving data collection, and developing solutions for paratransit decarbonisation.



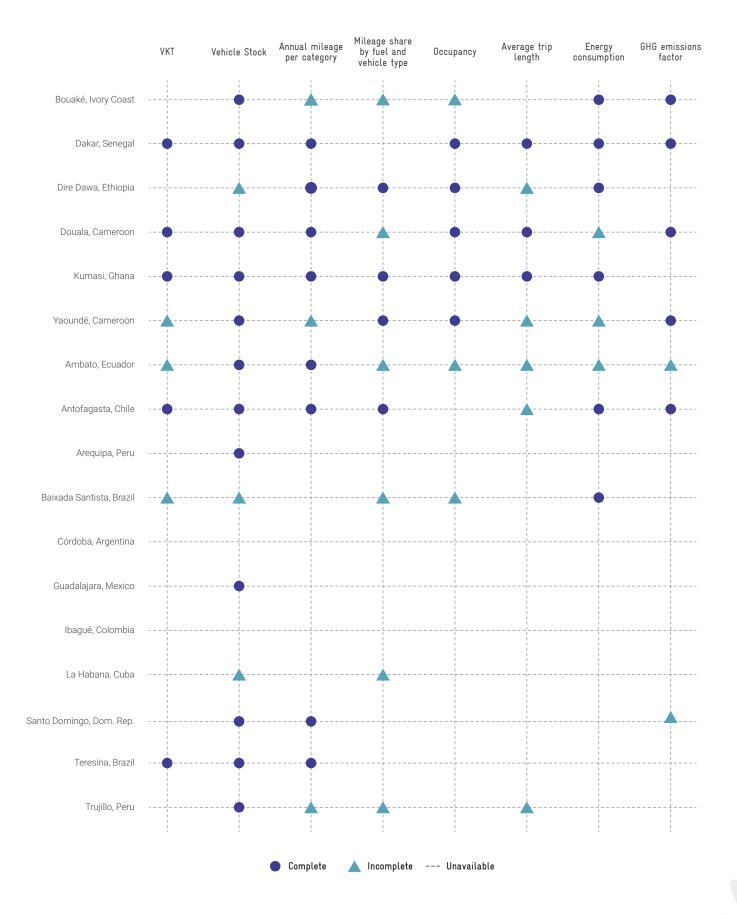


Figure 11. Availability of paratransit emissions information in selected cities.

Embracing the data gaps, the Secretariat has estimated the indicative contribution of the paratransit sector in the total emissions related to urban mobility for the indicated cities. Our preliminary analysis suggests that paratransit decarbonisation is crucial for reducing urban transport GHG emissions given its contribution to sector-wide emissions and modal share.

Paratransit has a lower GHG footprint in the cities studied than other modes' emissions, reinforcing its role as a sustainable transport option compared to other individual motorised modes. According to the data, the paratransit sector accounts for 1% of Medan's total urban mobility-related emissions, a share that can go as high as 32% in Santo Domingo. For instance, in Medan, paratransit accounts for 28% of transport emissions and 34% of the modal share while individual cars account for 30% of transport emissions and 14% of the modal share.

Further analysis in 2025 will help refine strategies and identify trends for paratransit decarbonisation. The accuracy of GHG emission estimates depends on data availability and reliability. For instance, due to data limitations, the information presented for Ambato, Antofagasta, Arequipa and Baixada Santista includes all bus transport. For the other cities, the estimations consider only emissions linked to paratransit. The figure below should be seen as an initial estimate that can be improved with more comprehensive data.

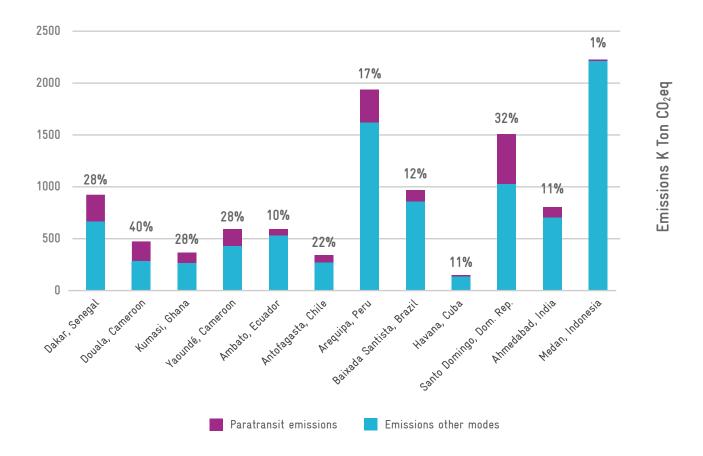


Figure 12. Paratransit GHG emissions in selected cities.

The Secretariat will continue coordinating the working group on paratransit decarbonisation to meet these information gaps.

Urban Mobility Observatories are being implemented in MobiliseYourCity member cities and countries to enhance monitoring of SUMP and NUMP implementation and address the scarcity of urban mobility data.

MobiliseYourCity actively promotes the establishment of Urban Mobility Observatories to improve data availability and systematise data collection for better urban mobility planning. These observatories play a crucial role in monitoring the implementation of sustainable urban mobility plans (SUMPs) and national urban mobility policies and investment programmes (NUMPs) and addressing the persistent data scarcity issue in our member cities and countries. By providing structured and accessible information, they support data-driven decision-making and enhance transparency.

Several MobiliseYourCity member cities have already taken steps to institutionalise Urban Mobility Observatories. In India, with support from AFD, three cities have launched online platforms to track urban mobility trends – Kochi, Nagpur, Ahmedabad, and Nagpur. Antofagasta, Chile, has developed a tool to monitor mobility indicators linked to its SUMP, while the Dominican Republic is also implementing an urban mobility observatory linked to its SUMP. These platforms enable stakeholders to access and analyse mobility data, ensuring its relevance and practical application.

While these observatories offer great potential, ensuring their efficiency and relevance is crucial. A key challenge is to avoid accumulating unused data for urban mobility, considering its size and energy requirements for storage. Urban Mobility Observatories should have clearly defined objectives to maximise their impact and generate actionable insights for policymakers and practitioners.

The emergence of new Urban Mobility Observatories in member cities and countries signals further improvements in data accessibility. In Santo Domingo, AFD has supported its observatory's implementation, and Douala has also initiated plans for its platform. These efforts align with MobiliseYourCity's broader strategy of enhancing mobility data availability and quality.

Despite progress, the MobiliseYourCity annual data collection process still faces limitations due to small sample sizes and inconsistent local data quality. MobiliseYourCity remains committed to addressing these challenges. In 2024, the Secretariat had a full set of 21 completed SUMPs to mine data from, which suggests significant progress in the veracity and validity of the used information. This growing pool of data strengthens the foundation for effective mobility planning and analysis of trends and needs for city and country members. The Partnership will continue to refine mobility data collection and use, ensuring that city and country members and partners remain accountable for advancing urban mobility transformation.



Advocacy and Outreach: connecting and communicating for a systems' transformation

Through our Advocacy and Outreach activities, we inspire organisations and individuals to champion and invest in sustainable urban mobility. By sharing successful experiences at the local level, we shape the global dialogue, build partnerships with diverse institutions, and rally cities and countries to drive transformative action.

A year of reinforced partnerships, global engagement, and impact across our focus

As the MobiliseYourCity Partnership entered its ninth year, advocacy and outreach efforts have become increasingly pivotal in driving our mission forward. In 2024, the Secretariat actively participated in 11 high-profile events worldwide, working in close collaboration with partner organizations, member cities, and national governments. These joint efforts strengthened our ability to communicate the urgency of addressing urban mobility challenges in the Global South while showcasing the transformative actions we lead to improve sustainable transport. By engaging diverse stakeholders, we optimized resources, broadened our reach, and ensured that our messages were tailored to resonate with each unique audience.

This year, MobiliseYourCity played a key role in global and regional events, advancing sustainable urban mobility through strategic partnerships and knowledge exchange. At the Asia and the Pacific Transport Forum 2024 in Manila, we, alongside ADB, ITDP, and other key partners, emphasized the critical role of walking and cycling in urban mobility planning. In Metro Manila, active and public transport account for nearly 80% of daily trips, yet these modes have historically suffered from underfunding at both national and local levels. Advocacy efforts in such contexts are not only essential but deeply meaningful, as they help pave the way for more inclusive and sustainable urban transport policies.

In Kigali, we joined forces with GIZ's Mobilize Net-Zero Project, VREF, and TUMI for a groundbreaking regional exchange on minibus electrification and paratransit reform. These discussions are essential in reshaping the future of informal transport systems across African cities. Meanwhile, our participation in high-level roundtables on road safety, paratransit, and sustainable investment—held in Berlin, Lima, and Brussels—contributed to shaping key policy discussions that culminated in the Hamburg Sustainability Conference, ultimately influencing the Hamburg Sustainability Charter.

At the World Urban Forum 12 (WUF12), we co-hosted a session with AFD, exploring how African cities are transforming their urban landscapes through large-scale mass transit infrastructure projects. These conversations highlighted the importance of integrating sustainable transport into long-term urban development strategies to foster more livable, resilient cities.

Recognizing that financing remains a crucial enabler of sustainable mobility, we have continued to strengthen our collaboration with KfW Development Bank. Our participation in their strategic retreat in Frankfurt underscored the role of Sustainable Urban Mobility Plans (SUMPs) and National Urban Mobility Policies (NUMPs) as fundamental tools for guiding urban development. By engaging financial institutions, we reinforce the link between robust policy frameworks and investment, ensuring that sustainable mobility solutions receive the support needed for implementation.

Through these collective efforts, MobiliseYourCity continues to advocate, collaborate, and drive impactful change, ensuring that cities in the Global South have the tools, resources, and support needed to build a more sustainable urban future.







8 February 2024, Liege

At the Climate Chance Summit in Liege in February 2024, MobiliseYourCity led a session on incorporating climate adaptation into sustainable urban mobility plans (SUMPs) in a pitch corner. The session, organised with Climate Chance, introduced a methodology to integrate climate resilience into urban mobility planning, emphasising its importance for sustainable urban development.



Roundtables for the HSC

March 2024, Berlin, Brussels, Lima

The Hamburg Sustainability Conference (HSC) Round Table format offered the MobiliseYourCity Partnership a unique opportunity to actively shape the Hamburg Sustainability Conference agenda and access highly exclusive networking opportunities. The results of the Round Tables served as the foundation of the conference program and the Hamburg Sustainability Charter.

MobiliseYourCity organised three Round Tables for the Hamburg Sustainability Conference in 2024:

- In Berlin, Germany, MobiliseYourCity contributed to two roundtables on the topic of road safety. The event was the occasion to present a road safety diagnosis in MobiliseYourCity's member cities and underline how implementing MobiliseYourCity SUMPs could significantly enhance road safety data collection based on local information availability.
- In Lima, Peru, a round table on "Transforming Urban Mobility in Latin America - The Role of the Informal Sector in Urban Transport in Peru" was co-organised by MobiliseYourCity, in collaboration with the GIZ and CODATU. The roundtable aimed to make visible the challenges of informal transport in urban mobility in Peru.
- Finally, the Partnership co-organized a roundtable on public and private investment in Brussels, Belgium. This third and last event in the HSC Roundtable framework discussed the barriers to investing in transport infrastructure in the Global South and analysed the existing instruments. This event started a bigger discussion on the private sector engagement in the Partnership.

The fruitful discussions of the three roundtables gave precious input for shaping the agenda for the Hamburg Sustainability Conference in October.

In particular, the topic of paratransit discussed in Peru has been retained as a central topic in the Hamburg Sustainability Charter.



ITF Paratransit Roundtable

31 March and 1 April 2024, Santiago de Chile

The MobiliseYourCity Secretariat participated in round tables on paratransit to align policy recommendations from ITF with the overall MobiliseYourCity approach to reform, integrate, and professionalise the Paratransit sector. The Roundtable focused on how authorities assess the externalities linked to paratransit services, the results of such assessments, and how they lead to decisions on paratransit reform in various contexts. The Roundtable was the basis of a set of principles to help authorities better assess, select and implement reforms that can maximise societal benefits and minimise negative externalities.



Asia and the Pacific Transport Forum 2024

16 May 2024, Manila

MobiliseYourCity hosted an event during the Asian Development Bank's (ADB) Asia and the Pacific Transport Forum 2024. The session emphasised the role of walking and cycling in urban mobility planning, featuring a collaboration between MobiliseYourCity Asia, IDOM, ITDP Indonesia, and ADB. Discussions showcased best practices for integrating active transport modes into mobility policies, particularly to enhance last-mile connectivity with public transport systems.



Mobilize Net-Zero: Regional Exchange on Minibus Electrification in Africa

11-13 June 2024, Kigali

In Kigali, MobiliseYourCity partnered with GIZ's Mobilize Net-Zero Project, VREF, and TUMI for a regional exchange on minibus electrification. This event convened governments, academia, and experts to discuss electrifying larger vehicles in Africa, addressing challenges like paratransit formalisation and electric mobility priorities. The Secretariat presented case studies and highlighted the importance of reforming paratransit services as a pre-requisite for mass transit systems growth. The event was also the occasion to meet our English-speaking African Community of Practice and to exchange with practitioners on their need in terms of sustainable urban mobility.



KfW Retreat in Frankfurt

17 September 2024, Frankfurt

At a KfW retreat in Frankfurt, MobiliseYourCity explored BMZ's perspectives on urban development and mobility, reflecting on lessons learned and opportunities for innovation. The Secretariat highlighted the value of the Partnership's SUMPs and NUMPs as tools for consultation and exchange, strengthening collaboration with KfW for future initiatives.



"The transition to electric mobility presents a unique opportunity for Africa's paratransit industry to formalize operations while enhancing safety and inclusivity. To maximize this potential, policymakers, government agencies, academia, and industry stakeholders should collaborate to ensure these elements are seamlessly integrated into the e-mobility roadmap."

Abigail Muigai

Senior Network Management OfficerSenior Network Management Officer-Nairobi Metropolitan Area Transport Authority (NaMATA)



Business Club - CODATU

25 September 2024, Paris

Invited by CODATU, the MobiliseYourCity Secretariat accompanied a representative from the EU DG INTPA to introduce the EU's Global Gateway strategy to the participants of CODATU's business club. This direct dialogue between private sector representatives and the EU was possible thanks to the role CODATU has in convening private companies working on urban mobility in the Global South.



World Urban Forum 12 (WUF12)

4-8 November 2024, Cairo

MobiliseYourCity participated in WUF12 in Cairo. The premier global forum on sustainable urban development addressed topics like mobility, climate resilience, and gender equality. We hosted two sessions on developing cities through mobility and active mobility initiatives: Developing the City Through Mobility and Pan African Action Plan for Active Mobility (PAAPAM).

'MobiliseYourCity has facilitated dialogue between public authorities, the private sector, and other stakeholders, fostering cooperation that ensures the long-term success of its projects.'

Sergio Oliete Josa

Head of Unit for Sustainable Transport and Urban Development, European Commission (DG INTPA)

MobiliseYourCity has been actively expanding its engagement across multiple fronts. In particular, we are strengthening connections with European networks that share our mission, allowing us to exchange best practices and promote the European approach to sustainable mobility. A key step in this direction was our participation in the **CIVITAS Forum** in Parma in September 2024. The conference provided valuable insights from cities, experts, and projects driving innovation in smart, inclusive, and sustainable mobility across Europe, helping us identify adaptable solutions for implementation in our geographies.

Recognising the importance of private sector involvement in our initiatives, we were pleased to accept an invitation from Movin'On Africa. The **Movin'On Summit**, held in Brussels in November 2024, brought together 350 international leaders and

innovators in the mobility sector. For MobiliseYourCity, this event was an opportunity to explore the future of mobility in Europe and discover cutting-edge solutions. While these innovations may not yet be directly replicable in our geographies, they offer a fresh perspective on urban mobility. With the expertise and financial resources we mobilise for our members, we contribute to accelerating the adoption of ambitious mobility solutions in the Global South and the Movin'On network will undoubtedly be a valuable platform in this endeavour.

Our social media audience reached 7,751 followers in 2024, reflecting steady growth and meaningful connections

This sustained growth in followers had a ripple effect, driving increased participation in training programs and significantly boosting the visibility and downloads of our tools and knowledge resources. For example, a focused social media campaign enabled the Global Monitor 2024 to reach nearly twice as many people as the previous edition to date.

Social media continues to be a cornerstone of our strategy—not only for outreach but also for fostering lasting relationships with our global audience. Through strategic use of cross-channel communication, we ensured our messages effectively engaged the right audiences. For example, our social media efforts amplified our presence at Cairo's WUF in November, allowing us to strengthen connections with colleagues and Community of Practice members in person.

In 2024, our social media presence showcased resilience in the face of a rapidly changing digital landscape. The 25% increase in followers during the partnership's ninth year highlights the enduring value and relevance of our content for practitioners and stakeholders. By continuously refining our strategies, we ensured steady growth while amplifying our platforms' impact across diverse global communities.



From the U.S. to India: MobiliseYourCity's Knowledge Platform Gains Worldwide Recognition



In 2024, MobiliseYourCity.net welcomed over 44,610 visitors, marking a significant milestone in our outreach efforts. Notably, the United States emerged as the leading source of visitors to our platform, highlighting a growing interest in sustainable mobility even in regions where it is not traditionally a priority. While the MobiliseYourCity Partnership does not have official partners in the U.S., the presence of key sustainability advocates—such as the World Bank—fosters an indirect yet impactful exchange of knowledge. Our long-standing, albeit informal, collaboration with institutions based there reinforces the relevance of our resources, which are clearly actively consulted and shared.

India also ranks among the top countries in terms of visitor engagement, reflecting the deepening impact of MobiliseYourCity projects within the country. This growing interest underscores the global resonance of our knowledge platform and its role in supporting sustainable mobility worldwide. The map below provides a detailed visualization of the geographic distribution of our platform's users.

Knowledge Platform users by country

More than 27K users of the Knowledge Platfom in 2024

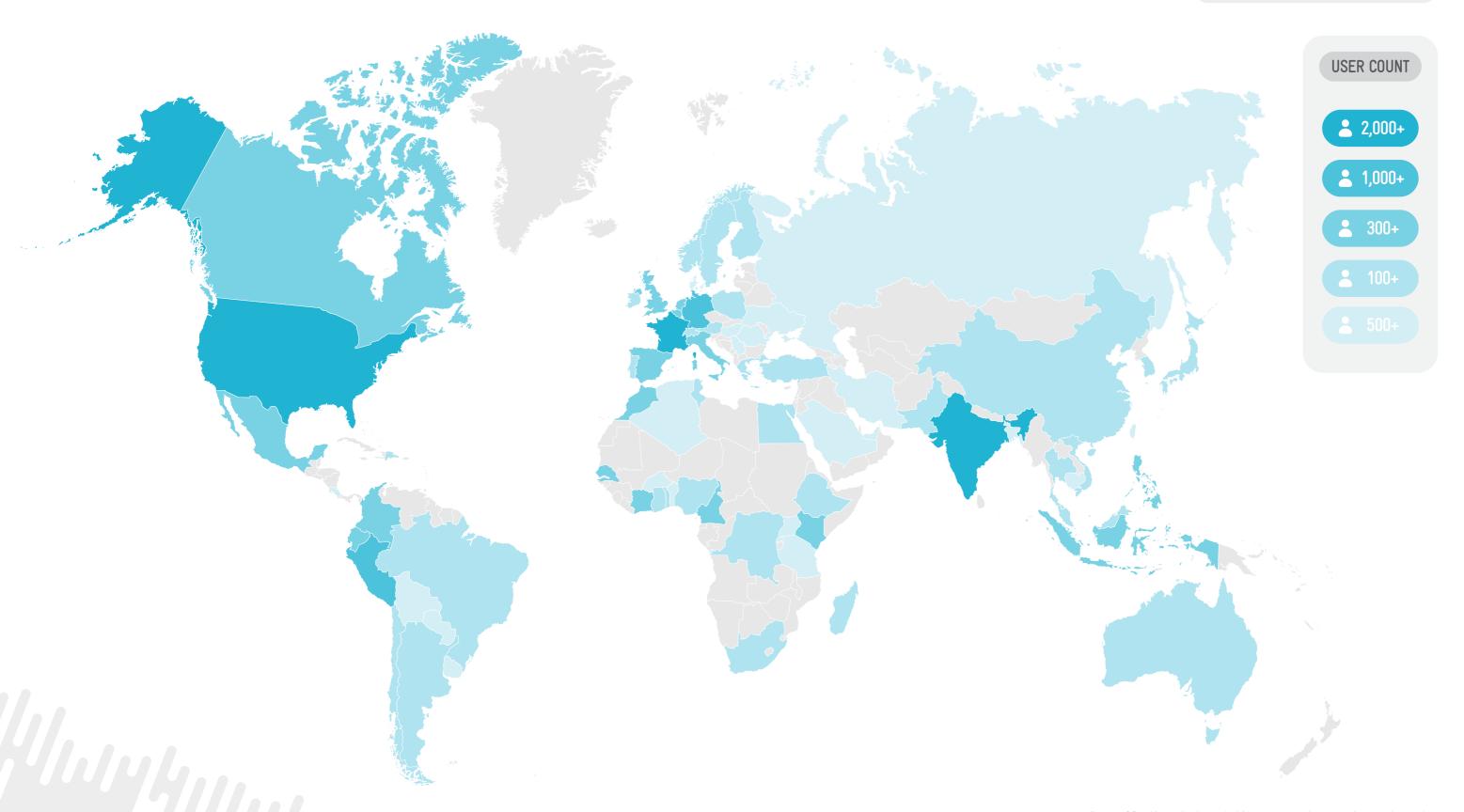


Figure 13. Knowledge platform users by country and gender

Implementation support

MobiliseYourCity's support for city and country members has expanded beyond developing SUMPs and NUMPs to include direct assistance with implementation support — one of the Partnership's four service areas. The scope of this implementation support varies based on local contexts and specific needs. For the MobiliseYourCity Partnership, it has focused on helping city and country members advance the actual implementation of sustainable urban mobility projects.



The MobiliseYourCity Strategy, adopted in 2022, outlined the type of support through which implementing partners deliver technical assistance to assist city and country members under the service area Implementation Support. In practice, the Secretariat has identified four main types of actions falling within this service area:

- 1. SUMP or NUMP implementation,
- 2. pilot projects,
- 3. project preparation,
- 4. institutional strengthening

Supporting the Implementation of SUMPs and NUMPs

Following the adoption of Sustainable Urban Mobility Plans (SUMPs) or National Urban Mobility Policies and Investment Programmes (NUMPs), member cities and countries often face challenges in moving from the planning phase to the implementation of concrete mobility interventions. To address this issue, MobiliseYourCity has extended its support to boost the implementation of SUMPs and NUMPs. Implementation partners have assisted cities in taking practical steps, such as conducting pre-feasibility studies and piloting selected measures, as part of the final phase of SUMP technical assistance. For example, in Abbottabad, Peshawar, and Mingora, Pakistan, MobiliseYourCity supported the conceptual design of priority projects identified in each city's SUMP action plan. In Havana, Cuba, and Córdoba, Argentina, technical assistance including both the development of the SUMP and the piloting of active mobility interventions in the city centres.

Building on this commitment and on the historical support to mobility planning, MobiliseYourCity partners have provided technical assistance by encompassing a comprehensive set of actions aimed at directly and explicitly enabling the implementation of SUMPs or NUMPs. These integrated efforts transform planned measures into actionable initiatives, including pilot projects, project preparation, institutional strengthening, capacity building, knowledge generation, and management support. Examples of this type of projects include the AIPMUS project in Santo Domingo, Dominican Republic; MoVe-Yaoundé in Yaoundé, Cameroon; MoVe-Senegal in Dakar, Senegal; and FEXTE II in Peru. These projects are structured holistically to support implementation at both city (SUMP) and national (NUMP) levels. To take place, these projects require a recently adopted SUMP or a NUMP.

Pilot projects help maintain momentum following the adoption of mobility plans by demonstrating early, visible results and laying the groundwork for replication. In Santo Domingo, the AIPMUS project piloted the professionalisation of "conchos" unions, leading to the operation of 141 formalised buses along three prioritised corridors. The project MoVe-Senegal also includes piloting SUMP measures related to walking and cycling.

At the same time, project preparation activities carry forward the planning process toward large-scale investments in infrastructure or public transport services. At the feasibility stage, key examples include the MoVe Yaoundé project with the Bus Rapid Transit system "Trans-Yaoundé" and project preparation and a feasibility study for paratransit professionalisation. The AIMPUS Santo Domingo project supports the development of TORs of the feasibility study for a BRT corridor. Moreover, the FEXTE II Peru will support Promovilidad in drafting and reviewing Terms of Reference for feasibility studies on mass transit corridors in three Peruvian cities and AFD's support for a feasibility study on a superblock project for six secondary cities in Peru.

Collectively, these initiatives aim to strengthen the capacities of the institutions responsible for implementing SUMPs and NUMPs, supporting a learning-by-doing approach to ensure that sustainable urban mobility transitions are effectively realised. The AIMPUS in Santo Domingo aims to strengthen the service capacity of the INTRANT to better deliver on the Dominican NUMP, with a focus on active mobility, public transit, and smart mobility.

10 Concho is the popular name for an informal taxi in Santo Domingo



The table below lists the SUMPs or NUMPs implementation projects supported by MobiliseYourCity:

MobiliseYourCity SUMPs or NUMPs Implementation Projects					
Project	Continent	Location	Donor	Implementing Partner	Amount
MoVe Yaoundé	Africa	Yaoundé, Cameroon	EU Delegation Cameroon		EUR 9,800,000
			BMZ	GIZ, AFD	EUR 570,000
			AFD		EUR 500,000
MoVe Senegal	Africa	Dakar, Senegal	BMZ	GIZ	EUR 5,000,000
AIPMUS Santo Domingo	Latin America and Santo Domingo, the Caribbean Dominican Republic	Santo Domingo,	EU LAIF	AFD	EUR 10,000,000
		AFD	AFD	EUR 400,000	
FEXTE II Peru	Latin America and the Caribbean	Peru	AFD	CODATU	EUR 800,000
		TOTAL			EUR 30,015,000

Pilot Projects for Sustainable Urban Mobility

Pilot projects serve as valuable tools to test innovative solutions and demonstrate the benefits of sustainable urban mobility measures. MobiliseYourCity has supported pilot projects in active mobility, paratransit, and digitalisation, providing cities with practical experience in implementing impactful, sustainable mobility solutions that have not been systematically deployed locally.

Walking and cycling pilot projects are a priority under the current MobiliseYourCity strategy, helping cities build institutional capacity and gain practical experience in active mobility project management and infrastructure development. These initiatives sustain momentum after SUMP adoption and can deliver and demonstrate a quick impact at a low cost. For instance, AFD and GIZ supported cities in Latin America to implement their cycling pilot projects. Puebla, Mexico, built a bike parking lot to improve cycling connectivity and expand its BRT system coverage. Curridabat & Montes de Oca, Costa Rica, piloted cycle lanes, enhancing local authorities' capacity to execute similar projects, which led to adopting the Intermunicipal Plan for Active Mobility. Ibagué, Colombia, used lessons learned from a bike-sharing pilot to contribute to a national guide on implementing similar systems in medium-sized Colombian cities, which often face institutional capacity challenges.

In addition, MobiliseYourCity has supported pilot projects aimed at improving operations and professionalising paratransit, recognising the key role of this sector. These initiatives enhance service quality, integrate paratransit into formal networks, and strengthen regulatory frameworks for public transport. In Antananarivo, Madagascar, Codatu is working with local authorities to reallocate road space to prioritise paratransit, addressing governance challenges and citizen opposition to the project. In San Juan Comalapa, Guatemala, a tuk tuk fleet renewal pilot highlighted the challenges of electrifying paratransit in small towns.



The table below lists the pilot projects supported by MobiliseYourCity:

		MobiliseYourCit	y Pilot Projects		
Project	Region	Location	Donor	Implementing Partner	Amount
Road safety in Bouaké	Africa	Bouaké, Ivory Coast	AFD	IRD	EUR 180,000
Schools' road safety in Bouaké	Africa	Bouaké, Ivory Coast	AFD	AMEND	EUR 415,000
Lomé paratransit pilot project ¹¹	Africa	Lomé, Togo	AFD	CODATU	EUR 450,000
Antananarivo Paratransit pilot project	Africa	Antananarivo, Madagascar	AFD	CODATU	EUR 600,000
Antananarivo active modes pilot project	Africa	Antananarivo, Madagascar	AFD	AFD	EUR 10,000,000 ¹²
Tactical urbanism in Belo Horizonte	Latin America and the Caribbean	Belo Horizonte, Brazil	BMZ	Wuppertal Institute	EUR 100,000
TukTuk fleet renewal in San Juan Comalapa	Latin America and the Caribbean	San Juan Comalapa, Guatemala	EU	GIZ	EUR 250,000
Bike lanes pilot in San José	Latin America and the Caribbean	Curridabat & Montes de Oca, Costa Rica	EU Euroclima	GIZ	EUR 400,000
Bike share pilot in Ibagué	Latin America and the Caribbean	Ibagué, Colombia	EU Euroclima	GIZ	EUR 500,000
Bike lanes pilot in La Paz	Latin America and the Caribbean	La Paz, Bolivia	EU Euroclima	AFD/Despacio	EUR 500,000
Open innovation challenge Teresina	Latin America and the Caribbean	Teresina, Brasil	EU Euroclima	AFD/Despacio	EUR 500,000
Active modes pilot in Puebla	Latin America and the Caribbean	Puebla, Mexico	EU Euroclima	AFD/Despacio	EUR 500,000
		TOTAL			EUR 14,395,000

¹¹ Project not started yet.



¹² The project includes SUMP development support for Antananarivo, currently ongoing.

Preparing Projects for Implementation

A key component of MobiliseYourCity's implementation support is helping city and country members develop bankable urban mobility projects. Project preparation focuses on conducting ideation activities, pre-feasibility and feasibility studies and securing financing, allowing cities to move from planning to implementation. These efforts bridge the gap between mobility planning and investment, ensuring that well-designed projects have a clear pathway to execution and actual implementation.

Technical assistance for project preparation takes place at three levels: project idea, pre-feasibility, and feasibility studies. At the project idea stage, MobiliseYourCity will support Davao, Philippines, in developing the concept design for a complete street. In terms of pre-feasibility studies, AFD has supported studies such as the North-South Green Mobility Corridor in Kochi, India.

MobiliseYourCity Project Preparation Projects					
Project	Region	Location	Donor	Implementing Partner	Amount
Active modes pilot in Kochi	Project preparation	Kochi, India	AFD	AFD	EUR 540,000
Prefeasibility studies in Davao ⁴	Project preparation	Davao, Philippines	AFD	AFD	TBD
		TOTAL			EUR 540,000

Supporting Urban Mobility Authorities Through Institutional Development

Many MobiliseYourCity country and city members face capacity gaps within their urban transport and mobility authorities. Without strong institutions, governance structures, and qualified personnel, implementing urban mobility projects can be hindered. To address this, MobiliseYourCity provides institutional strengthening support aimed at clarifying roles, improving governance frameworks, and building the capacity of local transport authorities. This ensures that cities and countries have the necessary expertise to manage and sustain urban mobility initiatives.

Typically, the AFD, through the FEXTE format, has been a key partner in supporting institutional strengthening efforts. The support provided to Luanda, Angola includes a prominent section on capacity building and institutional strengthening. Specifically, for the FEXTE II Abidjan project, supported activities include a road map to support AMUGA's institutional development.

MobiliseYourCity Implementation Support in Africa						
Project	Туре	Location	Donor	Implementing Partner	Amount	
FEXTE II Abidjan	Institutional strengthening	Abidjan, Ivory Coast	AFD	CODATU	EUR 1,500,000	
FEXTE I Luanda	Institutional strengthening	Angola	AFD	AFD, CODATU	EUR 1,000,000	
TOTAL					EUR 2,500,000	



After 10 years of its foundation, MobiliseYourCity will celebrate its achievements and will pave the way for the future

In 2025, MobiliseYourCity will proudly celebrate its 10-year anniversary, marking a decade since its creation during COP21 in 2015. Over the past ten years, we have worked alongside cities, national governments, and partners to advance sustainable urban mobility, strengthen policy frameworks, and support the transition to low-carbon transport systems. This milestone is an opportunity to reflect on our collective achievements and reaffirm our commitment to building more sustainable, inclusive, and resilient mobility solutions.

To mark this occasion, we will not only celebrate our progress but also look into the future. As part of this, we will update the Partnership's strategy to ensure it remains relevant in addressing today's challenges and opportunities for urban mobility in Asia, Africa, Eastern Europe, and Latin America. The Strategy update will allow us to adapt to evolving mobility needs, integrate emerging trends, and enhance our impact in supporting cities and countries worldwide. We look forward to shaping the next decade of sustainable urban mobility together with our partners.

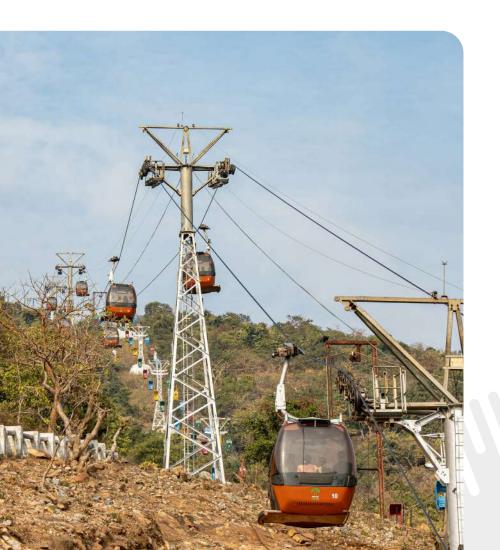


A new generation of MobiliseYourCity-supported projects will start in 2025

The European Union, as the current chair of the MobiliseYourCity Steering Committee, reinforced its commitment to MobiliseYourCity by providing €6 million in funding to implement technical assistance projects on urban mobility. This contribution - called The Urban Nodes Project - includes €5 million from the Directorate-General for International Partnerships (INTPA) to support global initiatives and €1 million from the Directorate-General for Enlargement and Eastern Neighbourhood (ENEST) dedicated to projects in Eastern Europe and Central Asia. These new projects will build upon previous efforts under MobiliseYourCity, focusing on the implementation of Sustainable Urban Mobility Plans (SUMPs) and National Urban Mobility Policies (NUMPs) or acting as catalysts for tangible impact in urban mobility. AFD has also allocated 1,5 million EUR to support pilot projects to transition from planning to implementation. Some of these projects will likely start in 2025.

The Urban Nodes Project is co-financed by the European Union and AFD under the MobiliseYourCity Partnership. This funding aims to accelerate the transition to sustainable, low-carbon urban mobility in key cities across the Global South. By targeting urban nodes - cities that serve as critical hubs along regional transport corridors - the project supports project preparation, facilitates policy dialogue, and strengthens technical capacity with a clear focus on economic development. It leverages MobiliseYourCity's expertise in sustainable urban mobility planning through feasibility studies, pilot interventions, and fostering collaboration between local, national, and international stakeholders. The Urban Nodes Project aligns with the EU's Global Gateway strategy, reinforcing sustainable infrastructure development and investment in climatefriendly transport systems.

Implementing partners include AFD and CODATU. The MobiliseYourCity Secretariat will continue to play a key role in supporting technical assistance activities by leveraging expertise from European institutions and development agencies.



The Secretariat will continue facilitating the working groups to expand our knowledge on pressing issues

To better harness the knowledge and expertise of our donors, implementing partners, and knowledge and network partners, the Secretariat has established three working groups: urban logistics, paratransit decarbonisation, and private sector engagement. These working groups serve as platforms for partner

organisations to exchange insights, focusing on knowledge management and advocacy to drive progress on each topic. In 2025, the MobiliseYourCity Secretariat will continue to lead these groups, working to develop a clear roadmap for how the Partnership can best support these areas.

Working group on urban logistics

















Working group on paratransit decarbonisation

















Working group on private sector engagement















We will strengthen our methodological offer by launching several publications

MobiliseYourCity has positioned itself as a knowledge hub for sustainable urban mobility in the Global South. In 2025, we will expand our methodological offer by launching publications that address topics for which there are specific knowledge gaps. The publications include:

- The Governance Toolkit will provide practical guidance on strengthening governance frameworks for sustainable urban mobility. It will help cities better understand and enhance coordination between institutions, improve decentralisation processes, and support the establishment or reinforcement of local and metropolitan transport authorities. By aligning with Sustainable Urban Mobility Plans (SUMPs), this resource will enable cities to develop more integrated and efficient transport systems.
- Integrating Climate Adaptation into SUMPs and Urban Mobility Adaptation Actions are two documents that provide guidance on how to build climate-resilient urban transport systems in the Global South. The publications will have a strong link to SUMPs and NUMPs, to better incorporate climate adaptation when going through the planning process. By equipping cities with these tools, we aim to strengthen their ability to anticipate, prepare for, and respond to the impacts of climate change on urban mobility.

- Mobility needs and experiences differ across populations, yet many transport systems fail to consider gender-specific challenges. To address this, MobiliseYourCity will launch a publication to provide guidance on mainstreaming gender perspectives into SUMPs.
- After the constant evolution of the
 MobiliseYourCity emissions calculator, the
 Secretariat will update the user manual so users
 can find specific indications on how to use the
 latest version of the Excel-based tool.



7 City and Country Factsheets

The MobiliseYourCity Partnership has 70 partner cities and 16 partner countries. Our Implementing Partners are supporting 32 cities and 9 countries in preparing SUMPs and NUMPs respectively.

- 32 Supported SUMPs
- 9 Supported NUMPs

The MobiliseYourCity Global Partnership

Status of technical assistance



- Supported NUMPs
- 16 Supported Pilot Projects
- 10 Other Implementation Support Projects

Bouake, Antananarivo, Dakar, Younde, Santo Domingo, Medan, Lome, Abijan, Peru, Angola

Latin-America and the Caribbean

Completed

Córdoba, Argentina
La Paz, Bolivia*
Baixada Santista, Brazil
Belo Horizonte, Brazil*
Teresina, Brazil*
Chile
Antofagasta, Chile
Colombia

Ibagué, Colombia* Curridabat & Montes de Oca, Costa Rica Havana, Cuba

Santo Domingo, Dominican Republic

Ecuador

Ambato, Ecuador

San Juan Comalapa, Guatemala*

Guadalajara, Mexico

Puebla, Mexico*

Arequipa, Peru

Trujillo, Peru

Uruguay

Ongoing

Paraguay Peru

Africa

Completed Cameroon

Douala, Cameroon Yaoundé, Cameroon Dire Dawa, Ethiopia Kumasi, Ghana

Bouaké, Ivory Coast

Morocco*

Al-Assima (Rabat-Salé-Temara), Morocco Dakar, Senegal

Tunisia

Ongoing

Luanda, Angola
Abidjan, Ivory Coast
Antananarivo, Madagascar*
Casablanca, Morocco
Khouribga, Morocco
Maputo, Mozambique
Mwanza, Tanzania
Lomé, Togo

48 Total of Supported Cities

11 Total of supported countries

Asia

Eastern Europe

Chernivtsi, Ukraine*

Vinnytsia, Ukraine*

Zhytomyr, Ukraine

Completed

Lviv, Ukraine Poltava. Ukraine

Completed

Tbilisi, Georgia
India*
Ahmedabad, India
Kochi, India*
Nagpur, India*
Medan, Indonesia
Abbottabad, Pakistan
Mingora (Swat District), Pakistan
Peshawar, Pakistan
The Philippines

Ongoing

Kurunegala, Sri Lanka Davao, Philippines Thailand

Click on the city/country of your interest to be redirected to the factsheet.

⁰

^{*}Supported with non-SUMP/NUMP technical assistance or pilot project

Africa | Marica | Ma

Africa

Completed

Cameroon P.75

Douala, Cameroon P.78

Yaoundé, Cameroon P.85

Dire Dawa, Ethiopia P.98

Kumasi, Ghana P.104

Bouaké, Ivory Coast P.109

Morocco P.117

Al-Assima (Rabat-Salé-Temara), Morocco P.119

Dakar, Senegal P.121

Tunisia P.128

Ongoing

Luanda, Angola P.134

Abidjan, Ivory Coast P.138

Antananarivo, Madagascar P.142

Casablanca, Morocco P.150

Khouribga, Morocco P.153

Maputo, Mozambique P.155

Mwanza, Tanzania P.158

Lomé, Togo P.160

Cameroon

Partner country

Status of the project: Completed National Urban Mobility Policy or Programme



Basic Information

Population: 27,744,989 | Growth rate: 2.54%

Percentage of urban population: 57%

GDP per capita: USD 1,498

Percentage of the population living below the national

poverty lines: 69%

Nationally Determined Contribution (NDC): no quantified

transport related NDC

National GHG emissions per capita: 0.4 (tCO₂eq)
Proportion of transport related GHG emissions: 53%

Exposure to climate change: HIGH

Context

Cameroon is undergoing a rapid population growth. With over 55% of the population living in cities, it is the most urbanised country in Central Africa, and it is expected that the urban population will reach 22 million by 2035. The geographical, economic, and social context of the country is complex and diversified but is largely dominated by two major cities, Douala, economic capital and Yaoundé, administrative capital.

Yet the quality and efficiency of urban mobility systems, and ultimately its performance is not satisfactory. Growing congestion in cities and the unpredictability of traffic are the most visible signs of these problems. The slowness, cost and discomfort of, mostly, informal public transport also greatly affects populations who have no other choice for their journeys. Walking is particularly neglected in Cameroonian cities. The high number of accidents and victims, often pedestrians, calls for emergency measures. Finally, Cameroon's greenhouse gas emissions from urban transport, although very low in absolute terms, could be better addressed.

Generally speaking, and with the notable exception of Douala, urban communities have neither the institutional nor the human resources to carry out some of the essential tasks entrusted to them by law, in particular the organisation and management of public transport and traffic management. Urban communities also do not fulfil their role of continuous monitoring of urban mobility, its performance and the service provided to citizens by urban transport infrastructure and systems.

In this context, and as Sustainable Urban Mobility Plans were being developed for Douala and Yaoundé, it appeared necessary for Cameroon to have a National Urban Mobility Policy (NUMP) that facilitates and guides local actions and is shared and appropriated by all actors, whether at the level of cities or the State.

The NUMP was delivered and presented in September 2019 during the MobiliseYourCity Africa Mobility Conference organised in Yaoundé.

Support from the Partnership

Technical assistance: National Urban Mobility Policy or Program (NUMP)

Type of NUMP: Policy NUMP

Funded by: European Union

Funding amount: EUR 500,000

Implemented by: AFD through the MobiliseYourCity Africa Program

Local counterpart: Ministère de l'Habitat et du Développement Urbain

Main purpose of the NUMP: Offer cities a general enabling framework for SUMPs

Objectives:

The NUMP for Cameroon provides guidance and actions recommendations focusing on four main targets:

- Reinforcement of urban mobility governance
- Increase of financing resources for urban mobility
- · Restructuration and modernisation and public transport
- Better use of state-of-the-art technologies for transport

Status of implementation

Project start date: 2018 Q1

NUMP adoption date: 2019 Q3

Completed outputs:

· National Urban Mobility Policy: Diagnosis, national vision, and strategic measures for its realisation

NUMP key measures and cost estimates

The following list highlights the most significant measures and recommendations identified in the NUMP.

Measure	Cost Estimate
Strengthen the governance of urban mobility	
Strengthen the capacity of urban communities	
Better integrate the activities of all urban mobility stakeholders	
Strengthen MINHDU	Not quantified
Develop human resources and capacities at all levels	
Develop governance tools	
Develop an approach for the metropolitan governance of urban governance of urban mobility	
2. Improve the financing of urban mobility	
Increase planning and spending capacities of urban communities on urban mobility	Not quantified
Strategic area: The State must continue to finance urban mobility while optimising its contributions	
3. Restructure and modernisation of public transport	
 Introduce in Yaoundé and Douala strong public transport axes by bus, starting with the congested roads 	
 Organise and professionalise the motorbike taxi sector by building on existing structures to drive organisation 	Not quantified
Organise and professionalise taxi services in the main cities and encourage the development of new taxi services	
4. Better use of transport technologies	
Gradually improve the vehicle fleet	
Improve road maintenance technologies	Not quantified
 Develop knowledge of the issues and institutional capacities in the digital field, and promote pilot projects 	

Finance leverage

Leveraged financing (resulting or enabled by the NUMP preparation process)

As a prerequisite to the adoption of sustainable urban mobility plans in Yaoundé and Douala, the national urban mobility policy in Cameroon has indirectly enabled securing financing, including nearly 75 million euros in grants or similar, for investments and further technical assistance in these two cities. This is presented in detail in the factsheets or SUMP summaries of Douala and Yaoundé.

Last update in December 2023.

Douala, Cameroon

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 923 km²

Population: 3,663,227 | Growth rate: 3.6%

Regional capital city

GDP per capita: USD 2,952

Modal Shares

Minibuses (paratransit): 1%

Walking: 35% Private cars: 5%

Private motorbikes or 2-wheelers: 4%

Taxis (paratransit): 12% Moto taxis (paratransit): 40%

Other: 3%

National GHG emissions per capita: 0.4 (tCO₂eq)

Exposure to climate change: HIGH

Context

The port city of Douala, the central economic hub of Cameroon, lies on a low coastal plateau with many natural drains and flood-prone valleys. With a population of more than 4 million inhabitants, which is anticipated to increase to 5 million by 2030¹, Douala is a dynamic, fast-growing city. Douala's rapid growth is particularly pronounced on the outskirts, where access to formal public transport services is low or non-existent. Urban sprawl forces people to travel further distances to access jobs, markets, health, and education. The low quality and inadequacy of infrastructure for walking and cycling add to the low provision of public transport services.

This combination of factors pushes travellers to rely on informal motorcycle taxis and mini-bus services instead of more sustainable modes such as walking, cycling and higher-capacity public transport. Informal transport services have taken an increasingly large modal share in outlying areas but also in the city centre. This entails threats to the citizen's health, safety, and comfort, as the precariousness of working conditions and high competitiveness of paratransit services are associated with a higher risk of traffic accidents and sexual harassment toward women. Ageing or badly maintained vehicles also significantly increase air and water pollution and greenhouse gas emissions.

Regulating and supervising urban development are significant challenges for the public authorities, as a large percentage of the urban territory is subject to unsanctioned land use, associated with the isolation of working-class neighbourhoods, the lack of tertiary roads, saturation of industrial zones and growing informal settlements on often unsuitable land.

¹ https://worldpopulationreview.com/cities/cameroon/douala

In addition to this, the lack of dialogue between land-use planning, on the one hand, and mobility planning authorities, on the other, exacerbates the urban transport problem. Above all, creating the conditions for viable integration between urban and transport planning is necessary. This diagnosis has led to the recognition of the need to initiate a planning approach that is more operational than those previously at work to respond to the challenges resulting from the rapid development of metropolitan areas.

Support from the Partnership - Mobility Planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission and FFEM

Funding amount: EUR 400,000

Implemented by: AFD through the MobiliseYourCity Africa Program

Local counterpart: Urban Community of Douala

Finance leverage: EUR 422,000,000

Supported activities:

- Organisation of Mobilise Days, in conjunction with Yaoundé, to officially launch SUMP development and raise awareness.
- Preparation of a Sustainable Urban Mobility Plan for Douala, with three main objectives:
- Enhancing citizens' access to destinations, activities and services offered in Douala;
- Enhancing the urban environment in Douala;
- Renewing the governance of Douala, its mobility, and projects

Status of the SUMP process

Project start: 2018 Q1

Project completion: 2019 Q3

Completed outputs:

- Sustainable Urban Mobility Plan
 - » Diagnosis
 - » Vision and goals
 - » Action and financing plan

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Physical investments (infrastructure, rolling stock, etc.)	508 M€		
Road infrastructure projects	107 M€	Domestic financing	2021
Purchase of 283 Bus 12m 2021: 150 2024: 133	66 M€ 2021: 33 M€ 2024: 33 M€	World Bank & Domestic Financing	2021 2024
Bus facilities (stations)	24 M€ 2021: 4 M€ 2024: 20 M€	World Bank & Domestic Financing	2021 2024
Purchase of 164 BRT 18m 2021: 50 2024: 75 2029: 39	66 M€ 2021: 20 M€ 2024: 30 M€ 2029: 16 M€	World Bank & Domestic Financing	2021 2024 2029
BRT facilities (stations)	92 M€ 2021: 18 M€ 2024: 49 M€ 2029: 25 M€	World Bank & Domestic Financing	2021 2024 2029
Cable Car line	26 M€	World Bank & Domestic Financing	2024
Development of 5 major multimodal interchange centres and 15 transfer points	15 M€ 2021: 4 M€ 2024: 6 M€ 2029: 5 M€	World Bank & Domestic Financing	2021 2024 2029
Walking plan	15 M€ 2021: 3 M€ 2024: 7 M€ 2029: 5 M€	World Bank & Domestic Financing	2021 2024 2029
Investments for cycling	5 M€ 2024: 1 M€ 2029: 4 M€	World Bank & Domestic Financing	2024 2029
Reinforcement of river links to Manuka	4 M€	Domestic financing	2021
Development of river and rail transport infrastructure	5 M€	Domestic financing	2029
Centralised Control Centre	10 M€ 2021: 3 M€ 2024: 4 M€ 2029: 3 M€	World Bank & Domestic Financing	2021 2024 2029
Project management, call for interest and contingency provision	63 M€ 2021: 15 M€ 2024: 37 M€ 2029: 11 M€	Domestic financing	2021 2024 2029

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Development of logistical hubs and truck parking spaces	11 M€ 2024: 7 M€ 2029: 4 M€	Domestic financing	2024 2029
Complementary actions and policy reforms in three phases	38 M€ 2021: 10 M€ 2024: 10 M€ 2029: 38 M€		
Technical (studies, plans, designs, etc.)			
Short-term complementary studies and strategy setting			2021
Guidelines for logistics platforms and truck parking			2021
Concerted plans and strategies for • Upkeep and maintenance of the road network • Valorisation/distribution of the public space • Tariff and ticketing of public transport			2021
Integration of mobility and other urban networks (water, sewage, energy, waste)			2024
Municipal traffic and parking plans			2024
Anticipation of plans after the SUMP			2029
Policy & regulation			
Informal transport project Continuous formalisation of motorcycle taxis and informal buses through establishing a new institution responsible for vocational training, schedule regulation, and administrative formalisation.		European Union	2024
Implementation of a digital action plan Open data policy Support the development of information and service platforms Mobility Observatory			2024
Strengthening the capacity of police officers about mobility			2024
Adaptation of public transport services and recruitment policy to tackle gender-related issues			2024
Improved road upkeep and maintenance			2024
Improved road signage			2024
Creation of a transport organising authority		European Union	2029
Monitoring and reporting on air quality and water pollution			2029
Emergence of new public transport operators			2029
Public support for the adoption of clean vehicles through financial incentives			2029
Optimised integration of port activities and reconversion of industrial disused sites			2029

The following table summarises the total capital expenditure (CapEx) estimates for different measures in the SUMP.

Urban transport investment measures	CapEx Estimate
Public transport and NMT	328 M€
Street shaping urban roads and traffic management	107 M€
Other measures	74 M€
Total	509 M€

Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Secured	Amount
Grant for the implementation of SUMP soft measures	European Union		2 M€

Associated financing

Description	Source of financing	Secured	Amount
International loan for the BRT and other investments (associated)	World Bank		370 M€
Domestic contribution to the BRT and other investments (associated)	Government of Cameroon		50 M€

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2019	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	-0,19 Mt CO₂eq -20 %	0.548 Mt CO₂eq	0.95 Mt CO₂eq	0.76 Mt CO₂eq
Annual transport-related GHG emissions per capita (kg CO ₂ eq)	-36 kg CO₂eq / capita -20.7 %	161 kg CO₂eq / capita	174 kg CO₂eq / capita	138 kg CO₂eq / capita
Access Increase the proportion of the population living within 500 meters or less of a public transport stop.	Improved but not quantified	Not quantified	Not quantified	Not quantified
Air pollution Decrease in mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations.	Improved but not quantified	Not quantified	Not quantified	Not quantified
	Formal public transport: +5%	Formal public transport: 2%	Formal public transport: 1%	Formal public transport: 6%
Modal share Increase of the modal shares of trips by public	Informal public transport: 0%	Informal public transport: 1%	Informal public transport: 0%	Informal public transport: 0%
transport, walking and cycling	Walking: +6%	Walking: 35%	Walking: 34%	Walking: 40%
	Cycling: 0%	Cycling: 0%	Cycling: 0%	Cycling: 0%
	TOTAL: +6%	TOTAL: 38%	TOTAL: 35%	TOTAL: 46%
Road safety Decrease in traffic fatalities in the urban area per 100,000 inhabitants	Improved but not quantified	Not quantified	Not quantified	Not quantified

Insights from practice: lessons learned from the SUMP process

The three key strengths of Douala SUMP are that it is integrated, realistic, and inclusive.

It links mobility and urban planning, includes existing actors and modes of transport, and proposes innovative solutions beyond road infrastructure, such as constructing a cable car line.

The SUMP's Action, Financing and Governance Plan is fully fundable through already available financial resources, newly identified resources, and international finance. It is based on a transport investment plan from the previous decade, with additional revenues from heightened fuel taxation, car ownership, and parking. Funding is sourced from the public budget, resulting in a positive revenue-to-expenditure ratio for the operation of the public transport network. The SUMP is also tailored to the area's context, location, and specificities, ensuring a progressive and realistic implementation of the plan.

The Douala SUMP is inclusive, facilitating information workshops and thematic focus groups that include young people, women, and actors from both modern and informal private sectors. This participatory process identifies overlooked issues related to population groups and devises adequate solutions. Notably, these public and stakeholder consultations mobilised new actors to get involved in organising a car-free day.

Significant governance and institutional reforms are prerequisites to SUMP implementation.

Although the Douala Sustainable Urban Mobility Plan (SUMP) has its strengths and opportunities, structural and urban limitations still need to be acknowledged. The liberalisation of the economy and decentralisation have led to a proliferation of actors with different interests, sometimes conflicting with the existing laws and regulations, complicating the organisation of the transport sector.

The management of regulatory urban planning poses a significant challenge in Douala and other African cities of similar size, given the creation of new districts on the outskirts, which necessitate new infrastructure and improvements in urban transportation. However, given the city's current investment and management capacity, these may not be sustainable.

Additionally, mobility data is often outdated and unavailable in a format suitable for long-term urban planning. Institutional reforms are necessary, including establishing a Transport Organising Authority, an Urban Planning Agency, and a Mobility Observatory to improve coordination between urban planning and mobility. These institutions should prioritise the representation of women and consider vulnerable groups, such as children and older people, who face systemic mobility challenges such as safety and lack of suitable infrastructure, as identified by the diagnostic.

Perspectives for implementation

The Douala Urban Mobility Project (PMUD) to implement the BRT and improve the moto-taxi services in Douala

The Douala Urban Municipality (CUD) will be implementing two of the main measures of the SUMP adopted in 2019, through the Douala Urban Mobility Project (PMUD) signed in August 2024 between the State of Cameroon and the World Bank. The main objective of this project is to improve urban mobility by implementing a pilot BRT corridor in Douala, and to support economic and inclusive development along the BRT and feeder lines. The project will also help to improve governance in the sector, strengthen the stakeholders involved in urban mobility, and improve the service and working conditions of moto-taxis in Douala.

Last updated in December 2024

Yaoundé, Cameroon

Partner city

Status of the project: Completed Sustainable Urban Mobility Plan & Ongoing Implementation Support



Basic Information

Population (Metropolitan Area): 4.10 million

Growth rate: 3.5% Urban area: 183 km² Motorisation rate:

58 cars /1000 hab.

18 motorbikes /1000 hab.

Transport emissions per capita: 241 kg CO, eq

GDP per capita: \$1,422.70 (2019)

Modal share:

Walking: 33% Private car: 10% Moto-taxi: 12%

Bus: 5% Taxis: 40%

Critical mobility challenges

- · Road safety and comfort issues
- · High cost of transport for the population
- Poorly maintained road network
- Increasingly high emissions and pollution
- Gender disparities
- Limited capacity of local transport authority

Selected SUMP Measures

- Physical investments, infrastructure and rolling stock
- Additional studies and plans
- Regulation, institution and policy reforms

Projected SUMP impact

 Implementing the measures identified in the SUMP is expected to significantly impact GHG emission reduction, improve the modal share of sustainable transport modes, and more.

Support from the Partnership - Mobility Planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) Development

Funded by: EU INTRA ACP

Funding amount: 350,000 EUR

Implemented by: Agence Française de Développement (AFD), Codatu

Local counterpart: Urban Community of Yaoundé (CUY)

Olopping

Supported activities:

Supporting a SUMP process for Yaoundé

Conducting capacity development activities, including workshops and technical committees

Baseline motorisation rate ²	58 cars per 1000 inhabitants 18 motorbikes per 1000 inhabitants
Annual transport emissions per capita ³	241 kg CO₂eq
SUMP implementation timeline	Joined MobiliseYourCity in November 2016 MobiliseDays in June 2016 Start of SUMP in March 2018 SUMP completed and approved in September 2019 Detailed feasibility study of BRT project to be delivered in Summer 2022 Detailed design study of BRT project foreseen after feasibility study
SUMP Vision	No concise vision formulated.
Approximate Total SUMP Investment Requirement (CAPEX/OPEX)	CAPEX by term · 2025: 298.1 M€ · 2035: 554.7 M€ Yearly OPEX to term (2035) · 770 M€ CAPEX by 2030 · 550 M€ OPEX by 2030 · 151 M€ Total CAPEX & OPEX requirements (by 2030) · 701 M€

Diagnosis: Urban Mobility in Yaoundé

Like many other major cities in sub-Saharan Africa, Yaoundé is experiencing rapid population growth. The metropolis lacks mobility infrastructure and the financial resources to properly maintain what it has, whether it is the public transport network, the organisation of small-scale transport offers, parking facilities or even simply roads and pedestrian areas. The city's economy suffers from the lack of infrastructure and struggles to attract investors.

Following the current evolution of rapid urban growth, the population will reach 5.5 million inhabitants in 2035, and the urban area will get a radius of 25 km by the end of the century. The increase in the travel demand and the rate of motorisation accompanying the rise in income may rapidly lead to the saturation of the existing system. Hence, travel times will increase significantly along with the overall cost of travel due to more fuel consumption by private vehicles and taxis.

1. Existing mobility and transport services

The transport system in Yaoundé, while being relatively fluid, is accident-prone, uncomfortable, polluting, and expensive for the population.

About 8 million trips are travelled daily, of which one-third are short-distance trips made on foot or by moto-taxis. For longer trips, taxis, motorbikes, and cars are the main modes of transport. Official bus service and informal minibuses currently only play a minor role.

² For comparison with motorisation rates in European capital cities, Berlin has a motorisation rate of 330 car per 1000 inhabitants, and other capital cities in Austria, Belgium, Denmark, France, Hungary, Ireland and the Netherlands have a motorisation rate under 450 cars per 1000 inhabitants. Source: Eurostat Regional Yearbook 2020.

³ For comparison, the annual transport (except air travel) emissions per capita in Germany are 1.61 tC0₂eq. Source: Die Umweltwirtschaft in Deutschland: Entwicklung, Struktur und internationale Wettbewerbsfähigkeit. www.umweltbundesamt.de

All these modes of transport use the same poorly maintained road network, where only 300 km of the 2700 km road network are asphalted. The state of the road network limits both private and public transport. More precisely, it suffers from the following problems:

- Most of the secondary and local roads are unasphalted.
- Main and metropolitan roads are not optimally laid out and do not provide for the sharing of the road network between low-capacity modes, high-capacity modes (bus) and soft modes
- Degraded road surfaces or unmanaged intersections create traffic bottlenecks.
- Vehicles, including freight vehicles, are parked on the road.
- Geographical elements and neighbourhoods that are densely built on several km² without wide roads constitute obstacles to transit traffic of cars and public transport.

Walking: 4 million trips are travelled daily by pedestrians, and walking is the main mode of transport. However, the lack of sidewalks combined with chaotic traffic poses a threat to pedestrians' safety, and they are particularly exposed to traffic accidents.

Taxi service: Less than 5% of vehicles are taxis, but they have a 38% share of the modal split by distance. They transport all population categories, and with an average occupation rate of 3 passengers, they are the primary motorised mode of transport. Taxis, even when used collectively, are relatively expensive: taxi fares represent over 15% of household income for one passenger out of four.

Moto-taxis: Moto-taxis are particularly present in the outlying districts. Their flexibility and agility allow them to use unpracticable roads for other vehicles due to the pavement's poor state or the road's narrowness. Moto-taxis, often operated informally by very young drivers, are notably resistant to any regulation, which is necessary to address the safety issues associated with this mode of transport.

Private cars: Cars are handicapped by the state of the road network, and only 10% of trips are made by private vehicles. The car ownership rate, which is highly dependent on household income, is increasing along with the standard of living.

Informal minibuses: Informal minibuses are less important than other African cities. In Yaoundé, they are mainly used for transport between the centre and the periphery, following fixed routes and departing from bus stations.

Formal buses: A formal bus service is available through the private company Stecy and is growing but remains a minority element in the current mobility landscape. No facilities are in place to encourage this mode of transport. Buses travel on the same roadway as other vehicles and suffer from congestion and low commercial speed.

2. Environmental challenges

The vehicle fleet is very old (20% of vehicles are over 20 years old) and is very polluting, emitting large amounts of greenhouse gases and air pollutants.

Internal trips within the CUY emit the equivalent of 635 ktCO₂ per year. Along with distances travelled by vehicles, emissions follow a strong growth. Unfortunately, the gradual improvement in the performance of the vehicle fleet linked to its renewal does not counterbalance this trend.

In a list of 54 countries, Cameroon ranked 15th among the most polluted countries in Africa in 2017. While the average concentrations of pollutants are not sufficiently documented, punctual measurements have observed peak concentrations of delicate particulate matter PM2.5 that were one hundred times higher than the WHO standard.

3. Safety and comfort are key issues to be addressed

Safety is a significant issue for mobility in Yaoundé, where accidents cause around 1,000 deaths and 5,000 serious injuries per year. A specific study on a sample of taxi drivers revealed that 73% of them had an accident in the two previous years. In addition to accidents, inquired passengers raised the issue of the risk of assault in taxis.

Comfort is also often a problem: long waits in hot or rainy environments, difficulty in finding an available taxi in certain areas, or vehicles overloaded with passengers and goods.

4. Gender disparities: women travel less and use less comfortable modes of transport

The diagnosis describes a slight difference in the number of journeys women make, which can be linked to significant disparities in full-time formal employment (15% of women compared to 27% of men). Compared to men, women in Yaoundé make half as many journeys using private cars but travel more by foot or on moto-taxis.

5. The high cost of transport puts low-income users under pressure

After housing and food, transport is the third most significant item of expenditure for Yaoundé residents and accounts for more than 11% of household spending. This is particularly critical in this city where inequalities are incredibly high, and the highest 20% of incomes are, on average, more than 7 times higher than the bottom 20%.

The high transport cost is attributed to the low efficiency of minibuses, taxis, and motor taxis, which are linked to a poor road network and the weakness of public transport offers.

6. Institutional and financial capacity of the CUY: a gap remains between mandate and resources

The Urban Community of Yaoundé is the transport organising authority, both legally and in practice.

However, despite notable capacities, the CUY does not currently have the institutional means nor the adequate human resources to perform some of the essential tasks assigned to it by law, including the following: (i) the organisation and management of public transport, (ii) the traffic and parking management, and (iii) continuous monitoring of performance the urban transport system and the quality of service provided to citizens.

As the majority of the city will develop outside the administrative boundaries of the CUY by 2035, the municipal authorities, i.e. the CUY and the peripheral municipalities, will have to create together an integrated organisation for public transport and define a structured infrastructure network and priority multimodal investment plans on the scale of the future large conurbation.

In total, the financial resources allocated to the construction and maintenance of roads, which are nearly 40 M€ per year, are in line with expectations based on the economic status of the city and country. However, the CUY has an insufficient share of these resources in the perspective of its mandate. The national level compensates financially with its much greater resources and the support of international donors. Still, coordination between the city and the ministries responsible for urban development and public works is insufficient.

The SUMP preparation process and stakeholder involvement

In order to take future urban development into account, the perimeter of the study covers a surface of about 700 km², from which 304 km² are within the city's administrative boundaries.

Throughout developing the SUMP, the various stakeholders involved in mobility were associated through technical committees, specific exchange workshops, and bilateral meetings.

The technical committees gathered the Yaoundé Urban Community, the Ministries of Urban Development, Transport, Public Works, Economy and Planning, Environment, the Police, the various taxi and motorbike taxi unions, the Stecy bus company and the French Development Agency (AFD).

Specific workshops in small groups linked representatives of the technical committee with academics, officials from the local districts, rail transporters, and managers of places that generate large amounts of travel, such as markets. These workshops enabled the different actors to take sufficient ownership of the approach.

In addition to the technical committee members, the team in charge of developing the SUMP also met bilaterally with international donors and representatives of the local districts.

Three time-horizons were considered:

- A. The very short term: the horizon of 1 to 2 years in order to highlight quick wins
- B. The medium term: the horizon of 5 to 7 years in order to observe the effects of the first SUMP measures.
- C. The long term: a horizon of 15 years to aim at significant results and anticipate possible reorientation needs.

SUMP development process

Project start: 2020 Q3

Project completion: 2022 Q2

SUMP approval: de facto approved (no formal approval expected)

Completed outputs:

- Inception Phase
- Diagnosis
- · Construction of scenarios and formulation of priority measures
- · Action plan, which includes indicators, budget, and financing measures
- Final SUMP document

Vision and goals

Strategic Vision

The SUMP of Yaoundé does not propose a clear vision and goals for urban mobility in the city. However, it fully adopts the EASI framework and strongly emphasises identifying challenges and solutions. Challenge-related objectives of the SUMP are:

- Improving traffic conditions by developing a network of roads beneficial to all.
- Reducing the cost of mobility supported by households
- Improving the quality of life in the city with a less dangerous and less polluting system

How does the SUMP adopt the EASI framework?

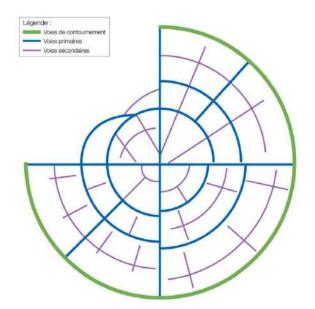
ENABLE - Improvement of steering and financing

AVOID - Transit-Oriented Urban Development, urban densification, densification around developing mass transit routes

SHIFT - Multimodal transport scheme, complementarity of transport modes

IMPROVE - Optimisation of the road network and improvement of the vehicle fleet

- Developing main roads
- Sharing space
- · Traffic regulation
- Renewing the vehicle fleet towards less polluting and lower emissions.



The SUMP develops the concept of a coherent road network: The Cross.

The network builds upon existing roads and uses north-south and east-west metropolitan axes and multiple hierarchical levels of roads.

The road infrastructure will provide an efficient inclusion of the bus offer, for example with reserved lanes on congested sections.

Test scenarios and selected scenario

Three specific scenarios were defined to assess the impact of the SUMP by 2025 and by 2035, each one developed with a different level of ambition.

Baseline scenario: No SUMP implementation occurs, but existing laws and regulations are implemented. Private car ownership will increase, and the modal share of public transport will decrease. Travel times are expected to rise sharply, mainly due to the increasing congestion in the capital.

Central scenario: This scenario provides immediate solutions to issues related to the road network. It is an ambitious infrastructure project focused on increasing the capacity of the roads to accommodate increased private vehicle traffic. However, with the appropriate road layout and the establishment of mass transport lines, this scenario allows for a significant shift to public transport, whose modal share is expected to evolve positively.

Ambitious scenario: The ambitious scenario also includes a vital road infrastructure component in the short term but focuses more on creating mass transport lines, including a train-tram project by 2035.

The scenario finally selected is the **central scenario**. This scenario aims at the completion in the short term (2025) of a more efficient, adequate, and structured road network. A public transport offer will also be put in place, but on a reduced number of lines, aiming at a good level of service and reliability, an affordable and financially balanced offer for the user. After having proven its effectiveness and relevance and gaining users' approval, the public transport offer can be extended and replicated on a larger scale according to a level of ambition yet to be defined. Indeed, the current measures respond to imperative needs but will not make it possible to meet all the long-term challenges, particularly the reduction of greenhouse gas emissions. The SUMP, therefore, recommends a reassessment in 2025 and envisages an increase in ambition for public transport in the long term.

SUMP measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measures	Cost estimates in M€	Cost estimates in M€ Proposed Financing Source	
Action plan	Total: 891.9 M€		
Physical investments, infrastructure and rolling stock	Total: 852.8 M€		
Bypass roads	2025: 157 M€ 2035: 304 M€	Domestic financing ⁴	2025 2035
Primary roads	2025: 29.7 M€ 2035: 94.5 M€	Domestic financing ³	2025 2035
Secondary roads	13 M€	Domestic financing ³	2035
Intersections and road measures	2025: 51.5 M€ 2030: 19.8 M€	AFD	2025 2030
Space for pedestrians, including the pilot neighbourhood "Coeur de Ville."	2020: 5 M€ 2035: 21 M€	AFD	2020 2035
Public transport lines (bus and minibus) and related road facilities	2025: 54.9 M€ 2035: 102.4 M€	Domestic financing ³	2025 2035
Additional studies and plans	Total: 28.7 M€		
Studies and support reorganisation plan for bus lines	2025: 9.7 M€ 2035: 19 M€	Domestic financing ³	2025 2035
Regulation, institution and policy reforms	Total: 10.4 M€		
Informal transport project Reform of the taxi and moto-taxi systems Continuous formalisation of moto-taxis and informal buses through establishing a new institution responsible for vocational training, schedules regulation, and administrative formalisation.	4.5 M€	European Union	2024
Institutional reforms: creation of a local commission and a technical service for mobility	2.1 M€	Domestic financing ³	2020
Control and training centre for mobility and transport	3.8 M€	Domestic financing ³	2023

⁴ Domestic financing / no international financing identified

SUMP impacts: Projected results and impact

Implementing the measures identified in the SUMP is expected to significantly impact GHG emission reduction, improvement of the modal share of sustainable transport modes, and more. The following table presents the expected results and effects.

Impact Area

Expected Impact

GHG emission (SDG 11)

Projected emissions in absolute value:

	Baseline 2018	BAU 2025	SUMP 2025	BAU 2035	SUMP 2035	SUMP vs BAU 2035
Per capita	241 kg CO₂eq	284 kg CO₂eq	251 kg CO₂eq	367 kg CO₂eq	271 kg CO₂eq	-26.16%
Total	0.78 Mt CO2eq	1.14 Mt CO2eq	1.01 Mt CO2eq	2.00 Mt CO₂eq	1.48 Mt CO₂eq	-26.00%

Projected increase of annual GHG emissions by 2029, in percentage of the baseline:

- Business-as-usual scenario: +101%
- · SUMP scenario: +59%

Accessibility (SDG 11)

	Baseline 2018	BAU 2025	SUMP 2025	BAU 2035	SUMP 2035
Total population covered	2,212,283	4,028,557	4,028,557	5,599,757	5,599, 757
Population at 500m or less of public transport stops	1,350,000	1,415,700	1,405,500	1,528,900	1,888, 600
% Access	42%	35%	35%	27%	34%

Air pollution (SDG 11)

Improved but not quantified

Modal share

Percentage of total trips being realised with Public Transport

	Baseline 2018	BAU 2025	SUMP 2025	BAU 2035	SUMP 2035
The modal share of Public Transport	2%	1%	9%	2%	19%
The modal share of walking and cycling	32%	31%	34%	29%	35%
Total	34%	32%	43%	31%	54%

Road safety (SDG 3)

	Baseline 2018	SUMP 2025	SUMP 2035
Deaths	1,000	800	500
Heavily wounded	5,000	4,000	2,500

- 66 M€ Secured international grant from AFD for "Yaoundé Coeur de Ville" project
- 15 M€ Secured national funding from Cameroon's government for the 'Yaoundé Coeur de Ville' project

Mobilised finance (SDG 17)

- 2 M€ Secured grant for the implementation of SUMP governance measures, including the creation of a
 Transport Organising Authority, an Urban Planning Agency, and the formalisation of moto-taxis and informal
 buses through outreach
 (European Union)
- 40 M€ Associated finance from the World Bank for urban road updates and pilot projects for non-motorised transport. The measures have been identified before the SUMP but are included in the plan.

Expected institutional impact

The measures identified in the SUMP are complemented with a National Urban Mobility Policy, adopted in parallel to the SUMP process

Insights from practice: lessons learned from the SUMP development

On the occasion of the 3rd MobiliseYourCity conference in Yaoundé in 2019 and the official presentation of the SUMP, a reflection group⁵ Composed of different stakeholders' proposed areas for improvement for future SUMPs, particularly on the African continent.

I. Placing the project owner at the centre of the SUMP process is important: authorities responsible for mobility should lead the planning process with the support of MobiliseYourCity partners.

Recommendation: When drafting the ToRs, clearly state the role of the responsible local authorities in project ownership and ensure their capacity to monitor the process.

II. Ambitious surveys such as "household travel surveys" are expensive, sometimes not adapted to the local context and available resources, and can produce unreliable data.

Recommendation: Demographic surveys (with car and two-wheeler motorisation rates) can be carried out based on existing national surveys. They should be supplemented by origin-destination surveys (such as a simplified household survey or road corridor and public transport network surveys) and qualitative socio-anthropological fieldwork to better capture the individual and collective factors behind respondents' behaviour regarding urban mobility. These two methodologies can be complementary, and origin-destination surveys would rapidly identify many journeys.

III. Predictive traffic models are expensive to develop. They can create the illusion of a "scientific" approach and may generate a gap between their results and the actual appropriation by technicians and local elected officials.

Recommendation: Limit the use of models and base them on the observation and expertise of local counterparts and consultants (expert opinion). The SUMP must help identify "strong lines", a concept that does not necessarily lead to choosing one mode rather than another, and use the models in a second stage, like during pre-feasibility studies.

IV. The link between transport and urban planning is insufficiently considered, even though transport planning documents can be used to implement other types of plans.

Recommendation: Strengthen local project management, institutional structuring, and governance, build capacities of local contracting authorities, and provide them with a framework for steering the implementation of SUMP action plans. When master plans exist for urban planning in African cities, they should be included in the terms of reference of the SUMP, even if their application is limited to a limited number of projects. Work done at the national level (NUMP) should contribute to providing a legislative and legal framework and sources of funding.

⁵ Reflection group led by CODATU: Patrice Berger and Thibaut Descroux (UrbaLyon), Thierry Goin (CEREMA), Marie Dols (consultant), Philipe Bossuet (SYTRAL), Jean-Jacques Helluin, Mael Martinie, Sofia Martin, Antoine Clémot (CODATU).

SUMP Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Secured	Amount M€
Ringroads, street shaping, traffic management & crossings, parking facilities	AFD C2D	Secured	66.00
Informal transport project	European Union	Secured	4.50
Institutional reforms	Government of Cameroon	Secured	2.10
SUMP governance, CR, studies, taxis and moto-taxi management	4 M EUR grant from EU to Douala / Yaoundé (impl. = CODATU) for SUMP soft measures implementation	Secured	2.00
Control and training centre for mobility and transport	Government of Cameroon	Planned	3.80
Project Yaoundé Cœur de Ville	AFD C2D	Secured	43.60
Project Yaoundé Cœur de Ville	Government of Cameroon	Secured	5.50
Capacity building for CUY staff	European Union	Secured	2.04
Capacity building for CUY staff	Communauté Urbaine de Yaoundé	Secured	0.35
The creation of a Public Transport and Soft Mobility Unit	European Union	Secured	3.28
The creation of a Public Transport and Soft Mobility Unit	AFD	Secured	0.50
Improving Air Quality	FASEP	Secured	0.47
MoVe Yaoundé and preparation of the North-South BRT Line	European Union, BMZ, AFD		10.87

Associated financing

Description	Source of financing	Secured	Amount
Ring roads, street shaping, traffic management & crossings, parking facilities	EU AFIF facility for Yaoundé ring road design preparation studies	Planned	10.00

Support from the Partnership: Implementation Support

Project description: Mobilité Verte (MoVe) Yaoundé

Technical Assistance: Implementation of SUMP through Move Yaounde project (2023-2027)

Funded by: Co-financing by European Commission (EC), German Ministry for Economic Cooperation and Development (BMZ) financial contribution

Funding amount: 10.87 M€ (9.8 M€ EC, 0.57 M€ BMZ, 0.5 M€ AFD)

Implemented by: 6.3 M€ implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 0.5 M€ implemented by the Agence Française de Développement (Team Europe Approach)

Local counterparts and SUMP Implementation agency: Urban Community of Yaoundé (CUY), Ministry for Habitat and Urban Development (MINHDU)

Supported activities:

- Project preparation for the Bus Rapid Transit System "Trans-Yaoundé" (AFD)
- Feasibility study for professionalisation of the paratransit sector (GIZ)
 - » Census and diagnostic
 - » Training (to be developed based on diagnostic results)
 - » Stakeholder engagement
 - » Foreseen output: Digital platform for the registration of taxis
- Green corridors and redevelopment of downtown Yaoundé (GIZ)
 - » Reorganisation of street vendors: Pilot project of 2-3 main streets, study on street vendors.
 - » Make the city centre safer, more accessible and more comfortable through urban greening and tactical urban planning operations
 - » Redevelopment of public spaces for the entire population of Yaoundé
 - » App development "Alert Gender-based violence"
 - » Study on road safety to identify accident hotspots
 - » Stakeholder engagement to discuss redesign of public spaces

Main SUMP implementation challenges

Decision-making was complicated by overlapping responsibilities, coordination challenges, and constrained financial resources.

The political partner for urban mobility is the Ministry of Housing (MINDUH) rather than the Ministry of Transport, which is responsible for regulating taxis but is not involved in city and infrastructure design. The MoveYaounde team operates between these two institutions, complicating decision-making on implementation. Although the Urban Community of Yaoundé (CUY), the project's local counterpart, implements project activities in the city, it is not the primary institution in charge, and government elections can lead to changes that affect coordination. CUY also lacks decision-makers, making it difficult to establish a shared vision between the national and city governments. In addition, the implementation process is challenged due to a lack of financial resources, meaning the paratransit reform roadmap cannot be fully implemented.

Takeaways on SUMP implementation support

Although there was a considerable delay between the approval and implementation of the SUMP, its data-driven recommendations have played a key role in guiding current decision-making and supporting ongoing projects.

Overall, a significant time gap existed between SUMP approval and the start of implementation support, which prolonged the process. Nevertheless, the SUMP proved successful in that its recommendations serve as the foundation for decision-making in Yaoundé. Both local and national assistance continue to use the SUMP and NUMP to implement projects, with the SUMP diagnostic and recommendations regularly presented in workshops and external meetings, showing that the government is eager to showcase visible results. The SUMP document, being data-based, enhances credibility and reduces doubts regarding the rationale behind certain project implementations. Another beneficial product was the roadmap for paratransit reform, referred to regularly. However, one challenge is that issues tend to be identified only during project implementation as activities progress.

The way forward

Move Yaoundé seeks to improve urban mobility through safer infrastructure, reduced gender-based violence, and a professionalised taxi sector, with key activities planned for 2025 and 2026.

The Move Yaoundé initiative aims to foster safer, sustainable, efficient, inclusive, and affordable mobility in the city. The expected outcomes include continuous and safe pavement development, well-defined horizontal signage, a decrease in gender-based violence (GBV), a reduction in greenhouse gas (GHG) emissions, the development of green spaces, and the professionalisation of the taxi transport sector. The local team will continue to progress in implementation to reach these objectives in the coming three years. Upcoming activities for 2025 include conducting a study on street vendors and a diagnosis of the paratransit sector. The first construction works for the planned BRT system are foreseen to start in 2026.

Other projects in Yaoundé

1. Implementation and improvement of crossroads and terminals in the framework of the Yaoundé Centre Programme

This programme aims to enhance access conditions to the city centre by improving crossroads and public transport terminals, as well as upgrading walking infrastructure. The detailed studies to implement the project started in 2019 and finished in late 2021. Its construction started in 2022.

2. Construction of a ring road

This project is expected to enhance traffic conditions in the city by the construction of a ring road around Yaoundé. The technical studies were completed for two of the five road segments of the ring, leading to the tender for their construction. Studies for the third ring segment are being prepared, and the project has been declared of public utility. Construction works for the first two segments are expected to start soon.

3. Inclusive and Resilient Cities Development Project (PDVIR for its acronym in French)

In 2019, this project kicked off to provide accessible transport infrastructure for the most underprivileged. The project will improve connectivity of two Yaounde Districts in Yaoundé through 15 km of structural roads and two pilot projects promote walking. It consists of four components, including capacity building, disaster management, and infrastructure enhancement, which will facilitate the connection of routes between Yaoundé's 4th and 5th districts and promote community well-being through additional facilities like sports grounds and waste bins.

4. Support to the cities of Douala and Yaoundé in the implementation of their SUMPs

This project, financed by the EU, allows capacity development support for Cameroonian authorities about urban mobility by funding of decentralised cooperation between Bordeaux Metropole and Yaoundé and Douala. Besides strengthening local capacities, the project goals include structuring a transport authority, creating a mobility observatory, organising participation workshops, and structuring an urban planning agency. The project will be launched in 2022

5. Training for city officials

Awareness of city officials in charge of road projects has been raised on multimodality and public spaces management. Training sessions have been conducted to propose low-cost, soft measures, such as crossroad redesign, bus stops, circulation schemes, etc., to boost implementation.

6. Implementation of instruments to reduce air pollution

Together with other Cameroonian authorities, Yaoundé's administration developed a programme to tackle air pollution, following the adoption of SUMP. Considering the alarming results of preliminary air quality measurements, a project funded by a donation of 337 million FCFA from the French Treasury has led to deploying 40 micro-sensors throughout the city to monitor delicate particulate matter in real-time. The mayor promotes tactical urbanism to reduce traffic-related pollution, with initiatives like pedestrianisation beginning in November 2021. The city is actively working on three FASEP projects, with one specifically focused on deploying fixed and mobile sensors in high-traffic areas to measure air quality. A management unit for air quality will be established to maintain and oversee the project, aiming to make Yaoundé less polluted and promote sustainable mobility practices.

7. Urban Master Plan (PDU)

The Urban Master Plan for Yaoundé outlines the city's needs between 2023 and 2035, focusing on real estate, mobility, demographic growth, and socio-economic development. Adopted by the Urban Community of Yaoundé (CUY) in February 2023, the new Master Plan includes regulations and a layout for the city by 2035. The plan aims to transform Yaoundé into a well-structured metropolis with functional multimodal mobility and equitable access to urban social services in a healthy environment. Additionally, it identifies key development aspects such as access to essential services, urban mobility, and governance to ensure strategic orientations for future growth. Following the underperformance of the initial plan adopted in 2008, which saw only 13% of actions completed, the CUY has revised the urban planning framework to meet the city's future needs better.

Highlights from the past year

The official launch of the MOVE-Yaoundé initiative in Yaoundé on 24 January 2024 marked an essential step towards constructing the Bus Rapid Transit (BRT) system and other projects as listed above. Another milestone was achieved in July 202466, when representatives from the city government, EIB, EU and AFD came together and reviewed projects underway to transform the city of Yaoundé, including Yaoundé Cœur de Ville, Move Yaoundé, the Urban Platform in Cameroon, as well as the Yaoundé Bypass and the BRT. The discussions enabled both parties to assess the preparation level and look at the other projects mentioned above.

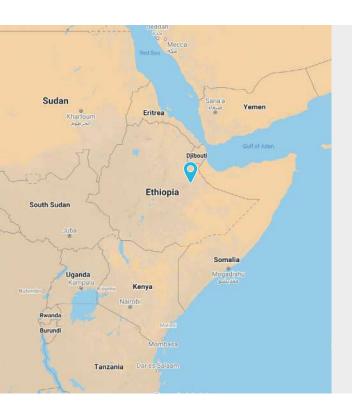
Last updated in December 2024

⁶ Dossier Presse-MoVe-YDE.pdf

Dire Dawa, Ethiopia

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 70 km²

Population: 408,000 (2020) | Growth rate: 4,4%

Region capital city

GDP per capita: USD 855.8 (2019)

Modal Share:

Informal public transport: 42%

Walking: 46%
Private cars: 4%

Private motorbikes or 2-wheelers: 1%

Other: 8%

National GHG emissions per capita: 1,60 (tCO₂eq)

Proportion of transport related GHG emissions: 3,317 %

Exposure to climate change: HIGH

Context

Located on a large flat plain between Addis Ababa and Djibouti, Dire Dawa is meant to become the main economic hub of eastern Ethiopia, Nowadays, it hosts a high density of commercial activities, including markets that generate important flows of goods and people at different scales, putting pressure on roads and public spaces. In the medium term, national freight transit is expected to increase, along with the development of the national road network and the integration of the new railway into the logistic system.

477,000 trips are made daily in Dire Dawa. Mobility patterns reveal a relatively high propensity to move (1.8 daily trips per inhabitant), Dire Dawa is located on a secondary national/international freight corridor between Addis Abeba and Djibouti, meaning that a significant volume of trucks transit through the city. Dire Dawa has no transportation master plan, but there exists an Ethiopian Transport Master Plan 2022-2058.

Two railway lines currently serve Dire Dawa. The century-old Ethio-Djiboutian railway is now nearly disused and only operates one or two regional services between Dire Dawa and Dewele at the Djibutian border. The new Chinese-built railway line between Addis Ababa and Djibouti has been operating since 2018 and links both passenger and freight services with a planned dry port near the new station. Railway services do not yet appear as a competitive alternative to road freight, but services are only beginning.

 $^{^{7}} Source: \underline{https://www.epa.gov.et/images/PDF/Climatechange/DireDawa_GHG\%20Emissions\%20Inventory\%20Report\%20V8.pdf} \\$

⁸ http://unidoseoul.org/en/files/2023/11/Ethiopia-Transport-Master-Plan-2022-2052_Summary-Report.pdf

The road network in Dire Dawa can accommodate the different mobility flows going through the city, whether for transit, exchange, or internal purposes, without major disturbance. However, the pressure exerted on the network is unbalanced, with an overwhelming weight on local roads and limited coverage of structuring ones (primary, secondary, tertiary).

There is no existing mass transit system. Bajaj represents most of the public transport supply, with 6,000 units and a hundred lines, it can be used for both people and goods. Bajaj supply varies according to places in the city and the time of the day. Bajaj is a fully private supply that only targets the most solvent market segments and does not properly address the others, leaving some mobility demand unanswered. During peak hours, a few minibuses provide a complementary supply to Bajaj on three routes. The publicly operated city bus service consists of 10 urban routes and is limited to peak hours (four rides a day).

Urban and road transport are managed at both the federal and local levels. Although responsibilities and perimeters are properly defined, some road or urban transport interfaces can be challenging to manage. The city and the region of Dire Dawa are under the mayor's authority which manages the nine urban *Kebeles* with different transport-related duties falling under its authority: city bus, road authority and traffic police. The Federal Transport Authority (FTA) is another major player regulating the transport sector through the delivery of licenses. It is the main interlocutor for Bajaj drivers' associations. The Ethiopian Road Authority (ERA) manages the interurban road network and national interest road projects in the city (industrial park).

The Dire Dawa Administration, the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure and running public transport costs. The budget for the urban transport sector was set between 480 and 655 million BRR (14 - 19 million USD) in the past few years.

Challenges and main aim of the SUMP

Mobility in Dire Dawa faces several problems simultaneously, including:

- · Lack of structured road network
- Lack of integrated management for road axes
- Lack of proper organisation of Bajaj supply
- Lack of infrastructure for non-motorised modes, resulting in inadequate consideration in planning, investments, and policymaking
- Lack of robust organisation of logistic chains
- Lack of an integrated mobility strategy or multimodal approach
- Lack of coordination between economic, urban, and mobility development strategies

The technical assistance will contribute to institutional strengthening by providing training sessions on the following topics:

- Data analysis and updating (including household surveys analysis) module 3 or 4
- Modelling and demand studies module 3 or 4 (after the model has been developed)
- SUMP follow-up and evaluation, including the use and analysis of the household surveys module 4

Support from the Partnership

Technical assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission

Funding amount: EUR 550,000

Implemented by: AFD through Intra-ACP

Local counterpart: Dire Dawa Administration mayor and Cabinet Affairs Office, Finance and Economy Bureau

Supported activities:

• Support to the city government for the preparation of a SUMP

Status of implementation

Project start: 2019 Q4

Expected project completion: 2022 Q3

Completed outputs:

• Reporting notes following missions 1 & 2

- · Minutes of stakeholders meeting
- Surveys results
- Module 1 report (Urban mobility diagnosis)
- Module 2 report (Vision, goal setting and measure planning)
- Training on transport modelling conducted in July 2021
- Module 3 Action plan
- Presentation of the final SUMP and implementation strategy

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Main road projects	EUR 94,635,000
Micro road projects	EUR 15,000,000
Road design guidelines	EUR 312,458
Road maintenance plan	EUR 312,458
Target road and crossroad network	EUR 312,458
Road axis upgrade projects	EUR 6,014,120
Traffic and mobility management	EUR 14,120
Circulation plan	EUR 387,458
Mobility management integrated taskforce	EUR 28,239
Paratransit structuration and development	EUR 6,034,053
Quality of service targets/charter/commitment	EUR 234,136
Target local transit network	EUR 387,458
Paratransit sector capacity reinforcement	EUR 900,000
Bus network development	EUR 27,080,457
BRT development	EUR 157,659,204
Mass transit development plan	EUR 612,458
Mass transit fare integration	EUR 600,000
Main NMT projects	EUR 3,000,000

NMT micro projects EUR 6624,450 Bikes for all EUR 150,000 NMT integration in transport and mobility projects EUR 609,136 NMT development plan EUR 609,136 Pedestrian-centred approach EUR 300,000 Walking in Dire Dawa EUR 300,000 Freight terminals - Urban logistics projects EUR 9,000,000 Urban logistics development plan EUR 450,000 Logistic pilot EUR 450,000 Transport hub reorganisation EUR 3,593,750 Sustainable mobility planning process EUR 1,500,00 SUMP evaluation EUR 9,907 Multimodality strategy EUR 9,907 Multimodality strategy EUR 8,000 Energy-wise mobility development EUR 8,000 Energy-wise mobility development EUR 8,200 Integrated Mobility financing EUR 8,239 Sustainable mobility project management EUR 9,800,00 Integrated Mobility financing EUR 8,239 Sustainable mobility project management EUR 8,000,00 Inclusive, green and gender aware mobility EUR 9,000,00 <t< th=""><th>Measure</th><th>Cost Estimate</th></t<>	Measure	Cost Estimate
NMT integration in transport and mobility projects EUR 609,136 NMT development plan EUR 609,136 Pedestrian-centred approach EUR 300,000 Walking in Dire Dawa EUR 300,000 Freight terminals - Urban logistics projects EUR 9,000,000 Urban logistics development plan EUR 450,000 Logistic pilot EUR 24,917 Transport hub reorganisation EUR 3,322 Sustainable mobility planning process EUR 150,000 SUMP evaluation EUR 9,967 Multimodality strategy EUR 600,000 Energy-wise mobility development EUR 80,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 28,239 Sustainable mobility project management EUR 450,000 Inclusive, green and gender aware mobility EUR 80,000 Inclusive, green and gender aware mobility EUR 82,239 TOD o project opportunities EUR 6016,611 TOD handbook EUR 25,000	NMT micro projects	EUR 6,624,450
NMT development plan EUR 609,136 Pedestrian-centred approach EUR 300,000 Walking in Dire Dawa EUR 300,000 Freight terminals - Urban logistics projects EUR 9,000,000 Urban logistics development plan EUR 450,000 Logistic pilot EUR 24,917 Transport hub reorganisation EUR 3,593,750 Sustainable mobility planning process EUR 33,22 Mobility data management EUR 150,000 SUMP evaluation EUR 900,000 Energy-wise mobility development EUR 800,000 Energy-wise mobility development EUR 800,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 82,239 Sustainable mobility project management EUR 800,000 Inclusive, green and gender aware mobility EUR 300,000 Inclusive, green and gender aware mobility EUR 28,239 TOD 9 project opportunities EUR 6,016,611 TOD handbook EUR 225,000	Bikes for all	EUR 150,000
Pedestrian-centred approachEUR 300,000Walking in Dire DawaEUR 300,000Freight terminals-Urban logistics projectsEUR 9,000,000Urban logistics development planEUR 450,000Logistic pilotEUR 24,917Transport hub reorganisationEUR 3,593,750Sustainable mobility planning processEUR 3,322Mobility data managementEUR 150,000SUMP evaluationEUR 9,967Multimodality strategyEUR 600,000Energy-wise mobility developmentEUR 850,000Integrated Transport AuthorityEUR 28,239Integrated Transport AuthorityEUR 28,239Sustainable mobility project managementEUR 450,000Inclusive, green and gender aware mobilityEUR 300,000Inclusive, green and gender aware mobilityEUR 28,239TOD * project opportunitiesEUR 28,239TOD handbookEUR 20,0814TOD development planEUR 25,000	NMT integration in transport and mobility projects	EUR 609,136
Walking in Dire DawaEUR 300,000Freight terminals-Urban logistics projectsEUR 9,000,000Urban logistics development planEUR 450,000Logistic pilotEUR 24,917Transport hub reorganisationEUR 3,593,750Sustainable mobility planning processEUR 3,322Mobility data managementEUR 150,000SUMP evaluationEUR 9,967Multimodality strategyEUR 600,000Energy-wise mobility developmentEUR 80,000Integrated Transport AuthorityEUR 28,239Integrated Transport AuthorityEUR 28,239Sustainable mobility project managementEUR 80,000Inclusive, green and gender aware mobilityEUR 300,000Inclusive, green and gender aware mobilityEUR 300,000Inclusive, green and gender aware mobilityEUR 28,239TOD * project opportunitiesEUR 20,016,611TOD handbookEUR 230,314TOD development planEUR 225,000	NMT development plan	EUR 609,136
Freight terminals : CUR 9,000,000 Urban logistics projects : CUR 9,000,000 Urban logistics development plan : CUR 450,000 Logistic pilot : CUR 24,917 Transport hub reorganisation : CUR 3,593,750 Sustainable mobility planning process : CUR 3,322 Mobility data management : CUR 9,967 SUMP evaluation : CUR 9,967 Multimodality strategy : CUR 600,000 Energy-wise mobility development : CUR 450,000 Energy-wise mobility development : CUR 300,000 Integrated Transport Authority : CUR 8,239 Integrated Mobility financing : CUR 8,239 Sustainable mobility project management : CUR 450,000 Inclusive, green and gender aware mobility : CUR 300,000 Inclusive, green and gender aware mobilit	Pedestrian-centred approach	EUR 300,000
Urban logistics projectsEUR 9,000,000Urban logistics development planEUR 450,000Logistic pilotEUR 24,917Transport hub reorganisationEUR 3,593,750Sustainable mobility planning processEUR 150,000Mobility data managementEUR 150,000SUMP evaluationEUR 9,967Multimodality strategyEUR 600,000Energy-wise mobility developmentEUR 800,000Integrated Transport AuthorityEUR 8,239Integrated Mobility financingEUR 8,239Sustainable mobility project managementEUR 450,000Inclusive, green and gender aware mobilityEUR 300,000Inclusive, green and gender aware mobilityEUR 28,239TOD *project opportunitiesEUR 28,239TOD handbookEUR 230,814TOD development planEUR 225,000	Walking in Dire Dawa	EUR 300,000
Urban logistics development plan EUR 450,000 Logistic pilot EUR 24,917 Transport hub reorganisation EUR 3,593,750 Sustainable mobility planning process EUR 3,322 Mobility data management EUR 150,000 SUMP evaluation EUR 9,967 Multimodality strategy EUR 600,000 Energy-wise mobility development EUR 300,000 Demand management EUR 300,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 28,239 Integrated Mobility project management EUR 300,000 Inclusive, green and gender aware mobility TOD 9 project opportunities EUR 230,814 TOD handbook EUR 230,001	Freight terminals	-
Logistic pilotEUR 24,917Transport hub reorganisationEUR 3,593,750Sustainable mobility planning processEUR 3,322Mobility data managementEUR 150,000SUMP evaluationEUR 9,967Multimodality strategyEUR 600,000Energy-wise mobility developmentEUR 450,000Demand managementEUR 300,000Integrated Transport AuthorityEUR 28,239Integrated Mobility financingEUR 28,239Sustainable mobility project managementEUR 450,000Inclusive, green and gender aware mobilityEUR 300,000Inclusive, green and gender aware mobilityEUR 28,239TOD op project opportunitiesEUR 28,239TOD handbookEUR 230,814TOD bevelopment planEUR 225,000	Urban logistics projects	EUR 9,000,000
Transport hub reorganisation EUR 3,593,750 Sustainable mobility planning process EUR 3,322 Mobility data management EUR 150,000 SUMP evaluation EUR 9,967 Multimodality strategy EUR 600,000 Energy-wise mobility development EUR 450,000 Demand management EUR 850,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 28,239 Sustainable mobility project management EUR 450,000 Inclusive, green and gender aware mobility EUR 300,000 Inclusive, green and gender aware mobility EUR 28,239 TOD 9 project opportunities EUR 28,239 TOD handbook EUR 20,16611 TOD development plan EUR 25,000	Urban logistics development plan	EUR 450,000
Sustainable mobility planning process Mobility data management EUR 3,322 Mobility data management EUR 150,000 SUMP evaluation EUR 9,967 Multimodality strategy EUR 600,000 Energy-wise mobility development EUR 450,000 Demand management EUR 300,000 Integrated Transport Authority Integrated Mobility financing EUR 28,239 Sustainable mobility project management EUR 300,000 Inclusive, green and gender aware mobility Inclusive, green and gender aware mobility TOD 9 project opportunities EUR 230,814 TOD development plan EUR 225,000	Logistic pilot	EUR 24,917
Mobility data management EUR 150,000 SUMP evaluation EUR 9,967 Multimodality strategy EUR 600,000 Energy-wise mobility development EUR 450,000 Demand management EUR 300,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 28,239 Sustainable mobility project management EUR 450,000 Inclusive, green and gender aware mobility EUR 28,239 Integrated Mobility project management EUR 28,239 TOD ° project opportunities EUR 28,239 TOD handbook EUR 28,239 TOD development plan EUR 230,814	Transport hub reorganisation	EUR 3,593,750
SUMP evaluation EUR 9,967 Multimodality strategy EUR 600,000 Energy-wise mobility development EUR 450,000 Demand management EUR 300,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 28,239 Sustainable mobility project management EUR 450,000 Inclusive, green and gender aware mobility EUR 28,239 TOD ° project opportunities EUR 28,239 TOD handbook EUR 28,239 TOD development plan EUR 28,239	Sustainable mobility planning process	EUR 3,322
Multimodality strategy Energy-wise mobility development Energy-wise mobility development Eur 450,000 Demand management Eur 300,000 Integrated Transport Authority Eur 28,239 Integrated Mobility financing Eur 28,239 Sustainable mobility project management Eur 450,000 Inclusive, green and gender aware mobility Eur 300,000 Inclusive, green and gender aware mobility Eur 28,239 TOD ° project opportunities Eur 6,016,611 TOD handbook Eur 230,814 TOD development plan	Mobility data management	EUR 150,000
Energy-wise mobility development Demand management EUR 300,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 28,239 Sustainable mobility project management EUR 450,000 Inclusive, green and gender aware mobility Inclusive, green and gender aware mobility EUR 28,239 TOD 9 project opportunities EUR 6,016,611 TOD handbook EUR 230,814 TOD development plan EUR 225,000	SUMP evaluation	EUR 9,967
Demand management EUR 300,000 Integrated Transport Authority EUR 28,239 Integrated Mobility financing EUR 28,239 Sustainable mobility project management EUR 450,000 Inclusive, green and gender aware mobility EUR 300,000 Inclusive, green and gender aware mobility EUR 28,239 TOD ° project opportunities EUR 6,016,611 TOD handbook EUR 230,814 TOD development plan EUR 225,000	Multimodality strategy	EUR 600,000
Integrated Transport Authority Integrated Mobility financing Sustainable mobility project management Inclusive, green and gender aware mobility Inclusive, green and gender aware mobility TOD oproject opportunities TOD handbook EUR 28,239 EUR 300,000 EUR 28,239 EUR 28,239 EUR 28,239 EUR 28,239 EUR 230,814 EUR 230,814 EUR 225,000	Energy-wise mobility development	EUR 450,000
Integrated Mobility financing Sustainable mobility project management Inclusive, green and gender aware mobility Inclusive, green and gender aware mobility EUR 28,239 TOD o project opportunities TOD handbook EUR 230,814 TOD development plan EUR 225,000	Demand management	EUR 300,000
Sustainable mobility project management Inclusive, green and gender aware mobility Inclusive, green and gender aware mobility EUR 300,000 Inclusive, green and gender aware mobility EUR 28,239 TOD ° project opportunities EUR 6,016,611 TOD handbook EUR 230,814 TOD development plan EUR 225,000	Integrated Transport Authority	EUR 28,239
Inclusive, green and gender aware mobility Inclusive, green and gender aware mobility TOD ° project opportunities TOD handbook EUR 28,239 EUR 6,016,611 EUR 230,814 TOD development plan EUR 225,000	Integrated Mobility financing	EUR 28,239
Inclusive, green and gender aware mobility TOD ° project opportunities EUR 28,239 EUR 6,016,611 TOD handbook EUR 230,814 TOD development plan EUR 225,000	Sustainable mobility project management	EUR 450,000
TOD ° project opportunities EUR 6,016,611 TOD handbook EUR 230,814 TOD development plan EUR 225,000	Inclusive, green and gender aware mobility	EUR 300,000
TOD handbook EUR 230,814 TOD development plan EUR 225,000	Inclusive, green and gender aware mobility	EUR 28,239
TOD development plan EUR 225,000	TOD 9 project opportunities	EUR 6,016,611
	TOD handbook	EUR 230,814
TOD funding opportunities -	TOD development plan	EUR 225,000
	TOD funding opportunities	-

The following table summarises the total capital expenses (CAPEX) estimates for different measures in the SUMP.

Urban transport investment measures	CAPEX Estimate
Public transport and NMT	EUR 204,516,269
Street shaping urban roads and traffic management	EUR 117,016,311
Other measures	EUR 21,889,098
Total	EUR 343,421,678

⁹ TOD: Transit Oriented Development

Projected impacts

The impact projections presented in this section should be read considering the prospect of a significant population increase. With an estimated population of 408,000 in 2020 and an urbanisation rate of 4,4% averaged over recent years, the population will reach 627,574 inhabitants in 2030, following the current trend.

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2020	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	-0,011 Mt CO ₂ eq -40% compared to BAU	0,011 Mt CO₂eq	0,029 Mt CO₂eq	0,018 Mt CO₂eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	-19 kg CO₂eq / capita	27 kg CO₂eq / capita	47 kg CO₂eq / capita	28 kg CO₂eq / capita
Access Increase in the proportion of the population living within 500 meters or less of a public transport stop	+28%	84%	58%	86% (+196,500 people with access compared to baseline)
Modal share Increase in the modal share of public transport, walking and cycling trips	Public transport: +1% Walking: +4% Cycling: NA% TOTAL: +5%	Public transport: 42% Walking: 46% Cycling: 0% TOTAL: 88%	Public transport: 43% Walking: 40% Cycling: NA% TOTAL: 83%	Public transport: 44% Walking: 44% Cycling: NA% TOTAL: 88%
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	- 1%	12%	10%	9%

Highlights

Dire Dawa completes completed the preparation of its SUMP to keep pace with strong ambitions and rapid urban growth

Dire Dawa, Ethiopia, completed the preparation of its Sustainable Urban Mobility Plan (SUMP) in 2022. This SUMP is a key document that outlines the city's strategy to improve its transportation system, reduce traffic congestion, and promote sustainable mobility.

The SUMP developing process involved extensive consultation with stakeholders, including government officials, private sector representatives, civil society organiszations, and community members. The plan's objectives include increasing public transportation services, improving road safety, reducing greenhouse gas emissions, and promoting non-motoriszed transport modes such as walking and cycling.

The SUMP is expected to impact Dire Dawa's residents life quality, as it will create a more sustainable and efficient urban environment. The plan is aligned with Ethiopia's national transport policy, which aims to promote sustainable and inclusive transportation systems.

This achievement highlights Dire Dawa's authorities' commitment to improving the city's transportation system and promoting sustainable mobility, the role played by AFD and the MobiliseYourCity partnership in supporting cities in their transition towards sustainable mobility.

Linking urban planning and mobility planning will become essential considering the changing city-scale

The number of inhabitants in Dire Dawa is expected to triple by 2040 (reaching 800 000 – 900 000 people). The patterns of this growth will significantly influence the mobility behaviour in the city. The SUMP scenarios are thus structured around the different future shapes of the city, considering the construction of an already planned new industrial city 15km away from the urban core. While the *scattered city scenario* could enlarge the urban area by 114km², significantly increasing the length of trips, the alternative, desired scenarios of a polycentric city would ensure more efficient and sustainable transport through densified development. They would also reduce the newly urbanised areas until 2040.

A structural plan for urban development has been prepared by the municipality. Linking the SUMP to the structural plan and coordinating between urban development and mobility planning will be key to future sustainable mobility in Dire Dawa.

Walking is a shadow mode - data can shed a better light on its importance

The household survey results indicated that most trips in Dire Dawa are made on foot (46%), Collecting this data showed that the importance of walking had been underestimated before by local decision-makers and helped to put active modes of transport on the agenda in the SUMP process. Thus, the SUMP aims to keep the current modal share of active modes while making the city entirely walkable. Non-motorised modes will, for instance, be considered in planning and upgrading roads to ensure that enough space is provided for pedestrians.

Last update in December 2024

Kumasi, Ghana

Status of the project: Completed preparation of the Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 2,603 km²

Population: 2,945,000 (2021 census) | Growth rate: + 4.00%

Region capital city

GDP per capita: USD 4,700 (National)

Motorised Modal Share (Road Space Usage)

Formal public transport (Bus): 15% Informal public transport (Trotro): 53%

Private cars: 14%

Taxis: 12%

Freight vehicles: 1% Other (LDV): 4%

(For all modes, not only road)

NMTs: 16%

Private cars/bikes: 20%
Public transport: 63%

National GHG emissions per capita: 1.5 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

Since the 2010s, more than half of Ghana's population (precisely 57%) has lived in urban areas. Despite their rapid expansion in size and population, most cities lack infrastructure, including transport infrastructure. In the last few years, institutions have been unable to cope with the rapid urban transition. Ghana has started seeing the side effects of rapid urbanization, including congestion, unregulated urban expansion, and limited access to services and affordable housing.

Kumasi is the second largest city in Ghana. The greater Kumasi Metropolitan Area (gKMA) is the result of multiple extensions of the city's perimeter, including inner Kumasi (KMA) and 6 additional municipalities and districts. It covers a total land area of 2,582km² with a total population of 2,945,000 in 2021. Kumasi is set to increase to about 4,200,000 in 2030 and about 6 million inhabitants by 2040. The population density is expected to substantially increase, as urban sprawl, while built-up area in gKMA already increased from 681km² in 2017 to 819km² in 2021.

Rapid urbanisation in Ghana has implications for urban mobility. Severe traffic congestion and road safety issues are the consequence of over-reliance on low-capacity passenger vehicles, inadequate traffic management, heavy dependence on informal public transport services, insufficient facilities for walking and cycling, occupation of roads by hawkers, and so on.

The predominant mode of transport in Kumasi is *trotros*, minibuses carrying between 14 and 23 passengers, and shared taxis which take four passengers. These vehicles do not provide scheduled services and operate with the 'fill and go' principle, preventing passengers from planning their trips effectively.

Their large number compensates for the limited capacity of these vehicles. Distribution of cars on routes depends on the preferences of the operators, usually linked with the conditions of the roads, leading to an uneven distribution of transport services.

The SUMP diagnosis conducted in 2022 identified that tro tro is the dominant public transport mode in Kumasi (50% of total trips), followed by shared taxis (6%), pragias (5%). Private vehicles account for only 17% of the total trip number. The city received in 2017 60 buses from the Ministry of Transport for the introduction of a mass transit service (pilot BRT), and 20 of them were in operation in 2022. Offer delivered from these buses is very limited, with not more than two rides a day per route.

The different Metropolitan, Municipal, or District Assemblies (MMDAs), which are part of gKMA, are empowered by law with legislative responsibilities to make policies, including the enabling legislative instruments, to provide leadership for local transport policy and planning, pass common bye-laws on passenger transport and facilitate a fair and efficient regulatory environment by offering priority to operators using traffic management measures. The fact that the mandate over urban mobility is scattered among the various MMDAs forming gKMA represents a challenge for adopting and implementing an holistic mobility system over gKMA territory.

There is an existing Greater Kumasi Urban Development Master Plan, sponsored by JICA and coordinated by the Spatial Planning Department of KMA in collaboration with the 6 adjoining Assemblies that formed the Greater Kumasi Metropolitan Area. While there has been a lack of formal coordination among these bodies, the Departments of Transport within the MMDAs regulate paratransit through various measures, including registering 24 unions' vehicles, driver, and route registration. However, coordination among the MMDAs remains a challenge. Additionally, MMDA issues stickers to paratransit vehicles to summarise registration data. It's important to note that illegal operators, known as "wawa," also exist within the system.

At the national level, the Ministry of Roads and Highways and the Ministry of Transport (MoRT) are responsible for road infrastructure, while the Ministry of Railway Development is in charge of the mass-transit railway.

The local governments cannot borrow from international finance sources based on the Local Government Act of 2016. Systems and procedures are partially in place to monitor, evaluate and report on urban mobility.

The main urban mobility challenges Kumasi is facing are described below:

- Poor integrated land use planning and control procedures. This results in urban sprawl, traffic congestion on major roads, and poor road safety.
- Poor traffic management and the poor condition of the existing road network, connected with
- While the road network is generally well developed and structured, with an outer ring road for transit flows, there are
 significant issues with traffic management. The network has adequate capacity for current demand; however, traffic
 jams are frequent. This congestion is mainly due to behavioural problems, including illegal parking, trotros stopping
 on the carriageway, and road encroachments, alongside issues like the misuse of road space and inadequate
 pedestrian continuity.
- Inadequate facilities and general inefficiency of the public transport system, which cannot meet the demand.
- The institutional framework is not optimised for mobility operators and organisations. This affects profitability, the enforcement of policies, and the prevention of fleet renewal.
- The exhaust gas causes excessive air pollution from a fleet of vehicles that is mainly old and poorly maintained.
- Uncontrolled occupation of public space by shops.

The main aims of the SUMP are to produce a high-quality document, ready for adoption by the different assemblies of the gKMA, that identifies different measures to:

- Introduce mass transit public transport and regulate paratransit for more efficiency, safety, and affordability of public transport services
- Improve traffic management and safety measures, particularly reducing traffic congestion in the city centre.
- Improve pedestrian/Non-Motorized Transport facilities for walkability and safety.
- Improve the institutional and financial framework, given greater effectiveness in planning, designing, building, regulating, and operating the mobility system in the city.

- Improve the technical capacity of the professionals in transport and GHG reduction.
- Build capacities of local experts and other mobility actors in Kumasi to implement, monitor, and revise the Sustainable Urban Mobility Plan, serve as advocates of sustainable urban mobility planning, and transfer gained knowledge and experience with other cities in Ghana or the subregion.

The technical assistance contributes to institutional strengthening by inter alia, providing training sessions on selected topics.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 500,000

Implemented by: AFD through the MobiliseYourCity Africa Program

Local counterpart: Kumasi Metropolitan Assembly (KMA)

Supported activities:

- SUMP for Kumasi (including support for inception, diagnosis, vision and strategic objectives, scenario development and action planning, financing requirements and public participation)
- Specific mission: Establishment of an observatory of urban mobility data and GHG emissions

Status of the SUMP development process

Project start: 2021 Q1

SUMP Project completion: 2024Q1

SUMP Project adoption: 2024 Q1

Completed outputs:

- Signature of a Memorandum of Understanding between a delegate of the Kumasi Metropolitan Assembly (KMA) representing the different Greater Kumasi Metropolitan Area (GMA) assemblies and AFD.
- Support for the tender and selection of consultants
- · Inception phase and inception report
- MobiliseDays.
- · Diagnosis phase.
- · Vision/scenario phase.
- Action plan.
- Final SUMP report.

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure Cost Estimate (in million USD)

Active modes of mobility	USD 120,300,000
Quality sidewalks	USD 120,000,000
Shared bicycle system	USD 300,000
Road infrastructure, traffic management, parking offer	USD 133,900,000
Urban safety and environment improvement	USD 13,000,000
Traffic management in the city centre	USD 4,000,000
Centralised traffic management centre	USD 1,000,000
Inner ring road dualisation	USD 22,000,000
Development of critical link roads	USD 93,000,000
Development of on-street parking	USD 600,000
Development of a multi-storey car park	USD 300,000
Public transport	USD 739,500,000
Hierarchisation and restructuration of the public transit network	USD 3,500,000
BRT system development	USD 502,000,000
Quality bus services development	USD 174,000,000
Trotro services enhancement	USD 60,000,000
Institutional arrangements	USD 4,000,000
Institutional framework enhancement	USD 4,000,000
Regulation and enforcement enhancement	USD 0
TOTAL	USD 997,000,000

Projected impacts

Indicator	Impact 2035 (SUMP vs BAU)	Baseline - 2022	Projected 2035 BAU	Projected 2035 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	-0,13 Mt CO₂eq -18.57% compared to BAU	0,37 Mt CO₂eq	0,7 Mt CO₂eq	0,57 Mt CO₂eq
Access Increase in the proportion of the population living within 500 meters or less of a public transport stop	+20.1%	62.1%	62.1%	82.2%
Modal share Increase in the modal share of public transport (among motorised modes)	Public transport: +5%	Public transport: 76%	Public transport: 60%	Public transport: 65%
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	+ 1.2%	21.1%	16.2%	17.4%

It is important to note that the difference in the modal share of motorised transport between men and women is expected to decrease from -4% in the 2035 Business-as-Usual (BAU) scenario to -1% in the 2035 Projected SUMP scenario. This indicates a predicted improvement in gender equality in access to transport.

Insights from practice: lessons learned from SUMP development process

The SUMP diagnosis brings new insights into Kumasi's current mobility situation and future trends.

After thoroughly analysing Kumasi's urban mobility system, several key takeaways emerged that provide insights into the city's transportation network's strengths, weaknesses, opportunities, and threats.

- Kumasi is experiencing strong population growth and urban sprawl, which is expected to increase housing demand and urban development. This growth will likely lead to more congestion, higher travel times, and saturation in the city centre.
- Car ownership rates are expected to rise in Kumasi, particularly as the gender gap between men and women
 gradually decreases. This will lead to even more competition for urban space and reduced space for public
 transport stations and terminals.
- The current public transport system in Kumasi is working well and is affordable for passengers, but it faces significant challenges. For example, there are conflicts between different modes of transport and a lack of coordination between transport and urban planning.
- Kumasi's road network is relatively complete and logical, and the roads are of good quality where most urgent
 maintenance works have been done. However, there is a lack of alternatives to the road network, and the traffic
 conditions in the city centre around Kejetia market are difficult.
- Kumasi faces both opportunities and threats in terms of its urban mobility. Some opportunities include the existence of DOTs and transport unions, the population's acceptance of public transport, and investors' interest in Kumasi. Threats include inadequate space and pressure on land use for public transport terminals, the risk to the economic model of trotros, affordability, and fast unplanned growth of the metropolis.
- Regarding context, the World Bank is preparing the Kumasi Urban Mobility and Accessibility Plan (KUMAP), which
 will implement a BRT system in Kumasi. The World Bank has been involved in the SUMP and participated in the
 Mobilise Days and the Action plan presentation in Kumasi.
- The BRT project is captured in the SUMP proposal. The World Bank is considering organising their board for the KUMAP in July 2025 and is conducting an institutional assessment with the local authorities and development partners.

Perspectives for SUMP implementation

Implementation perspectives in Kumasi have been challenging due to Ghana's payment default situation, which began in 2022. This has limited ability to prepare for new activities. However, with the country on track to exit this situation through debt restructuring, there is renewed optimism for future progress.

Highlights in the last year

The main highlight of 2024 is the completion and adoption of the Kumasi SUMP in March 2024.

Last updated in December 2024

Bouaké, Ivory Coast

Status of the project: Completed preparation of the Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 120 km²

Population: 800,000 | Growth rate: +3%

Regional capital city

GDP per capita: USD 2,286 (National)

Modal Share:

Motorcycle: 54% Walking: 20%

Taxi: 11%

Individual car: 10%

Tricycle: 2%

Minibus "Gbaka": 2%

Truck: 2% Bicycle: 1%

National GHG emissions per capita: 0.98 (tCO₂eq)

Exposure to climate change: HIGH

Context

Bouaké sits at the crossroads of two major international road corridors in central Ivory Coast, linking Abidjan with Burkina Faso, Mali, Ghana, southern Guinea, and Liberia. As a key rail and air hub, the city also hosts a central wholesale market for regional food products, forming the backbone of its economy.

Transport system

While the primary road network is well-maintained along the key national routes, secondary roads remain underdeveloped, and tertiary roads in residential areas are often impassable, leading to isolation and spatial segregation in some neighbourhoods. As of 2014, only 20% of the city's 582 km road network was paved (122km), mainly in the city centre, while 23% (135km) was deemed passable. Although individual motorisation rates are low, parking on sidewalks is a persistent issue. The city's wide roads lack dedicated parking spaces and fail to accommodate pedestrian and cyclist safety, contributing to road safety concerns.

Since the bankruptcy of the *Société de Transport Urbain de Bouaké* (STUB) in 2011, informal transport has dominated public transport supply. Informal taxis, often fuelled by butane gas, pose significant safety risks, while minibuses ("Gbakas") account for a smaller yet more structured share of transport services.

The public bus transport service was redeployed in 2020 by lines operated by SOTRA (Société des Transports Abidjanais). To enhance intercity transport, a regional bus terminal is planned on the city's outskirts to reduce traffic disruption in the centre. Currently, informal modes (e.g. minibuses with 20 to 30 seats, called Massa / Dianra or Badjan) are the leading supplier of interregional transport of people and goods.

The most important mode of motorised transport is two-wheelers (including motorcycle taxis). It is economical, fast, suited to road conditions and less sensitive to traffic congestion. However, motorcycles and moto-taxis are involved in 60% (2016) of traffic crashes. Although hard to quantify, walking is an essential mode of mobility.

The transport of goods in the urban area is mainly provided by small vehicles (tricycles, pickups, or tarpaulin vans), whose traffic and parking contribute to congestion. Heavy truck traffic and parking, especially those crossing the city lacking an alternative route, negatively impact traffic and road conditions.

Institutional context

The local authorities involved in urban mobility include the city of Bouaké, the Regional Directorate of Transport, and the prefecture. Local institutions do not have the means to organise and regulate mobility, cross-cutting and multi-sectoral issues. However, in 2022, the Mayor of Bouaké created a working group on urban mobility (*Groupe de Travail sur la Mobilité Urbaine* – GTMU), intending to enhance cooperation and improve planning.

Bouaké cannot finance mass public transport infrastructure or access international finance sources, and there is no demand for such a system. No systems and procedures exist to monitor, evaluate and report on urban mobility. The GTMU will be one tool to improve the monitoring of urban mobility.

Challenges and the main aim of the SUMP

Mobility in Bouaké faces several problems simultaneously, including:

- The city's mono-centric organisation attracts many urban trips, while the low density of the urban grid increases travel distances.
- The inadequate quality of the road network, its weak functional hierarchy, and radial structure converging towards the city centre.
- The inadequate use of asphalt-surfaced roads (deficient organisation of traffic, management of intersections and parking, and severe road safety issues).
- Traffic congestion in the city centre and road safety issues. Lack of public mass transport service. Trips to and from specific neighbourhoods are limited to moto-taxis and walking.
- The presence of low-capacity passenger and goods transport service and paratransit sector.
- Lacking local institutional capacities to organise and regulate those problems.
- A lack of regulation through coercive measures and the absence of authority control.

Bouake's challenge is to adopt a strategy for sustainable urban mobility in line with the Urban Master Plan (SDU). This strategy considers the current and future challenges linked to climate change and sustainable development and the specific mobility needs of people in vulnerable situations (children, physically disabled, pregnant women, etc.).

The technical assistance contributes to institutional strengthening by collecting data on the current situation, supporting authorities in identifying the main challenges and measures to address them and organising tailor-made workshops on key mobility issues.

Support from the Partnership - Mobility Planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission

Funding amount: EUR 400,000

Implemented by: AFD through the MobiliseYourCity Africa Program

Local counterpart: Municipality of Bouake

Supported activities:

• Implementation of a SUMP

Status of the SUMP development process

Project start date: 2021 Q1

SUMP approval date: 2023 Q1

Completed outputs:

- Terms of Reference drafting
- Receiving and evaluation of the proposals
- Selection of the consultant and administrative assignment (contract signed in January 2021)
- Diagnosis of urban mobility in Bouaké
- · Survey on mobility practice in Bouaké
- Mobility scenarios: business as usual, improved, and ambitious
- Modelling of urban mobility
- Choice of a scenario and development of measures
- Creation of a GTMU
- Final report of the SUMP

The total cost of the measures, focusing on (1) urban planning, (2) transport organisation and (3) governance, is 18.2 billion CFA francs, or 27.8 million Euros, to be spread over the next 15 years.

The following table lists the measures identified in the SUMP action plan.

Measure Cost Estimate (EUR)

Urban planning	Sub-total: 21,340,000
M01 - Improve strategic junctions and traffic lights	EUR 2,500,000
M02 - Moderate traffic zones (30 and semi-pedestrian zones)	EUR 500,000
M03 - Develop/safeguard road crossings	EUR 500,000
M04 - Plant and decorate pedestrian walkways and waiting areas for public transport	EUR 30,000
M05 - Secure pedestrian routes in neighbourhoods	EUR 560,000
M06 - Pedestrian crossings in the lowlands	EUR 30,000
M07 – Develop the "grand marché" area through reallocating public space, support for itinerant merchants and traders, and cross-section improvement	EUR 1,500,000
M08 - Organise and rehabilitate interurban stations	EUR 2,2500,00
M09 - Cycle and pedestrian routes along the main network Including 10 km of sidewalk and 5 km of cycleway	EUR 250,000
M10 – Organise the lorry parking areas	EUR 8,000,000
M11 - Horizontal signs	EUR 720,000
M12 - Redesign the main network to promote safety and mixed-use uses	Included in road projects
M13 – Bus infrastructure improvements	EUR 3,350,000

Measure	Cost Estimate (EUR)
M14 – Exchange areas between small-scale transport and buses	EUR 1,000,000
M15 - Motorbike taxis stations	EUR 150,000
Transport organisation	Sub-total: 4,400
M16 - Raise awareness of good transport practices	EUR 50,000
M17 - Institutional transport: study of services pricing and marketing	EUR 300,000
M18 - Strategic study for the sustainability and development of SOTRA in Bouaké	EUR 1,000,000
M19 - Define and implement a traffic plan	EUR 750,000
M20 - Regulate the access of heavy goods vehicles and their circulation in the city	EUR 10,000
M21 - Taxi sector reorganisation	EUR 100,000
M22 – Establish collective taxi lines	EUR 800,000
M23 - Revitalise gbaka minibus routes and improve their governance	EUR 700,000
M24 – City centre parking management	EUR 170,000
M25 – Evaluate and promote electric motorbike taxis and tricycle development	EUR 150,000
M26 - Motorbike taxi sector regulation and professionalisation	EUR 200,000
M27 – Changing the image of the motorbike taxi sector through good practice promotion	EUR 150,000
M28 - Encourage the development of a motorbike taxi booking platform	EUR 20,000
Governance	Sub-total: 2,050
M29 – Empowerment of the town hall as an urban mobility organising authority	Integrated into M30
M30 – Technical assistance for the town hall urban mobility group	EUR 1,000,000
M31 - Entrust the City Council with the joint management of rehabilitation projects	No cost expected
M32 - Strengthen the routine maintenance service for rapid interventions	EUR 700,000
M33 - Create a traffic service - Set up a signalling system	EUR 200,000
M34 – Create a transport planning service	EUR 150,000

The following table summarises the total capital expenses (CapEx) estimates for different types of measures in the SUMP.

Urban transport investment measures	CapEx Estimate
Public transport and NMT	EUR 12,420,000
Street shaping urban roads and traffic management	EUR 4,650,000
Other measures	EUR 10,720
Total	EUR 27,790,000

Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Secured	Amount
Bouaké pilot projects on road safety	European Union	Secured	EUR 595,000
Bouaké local financing for SUMP	Commune de Bouaké	Planned	EUR 300,000
National financing under local management for SUMP	Ivory Coast national government	Planned	EUR 5,800,000
National financing for SUMP	Ivory Coast national government	Planned	EUR 12,200,000

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2021	Projected 2038 BAU	Projected 2038 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	-0,012 Mt CO₂eq	0,086 ¹⁰ Mt CO₂eq	0,198 Mt CO2eq	0,186 Mt CO2eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	-6,1 %	98 kg CO2eq / capita	226 kg CO₂eq / capita	213 kg CO₂eq / capita
Modal share Increase of the modal shares of trips by public transport, walking and cycling	Not quantified	Formal public transport: 0% Informal public transport: 42% Walking: 20% Cycling: 1% TOTAL: 63%	Not quantified	Not quantified
Road safety Decrease of traffic fatalities in the urban area per 100,000 inhabitants	-2.95 fatalities/100 000 hab	5.9 fatalities/100 000 hab	5.9 fatalities/100 000 hab	2.95 fatalities/100 000 hab

Insights from practice: perspectives for implementation

Adopting a financially realistic plan is key to moving into implementation

The total cost of PMUD measures and actions is 27.8 million Euros over the next 15 years. While the amount to be mobilised is low for a SUMP, it is realistic and suited to the identified needs. The objective seems attainable, given a strong political will supports the PMUD.

PMUD financing needs to be ensured primarily with the support of the State and donors, with EUR 18.6 million from the state's budget or donor programmes, EUR 8.8 million as retrocession from donor loans to the local authority and EUR 0.3 million from the regional budget.

Perspectives for implementation

Bouaké will continue receiving support to move into implementation

AFD financed a road safety pilot project in Bouaké under the MobiliseYourCity funding. AFD committed 55 million EUR to the SUMP implementation, involving road upgrade and safety, support to bus operation, non-motorised transport and technical assistance. This will also include a 15 million EUR grant from the EU envisaged from the MIP envelope.

Support from the Partnership - Implementation Support 1

Project description

Technical Assistance: Road safety pilot project and data collection in Bouaké

Funded by: European Commission

Funding amount: EUR 180,000

Implemented by: IRD

¹⁰ Estimated by the MobiliseYourCity Secretariat based on SUMP deliverables.

Local counterpart: Municipality of Bouake

Supported activities:

- · Identify crash-prone areas and crash causes, and measure the extent of the consequences for people's health
- Collect crash data from different sources, including the police, firefighters and hospitals, to produce reliable real-time statistics on road safety.
- Develop a crash and trauma monitoring platform: The technical assistance included the development of an APP called "Trafic Data Collect" to digitise activities by the stakeholders in the following areas:
 - » Data collection (longitudinal, cross-sectional studies).
 - » Surveys (field, online, telephone).
 - » Security -Digitalised Road.
 - » Computerized User File (Associations, NGOs ...).
 - » Computerized Patient File (Medical and Medico-Social Environments).
- Development of an online tool for visualising statistics on the most recent data: An <u>online tool</u> was developed
 alongside the app deployment to visualise real-time crash data and severity. It also generates additional statistics
 for public officials and decision-makers.

Challenges on the pilot implementation

Staff turnover, data entry workload, and integration with medical teams hinder the long-term effectiveness and reliability of the data collection system.

The successful application adoption by field agents and the absence of technical or network failures highlight the project's effectiveness. However, several challenges emerged. Frequent staff rotations require ongoing training to ensure continuity in data collection. Additionally, some agents perceive data entry as an added workload, underscoring the need for sustained motivation and awareness efforts. Lastly, integrating emergency data collection with medical teams remains a key area for improvement to enhance the system's reliability and completeness.

Insights from practice: key pilot projects takeaways

Enhancing Coordination, Awareness, and Emergency Response in Bouake

The digitalisation of crash data in Bouake presents a significant opportunity to enhance road safety, provided it is developed collaboratively with all stakeholders and adapted to local conditions. Strengthening multisectoral coordination, particularly with the health sector, is essential for improving prevention and victim care. Raising awareness among data collection agents is also key to ensuring this task is considered a valuable tool rather than an additional burden. Additionally, promoting the proper use of helmets among riders and passengers of two-wheelers is crucial to reducing head injuries. Finally, improving pre-hospital care and emergency response services is vital to increasing survival rates and minimising the long-term impact of road accidents.

Perspectives for scaling

Ensuring Sustainable Road Safety Improvements in Bouake

This pilot project offers a valuable opportunity to enhance road safety in Bouake and serves as a potential best practice for other African cities. However, ensuring its sustainability beyond the technical assistance phase remains a key challenge, mainly due to the need for continuous training of new personnel and effective stakeholder coordination. Long-term sustainability will enable the city to build a historical data repository, facilitating the assessment of road safety trends and the impact of policy measures over time.

Support from the Partnership: Implementation Support 2

Project description

Technical Assistance: Road safety improvements around schools

Funded by: European Commission

Funding amount: EUR 415,000

Implemented by: AMED

Local counterpart: Municipality of Bouake

Supported activities:

- The pilot project allows for addressing road safety alongside the PMUD implementation, leveraging data, and
 involving engaged stakeholders in the topic. The project engaged relevant stakeholders including the Municipality,
 Ministry of Transport, Ageroute, Ministry of Education, NGOs, universities, and health and security stakeholders.
 Pilot projects, like the Observatory (IRD/Bouaké University) and pilot actions in schools, will play a key role in
 demonstrating impact, fostering support, and creating momentum for broader engagement.
- Conduct a diagnostic of mobility challenges and propose necessary infrastructure improvements, followed by road safety awareness programmes for children in local schools. The cost per school for this initiative will range between 40.000 and 60.000.

Institutional challenges – Role of local authorities in implementing the SUMP

The road safety challenge in Bouaké is multifaceted and requires a comprehensive approach.

As a cross-cutting public policy, road safety involves governance coordination among multiple stakeholders, including local authorities, health services, and law enforcement. The complexity lies in addressing issues such as improving infrastructure by reducing black spots, changing behaviours like promoting helmet use in the population and ensuring adequate emergency care systems. Additionally, reliable data is crucial to inform decisions and measure the effectiveness of interventions. Despite these challenges, road safety is a priority for the city's residents and decision-makers, making it a critical area of focus within the SUMP.

Insights from practice: key pilot projects takeaways

Effective coordination is key to the pilot implementation to improve road safety

This project has improved road safety in school zones through targeted actions in data collection, pilot infrastructure interventions, and road risk education. The key to its success has been effective coordination among stakeholders, which provides valuable insights for strengthening road safety decision-making bodies, such as a road safety council. To sustain stakeholder engagement, it is crucial to highlight the impact and results achieved while outlining a roadmap for future implementation in additional schools.

Perspectives for scaling

Ongoing funding is being secured from AFD with a European grant to advance key initiatives further.

This includes addressing infrastructure issues, such as identifying black spots, anticipating risks to road surfaces, and continuing the development of the data platform with a strengthened role for the Municipality. In schools, the focus will be on securing dozens of schools across the city, standardising infrastructure, and educating students on road safety. Additionally, governance efforts will continue by supporting local authorities, enhancing the capabilities of local NGOs, and tackling specific issues like helmet use on motorcycles and motorbike taxi behaviour.

Highlights in the past year

A research project to address road safety specifically

Road crash data is collected by the police forces and health workers and automatically updated in an app to show in real-time how many accidents have occurred and where they have taken place. This pilot data collection project is being implemented by the "Institut de Recherche pour le Développement" (IRD, French) and the University of Bouaké, with the support of AFD.

Last update in December 2024

Morocco

Status of the project: Completed technical assistance

Partner country



Basic Information

Population: 35,740,000 | Growth rate: 1,20% Percentage of urban population: 58% (2010)

GDP per capita: USD 8,612 (2017)

Percentage of population living below the national poverty

lines: 4,8% (2013)

Nationally Determined Contribution (NDC): Quantified

transport related NDC

National GHG emissions per capita: 1.75 (tCO₂eq)

Exposure to climate change: HIGH

Context

Over the last decade, the Government of Morocco has developed a national policy with the objectives of improving urban mobility and addressing the current and future challenges that Moroccan cities are facing. The planning process is therefore already at an advanced level of maturity in the country.

The organisation of a National Day for Urban Transport (JNTU) in 2013 was an opportunity to relaunch the public debate over the main urgent challenges of urban mobility policies. The creation of the Fund for Urban and Inter-urban Road Transport Reforms (FART) and the empowerment of local authorities in the context of devolution and decentralisation, contributed to a redefinition of the national strategy. In 2016, the "MobiliseDays" event in Rabat highlighted the need for evolutions of the national framework and the role of SUMPs as a leverage to structure sustainable urban mobility policies.

Moreover, as the host country of COP22 in 2016, the government of Morocco committed to reducing its greenhouse gas (GHG) emissions by 13% by 2030 and was one of the first countries to join the MobiliseYourCity Partnership. In 2021, Morocco increased its ambitions. In its updated nationally determined contributions, the country aims to reduce the GHG emissions by 18.5% by 2030 (unconditional target) and could even reach a 45.5% reduction with the support of other parties of the Paris Agreement (conditional target).

Support from the Partnership

Technical assistance: Develop a national vision for urban mobility.

Funded by: FFEM

Implemented by: AFD, Ademe, Cerema and CODATU, through the MobiliseYourCity Morocco Program

Local counterpart: Ministry of Home Affairs, Directorate General of Local Authorities (DGCL)

Supported activities:

The support to Morocco is to develop a coherent framework for the improvement of urban mobility, in relation with city level actions. Specifically, it aims at building capacities both at national and local level, and at developing 2 policy documents:

- National vision for urban mobility in 2030 (NUMP)
- · Action plan for implementation of the national urban mobility strategy

Status of implementation

Project start: 2017

Expected project completion: 2019

Completed outputs:

- National Vision for Urban Mobility in 2030 (NUMP)
- Action plan for the implementation of the national urban mobility strategy

NUMP key measures

The Moroccan National Vision for Urban Mobility in 2030 outlines several significant measures to integrate mobility into sustainable development, improve funding and governance, and promote the efficient organisation of public transport, among other initiatives.

The following list highlights the most significant measures identified in the NUMP.

- Integration of the mobility dimension into the actions of other major related sectors
- Organisation and planning of urban mobility to contribute to sustainable development
- Maintenance and redeployment of government funding
- Increase and rationalisation of funding from the municipalities
- Completion of the legal and institutional framework and implementation of pilot operations for all other possible sources of funding
- Development of a legal and technical framework for new urban mobility solutions in terms of legislation, regulations, and technical choices
- Implementation of high-impact pilot projects
- Promotion of an integrated and efficient organisation of all modes of public transport
- Maintenance of a realistic and easy-to-manage public transport fare policy
- Development of governance tools
- · Strengthening institutional and human resource capacity for better governance at central and local levels
- Development of institutional capacity and skills for digital solutions for urban mobility
- Development of a better understanding of the challenges and priorities for action in digital technology applied to urban mobility
- Improvement of the delegated management of public transport

Al-Assima (Rabat-Salé-Temara), Morocco

Partner city

Status of the project: Completed technical assistance



Basic Information

Urban area: 1,910 km²

Population: 2,134,533 (2014) | Growth rate: 1.6%

Country capital city

GDP per capita: USD 3,217

National GHG emissions per capita: 2.62 (tCO₂eq)

Exposure to climate change: HIGH

Context

Rabat is the capital city of Morocco and the second largest region of the country. It is both the administrative and business centre of the country. Rabat's agglomeration "Al Assima" includes the cities of Salé and Temara. Salé is the biggest cities among the three cities (982,163 inhabitants in 2014), followed by Rabat (577,827 inhabitants), and Temara (574,543 inhabitants). In 2024, the agglomeration's population is expected to reach 2,549,000 inhabitants, which will result in an increase in mobility.

Al-Assima has an existing mass transit system as well as a transport master plan. The local counterparts, Etablissement de la Coopération Intercommunale Al-Assima (ECIAA) and Rabat Région Mobilité (RRM), have the mandate and responsibility to finance mass public transport infrastructure. They have the authority, with the central government guarantee, to borrow from international finance sources. Currently, there are no systems and procedures in place to monitor, evaluate and report on urban mobility.

Al-Assima plans to develop a Sustainable Urban Mobility Plan (SUMP), by mandating a consultant. The future mobility plan will replace the former mobility plan of Rabat and integrate the whole urban area, including the cities of Salé and Temara.

- Structuring the project (governance, feedback on terms of reference)
- Providing RRM with assistance for developing urban mobility diagnosis and vision-building modules
- · Assistance for integrating a participatory approach
- Capacity-building (throughout the process)
- Providing technical expertise for the review of SUMP deliverables
- Delivering an expertise programme for the definition and implementation of a local measuring, reporting and verifying greenhouse gas emissions approach, in link with the national level (Rabat is one of the three pilot cities of this specific programme)

The technical assistance contributes to institutional strengthening through capacity building for implementation and a large stakeholder engagement process.

Support from the Partnership

Technical assistance: Support to pilot a Sustainable Urban Mobility Plan (SUMP)

Funded by: CEREMA

Funding amount: EUR 500,000 (in kind)

Implemented by: CEREMA through MobiliseYourCity Morocco

Local counterpart: Etablissement de la Coopération Intercommunale "Al-Assima" ECIAA Rabat Région Mobilité (RRM)

Supported activities:

Technical assistance to support RRM and the SUMP

- Deliverable reviews
- · Support during the SUMP committees

Status of implementation

Project start: 2021 Q4

Expected project completion: 2023 Q4

Completed outputs:

Elaboration of SUMP ToRs

Next expected outputs

- Diagnosis report
- SUMP elaboration study

Highlights

SUMP preparation study ongoing after being delayed due to pandemic

After the procurement of the SUMP had been delayed in 2020 due to the COVID-19 pandemic, the study on the elaboration of the SUMP started in September 2021. Completion is scheduled for December 2023. As of October 2023, the SUMP is in the action plan phase.

Last update in December 2023

Dakar, Senegal

Partner city

Status of the project: Completed Sustainable Urban Mobility Plan & ongoing implementation support



Basic Information

Urban area (Dakar Region): 550 km²

Population: 4,042,225 (2022) | Growth rate: +2.8%

Country capital city

GDP per capita: USD 1,636 (2021)

Modal Shares (in 2015)

Walking: 70%

Formal public transport: 11.7 %

Informal public transport (minibuses): 6.8 %

Informal collective taxis: 3.5 %

Private cars: 4.2 % Formal Taxis: 3.0 %

Private motorbikes or 2-wheelers: 0.8%

GHG emissions per capita: 0.6 tCO₂eq at national level in 2016

and 2.1 tCO,eq/capita in Dakar

Exposure to climate change: MEDIUM

Context

The Dakar region is a fast-growing conurbation that includes the cities of Dakar, Guédiawaye, Pikine, and Rufisque. It is home to over 4 million people and accounts for 25% of the country's population and 50% of the urban population. The population is expected to reach 5 million by 2030, with a growth rate twice as high as in the past 30 years.

The high population density of the region (7 350 inhabitants/km²) masks significant disparities between urban areas and territorial imbalances due to the peninsula's geography and uncontrolled urbanisation. The concentration of jobs in Dakar city centre leads to pendular mobility, and income inequality between Dakar and suburban cities increases the use of private vehicles.

The limited space in Dakar and road congestion have led the government to pursue ambitious urban projects outside the current agglomeration, such as the Diamnadio urban pole, which is planned to be the future administrative centre of Senegal.

Walking is the most common mode of transportation, accounting for 70% of trips, but it is imposed rather than chosen due to the absence or poor condition of sidewalks and obstacles from larger roads. Cycling is hindered by a lack of infrastructure and unsafe road conditions, encouraging a shift to private vehicles.

Public transportation options in Dakar include the public operator Dakar Dem Dikk (DDD) with 42 standard bus lines, 14 private operators with 64 minibus lines under the AFTUs, informal minibus operators, and Clando taxi operators. In addition, since 2023, the Express Regional Train (TER) has been operating on the corridor of the former "Petit Train de Banlieue" between Dakar downtown and the Blaise Diagne International Airport located in Diamniadio at a 36 km distance. Finally, a BRT line between Dakar downtown and the Guédiawaye suburb has been operating since 2024, and the extension of the TER beyond the airport is under construction.

The total number of trips within the region of Dakar stands at 3.36 trips per person on average on weekdays. Of these trips, 1.0 trips are made using motorised modes.

The Conseil Exécutif des Transports Urbains de Dakar (CETUD) manages mobility in Dakar and is responsible for piloting public transport (while the TER is under the APIX mandate) and implementing a transport master plan. CETUD's mission is to organise and regulate urban transport and promote healthy competition by state policies. CETUD has revised its transport master plan with the support of the MobiliseYourCity partnership to create a Sustainable Urban Mobility Plan (SUMP) for 2020-2035.

CETUD has the mandate and responsibility to manage public transport, under the direct authority of the Ministry of Infrastructure. Systems and procedures are in place to monitor, evaluate and report on urban mobility.

Support from the Partnership - Mobility Planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: FFEM

Funding amount: EUR 400,000

Implemented by: AFD: supported the elaboration of a SUMP for the Dakar metropolitan area, contracted and managed by the local mobility authority, Conseil Exécutif des Transports Urbains de Dakar (CETUD)

Local counterpart: Conseil Exécutif des Transports Urbains de Dakar (CETUD)

Supported activities:

Update the existing urban mobility plan into a SUMP, which:

- Builds upon existing studies, plans and documents
- Is aligned with the national urban mobility strategy
- Is the result of a participatory process
- Is ready to be adopted by the CETUD and the relevant authorities

Status of the SUMP development process

Project start date: 2020 Q2

SUMP development completion date: April 2023

SUMP adoption status: Not legally adopted yet11

Completed outputs:

- Evaluation of the existing transport master plan report
- Inception report
- Diagnostic report
- Scenario and financing report
- · Vision, objectives, and action plan of the SUMP
- · Monitoring and reporting of the SUMP
- Reports about the participatory process of the SUMP

¹¹ A general synthesis of Dakar SUMP can be found on https://www.mobiliseyourcity.net/dakar-general-summary

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate (EUR)
Reserving rights of way for the development of the TCSP network and active modes of transport	Million EUR 225.3
 Organisation of events and participative activities on active modes of transport Creation of a cycle lane near UCAD Updating the technical inspection centre and introducing environmental constraints Organisation and management of mobility events in Diamniadio Taking gender into account in the provision and management of mobility Taking account of PRMs in mobility provision Open data for public transport data 	Million EUR 8.8
 Communication campaigns on the SUMP Restructuring of the CAPTRANS system Implementation of a programme to extend the number of air quality measurement stations Setting up a mobility/urban planning coordination body Opportunity study for a TOD on Grande Médine Management of motorbike taxis Establishment of a consultation framework for possible changes to the SUMP Setting up a vehicle pound 	Million EUR 12.1
Road safety study for the urban area	Thousand EUR 335.4
Organisational support for CETUD's growth	Thousand EUR 76.2
Reform of the urban transport financing model	Thousand EUR 76.2
 Strategic traffic plans Accessibility study of the Daga Kholpa area Update of the multimodal accessibility study for the Diamniadio area Multimodal accessibility planning study for the airport sector Accessibility study for areas undergoing urbanisation 	Thousand EUR 792.7
Strategic plan and works upgrade for multimodal hubsOperational study to improve urban bus stations	Million EUR 34.7
 Network restructuring study, second round Setting up a working group on intermodal ticketing MAAS study and development of services Opportunity study for a maritime transport network 	Million EUR 2.2
Feasibility study and construction of TCSP lines	Billion EUR 1.2
Strategic study and works upgrades on cycling routes	Million EUR 53.4
 Public space charter Study on the management of on-demand modes using digital platforms Study of active mode crossings on infrastructure with capacity (N1, A1, VDN) 	Thousand EUR 640.3
Pedestrian master plan and works upgrade	Million EUR 70.7
Feasibility studies	Million EUR 1.0
Operationalisation of the goods flow management study	Million EUR 14.3
 Feasibility study on setting up a parking system for the conurbation Training in traffic management and initial analysis of the current situation 	Million EUR 3.6
TOTAL SUMP	Billion EUR 1.6

SUMP Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Secured	Amount
Grant to upgrade Dakar's Public Transport Network ¹²	EU, BMZ	Secured	53.3 M EUR
Loan to upgrade Dakar's Public Transport Network	EU, AFD	Secured	EUR 267 M EUR ¹³

Associated financing

Description	Source of financing	Secured	Amount
TER Dakar	IFIs financing: AfDB, AFD, IsDB, French Gov	Secured	853,00
BRT Dakar	World Bank WB financing (300 MUSD)	Secured	273,00
TER Dakar	IFIs financing: AfDB, AFD, IsDB, French Gov	Secured	172,00
Street shaping for feeder buses		Planned	60,00
BRT Dakar	PPP (PSP = 50 to 90 MUSD)	Secured	55,00
Purchase of feeder buses		Planned	40,00
BRT Dakar		Secured	35,00
BRT Dakar	GCF financing (30 MUSD)	Secured	27,00

Core indicators baseline and impact

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2015	Projected 2035 BAU scenario	Projected 2035 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	0.2 Mt CO2eq	0.924 Mt CO2eq	1.4 Mt CO2eq	1.2 Mt CO2eq
Annual transport-related GHG emissions per capita (kg CO ₂ eq)	N/A	243 kg CO2eq	368.2 kg CO2eq	315.7 kg CO2eq
		Walking: 70%		Walking: 55%
Modal share Increase of the modal shares of trips by public transport and cycling		Cycling: 0%		Cycling: 3%
		Personal cars: 3%		Personal cars: 9%
		Motorised two-wheeler:1%		Motorised two-wheeler: 2%
		Taxi: 2%		Taxi: 2%
		TC has TCSP: 23%		TC has TCSP: 17%
		TCSP:0%		TCSP: 10%
Road safety Decrease in traffic accidents in the urban area, per 100.000 inhabitants		165 accidents / 100,000 inhabitants		95 accidents/100,000 inhabitants

The grant is part of a Team Europe approach project by the EU, EIB, KfW, AFD and including a loan for 267 M EUR - https://www.eib.org/en/press/all/2023-081-global-gateway-team-europe-joins-forces-with-senegal-for-cleaner-safe-and-affordable-transport-in-dakar

¹³ EUR 166.9 million from EIB guaranteed by the European Commission through EFSD+ with an amount of EUR 15 million and EUR 100 million from AFD

Insights from practice: lessons learned from the SUMP development process

CETUD is a highly qualified technical institution able to oversee mobility projects in Dakar

One specificity of the Dakar SUMP is that the CETUD was the contracting authority for the SUMP study (not AFD). A delegation agreement was signed between AFD and CETUD for this purpose. This was possible because CETUD is quite a mature mobility authority with rather skilled staff. The CETUD was very much involved in monitoring the SUMP, more than usual SUMPs. This was possible because CETUD is a mature mobility authority and because they were the contracting authority of the SUMP study.

In a highly congested city, collaboration with paratransit operators is crucial for transformation

The road network in the densely populated districts of Dakar is already under pressure under the current motorisation rates. At the same time, most trips are still taken by foot as large parts of the population cannot access or afford public transport. In this context, the collaboration of CETUD with paratransit operators to support the professionalisation and upgrading of their buses and the planned development of the BRT system feed into the SUMP process. Approaches for increasing a multi-modal transport system that focuses on public transport also include developing a fare system adjusted to the household income and improving conditions for walking and cycling.

A robust participatory process along SUMP development increased citizens' ownership of the project

Throughout the SUMP process, the responsible committees and the SUMP task force firmly focused on involving diverse stakeholders in the plan's development. Workshops were conducted with private and institutional actors as well as the population. The topics of the workshops covered a wide variety of SUMP-related issues, including the sharing of roads and the importance of gender for transport. The results from the diagnosis were also presented during a public event to collect feedback on the outcomes. The success of these participatory events is visible through the acknowledgement that the SUMP was able to gain. While the urban mobility plan from 2007 was unknown to some stakeholders, their involvement in preparing the SUMP led to an increased awareness of the plan's aims.

Urban planning and transport planning go hand in hand as part of the SUMP

Urban development is a crucial driver for the increasing demand for transport in Dakar. Differences in the density among urban districts influence mobility and transport systems. To effectively integrate land use and transport planning, the Ministry of Urban Planning is an essential partner in the SUMP development and has been involved from the start. The objectives of the urban master plan (Dakar 2035) directly feed into the SUMP process. Especially in the less densely populated districts in the outskirts of Dakar, the SUMP aims to focus on developing compact city structures according to the principles of the 15-minute city.

Perspectives for SUMP implementation

The Sustainable Urban Mobility Plan of Dakar was finalised in April 2023.

CETUD (under the bus priority project financing) is planning to conduct several studies in the follow-up of the SUMP process: a new households survey, road safety action plan, analysis of public transport tariffs, study on public transport financing, elaboration of public space design guidelines, traffic study for Dakar city centre within others.

However, the recent change in government has introduced uncertainty regarding the future of the SUMP.

Support from the Partnership - Implementation Support

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) implementation - MoVe - Green Mobility in Senegal¹⁴

Funded by: BMZ

Funding amount: EUR 5,000,000

Implemented by: GIZ

Local counterpart:

Political Partner: Ministère des Infrastrutures et des Transports Terresteres et du Desenclavement (MITTD)

Implementing partner: Conseil Exécutif des Transports Urbains Durables (CETUD)

Supported activities:

Developing strategies for walking and cycling

- · Creating action plans for active and pedestrian mobility
- Preparing a green corridor in Dakar
- Providing training on cycling practices
- Implementing a pilot bike-sharing project

Status of the project implementation

Project start: 2024 Q1

Expected project completion: Q1 2027

Main SUMP Implementation challenges

Interinstitutional coordination is key to project success.

The Mobilité Verte (MoVe) Senegal project in Dakar faces institutional challenges typical of establishing sustainable transport systems in rapidly growing urban environments. The project requires close collaboration between multiple entities, with the German International Cooperation (GIZ) leading implementation for the German Federal Ministry for Economic Cooperation and Development (BMZ). Locally, the Ministry of Infrastructure, Land Transport, and Decentralization (MITTD) serves as the political counterpart, while the Executive Council for Sustainable Urban Transportation (CETUD) plays a key role as the implementing partner. This partnership highlights the importance of cooperation across institutional levels to meet rising transport demands sustainably.

https://www.giz.de/projektdaten/projects.action?request_locale=de_DE&pn=202322162

Takeaways on SUMP implementation support

Walking and cycling should be included in the early stages of mobility planning processes

Early observations from the MoVe Senegal project underscore the value of integrating sustainable transportation modes into city planning. Establishing active mobility as a priority in Dakar's transport planning has proven essential for improving accessibility and meeting the needs of active mobility users. This initiative emphasises how planning for active mobility can improve urban transport conditions, benefiting residents and the environment.

Way forward

Moving forward, the MoVe Senegal project aims to embed active mobility as a central element of transport planning in Dakar. This approach addresses current mobility challenges and sets a foundation for expanding sustainable transport options throughout the Dakar metropolitan region. The continued collaboration among GIZ, MITTD, and CETUD will be crucial for maintaining momentum and ensuring that active mobility infrastructure is fully integrated into future urban planning.

Highlights from the last year

In 2024, Dakar has significantly improved its public transport infrastructure. The new Bus Rapid Transit (BRT) system, launched in 2024, represents a major step forward for the city. Complementing this is the Regional Express Train (TER), which began operations in 2023, enhancing connectivity across the region.

Additionally, a comprehensive bus network restructuring project, funded with over 320 million EUR from the EU, AFD, and KfW, is currently underway to align bus routes with the BRT and TER systems, ensuring a more cohesive and efficient public transport system. Follow-up studies, part of a broader 350 million EUR initiative supported by EIB, the EU, and AFD, are focusing on public space use, parking, and traffic, as well as a new household survey scheduled for 2025, which occurs every decade. These efforts underscore Dakar's commitment to an integrated and sustainable future of urban mobility.

Last updated in December 2024

Tunisia

Status of the project: Completed technical assistance

Partner country



Basic Information

Population: 11,540,000 | Growth rate: 1.1%

Percent of urban population: 70%

GDP per capita: USD 3,317

Percentage of the population living below the national

poverty line: 15.5%

Nationally Determined Contribution (NDC): no mobility/

transport-related NDC

CO₂ Emissions (total in million tonnes CO₂/ per capita in

tonnes): 32.07 / 2.74

CO, Transport Emissions (total in million tonnes CO,/ per

capita in tonnes): 7.27 / 0.62

The proportion of transport-related GHG emissions: 21%

Climate change risk: High

Context

The development of the transport sector in Tunisia resembles a pathway that is common across most countries in the Global South; Tunisia is experiencing a steady rate of urbanisation that is expected to result in three-fourths of the population living in urban areas by 2030. A growing citizenry exerts increasing pressure on the existing urban transport infrastructure, already characterised by an inefficient public transport service that has been historically underfunded – state budgets for road infrastructure development are as high as those for public transport - and unable to satisfy the mobility demands of the urban population. These factors have resulted in an increasing motorisation rate, particularly private means of transportation, and subsequently, high GHG emission levels:

- Individual transport accounts for 63% of all motorised passenger journeys. This percentage stands in opposition to the 1970s modal distribution when public transport represented 70% of the modal share.
- Nonetheless, active mobility still constitutes an essential means of transportation commonly used by more than 50% of medium-sized cities and approximately 36% of citizens in Tunis, Sousse and Sfax.
- Paratransit has experienced tremendous gains since 2001, with the number of permits granted increasing by 89% for private taxis and 260% for collective taxis between 2001 and 2015.
- The vehicle fleet has increased by more than 55% between 2006 and 2015, comprising now more than 1.5 million cars.
- In 2012 the transport sector emitted 6.5 MtCO₂e, or 21% of total net GHG emissions.

- Congestion in urban areas has become a frequent problem, such as reducing average speeds to 7 km/h during rush hours in Tunis and inflicting a cost of up to 2% of the country's GDP.
- Air pollution represents a significant health and economic problem, its cost amounting to between 2% and 10% of GDP.
- While the transport sector accounts for 30% of the country's energy consumption, 94% of this share is concentrated
 in road transportation, which is in turn disaggregated by the following sub-sectors:
 - » Passenger cars: 49%
 - » Commercial vehicles 19%
 - » Buses 15%
 - » Freight transport 18%

Support from the Partnership

Technical Assistance: National Urban Mobility Policy and Investment Programme (NUMP)

Type of NUMP: Policy NUMP

Funded by: FFEM and BMU-ICI

Funding amount: EUR 0.3 M (FFEM), 0.1 M (Cerema) and 0.2 M (BMU-ICI)

Implemented by: GIZ, AFD, Codatu and Cerema

Local counterpart: Ministry of Transport

Finance leverage: EUR 850,000

The primary purpose of the NUMP is to contribute to the country's NDC and offer cities a general enabling framework for sustainable urban mobility planning.

Supported activities:

With support from MobiliseYourCity's implementing partners AFD, GIZ, Cerema, and Codatu, the Tunisian Ministry of Transport began the process of developing a National Urban Mobility Policy (NUMP) after the country submitted its first NDC in 2015 and joined the Partnership in 2016. The Tunisian NUMP has a strong focus on climate change mitigation and aims to contribute to the country's NDC target of reducing carbon intensity (tCO2e/GDP) in 2030 by 41% compared to the reference year 2010.

The Tunisian NUMP includes a broad package of measures to decarbonise transport, increase institutional capacities, and improve the governance of the sector:

- Development of technical and institutional frameworks to support Tunisian cities in SUMP development
- · Identification of sustainable urban mobility measures, including an action plan for paratransit reform
- Establishment of a national fund for urban mobility
- Establishment of the National Urban Mobility Observatory
- Capacity building programme for local and national agencies
- Support the ongoing decentralisation process in the country through the creation of local administrative entities

The NUMP, which included an emissions inventory, scenario modelling and definition of mitigation actions, was adopted by the national government in May 2020. The implementation of priority measures is currently underway thanks to the support of an AFD grant between 2020 and 2023.

Status of implementation

Project start: 2017 Q1

Project completion: 2020 Q2

Completed outputs:

- Initial diagnostic and priority setting
- Definition of a vision and strategic orientation
- · Definition of action plans, responsibilities and resources
- NUMP elaboration
- Official adoption of the NUMP by the national government
- Tunisian MRV approach
- Tunisian SUMP approach
- Sustainable Mobility Forum to kick-start the implementation of the NUMP
- Mobilisation of international experts to support the Ministry of Transport in implementing prioritised actions:
 Preparation of the framework and identification of administrative resources and competencies for the establishment of local transport authorities, to be mandated by law

Next expected outputs

- Support SUMP elaboration in the Great Tunis area.
- Development Policy Loan funded jointly by AFD and World Bank using the NUMP as the backbone of a public policy matrix

NUMP key measures and cost estimates

The following list highlights the most significant measures identified in the NUMP.

Strategic area 1: Governance

- Establishment of appropriate structures at the local level for the planning, development and management of sustainable mobility
- Creation of a Central Technical Support Unit for the implementation of the NUMP
- Creation of a National Commission on Urban Mobility
- Implementation of governance measures for the mobility sector

Strategic area 2: Capacity building

- Development of capacities of managerial and administrative staff
- Integration of urban mobility into the training programmes of civil engineers, urban planners and administrative staff
- Establishment of networks for knowledge exchange and dissemination within the sector
- Development of an implementation plan for awareness raising of civil society, elected officials and media
- Development of capacities of technical, operational, and administrative staff involved in urban mobility

Strategic area 3: Financing sustainable urban mobility

- Improvement of the role of the State through the establishment of a National Fund for Urban Mobility
- Definition of competencies of local governments to finance urban mobility
- Revision of fare policy and financing of public transportation
- Reduction and redirection of fuel subsidies to the Urban Mobility Fund
- Improvement of the compensation system for school transport

Strategic area 4: Urban public transport

- Development of public transport rationalisation plans
- · Establishment of a public transport regulatory unit within metropolitan mobility authorities
- · Restructuring of public transport companies
- · Set up public service delegation contracts between authorities and public transport companies
- · Regulation of paratransit services

Strategic area 5: Improved coordination between transport and land-use planning

- · Promotion of integration between master development plans, urban travel plans, and urban development plans
- Establishment of legal provisions for greater coherence between land-use and transport planning
- Promotion of densification of major transit routes through Transport Oriented Development (TOD)

Strategic area 6: Management of individual motorised transport development

- Improvement in road sharing between different modes
- Design of a legal and regulatory framework for carpooling
- Establishment of company travel plans for public organisations
- · Mainstreaming and supporting the development of traffic management plans at the local level
- Feasibility study for introducing restrictive parking policies
- Implementation of initiatives to improve freight transport efficiency
- Promotion of intermodality and fare integration between collective transport modes
- Expedite implementation of mass transit projects

Strategic area 7: Promotion of active transportation

- Development of an Active Mobility Action Plan at the national level
- Development of Active Mobility Master Plans in main urban areas
- Implementation of a sidewalk rehabilitation campaign
- Improvement of enforcement capacities to fight the illegal use of public space
- Integration of active mobility into major infrastructure projects

Strategic area 8: Promotion of safer, cleaner and more inclusive urban mobility

- Improvement of road safety in urban areas
- Promotion of e-mobility and alternative fuels
- Introduction of vehicle emission standards
- Promotion of accessibility for the most vulnerable populations

Strategic area 9: Development of digital solutions for urban mobility

• Implementation of an action plan for Smart Mobility Tunisia

Finance leverage

Financing resulting from the NUMP	Source	Amount
Grant fund to support NUMP implementation	AFD	EUR 250,000
Grant fund to develop an urban mobility plan for the Greater Metropolitan Area of Tunis	Republic of Tunisia	EUR 600,000
Grant funds to finance actions of the NUMP (studies, capacity building and tender support for NUMP implementation)	AFD	EUR 400,000

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2015	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	-3 300 000 tCO₂eq	9 200 000 tCO₂eq	15 300 000 tCO₂eq	12 000 000 tCO2eq
Access Increase in the proportion of the population living 500 meters or less of a public transport stop	Unknown	Unknown	Unknown	80%
Modal share Increase in the modal share of trips by public transport, walking and cycling	TOTAL: 31.4 %	TOTAL: 53.6 %	Unknown	TOTAL: 85 %
Road safety Decrease in traffic fatalities in the urban area per 100,000 inhabitants	-50 %	-55 fatalities/100 000 hab	Unknown	-22 fatalities/100 000 hab

Insights from practice: lessons learned from NUMP development

New governance framework for urban mobility and a National Mobility Fund

From 2021 to 2022, an AFD-funded consultant assisted the Ministry of Transport in implementing a new governance framework for urban mobility, and a National Mobility Fund.

At the national level, the national government is planning the creation of a National Urban Mobility Commission (CNMU) to ensure the political support of the NUMP as well as all the structural reforms proposed, and a Central Technical Support Unit (UTAC) providing technical support to the CNMU and responsible for the operational implementation of most of the actions recommended by the NUMP. It should first be hosted in-house by the Ministry of Transport and later become an independent public institution.

To ensure that state funding is stable and predictable, the NUMP also plans to create a National Urban Mobility Fund (FNMU) in 2022, to which specific national tax resources from transport, such as the road tax, would be allocated, as well as specific local taxes.

The decentralisation process in Tunisia is still a major challenge, and adjustments to the legal framework to solve the governance problems created by the contradictions between the Local Authorities Code and Law 2004-33 of April 19, 2004, on the organisation of land transport still need to be made. An additional challenge is finding the proper legal status for the new entities created at the national level in a politically unstable context and very limited budgetary space.

At the local scale, depending on the size of the urban areas, Metropolitan Urban Mobility Authorities (AMMU) will be created, as well as Urban Mobility Departments (DMU) within the municipalities, to ensure the development of local mobility strategies and the management of public transport networks. Additionally, there has been an advanced discussion with the AUGT (Urban Planning Agency) on the preparation of a SUMP for the metropolitan area of Tunis.

The European Union supports the development of capacities for the transition to low-carbon mobility and the achievement of the Tunisian NDC

Tunisia has committed to reducing its GHG emissions by 45% by 2030 compared to 2010, and transport must contribute to 37% of this reduction target. To support the implementation of the new Regional Transport Action Plan, the **EU launched the EuroMed Transport Support Project (ETSP)** for a duration of 7 years (January 2017 to December 2023), including an extension due to the context of the pandemic.

This support includes a specific technical assistance project for the secondary city of Sousse. This technical assistance aims to develop the capacity of local authorities to support the transition to low-carbon mobility. Activities include the use of the MobiliseYourCity greenhouse gas emissions calculator to analyse the potential impact of different mobility planning approaches on emissions trajectories. The MobiliseYourCity Secretariat directly supported this technical assistance.

Highlights in the past year

A supported Urban Mobility Master Plan for the Great Tuniz

In 2024, the Japanese Cooperation (JICA) signed a Record of Discussions with the Government of Tunisia to develop an Urban Mobility Master Plan Study in Greater Tunis

Updated in December 2024

Luanda, Angola

Status of the project: Ongoing implementation support

Partner city



Basic Information

Urban area: 25 000 km²

Population: 10 million | Growth Rate: 3.91%

GDP per capita: 2,308 USD

National GHG emissions per capita: 3.62 tonnes

Modal share:

Candongueiros - paratransit (68%)

Individual private vehicles (19%)

Walking (5%)

Bus - TCUL and private companies (4%)

Motorcycle (3%)

Train (1%)

Taxis (1%)

Cycling (> 0.2 %)

Bateau navette (> 1%)

Exposure to climate change: HIGH

Context

Located on the African Atlantic coast, Angola plunged into a prolonged crisis after gaining independence in 1975, enduring a devastating civil war that lasted until 2002. In the years since, the country has focused on reconstruction, largely financed by revenues from fuel exports. However, these investments have been heavily concentrated in the capital, Luanda, deepening existing disparities with the rest of the country.

Luanda continues to attract a significant share of Angola's population, with 25% of the country's inhabitants living in the city. Like many African cities, its population is expected to grow substantially, rising from 10 million in 2025 to 12.9 million by 2030. Luanda also serves as the economic hub of Angola, generating 65% of the national GDP. The economy remains heavily reliant on the export of natural resources — primarily oil — making the port of Luanda a key source of employment.

In addition, the informal sector plays a crucial role in job creation, contributing up to 40% of the national GDP, according to the 2018-2022 National Development Plan. However, Angola's economic vulnerability and dependence on international markets have exacerbated inequalities, particularly in Luanda. Access to basic services and infrastructure remains insufficient, further deepening socio-economic disparities.

In Luanda, public transport is largely dominated by the paratransit sector, particularly the *candongueiros*, the city's iconic blue-and-white minibuses, which account for 68% of all trips. In 2024, rising fuel prices and the removal of tax exemptions for operators led to social unrest and worsened the already precarious conditions of the paratransit sector.

Formal bus services are provided by the state-owned TCUL, which struggles with fleet management and operational inefficiencies, as well as by private operators such as Macon and AngoAustral. However, much of the city's road network remains unpaved, limiting accessibility in certain areas.

Luanda also has an urban railway system operated by Caminho de Ferro de Luanda (CFL), which runs across the city and was recently extended to connect with the newly built airport. However, the railway faces significant operational challenges: tracks remain unprotected and are obstructed by waste, pedestrian crossings, street vendors, and informal housing developments. These issues contribute to low service frequency and slow commercial speeds, reducing its efficiency as a transport option.

Despite Angola's 18 administrative provinces, the country remains highly centralised. As a result, urban transport financing and regulation fall under the authority of the **Ministry of Transport (MinTrans)**. Most investments in the sector are directed toward road infrastructure rather than public transport, and there is no clear vision or strategic roadmap for urban mobility in Luanda or other cities.

One of the most recent transport-related initiatives led by local authorities is the construction of Luanda's new airport. However, this project may have diverted attention and resources away from other urban mobility policies and investments.

Recognising the need for support and capacity building in urban mobility, Angolan authorities signed a three-year FEXTE technical cooperation agreement in May 2022 with the Ministry of Transport (MinTrans), the French Development Agency (AFD), and CODATU. At the time, AFD had not yet developed any projects in urban mobility, making one of the cooperation's key priorities the establishment of a trust-based relationship between MinTrans, AFD, and CODATU. Additionally, the collaboration aims to conduct a comprehensive diagnosis of the urban mobility sector, serving as a foundation for future projects and interventions.

MinTrans identified several areas requiring external expertise, including institutional and management support for the state-owned bus company TCUL and the urban railway operator CFL, guidance on implementing a ticketing system, and an assessment of the paratransit sector with recommendations for potential reforms. While the cooperation initially focused on Luanda, attention later shifted toward secondary cities, exploring the possibility of implementing a Sustainable Urban Mobility Plan (SUMP) in one of them.

Support from the Partnership

Project description

Technical Assistance: Strengthening the institutional and technical capacities of urban mobility institutions for Luanda (FEXTE)

Funded by: Agence Française de Développement (AFD)

Funding amount: 1,000,000 EUR

Implemented by: CODATU

Local counterpart: Ministry of Transport of Angola (MinTrans)

Supported activities:

- Diagnosis of the urban mobility sector in Luanda with a focus on public transport and mass-transit services,
- Diagnosis of the paratransit sector in Luanda and recommendations to improve the sector,
- Support to TCUL through capacity-building activities to improve institutional management and gain skills regarding the fleet operation and maintenance,
- Support to CFL with the organization of a working group including the local authorities and communes located along the railways and CFL,
- Support to ENBI (national enterprise in charge of the integrated ticketing system) through expertise and high-level advising,

- Identification of secondary city in Angola to receive funds for a Sustainable Urban Mobility Plan through the Urban Nodes program of the European Union.
- Study on traffic modelling and survey
- · Study on urban mobility planning along corridors.

Status of project implementation

Project start: May 2022

Expected completion date: May 2025

Completed outputs:

- October 2022: participation of an Angolan delegation in the international Codatu-Climate Chance conference in Dakar (SMDC)
- November 2022: Launching mission of the FEXTE and diagnosis of the urban mobility sector in Luanda, with a specific focus on TCUL.
- April 2023: diagnosis of the paratransit sector in Luanda.
- November 2023: capacity building workshop on urban mobility governance, financing and planning.
- 2023-2024: technical assistance to TCUL through expert missions and support.
- 2024: mediation on the urban railway project and technical assistance to CFL through expert missions.
- March 2024: study tour in France (Paris, Lyon) dealing with public transport system planning, design and implementation, intermodality, and ticketing systems.
- · April 2024: technical assistance on ticketing and fare systems on expert missions and support.
- June 2024: expertise on intermodality and urban mobility considering secondary cities.

Next expected outputs:

- November 2024-March 2025: Study on traffic modelling and survey.
- Spring 2025: Diagnosis and advising regarding urban mobility in Angolan secondary cities (Benguela-Lobito and Huambo) in the perspective of a possible support from the European Union through the Urban Nodes programme (expert mission, recommendations).
- April 2025: writing of the Terms of references for a preliminary study regarding the implementation of a bus corridor in Luanda.

Setting the basis for urban mobility improvements in Luanda

One of the key objectives of this technical assistance project is to establish a shared understanding and knowledge base on urban mobility in Luanda and its challenges among all partners. Since this was AFD's first initiative of its kind in the sector, it was crucial to begin with a comprehensive diagnosis of urban mobility and the relevant stakeholders.

Given the diverse needs of local partners and the exploratory nature of this technical assistance, support and activities covered multiple transport modes, ensuring a holistic approach. Over the three years, local stakeholders benefit from high-level expertise and guidance on institutional aspects such as urban mobility governance, financing, and planning, as well as technical topics like fleet operation, transport demand evaluation, and the integration of transport and urban planning. This knowledge is delivered through workshops, expert missions, study tours, and reports with actionable recommendations.

The cooperation also plays a crucial role in facilitating dialogue between local stakeholders, helping them develop a common understanding of key challenges. Additionally, the studies conducted under the project provide valuable tools for local authorities to assess and design future urban mobility policies and projects. These included a traffic modeling and survey study, as well as a study establishing the planning foundations for mobility projects along key transport corridors.

Ultimately, one of the most significant outcomes of the FEXTE cooperation is the generation and dissemination of updated knowledge on urban mobility in Luanda and secondary cities. This shared knowledge among MinTrans, its partners, and AFD laid the groundwork for more systemic and ambitious urban mobility initiatives in Angola.

Institutional challenges

Institutional challenges and lack of strategic vision hinder urban mobility planning.

One major issue is the difficulty in prioritising projects, largely due to the diverse local challenges and the involvement of multiple stakeholders. Additionally, decision-making is fragmented among several national institutions, leading to delays and, at times, misalignment between ambitions and actual measures. Both of these challenges stem from the absence of a strategic vision and a clear urban mobility policy.

Private car dominance remains a major obstacle to sustainable urban mobility.

A significant challenge in urban mobility planning is the continued prioritisation of private cars. Local authorities may hesitate to reallocate road space out of concern that it could worsen traffic congestion. Additionally, as in many African countries, owning a private car is widely associated with social status, reinforcing its dominant position. While the traffic modelling study conducted during the project provides evidence supporting a shift toward public transport, it may not be enough to persuade decision-makers and technicians to embrace a public transport-centred approach.

Insights from practice: project takeaways

Political commitment and technical expertise drive improvements in public transport management.

The support provided to the public bus company TCUL serves as an example of how public transport management can improve in an African country. This progress was made possible through strong political commitment and the active engagement of technical staff. Such commitment appears to be a crucial prerequisite for any fleet renewal or expansion program, whether in the framework of a Bus Rapid Transit (BRT) system or other public transport initiatives.

Highlights in the past year

In recent months, the Ministry of Transport (MinTrans) has regularly sought tailored expertise and advice from CODATU on key urban mobility issues, such as financing mechanisms and international ticketing system benchmarks. This demonstrates the trust built through the cooperation and provides a strong foundation for CODATU to offer recommendations on structuring a transport project in Luanda that is both locally adapted and aligned with Angolan partners' priorities.

Updated in December 2024

Abidjan, Ivory Coast

Status of the project: Ongoing technical assistance

Partner city



Basic Information

Urban area: District Autonome d'Abidjan, 2,119 km²
Population: 6,3 million (RGPH, 2021) Growth Rate: 4%

GDP per capita: 2,537 dollars (FMI, 2023) National GHG emissions per capita: ND Exposure to climate change: HIGH

Context

Abidjan is the largest city of Côte d'Ivoire. Like many other African cities, Abidjan has faced intense demographic growth over the past years, concentrating 20 % of the national population and 40 % of Ivory Coast's urban population as of 2019. Besides, Abidjan is also a strong economic driver, making it the country's undisputable economic capital, producing 60 % of the national GDP. However, access to public infrastructure and public transport is scarce. More generally, Abidjan's urban development represents a pressing challenge for the local and national authorities, with more than 6 million inhabitants in 2019 and a forecast of more than 10 million by 2050.

To improve access to services, ensure the metropolitan area's development and anticipate its demographic growth, efforts and investments are made towards the public transport sector. Currently, the public transport system in the Great Abidjan area is mainly characterised by operators with concession agreements with the State of Côte d'Ivoire and non-conventional transport operators (paratransit), which are poorly structured. Paratransit represents approximately 75% of the public transport market share. The main planning document, the *Schéma Directeur d'Urbanisme du Grand Abidjan*, elaborated in 2015, details within a chapter the main directions to develop the urban transport sector, suggesting among other measures the introduction of mass-transit projects as a way to improve accessibility (as this document presents a detailed vision and action plan, no Sustainable Urban Mobility Plan has been undertaken yet). Based on the Schéma, two mass-transit projects are now under construction: the east-west Bus Rapid Transit project under the *Projet de Mobilité Urbaine d'Abidjan (PMUA)* supported by the World Bank and Agence Française de Développement (AFD) and a metro project on the north-south corridor actively supported by the French State. These two projects have similar implementation timelines. They are currently under development and a restructuring of the global transport network around this main network is scheduled. This future and reorganised network will require a coordinated intermodal approach, professionalization of paratransit, fare integration, and ticketing interoperability.

Parallel to these projects, Côte d'Ivoire's government undertook a major institutional reform in 2019 by creating a new Urban Mobility Authority for Greater Abidjan, AMUGA, to become the leading authority for urban mobility planning and projects. AMUGA's mission is to organise and coordinate the various modes of transport in Greater Abidjan. To this end, its actions aim to establish 'sustainable mobility for all' in Greater Abidjan. AMUGA is responsible for developing and implementing the urban mobility strategy for Greater Abidjan. Its role includes organising the entire urban transport network and coordinating the competitive procedure for transport operators. AMUGA also issues authorisations for urban transport services and ensures compliance with regulations by all relevant stakeholders. It measures urban transport performance and works with the competent government actors to develop infrastructure and transport projects. Finally, AMUGA oversees the implementation of public transport investments and serves as the main point of contact for all economic and institutional actors on urban mobility issues.

To support AMUGA in its initial structuring phase, Agence Française de Développement and the French Treasury provided support to AMUGA through the allocation of a FEXTE. Fund, allowing the newly created authority to benefit from capacity-building activities and expertise. AFD supported a first FEXTE implemented between 2021 and 2023 by CODATU for AMUGA. Several initiatives to support governance and build the capacity of AMUGA staff have been carried out under this framework (thematic workshops, training, launch of studies, technical visits). Given the interest shared by the beneficiaries and the various cooperation partners, a second FEXTE was launched to continue the actions. This second FEXTE, which began in 2024, will run for three years, and is implemented by CODATU as part of the MobiliseYourCity Partnership.

Institutional challenges

Coordinating mass transit projects and integrating paratransit services

Managing the execution of complex mass transit projects in Abidjan presents significant challenges, particularly in restructuring existing transport services such as SOTRA bus services, maritime public transport, and paratransit services. A key difficulty lies in effectively integrating paratransit services into the broader transport network. Ensuring seamless coordination among operators while modernising the system requires overcoming operational, regulatory, and institutional barriers.

Clarifying AMUGA's role among existing stakeholders

The positioning of AMUGA among existing stakeholders in the urban mobility sector in Abidjan. As most operators pre-existed the creation of AMUGA, their relationship with the new transport lead authority needs to be clarified, as well as the mandate of AMUGA as a contracting authority for future transport services and operators. Thus, the situation needs to be carefully addressed to optimise each stakeholder's role and perimeter, and ensure coordination of their actions and projects, considering the ultimate goal to improve urban mobility for the local population in Abidjan.

Support from the Partnership

Project description

Technical Assistance: Strengthening the institutional and technical capacities of a recently established authority in Greater Abidjan (FEXTE)

Funded by: Agence Française de Développement (AFD)

Funding amount: 1,500,000 EUR

Implemented by: CODATU

Local counterpart: Autorité de la Mobilité Urbaine du Grand Abidjan - AMUGA

Supported activities:

- Operational Roadmap to support AMUGA's institutional and technical development
- Operational Roadmap for paratransit professionalisation and integration into Abidjan urban mobility system
- Technical expertise on the following topics (expert missions, high-level advising, study tours, workshops, ...)
 - » Fare policy and fare integration
 - » Communication strategy and branding of AMUGA
 - » Legal and regulatory framework for urban mobility

¹⁵ FEXTE is a cooperation and project preparation instrument to strengthen capacities in local authorities by promoting the French expertise and know-how. To know more visit https://www.afd.fr/en/fexte-cooperation-and-project-preparation-instrument

- » Contracting and monitoring transport operations
- » Paratransit integration
- » Intermodality

More areas of support will be identified during the cooperation.

Project details

The technical assistance aims to support AMUGA on two main axes: institutional governance and technical capacities related to intermodality and paratransit integration.

Regarding institutional governance, CODATU will support AMUGA to ensure that the authority fulfils its missions and is appropriately positioned among the stakeholders to promote sustainable urban mobility projects and policies. To do so, CODATU will work with AMUGA on a detailed roadmap to guide its development and identify the expertise and skills needed to conduct its mandate and missions over the short and long term. Through training programmes, mentorship, internships within lead authorities and study tours, the capacities of AMUGA will be reinforced and completed based on the projects and missions' requirements. In parallel, advocacy and strategic advising will enable AMUGA to assert its position among the various stakeholders involved in the urban mobility sector in Abidjan.

The support provided by CODATU in the context of the cooperation also regards the strengthening of AMUGA's technical expertise. In particular, intermodality is a crucial issue in the Greater Abidjan, due to the number of ongoing and planned projects related to urban mobility. As the lead authority, AMUGA should thus be able to promote intermodality and coordinate the various stakeholders according to an overarching vision of urban mobility for the Greater Abidjan. The cooperation will then focus on fare policy and fare integration, communication and branding strategy, and integration of the paratransit services and operators within the metropolitan urban mobility system. To do so, expert missions, peer-to-peer exchanges, workshops, study tours and studies will be conducted according to the agenda and priorities of AMUGA and its partners.

All along the cooperation, advocacy activities are organised to enhance the role and actions of AMUGA among local and international stakeholders, as part of the goal to assert its visibility and legitimacy. This support is in line with trends in many other African cities, which need to establish local lead authorities to conduct reforms of the urban mobility sector and improve travel conditions for their local population and limit the environmental impact of the transport sector. In this perspective, the African Association of Urban Mobility Authorities has been created in 2023¹⁶, of which AMUGA General Director is the General Secretary and AMUGA the permanent Secretariat.

Status of project implementation

Project start: September 2024

Expected completion date: September 2027

Completed outputs:

- · Launching mission: September 2024
- Terms of References for a Study for an Operational Roadmap to support the development of AMUGA: December 2024
- Expert mission on fare policy: January 2025
- Technical study tour on institutional governance, intermodality and communication strategy: January 2025

 $^{{}^{18}\} https://www.ssatp.org/news-events/news-release-african-association-urban-mobility-authorities-aauma-officially-created$

Next expected outputs:

- Start of the operational Roadmap to support AMUGA's institutional and technical development
- Start of the operational Roadmap for paratransit professionalisation and integration into Abidjan urban mobility system
- Expert technical mission and activities about: Fare policy and fare integration, communication strategy and branding of AMUGA, Legal and regulatory framework for urban mobility, intermodality.

Highlights in the past year

The renewal of the technical cooperation supporting AMUGA of CODATU through the FEXTE agreement funded by AFD and MobiliseYourCity is an indicator of the achievements reached during the first cooperation, and a strong signal for local and international stakeholders of the role and relevance of this young lead authority in Greater Abidjan.

Last updated in December 2024

Antananarivo, Madagascar

Partner city

Status of the project: Ongoing Sustainable Urban Mobility Plan & ongoing implementation support



Basic Information

Urban area: 85,01 km²

Population: 3,209,933 | Growth rate: +4.84%

Country capital city

GDP per capita: USD 522

National GHG emissions per capita: 0.13 (tCO₂eq)

Exposure to climate change: HIGH

Context

Antananarivo, commonly known as Tana, is the capital and largest city of Madagascar. Centrally located on the island at 1,280 m above sea level, Tana serves as the primary hub for the country's industrial and administrative activity.

The city grapples with rapid demographic growth, resulting in challenges such as overcrowding, traffic congestion, inadequate waste management, severe air pollution, security concerns, and shortages of public water and electricity. Despite these issues, the local authority's efforts to address them are hindered by limited funds and management challenges associated with the burgeoning population.

Notably, a report by the French Embassy reveals that walking accounts for more than 60% of travel within Antananarivo. Paratransit constitutes the bulk of motorised trips, of which *taxi-bé* minibuses account for nearly 72%. However, the absence of a mass transit system exacerbates the problems of increasing travel demand and road congestion.

The city lacks an updated urban mobility planning document to tackle these challenges, and the existing transport organisations, the urban commune of Antananarivo (CUA) and the suburban transport agency (ATT), face complexity due to overlapping competencies, financial constraints, and outdated regulations.

Previous initiatives, such as the 2008 Urban Mobility Improvement Programme (PAMU), failed to yield all the expected outcomes, therefore recent efforts include studies on creating a transport organising authority, an economic analysis of taxi-bé, defining specifications for operators, implementing a ticketing system, and operator training. The World Bank is currently conducting a study to develop a master plan for urban transport.

In addition to these plans, the city is engaged in various ambitious projects. These include an electric cable transport initiative, the development of an urban train network, the inauguration of a bypass road in 2021, a pilot Bus Class project to enhance the taxi-be service, and an AFD and EU-supported project initiated in 2011 to improve pedestrian mobility and traffic on specific urban roads.

Support from the Partnership: Mobility Planning 1

Project description

Technical Assistance: Urban Mobility Forum

Funded by: AFD

Funding amount: EUR 40,000

Implemented by: CODATU

Local counterpart: Ministry of Transport and Meteorology (Ministère des Transports et de la Météorologie) ans Ministry of Decentralization and Land Planning (Ministère de la Décentralisation et de l'Aménagement du Territoire)

In collaboration with Urban Municipality of Antananarivo (CUA) (Commune Urbaine d'Antananarivo), Land Transport Agency (ATT) (Agence des Transports Terrestres), Urban Planning Agency of Greater Antananarivo (IPAM)

Supported activities:

- Urban Mobility Forum: an inclusive forum was established to engage the various and diverse stakeholders in
 discussions about urban mobility issues, with the objective of building consensus on objectives and strategies to be
 taken;
- Diagnostic Report: a shared and detailed diagnostic of the current mobility system was produced, developed with input from all stakeholders (public authorities, private sector, and users) during the Urban Mobility Forum;
- Preliminary Strategic Roadmap: a roadmap with initial priority actions was created, focusing on governance reform (e.g., creating an integrated mobility authority), intermodal transport, and professionalising paratransit transport systems such as the Taxi be.

Status of the project

Project started: April 2024

Project completion: August 2024

Completed outputs:

- Detailed report of the Forum;
- Roadmap related to the four workshops;
- Feedback sheet on the Forum's logistical organisation.

Main Challenges

Building Consensus on Governance Reforms

Preparing clear guidelines for the roadmap, especially for the governance workshop, required strong coordination with authorities. Aligning stakeholders around governance reforms, such as creating an integrated mobility authority, was complex due to varying interests and institutional constraints.

Ensuring a Shared Understanding of Mobility Issues

Developing a diagnostic report that all stakeholders accepted posed a challenge. Innovative tools like cartoons and synthesised mobility data were used to make the findings accessible and engaging. However, achieving broad consensus on the diagnosis required extensive consultation and careful framing of key issues.

Translating Discussions into Actionable Outcomes

Turning workshop discussions into a concrete and operational roadmap was a key challenge. The success of the Urban Mobility Forum depended not only on logistics—such as organising a large conference hall and multiple workshop rooms—but also on effectively capturing insights from the discussions and translating them into strategic, implementable actions.

Support from the Partnership - Mobility Planning 2

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) Development

Funded by: AFD and National Government of Madagascar

Funding amount: EUR 500,00017

Implemented by: AFD

Local counterpart: Commune Urbaine d'Antananarivo (CUA), ATT (Agence des Transports Terrestres)

Supported activities:

- Diagnosis
- Definition of a vision and strategic objectives, development of scenarios, formulation of priority measures proposed by the SUMP
- Elaboration of a detailed scenario into an action plan, including monitoring and evaluation indicators, implementation modalities and timelines, budgeting, and financing of measures
- Participatory process (dialogue and consultation)

Status of the SUMP development process

Project start: 2024 Q2

Expected project completion: 2025 Q4

Completed Outputs:

A first version of the diagnosis was shared and presented to the AUC and AFD.

Next expected Outputs:

- SUMP Vision
- Scenarios
- Action plan

¹⁷ This SUMP support project is a component of the larger support AFD is providing to Antananarivo on active mobility with a total budget of 10 M EUR. See the Implementation Support activities of this factsheet to know more.

SUMP impact indicators baselines

Indicator Baseline - 2024

Total annual transport related GHG emissions (Mt CO2eq)	160 Mt CO₂eq
Annual transport related GHG emissions per capita (kg CO2eq)	0.5 kg CO₂eq / capita
Access to public transport in urban areas Proportion of the population living within 500 meters of a public transport stop	N/A
Air pollution Mean urban air pollution of particulate matter (in μ g PM _{2.5}) at road-based monitoring stations.	29 μg/m³ of PM2.5
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	N/A
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group.	N/A

Insights from practice: lessons learned from the SUMP development process

To create a shared and actionable urban mobility strategy, building an inclusive stakeholder dialogue is necessary to bring together public authorities, private operators, users, and development partners. This ensures that the plan will be targeted to real-world challenges, gain widespread acceptance, and secure long-term commitment for implementation (especially in complex and resource-constrained contexts like Antananarivo).

Support from the Partnership: Implementation Support 1

Project description

Technical Assistance: Paratransit Pilot Project

Funded by: AFD

Funding amount: EUR 600,000

Implemented by: CODATU

Local counterpart: Ministry of Transport and Meteorology (Ministère des Transports et de la Météorologie) ans Ministry of Decentralisation and Land Planning (Ministère de la Décentralisation et de l'Aménagement du Territoire)

In collaboration with Urban Commune of Antananarivo (CUA) (Commune Urbaine d'Antananarivo), Rural Commune of Ambohimangakely, Land Transport Agency (ATT) (Agence des Transports Terrestres), Urban Planning Agency of Greater Antananarivo (IPAM)

Supported activities:

The pilot project aims to modernise and professionalise Antananarivo's public transport and paratransit system. The project seeks to demonstrate that it can significantly improve user service, reduce air pollution, greenhouse gas emissions, and improve road safety while enhancing the operators' working conditions. All of this is expected to be achieved without any public subsidy while maintaining the principles of collective transport by Taxi-Be on the pilot corridor.

The project considers two main phases:

- Pilot project line for the new larivo bypass, inaugurated in 2021;
- Pilot project line for existing bus network based on the bypass line demonstrator.

The project aims to demonstrate the profitability of the new rolling stock on new infrastructure operated by a private operator or a consortium, followed by creating an association of owners who own the new rolling stock and commit to respect the new operating rules. CODATU provides technical assistance throughout the process, including advising a steering committee, drafting technical and operating specifications, supporting operators to create the operators association, delivering training, assessing results, and scaling the project.

Status of the pilot project implementation

Project start: 2023 Q1

Expected project completion: 2025 Q1 (Extension under review)

Completed Outputs:

- The necessary studies to define the number of buses required for the pilot project.
- Financial studies, including a consultation tool and a comprehensive economic model.
- · Operator selection strategies.
- Specifications for the new vehicles, sourcing vehicles that can be adapted to the local context and meet the specifications.
- Analysis of the operation of the digital ticketing system.
- Training transport operators on legal structures on "Championing the modernisation of Taxi Be" (November 2023).
- Database of existing Taxi-Be routes.
- A strategic note on gender issues.
- The action plan and communication strategy for field occupancy communication have already been prepared to maintain public attention on the project.

Next expected Outputs:

- For public authorities: training on transport network planning and market studies.
- Recruitment of technical support to conduct a diagnosis, develop a strategic plan, and implement the operationalisation plan.
- Train the authorities on the operation of bus routes and public service delegation contracts adapted to the selection of bus routes.
- Organise a study visit to Dakar, Senegal for the transport operators.
- Assist the authorities in selecting operators and service providers for the ticketing system.
- CODATU will help the transport operators choose the firm to assist them in structuring themselves as a transport company.
- Studies on the necessary roadworks for the launch of the ring road route.
- Study related to the depot platform.

Insights from practice: key pilot project takeaways

Facilitating financial viability for transporters is key for upscale

Access to financing and tax incentives is crucial for enabling transport operators to formalise their services. Establishing financial facilitation mechanisms and advocating for supportive fiscal policies can reduce barriers to investment and encourage participation.

Ensuring High-Level Political Support is a pre-requisite for project execution.

In a highly centralised country, securing commitment from high-level authorities is essential for overcoming bureaucratic challenges and ensuring the project's long-term success. Political backing strengthens institutional support and helps drive policy changes.

The pilot project contributes to defining a valid approach to reform.

Successful paratransit formalisation requires a structured implementation process, including demand and financial studies, technical assessments (equipment and road infrastructure needs), change management strategies, capacity building, assistance in structuring transport companies and acquiring necessary equipment. A well-defined project logic ensures that all critical aspects are addressed in a coordinated manner. A simple and transparent financial model, particularly for the future line's income statement, is essential for gaining trust and buy-in from transport operators and decision-makers. Precise consultation tools help align stakeholders and improve project feasibility.

Perspectives for scaling

In January 2025, the Malagasy government decided to purchase 300 buses to be resold to transport operators. CODATU is involved in reflecting on the scaling strategy based on the pilot project, using the same processes and techniques that were put in place.

Support from the Partnership: Implementation Support 2

Project description

Technical Assistance: Active Modes Deployment Project

Funded by: AFD

Funding amount: EUR 10,000,000¹⁸

Implemented by: Communauté Urbaine d'Antananarive and GRET - Cabanon Vertical

Local counterpart: Communauté Urbaine d'Antananarive (CUA)

¹⁸ The total amount includes the support to Antananarivo's SUMP development support for 500,000 EUR (description of the project included above).

Supported activities:

The project is structured in 3 main components:

Component 1: Securing and Developing Active Mobility - Urban Mobility Planning (€7.5M)

The project will enable the development of infrastructure for active mobility, implemented by the CUA with the support of a Project Management Team. The main objectives of this component include:

- I. Upgrading the most frequented pedestrian routes (rehabilitation and widening of sidewalks, securing pedestrian zones);
- II. Creating cycling routes between key urban areas;
- III. Securing areas around schools and markets;
- IV. Improving waiting areas for taxi-bés; and
- V. Addressing critical crossing points.

This component also funds and supports the development of a Sustainable Urban Mobility Plan (SUMP) for the city for 500,000 EUR.

Component 2: Capacity Building for the CUA (€1.3M)

Strengthen the CUA's institutional capacities (change management planning, procurement, governance, etc.) while supporting the implementation of the active mobility program (Component 1). This component provides technical assistance on Social Urban Project Management (MOUS) guidance and contributes to communication and user awareness campaigns.

Component 3: Urban Incubator (€1.2M)

Implemented by GRET¹⁹, this component aims to enhance community participation. Small-scale urban improvements will be carried out through the engagement of civil society and/or local residents to improve the quality and inclusiveness of public spaces. Activities will help prefigure the developments financed under the active mobility component or target Lalankely project sites to foster user ownership of the infrastructure.

Status of pilot project implementation

Project start: 2023 Q2

Expected project completion: 2026 Q4

Completed Outputs:

- The tender process to implement the technical assistance (Component 2) has been launched.
- The Project Management Team to carry out the more complex studies and oversee Component 1 is being recruited.

Next expected Outputs:

Strengthen institutional capacities of CUA

- Institutional diagnosis of the CUA to implement urban mobility projects
- · Plan of institutional strengthening for the CUA
- Strengthening CUA in team management, project management, and tender processes

¹⁹ To know more about GRET https://gret.org/qui-sommes-nous/

Implement the active modes projects, including planning, executing, and monitoring

- Modernisation of digital tools and software (Autocad, QGIS)
- Training on the acquired softwares and tools
- Trainings, exchanges, and sharing experiences in active mobility

Reinforce dialogue with citizens to raise awareness in terms of active mobility

- Support the local government to carry out awareness-raising campaigns to free public spaces
- Work with the police to interact with the public and make comply with the public space usage rules
- Information dissemination and awareness-raising about the active mobility strategy in Antananarivo.

Highlights in the past year

CODATU invited other cities to join the Partnership Antsirabe and Toamasina, who officially became members in December 2024.

Last updated in December 2024

Casablanca, Morocco

Partner city

Status of the project: Ongoing preparation of the Sustainable Urban Mobility Plan



Basic Information

Grand Casablanca urban area: 1,117 km² Population: 4,047,066 | Growth rate: 0.85%

Region capital city

GDP per capita: USD 2,832 (2016)

Modal Share:

Formal public transport: 13% Informal public transport: 6%

Walking: 60% Private cars: 13%

Private motorbikes or 2-wheelers: 4%

Taxis: 4%

National GHG emissions per capita: 2.62 (tCO₂eq)

Exposure to climate change: HIGH

Context

Located in the western part of the country, Casablanca is the largest city in Morocco and operates as the country's economic capital, with the industrial and service sectors contributing a viable share in the country's GDP (World Bank, 2017). Statistics show that the region of Casablanca-Settat alone accounted for 34% of Morocco's economy in 2014, positioning the city as the backbone of the country's economy.

Regardless of serving as an important financial hub, the metropolitan area is facing exponential mobility challenges such as increasing traffic congestion, degrading air quality and a public transport network unable to meet the growing demands and take its fair share of the 7.8 million trips taken daily in the city. In 2005, only 15% of inhabitants used the public transport system to commute. Since then, the Moroccan government and the municipality of Casablanca have committed to significantly increasing access to mass public transport by tackling various underlying issues.

In line with this objective, the municipality formulated a strategic development plan focusing on expanding and improving existing tram and bus networks to integrate different neighbourhoods, and foreseeing the development of approximately 100 km of a new public transport network by 2025, which consists of four tram and two rapid bus lines (Casa Transports SA, 2020). The highlight of this project was the implementation of tramway line 1 (31 km completed in 2012) and line 2 (19 km completed in 2018) to develop efficient and green public transport. Additionally, tramway line 3 (14 km) and line 4 (18km) and the BRT lines 5 and 6 are in the pipeline, expected to operate fully in 2022. Alongside the tram lines, the project features a green corridor and improved pedestrian facilities to ensure the enhanced safety and security of citizens. By strengthening various components of the public transport system, the city is committed to reducing private vehicle ownership and cutting on GHG emissions in line with Morocco's NDCs.

There is an existing transport master plan or similar document. Casa Transports, the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure. It has authority to borrow from international finance sources. Systems and procedures are in place to monitor, evaluate and report on urban mobility.

The technical assistance has contributed to institutional strengthening by supporting Casa Transports in the stakeholder engagement process.

Support from the Partnership

Technical assistance: Project management assistance to the Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 90,000 (total cost of the SUMP EUR 1,500,000)

Implemented by: AFD through the MobiliseYourCity Morocco project

Local counterpart: Casa Transports

Finance leverage: EUR 100,500,000

Supported activities:

The objective of the MobiliseYourCity service is to assist Casa Transports in piloting the SUMP study in order to contribute to its technical quality, its implementation, its coherence with the MobiliseYourCity orientations as well as with the different approaches at the national and local level in terms of low-carbon transport planning.

- Mission 1: Evaluation and assessment of the 2004 urban mobility plan
- Mission 2: Data collection, surveys, and counts
- Mission 3: Realisation of the diagnosis
- Mission 4: Definition of scenarios and choice of a scenario
- Mission 5: Formalisation of the SUMP Project
- Mission 6: Design and implementation of a mobility observatory

Status of the SUMP process

Project start date: 2017 Q3

SUMP expected completion date: 2022 Q4

Completed outputs:

- Inventory and diagnosis; goal setting and strategy development
- Scenario elaboration
- Formalisation of the SUMP project

Next expected outputs:

Full SUMP report

SUMP key measures and cost estimates

The following table gives an overview of the measures and cost estimates identified at a preliminary stage of the SUMP process.

Measure	Cost Estimate
Implementation of a Transport Authority	EUR 1,000,000
Mass Transit line implementation	EUR 4,600,000,00
Bus network and taxi reorganisation and related bus lane	EUR 140,000,000
Circulation plan and parking policy upgrade	EUR 250,000,000
Non-motorised transport policy upgrade	tbd
Upgrade of intermodality facilities	tbd
Freight regulation enhancement	tbd
Transversal: improve road safety and reduce private car disturbance	tbd

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures	CAPEX Estimate
Public transport and NMT	EUR 4,741,000,000
Street shaping urban roads and traffic management	EUR 250,000,000
Other measures	EUR 0
Total	EUR 4,991,000,000

Finance leverage

Financing resulting from the SUMP	Source	Amount
Line 3 and 4 of the tramway networks	AFD Loan	EUR 100,000,000
Technical assistance for Casa Transport	AFD Grant	EUR 500,000

Projected impact

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2019	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO2eq)	-0.1 Mt CO₂eq	1.05 Mt CO₂eq	1.50 Mt CO₂eq	1.40 Mt CO₂eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	-17 kg CO₂eq / capita	262 kg CO₂eq / capita	257 kg CO₂eq / capita	240 kg CO₂eq / capita

Khouribga, Morocco

Status of the project: Ongoing preparation of the Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 52 km²

Population: 216,397 | Growth rate: 0.65%

GDP per capita: USD 3,237

National GHG emissions per capita: 2.62 (tCO₂eq)

Exposure to climate change: HIGH

Context

Khouribga is an inland urban area and an industrial hub in central Morocco. Located 120 km from Casablanca and 154 km from Rabat, Khouribga serves as the capital of the Khouribga province in the Béni Mellal-Khénifra region. The city emerged in 1923 by French authorities after the discovery of rich mineral reserves and held a strong position as the biggest exporter of phosphate in the world. Due to various mining sites in the region, the local economy is heavily dependent on the mining sector as it contributes significantly to Morocco's economy, accounting for about 10% of the GDP and 72% of national phosphate exports in 2013.

The city is located at the intersection of two major roads. Khouribga has a small railway station for interurban transport located in the centre of the city. It is used for both passenger and freight transport. The railway station was one of the stops of the journey of the climate train from Casablanca to Safi during COP22 in Morocco, raising awareness for sustainable transport. Apart from a city bus, there is no existing mass transit system in the city.

There is no existing transport master plan or similar document. The Municipality of Khouribga, the local counterpart, does not have the mandate and responsibility to finance mass public transport infrastructure, even though it has the authority to borrow from international finance sources. Systems and procedures are not in place to monitor, evaluate or report on urban mobility.

Support from the Partnership

Technical assistance: Project management assistance for Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 100,000

Implemented by: AFD through MobiliseYourCity Morocco

Local counterpart: Commune de Khouribga

Supported activities:

- Support the Khouribga Commune in the preparation, launching and piloting of the SUMP study to contribute to its technical quality, its implementation, its coherence with the MobiliseYourCity orientations as well as with the different approaches at the national and local level in terms of low-carbon transport planning.
- Ensure that the SUMP study is well articulated with opposable planning documents (urban planning, environment).

Status of the SUMP process

Project start: 2019 Q2

Expected project completion: 2023 Q4

Completed outputs:

- Terms of reference for the SUMP
- Procurement process to hire a consultant for the SUMP study finalized
- Launching the SUMP process with local consultant

Next expected outputs:

SUMP process

Last update in December 2023

Maputo, Mozambique

Status of the project: Ongoing preparation of the Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 2,200 km²

Population: 2,541,000 | Growth rate: +2,5%

National capital city

GDP per capita: USD 1,376

Modal Share:

Formal public transport: 9.2% Informal public transport: 32.9%

Walking/cycling: 45.9% Private cars: 10.2%

Private motorbikes or 2-wheelers: 0.2%

Freight vehicles: 0.7%

National GHG emissions per capita: 1.24 (tCO₂eq)

Exposure to climate change: HIGH

Context

Maputo is the capital of Mozambique and a port city located on the Indian Ocean coast in Southern Africa. The Maputo Metropolitan Area is the political and commercial centre and the most populated area of Mozambique, where approximately 8.8% of the country's population lives. Furthermore, the Metropolitan Area of Maputo includes the densest municipality (Maputo City), the most populated municipality (Matola City), and the largest municipality in the country (Boane City). The district of Marracuene and Maputo city is the most urbanised area of the agglomeration. The primary economic activities in Maputo are trade, transportation, communication, and manufacturing. The attraction of economic opportunities in the capital has, therefore, resulted in population growth, which is spiralling into neighbouring cities and districts. There is continuous growth further away from the central area towards the outskirts of Maputo.

The current demand for public transport is greater than the offer, leading to increased private vehicle ownership, traffic congestion and irregular parking on public roads. The poor state of road infrastructures reduces the quality and durability of public transport and the fluidity of traffic. The city also lacks proper infrastructure for active mobility, a high number of road accidents and a lack of security for women in transport. These mobility issues can undermine the area's economic development due to the limited access to employment opportunities, poor health, and time-consuming trips. This situation especially affects low-income populations and leads to a severe impact on air quality and climate.

An urban transport master plan for the Great Maputo area was prepared under JICA funding in 2014. According to this document, walking (46%) and chapas/minibus (33%) were the two dominant transport modes. Chapas is an informal public transport company owned by private operators that follows a "fill and go" system, usually waiting at terminal areas until it is fully loaded. 4,500 chapas were licensed and operating in the Maputo Metropolitan Area in 2004. However, many additional chapas are operating without licenses.

The master plan forecasts significant growth in mobility demand in the forthcoming years. Urban trips are expected to double between 2012 (3.3 million trips/day) and 2035 (expected 6.7 million trips per day). As a result, congestion is likely to increase to unbearable levels if no action is taken to make mobility patterns more efficient in Maputo. The 2014 master plan proposes a prioritised action plan to tackle these mobility challenges that feed into the SUMP. The main proposed actions are developing a mass rapid transit network and improving the road network.

The Metropolitan Transport Agency of Maputo (AMT – Agencia Metropolitana de Transportes de Maputo) was created in 2017 through Decree No. 85/2017, and it started operating in August 2018 after the Board of Directors (PCA) appointment. AMT has the responsibility in the Metropolitan Area of Maputo to plan, implement and manage collective public transport, and to respond to the interests of municipalities, provincial, district governments and private partners in the Maputo metropolitan area, as well as the central government, in matters of public transport.

AMT's precise role, competence, and financial framework are still to be precisely defined. Refined objectives shall be reflected in a strategic plan for the AMT itself, aiming at the structuration and consolidation of the authority. A partnership with UITP, under World Bank funding, has started to develop such a strategic plan but is currently on hold. The think tank Waza supports the AMT staff as a partner under the T-SUM project. The AMT currently does not have the mandate and responsibility to finance mass public transport infrastructure. It does not have the authority to borrow from international finance sources. Systems and procedures are not in place to monitor, evaluate and report on urban mobility.

In this challenging environment, some of the main issues for public stakeholders to tackle are the lack of a common metropolitan vision, poor coordination between stakeholders, limited technical and institutional capacities, and limited options for tax collection and revenues from the transportation system. The Transport Agency for Maputo Metropolitan Area and the municipalities of the Metropolitan Area want to develop a Sustainable Urban Mobility Plan (SUMP) to work on the current issues related to urban mobility and expand the public transport system to all neighbourhoods. The plan shall also improve access routes, consolidate the overall transport system and help with the relationship with other primary stakeholders. In the organisational aspect, the SUMP assignment shall support AMT in finalising the institution structure strategic plan under formulation.

Support from the Partnership - Mobility Planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: 500,000 EUR

Implemented by: AFD through the MobiliseYourCity AFD Africa Program

Local counterpart: Agência Metropolitana de Transporte de Maputo (AMT)

Supported activities:

 SUMP preparation for Maputo Metropolitan Area, managed by the local transport authority, Agência Metropolitan de Transportes de Maputo (AMT)

Other related activities supported by AFD outside of MobiliseYourCity scope and financing:

- Technical Assistance to the AMT (Financing of one Senior and one Junior position)
- Quick wins actions

Status of the SUMP process

Project start: 2021 Q1

Expected project completion: 2023 Q2

Completed outputs:

- Mobilise Days (2019)
- Elaboration of Terms of Reference
- Selection of the consultant and administrative assignment of the mission (February 2021)
- Inception phase (completed in January 2022)

Next expected outputs:

- Vision and scenario phase
- Action plan and final SUMP

Updated in December 2024

Mwanza, Tanzania

Status of the project: Ongoing Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 425 km²

Population: 1,311,000 | Growth rate: 5.3%

Region capital city

GDP per capita: USD 1,089

Modal split:

Walking: 61% Cycling: 3%

Public transport: 25%

Motorcycle: 7% Private car: 2%

National GHG emissions per capita: 0.206 (tCO,eq)

Exposure to climate change: HIGH

Context

Mwanza is one of the fastest growing cities in Tanzania. It has a prime location on the Lake Victoria and it has a great potential to become a leading urban centre in the Lake Region and all of the East African Community. Due to its locational advantage, Mwanza offers great investment opportunities that will increasingly attract investors and visitors from all over the Globe. In view of the rapid population growth and economic advantages that Mwanza poses, the Government of Tanzania decided to prepare a master plan to serve as a tool for guiding the spatial and economic growth of this City. This master plan is anticipated to serve as a tool for coordinating actors and projects, attracting planned economic ventures and providing certainty over investment.

Sustainable transport modes dominate commuting choices in intermediate cities in Tanzania. Analysis of available Master Plans suggests walking is the dominant transport mode, accounting for between 50% and 70% of trips in most cities surveyed. Cycling, an equally sustainable alternative, is used by an additional 3% to 8%. In larger cities such as Mwanza and Arusha, public transportation is the second most-used mode, accounting for 20% and 27% of trips, respectively, while other motorised vehicles account for 8% of trips.

Administratively, the country is organised into Regions which are subdivided into Districts, and Districts are further subdivided into wards. All the administrative divisions are represented by respective Governments, except for wards, which are governed by District Authorities. Regional Government i.e., Regional Secretariat, acts as a coordinator between the National level and Local Governments. Additionally, Regional Government assists in the institutional capacity building of Local Governments. Based on the settlement population and other criteria established by The Urban Planning Act, certain districts are classified into Urban District and Rural District. Urban Districts are ruled by City/ Municipal Councils, whereas as Rural Districts are ruled by District Councils.

Mwanza City is comprised of the Nyamagana and Ilemela Districts. In 2000, the Nyamagana District attained city status and is since then referred to as Mwanza City which is ruled by the City Council. Meanwhile, the Ilemela District is largely rural and is ruled by the Municipal Council. The city has 12 Divisions and 21 wards, of which 12 wards are in the Nyamagana district and nine wards are in the Ilemela district. In addition, the city has a total of 481 subwards (Mitaas), eight villages and 72 sub-villages (vitongoji) as per Mwanza City Master Plan 2008-28. Mwanza City and Ilemela local governments collectively occupy the surface area of 1337 km², out of which only 437 km² is dry land area, including islands, while 900 km² belongs to the Lake.

Support from the Partnership

Technical assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD under the funding line MobiliseYourCity Africa

Funding amount: EUR 375,000

Implemented by: AFD through the MobiliseYourCity Africa Program

Local counterpart: Mwanza City Council

Supported activities:

- Inception
- Diagnosis
- Vision and Objectives
- Action Plan and Financing

Status of the SUMP process

Tender publication: 2022 Q4

Project start date: 2023

Completed Outputs:

- Inception Phase
- · Component 1: Active inception of the SUMP process
- Component 2: Diagnosis

Expected outputs:

- Component 3: Definition of a vision and strategic objectives, construction of scenarios, formulation of priority measures proposed by the SUMP
- Component 4: Detailing the selected scenario into an action plan, including monitoring and evaluation indicators, implementation modalities and horizons, budgeting and financing of measures
- Cross-cutting mission: Participatory Process (concertation and consultation)
- Final SUMP report

Lomé, Togo

Partner city

Status of the project: Ongoing Sustainable Urban Mobility Plan & upcoming implementation support



Basic Information

Urban area: 333 km² Population: 2,188,376 National capital city

GDP per capita: USD 1,700 (Togo)

Modal share:

Walking 51%,

Private motorcycle 20%,

Shared motorcycle (moto-taxis) 19%

Shared taxis 4%

Private car 3%

Bicycle 1%

Bus (SOTRAL cie) 1%

National GHG emissions per capita: 1.06 (tCO₂eq)

Exposure to climate change: HIGH

Context

Lomé is Togo's capital and largest city, representing nearly 20% of the country's population. Lomé is located on the Gulf of Guinea and serves as an important port city and a commercial and industrial hub. The city is home to various economic activities, including agriculture, manufacturing, and services.

The transport system in Lomé is primarily composed of taxis, both collectives and motorcycles. Minibuses are also present but are mostly reserved for intercity transport. There is limited evidence of traffic congestion in Lomé so far. Lomé's mobility rate (the average daily number of trips per inhabitant) is 2.3, a rather usual rate for a Sub-Saharan city. The population's low age average (the mean age in Togo is 17 years old) and problems regarding affording services such as moto-taxis, taxis, and private cars limit the mobility of Lomé's population. There is no formal transport master plan. However, the SUMP elaboration process started in April 2023 under the Covenant of Mayors in Sub-Saharan Africa (CoM SSA – EU funding) and SYSTRA as a consultant. The mission includes a feasibility study supporting measures for SOTRAL, Lomé's public bus company.

Local institutions manage the transport system, including the Ministry of Transport (MTRAF -Ministère des Transports Routiers, Aeriens et Ferroviaires) and DAGL (District Autonome du Grand Lomé). In particular, MTRAF is the main actor in charge of public transport sector management. MTRAF has a clear mandate to implement and finance public transport, and MTRAF has access to Togo's national budget resources as well as international finance. Although some systems and procedures exist to monitor, evaluate, and report on urban mobility, they are only partially in place.

The main current challenge concerning urban mobility in Lomé is transport massification, as motorcycles remain the primary motorised mode. Additionally, there is a significant challenge regarding road safety, particularly for pedestrians who rely heavily on walking, especially the younger population, and face suboptimal conditions for pedestrian movement. These issues adversely affect the environment, public health, and economic development.

Support from the Partnership - Mobility Planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: EU, under the Covenant of Mayors in Sub-Saharan Africa (CoM SSA)

Funding amount: 600,000 EUR

Implemented by: AFD

Local counterpart: Ministry of Road, Air, and Rail Transport (TRAF) - Autonomous District of Great Lomé (DAGL)

Supported activities:

Support to developing a Sustainable Urban Mobility Plan for the Grand Lomé

The primary objective of the Sustainable Urban Mobility Plan (SUMP) is to formulate a comprehensive transport strategy that addresses Lomé's challenges, improves mobility for residents, and contributes to sustainable urban development.

The provided technical assistance contributes to institutional strengthening by improving the capacity of local institutions to formulate and implement sustainable urban transport policies and programmes. This involves working with local stakeholders to identify key challenges, devise action plans, and establish mechanisms for monitoring and evaluating progress. By supporting the development of a SUMP, the technical assistance facilitates creating a more efficient, safe, and sustainable urban transport system in Lomé, ultimately benefiting the city's residents and fostering economic growth.

Status of the SUMP development process

Project start date: 2023 Q2

SUMP expected adoption date: 2024 Q3

Local counterpart: MTRAF

Completed outputs:

- Official launch event on 16th May 2023
- Comprehensive survey program implemented in May-June 2023
- 3 roundtables on sustainable mobility organised in 2023
- 3 training sessions on mobility organised in 2023

Next expected outputs

- SUMP completion is foreseen for Q3 2024
- SUMP adoption is foreseen for Q4 2024

Support from the Partnership: Implementation Support 1

Project description

Technical Assistance: Paratransit Pilot Project

Funded by: AFD through MobiliseYourCity Global

Funding amount: EUR 450 000

Implemented by: CODATU

Local counterpart: Ministry of Road, Air, and Rail Transport (TRAF) - Autonomous District of Great Lomé (DAGL)

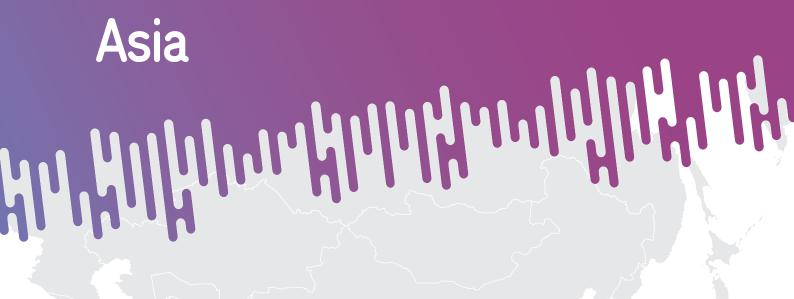
Supported activities:

- Institutional development and capacity building: To enhance the ability of local authorities to modernise the paratransit sector by supporting the implementation of new regulations.
- Technical assistance: The project's objectives will be to improve the quality of service and working conditions
 of motorbike taxis by providing targeted training for drivers, improving the infrastructure of stopping points and
 creating a dedicated building for the profession, providing access to information, registration procedures and
 medical and social services.

Status of the pilot project implementation

Expected project start: 2025 Q2

Updated in December 2024



Asia

Completed

Tbilisi, Georgia P.164

India P.169

Ahmedabad, India P.172

Kochi, India P.176

Nagpur, India P.180

Medan, Indonesia P.184

Abbottabad, Pakistan P.189

Mingora (Swat District), Pakistan P.194

Peshawar, Pakistan P.198

The Philippines P.202

Ongoing

Kurunegala, Sri Lanka P.208

Davao, Philippines P.212

Thailand P.214

Tbilisi, Georgia

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 726 km²

Population: 1,227,81117 | Growth rate: 1.33%

Country capital city

GDP per capita: USD 5,422

Modal Share:

Public transport: 49%

Walking: 28%

Private cars: 20%

Taxis: 2%

National GHG emissions per capita: 4.61 (tCO₂eq)

Exposure to climate change: Medium

Context

Tbilisi is the largest city and capital of the Republic of Georgia, located in the South Caucasus in East Georgia, along the bank of River Mtkvari. Due to its strategic location between Europe and Asia and its proximity to the Silk Road, the city is an important trade route between neighbouring countries, significantly experiencing high traffic levels, primarily through the Tbilisi Metropolitan Area. The 2024 population census indicates that around 1,227,811 inhabitants reside in the city, accounting for approximately 30% of Georgia's total population.

Tbilisi is on the road towards sustainable urban mobility and is working on major areas to promote it. Previously, the city was heavily dependent on private vehicle ownership, resulting in significant traffic congestion and environmental challenges such as air and noise pollution. However, from the 2010s onwards, the city has invested extensively in green transport networks in line with the <u>Tbilisi Sustainable Urban Transport Strategy</u>. Today, Tbilisi has a 27.6 km long Soviet-era metro network servicing an average of 450,000 passenger trips a day and accounting for approximately 13% of total trips – operating as the backbone of the public transport system. The metro is complemented by an expanding BRT system, extensive municipal and minibus services, a ridership of more than 350,000 daily passengers, and a recently introduced bicycle road network.

The city, however, still faces major mobility-related challenges, of which three of the most pressing relate to a lack of infrastructural and fare integration of the diverse public transport services, a persistent predominance of private motorised transport and a very low modal share of active modes, especially cycling. Tbilisi joined the MobiliseYourCity Partnership in 2019 and is now part of a new project aiming to support city administrations in the South Caucasus to design, implement and further develop their urban transport systems in a participatory, sustainable, and integrated manner.

¹⁷ Taken from https://geostat.ge/media/61960/1-3-population-by-cities-and-boroughs.xlsx

Georgia's capital is cooperating with various implementing partners of MobiliseYourCity to develop, among others, a Sustainable Urban Mobility Plan (SUMP), improve the existing BRT system in the city centre, promote active transport, strengthen the capacities of the local government and develop a cable-car service.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD for MobiliseYourCity Asia

Funding amount: EUR 406,000

Implemented by: AFD in collaboration with ADB and GIZ

Local counterpart: Municipality of Tbilisi

Supported Activities:

By Asian Development Bank (ADB)

· Infrastructure development and financing of the SUMP

By Agence Française de Développement (AFD)

- Technical Assistance to the Transport Department of the Tbilisi City Hall to monitor SUMP elaboration
- Follow-up on initiatives related to active mobility with the Tbilisi City Hall
- Complementary study on (i) improvement of existing BRT-light in the city centre; (ii) improvement of the standard bus network; (iii) potential development of a cable car system; (iv) development of bike share scheme and cycling master plan

Status of the SUMP development process

Project start: Q1 2019

Project completion: Q1 2023 (endorsed by Mayor Kakha Kaladze)

Completed outputs:

• Sustainable Urban Mobility Plan

SUMP key measures, leveraged financing and projected impact

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Superblocks	USD 44,868,107
Waterfront Revitalisation	USD 3,050,000
Freedom Square and Rustaveli Avenue	USD 15,460,000
Pedestrian-Oriented Kote Afkhazi Street	USD 3,685,000
Didi Dighomi - City Centre Rail Link	USD 276,300,000
Commuter Rail	USD 288,450,000

Measure	Cost Estimate
Metro Modernisation	USD 71,900,000
Tbilisi Bus Transit (TBT)	USD 63,365,561
Better Buses and Minibuses	USD 126,487,010
Cable Cars	USD 235,700,000
Station Square Upgrade and Bus Priority Crossing	USD 27,000,000
Pedestrian and Cycle-Friendly River Crossings	USD 11,639,282
Pedestrian Streets	USD 2,495,430
Bicycle Network	USD 27,972,999
On-Street Parking Management	USD750,000
Parking Levy	USD 950,000
Vision Zero (speed limit reduction, safe cycle network, complete streets, safer junctions)	USD 79,081,000
Transit-Oriented Development (TOD)	USD 230,347
Intelligent Transport System (ITS)	USD 48,500,000
Urban Freight Policy	USD 572,600

The following table summarises the total capital expenses (CAPEX) estimates for different measures in the SUMP.

Urban transport investment measures	CAPEX Estimate (USD M)
5-Year Cost Estimate (Initiation)	505 -515
Total investment cost	1,300-1,400
Freedom Square and Rustaveli Avenue	USD 15,460,000

Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)¹⁸

Description	Source of financing	Secured	Amount
Detailed design for Tbilisi Superblock project	ADB	N/A	USD 1,000,000
Concept Design and Feasibility Study for Development of Superblocks in Tbilisi	ADB	N/A	USD 784,358.78
Transport System Data Collection	ADB	N/A	USD 900,000
Feasibility Study and Detailed Design for Tbilisi metro station upgrades	ADB	N/A	USD 1,422,547.35
Preparation of Sustainable Urban Mobility Plan (SUMP) for Tbilisi	ADB	N/A	USD 837,274.58
Feasibility Study on the Development of Public and Tourist Transport Services on the Mtkvari River in Tbilisi	ADB	N/A	USD 791,290.29

 $^{^{18}\} https://www.adb.org/sites/default/files/project-documents/53118/53118-002-pp-en.pdf$

Associated financing (independently secured financing for measures related to the SUMP)

Description	Source of financing	Secured	Amount
Sustainable urban mobility in Georgia (SUM Tbilisi) - Project implementation and accompanying measures Consultant (GOPA infra)	KfW		EUR 4,362,467
Connect Georgia – Shaping the mobility of tomorrow in Georgia	BMZ		N/A
Sustainable Urban Mobility in the South Caucasus (Mobility4Cities)	BMZ, KfW	Yes	EUR 4,800,000
Tbilisi City Hall Transport Advisory	CDIA	Yes	EUR 356,768

Projected impacts

A Social and Environmental Impact Assessment (SEIA) was undertaken for each of the proposed actions, focusing on 4 criteria:

- Social Impact focusing on land acquisition, displacement of people, loss of agricultural land, loss of property, and displacement of minorities e
- Environmental Impact whether the project is adjacent to an environmentally sensitive area and the potential environmental impacts of the project
- Economic Impact focusing on the impacts on transport mode choice, jobs, productivity, regional GDP, and health
- · Accessibility improvements to public transport accessibility, as well as impact on the mobility impaired

The actions are evaluated based on these criteria using the following scale:

- A: weakest benefit/impact
- B: medium benefit/impact
- C: strongest benefit/impact

Social and environmental impact assessment

Urban transport investment measures	Social	Environmental	Economic	Accessibility	
Superblocks	С	С	В	С	
Waterfront Revitalisation	С	С	С	С	
Freedom Square and Rustaveli Avenue	С	С	С	С	
Pedestrian-Oriented Kote Afkhazi Street	С	С	С	С	
Didi Dighomi - City Centre Rail Link	С	С	В	С	
Commuter Rail	С	С	В	С	
Metro Modernisation	С	С	С	С	
Tbilisi Bus Transit (TBT)	С	С	С	С	
Better Buses and Minibuses	С	С	В	С	
Cable Cars	С	С	В	С	
Station Square Upgrade and Bus Priority Crossing	С	С	С	С	
Pedestrian and Cycle-Friendly River Crossings	С	С	В	С	
Pedestrian Streets	С	С	В	С	
Bicycle Network	С	С	С	С	

Social and environmental impact assessment

Urban transport investment measures	Social	Environmental	Economic	Accessibility
On-Street Parking Management	С	С	В	С
Parking Levy	С	С	В	В
Vision Zero (speed limit reduction, safe cycle network, complete streets, safer junctions)	С	С	В	С
Transit-Oriented Development (TOD)	С	С	В	С
Intelligent Transport System (ITS)	С	С	С	С
Urban Freight Policy	С	С	В	В

Insights from practice: lessons learned from the SUMP process

The Tbilisi SUMP process highlighted the importance of early stakeholder engagement, integrated planning, and securing political commitment to ensure a comprehensive and actionable sustainable urban mobility strategy.

Perspectives for implementation

The Tbilisi Transport Plan was endorsed by Mayor Kakha Kaladze and is expected to move into the implementation phase. The city's leadership invites active participation from citizens to ensure a collaborative approach to bringing this vision to life

Highlights in the past years

The plan was finalised in 2023, marking a significant milestone in Tbilisi's sustainable mobility journey.

Moreover, in the past years, significant progress has been made in modernising the Tbilisi Metro, enhancing the travel experience for its 500,000 daily passengers, particularly benefiting women and low-income groups. A phased investment program by the Cities Development Initiative for Asia (CDIA), a multi-donor trust fund managed by the ADB, has resulted in replacing outdated power cables and installing modern ventilators, effectively improving passenger safety and air quality. The city government has invested in the renovation of rolling stock and metro stations, which has increased trip frequency and improved overall infrastructure. As a result, Metro ridership has risen to 40% of all public transport users, while ongoing plans aim to enhance inclusivity and accessibility for vulnerable populations. Contributions from donors like the ADB and the European Bank for Reconstruction and Development have further supported these efforts through substantial loans for station upgrades and infrastructure improvements. CDIA's assistance has also strengthened transport governance in Tbilisi, improving project planning and creating a unified transport and land use planning agency.

However, in December 2024, the German government decided to stop cooperation projects with the Georgian government, responding to the anti-EU shift in the Georgian government and the ongoing violent suppression of pro-European mass demonstrations. This will stop envisaged cooperation projects with a cumulated worth of 237 million euros. ¹⁹

Updated in December 2024

¹⁹ https://www.bmz.de/en/countries/georgia

India

Status of the project: Completed technical assistance

Partner country



Basic Information

Population: 1 352 642 280 (2018) | Growth rate: 1.1%

Percentage of urban population: 34% (2018) Urban population growth rate: 2.3% (2018)

GDP per capita: USD 9,027

Percentage of the population living below the national

poverty line: 21.9% (2011)

Nationally Determined Contribution (NDC): Unquantified

transport-related NDC

National GHG emissions per capita: 1.728 (tCO₂eq)

Proportion of transport-related GHG emissions: approx.

10% (2019)

Exposure to climate change: HIGH

Context

Home to more than one out of every six inhabitants of the planet, India possesses the size and weight of a continent. Each city has its own transport system, yet their development levels vary. While cities experience steady economic growth, it is juxtaposed with inadequate urban planning, leading to mobility issues. Private modes of transportation are growing rapidly, overshadowing greener public and non-motorised transport options, which suffer from insufficient infrastructure investment. The repercussions include road congestion, a scarcity of parking space, declining air quality in urban areas, and rising traffic accidents.

The MobiliseYourCity programme tailored for India aims to (1) support four pilot cities - Nagpur, Kochi, Aizawl and Ahmedabad - in reducing their greenhouse gas (GHG) emissions associated with urban transport by implementing sustainable urban mobility plans at the local level and (2) aid India in improving its sustainable transport policy at the national level. The programme is facilitated with the support of the Ministry of Housing and Urban Affairs and the Government of India at the national level and with the backing of the pilot cities through their respective municipal corporations.

At the national level, the primary objectives include aligning urban transport policies with GHG emission reduction goals and establishing a Monitoring, Reporting, and Verification (MRV) framework to measure and report impacts, thereby facilitating access to climate finance. The envisaged strategy and its operational documentation tools will contribute to achieving the Nationally Determined Contributions (NDCs) outlined by the Government of India under the Paris Agreement, which aims "to reduce the emission intensity of its GDP by 33%-35% by 2030 compared to 2005 levels". This strategy, referred to as the "Climate Change Mitigation Strategy for Urban Transport (CCMSUT) in India and the definition and preparation of an MRV system", is being developed with the support of the French Development Agency (AFD) and the Urban Mass Transit Company Ltd. (PIU of the MobiliseYourCity India Programme).

Support from the Partnership

Technical Assistance: Elaboration of a Climate Change Mitigation Strategy for Urban Transport

Funded by: EU Asia Investment Facility (AIF)

Funding amount: EUR 490,000

Implemented by: AFD through the MobiliseYourCity India Project

Local counterpart: Ministry of Housing and Urban Affairs (MoHUA)

Primary purpose of the technical assistance:

Supporting India at the national level to improve its sustainable transport policy (policy-based strategy), notably by developing a Climate Change Mitigation Strategy (CCMS) that could be submitted to the United Nations Framework Convention on Climate Change (UNFCCC).

The improved sustainable transport policy shall encompass an updated vision for urban transport and of identifying strategic measures for its implementation, including institutional development, financing, and capacity building, among others.

Supported activities:

- At the national level, MobiliseYourCity is assisting the Government of India (GoI) through the Ministry of Housing and Urban Affairs in improving their sustainable urban transport policy.
- · Connecting urban transport policies to GHG emissions reduction as part of the climate change mitigation agenda.
- At the local level, MobiliseYourCity is providing support to four pilot cities Nagpur, Kochi, Aizawl and Ahmedabad
 - in their endeavours to reduce GHG emissions in the urban transport sector by developing and implementing
 SUMPs.

Status of implementation

Project start: 2018 Q3

Project completion: 2023 Q4

Completed outputs:

- First Project Steering Committee meeting
- Climate Change Mitigation Strategy
- MRV System Inception
- 9 capacity building sessions conducted at the national level
- Improvement of the toolkit to develop Comprehensive Mobility Plans (CMP)
- MRV System Implementation

Insights from practice: lessons learned from the technical assistance

The technical assistance under the MobiliseYourCity programme emphasised the need to build capacity at both national and local levels. Local capacity building, in particular, is crucial for ensuring effective and long-term implementation of CMPs.

Improvement of India's toolkit to develop Comprehensive Mobility Plans (CMP)

Comprehensive Mobility Plans serve as India's strategic planning framework for local governments. They bear resemblance to Sustainable Urban Mobility Plans, aiming to establish a long-term vision and goals for a city's urban mobility system, design a plan integrating urban mobility and land use measures, and determine the necessary steps for implementation.

India's national government has a toolkit in place to guide cities in the development of CMPs. However, the toolkit was outdated. With support from MobiliseYourCity, it has undergone updates and enhancements along the following lines:

- A self-assessment tool provides additional support to cities in identifying their current status and preparatory steps required before developing or improving a CMP.
- Climate change plays a more prominent role, such as serving as a guiding principle for prioritising measures and recommendations.
- Comprehensive Mobility Plans are integrated as statutory documents in Master Plans.

Emphasis on the resilience of the public transport system and non-motorised alternatives due to the severe impact of the pandemic on profitability

Transportation is a rapidly evolving sector linked with infrastructure development, the adoption of new technologies, and innovative funding mechanisms. However, the Covid-19 pandemic has strongly reduced revenue and introduced new operational and management challenges. Collective transport, in particular, faces major issues related to decreased ridership, volatile demand, additional costs of security and disinfection measures, and staff availability.

Over the pandemic period, knowledge and guidelines have been disseminated through webinars on addressing the financial and operational challenges faced by public transport systems, both for crisis management and in anticipation of post-Covid recovery. Electric buses might be part of the response strategy due to their lower operation costs, increased reliability, and low emissions of GHGs and air pollutants.

Stakeholders involved in MobiliseYourCity India have made substantial contributions to knowledge development and sharing, organising webinars and publishing guidelines on smart mobility, non-motorised transport modes, the connection between air quality and urban planning, tactical urbanism, multimodal integration, and various other topics. These contents are available online on the MobiliseYourCity knowledge platform.

Updated in December 2024

Ahmedabad, India

Status of the project:Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 1,866 km²

Population: 7,800,000 | Growth rate: 2.54%

Region capital city

GDP per capita: USD 2,771

Modal Share:

(Source: Metro DPR)

Formal public transport: 11.4% Informal public transport: 6.1%

Walking: 37.2% Cycling: 9.1% Private cars: 3.9%

Private motorbikes or 2-wheelers: 25.9%

Other: 6.3%

National GHG emissions per capita: 2.41 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

Ahmedabad is one of Gujarat, India's oldest and most densely populated cities. As a hub for industries, including manufacturing, services, textiles, etc., Ahmedabad is experiencing rapid growth. The Greater Ahmedabad (GA) region is expected to grow from 8.1 million in 2011 to about 12.5 million in 2031. Major industrial developments in the city are being planned in areas like Viramgam, Changodar and Bechraji Special Investment Regions (SIRs) in western and southwestern parts of the Greater Ahmedabad area. To strengthen the growth in the city, another major employment node, GIFT City, is being planned between Ahmedabad and Gandhinagar as a major financial centre. While some industrial investments are also envisaged in Kadi, Kalol, and Mehmedabad, Sanand, Dehgam, Kheda, and Bavla are being developed as residential towns.²⁰

All these planned developments will add another 1.75 million trips in the SUMP study area by 2031, a 15% increase from the current levels. Today, about 21% of the population is covered by the public transport system in Ahmedabad, whereby the mode share for public transport is about 11%, with around 900,000 passengers boarding on AMTS (Ahmedabad Municipal Transport Service) buses and 150,000 on BRTS. Ahmedabad has a compact city structure with poly-centric nodes and mixed land use throughout the city, concentrated along major roads. Trip patterns are dispersed, so the average trip length (5.5 km) is shorter than in comparably sized cities in India.

²⁰ Integrated Mobility Plan for Greater Ahmedabad Region, Vol. 1

Until 2007, urban transport was a state function and had systematically been taken care of in the city of Ahmedabad, especially in the old heritage city. Ahmedabad Municipal Transport Services (AMTS) comprises 201 routes covering 549 km of road. AMTS has a coverage area spread over 88% of the developed AMC area. According to AMTS data from 2012, it caters to 11% of trips within the city, i.e. 0.9 million passengers per day. The first closed system BRT in India was deployed in Ahmedabad in 2009 and is operated by Ahmedabad Janmarg Limited (AJL), a special purpose vehicle (SPV) formulated by Ahmedabad Municipal Corporation, Ahmedabad Urban Development Authority and the Government of Gujarat. The BRT system operates on 13 routes with a network length of 82 km and a daily ridership of 130,000 passengers with peak headways of 2.5 to 3 minutes.

Ahmedabad Municipal Corporation, the local counterpart, has the mandate and responsibility to finance bus transport infrastructure, which it can borrow from international finance sources for. The performance of bus services is monitored and evaluated periodically by the Municipal Corporation.

The local authority is willing to strengthen integrated land-use transport planning, aiming to address the lack of land for public spaces, public transport utilities or depots, and the absence of walking and cycling infrastructure. Other important challenges are promoting fare integration of public transport, last mile connectivity, reducing travel distance and time and adopting on-street design, management, and integration in Local Area Plans.

AFD, through the MobiliseYourCity India Program, supported Ahmedabad in developing a Sustainable Urban Mobility Plan and establishing an Urban Mobility Observatory. Technical assistance will contribute to institutional strengthening by building the capacity of local urban bodies on mobility issues and sustainable urban development.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) and establishment of Urban Mobility Observatory in Nagpur, Kochi, and Ahmedabad

Funded by: European Union

Funding amount: EUR 900,000

Implemented by: AFD through the MobiliseYourCity India Project and supported by UMTC as a Project Implementation

Unit

Local counterpart: Ahmedabad Municipal Corporation

Supported Activities:

- 1. Preparation of SUMP & creation of mobility observatory
- 2. Preparation of Handbook for Physical Planning of Transit Interchanges
- 3. Capacity Building activities for stakeholders in the city

Status of implementation

Project start: 2018 Q4

Project completion: 2023 Q4

Completed outputs:

- MobiliseDays (Feb. 2019)
- Inception phase and inception report delivered (Dec. 2021)
- Publication of the General guidelines and Concept Plan for Transit Interchanges in Ahmedabad
- Mobility diagnosis report, SUMP Vision and Goal Setting, Construction of Scenarios, Measures prioritisation, SUMP Action Plan and synthesis of SUMP Action Plan
- · Capacity building: in-person workshops and online webinars

- Meetings of the local steering committee, SUMP task force, and other related instances
- Draft Mobility Observatory (online platform)
- Participatory process
- Finalised Mobility Observatory and MRV systems for Nagpur, Kochi, and Ahmedabad:

Finalised in 2023, the Urban Mobility Observatory²¹ showcases the data collected during the technical assistance period, providing an overview of transport-related information in Ahmedabad. A set of 20 indicators has been defined and is presented through graphs and maps on an interactive website.

Core impact indicators baseline and projected impacts

Indicator	Baseline - 2022	Projected 2041 BAU	Projected 2041 SUMP scenario (proactive)	Impact 2030 (SUMP vs BAU)
Annual transport-related GHG emissions per capita (kg CO ₂ eq)	81 kg CO₂eq / capita	90 kg CO₂eq / capita	102 kg CO₂eq / capita	Data not yet available
Modal share Increase of the modal shares of trips by public transport (% of total trips)	Public Transport: 8%	Public Transport: 20%	Public Transport: 35%	Public Transport ²² : +15%
Access to public transport Proportion of the population living 500 meters or less from a public transport stop	21% (IMP 2031)	Data not yet available	Data not yet available	Data not yet available
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	33 μg/m³ of PM _{2.5} ²³ as on date 13-02-2021	Data not yet available	Data not yet available	Data not yet available
Road safety Annual traffic fatalities in the urban area per 100,000 inhabitants	5 fatalities / 100,000 hab. (2019)	Data not yet available	Data not yet available	Data not yet available

Key measures and cost estimates

The following table highlights the most significant measures identified as part of technical assistance.

Measure

Strategic axis A: Assign clear responsibilities and funding for urban mobility
Strategic axis B: Plan for urban forms and land use that minimise travel distances
Strategic axis C: Mitigate growth of private vehicle use and encourage a modal shift from private vehicles to public transport
Strategic axis D: Develop an integrated public transport system
Strategic axis E: Develop complete streets and facilitate access to the integrated transport system
Strategic axis F: Improve efficiency and reduce externalities of the freight system
Strategic axis G: Promote energy efficiency and GHG emissions mitigation
Total cost of measures: Rs. 450.8 billion (EUR 5.02 billion) for investment and Rs. 1.58 billion (EUR 20 million) for operation until 2041

²¹ The Ahmedabad Urban Mobility Observatory can be accessed via the following link: http://transitec.oslandia.io/sump/mobility-indicators/ahmedabad

¹² In the chosen scenario, GHG emissions per capita would increase due to population growth and an increase in passenger kilometres. However, the GHG emissions per passenger kilometre travelled per year would decrease.

²³ https://aqicn.org/station/

Insights from practice: key takeaways

Stakeholder collaboration enables sustainable urban mobility

Enhanced cooperation between entities engaged in urban mobility initiatives (municipal authorities, operators, etc.) could lead to more cohesive and efficient urban mobility solutions for Ahmedabad.

Highlights in the past year

AFD has supported the extension of the metro of Ahmedabad towards Gandhinagar since 2022.

In 2024, with the support of AFD, the Gujarat Metro Rail Corporation (GMRC) initiated efforts to enhance connectivity and accessibility through Multimodal Integration (MMI) at various stations in Phases I and II of the Ahmedabad Metro Rail Project. These efforts are designed to facilitate seamless transfers between different modes of transport, thereby improving the overall efficiency of the urban mobility network. It places significant emphasis on enhancing pedestrian accessibility and safety.

Updated in December 2024

Kochi, India

Status of the project: Completed technical assistance

Partner city



Basic Information

Urban area: 632 km²

Population: 2,100,000 (2011) | Growth rate: 1%

GDP per capita: USD 2,800 (2017)

GHG emissions per capita: 1,7 tons (India, 2014)

Modal share:

Motorcycle: 26%

Cars: 10%

Public bus: 42%

Cycling: 3%

Walking: 12%

Other motorised: 7%

National GHG emissions per capita: 2.41 (tCO₂eq)

Exposure to climate change: HIGH

Coastal City

Context

Kochi, one of the most important cities in South India, is also known as the commercial capital of Kerala. Its influence extends far beyond the municipal corporation area of 95 km² and its 650,000 inhabitants. The city's mobility demand is rapidly increasing, with the latest estimates indicating that the metropolitan region accounts for almost two million passenger trips per day (CMP, 2017).

AFD has supported Kochi's construction of a light metro and restructuring of its urban mobility. This innovation-driven project dramatically contributes to transforming Kochi into a Smart City.

Kochi has initiated various successful initiatives for the multimodal integration of the first phase of the metro under development. The city has introduced an integrated smart card system, established an agreement with rickshaw associations, and integrated metro stations with walking and cycling infrastructure.

The city has two railway stations, namely Ernakulum North and Ernakulum South, with an estimated daily passenger volume of 65,000. The stations are connected via a 3.8 km corridor that links significant activity centres such as Ambedkar Stadium, Lissie Hospital, and the KSRTC Bus terminal & depot. However, connectivity remains poor, and the primary modes of transport are walking and auto-rickshaws (intermediate public transport). Despite ongoing efforts, the urban local authority has struggled to improve connectivity between the two stations due to a lack of a suitable design and clarity on optimal movement patterns.

Recently, a renewed interest has been in improving mobility along the corridor. The city aims to develop it as a green corridor, improving connectivity, aesthetics, cleanliness, and security, thus increasing land value throughout. The objective is also to facilitate multimodal integration by improving the accessibility to metro stations from identified activity centres. The project aims to promote mobility, focusing on pedestrians and non-motorised modes to create a more walkable, safe, environmentally friendly, and humane city.

However, several challenges persist: lack of stakeholder buy-in for the Comprehensive Mobility Plan (CMP), failure to consider climate impacts in the CMP, disappointing metro ridership and revenues (probably due to inappropriate fares and competition with city buses), and insufficient data availability on urban mobility.

Support from the Partnership

Technical Assistance: Improve the existing city mobility plan and support a pre-feasibility study for a priority pilot project

Funded by: EU Asia Investment Facility (AIF)

Funding amount: Approx. EUR 700,000

Implemented by: AFD through the MobiliseYourCity India Project, supported by WRI for project management and coordination

Local counterpart: City of Kochi

Supported Activities:

- 1. Development of a toolkit for the preparation of sustainable and tailored Comprehensive Mobility Plans (CMPs), including the definition of monitoring indicators;
- 2. Capacity-building for Municipal Corporations and Unified Metropolitan Transport Authorities to
 - I. Implement the toolkit within their cities
 - II. Develop strategies for low-carbon transport in collaboration with city stakeholders
 - III. Ensure the monitoring of strategy implementation through data collection
 - IV. Facilitate data transfer to the national level;
- 3. Preparation of CMP improvements with city stakeholders, including conducting a bus route rationalisation study in Kochi;
- 4. Conducting a pre-feasibility study for a priority pilot project: the North-South Green Mobility corridor in Kochi;
- 5. Establishment of a dedicated unit within Urban Local Bodies to collect data and oversee the progress of CMP implementation, functioning as a "mobility observatory."

The Urban Mobility Observatory was finalised in 2023. It showcases the data collected during the technical assistance period, providing an overview of transport-related information in Kochi. A set of 20 indicators has been defined and is presented through graphs and maps on an interactive website.²⁴

Status of implementation

Project start: 2018 Q4

Project completion: 2023 Q4

²⁴ The Kochi Urban Mobility Observatory can be accessed via the following link: http://transitec.oslandia.io/sump/mobility-indicators/kochi

Completed outputs:

- Mobilise Days
- North-South rail corridor mobility improvement plan
- · Eight capacity-building sessions
- · Establishment of the urban mobility observatory
- · Launch and implementation of the Green Mobility Corridor
- Bus Route rationalisation study

Finance leverage

Leveraged financing (resulting or enabled by the technical assistance)

Description	Source of financing	Secured	Amount
Loan to Kochi Metro Rail Limited (KMRL) supporting multimodal integration at metro stations.	AFD	Secured	Data not available
Additional financing has been allocated for the procurement of buses as part of the bus network restructuring	AFD	Planned	EUR 27 million

Insights from practice

Moving along an active railway - an uncomfortable and dangerous route

The corridor selected for mobility improvement is the shortest connection (2.5 km) between the Ernakulam North and Ernakulam South railway stations. No continuous road exists along this corridor, and the area is characterised by difficult accessibility, uneven paths, and inadequate lighting at night. Despite these conditions, four mobility surveys conducted in February 2020 as part of the diagnosis phase of the study indicated that almost 15,000 people travel along the corridor every day. This includes:

- 10,000 pedestrians who either walk along or on the tracks due to the difficult walking conditions (60%) or cross the tracks (40%)
- 3,000 autorickshaw passengers navigating complex and congested routes parallel to the corridor, transporting 8,000 people
- 400 cyclists utilising parts of the corridor that are accessible to them

The diagnosis of the current situation along the corridor indicated the necessity to improve the connectivity between the railway stations, the city centre, and the surrounding areas as part of integrating the area into Kochi's urban space. The current unsafe and uninviting conditions further accentuated the need for improved urban management.

Ensuring safe and comfortable movement along the railway – design and planning principles of the Green Mobility corridor

Based on the analysis of the current conditions and survey results of current corridor users, the plan for the Green Mobility corridor consists of four main components:

 The development of a green corridor adapted to non-motorised transport (mainly focused on pedestrians and cyclists)

- The development of e-rickshaw services on a separate line to provide a fast and environmentally friendly alternative to the current autorickshaws
- Development of hubs and connections to the city centre at core intersections like the KSRTC Bus Terminal to foster intermodal connections and create public spaces
- Development of social and commercial activities to increase the corridor's appeal

The design principles for the proposed project primarily focused on increasing the amenity and accessibility of the area for non-motorised transport modes by levelling the ground and developing 3 - 4.5 m pathways to ensure safe passage for cyclists and pedestrians within the existing right of way. As part of the aim to increase the security of users, the installation of fences and hedges to separate the railway tracks was included in the plan. An illumination concept will further ensure safe and appealing use during the night and can contribute to the corridor's beautification. Integrating existing trees into the new design is planned to further enhance the attractiveness and comfort of walking and cycling on the route.

On the pathway towards implementation

In this preliminary stage of the project, implementation costs were estimated at 250 million INR, approximately 3.31 million US\$, excluding land acquisition. The estimated user frequency of the corridor and the associated benefits in terms of emission reduction and increases in social and economic activities include:

- A 50% increase in pedestrians and cyclists (including transfer from autorickshaws, motorcycles, and car users)
- Emission reduction potential of 84 tons of CO₂/year based on a transfer of 2,400 vehicle-km/day to green modes on the corridor
- Considerable improvements in safety (prevent people from walking on the railway tracks)
- Attractive public space for the 30,000 people who live, work, or study around the corridor.

The Mobility Improvement study suggests that the project could be implemented in the short term, and the municipality has already taken initial steps in this regard. The project was reviewed and updated by the technical department of the Kochi Municipal Corporation, and a preliminary assessment of land ownership was conducted to elaborate on feasibility. Despite delays due to the COVID-19 pandemic and the change of municipal government, the Municipal Council has presented and approved the project report to commence the Detailed Project Report process for further implementation.

Highlights of the past year

AFD has provided a loan to Kochi Metro Rail Limited (KMRL) for the Kochi Metro, supporting multimodal integration at metro stations.

An additional €27 million has been allocated for the procurement of buses as part of the bus network restructuring. There is ongoing collaboration to review and optimise bus routes following the routes recommended as part of the MobiliseYourCity Technical Assistance.

Updated in December 2024

Nagpur, India

Status of the project: Completed technical assistance

Partner city



Basic Information

Urban area: 217 km²

Population: 2,893,000 | Growth rate: 1.5%

Region capital city

GDP per capita: USD 3,000

Modal Share

Formal public transport: 9.8%1

Informal public transport: 26% (autorickshaw, minibus,

school bus, chartered bus etc.)

Walking: 9.5% Cycling: 6%

Private motorbikes or 2-wheelers: 42.6%

Private cars: 5.7%

National GHG emissions per capita: 2.41 (tCO₂eq)

Exposure to climate change: HIGH

Context

Nagpur is the Orange City of India, the third largest city in Maharashtra and the state's second capital. Nagpur lies precisely at the centre of the country, with Zero Mile Stone indicating the geographical centre of India. It is a major commercial and political centre of the Vidarbha region of Maharashtra. With nearly 3 million people, Nagpur accounts for 6.5% of the state's urban population. The total population, including the surrounding towns of Kamptee, Kalmeshwar, and Hingna, was 3.6 million in 2021.

Nagpur is the main centre of commerce in the state and an important trading location. The city is also home to various food manufacturing units. The city is undertaking the Multi-Model International Passenger and Cargo Hub Airport at Nagpur's (MIHAN) project, the most significant economic development project currently underway in India regarding investments.

Nagpur is one of the Indian cities that has a Metro Rail System. The majority of commuters currently commute by buses as the metro project is still ongoing. Phase I of Nagpur metro was sanctioned in 2015, and its construction began in December 2020. Nagpur Metro started commercial operations at 16 stations and received approval for Phase 2. Nagpur metro has undertaken initiatives to integrate the metro system with other modes such as station and area design for physical integration and a digital app and card for fare integration.

Apart from the metro, the city bus service is a crucial mode of transport run by Nagpur Municipal Corporation (NMC). The bus service provides connectivity within the city and with suburban areas such as Butibori, Katol, Kalamna etc. NMC recently procured electric buses to run under the "Tejaswini" scheme, a bus service exclusively reserved for women. The Smart City Corporation of Nagpur (Nagpur Smart and Sustainable City Development Corporation Ltd) is also working to improve transport conditions in the city with various proposals such as PBS, Smart Parking, MLCPs etc. and is working with AFD on the preparation of a transition plan to electric buses.

A proposal was also sent to Maharashtra Government for establishing a Unified Metropolitan Transport Authority (UMTA) in Nagpur. The proposal in under consideration.

As other municipal corporations in India, Nagpur Municipal Corporation, has the mandate and responsibility to finance bus transport infrastructure, whereby it can possibly borrow from international finance sources too. The performance of bus services is monitored and evaluated periodically by municipal corporations.

Whereas the ongoing development of a new phase of the metro will provide a new leap in public transport to counterbalance the negative impact of the increase in private vehicle traffic and provide more sustainable mobility solutions for the future, the city still faces significant challenges, such as the financial sustainability of the public transport system and its very low walkability due to the lack of pedestrian infrastructure. Beyond investment and technology, a transformation of mindset and system is required to move beyond the current reliance on individual mobility, for which increased public awareness on the benefits of a more sustainable mobility system will be critical.

Considering that the last comprehensive mobility plan (CMP) was prepared in 2013 and since CMPs are revised in 10 years, a new version may be taken up in the upcoming years. Further mobility needs, patterns and challenges have evolved with the introduction of the metro in the city and warrant an updated planning framework. In addition, the old CMP did not focus on e-mobility aspects which have gained traction in last few years.

AFD is supporting the Nagpur Municipal Corporation in the improvement of the existing CMP, the development of an e-bus transition plan and the creation of a mobility observatory.

Support from the Partnership

Technical Assistance: mobility plan update, mobility observatory and complementary study

Funded by: European Union though the EU Asia Investment facility

Funding amount: EUR 350,000

Implemented by: AFD through the MobiliseYourCity India Programme

Local counterpart: Nagpur Municipal Corporation via Nagpur Smart and Sustainable City Development Corporation Ltd.

Supported Activities:

- 1. Update of the existing Comprehensive Mobility Plan (CMP)
- 2. Development of Transition Plan of Municipal buses to Electric Buses
- 3. Creation of a mobility observatory

Status of implementation

Project start: Q4 2018

Project completion: Q4 2023

Completed outputs:

- MoU signed August 2018
- Local Steering Committee meetings were held during November 2019, December 2019, December 2020 and Technical task force committee settled in March 2019
- 8 Trainings and capacity building workshops July 2019, December 2019 and February 2020
- Online webinars were conducted during the period of June 2020 Jan 2021
- Elaboration of a Transition Plan for Municipal Bus Network In Nagpur Final report "Pre-feasibility study for electric buses deployment".
- Urban Mobility observatory: Finalised in 2023, it showcases the data collected during the technical assistance
 period, proving an overview of transport-related information in Nagpur. A set of 20 indicators has been defined and
 is presented through graphs and maps on an interactive website. The Nagpur Urban Mobility Observatory can be
 accessed online.²⁵

Core impact indicators baselines

Indicator	Baseline - N/A
Total annual transport related GHG emissions (Mt CO2eq)	507,300 Mt CO₂eq
Annual transport related GHG emissions per capita (kg CO_2eq)	197 kg CO₂eq / capita
Air pollution Mean urban air pollution of particulate matter (in μg PM _{2.5}) at road-based monitoring stations	49.2 μg/m³ of PM _{2.5}
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	10 fatalities / 100,000 hab
Annual traffic fatalities in the urban area, per 100,000 inhabitants Percentage of disposable household income spent on public transport for the second quintile household income group	12%

Highlights in previous years

With the support from AFD, the Nagpur Municipality has developed a transition plan that aims at progressively replacing existing internal combustion buses with e-buses.

The transition plan to electric buses builds on Nagpur's Comprehensive Mobility plan, which envisaged a progressive increase of the bus fleet size by almost 90% in 2018 and up to 4.5 times its current size by 2041, for a total of 2,418 buses.

The transition plan not only addresses the electrification requirements of a significant share of the bus fleet, but also includes recommendations on route rationalisation for a better integration with the recently introduced metro and adaptations to the contractual framework to guarantee operational and financial viability of the new system.

The pre-feasibility study focused on the electrification impacts and operational requirements of the bus fleet that shall be replaced by 2022, as foreseen in the existing contracts. In total, 237 standard diesel buses shall be replaced with 202 newer vehicles. For this purpose, three scenarios were assessed:

- Reference scenario: Replacement with new standard diesel buses
- Scenario 1: Replacement with new electric buses of 350 kWh battery capacity
- Scenario 2: Replacement with new electric buses of 400 KWh battery capacity

²⁵ http://transitec.oslandia.io/sump/mobility-indicators/nagpur

The pre-feasibility study showed that all modernization scenarios required higher OPEX and CAPEX. The e-bus scenarios require significantly higher resources than the reference scenario. This difference is caused by a significantly higher CAPEX of e-buses relative to diesel buses compared to a lower OPEX for the former.

To close this funding and financing gap, both the study and the transition plan recommend three potential solutions:

- 1. Increased cost efficiency through improved contractual frameworks: Such adaptations could include extending the contract duration from 5 to 10 years, providing additional incentives to increase operational efficiency and renegotiating existing contracts or launching new competitive tenders for the new electric buses.
- 2. Investment subsidies: Different sources could be leveraged by the Nagpur Municipality to cover the increasing costs, such as advertisement revenue, land-value taxes, as well as international support in the form of soft loans and grants for capital expenditures from diverse sources, such as the Green Climate Fund or the Clean Technology Fund. The study however did not include any of these sources in its financial analysis, hence their potential remains unclear.
- 3. Increased fare box revenue: Currently, Nagpur's tariff levels are relatively low compared to agglomerations sharing similar characteristics, as the city has given priority to service affordability, by relying on public subsidies to close the ensuing gap. According to the study, the current conditions provide some flexibility to potential fare increases, assuming that these are progressive and their impact on ridership levels remains limited.

The necessary investments to electrify the bus fleet can be justified by non-quantified positive externalities, such as improved health and air quality and reduced GHG emissions. Even with high emission factors stemming from the electricity grid, battery electric buses have the potential to reduce CO_2 emissions by 30% compared to diesel buses and could save approximately $100 \text{ kt}CO_2$ e over a period of 15 years.

Nagpur's transition plan and the pre-feasibility study can be accessed in the MobiliseYourCity Knowledge Platform using this link.

Updated in December 2024

Medan, Indonesia

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 3,151 km²

Population: 4,795,186 | Growth rate: +1.1%

Regional capital city

GDP per capita: USD 12,400

Modal Share:

Public transport: 6% of which

Minibus: 94%

Bus: 5%

Train: 1%

On-demand transport services: 7% of which

Tuk-tuk: 40%

Ojek: 50%

Taxi: 10%

Private transport: 72% of which

Car: 23%

Motorcycle: 77%

Non-motorised transport: 15% of which

Walking: 94%

Cycling: 6%

National GHG emissions per capita: 3.45 (tCO₂eq)

Exposure to climate change: High

Context

Medan, located on the northern part of Sumatra Island, is the capital and largest city of North Sumatra Province and ranks as the fourth largest city in Indonesia. The city itself has a population of 2.3 million, while the greater metropolitan area (Mebidangro) encompasses 4.8 million inhabitants and continues to expand. This metropolitan area consists of four Kota (cities) and two Kabupaten (regencies): Kota Medan, Kota Binjai, Kabupaten Deli Serdang, and part of Kabupaten Karo. Medan is a significant economic hub, home to Belawan, Indonesia's third-largest container port, and Kualanamu International Airport, the country's fifth-busiest airport. With an economic growth rate of 6.4%, which exceeds the national average, the Medan metropolitan area plays a crucial role in Indonesia's industrial and economic landscape.

Medan's transportation system has been grappling with the rapid increase in private motorised vehicle usage, particularly motorcycles, while road infrastructure grows at a modest 0.8% annually. This disparity has resulted in considerable congestion issues. Public transport services in Medan are provided through fixed routes that include public passenger

cars and buses of various sizes alongside a rail network that offers alternative transport options. However, Medan lacks a designated Public Transport Authority, which impacts a mass transit system overall organisation and development. The development of a comprehensive Sustainable Urban Mobility Plan (SUMP) for Mebidangro in 2022 introduced a strategic transport master plan with a strong focus on enhancing public transit options.

Local authorities in the Medan Metropolitan Area do not currently hold full responsibility or the mandate to finance mass public transport infrastructure, nor do they have direct authority to borrow from international finance sources. This limits their capacity to drive large-scale transport infrastructure projects independently. Institutional systems and procedures for monitoring, evaluating, and reporting on urban mobility in the area are only partially established, creating challenges for systematic transport management and policy enforcement.

Support from the Partnership - Mobility Planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) Development

Funded by: AFD

Funding amount: EUR 510,155

Implemented by: AFD through MobiliseYourCity Asia

Local counterpart: North Sumatra Province (and the representatives of the Medan Metropolitan Area authorities from Kota Medan, Kota Binjai, Kabupaten Deli Serdang and Kabupaten Karo).

Supported activities:

- Supporting a SUMP process for the Medan Metropolitan Area
- Conducting capacity development activities (subject to inception phase approval)
- Developing a citizen participation process and a communication plan
- Establishing an observatory on urban mobility data and GHG emissions

Status of the SUMP development process

Project start: 2020 Q3

Project completion: 2022 Q2

SUMP approval: de facto approved (no formal approval expected)

Completed outputs:

- Inception Phase
- Diagnosis
- · Construction of scenarios and formulation of priority measures
- · Action plan which includes indicators, budget, and financing measures
- Final SUMP document

SUMP measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure packages	Cost Estimate (CapEx) up to 2040	Cost Estimate (OpEx) up to 2040	
Urban planning and non-motorized transport Periodical closure of roads Mixed-use zones Comfortable and safe sidewalks Development of safe bicycle lanes Laws to restrict urban sprawl Transit-Oriented Development framework	USD 64,100,000		
Public transport Expansion of BRT network Expansion of urban rail wider network Increased rail service levels Bus lines for schools Optimiszation and rejuvenation of minibus routes Waterbus lines Promotional campaign for public transport	USD 3,274,000,000		
Road network and private vehicles Road link Medan – Berastagi Circular roads in Medan Quality road network across Mebidangro Standardized road signage Traffic calming measures and blackspots Limitation on freight vehicles operating hours Dedicated Park and Ride at transit hubs Multimodal hubs	USD 222,300,000	Operating expenses (OpEx) were assessed for all quantifiable and operational actions, including public transport and digital systems, and excluding governance measures that require further specification through	
Governance Creation of Metropolitan Transport Authority Corporate taxes on mobility Capacity building through technical assistance Separation of train and track operators Reorganisation and reform of the minibus industry	USD 8,100,000	additional studies.	
Environment Incentives to reduce fuel consumption Tax on motoriszed vehicles using urban roads Cleaner energy sources for all road vehicles Renewable energy for rail Air quality stations Awareness-raising campaign	USD 2,900,000		
Digitalization • Mobility as a service • Fare integration • Passenger information systems • Traffic monitoring systems	USD 600,000		
Total	USD 3,572,000,000	USD 1,400,000,000	

SUMP Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Secured	Amount
Loan to build the 1st BRT line	World Bank ²⁶ , AFD ²⁷	Secured	USD 132,000,000
Technical Assistance for establishing BRT Management Institution of Medan	UK-PACT Grant	Secured	Unknown

Projected impacts

Indicator	Impact 2035 Baseline - 2020 (SUMP vs BAU)		Projected 2035 BAU	Projected 2035 SUMP scenario
Total annual GHG emissions (Mt CO2eq)	-0618 t CO₂eq or 15% reduction	2225 t CO₂eq	3196 t CO₂eq	2578 t CO₂eq
Annual transport related GHG emissions per capita (kg ${\tt CO_2eq})$	-124 kg CO₂eq / capita	549 kg CO₂eq / capita	641 kg CO₂eq / capita	517 kg CO₂eq / capita
Access Increase in the proportion of the population living within 750m or less of a mass transit stop	+7,3%	3,8%	3,8%1	11,1%
Air pollution Decrease in the mean urban air pollution of particulate matter (in µg PM _{2.5}) at road-based monitoring stations	N/A	N/A	N/A	N/A
Modal share Increase in the modal shares of trips by public transport, walking, and cycling	Public Transport: 13.7% NMT: 0% of total trips TOTAL: 13.7%	Public Transport: 9.6% NMT: 15% of total trips TOTAL: 24.6%	Public Transport: 9.6% NMT: 15% of total trips TOTAL: 24.6%	Public Transport: 23.3% NMT: 15% of total trips TOTAL: 38.3%
Road safety A decrease in traffic fatalities within the urban area, per 100.000 inhabitants	-9.0 fatalities/100 000 hab	10.4 fatalities/100 000 hab	13.9 fatalities/100 000 hab	4.9 fatalities/100 000 hab (Target)
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	-15,5%	13,0%	20,5%	5,0% (Target)

²⁸ More about the Indonesia Mass Transit (MASTRAN project) available here https://www.worldbank.org/en/news/press-release/2022/06/01/new-project-will-support-improved-mobility-and-accessibility-in-indonesia-bandung-and-medan-metropolitan-areas

²⁷ AFD cofinance the project for 40 M EUR. More information available here https://www.afd.fr/en/actualites/communique-de-presse/40-million-euros-loan-afd-enhance-urban-mobility-and-accessibility-indonesia-mass-transit-program-support-project-mastran

Insights from practice: lessons learned from the SUMP development process

Leveraging innovative data collection tools and inclusive stakeholder processes has proven critical in developing a strategic, data-driven, and widely accepted mobility framework for Medan.

The **use of telecom data** for diagnostics allowed for precise and reliable analysis of home-to-work commute surveys, significantly improving the understanding of mobility patterns and travel demand in the Medan Metropolitan Area.

Stakeholder engagement was prioritized at every phase of the process, ensuring broad participation in the development of scenarios and the action plan. This inclusive approach fostered consensus, enriched decision-making, and built local ownership of the SUMP measures.

Mebidangro's SUMP leading the way of sustainable mobility planning in Indonesia:

Mebidangro's SUMP is being used as a model by the Ministry of Transport to show other cities what such plan should cover.

Perspectives for SUMP implementation

The SUMP as a requirement for Bappenas to approve the financing of the MASTRAN project:

The SUMP is de facto approved, as Bappenas approved the completion of the grant, and the SUMP was necessary for the approval of the Mass Transit Program Support (MASTRAN) Project as national priority project (Green Book). This project covers the implementation of BRT projects in Medan and Bandung and the designs of two future BRTs in Semarang and Surabaya. The total amount of the loan co financed by AFD and the World Bank, is USD 264 M.

Next Steps

As next steps, the implementation of the SUMP is expected to include the creation of a task force that will be in charge of setting up a Metropolitan Transport Authority and establishing an observatory on urban mobility data and GHG emissions.

Updated in December 2024

Abbottabad, Pakistan

Partner city

Status of the project: Completed preparation of the Sustainable Urban Mobility Plan



Basic Information

Urban area: 1,967 km²

Population: 981,590 (district scale) | Growth rate: 1.82%

GDP per capita: USD 1,284 (Pakistan, 2019)

Modal split:

Walking: 64%

Formal public transport: 5% (including school and

staff buses)

Informal public transport: 16% (minibus)

Private cars: 6%

Private motorbikes or 2-wheelers: 5%

Other: 4%

National GHG emissions per capita: 0.9 (tCO₂eq)

Exposure to climate change: HIGH

Context

Abbottabad is 61 km northeast of Rawalpindi, in the Hazara Division of Khyber Pakhtunkhwa (KP) province, northwest Pakistan. It is a gateway to the picturesque Kagan Valley. It is connected by road with Indus Plain and the Kashmir region, and by rail with Peshawar. The city is a district market and trade centre and stands out for being a communication route with China and northern parts of Pakistan. The population of Tehsil Abbottabad is 981,590, distributed over an area of 1,967 km². The city's administration is under District Administrator Abbottabad.

Currently, the most significant issues related to urban mobility in Abbottabad are:

- · High influx of vehicles due to tourism,
- High number of commercial vehicles passing through the city, affecting capacity and safety,
- Lack of infrastructure such as alternative routes/bypasses, underpasses/flyovers, parking areas, intersection
 improvement, facilities for non-motorised transport,
- · Lack of road safety and traffic management,
- Air pollution from vehicles,
- · Lack of master plan framework for urbanisation and transportation,
- Lack of formalised institutional setup for addressing mobility issues.

The local counterpart, the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA), has the mandate and responsibility to finance the construction of a mass public transport infrastructure. It does not have the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate, and report on urban matters.

The SUMP elaboration aims to provide a comprehensive sustainable mobility plan at the urban scale and propose a conceptual design for priority projects.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 1,200,000 global budget for SUMPs 3 cities within the Khyber Pakhtunkhwa province

Implemented by: AFD and ADB through MobiliseYourCity Asia

Local counterpart: Transport Department Government of Khyber Pakhtunkhwa province and the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA)

Supported activities:

Support the SUMP process for the city of Abbottabad

· Conceptual design for priority projects to identify

Status of the SUMP process

Project start: Q3 2021

Project completion: Q4 2023 - Administrative approval received; political approval is underway.

Completed outputs:

- Inception report
- Urban mobility diagnosis
- Scenario building
- Action plan

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

	Measure	Cost Estimate
1. Road network improvements	Main road projects	EUR 29.6 million
1. Road network improvements	Local street projects	EUR 21.2 million
1. Road network improvements	Road design guideline	EUR 0.64 million
1. Road network improvements	Road maintenance plan	EUR 0.74 million
1. Road network improvements	Traffic and mobility management	EUR 0.43 million
1. Road network improvements	Target road and crossroad network	EUR 0.86 million
1. Road network improvements	Circulation plan	EUR 0.63 million
1. Road network improvements	Traffic management unit	EUR 0.95 million
2. Urban transit	BRT development	EUR 304.6 million
2. Urban transit	Paratransit structuration	EUR 3.0 million
2. Urban transit	Transport hubs organisation	EUR 0.34 million
2. Urban transit	Paratransit quality of service	EUR 0.81 million
2. Urban transit	BRT development roadmap	EUR 1.54 million
2. Urban transit	Paratransit transition roadmap	EUR 1.14 million
2. Urban transit	Paratransit drivers training	EUR 1.54 million
3. NMT	NMT projects	EUR 7.5 million
3. NMT	NMT in transport and urban projects	EUR 3.0 million
3. NMT	Bikes for Abbottabad	EUR 0.15 million
3. NMT	NMT guidelines	EUR 0.61 million
3. NMT	NMT development roadmap	EUR 0.46 million
3. NMT	Pedestrian-centred approach	EUR 0.79 million
3. NMT	Walking in Abbottabad	EUR 0.45 million
4. Urban logistics	Urban logistics projects	EUR 9.00 million
4. Urban logistics	Urban logistics roadmap	EUR 0.65 million
5. Integrated mobility policy	Sustainable mobility planning process	EUR 1.0 million
5. Integrated mobility policy	Mobility data management	EUR 0.70 million
5. Integrated mobility policy	SUMP evaluation	EUR 0.71 million
5. Integrated mobility policy	Multimodal strategy	EUR 0.48 million
5. Integrated mobility policy	Energy-wise mobility	EUR 0.51 million
5. Integrated mobility policy	Demand management	EUR 0.37 million
5. Integrated mobility policy	Transport Authority reinforcement	EUR 0.91 million
5. Integrated mobility policy	Integrated mobility financing	EUR 0.54 million
5. Integrated mobility policy	Sustainable mobility project management	EUR 0.67 million
5. Integrated mobility policy	Inclusive, green and gender-aware mobility	EUR 0.57 million
5. Integrated mobility policy	Inclusive, green and gender-aware mobility	EUR 0.57 million
6. Transit oriented dev.	TOD projects opportunities	EUR 4.5 million
6. Transit oriented dev.	TOD guidelines	EUR 97.8 million
6. Transit oriented dev.	TOD development roadmap	EUR 0.31 million

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures identified in the SUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Road Network [including Road projects, Road design guidelines, Road maintenance plan, Traffic and mobility management, etc.]	EUR 50.9 million
Urban transit [including BRT development, paratransit structuration, transport hubs organisation, paratransit quality of service, etc.]	EUR 307.6 million
Non-Motorised Transport [including NMT guidelines and projects; pedestrian-centred approach; walking and biking equipment; etc.]	EUR 10.7 million
Urban logistics [including urban logistics roadmap and projects]	EUR 9 million
Integrated mobility policy [including Transport Authority reinforcement, SUMP evaluation, Mobility data management, etc.]	-
Transit Oriented Development [including TOD projects, roadmap and guidelines]	EUR 4.5 million
TOTAL	EUR 382.6 million

Projected impacts

Indicator	BAU 2022	Scenario 1 Restructured Paratransit	Scenario 2 Trunk BRT and Bus Feeders	Scenario 3 Integrated BRT
Total annual GHG emissions (Mt CO2eq)	111 510 t CO₂eq	111 510 t CO₂eq	72 870 tCO₂eq	72 990 tCO2eq
Annual transport-related GHG emissions per capita (kg CO ₂ eq)	0,123 tCO₂eq/ capita	0,129 tCO₂eq/ capita	0,084 tCO₂eq/ capita	0,084 tCO₂eq/ capita
Trips Daily Average Total generated trips	1 466 300	2 719 000	2 717 100	2 717 100
Modal share Related to the carbon footprint	Motorcycle: 66% Car: 25% Paratransit: 9%	Motorcycle: 41% Car: 30% Paratransit: 29%	Motorcycle: 30% Car: 52% Paratransit: 6% BRT: 12%	Motorcycle: 30% Car: 50% Paratransit: 6% BRT: 14%

Perspectives for implementation

Governance structure for SUMP implementation

The implementation of the SUMP of Abbottabad relies on two distinct bodies: (i) the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA), responsible for transport and mobility topics over the KP Province, and (ii) the SUMP taskforce, responsible for the SUMP implementation, follow-up, and evaluation, under the authority of the KPUMA. The Mobility Committee under KPUMA will bring the different KP Province Departments together to manage and inform on the transport and mobility cases. It will allow local key stakeholders to have open discussions and review the investment priorities of each Department in a concerted manner. Additionally, the development of the potential Bus Rapid Transit (BRT) line will require creating a dedicated operator. Based on TransPeshawar, which is operating BRT in Peshawar, the new BRT operator will be called TransAbbottabad.

Composition and capacity-building of the SUMP taskforce

Furthermore, the foreseen organisation of the SUMP task force is expected to gather professionals currently in charge of mobility planning, transport operation, urban planning, or land use in current KP Province Departments, as well as new external resources hired for the purpose. The resources shall be dedicated to Abbottabad but will be mobilised within a broader team that will also intervene in the other cities of KP Province. Capacity strengthening will be a continuous process within the SUMP team. Partnerships with the federal government or peer cities from the wider Asian region could also be encouraged to favour capacity building and exchange within the MobiliseYourCity Community of Practice.

Proposed approach for public transport development

Following the completion of the SUMP, while public transport remains a priority for Abbottabad, the preferred approach would be to implement a light version of a BRT without dedicated infrastructure. Additional feasibility studies are required and expected to be conducted at the KP province's scale, covering Abbottabad and other cities.

Future urban mobility initiatives:

The city is expected to draw further inspiration from the SUMP's strategic directions, including implementing green corridors.

Insights from practice: lessons learned from the SUMP process

The SUMP process enables the involvement of local counterparts from the city of Abbottabad under the provincial-level orientation. The SUMP development requires interaction between public bodies. In this context, it fostered dialogue between local stakeholders on topics that are usually not covered (such as the development of a BRT system or the paratransit reforms). Local authorities often have to deal with problems and solve them in emergency situations rather than having time to plan mobility with an innovative approach.

Highlights in the past years

One SUMP process for three cities

Abbottabad's SUMP has been developed with the participation of both the provincial and local authorities, under the leadership of the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA). This public authority was created with support from the Asian Development Bank (ADB) to plan and regulate transportation within the province. This coordination process has been facilitated by establishing three technical SUMP committees for each city of the KP province, namely Abbottabad, Mingora, and Peshawar.

The last phases of the SUMP elaboration allowed the technical committee of Abbottabad to identify priority operational projects to improve mobility and engage the city on the path of sustainable mobility. Three main specific projects have been identified. First, there is a need to improve some road sections. For roads, projects are focused on the central areas of Abbottabad and the existing urbanised area. Road projects address missing links, network densification, and road upgrades. Micro road projects will be undertaken in different districts (e.g. Bilal Town). Secondly, the main identified infrastructure is creating a Bus Rapid Transit line. This priority project should lead to the elaboration of design studies as well as operational exploitation of the future BRT line. Thirdly, in order to improve the public transport service offer, priority is given to reforming paratransit. The paratransit restructuration is linked to the BRT development and will start while BRT phase 1 is being built on Karakorum highway (the main identified corridor).

Mingora (Swat District), Pakistan

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 5,337 km² (district scale)

Population: 2,309,570 (district scale) | Growth rate: 1,5%

The largest city of Swat District: Khyber Pakhtunkhwa province

Modal Share:

Public transport: 25%

Walking: 58%

Private motorised modes: 17%

National GHG emissions per capita: 1.99 (tCO₂eq)

Exposure to climate change: HIGH

Context

Mingora is the largest city and commercial centre of the Swat district, while Swat's administrative capital is Saidu Sharif. Mingora is located on the Swat Riverside, north of Saidu Sharif. This district is part of the Malakand division of the Khyber Pakhtunkhwa province of Pakistan. It is renowned for its natural beauty and is well known as a tourist centre. The N-95 and N-45 highways connect Mingora to Peshawar and Islamabad through Mardan. Locally, the administration is run by the Deputy Commissioner. Tehsil Municipal Administration is responsible for urban transport, and the Regional Transport Authority regulates private vehicles.

Mingora suffers from inadequate road capacity (including infrastructure facilities such as flyovers and underpasses) due to the high traffic growth rate and rising private vehicle ownership. Road safety is a major issue due to a lack of proper traffic control devices (such as signs, signals, and markings) and little enforcement of regulations by traffic wardens. There is currently no master plan for transportation and land use available.

The local Counterpart, the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA), has the mandate and responsibility to finance mass public transport infrastructure. However, it does not have the capacity to borrow from international finance sources. Some systems and procedures are partially in place to monitor, evaluate, and report on urban issues.

The Sustainable Urban Mobility Plan (SUMP) elaboration aims to provide a comprehensive sustainable mobility plan at the urban scale and propose a conceptual design for priority projects that will be identified in the SUMP.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: French Development Agency (AFD)

Funding amount: EUR 1,200,000 (budget includes SUMP for 3 cities in the Khyber Pakhtunkhwa province)

Implemented by: French Development Agency (AFD) and the Asian Development Bank (ADB) through MobiliseYourCity Asia

Local counterpart: Transport Department, Government of Khyber Pakhtunkhwa Province, and the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA)

Supported activities:

- Development of a Sustainable Urban Mobility Plan
- Conceptual design for identified priority projects

Status of the SUMP process

Project start: 2021 Q3

Project completion: 2024 Q1 - Administrative approval received; political approval is in progress.

Completed outputs:

- Inception report
- Urban Mobility diagnosis
- Vision and Scenario building
- Action plan
- Final SUMP and Concept Design for priority projects

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Swat River Walkway (concept design)	EUR 7.5 million

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Road network	EUR 48.4 million
Urban transit	EUR 86.1 million
Non-Motorized Transport (NMT)	EUR 15.8 million
Urban logistics	EUR 9 million
Transit Oriented Development (TOD)	EUR 4.5 million
TOTAL	EUR 163.8 million

Projected impacts

Indicator	BAU 2022	Scenario 1 Scattered city and restructured paratransit	Scenario 2 Compact city bus network	Scenario 3 Decongested city bus network
Total annual GHG emissions (Mt CO2eq)	72,080 tCO₂eq	72,080 tCO₂eq	41,370 tCO₂eq	41,680 tCO₂eq
Annual transport-related GHG emissions per capita (kg CO ₂ eq)	0.0537 tCO₂eq/ capita	0.115 tCO₂eq/capita	0.066 tCO₂eq/ capita	0.067 tCO₂eq/ capita
Trips Daily Average Total generated trips	915,300	1,394,100	1,393,100	1,394,900
Modal share Related to the carbon footprint	Motorcycle: 20% Car: 25% Paratransit: 55%	Motorcycle: 20% Car: 35% Paratransit: 45%	Motorcycle: 25% Car: 50% Paratransit: 17% Bus: 7%	Motorcycle: 25% Car: 50% Paratransit: 17% Bus: 7%

Perspectives for implementation

The SUMP's administrative approval has been secured, and the process for obtaining political approval is currently underway.

After completing the three SUMPs in the Khyber Pakhtunkhwa province, public transport is recognised as a priority, and additional feasibility studies are expected to be conducted at the province's scale. The city is expected to draw further inspiration from the SUMP's strategic directions, including the implementation of green corridors.

Insights from practice: lessons learned from the SUMP process

The institutional framework of the transport sector in the Khyber Pakhtunkhwa province presents significant challenges linked to siloed operations and overlapping responsibilities. These issues highlight the need for clearer mandates, capacity building, and enhanced coordination mechanisms to streamline the SUMP process.

Highlights in the past year

SUMP Vision and Scenario Building with the development of a Concept Design for a priority project

As part of the joint SUMP process for the city of Mingora, three scenarios have been developed with the local counterparts and the KPUMA in 2023. One prominent feature of sustainable mobility would be the introduction of a Bus Rapid Transit line, which would also trigger improvements along the potential corridor (road intersections, traffic signals, pedestrian crossings, and pavements). A paratransit reform will be engaged as part of this project and before the launch of the BRT project.

The diagnosis showed that the primary mode of transport in Mingora is paratransit, accounting for around 25% of total trips, followed by walking. However, the city lacks integration between paratransit regulation, road planning, design, maintenance, and traffic regulation, which can affect decision-making and administration. Significant ongoing road projects, such as the Kanju Interchange, aimed at reducing congestion, the planned Swat Motorway extension, and the development of Kanju Township Park to accommodate urban growth, were noted.

The SUMP diagnosis also revealed the lack of consideration for the Swat riverbank. Despite its significant potential, there is insufficient infrastructure and facilities to support leisure and related activities that would attract residents and tourists. In the context of the SUMP, a 2 km section on the southern bank of the Swat River has been chosen as a showcase for the development of a walkway and recreational area as a priority project.

The development of the Swat riverbank will facilitate the city's connection to the river while ensuring continuous urbanism. It will provide a sustainable and inviting recreational area for Mingora residents. In summary, developing such a project would (i) reinforce urban continuity by integrating the Swat River banks as an integral part of the city; (ii) contribute to the development of non-motorised Transport mobility potential along the riverbank as a continuous axis through different neighbourhoods; (iii) add value to the city's tourism by developing a green and blue corridor; (iv) provide road network improvements to access the riverbank area.

Updated in December 2024

Peshawar, Pakistan

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 1,217 km²

Population: 4,269,079 | Growth rate: +3.29%

Region capital city of the Khyber Pakhtunkhwa province

GDP per capita: USD 1,406 (National level)

Modal Share

Public transport (excl. BRT): 6%

BRT: 4%

Private cars and motorbikes: 25%

Walking: 55% Rickshaws: 6% Other: 4%

National GHG emissions per capita: 1.99 (tCO₂eq)

Exposure to climate change: HIGH

Context

Peshawar is the capital city of Khyber Pakhtunkhwa province, located 160 km west of Pakistan's capital city Islamabad. It is home to 1,970,042 inhabitants, spread over an area of 157 km², with the metropolitan area housing 4,269,079 inhabitants across 1,217 km². The city is governed by the Peshawar Municipal Corporation.

Recently, Peshawar has introduced a Bus Rapid Transit (BRT) system named "Zu Peshawar". This system, conceived and built with support from the Asian Development Bank (ADB) and the French Development Agency (AFD), commenced operations in August 2020. Operated by TransPeshawar, the BRT system comprises a main corridor stretching over 28 km from Chamkani in the east to Hayatabad and Karkhano Market in the west. Additionally, it features a 68 km long network of 8 feeder routes, connecting the main corridor to other parts of the city. The introduction of the first BRT line has already begun to alter this modal share, as it is attracting users to this public transport service. A video highlighting the BRT has been created and is available here.

Peshawar faces challenges stemming from an inadequate public service offering, leading residents to rely heavily on private cars, resulting in traffic congestion, road safety concerns, and poor air quality. The city lacks a sufficient road network, infrastructure for non-motorised transport, and effective traffic management. Moreover, the city has also recognised a need for improved control of land use and urban development.

To address these challenges and prepare a comprehensive plan addressing not only transport issues but also improving the quality of life, the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA) has opted to develop a Sustainable Urban Mobility Plan (SUMP). This plan will encompass not only mobility-related issues but also considerations regarding local economic development and health concerns. Furthermore, the SUMP will facilitate the development of a Transport Management Plan and the establishment of a Road Safety Authority. It will also include initiatives to improve Non-Motorised Transport options and equip the city with better monitoring capabilities for traffic and GHG emissions. Lastly, the SUMP will build KPUMA's capacity for sustainable mobility planning.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 1,200,000 (budget includes SUMPs for 3 cities in the Khyber Pakhtunkhwa province)

Implemented by: French Development Agency (AFD) and Asian Development Bank (ADB) through MobiliseYourCity Asia

Local counterpart: Transport Department, Government of Khyber Pakhtunkhwa province and the Khyber Pakhtunkhwa Urban Mobility Authority

Supported activities:

- SUMP elaboration for the city of Peshawar
- Conceptual design for identified priority projects (i.e., BRT transit corridor and line extensions, non-motorised transport urban design equipment)

Status of the SUMP process

Project start: 2021 Q3

Project completion: 2024 Q1 - Administrative approval received; political approval is in progress.

Completed outputs:

- Inception Phase
- Diagnosis report
- Vision and scenarios
- Action plan
- Final SUMP and Concept Design for priority projects

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Kabul Canal	EUR 3.3 million
GT Road Upgrade	EUR 1.3 million

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Road network	EUR 221.8 million
Urban transit	EUR 916.9 million
Non-Motorized Transport (NMT)	EUR 30.5 million
Urban logistics	EUR 12 million
Transit Oriented Development (TOD)	EUR 10.5 million
TOTAL	EUR 1,191.6 million

Projected impacts

Indicator	BAU 2022	Scenario 1 (2040) Compact City	Scenario 2 (2040) Scattered City	Scenario 3 (2040) Southern Extension
Total annual GHG emissions (Mt CO2eq)	1,214,600 tCO₂eq	927,640 tCO₂eq	1,214,600 tCO₂eq	960,830 tCO₂eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	0.22686 tCO2eq/ capita	0.152 tCO₂eq/capita	0.199 tCO₂eq/ capita	0.158 tCO₂eq/ capita
Trips Daily Average Total generated trips	6,368,800	15,212,600	15,229,800	15,226,200
Modal share	Motorcycle: 24% Car: 49%	Motorcycle: 31% Car: 50%	Motorcycle: 32% Car: 48%	Motorcycle: 30% Car: 49%
Related to the carbon footprint	Paratransit: 26% BRT: 2%	Paratransit: 9% BRT: 9%	Paratransit: 14% BRT: 7%	Paratransit: 10% BRT: 11%

Perspectives for implementation

The SUMP's administrative approval has been secured, and the process for obtaining political approval is currently underway.

Following the completion of the three SUMPs in the Khyber Pakhtunkhwa province, public transport is recognised as a priority and additional feasibility studies are expected to be conducted at the scale of the province. It is expected that the city will draw further inspiration from the SUMP's strategic directions, including the implementation of green corridors.

The Peshawar BRT system's Phase 2 has been validated and is progressing with financial planning to further improve urban mobility and accessibility for residents.

Insights from practice: lessons learned from the SUMP process

The institutional framework of the transport sector in the Khyber Pakhtunkhwa province presents significant challenges linked with siloed operations and overlapping responsibilities. These issues highlight the need for clearer mandates, capacity building, and enhanced coordination mechanisms to streamline the SUMP process.

Highlights in the past year

Zu Peshawar: The First Gold Standard BRT in Pakistan is changing the way people travel

The authorities responsible for urban mobility in Peshawar have an ambitious vision to transition towards more sustainable urban transportation. With the preparation of the SUMP, supported by MobiliseYourCity partners, significant investments are foreseen, including the development of Zu Peshawar BRT, the first Gold-Standard BRT in the Indian subcontinent.

Peshawar's ambition and efforts in sustainable mobility have gained international recognition. In 2022, the city was nominated and received an honourable mention from the International Transport Development Policy (ITDP) Sustainable Transport Award. This recognition highlights Peshawar's commitment to prioritising the needs of its citizens and ensuring that their transportation needs are met in a sustainable and inclusive manner. More recently, Zu Peshawar received the "Best Smart Ticketing" prize from Transport Ticketing Global and was a finalist for the "Prize for Cities" awarded by the World Resource Institute. As the city progresses with its SUMP and planned investments, it is poised to become a leader in sustainable urban transportation in the region and beyond.

Peshawar advances with active mobility projects

During the SUMP elaboration process, several conceptual designs for key and priority projects have been developed. Among them is the concept design for the regeneration of the Kabul canal, which aims to transform the space into a non-motorised transport-friendly area. Another conceptual design focuses on upgrading the existing Saddar BRT Station area to create public spaces conducive to non-motorised transport and seamless intermodal connections.

Find out more on this case study, co-developed by ITDP, TUMI and TransPeshawar.

Updated in December 2024

The Philippines

Status of the project: Completed technical assistance

Partner country



Basic Information

Population: 109,035,343 (May 2020) | Growth rate: 1.63%28

Percentage of urban population: 51.2%29

GDP per capita 2023: USD 3,49930

Percentage of the population living below the national

poverty lines (2021): 18.1%³¹

Annual average infrastructure expenditures as a percentage

of GDP (2024 General Appropriations Act): 5.3%32

Nationally Determined Contribution (NDC): 75% (2.71%

unconditional, 72.29%) of a projected 3,340.3 $\rm MtCO_2e$

 $(2020-2030)^{33}$

National GHG emissions per capita: 1.39 (tCO₂eq)

Proportion of transport related GHG emissions: 26.1% of

energy-related emissions

Exposure to climate change: HIGH

Context

The Philippines is rapidly urbanising, with 51.2% of its over one hundred million population now living in just 145 cities—33 of which account for more than 70% of the national income. The country has a relatively young population (60% under 30 years old) and, until 2019, an average economic growth rate of over 5% per year.

Active and public transport has historically been underfunded at the national and local levels, despite these modes comprising ~80% of trips in Metro Manila and the surrounding provinces. The COVID-19 recovery budget includes increased spending on these modes, which can translate into long-term improvements. In 2018, congestion was estimated to cost the economy over PHP 3.5 billion daily in lost productivity, time, and unnecessary vehicle costs—not counting other effects such as GHG emissions and traffic collisions.

https://psa.gov.ph/content/2020-census-population-and-housing-2020-cph-population-counts-declared-official-president#~:text=The%20Philippine%20Statistics%20Authority%20 (PSA,Philippines%2C%20pursuant%20to%20Proclamation%20No.

²⁹ https://psa.gov.ph/content/urban-population-philippines-results-2015-census-population

³⁰ https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=PH

 $[\]frac{31}{\text{https://www.adb.org/where-we-work/philippines/poverty\#:\sim:text=Poverty\%20Data\%3A\%20Philippines\&text=In\%20the\%20Philippines\%2C\%2018.1\%25\%20of,national\%20poverty\%20} \\ \frac{1}{\text{line\%20in\%202021. statistics/\#:\sim:text=As\%20reported\%20by\%20the\%20Philippine,more\%20Filipinos\%20living\%20in\%20poverty.}}$

 $[\]frac{32}{\text{https://www.dbm.gov.ph/index.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation} \\ \frac{\text{https://www.dbm.gov.ph/index.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.ph/index.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.ph/index.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.ph/index.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.ph/index.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20to%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflation}{\text{continue,percent%20compared%20compared%20this%20year.}} \\ \frac{\text{https://www.dbm.gov.php/management-2/2327-proposed-fy-2024-national-budget-will-lower-debt-address-inflational-budget-will-lower-debt-address-inflational-budget-will-low$

³³ https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Philippines%20First/Philippines%20-%20NDC.pdf

The Philippines face various challenges that constrain the country's ability to transition towards sustainable urban mobility.

These challenges include:

- Outdated policies and regulations
- Insufficient collaboration among agencies and lacking capacities of public institutions
- Insufficient capacities within government agencies to plan, implement, and monitor initiatives
- · Uncertain funding sources for sustainable urban mobility
- Limited data to monitor and properly plan sustainable urban mobility initiatives
- · Limited planning and design guidelines for sustainable urban mobility initiatives

The Philippine Urban Mobility Programme (PUMP) provides mechanisms by which the national government can support local governments in planning and implementing sustainable urban mobility systems, focusing on public transport, active transport, urban freight, travel demand management, and transit-oriented development. The Programme considered inputs from national- and local-level stakeholders and was developed closely with the Department of Transportation. The National Economic and Development Authority has likewise approved it—the country's oversight planning agency—which recognised that it was in line with the National Transport Policy released in 2017.

The GIZ-run TRANSfer project provides ongoing technical assistance for the programme's implementation through several activities, such as the data collection toolkit development, which aims to present government partners with a manual that identifies sustainable urban mobility indicators and how to gather the necessary data points to monitor them.

In 2022, the approved national budget for road-based transport was PHP 13.3 billion, higher than the PHP 12.9 billion from 2021 (counting both the COVID-19-recovery fund and the usual budget).³⁴ Of this PHP 13.3 billion, PHP 7 billion was allotted for public transport service contracting, PHP 1.8 billion for the Public Utility Vehicle (PUV) Modernization Program, including social support, and PHP 2 billion for active transport.

In 2023, the Department of Transportation allocated PhP 106.0 billion to strengthen and modernise the Country's transport systems for more efficient and convenient public transport systems.³⁵ Of this, PhP 1.3 billion was allotted for Service Contracting of the Public Utility Vehicle Program; PhP 200 million for the Social Support Component of the Public Utility Vehicle Modernization Program; and PhP 705 million for the Active Transport Bike Share System and Safe Pathways Program in Metropolitan Areas.

Support from the Partnership

Technical Assistance: National Urban Mobility Program (NUMP)

Type of NUMP: Mixed NUMP

Funded by: BMU

Funding amount: EUR 1,500,000

Implemented by: GIZ through the TRANSfer III Project

Local counterpart: Department of Transportation

Finance leverage: EUR 3,403,000,000

The primary purpose of the NUMP:

- Offer cities a general enabling framework to formulate, adopt, and implement Sustainable Urban Mobility Plans (SUMPs)
- Identification of measures to support improvements in active transport, travel demand management, transitoriented development and urban freight

 $[\]underline{\text{https://docs.google.com/spreadsheets/d/1rhd2weqzt4d5qdcVVIUjnMBsDECoV_CaDrl7k2zFa-E/edit\#gid=2058725729}}\\$

³⁵ https://www.dbm.gov.ph/index.php/budget-2/budget-documents/2023/general-appropriations-act-fy-2023/1780-2023-peoples-enacted-budget

Vision:

- Social objective: 'A people-first approach that ensures inclusive, comfortable, safe and dignified access to public services'
- Environmental objective: 'An urban transport system which reduces its negative impacts imposed on the environment and on public health towards healthy cities'
- Economic objective: 'Efficient, affordable and economically sustainable transport, which supports economic vitality for the individual and for the city'

Supported activities:

- Status Quo Report
- · Visioning Workshops with national government agencies
- Capacity building workshops (including study tours and online training) with government, academia, and the private sector
- Technical studies for the government (e.g., improvements in public transport operations, building on the Jeepney+ NAMA, service contracting for public transport, production of base maps)
- Development of a Data Collection Toolkit/Manual

Status of implementation

Project start: 2017 Q1

Project completion: 2019 Q4

Completed outputs:

- EDSA-Bus Case Study: Operations and Business Model (2018 Q4)
- Public Utility Vehicle Modernization Program Early Evaluation (2019 Q4)
- Philippine Urban Mobility Programme Concept Document (2019 Q4)
- Sustainable Urban Mobility Data Collection Toolkit (beta version: 2021 Q4)³⁶

NUMP key measures and cost estimates

The following table highlights the most significant measures identified in the NUMP.

Measure	Cost Estimate
Develop a National walking and cycling policy	EUR 200,000
Collect data to enable planning	EUR 300,000
Increase dedicated staff in the Department of Transportation & Local Government Units	EUR 55,000,000
Increase focus on NMT in the planning process	EUR 200,000
Address lack of political support	EUR 100,000
Continued ring-fenced funding for walking and cycling projects in HUCs	EUR 500,000,000
Develop NMT guidance	EUR 200,000
Tackle behaviours that discourage walking and cycling	EUR 5,000,000
Train existing and future staff on planning for walking and cycling	EUR 1,000,000

https://bit.ly/PHTransportDataCollection (https://mobilitydatatoolkit.notion.site/mobilitydatatoolkit/Sustainable-Urban-Mobility-Data-Collection-Toolkit-for-the-Philippines-f10af05a5c9748eeb642ab157619e7de)

Measure	Cost Estimate
Jeepney modernization program	EUR 5,800,000,000
Develop a freight data collection mechanism	EUR 200,000
Develop and implement vehicle standards	EUR 300,000
Establish a national freight operator dialogue forum	EUR 300,000
Support consolidation and professionalisation of the freight sector	EUR 300,000
Establish a motor vehicle inspection system	EUR 340,000,000
Promote and assess modern fleet pioneers	EUR 200,000
Explore scrappage and buyback program	EUR 200,000

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the NUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Public transport and NMT (Active Transport)	EUR 62,000,000.00
Street shaping urban roads and traffic management	Unknown
Other measures (Urban Freight)	EUR 1,500,000.00
Total	Unknown

Finance leverage

Financing resulting from the NUMP	Source	Amount
Public Utility Vehicle Modernization Program	Private sector investments	EUR 3 160 000
Loans	Local development banks	EUR 36 000 000
The pilot phase of Jeepney+ NAMA (equity subsidy and social support programme)		EUR 56 000 000
Support for local production of public transport manufacturing	National government	EUR 150 000 000
	Development Bank of the Philippines	EUR 8 140 000
Budget for Metro Manila Greenways	National government	EUR 136,000,000
Budget for National Greenways	National government; ADB technical assistance loan	EUR 175,000,000
Budget for Green Green Program	National government	EUR 45,300,000
Budget for bikeways	National government (through Bayanihan 2)	EUR 22,900,000
Budget for public transport service contract	National government (through Bayanihan 2)	EUR 97,200,000
Budget for common station connecting LRT 1, MRT 3, MRT 7 and Subway	National government	EUR 48,800,000
Budget for active transport	National government (2022 General Appropriations Act)	PHP 2 billion / EUR 34,250,000
Budget for public transport service contract	National government (2022 General Appropriations Act)	PHP 7 billion / EUR 120,000,000
Budget for PUV Modernization	National government (2022 General Appropriations Act)	PHP 1.8 billion / EUR 30,800,000
Urban Act Project ³⁷	The International Climate Initiative	22,980,000 EUR

³⁷ The Urban Act project supports activities on urban mobility in China, India, Indonesia, Philippines, Thailand.

Projected impacts

Indicator	Impact 2030 (NUMP vs BAU)	Baseline - 2022	Projected 2035 BAU	Projected 2035 NUMP scenario
Total annual GHG emissions (Mt CO2eq)	-2.5 Mt CO₂eq	20 Mt CO₂eq	29.5 Mt CO₂eq	27 Mt CO₂eq

Perspectives for Implementation

The Sustainable Urban Mobility Data Collection Toolkit supports the monitoring of NUMP implementation

In 2022, the Sustainable Urban Mobility Data Collection Toolkit, developed in 2021, continued to play a crucial role in informing the planning of urban transport systems and monitoring the implementation of the National Urban Mobility Policy (NUMP). The toolkit provides recommendations on methodologies, tools, and governance aspects for collecting urban transport data, enabling stakeholders at the national and local levels to make informed decisions. Such data collection is significant for policymakers as they work towards sustainable urban mobility amidst the pandemic's impacts on transportation and the environment.

MobiliseYourCity partners continue to support sustainable urban mobility in the Philippines

MobiliseYourCity partners continue to support the Philippines through the Urban ACT project, which began in 2022. This builds on previous work done under Transfer III, focusing on solutions for financing sustainable urban transport. The project enhances climate resilience and low-carbon mobility across the region. Additionally, MobiliseYourCity Asia is hosted in the Philippines, serving as a regional hub of knowledge and expertise on sustainable urban mobility. This collaboration strengthens urban climate action and fosters sustainable transport practices throughout the Asia-Pacific. More information here.

Insights from practice: lessons learned from NUMP development

The Philippines' COVID-19 recovery plan's focus on urban mobility counterbalances the impact of the pandemic on PUMP implementation

As part of its pandemic recovery plan, the government released a four-pillar socioeconomic strategy covering the following areas and amounting to at least PHP 2.57 trillion: financial aid, improvements to healthcare, monetary actions, and job creation. This includes the Bayanihan to Recover as One Act, a law which allocates emergency funding of PHP 5.58 billion for public transport service contracts and PHP 1.32 billion for bike lanes and sidewalks.

COVID-19 has highlighted the need for better active transport infrastructure and policies, green spaces, and substantial government financial support for public transport. However, the continued spread of the virus and widespread lockdowns have also affected the implementation of the PUV Modernisation Program and any urban freight initiatives.

NUMP: A driving force behind the Philippines' sustainable urban mobility efforts despite the challenges in communication and coordination

The National Urban Mobility Policy (NUMP) is being implemented in coordination with the Department of Transportation and the National Economic and Development Authority, providing guidance on sustainable urban mobility indicators and active and public transport measures. However, it appears that the implementation of the NUMP is running parallel to the government's other measures, and it is unclear if it is being used as a consistent strategy or the driving force.

For the success of the NUMP, effective communication is key. This is demonstrated by the better-known Transport Oriented Development plan supported by JICA, which has been cited more widely by the public than the NUMP supported by MobiliseYourCity. Nonetheless, the NUMP has still played a significant role in raising awareness and building the capacities of authorities and civil society.

Despite the challenges, the government's efforts to improve sustainable urban mobility are crucial, particularly in light of the pandemic's impacts on transportation and the environment. Greater consistency in the implementation of NUMP measures and communication efforts could help to further drive progress in urban mobility policies in the Philippines.

Leveraging the required funds for implementation is still a major challenge

Some measures identified in the NUMP are experiencing challenges in securing continuous funding from national and local government agencies. This is due to more pressing issues, such as COVID, and prioritisation of heavy infrastructure projects, such as rail and roads, over other programmes and policies, including reallocating road lanes for biking and walking. This is reflected in the budget for road transportation in 2022, of which only 10% has been allocated to active transportation. However, an increase in the transport budget relative to previous years has been made possible by an active civil society movement.

Political commitment needs to be secured across electoral cycles

Political commitment faces difficulties related to national and local elections, potentially leading to the loss of institutional knowledge in partner agencies (e.g., several key staff and offices in the Department of Transport will depart with the existing administration). This potential barrier is currently being addressed through engagement and communication with several transport agencies (e.g., NEDA).

Last update in December 2023

Kurunegala, Sri Lanka

Status of the project: Ongoing Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 11 km²

Population: 122,172 | Growth rate: 1.4%

Region capital city

GDP per capita: USD 3,853

Modal Share:

Formal public transport: 25.3% Informal private transport: 16.2%

Walking: 11.8% Cycling: 1%

Private cars: 22.3%

Private motorbikes or 2-wheelers: 18.7%

Taxis: 1.3% Other: 3.4%

National GHG emissions per capita: 1.67 (tCO₂eq)

Exposure to climate change: LOW

Context

Kurunegala has 120,000 inhabitants, including 30,000 in the urban core. Despite being a relatively small city for Sri Lanka, it is the capital city of both the North-western Province and the Kurunegala District.

According to the National Physical Plan (NPP) updated by the National Physical Planning Department (NPPD) of the Ministry of Megapolis and Western Development (MMWD) in 2018, the Kurunegala urban area could grow to 1,000,000 inhabitants by 2050. The city is also expected to meet an annual growth rate of 2.5%, the highest of Sri Lanka. Kurunegala is expected to become one of the main urban centres – even a "metro region" – of the East-West Development Corridor that guides the spatial and economic development at the national scale. Consequently, Kurunegala will face many challenges regarding urban development, employment, and transportation. The city must plan its internal transport as well as connections with the other cities of the corridor and with Colombo, the national Capital City.

The city has a railway station (located in the Southeast of the urban core) and is located on a rail axis. However, it does not play a major role in daily commuting as people usually commute by private motorised vehicles (car, motorbike and tuk-tuk) or by public bus.

Currently, the Municipality of Kurunegala (the SUMP local counterpart) does not have the mandate or responsibility to finance mass public transport infrastructure nor the authority to borrow from international finance sources. The running costs of the collective transport system are, however, part of the public authority's budget.

The objective of the project is the elaboration of a SUMP for the city of Kurunegala from the ground up since there is neither an existing public mass transit system nor an existing transport master plan for the city.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 400,000

Implemented by: AFD through MobiliseYourCity Asia

Local counterpart: Municipality of Kurunegala

Supported Activities:

• MobiliseDays (35 participants)

• Diagnosis workshop (32 participants)

• Public Transport focus group

Scenario analysis workshop

Status of the SUMP process

Project start: Q1 2019

Project completion: Q4 2021

Completed outputs:

- Inception report (September 2019)
- Diagnosis report (March 2020)
- Scenario elaboration and comparison report (1st Draft, May 2020/ Revised Draft, December 2020)
- Final SUMP report

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate	Implementation Period
Introduce a road hierarchy for Kurunegala	60,000	2021-2023
Speed regulation and enforcement	80,000	2021-2023
Dealine	60,000	2021-2023
Parking mangement	120,000	2023-2026
Outer ring road		
Develop green corridors/pedestrian and bicycle lanes	60,000	2021-2023
City centre calming	120,000	2021-2023
	100,000	2021-2023
Introduce a linked ATM system for the city including PT priority at signals	100,000	2023-2026
Develop a Transit Corridor	to be costed in feasibility study (FS)	TBD in FS
Provide mini-bus stands at the city centres	to be costed in FS	TBD in FS
Provide park-and-ride at the city centres	to be costed in FS	TBD in FS
Develop a multimodal hub at the central rail station	to be costed in FS	TBD in FS
City bus network (improvement of current services)	80,000	2021-2023
City bus network (Public Service Obligation)	200,000	2023-2026
Develop ITS for Public Transport (ticketing, digital mapping)	60,000	2021-2023
Develop 115 for Public Transport (ticketing, digital mapping)	120,000	2023-2026
Develop fare integration within the KMC area (for PT, rail)	200,000	2023-2026
School bus parking	60,000	2023-2026
Freight transport	120,000	2023-2026
Bike and e-rickshaw promotion	200,000	2021-2023
Preparation & promulgation of auto rickshaw regulations	120,000	2021-2023
Institutional support and progressive development of coordinated urban transport arrangements	440,000	2021-2023
Improve pedestrian and vehicular access to the Kurunegala Teaching Hospital	F.S to be costed	F.S to be costed
Street design toward the inclusion of pedestrians and non-motorised transport	120,000	2021-2023
Muttetugala overpass	F.S to be costed	F.S to be costed

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2018	Projected 2038 BAU	Projected 2038 SUMP scenario
Total annual GHG emissions (Mt CO2eq)	-0.0002 Mt CO₂eq	0.0827 Mt CO2eq	0.0935 Mt CO₂eq	0.0933 Mt CO₂eq
Veh.km of formal public transport Increase of the availability of public transport	Formal public transport: 7,698 Veh.km	Formal public transport: 51,209 Veh.km	Formal public transport: 66,748 Veh.km	Formal public transport: 74,446 Veh.km

Perspectives for implementation

The SUMP for Kurunegala has been developed and finalised; however, its transition to approval and implementation has been delayed due to the political situation in Sri Lanka. The future of the plan remains uncertain.

Kurunegala's SUMP prioritises measures for their implementation

The implementation of the SUMP has been structured by identifying primary and secondary actions. The former refers to main SUMP projects that will be developed and implemented on their own and on a priority basis. The latter will function to enhance the impact of primary projects and are considered as subordinate to these.

In total, 26 measures were identified in the SUMP, and two development scenarios were proposed that could be implemented separately or collectively, depending on their level of ambition. Considering the project objectives, scenario two was finalised for implementation. It focused on medium-term goals (until the year 2025) regarding public transport development and the overall implementation of governance structures, shaping the mobility framework for the city of Kurunegala.

The Kurunegala Municipal Council (KMC), the Road Development Authority (RDA), and the Sri Lankan Transport Board (SLTB) oversee the implementation of most of these measures. The funding for the different measures is expected to be assumed with support from International Funding Institutions (IFIs). It will be complemented by KMC, RDA, and the Urban Development Authority (UDA). The financial mechanism for these measures is rather complex as it involves multiple stakeholders for the different measures, and to date, remains unclear.

Insights from practice: lessons learned from the SUMP process

Strong institutional coordination is essential for successful SUMP development and implementation.

The SUMP process in Kurunegala highlighted the importance of aligning mandates and responsibilities across multiple stakeholders, such as KMC, RDA, UDA and SLTB. Clear institutional roles and effective collaboration are critical for transitioning from planning to implementation.

Political stability is a key enabler for the implementation of sustainable mobility plans.

While the SUMP for Kurunegala successfully identified and prioritised measures to improve mobility, the political unrest has stalled its approval and implementation. This underscores the need for political support and a stable governance environment to ensure the continuity and execution of long-term urban mobility strategies.

Political unrest puts Kurunegala's mobility plan on hold.

Due to the political climate in Sri Lanka, the approval and implementation of the Sustainable Urban Mobility Plan of Kurunegala has been put on hold. As a result, the city might struggle to address important mobility-related challenges, including traffic congestion, air pollution, and limited access to public transportation. The future of the plan remains uncertain until the political situation stabilises.

Updated in December 2024

Davao, Philippines

Status of the project: Ongoing implementation support

Partner city



Basic Information

Urban area: 2,444 km²

Population: 1,776,949 (2020 census) Growth Rate: 2.21% (2000-2020) GDP per capita: USD 4,480 (2022)

National GHG emissions per capita: 1.2 tCO₂eq (2022)

Exposure to climate change: High

Context

Davao City, located on Mindanao Island, is the third-largest city in the Philippines, with a population of approximately 1.8 million. The city is the capital of the Davao Region and represents the primary urban centre and economic hub on Mindanao Island. It also plays a key role in the nation's economy. The Davao Region experienced remarkable annual economic growth of 8.1% from 2014 to 2019, exceeding the national average of 6.6%.

The compound annual growth rate for the population of Davao City was approximately 2.2% from 2000 to 2020. The city's growth brings challenges, particularly traffic congestion. The rapid increase in private vehicles, including cars and motorbikes, combined with the lack of reliable public transport and inadequate infrastructure for non-motorized transport, significantly contributes to congestion in the city's urbanised areas while deteriorating air quality and the urban environment.

Over the past decade, several actions have been taken to modernise Davao City's road network and public transport system. In 2017, Davao City developed a comprehensive Transport Roadmap to address its urban mobility challenges. This roadmap outlines strategies for enhancing the city's transportation system, including infrastructure development and traffic management improvements.

In 2023, ADB approved a USD 1 billion loan to help establish the Davao Public Transport Modernization Project (DPTMP). It aims to implement a modern public transport system in Davao City with modern electric buses and Euro-5 standard diesel buses, standardised operations and reliable timetables, an intelligent transport system to support bus operation, designated bus stops with shelters and lighting, and designated bus lanes in selected road sections.

Supporting this project, a "Complete Streets." ³⁸ Concept Design Study is to be conducted in 2025 under the framework of MobiliseYourCity. This initiative aims to enhance accessibility to public transport, promote active modes, and improve residents' quality of urban life while reducing GHG emissions.

^{38 &}quot;Complete streets" is a multimodal approach to roadway design and safety that considers all users of transportation infrastructure. A street is considered complete if it facilitates the safe movement of users of all ages, abilities, and transportation modes. This approach allows urban communities to reach safety, accessibility, equity, connectivity, mobility, and environmental goals.

The "Complete Streets" Concept Design Study for Davao City comprises components aimed at enhancing urban mobility and accessibility: NMT and junction surveys; concept design to implement the "Complete Streets" approach, prioritizing safe crossings and enhanced access to public transport to promote inclusive and sustainable mobility; preliminary design for a pilot transit corridor, incorporating pedestrian and cycling facilities, transit access, and roadway organisation, along with drainage and lighting/signage solutions.

Support from the Partnership

Technical Assistance: "Complete Streets" Concept Design Study for Davao

Funded by: Agence Française de Développment (AFD)

Funding amount: To be determined

Implemented by AFD and ADB through MobiliseYourCity Asia

Local counterpart: Davao City Local Government Unit, DPTMP Project Management Office (PMO) from the Department of Transportation, DPTMP Project Management Unit (PMU) or Davao Bus Office

Supported activities:

• "Complete Streets" Concept Design Study for Davao

Status of project implementation

Expected project start: 2025 Q2

Expected project completion: 2026 Q1

Highlights in the past year

Implemented in collaboration with AFD and ADB, MobiliseYourCity seeks to support and enhance the ADB-led Davao Public Transport Modernization Project (DPTMP) by delivering added value through the sustainable approach it promotes.

Within this context, DPTMP so far underscores the importance of community engagement, flexible planning, financial readiness, technological integration, and collaborative partnerships in the successful implementation of urban transport modernization initiatives.

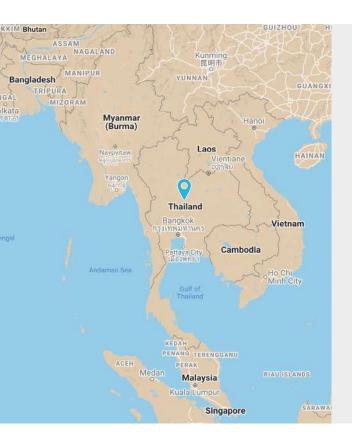
In August 2024, Davao City demonstrated its commitment to sustainable mobility by officially joining the MobiliseYourCity Partnership.

Updated in December 2024

Thailand

Partner country

Status of the project: Ongoing National Urban Mobility Policy or Programme



Basic Information

Population: 66.17 million (2021) | Growth rate: -0.01%

Percentage of urban population: 34.47% GDP per capita: USD 6,730.31 (2020)

Percentage of the population living below the national

poverty lines: 6.84% (2020)

Nationally Determined Contribution (NDC):

Reducing annual GHG emissions by 20%, or 115.6 $MtCO_2$, in 2030 compared to BAU. Transport will aim to reduce 41 $MtCO_2$ or 35.42% of the total NDC target (MoT)

National GHG emissions per capita: 5.37 tCO₂eq (excluding LULUCF), 3.99 tCO₂eq (including LULUCF)

Proportion of transport related GHG emissions: 25.93%

(including LULUCF)

Exposure to climate change: HIGH

Context

Thailand is in the heart of Southeast Asia and borders Lao PDR, Myanmar, Cambodia, and Malaysia. Its capital is Bangkok, or Krung Thep in Thai. Thailand has the second largest economy in Southeast Asia after Indonesia. The services sector represents 45.75% of jobs in Thailand and contributes to 58.59% of the total GDP, followed by the agriculture sector, which employs 31.62% of the active workforce and 8% of the GDP. Last is the industry sector, which uses 22.63% of the active workforce and contributes 33.4% of the GDP (Statista, 2019). Thailand relies heavily on tourism, with nearly 40 million visitors in 2019. This puts Thailand in one of the top 10 most visited countries in 2019. However, many sectors have suffered from the decline in tourism due to the COVID-19 pandemic, which had a major impact on Thailand's economy. Thailand experienced negative GDP growth in 2020 for the first time since 1998.

Private vehicles are the most popular mode of transportation in Thailand. Bangkok has the most diversified transport offer in the country, including BTS (sky train), MRT (subway), metered taxis, motorcycle taxis and Tuk Tuks. However, the city is still notorious for traffic congestion as people prefer private vehicles for convenience and flexibility. To travel across the country or to the suburbs, there is an abundance of minivans and buses that connect most cities and popular destinations. Thailand also has 38 airports, seven of which are international airports. It typically takes around an hour to reach anywhere in Thailand by plane. Thailand also has a rail system spanning 4,925 km (BOI), which serves every part of the country, although it is not a high-speed train.

The national government has collaborated with GIZ to develop a National Urban Mobility Programme (NUMP) called the Thai Clean Mobility Program, aiming towards reducing GHG emissions stemming from the transport sector, reducing air pollution and promoting a modal shift away from motorised private vehicles to public transport.

The development of the NUMP is a participatory process which requires several preparatory steps and discussions. These steps include:

- Building on existing sector studies to assess city and national government mechanisms for funding, financing and transport planning and implementation
- Identifying support needs for cities that are to be included in the NUMP (capacity, financial instruments, funding, planning procedures, institutional framework)
- Assessing the main current barriers to low-carbon transport in Thailand
- Providing recommendations for "Vision & Goal setting" to:
 - » draft a national vision for urban mobility (in line with the NDC action plan);
 - » define the objectives of the National Urban Mobility Programme; and
 - » provide strategic direction on using the various levers of action available (governance, financing, funding, capacity building, technological choices, etc.) in Thailand

Support from the Partnership

Technical Assistance: National Urban Mobility Programme (NUMP)

Type of NUMP: Programme NUMP

Funded by: BMU

Funding amount: EUR 1,661,634

Implemented by: GIZ through the TRANSfer III Project

Local counterpart: Office of Transport and Traffic Policy and Planning (OTP), Ministry of Transport

Main purpose of the NUMP:

- Provide necessary groundwork that allows policy makers in the Thai government to make an informed decision on the implementation of the NDC action plan
- Develop a funding mechanism that supports the implementation of urban transport measures
- Provide a planning framework for urban transport planning (quality standards, clear guidance on roles and responsibilities, capacity development)

Objectives and supported activities:

The 'Thai Clean Mobility Program' consists of three pillars:

- Congestion charging
- Set-up of a Clean Transport Fund
- Public transport electrification

Status of implementation

Project start: 2017 Q1

Expected project completion: 2022 Q4

Completed outputs:

- Study Tour to Berlin and London (February 2020)
- Pre-feasibility study on congestion charging design for Bangkok (November 2020)
- 2 congestion charge videos for communication and educational purposes for the broad public as well as for the expert and policy maker community (December 2020)
- Study for the development of a Clean Transport fund (December 2020)
- Thailand Clean Mobility vision of the youth (July 2022)
- Study for Thailand's upscaling public and private investment on public transport electrification (October 2022)

NUMP key measures and cost estimates

The following table highlights the most significant measures identified in the NUMP.

Measure	Cost Estimate
Congestion Charge	EUR 662,279,406
Bus Modernisation	EUR 124,902,630
BTS/MRT Fare Subsidy	EUR 290,633,646

Finance leverage

Leveraged financing (resulting or enabled by the NUMP preparation process)

Description	Source of financing	Secured	Amount
SMMR – Sustainable Mobility for Metropolitan Regional Projects ³⁹	BMZ	Secured	6,800,000 M EUR
Urban Act project ⁴⁰	The International Climate Initiative	Secured	22,980,000 EUR

Core impact indicator baselines

Indicator Baseline - 2016

Total annual GHG emissions (Mt CO2eq)	68.26 Mt CO₂eq from the energy sector
Annual transport related GHG emissions per capita (kg CO2eq)	1.04 kgCO₂eq
Air pollution Decrease in mean urban air pollution of particulate matter (in μg PM _{2.s}) at road-based monitoring stations	43 μg/m³ of PM _{2.5}
Road safety Decrease of traffic fatalities in the urban area, per 100,000 inhabitants	11 fatalities / 100,000 habitants (2020)

 $^{^{\}mbox{\tiny 39}}$ The SSMR project supports activities on urban mobility in Cambodia, Thailand, Laos, Vietnam

⁴⁰ The Urban Act project supports activities on urban mobility in China, India, Indonesia, Philippines, Thailand.

Insights from practice: lessons learned from the NUMP process

Balance is key, as implementing congestion charging represents a political risk

One key lesson from this project is that implementing a congestion charging system can be complex and politically sensitive. It involves balancing the objectives and constraints of multiple stakeholders, which can be challenging.

In this project, a steering and working groups were formed to ensure that all relevant stakeholders were included in the policy design process. However, due to the upcoming national election in Thailand, gaining political buy-in for implementing the congestion charge in Bangkok has been difficult, as decision-makers may fear that proposing such a system could reduce their popularity with the public.

Supporting sustainable urban mobility in Thailand requires addressing institutional and regulatory barriers.

Implementing the Clean Mobility Fund presents an opportunity to address institutional and legal barriers to congestion charging. Although the Ministry of Finance has reservations due to the past performance of similar funds, this presents an opportunity to ensure transparency and exemplary performance in this initiative. The feasibility study has identified key roles and stakeholders involved in implementing the system, and it is recommended that cooperation between these stakeholders is set up to ensure successful implementation. Additionally, legal issues related to vehicle identification, charging, and payment enforcement must be addressed. Addressing these issues will provide a strong foundation for the Clean Mobility Fund and pave the way for practical policy recommendations.

Perspectives for implementation

ASEAN-German SMMR Project

The ASEAN-German SMMR project culminated in a closing event in December 2024, marking the successful completion of its six-year collaboration on sustainable mobility across the ASEAN region. The project worked with several cities, including Udon Thani in Thailand, to implement sustainable solutions like Light Electric Vehicles (LEVs) and Mobility-as-a-Service (MaaS). These solutions aimed to reduce emissions and enhance urban transport efficiency.

Thailand's involvement in the project demonstrated its commitment to tackling mobility challenges while striving for climate-resilient urban development. The event showcased the positive outcomes of regional cooperation, including knowledge-sharing and capacity-building for sustainable mobility planning.

The closing event provided a platform for key stakeholders to reflect on the lessons learned, the project's impact on cities like Udon Thani, and its role in shaping the future of sustainable transport in ASEAN. It was also an opportunity to explore how these successful practices can be expanded and replicated across the region.

Urban Act Project

The Urban ACT project⁴¹ Supports Thailand in integrating climate action and low-carbon mobility into urban development. It aids local authorities in enhancing urban resilience and reducing emissions, with a strong focus on sustainable transport systems. Building on MobiliseYourCity's prior work, the project improves climate adaptation and urban mobility strategies, positioning Thailand to address climate challenges and sustainable growth in its cities.

Updated in December 2024

⁴ https://www.international-climate-initiative.com/en/project/urban-act-integrated-urban-climate-action-for-low-carbon-resilient-cities-22-i-416-asia-g-urban-act-integrated-climate-action/



Eastern Europe

Completed

Chernivtsi, Ukraine P.219

Lviv, Ukraine P.220

Poltava, Ukraine P.223

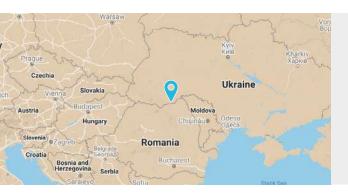
Vinnytsia, Ukraine P.230

Zhytomyr, Ukraine P.231

Chernivtsi, Ukraine

Status of the project: Completed technical assistance

Partner country



Basic Information

Urban area: 153 km²
Population: 266,366
Region capital city

GDP per capita: USD 8,668

Context

Chernivtsi is located in the south-west of Ukraine, 40 km from the border with Romania. The relief is characterised by a significant difference in elevation, between 150m and 537m above sea level.

Chernivtsi is viewed as one of Western Ukraine's main cultural centres. The city is also considered one of Ukraine's important educational and architectural sites. It is a major regional rail and road transportation hub, also housing an international airport.

Chernivtsi has a long tradition of public transport, being home of a tramway network for 70 years from 1897 to 1967. Today, Chernivtsi passengers use several types of public transport: trolleybuses, shuttles, minibuses and taxis. The network includes 43 bus lines and nine trolleybus lines. This offer is completed by about 20 radio taxi services providers.

The main means of public transport in the city is the trolleybus. This type of transport appeared in Chernivtsi on 1 February 1939, but was completely rebuilt after its destruction during the Second World War. The existing trolleybus network has been in operation since 1966.

Support from the Partnership

Technical assistance: Technical assistance related to transport modelling

Funded by: The German Federal Ministry for Economic Cooperation and Development (BMZ), Swiss State Secretariat for Economic Affairs (SECO)

Implemented by GIZ through the project Integrated urban development in Ukraine

Local counterpart: City Council of Chernivtsi

Supported activities:

- · Capacity building related to transport modelling
- Development of transport models for Chernivtsi
- Optimisation of the public transport network through modelling based on existing SUMP

Status of implementation

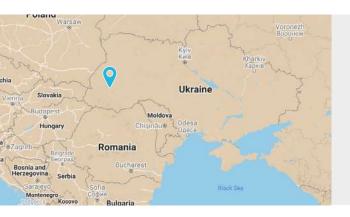
Project start: 2017 Q4

Project completion: 2019 Q4

Lviv, Ukraine

Status of the project: Completed technical assistance

Partner city



Basic Information

Urban area: 171.71 km²

Population: 734,000 | Growth rate: 0%

Region capital city

GDP per capita: USD 8,668

Context

Car ownership increased a lot in Lviv, which will cause traffic to become denser and denser. In the long term, this situation could become intolerable and jeopardise every effort to capitalise on the attractivity of the historic city. Parking is also an issue as it takes away valuable space for public and private transport as well as for pedestrians.

Car ownership in the Ukraine increased significantly since the independence in 1991. However, there were still only 220 motor vehicles per 1000 inhabitants in 2012 (excluding motorcycles and other two wheeled vehicles) compared to 580 in Poland or 588 in Germany. Even though figures for Lviv are far above the Ukrainian average, traffic in the city will become denser in future. Moreover, the UNESCO world heritage area is expected to attract more visitors when tourists will no longer be deterred by the political insecurities.

Public transport and traffic are not only impeded by car in movement, but also by static cars. indeed, parking in the city centre takes away valuable space for public and private transport as well as for pedestrians. In most of the European cities with a comparable historical centre, let alone UNESCO heritage, cars are banned totally from the centre. This is in theory true for the inner cordon of world heritage area in Lviv too but not always in practice. Moreover, the historical centre of high urban value and exquisite buildings in Lviv is not confined to the UNESCO boundaries.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: The German Federal Ministry for Economic Cooperation and Development (BMZ), Swiss State Secretariat for Economic Affairs (SECO)

Implemented by GIZ through the project Integrated urban development in Ukraine

Local counterpart: City Council Lviv

Supported Activities:

- Capacity building for designing, applying, and implementing processes and standards of integrated and sustainable urban development.
- Preparation of priority infrastructure projects and implementation of small scale, low budget, and high impact investments (quick wins)
- Establishment of suitable communication, coordination, and cooperation mechanisms

Status of implementation

Project start: 2017 Q4

Project completion: 2019 Q4

Completed outputs:

- Development of the Integrated Urban Development Concept for Lviv in close cooperation with the Chief Architect and the City Institute and in accordance with the Leipzig Charter on Sustainable European Cities.
- Active involvement of the Representatives of municipal units of Lviv in the process of developing the Sustainable
 Urban Mobility Plan, including City Institute, Spatial Development Institute, municipal transport operator
 "Lvivavtodor", municipal company "Lvivelectrotrans", Department of Housing and Infrastructure, Transport office,
 Architecture and Urban Development Department, as well as international experts from Switzerland and Germany.
 Many meetings were held with residents and stakeholders.
- Organisation of a comprehensive training program called "Management Competences", aimed at improving
 the capacity of Lviv City Council and enhancing closer cooperation between different structural units, better
 coordination of projects and optimization of administrative management at both vertical and horizontal levels.
- Creation of the Green Line, the Demonstration Infrastructure Project is a pedestrian-bicycle connection from Sykhiv
 District to the city centre, passing through green territories, an industrial zone and connecting buildings of Ukrainian
 Catholic University. The concept has been developed and working documentation is being prepared for the first
 section along the southwestern part of Park Ivan Pavlo II to Shuvar Market at Khutorivka.

Next expected outputs

- Continue the implementation of the Integrated Urban Development Concept
- Further implementation of objectives set out in the Sustainable Urban Mobility Plan, including transport solutions and urban space renovations in accordance with the principles of sustainable mobility.
- Further work on implementing the Green Line as a good example of alternative connections in the city should be continued.

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Implementation of e-ticketing	-
Acquisition of 10 low-floor trams	10,000,000
Acquisition of 100 buses	12,000,000
Acquisition of 50 trolleybuses	12,000,000
New bus depot	12,000,000
Reconstruction of 15 km of trolleybus catenary	13,000,000
Implementation of the Ukraine Urban Road Safety Program	37,800,000

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures CAPEX Estimate (
Public transport and NMT	
Street shaping urban roads and traffic management	
Other measures	
Total	

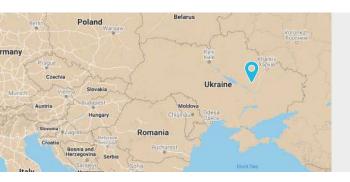
Finance leverage

Financing resulting from the SUMP	Source	Amount
Loan leveraged through MobiliseYourCity for the implementation of SUMP infrastructure, fleet and e-ticketing measures	EBRD and EIB	59,000,000
Loan for the financing of the Ukraine Urban Road Safety Program	EBRD and EIB	37,800,000
Loan for the financing of the second phase of the Ukraine Urban Public Transport Program	EBRD and EIB	70,000,000
Loan for the financing of the Lviv E-Bus project	IFC	50,000,000

Poltava, Ukraine

Status of the project: Completed technical assistance

Partner city



Basic Information

Urban area: 106.4 km²

Population: 106.4 km² | Growth rate: 0%

GDP per capita: USD 4,621,31

By bridging its economic and touristic goals, Poltava puts in place a Sustainable Urban Mobility Plan focused on public transport attractiveness and active mobility.

Key Facts

City, Country	Poltava, Ukraine
Population1 ⁴²	287,000
Land area (Poltava City) ⁴³	106,4 km²
GDP per capita	USD 4,621,31
Baseline motorisation rate ⁴⁴	152 cars / 1,000 inhabitants
Local Partner (organisation)	Poltava City Council
Implementing partners	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH through the project Integrated urban development in Ukraine
Donors supporting technical assistance for SUMP	 German Ministry for Economic Cooperation and Development (BMZ) Swiss Federation State Secretariat for Economic Affairs (SECO)
Amount in technical assistance	Included in the Integrated Urban Development in Ukraine project which has a budget of 9,100,000 EUR to support multiple cities
SUMP implementation timeline	 Joined MobiliseYourCity in June 2017 MobiliseDays in September 2018 Start of SUMP elaboration in 2019 SUMP completed and approved in 2020
SUMP Vision	Making Poltava a more liveable urban environment and a powerful regional centre, integrated into the national and global economy. The focal points of the SUMP are strengthening the city's economy and promoting a healthier and more inclusive lifestyle

⁴² State Statistics Service

⁴³ Poltava City Master Plan

 $^{^{\}it 44}$ Regional service centre in Poltava region, Ministry of Internal Affairs of Ukraine, 2015

Thanks to the funding of BMZ, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH has supported the Poltava City Council in developing a Sustainable Urban Mobility Plan (SUMP). The project includes the diagnosis of the current situation, the definition of sustainable urban mobility priorities and goals, the analysis of possible future scenarios and, finally, the identification of priority measures.

Although participatory processes had previously taken place in the city, such as online public consultations and civil society actions, the project went much further and ensured a very broad involvement of residents and specialised professionals in the area.

The implementation and development of the selected SUMP measures is expected to give access to transport to the entire population, especially low-mobility groups, increase the ecological compatibility and strengthen the economy and touristic attractivity of the city.

Diagnosis: Urban Mobility in Poltava

Poltava is an important regional city characterized mostly by a flat territory with a maximum level of relief plains fixed at +159,2 m above sea level. The demographic growth is negative in its urban area, characterized by low fertility and high mortality rates. However, the level of motorisation until 2031 is expected to grow by 330 cars / 1000 inhabitants, which will have a significant impact on the road network and traffic of the city.

The spatial organisation of the city is heterogenous. Although the average population density is high, it is very different among micro districts. The majority of workplaces and points of attraction are located in the centre, the surroundings of the southern station and in the southern part of the city. The northern part of the city is less populated.

These indicators are important for analysing the mobility of its inhabitants and the formation of a public transport system. Working trips make a significant share of traffic in the city and affect the loading of the road network in the morning peak period in the direction home - work, and vice versa in the evening.

Mobility demand and transport services

According to the mobility survey carried out in May 2018, Poltava's daily travel rate is 2.1 trips per person. As shown in **Figure 1**, the modal split highlights the current dominance of motorized travels (car and public transport), which represent 67.6% of trips against 32.3% of non-motorised modes (walking and cycling).

75 % of households do not own a car and the share of car users is limited compared to cities of the same size in Ukraine or elsewhere in Europe. Consequently, the share of public transport is high (55.2 %), making public transport the most often-used mode in Poltava. Walking is the second most often-used mode, with a share of 30.5 % of all trips.

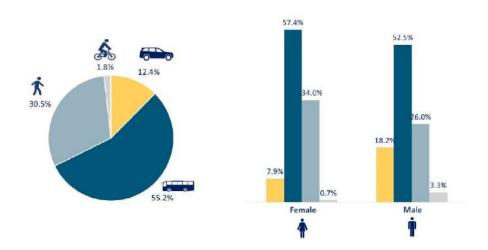


Figure 1. Modal split

Overview of the mobility services:

Public transport services (trolleybus and bus)

The city counts 10 trolleybus and 65 bus routes. 45 15% of the final stops of these bus routes are located outside the territorial borders of the city, which makes the route network of the city accessible to the population in the near settlements. 87.9% of local residents live within 500 m to public transport stops.

The length of the network of urban electric transport (trolleybuses) is 73 km, while the total length of the network of is 250 km³ (**Figure 2**). The public transport system has 407 stopping points.

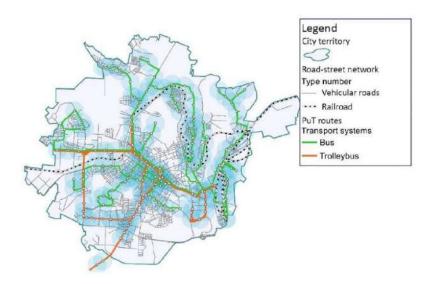


Figure 2. Public transport network

Although the network is relatively well developed, a renewal of both bus fleet and electric trolleybuses is necessary. Today 49% of Poltava's bus fleet are low-capacity buses, while the current age of 70% of the rolling stock of the trolleybus fleet exceeds 15 years⁴⁶.

Walking

Streets in Poltava do not systematically consider the needs of pedestrians. An acute challenge for the city is to ensure the barrier-free pedestrian space for people with limited mobility, since 10% of Poltava's population consists of people with disabilities. Besides, all sorts of obstacles often occupy pedestrian space, which impede the free movement of pedestrian.

Cycling

The cycling infrastructure is still undeveloped in the city, but its geographical characteristics as well as its wide streets represent a great potential for its emergence.

Private vehicles

Although private cars represent a limited share of the modal split, Poltava experiences significant issues related to mass spontaneous street parking, as the city lacks a single scheme for the city parking space management, as well as a control system for parking.

 $^{^{45}}$ Register of urban passenger transport routes as of December 1, 2017, Poltava Transport and Communications Department

 $^{^{\}mbox{\tiny 46}}$ According to the data of KP "Poltavaelektroavtotrans" as of 01.12.2017

Social issues

The diagnosis revealed that the existing public transport vehicle equipment does not offer adequate service to vulnerable groups, such as elderly people and people with limited mobility.

In addition, several surveys highlighted gender issues, especially related to cycling. Among all active bicycle users in Poltava, only 9% are women⁴⁷. This gender gap indicates the perception of cycling as a highly dangerous mode. On the other hand, women are more likely to use electric trolleybuses compared to men.

Road safety represents an important concern in Poltava, especially for pedestrians, who are the most frequent victims. Based on the analysis of heat maps of traffic violence with victims, places not meeting the minimal standards for pedestrian accessibility and barrier-free space (for example, underground pedestrian crossings) are usually the most dangerous for pedestrians in Poltava.

SUMP vision and goals

Vision for urban mobility in Poltava

Poltava is a city of healthy lifestyles, friendly to young people, that values and support the elderly. It is a tolerant and safe city with a strong, socially responsible community.

Poltava's SUMP identifies six main priorities and some related goals to improve the mobility situation.

Priority 1: Improving the attractiveness of public transport

- Improve the quality of public transport services
- · Introduce an efficient public transport management system
- · Improve conditions for people with limited mobility
- Develop a multimodal and integrated public transport
- Prioritize public transport in traffic

Priority 2: Improvement of parking space

- Unload roads and sidewalks in the city centre from the parking
- Provide a sufficient parking space in residential areas
- Implement parking management near public and commercial institutions
- Reduce large-sized vehicles from the city centre

Priority 3: Collection and analysis of data and creation of an intelligent transport system

- Create a unified information system
- Implement an electronic payment system for transport services
- · Provide information to road users
- Renew infrastructure in accordance with the latest technologies

Priority 4: Cycling development

- Promote cycling among citizens and tourists
- · Create a management mechanism for cycling development
- Improve cycling infrastructure to ensure quick and safe trips

 $^{^{\}mbox{\tiny 47}}$ Occording to the cyclists survey results of "CITYLAB", 2015-2016

Priority 5: Development of pedestrian spaces and accessibility

- Increase the attractiveness of walking as a transport mode
- Develop safe and comfortable facilities for pedestrians
- Create a municipal management system of walking facilities

Priority 6: Increasing road safety

- · Create a safe urban environment
- Improve the traffic culture

Key SUMP measures

Within the SUMP framework, specific measures for each priority area were identified. They can be divided into five points:

- Infrastructure measures to enhance inclusiveness and safe access to transport and to ensure city resilience in the long-term.
- **Management and organisation measure** relevant for the development of management systems and strategic documents to support a high-quality urban environment and mobility.
- Monitoring and data collection measures, essential to assess the urban transport skyline and identify its problems.
- Capacity building measures aiming at raising the awareness of the main stakeholders, such as politicians and planners, about sustainable mobility.
- Promotion and awareness measures aiming at scaling up citizens' participation and understanding of the sustainable urban mobility transition.

The following table presents the main measures planned on the short term.

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Physical investments (Infrastructure, rolling stock, etc.)			
Short term acquisition of 11 buses	0.8M€	Domestic financing	2019
Acquisition of 40 low floor trolleybuses and modernisation of 3 traction substations	10M€	European Bank for Reconstruc- tions and Development (EBRD) loan	2021
Technical (studies, plans, designs, etc.)			
Setup of a working group for cycling infrastructure and appointment of a cycling envoy			

Projected results and impact

Expected Impact

Impact Area

The implementation of the measures listed before will lead Poltava to consolidate its regional importance as an ecologically oriented city desiring to improve its citizens' quality of life. The following table presents the expected results and impact.

Impact Area	Expected impact	
GHG emissions (SDG 11)	Improved but not quantified	
	Accessibility for the entire population	Accessibility for people with reduced mobility
Accessibility (SDG 11)	Baseline: 87.9%48 Improved but not quantified	 Baseline: 11%⁴⁹ Improved but not quantified
Air pollution (SDG 11)	Improved but not quantified	
Modal share	Percentage of total trips by public transp • Baseline: 55%50 • SUMP scenario: improved but not qua	
Road safety (SDG 3)	Baseline: 0.04 accident/ 1000 inhabit. Improved but not quantified	51
Mobilized finance (SDG 17)	10M€ - Loan leveraged through Mobilise	eYourCity (EBRD)
Infrastructure and assets with committed financing (SDG 9)	of Poltava SUMP measures are related t actions are: Reduce duplication on urban public tra Unload the network from small-capac Reduce travel time for passengers; Optimize the transport system operati Build a network with the most efficient Increase electric transport; Introduce additional trolleybus routes; Introduce new types of public transpor municipal taxis Upgrade infrastructure in accordance	ity vehicles; ional cost; t vehicles; rt, such as car sharing, ride sharing (i.e., Uber), bike sharing or
Expected institutional impact	Poltava's SUMP includes several actions related to governance aiming at building effective management systems to guarantee the achievement of its goals and priorities. The expected impact at the institutional level can be deducted by the following list of recommended measures: Creation of a single centralized management system of public transport in the city; Creation of a municipal management system of walking facilities; Creation and approval at the municipal level the responsible for the development of cycling transport terms of reference; Establishment of a responsible authority for the organisation and management of the unified data system; Creation of municipal service for the control of parking; Conduct regular training in the field of management, development of public transport and the collection are analysis of traffic data to members of the relevant local authorities; Development and implementation of a Programme for Street Design; The creation and approval at the municipal level the responsible for the development of pedestrian infrastructure terms of reference; Establishment of a municipal authority responsible for the road safety coordination in Poltava; Inclusion of an independent "road safety audit" component to the projects of streets repairing and reconstruction.	

⁴⁸ Based on data about place of voters registration

⁴⁹ Characteristics of Urban Passenger Transport, 2008

 $^{^{\}rm 50}$ Estimated based of Mobility Survey, Dornier Consulting International GmbH, 2018 $\,$

 $^{^{\}rm 51}$ Information of the Police Department of Poltava in 2015

Highlights

Two years after the adoption of the SUMP, significant progress has been made to make public transport and cycling more attractive in Poltava

Since the SUMP was approved by the Poltava City Council in 2020, the most progress have been made in priority 1 *increase* the attractivity of public transport and priority 4 development of cycling.

Priority 1: attractivity of public transport

- Effective purchase of 11 buses in 2019 as well as 40 low-floor new trolleybuses in 2020 (financed by EBRD).
- Real-time information systems to passenger, including mobile app and GPS trackers embedded in trolleybuses.
- Transport model has been developed to improve public transport routes.
- 23 public transport stops repaired, 10 equipped with real-time information systems to passenger.
- Preparation of EUR 4.5 million investment project by the European Investment Bank (EIB), to develop the trolleybus network lines and infrastructure, including power station.
- · Process to integrate fares has started.

Priority 4: development of cycling

- A working group has been created for cycling infrastructure development.
- Specific action plan for cycling in Poltava has been prepared and approved.
- The development of bicycle infrastructure is ongoing, with further support from GIZ, including bike park installations
 for schools, libraries and sport infrastructures, shared bicycle for public administration and the identification of new
 cycling routes.
- Communication and advocacy efforts have been made in the local media and schools, in collaboration with the police services, to improve attractivity but also safety of cycling in Poltava.

The political situation is impeding the domestic financing of SUMP measures

The main obstacle for the SUMP implementation is the access to domestic public financing, aggravated by the political situation, and the reallocation of budget to national defence. As international tensions have transitioned to a military conflict with the Russian Federation, there is hardly any perspective that this situation will improve in the short term.

Vinnytsia, Ukraine

Status of the project: Completed technical assistance

Partner city



Basic Information

Urban area: 113 km²

Population: 369,900 (2018) | Growth rate: 0,27%

Region capital city

GDP per capita: USD 8,668

Context

The city of Vinnytsia has a relatively well-structured transport network that serves most housing and employment districts and connects them with the centre. The size of the system is optimal for trams and buses, but railway and vast industrial areas represent a barrier for soft modes of transport.

Topography, hydrography, and industrial infrastructure have a strong influence on the development of the road network. Only few relations exist over the Southern Bug river. A direct connection between outer districts does not exist, and most of outer districts have low population and employment density.

The recent developments have been strongly oriented toward individual motorized traffic, and there is room for improved traffic management, profiles of the existing streets offer enough space for all different modes of transport, including cycling, and for quality urban space with tree lined avenues.

Support from the Partnership

Technical Assistance: Technical assistance related to transport modelling

Funded by: The German Federal Ministry for Economic Cooperation and Development (BMZ), Swiss State Secretariat for Economic Affairs (SECO)

Implemented by: GIZ through the project Integrated urban development in Ukraine.

Local counterpart: Vinnytsia City Council

Supported activities:

- Capacity building for designing, applying, and implementing processes and standards of integrated and sustainable urban development.
- Preparation of priority infrastructure projects and implementation of small scale, low budget, and high impact investments (quick wins)
- Establishment of suitable communication, coordination, and cooperation mechanisms

Status of implementation

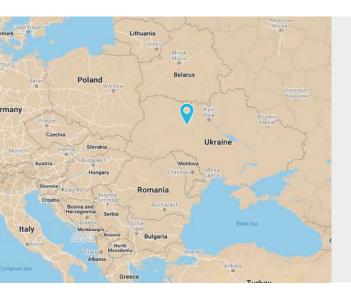
Project start: 2017 Q4

Project completion: 2019 Q4

Zhytomyr, Ukraine

Status of the project: Completed technical assistance

Partner city



Basic Information

Urban area: 93 km²

Population: 264,300 (2018) GDP per capita: USD 8,668

Modal share:

Motorised vehicles: 15% Public transport: 46%

Walking: 37.8% Cycling: 1.3%

Context

Zhytomyr is a city in the north of Ukraine, and is an important hub of inter-city road transport, due to its position as a crossroads between Kiev and the western cities of the country. It is also an important railway hub linking Kiev, western Ukrainian cities, Minsk, and Russia via Belarus.

The city has a long tradition of electric public transport, with the adoption of the tramway in 1988, and the trolleybus since 1962. The trolleybus network grew steadily until 2008, when it was streamlined from 19 to 11 lines. Every year, the city's trams and trolleybuses carry almost 40 million passengers. The length of the electric transport routes reaches 125 km.

Several transport and mobility related challenges were identified during the SUMP preparation process. The fleet of public transport rolling stock needs to be updated. The average age of the trolleybus is 27.5 years, the tram is 32.5 years old and the standard period of operation is 10 and 15 years, respectively. Road accidents are frequent and road markings are absent on a variety of secondary roads and alleys, where it is particularly important to replenish the markings. In terms of walking infrastructure in the city, Zhytomyr has a problem of narrow pedestrian walkways, which are common in residential areas. Most traffic lights have no sound equipment. The street lighting focuses only on roads, which leads to insufficient lighting on the sidewalks.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: The German Federal Ministry for Economic Cooperation and Development (BMZ), Swiss State Secretariat for Economic Affairs (SECO)

Implemented by GIZ through the project Integrated urban development in Ukraine.

Local counterpart: City Council Zhytomyr

Finance leverage: EUR 10,000,000

Supported activities:

- Capacity building for designing, applying, and implementing processes and standards of integrated and sustainable urban development.
- Preparation of priority infrastructure projects and implementation of small scale, low budget, and high impact investments (quick wins)
- Establishment of suitable communication, coordination, and cooperation mechanisms

Status of implementation

Project start: 2017 Q4

Project completion: 2019 Q4

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Reconstruction of central streets and sidewalks	Not available
Envoy for bicycle transport is needed within the structure of the city administration	Not available
Further work on the concept of changes of Sobornyi and Peremohy squares, elaboration of feasibility studies, looking for funding	Not available

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Finance leverage

Financing resulting from the SUMP	Source	Amount
Trolley buses	EBRD	EUR 10,000,000

Latin America and the Caribbean

Latin-America and the Caribbean

Completed

Córdoba, Argentina P.234

La Paz, Bolivia P.237

Baixada Santista, Brazil P.240

Belo Horizonte, Brazil P.245

Teresina, Brazil P.248

Chile P.251

Antofagasta, Chile P.256

Colombia P.262

Ibagué, Colombia P.267

Curridabat & Montes de Oca, Costa Rica P.270

Havana, Cuba P.274

Santo Domingo, Dominican Republic P.279

Ecuador P.290

Ambato, Ecuador P.296

San Juan Comalapa, Guatemala P.303

Guadalajara, Mexico P.307

Puebla, Mexico P.312

Arequipa, Peru P.316

Trujillo, Peru P.321

Uruguay P.327

Ongoing

Paraguay P.332

Peru P.336

Córdoba, Argentina

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 576 km²

Population: 1,600,000 | Growth rate: +0.4%

Region capital city

GDP per capita: USD 12,000

Modal Share:

Formal public transport: 32.2%

Walking: 27.2% Cycling: 2.6%

Private cars: 26.1%

Private motorbikes or 2-wheelers: 5.8%

Taxis: 5% Other: 0.3%

National GHG emissions per capita: 8.35 (tCO₂eq)

Exposure to climate change: HIGH

Context

The City of Córdoba is the capital of the Province of Córdoba and is located in the centre of the territory. The singular topography, characterised by terraces, makes it particularly challenging to implement and develop suitable infrastructure and a mobility system.

Córdoba has an urban area of 576 km² and an estimated population of 1,600,000, making it the second-largest city in the country after Buenos Aires. 83% of the population of the Metropolitan Area of Córdoba lives in Córdoba. The economy of the Province of Córdoba is based on services and technological activities (64% of the gross geographic product - GGP), the automotive industry (26.5% of GGP) and the primary sector (9.5% of GGP).

The city is organised by a radio-centric system, which generates urban and mobility planning challenges. Its population density is low (63 inhabitants/km²). However, high-density areas do not receive basic transport services. This imbalance has existed for the last 50 years.

In the metropolitan area of Córdoba, 2,556,906 motorised and non-motorised trips are made daily. 85.4% of these trips originate and/or end in the capital city, revealing the city's importance within the metropolitan area. Trips are made by 74.7% of the population, which shows a relatively high mobility rate (2.47 trips per working day) when considering the group of people who make at least one trip per day. Considering the entire population, this average drops to 1.84 trips per person per working day. Motorised modes are the predominant mode(69.9%). In recent years, a series of actions have been encouraging the growth of individual mobility to the detriment of mass transport.

A mass transit system is in place with buses and trolleybuses operated by three private firms and a public one. Seventy lines compose the system, with eight central corridors, two circle lines, three trolleybus lines, six district lines and one airport line.

There is an existing transport master plan, which was approved in 2014 and financed by CAF (Development Bank of Latin America). Its main objectives include the promotion of mass transit, the development of non-motorised transport, the promotion of the rational use of private motorised transport, the generation of new travel patterns that allow for more efficient use of the network infrastructure, better road safety and the preservation of the environment. This master plan must be updated and consolidated to be validated by institutional actors and the community.

The Municipalidad de Córdoba, the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure. It has the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate and report on urban matters. The technical assistance contributes to institutional strengthening by facilitating spaces for exchange between the different areas of the municipality and discussions to have a shared vision of mobility for the city.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) and Pilot project

Funded by: European Union

Funding amount: EUR 600,000

Implemented by AFD through the Euroclima+ Program

Local counterpart: Municipalidad de Córdoba

Supported activities (SUMP):

- SUMP for Córdoba.
- Study the city's central area to propose structuring actions for the transformation into a low-emissions area.
- Updated origin/destination survey and prediction model of current and future mobility scenarios, including short, medium-, and long-term strategies.
- Technical document on the projected GHG mitigation impact of the SUMP implementation.

Status of SUMP development

Project start: 2021 Q2

Expected project completion: 2023 Q4

Completed outputs:

- Preliminary report.
- · Diagnosis and evaluation report.

Next expected outputs

- Definition of a vision, strategic objectives and scenario building.
- Action plan, budget and funding.
- Monitoring, reporting and accompanying implementation.

Core impact indicators baselines

Indicator	Baseline - 2022	Projected 2030 BAU	Projected 2030 SUMP Scenario B ("Estabilizar")	Projected 2030 SUMP Scenario C ("Revertir")
Total annual transport-related GHG emissions (tCO_2eq)	450,000 t CO₂eq	528,000 t CO₂eq	501,000 t CO₂eq	464,000 t CO₂eq
Annual transport-related GHG emissions per capita (kg CO ₂ eq)	281kg CO₂eq / capita	330kg CO₂eq / capita	313kg CO₂eq / capita	290kg CO₂eq / capita

Insights from practice: lessons learned from the SUMP process

Córdoba's SUMP relied on existing data and stakeholder engagement to overcome COVID-19 challenges and Argentina's fragmented transport governance.

The formulation of Córdoba's SUMP, implemented by AFD, began during the COVID-19 crisis, limiting opportunities for in-person meetings and field surveys. The consulting team relied on existing documentation, primarily the 2014 Mobility Plan, and engaged extensively with stakeholders from Córdoba and its surrounding cities. This was crucial given Argentina's fragmented responsibility for urban transport, where municipalities oversee local transport, provinces manage interurban transport, and national authorities handle the railway system.

Córdoba's SUMP prioritises gender and inclusion, integrating "mobility of care" to support vulnerable groups. Córdoba's SUMP emphasises gender and inclusion, prioritising vulnerable groups such as children, older adults, individuals with disabilities, and especially women. The concept of "mobility of care" was integrated into the project and supported by data-driven decision-making. Studies revealed that care-related travel, such as accompanying or assisting others, accounts for 12% of total trips in the area. However, disparities remain—individuals with disabilities, for instance, undertake just 0.68 trips daily, half that of individuals without disabilities.

A strong private sector link drives sustainable mobility through innovation and investment, while solid governance ensures a well-defined SUMP to prioritise actions.

For developing a project such as a SUMP, the link with the private sector is crucial in promoting sustainable mobility since companies can offer innovative solutions, investments in infrastructure, and sustainable transport services. It is also necessary to have a solid and effective governance scheme that promotes sustainable mobility with a comprehensive approach, involving all actors in the territory, both public and private. Additionally, based on a solid diagnosis, the SUMP must be consolidated as a roadmap to prioritise actions and measures for more sustainable mobility.

Perspectives for SUMP Implementation

With 16 transport authorities involved, interinstitutional dialogue led to the creation of the Intermunicipal Metropolitan Management Entity in 2022.

Córdoba's transport governance includes 16 authorities, necessitating interinstitutional dialogue, supported by surveys of 2,500 households, traffic counts, stakeholder interviews, and the Gran Córdoba Forum. Regular virtual meetings fostered collaboration, aligning perspectives across stakeholders. Initially hesitant to involve neighbouring cities, Córdoba's municipal government shifted its approach, establishing a Metropolitan Affairs Secretariat and creating the Intermunicipal Metropolitan Management Entity, signed into action on 4 March 2022 with nine neighbouring municipalities. This collaboration became a cornerstone of the SUMP process.

La Paz, Bolivia

Status of the project: Completed pilot project

Partner city



Basic Information

Urban area: 3,152 km²

Population: 951,800 (2019) | Growth rate: 0.7%

Country capital city

GDP per capita: USD 3,143 (2020)

Modal Share:

Public transport (formal and informal): 79,18%

Walking: 11,92% Cycling: 0,04%

Private vehicles (cars, motorbikes): 6,75%

Other (freight vehicles, taxis): 2,11%

National GHG emissions per capita: 1,77 (tCO₂eq) (2020)

Exposure to climate change: HIGH

Context

La Paz is the economic and administrative capital of Bolivia. With an elevation of roughly 3,650m, it is the highest capital city in the world. Its metropolitan area includes the even higher city of El Alto, with an average elevation of 4,000m. Both cities are connected via one of the biggest cable car networks in the world but are not integrated from an administrative standpoint. The metropolitan area of La Paz-El Alto has a population of about 2 million inhabitants, of which approximately 950,000 live in La Paz.

The Municipality of La Paz (the counterpart for this project) has the mandate and responsibility to finance mass public transport infrastructure. International finance sources can lend money to the counterpart by agreeing on a sovereign loan with the national government, which then retrocedes it to the municipal government. Systems and procedures are partially in place to monitor, evaluate and report on urban mobility.

In 2014, the city inaugurated the country's first formal public transport system: a structural network of buses named Puma Katari that travel along main urban transport arteries designated fixed stops. Compared to the pre-existing "micro" buses, this is a remarkable innovation, stopping on demand and operating at a low commercial speed. The cable car network, called Mi Teleferico, has also been functioning since 2014 and comprises 11 lines that transport about 250,000 to 300,000 passengers daily (2019). According to the network's expansion plan, four new lines will be operating by 2025.

Compared to other modes, cycling is nearly absent (0.04%) in the modal split, with less than a thousand trips made daily by bicycle. The city of La Paz is topographically challenging for cyclists, with steep slopes and an altitude variation of 600m from the lowest to the highest point of the city. The development strategy of the cycling infrastructure focuses on the implementation of micro-networks connected through the collective transport systems – Cable Car and Puma Katari. These micro-networks will be located in neighbourhoods whose slopes allow connections in order to cover trips for shopping, work or entertainment.

The objective of the pilot project is to design and construct a pilot micro-network in the Southern Macro District of the municipality of La Paz, proposing an intermodal connection and promoting the use of bicycles in urban mobility.

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: European Union through the EUROCLIMA+ programme

Funding amount: EUR 500,000

Implemented by: AFD through EUROCLIMA+

Local counterpart: Autonomous Government of the Municipality of La Paz (GAMLP)

Supported activities:

• Initiation: Report on the design and budget for the cycle path proposed by GAMLP.

- Preparation: Preparation of bid tender documents for the works and support in the design of the communication campaign for the launch of the bicycle infrastructure.
- Training: 20-hour course and study tour on cycling infrastructure for GAMLP staff.
- Diagnostic: Report on the site supervision strategy for cycling infrastructure projects and business model for a public bicycle system.
- Implementation: Construction of Phase I of the cycling path and technical support during its implementation.

Status of implementation

Project start: 2023 Q1

Project completion: 2024 Q4

Completed outputs:

- Training plan
- Territorial Management Plan
- Monitoring, Reporting and Verification (MRV) Plan
- Project Communication Campaign
- Study tour agenda and methodology
- Technical design report
- Cost estimates, technical specifications and budget
- Bid tender documents for the technical assistance contract.
- Business model proposal for a bike share system
- Recommendations for the construction phase
- Communication strategy and project socialisation
- To school by bike programme proposal
- Designed 8.7 km cycling infrastructure: 5.2 km bike paths and 3.5 km shared lanes.
- 7,8 Km of bike paths implemented: 3 km of bike paths and 4,8 km of shared lanes.

Next expected outputs

• MRV plan implemented by local government

Insights from practice: key pilot project takeaways

The first cycling lanes in La Paz

With this pilot project, the city of La Paz has been able to create the first kilometres of high-quality bicycle lanes designed for the safety and comfort of cyclists, as well as for connecting them to the city's commercial and intermodal transport systems, such as the cable car. This new infrastructure will increase the potential for cycling, especially for short trips within the Calacoto area. However, in order to be most effective, the promotion of cycling will require a more significant commitment from the city's decision-makers.

Perspectives for scaling

Thanks to the high quality of the designs and the alternatives proposed, which adapt to different road profiles, the project designs have a high capacity for replication in other areas of the city and other cities in Bolivia and the region.

Capacity building and infrastructure implementation interact to encourage cycling.

This pilot project aims to test the development model of micro-networks of cycling infrastructure in specific neighbourhoods proposed by the Municipality. The pilot project trained technical teams, produced ground knowledge for future projects, and provided the necessary tools to complete the integrated cycling strategy in La Paz.

Highlights in the past year

The project designs were finalised in the first half of 2024 and the contracting process for the start of construction began around July 2024.

At the same time, the socialisation and communication campaign for the project was defined with the slogan 'High-level Mobility' (Mobilidad de altura in Spanish). The socialisation process began with key actors and neighbours in the area, especially cycling groups, businesses and schools.

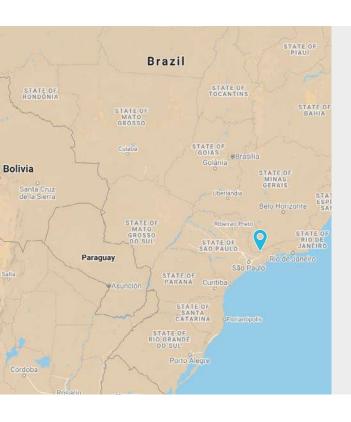
The construction phase began and was completed in the second half of 2024, with the implementation of 7.8 km of cycling infrastructure (initially, only 5 km had been planned), combining segregated (3 km) and shared (4.8 km) infrastructure.

Updated in December 2024

Baixada Santista, Brazil

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Antofagasta urban area: 2,422 km²

Population: 1,892,314 | Growth rate: +1.24%

Region capital city

GDP per capita: USD 16,771

Modal Share:

Public transport: 24%

Walking: 34% Cycling: 7%

Private cars/motorbikes: 35%

National GHG emissions per capita: 5.12 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

The Metropolitan Region of Baixada Santista (RMBS), established in 1996, was formed by the grouping of nine municipalities: Bertioga, Cubatão, Guarujá, Itanhaém, Mongaguá, Peruíbe, Praia Grande, Santos, and São Vicente. Despite corresponding to less than 1% of the surface of the State of São Paulo, the region accounts for approximately 4% of its population. It also represents 4% of the state GDP and is recognised as one of Brazil's most significant metropolitan regions due to its harbour and strong industrial and tourist sectors.

In RMBS, 185,247 people travel daily, with 13.38% travelling to the Metropolitan Region of São Paulo (RMSP) and 77.95% within RMBS. Road, sea and rail accesses to the port complex significantly limit the potential for cargo movement expansion, which is projected in an expansion Master Plan. The region has seasonal tourism activities, which highly impact the transport system.

By 2021, approximately 230,000 vehicles were registered in RMBS, and the private vehicle fleet was expanding faster than the population growth. The metropolitan roads serve metropolitan bus transportation operated by São Paulo's Metropolitan Company of Urban Transport (EMTU). Still, they are often poorly integrated with the Light Rail Transit System (VLT) and the intermunicipal buses. Approximately 11% of regional travel is made by bicycle, but with low integration with other modes. Most of the metropolitan roads in the municipalities are not equipped with bicycle lanes. RMBS currently has about 220 km of bike lanes and cycle paths in place.

There was no transport master plan or similar document for the metropolitan region, although some municipalities have their transport plans. Baixada Santista Metropolitan Agency (AGEM) does not have the mandate and responsibility to finance mass public transport infrastructure. Instead, mobility is managed by the Government of the State of São Paulo through the Secretariat of Metropolitan Transport (STM), the Secretariat of Logistics and Transport (SLT), and the Metropolitan Company of Urban Transport (EMTU). The state government has the authority to borrow from international finance sources. Some systems and procedures are partially in place to monitor, evaluate, and report on urban matters.

Baixada Santista received technical assistance to develop a regional urban mobility and logistics plan for the region to guide actions and investments for the short, medium, and long term. The new plan should allow the expansion and integration of different modes of passenger transport to improve traffic flows and decrease travel times. The modal share of public transport and bicycles should both rise.

The technical assistance strengthened institutions by providing general guidelines and proposals for integrated transport solutions, containing a complete diagnosis of current mobility conditions and a prognosis of the evolution of these conditions. It proposed actions that streamlined the mobility system and presented alternatives that maximise the potential for the sustainability of each transport mode to achieve adequate standards for the movement of people and freight in the region. Finally, it will help establish a Monitoring and Evaluation System (SIMA) with a set of sustainable mobility and logistics indicators providing information for the Thematic Chamber of Mobility to monitor the outcome of the proposed actions, thus contributing to the integrated management cycle of the region.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission

Funding amount: EUR 500,000

Implemented by: AFD through the Euroclima+ Program

Local counterpart: Baixada Santista Metropolitan Agency (AGEM)

Supported activities:

- Preparation of a Regional Urban Mobility and Logistics Plan for Baixada Santista, which guides actions and investments for the short (2022), medium (2026), and long-term (up to 2030).
- Mobility diagnosis (data collection, inventory, and evaluation)
- Definition of vision, objectives and strategies of SUMP
- Action and Financing Plan for SUMP implementation
- Participatory approaches and processes
- Monitoring and formal reception of PRMSL-BS and support for implementation

Status of the SUMP process

Project start date: 2021 Q2

Project completion: 2023 Q2

Completed outputs:

- Project initiation
- Phase 0: Preliminary information
- Phase 1: Diagnosis
- Phase 2: Definition of vision, objectives, and strategies
- Phase 3: Action and financing plan
- Phase 4: Participatory approaches and processes
- Phase 5: Monitoring and formal reception of PRMSL-BS

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure / investment	Capex estimates (M€)
Upgrading the Cycling Network in the Municipalities	5,69
Expansion of the Metropolitan Cycling Network	6,64
Expansion of the Cycling Network of Metropolitan Interest (Secondary Network)	7,58
Expansion of Cycling Connections in Municipalities	6,16
Implementation of Bicycle Stations in Terminals with a capacity of 50 bicycles	0,95
Installation of Paracycles	0,32
Installation of directional signs on the Baixada Santista Metropolitan Region's cycle network	0,47
Implementation of a Monitoring System on the Cycling Network of the Baixada Santista Metropolitan Region	0,47
Structural Public Transport Corridors	16,12
Implementation of the BRT	7,11
Tram Expansion	252,17
Public Transport Road Hubs Stopping Points	10,43
Urban Transport Integration Facilities	3,79
Integration of public transport networks (study)	0,79
Reducing emissions from the bus fleet	0,47
Information and dissemination of public transport	0,47
Southern Mobility Hub	70,47
Metropolitan Road System	25,44
New road links	12,32
Road extensions/ additions and improvements	7,74
Road safety program, pedestrians and cyclists at the crossings of axes of metropolitan interest	43,29
Program to support institutional strengthening for mobility management in Baixada Santista municipalities	0,18
Project to unify the metropolitan concession of stops and shelters in the RMBS	0,19
Baixada Santista public transport integration project	0,79
Intersectional gender program	1,11
Baixada Santista Metropolitan Urban Mobility Pact	
Technical studies for the preparation of a Navigation Program in Baixada Santista	0,09

The following table summarises the total capital expenses (CAPEX) estimates for different measures in the SUMP.

Urban transport investment measures CAPEX Estim	
Public transport and NMT	EUR 383.624.000,00
Street shaping urban roads and traffic management	EUR 159.264.000,00
Other measures	EUR 2.191.460,00
Total	EUR 545.079.460,00

Projected impacts

Indicator	Baseline - 2019

Total annual GHG emissions (Mt CO ₂ eq)	38.87 Mt CO ₂ eq
Annual transport-related GHG emissions per capita (kg CO2eq)	34,367 kg CO₂eq / capita
Air pollution Decrease in mean urban air pollution of particulate matter (in μg PM _{2.5}) at road-based monitoring stations	34,367 kg CO₂eq / capita

Insights from practice: lessons learned from the SUMP process

The SUMP was delivered and finalised on March 30, 2023. At the Council meeting on February 28, 2023, a Working Group in Sustainable Mobility and Logistics Thematic Chamber was approved to draw up a proposal for creating the Baixada Santista Sustainable Mobility Observatory.

Metropolitan areas manage urban mobility differently.

In the case of Baixada Santista, the metropolitan entity that brings together all the metropolitan municipalities was responsible for leading the development of the Plan. One of the key strengths of this institutional framework was its independence from local administrations, allowing for a more comprehensive metropolitan vision and urban development approach. Additionally, its distance from the daily challenges and urgent matters faced by municipal governments contributed to a more strategic and long-term planning process.

It is essential to consider that regional plans differ from SUMPs for a single city. In these cases, many actors and municipalities must coordinate. For Baxiada Santista, the consultant had to coordinate the data collection process from nine municipalities; the diagnosis's final result was an 800-page document. It would be good to leave a page limit for deliverables in cases like this.

Integrating gender and inclusion in mobility planning requires both internal capacity-building and targeted awareness-raising for decision-makers⁵².

Additionally, it is recommended that the gender approach be included and mainstreamed. It is not enough to include the gender issue as another section, but it is mainstreamed into all processes and deliverables of the plans.

To ensure that gender and inclusion were recognised as cross-cutting issues to be addressed technically, the gender and mobility consultancy within the Baixada Santista Regional Sustainable Urban Mobility and Logistics Plan (PRMLUS-BS) prioritised knowledge-sharing among technical team members. This was done informally through written exchanges, shared resources, and discussions in project meetings. Additionally, raising awareness among public officials was essential, achieved through concise presentations with space for questions during general project follow-ups.

Clear communication and integration of public input into decision-making processes are essential for meaningful civil society participation in mobility planning.

In the Baixada Santista Regional Sustainable Urban Mobility and Logistics Plan (PRMSL-BS), civil society participation played a crucial role in shaping the plan through qualitative research and public consultations. Sectoral listening sessions allowed for the collection of diverse perspectives from specific social groups, enriching the diagnostic phase with valuable insights. However, a key challenge in participatory processes is maintaining public engagement, as communities often struggle to see the direct impact of their contributions. Strengthening communication strategies and linking participatory research with validation processes can enhance transparency and demonstrate the real influence of civil society in urban mobility planning.

⁵² To know more about lessons learned of Euroclima's Urban Mobility component visit https://despacio.org/portfolio/movilidad-urbana-euroclima-resultados-y-lecciones-2018-2024/

The SUMP proposes measures with potential national spillover.

In addition, it should be noted that the SUMP have three innovative approaches that could be replicated and scaled in the country: The metropolitan cycle-infrastructure network, the management of measures for the regional integration of mobility, with special emphasis on tariff integration, and the inclusion of gender category in the OD survey that was done for cyclists.

Perspectives for implementation

Political buy-in for approval must start from the outset, involving all key stakeholders.

As this is a regional plan, the approval must involve all nine municipalities in the metropolitan region. The SUMP development process included municipalities' participation through the Mobility and Logistics Technical Chamber, with periodic meetings where the consultant presented project updates and key documents. Financing for prioritised actions will potentially come from the National Government and a new framework for public transportation.

Highlights in the past year

CAF and Santos City Hall signed a loan agreement in August 2024, for US\$ 105 million, the largest loan in the city's history, for the Santos Macrodrainage, Accessibility, Innovation and Sustainability Program.⁵³

Urban mobility is being addressed by upgrading approximately 18 kilometres of roads and acquiring road signalling and guidance equipment, traffic light control systems and car detection.

Urban development will also see the expansion of monitoring capacity through the installation of 1,500 cameras integrated into the municipal Operational Control Centre.

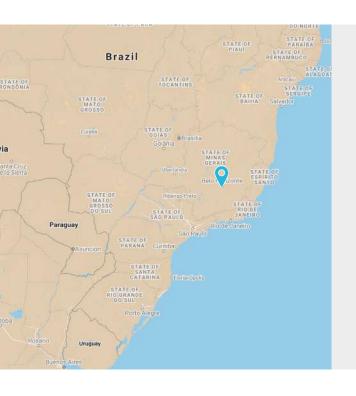
Updated in December 2024

 $^{{\}tt https://www.caf.com/pt/presente/noticias/financiamento-de-us-105-milh\~oes-para-desenvolvimento-urbano-de-santos/para-desenvolvimento-de-santos/para-de-santo$

Belo Horizonte, Brazil

Status of the project: Completed pilot project

Partner city



Basic Information

Urban area: 14,420 km²

Population: 5,700,000 | Growth rate: 1.05%

Region capital city

GDP per capita: USD 17,239

Modal Share:

Formal public transport: 28%

Walking: 35% Cycling: 0.4% Private cars: 33% Motorcycle: 4%

National GHG emissions per capita: 5.12 (tCO₂eq)

Exposure to climate change: HIGH

Context

Belo Horizonte is the capital of the state of Minas Gerais and is located in the south-eastern region of Brazil. It is the third-largest metropolitan area in the country and has a population of over 2.4 million, with 5.7 million in the official Metropolitan Area (IBGE, 2014). Considering the relatively moderate ambition level of Brazil's NDC, local action in cities plays a crucial role in climate change mitigation. Belo Horizonte is one example of an active, mid-sized city committed to sustainable development.

Brazil commits to reducing greenhouse gas emissions by 37% below 2005 levels by 2025 in its NDC. The NDC also has a subsequent indicative contribution to reducing greenhouse gas emissions by 43% below 2005 levels in 2030. Compared to the 1990 level, this translates to a 6% and 16% reduction, respectively. With this target, Brazil is the first major developing country to commit to an absolute GHG reduction below 1990 levels.

Belo Horizonte has a series of plans (Master Plan, PlanMob-BH, Belo Horizonte – a Smart City, etc.) and policies that are reviewed and monitored regularly to help guide the city's urban development. Belo Horizonte has already made important progress towards sustainability. It envisions becoming an example of smart and sustainable urban development for Brazil and Latin America in the medium and long run. However, road transport remains responsible for 53% of greenhouse gas emissions in Belo Horizonte and could reach 6 million tons of CO₂ emissions by 2030. Regarding mobility, Belo Horizonte already has an innovative Sustainable Urban Mobility Plan (2010, reviewed in 2016) called PlanMob-BH, with comprehensive measures related to eight strategic areas: (1) active mobility, (2) collective mobility, (3) motorised individual mobility, (4) traffic calming and circulation, (5) urban logistics, (6) sustainable city, (7) universal accessibility, and (8) management, supervision and operation. Each strategic intervention is complemented by actions and indicators for short (2020), medium (2025) and long-term (2030) planning horizons.

Since 2017, Urban Pathways has been supporting Belo Horizonte in the implementation of active mobility projects. Urban Pathways has invited the city to participate in international forums, training, and peer-to-peer learning. Moreover, Urban Pathways has provided technical assistance in developing project proposals to be submitted to donors. As a result, in 2019, Belo Horizonte implemented four "Zones 30", one of which counted on the support of Urban Pathways from conceptualisation to financing, namely "Zone 30 Confisco". The successful implementation of Zones 30 in Belo Horizonte has led to citizens' political support and great acceptance.

The Zone 30 pilot project foresees a vast deployment of vertical and horizontal signalling, the reallocation and repositioning of parking spaces to encourage a reduction in speed, and the enlargement of sidewalks, including the insertion of urban furniture, hereby creating small areas of coexistence for pedestrians. Beyond the immediate mobility-related issues, Belo Horizonte also recognises these measures as an opportunity to revitalise the downtown area and enhance the quality of life by creating pedestrian streets and giving the space used for cars back to the people.

In terms of capacity building, Urban Pathways involved Belo Horizonte in webinars on e-scooters, tactical urbanism, public space interventions, AQ sensors, etc. Urban Pathways also supported the participation of Belo Horizonte in the Transport and Climate Change Week 2018 and 2022 (Berlin), the Sustainable Urban Infrastructure Forum (Quito), the International Conference on Climate Action 2019 - ICCA (Heidelberg), and, among others, a site visit to Santiago de Chile (2020). Thus, Urban Pathways would like to continue supporting Belo Horizonte in the development of active mobility projects, awareness raising, and cross-sectorial integration related to climate change mitigation.

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: BMU through the International Climate Initiative (IKI), WRI Brazil, TUMI

Funding amount: EUR 100,000

Implemented by: Wuppertal Institute and UN-Habitat through the Urban Pathways project

Local counterpart: Belo Horizonte Transport and Traffic Company (BH-TRANS)

Supported activities:

- Pilot project financing and implementation
- Capacity building, training, and participation in international fora
- Assistance in the development of project proposals for donors

Status of implementation

Project start: 2017

Project completion: 2022

Completed outputs:

- Pilot project implementation of Zone 30 in the Confisco neighbourhood.
- Pilot project implementation of the EcoZone in the Santa Tereza neighbourhood
- · Capacity building and webinars on e-scooters, tactical urbanism, public space interventions, AQ sensors

Insights from practice: key pilot project takeaways

The necessity of a pilot project as a first step for implementing zone 30 in Belo Horizonte

The pilot project, implemented in the Confisco neighbourhood in 2019, aimed to create a low-cost Zone 30, increase safety around the school area, and enhance social cohesion in the neighbourhood. The project's positive results, including increased public perception and city-wide replication, have led to institutionalising this type of intervention in Belo Horizonte. Despite the pilot project's success, there is still room for improvement in the intervention strategy and specificity of project results. Possible improvements include addressing measurement errors, increasing assessment days, and incorporating awareness-raising activities related to waste.

Incorporating sustainability and awareness-raising activities in future urban intervention projects: Insights from the Confisco Zone 30 pilot project

The pilot project showed that community participation, before and after assessments, and inter-institutional cooperation are crucial elements for the success of an urban intervention project like the Confisco Zone 30. The project's positive results, such as increased safety around the school area, social cohesion in the neighbourhood, and the public's positive perception, have led to the institutionalisation of this type of intervention in Belo Horizonte. BHTrans is now creating a Zone 30 guide to help replicate this success city-wide.

The pilot project also revealed that there is still room for improvement in the intervention strategy and specificity of project results. For example, the results of the Smart Citizen Kit did not exhibit the desired results during the mobility week, and the relative numbers of pedestrian and cyclist counts hardly exhibited any difference in mobility behaviour in the surroundings of the school. To address these issues, covering a longer period of time before and after the intervention and increasing assessment days could help reduce data biases and measurement errors.

Finally, some elements that could be included in future urban intervention projects were identified, such as the fabrication of urban furniture with local partners using recycled materials and the inclusion of awareness-raising activities related to waste. The Confisco Zone 30 already incorporated some of these elements, but further attention to these topics could improve the success of future projects. Overall, the pilot project provided valuable insights into what works and what could be improved in urban intervention projects, serving as a model for future initiatives.

Results and perspectives for scaling

Belo Horizonte's Model for Safe and Sustainable Mobility: A Blueprint for Cities Worldwide?

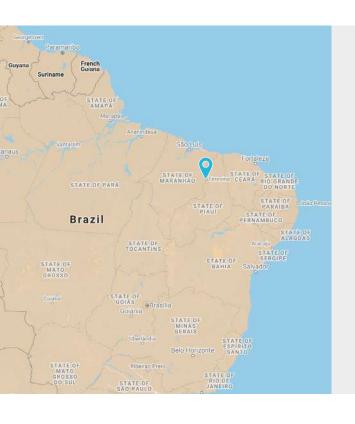
While the project's specific implementation may not be directly replicable in other locations, the project's emphasis on community engagement, inter-institutional cooperation, and low-cost interventions can serve as a model for similar projects around the world. The creation of a Zone 30 guide can be a valuable tool for other cities interested in pursuing similar initiatives.

Updated in December 2022

Teresina, Brazil

Status of the project: Completed pilot project

Partner city



Basic Information

Urban area: 1,392 km²

Population: 1,203,922 | Growth rate: 1.21%

Region capital city

GDP per capita: USD 6,729

Modal Share:

Formal public transport: 21.3%

Walking: 32.6% Cycling: 11.8% Private cars: 24.8%

Private motorbikes or 2-wheelers: 5.8%

National GHG emissions per capita: 5.12 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

Teresina is a low-density agglomeration of 1.2 million inhabitants located in northeast Brazil. The city is located at a crossroads near significant towns on the country's north coast, notably Fortaleza and Sao Luis, which contribute significantly to its economic development. However, the city suffers from urban sprawl, which increases travel time and costs and reduces the efficiency of public transport.

The 2008 Master Plan for Transport and Urban Mobility states that 1.91 million trips are made per day in the greater Teresina, standing out on foot (32.6%), followed by private car trips (24.8%), and municipal public transport (21.3%), with less representation, bicycle (11.8%) and motorcycles (5.8%). The relatively low share of public transport illustrates existing issues related to efficiency, accessibility and affordability of public transport accessibility but also affordability issues. Public transport in Teresina currently has about 100 bus lines, and a BRT system is under development. Four leading companies operate this network with a total fleet of 550 vehicles. This network is supplemented by eight alternative service routes, operated by 45 cars from minor operators organised under the SINTRAPI (Alternative Passenger Transport Operators Union).

During the last year, the current "conventional" bus system) has gradually been replaced by the new Integrated BRT System. This evolution redesigns the bus routes, previously classified into (i) radial, (ii) circular, and (iii) diameters (from one side of the city to the other, going through the city centre), all converging to the Central Business District, and leading to overlapping itineraries and saturation of some segments in the system.

The Integrated BRT System introduces a new feeder-trunk system, operating with a set of feeder lines that connect neighbourhoods to zone terminals and trunk lines (BRT) departing from terminals to the city centre or linking terminals. It divides the city into four main zones (South, Southeast, East, Centre-North -Teresina doesn't have a West zone inside the municipal jurisdiction), each zone with two bus terminals, and the CBD has four unloading terminals. The bus route concession was allocated by zone, and each operator holds the concession for the zone routes.

Teresina Municipality Town Hall, the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure. It has the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate and report on urban transport.

The project supported by the MobiliseYourCity partnership implements an Open Innovation approach which aims at (i) identifying the key issues of the transport system management and (ii) developing relevant digital solutions that can address those issues and scale up strategy.

The specific objectives of the Project are to:

- Provide a rapid assessment of the current public transportation system of Teresina;
- Co-identify and prioritise the main issues faced by the public transportation system;
- Identify solutions and technologies which could address those prioritised issues, including blockchain;
- Provide methodology and resources to prototype pilot projects;
- Lesson learned from the pilots: documentation and definition of the pilot implementation strategy.

Technical assistance contributes to institutional strengthening by tackling trust issues between all the mobility sector stakeholders through data and technological solutions.

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: EUROCLIMA+

Funding amount: EUR 500,000

Implemented by: AFD through the project

Local counterpart: Teresina Municipality Town Hall, Secretary of Planning and Coordination (SEMPLAN)

Supported activities:

- Install the blockchain platform and promote its use by the actors involved in the Teresina transport system.
- Implement a public transport governance system based on co-management and the opening of data and processes whereby the municipality, companies, users and the treasury interact in a collaborative way.

Status of implementation

Project start: 2019 Q4

Project completion: 2022 Q1

Completed outputs:

- Signature of a MoU between Teresina and AFD
- · Finalization Diagnosis
- Finalization Setup of The Open Innovation.
- Finalization Pilot Conception
- Finalization of Proof of concept
- Scale-up strategy

Core impact indicators baselines

Indicator	Baseline - 2020
Total annual transport-related GHG emissions (Mt CO2eq)(Brazil)	1,070.08 Mt CO₂eq
Annual transport-related GHG emissions per capita (kg CO2eq)(Brazil)	5,120 kg CO₂eq / capita
Air pollution Mean urban air pollution of particulate matter (in µg PM _{2.5}) at road-based monitoring stations	13 μg/m³ of PM _{2.5}
Road safety Annual traffic fatalities in the urban area per 100,000 inhabitants	22.8 fatalities / 100,000 hab

Insights from practice: key pilot project takeaways

Breaking Down Barriers: How Teresina's Pilot Project Overcame Data Inefficiencies in Transport Management

The pilot project in Teresina aimed to improve the efficiency of the BRT system by implementing an innovative information and interrelationship system. By reducing information asymmetries between stakeholders, decision-making was improved, making it easier to adjust to the interests of each actor. The project successfully tackled the challenges of inefficient data management and analysis, paving the way for more effective traffic reorganisation policies in the future.

The use of this information system is also intended to improve the levels of traffic norm infringement by private companies in terms of fines and infractions committed, in addition to providing better traceability of the process.

Open innovation process allowed for public interest and sharing of data, but political will is lacking to expand solutions

Implementing blockchain technology in the transportation sector is very innovative and became a challenge in the open innovation process, as there were few participants who could integrate it into the solutions. The open innovation process allowed for citizen participation and interest in the transportation system's management; internally, the municipality had to coordinate to share data and public information. As a result, the information has been shared publicly on a website: https://observatorio.stardust.dev.br/. However, the lack of political interest from the high officers and the remaining basic challenges of the public transport system did not allow for systemic change.

Results and perspectives for scaling

The scaling-up strategy developed from the outset connects to potential funding for the city

The scaling up of Teresina's pilot project was included from the beginning. Solutions developed in the Open Innovation process were structured in a strategy to be implemented by the city and included as part of potential funding for expansion of the Proof of Concept through the AFD Project "Teresina 2030".

Updated in December 2023

Chile

Partner country

Status of the project: Completed National Urban Mobility Policy or Programme



Basic Information

Population: 18,050,000 (2018) | Growth rate: 1.4%

Percentage of urban population: 87.8%

GDP per capita: USD 16,522

Percentage of the population living below the national poverty

line: 10.9%

Annual average infrastructure expenditures as a percentage of

GDP: 2.2%

Nationally Determined Contribution (NDC):

100% e-taxis by 2050

100% urban public transport e-buses by 2040

58% private e-vehicles by 2050

58% commercial e-vehicles by 2050

National GHG emissions per capita: 5.1 (tCO₂eq)

Proportion of transport related GHG emissions: 24.1% (2016)

Exposure to climate change: HIGH

Context

The Republic of Chile, a country in South America, occupies a long, narrow strip of land between the Andes to the east and the Pacific Ocean to the west. Chile covers an area of 756,096 km² and has a population of 18 million as of 2018. The capital and largest city is Santiago.

Chile has an economy characterised by the exploitation and export of raw materials. In 2012, exports - copper, fruit, fishery products, paper and cellulose pulp, chemicals, and wine - reached USD 83.66 billion, while imports - oil and derived products, chemicals, electrical and telecommunications articles, industrial machinery, vehicles and natural gas- reached USD 72.2 billion. The public debt was 10.1% of the GDP, of which the external debt amounted to USD 102.1 billion by late 2012.

By 2030, CO_2e emissions from the transport sector will likely increase 36% compared to 2007, reaching the value of 46.4 megatons CO_2e . This trajectory is strongly correlated with GDP growth, and the business-as-usual projections for 2050 go from 44.5 megatons CO_2e for low GDP growth projections to 84.4 megatons CO_2e for high GDP growth projections.

The Ministry of Transport and Telecommunications (MTT) is responsible for developing transport in Chile. It develops transport plans for the country's main cities every ten years and manages public transport contracts and subventions, among other responsibilities.

Due to a highly centralised system, Chilean cities have few competencies for planning sustainable urban mobility. However, as of 2021, due to a new decentralisation law, municipalities receive new powers in this area. Since October 2019, Chile has been subject to a profound social and political crisis, which has led to a referendum for a constitution renewal.

Despite Chile's efforts to electrify public transport, such as the ongoing fleet electrification in several regions, the country shows high levels of development inequality between the capital and other cities. Indeed, public transportation is still informal in several towns and does not meet the same qualitative and quantitative standards as in the capital city.

The implementation of a National Urban Mobility Policy (NUMP) aims to support cities in the development of sustainable urban mobility, either through the establishment of multisectoral political guidelines (Strategy) or the facilitation of a financing programme, in addition to supporting commitments of the NDC and the country's Long-Term Strategy (LTS).

Technical assistance for the development of the NUMP has strengthened the institutional framework in the country mainly through the facilitation of dialogue and agreements from a multisectoral (discussion between the transport sector, urban planning, environment, and energy) and multilevel (dialogue between the regional and local levels) perspective.

Support from the Partnership

Technical Assistance: National Urban Mobility Policy or Programme (NUMP)

Type of NUMP: Mixed Programme and Policy NUMP

Funded by: European Commission

Funding amount: EUR 1,000,000

Implemented by: GIZ through the Euroclima+ Programme

Local counterpart: Ministry of Transportation and Telecommunications

Primary purpose of the NUMP

- · Offer cities and regions a general enabling framework for Sustainable Urban Mobility Plans
- Provide technical guidance on a wide range of technical issues relevant to the transport sector in the context of reducing GHG emissions
- Offer cities a general enabling framework for SUMPs
- Regulate a wide range of technical issues
- Provide technical advice on a wide range of technical issues

Supported activities:

- Design a National Programme for Sustainable Mobility
- Elaboration of the National Strategy for Sustainable Urban Mobility (writing, revising, and promoting the participation of other institutions in the process)
- Various NUMP Chile roundtable meetings and strategic planning of the NUMP activities
- Virtual peer-to-peer workshops (with Brazil, Ecuador, and Uruguay) and internal workshops with several MTT departments
- Development of technical studies relevant in the context of the Chilean Long-Term Strategy for Fighting Climate Change (Emissions Inventory, Emissions Projection, Status Quo Analysis, among others)

Status of NUMP development

Project start date: 2018 Q4

NUMP completion date: 2023 Q4

Completed outputs:

- NUMP Workshops in Quito, Ecuador and Bogota, Colombia (March 2019 and February 2020)
- Status quo analysis and multisectoral workshops to build a shared understanding of the urban mobility situation, including mobility challenges and current actions implemented by seven sectoral ministries.
- Internal round of 3 workshops (Nov-Dec 2020) with the participation of representatives from most departments (regional and national) of the Ministry of Transport and Telecommunication (MTT) to define the objectives and action lines of the National Strategy on Sustainable Urban Mobility (134 participants in total)
- Study in emissions Inventory from the transport sector (2020)
- Study on emissions projections from the transport sector (2021)
- National Strategy for Sustainable Mobility (2021)

Next expected outputs:

- Investment Programme to support the implementation of sustainable mobility measures by subnational governments (currently in process)
- MRV process at the national level

NUMP key measures and cost estimates

The following table highlights the most significant measures identified in the NUMP.

Measure	Cost Estimate
1. Integrating mobility into the territory	
Instruments of urban planning oriented to public transit and active mobility	
Urban design and management oriented toward public transit and active mobility	Not quantified ⁵⁴
Intersectionality with a territorial approach	
Sustainable urban logistics	
2. Reducing the adverse effects of urban mobility on the environment by strengthening climate mitigation actions and addressing local negative externalities	
Climate-oriented social assessment of projects	
Disincentives for polluting vehicle usage	Not a restificat
Disincentives for polluting vehicle purchases	Not quantified
Polluting vehicle control	
Polluting vehicle controlFleet decarbonisation	

⁵⁴ The National Sustainable Mobility Strategy provides a repertoire of 30 types of measures. Regional governments wishing to develop a sustainable urban mobility plan should select from the most suitable measures for their context. Hence, there is not cost estimate for the 30 types of measures. Their costs depend on the specific application that each regional government will do (for example, how many kilometres of bikeways or pedestrian paths).

Measure	Cost Estimate
Promoting more efficient use of urban and road space by enabling better travel demand management and enhancing access through prioritising sustainable modes of transport	
Reduction of the need to travel	
Redistribution of road space	Niet en entificat
Improvement of public transit levels of service	Not quantified
Incentives for public transit operation and ridership	
promotion and facilitation of intermodality	
Disincentives to inefficient car ownership and use	
4. Active and safe mobility	
Walking and cycling infrastructure	
Road safety initiatives that prioritise pedestrians and cyclists	Not quantified
Promotion of intermodality between cycling and public transit	
Incentives for active mobility	
5. Promoting inclusion, universal accessibility, and gender equality in mobility systems	
Universally accessible infrastructure and public spaces	N = 4 = = 4: E = 1
Universally accessible public transit	Not quantified
Safe public transit	
6. Integrating citizens' vision into decision-making	
Appropriate and transparent participatory processes leading to agreements	N
Decentralised governance for sustainable mobility	Not quantified
Arrangements allowing citizens to raise their concerns and communicate about processes	
 Progressing towards greater integration and transparency of mobility data, enhancing information access for users, and strengthening the technological bases for planners, operators, and deci- sion-makers 	
Improvement of mobility data collection, processing, and analysis arrangements	Not quantified
Digital transformation for an integrated transit management	
Strengthening of information services for citizens	
Development of integrated transport services	

Projected impacts

Currently, the NUMP Chile includes a catalogue of measures but no action plan or NUMP scenario with quantified impact.

Indicator	Impact 2030 (NUMP vs BAU)	Baseline - 2020	Projected 2030 BAU	Projected 2030 NUMP scenario
Total annual GHG emissions (Mt CO2eq)	Not possible to quantify	20.01 Mt CO₂eq	22.25 Mt CO₂eq	Not yet quantified
Annual transport related GHG emissions per capita (kg CO ₂ eq)	Not yet quantified	853 kg CO₂eq / capita	1174 kg CO₂eq / capita	Not yet quantified

Insights from practice: lessons learned from the NUMP process

Integrated multi-sector and multilevel coordination, communication, and participation have been critical elements in the preparation of Chile's NUMP

Regarding multisectoral and multilevel governance, Chile is a highly centralised country with a low public culture of territorial linkage and involvement in decision- and policy-making. This situation has impacted the development of the NUMP due to the difficulties in incorporating the particularities of the different territories into their development plans, as well as in linking transport with other sectors and ministries, making it challenging to formulate comprehensive measures to reduce emissions.

Moreover, the empowerment of the transport sector around the climate crisis is still challenging. Although the NUMP has facilitated this approach, there is still a significant gap for the transport sector in communicating transparent and timely manner the impact it has on the climate and opportunities for change.

In Chile, integrated urban planning still fails to incorporate both the climate crisis and other development issues, such as gender perspectives and inequality. The different sectors directly influencing urban spaces and their dynamics have not yet fully assumed these areas.

Local governments possess more profound knowledge of urban mobility needs.

Regional governments possess better knowledge and understanding of selecting sustainable mobility measures more suitable for their contexts. Hence, the National Sustainable Mobility Strategy offers cities and regions a general enabling framework for developing SUMPs that local governments will complement by adding context-specific insights and adapting the proposed available measures to create effective SUMP road-maps.

Perspectives for implementation

The national government is promoting the NUMP so that cities can take action.

The most important output of the NUMP Chile project has been the National Sustainable Mobility Strategy. This Strategy presents a repertoire of 30 types of sustainable mobility measures. Thus, this Strategy offers cities and regions a general enabling framework for developing sustainable urban mobility plans. Regional governments wishing to create a sustainable urban mobility plan should select from these 30 measures the ones most suitable for their context.

The transport planning agency (SECTRA) of the Chilean Transport Ministry is currently conducting workshops with professional teams from different regional governments to demonstrate how the National Sustainable Mobility Strategy works and can assist them in developing SUMPs for their cities. Until now, one regional government has prepared a SUMP (Antofagasta) and is tendering a consultancy project to support the development of a SUMP in another city within the region (Calama).

Effective sustainable mobility implementation in Chile requires improved interministerial coordination and precise funding mechanisms for regional governments.⁵⁵

In Chile, sustainable mobility responsibilities are primarily concentrated at the national level, particularly within the ministries of transport and housing and urban planning. Regional governments have limited authority and budget to develop mobility initiatives. To address this, an implementation strategy was initiated through the formulation of a Sustainable Mobility Program, designed as a competitive fund from the central government to support regional governments in planning and implementing mobility projects. However, a key challenge has been the dispersion of decision-making power and funding across multiple ministries, making it difficult to achieve the necessary alignment of interests for effective program management. Moving forward, stronger interministerial coordination and institutional alignment will be critical for successfully implementing sustainable mobility policies at the regional level.

Updated in December 2024

⁵⁵ To know more about lessons learned of the Euroclima's Urban Mobility Component visit https://despacio.org/portfolio/movilidad-urbana-euroclima-resultados-y-lecciones-2018-2024/

Antofagasta, Chile

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Antofagasta urban area: 30,718 km² Population: 388,545 | Growth rate: 2%

Region capital city

GDP per capita: USD 47,000

Modal Share:

Formal public transport: 25.08%

Walking: 28.31% Cycling: 0.33%

Private cars: 35.13%

Taxis: 9.13%

Freight vehicles: 1.28%

Other: 0.74%

National GHG emissions per capita: 5.92 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

Antofagasta spans 30 km in length and averages 2 km in width, where approximately 380,000 citizens residing there according to the 2017 census. The city, primarily reliant on the copper mining industry for economic development, attracts tens of thousands of migrants seeking employment opportunities. The intercensal variation (2002-2017) indicated a notable population increase of 22.99%, surpassing the national growth rate of 16.26%. Antofagasta experienced a significant population surge, adding 72,396 new inhabitants during the intercensal period. A considerable portion of these newcomers are immigrants drawn to the region by its climate and employment prospects.

Around 100,000 vehicles traverse the city daily, covering average distances ranging from 5.9 and 7.4 km. Geographic constraints and demographic pressures have pushed the city's expansion to the north and south, with more than 60% of the population residing in the northern sector. Nonetheless, the central area remains the focal point for services, employment, and economic activities, leading to congestion and straining the already inadequate transport network. The transport network has, in turn, only exacerbated urban development and land use challenges. The two branches of the private train that transports materials from the mines to the port pass through the heart of the municipal territory, dividing the city in two, interrupting traffic flows and consuming a large part of the urban territory with its right of way.

Faced with this, the Regional Government, in conjunction with the Local Government and other institutions, has promoted a series of mobility initiatives that complement the current public transport system and the urban transport master plan. However, these are not necessarily linked to each other, and their impact in terms of emissions is unknown.

The regional Government of Antofagasta has the mandate and responsibility to finance mass public transport infrastructure, not its operation. It has the authority to borrow from international finance sources. Systems and procedures are not yet in place to monitor, evaluate and report on urban transport development.

The SUMP process has already achieved important milestones. A Technical Board that institutionally and politically validates the development of the SUMP has been established, as well as a Social Board responsible for including the demands and perspectives of citizens and other stakeholders in the SUMP. The authorities also set up a website⁵⁶ that is the primary communication tool with citizens, hosting surveys and news.

Phases 1, 2 and 3 of the SUMP development process have ended. There is already a consolidated vision, objectives, indicators, and goals for the SUMP and a selection of measures. The SUMP's official launch happened in November 2022.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan

Funded by: European Union

Funding amount: EUR 500,000

Implemented by: GIZ through the EUROCLIMA+ Programme

Local counterpart: Regional Government of Antofagasta

Supported activities:

- Develop an Integrated Sustainable Urban Mobility Plan incorporating environmental goals and implementing monitoring, reporting and verification (MRV) mechanisms to existing measures and individual modal plans.
- Support the integration of various modes of transport and enhance existing bike lanes, sidewalks and public transport infrastructure.
- Formalise the Technical Board for Sustainable Mobility within the city.
- Provide training for regional and municipal government officials.
- Foster citizen empowerment and ensure their access to decision-making processes, with a focus on investment initiatives.

Finance leverage: USD 2,313,292,800

Status of the SUMP process

Project start date: 2018 Q2

SUMP adoption date: 2022 Q4

Completed outputs:

- Status quo analysis, including emissions inventory
- Implementation of the communications and participatory process strategy, including the website and social media accounts
- Implementation and results of online surveys
- Implementation of the Technical Board
- Implementation of the Social Board
- MRV plan
- Phase I to IV completed

⁵⁶ www.movilidadantofagasta.cl

- · Draft SUMP policy document
- Establishment of an Observatory for Sustainable Urban Mobility in the city of Antofagasta.
- · Communications products (graphic summary of the policy text, short video, poster)
- · Launch of SUMP implementation.

Development of the Public Space Infrastructure and Mobility Plan

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP. The measures presented here are part of the prioritised set of measures⁵⁷.

Measure **Cost Estimate** Total prioritised measures USD 1,222,680,555 Physical (infrastructure, rolling stock, etc.) USD 1,202,049,946 USD 417,000 Renewal of buses and collective taxi fleet Mass transit system USD 576,666,667 Shelters and public transport transfer zones USD 2,027,778 USD 299,042,000 Network of high-standard pedestrian axes Extending the network of cycle lanes and cycle parking areas USD 7,381,944 USD 1,291,667 Urban renovation zones and incentives for residential use USD 4.861.111 Traffic calming measures Enabling and consolidating urban transects USD 78,889 Continuity of north-south road axes USD 214,930 Integrated intermodal stations and terminals USD 16,541,667 Technical (studies, plans, design) USD 76,000 Restructuring of the taxi-bus service network USD 76,000 Policy & regulation USD 20,569,444 USD 55,555 Parking management policy Incentives for the generation of centralities USD 3,166,667 USD 69,444 Fare and ticketing integration USD 576,389 Integration of logistics in land-use planning Establishment of a regional metropolitan transport corporation USD 76.389

The following table summarises the total capital expenses (CapEx) estimates for different measures in the SUMP.

USD 16,625,000

Urban transport investment measures	CapEx Estimate
Public transport	USD 579,284,722
Active transport	USD 314,965,277
Disincentive car use	USD 17,888,888
Land use and public space	USD 430,152,777

⁵⁷ Measures that due to their technical, financial feasibility and GHG emissions reduction potential are indispensable to kick-off the implementation of Antofagasta's SUMP.

Urban transport investment measures	Cost Estimate
Freight and logistic transport	USD 716,027,777
Intermodality	USD 310,513,888
Governance	USD 16,701,388
Total	USD 2,385,534,722

Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Status	Amount
State funding sources	Regional Government of Antofagasta	Planned	USD 497,011,200
State funding sources	Ministry of Housing and Urban Planning	Planned	USD 414,019,200
State funding sources	Ministry of Public Works	Planned	USD 406,896,000
Electrification of the freight train	Private company investment FCAB	Planned	USD 576,800,000
Concession mechanisms through public-private partnerships		Planned	USD 418,566,400

Associated financing (independently secured financing for measures related to the SUMP)

Package of measures	Measure	Investment	Concessional investment
	Redesign of the service network of taxibuses	USD 62,755	
Public Transport	Renewal of the vehicle fleet of taxibuses and collective cabs	USD 342,300	USD 342,300
	Mass transit system	USD 473,743,200	USD 399,350,000
	Shelters and transfer areas for public transportation	USD 1,665,860	
Active Transport	High-standard pedestrian axis network	USD 245,668,710	
Active transport	Expansion of the bicycle lanes and bicycle parking network	USD 6,064,415	
Car disincentive	Traffic calming measures	USD 3,993,500	
Car districentive	Parking management policy	USD 45,640	
Land Use and Public	Incentives for the generation of new urban centers	USD 2,601,480	
Areas	Urban renewal zones and incentives for residential use	USD 1,061,130	
Logistic transport	Integration of logistics in land use planning	USD 473,515	
	Integration of rates and payment methods	USD 57,050	
Intermodality	Continuity of north-south road axes	USD 176,569,750	
mermodality	Enabling and consolidation of urban transects	USD 64,808,800	
	Integrated intermodal stations and terminals	USD 13,589,310	USD 12,151,650
Covernance	Creation of a regional corporation of metropolitan transportation	USD 62,755	
Governance	Development of the Infrastructure and Mobility Plan in the Public Space (PIMEP)	USD 13,657,770	
TOTAL		USD 1,004,456,530	USD 412,984,950

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2017	Projected 2035 BAU	Projected 2035 SUMP scenario
Total annual GHG emissions (Mt CO2eq)	-0.36 Mt CO₂eq	0.343 Mt CO₂eq	0.400 Mt CO ₂ eq	0.364 Mt CO2eq
Annual transport related GHG emissions per capita (kg ${\tt CO_2eq})$	Not quantified	815 kg CO₂eq / capita	800 kg CO2eq / capita	600 kg CO₂eq / capita
Access Increase in the proportion of the population living within 500 meters or less of a public transport stop	Not quantified	80.4% (2018)	Steady	90%
Modal share Increase in the modal shares of trips by public transport, walking and cycling	Not quantified	63.3% (2018)	Gradually decreasing	70%
Road safety Decrease in traffic fatalities in the urban area, per 100,000 inhabitants	Not quantified	5.56 fatalities / 100,000 hab (2018)	Gradually increasing	3.50 fatalities/100 000 hab

Perspectives for implementation

Public authorities are working together to allocate funding for SUMP implementation

The regional Government worked during December 2022 with other central and local government public agencies to develop a programming agreement for financing the projects of the SUMP. A programming agreement is a financing agreement between two or more financial institutions, such as Ministries, Municipalities and Regional Governments, aimed at pooling resources for the achievement of an objective of high regional interest.

Insights from practice: lessons learned from the SUMP process

Global methodologies need to be adapted to the local context

Transport planning methods and tools used for SUMP development must meet the requisites of the Chilean national investment system; otherwise, projects cannot obtain financial resources from the central Government. Learning from Antofagasta's SUMP, the regional Government has overcome this problem in a new project when developing terms of reference for Calama's SUMP. The central Government accepts the planning methods and tools used so that projects can qualify for public resources.

Participation is a crucial component of the SUMP formulation, yet related strategies must be the most cost-efficient alternatives considering the available resources. It is important to consider public participation from the beginning of the SUMP process. This trade-off worked very well for the Antofagasta SUMP case, becoming one of the strengths of this experience. Public participation was particularly relevant for understanding the current problems and needs of Antofagasta's population.

Although the generation of two participatory roundtables (the Technical Roundtable and the Social Roundtable) was a successful process in Antofagasta, it required more resources and the need to cross-reference the work carried out in both spaces. Generating a single broad participatory roundtable (multi-sectoral, multi-level and multi-stakeholder) from the beginning of the SUMP can reduce costs and increase efficiency for process management.

It is vital to be able to communicate progress while the SUMP is under development so that people can become involved in it to generate a "collective awareness" about the urgency of acting in the transport sector to mitigate the climate crisis. Implementing the website and other digital tools proved to be of great help in this regard.

Even if it is not a binding policy instrument, ensuring budget allocation at different levels of government and governance bodies can uphold the SUMP

The Antofagasta SUMP is a non-binding public policy instrument, so its approval rests in the hands of the principal, which corresponds to the Regional Government of Antofagasta. However, to secure part of the public funding required for the plan, the Regional Government has committed to sign a "Programming Agreement", which is the general instrument through which Regional Governments engage shared funding with Ministries to finance local initiatives.

The Regional Secretariat of the Ministry of Housing and Urban Development has decided to give continuity to work carried out by the SUMP participatory roundtables, merging them and taking over their leadership. This leadership will make it possible to exercise control over the SUMP's implementation and continue empowering the stakeholders involved.

Sustainable urban mobility should be planned in interaction with other urban planning instruments and adapted to the local context

Antofagasta conceived its SUMP as compatible with other urban public policies, such as regeneration, housing or development plans, since authorities should not understand mobility from a single sectoral perspective. Several urban components influence urban mobility and vice-versa.

For the SUMP development in Antofagasta, the SUMP team harmonised the SUMP methodology proposed by MobiliseYourCity with existing transport or mobility planning processes and experiences in the local territory. Existing transport plans already addressed aspects such as modelling, indicators or measures' scope.

Antofagasta launches Chile's first SUMP mobility observatory

As part of the SUMP process, Antofagasta presented its Mobility Observatory, a platform that allows the visualization of the indicators of the SUMP, the first of its kind in a Chilean city. The observatory consists of a web platform that monitors the implementation of the Antofagasta SUMP and its strategic objectives. Read more on EUROCLIMA+ website.

Highlights in past years

Development of a Diffusion Report of Antofagasta's SUMP

An Antofagasta SUMP diffusion report was developed in November 2022. The purpose of this report is to provide information on the SUMP formulation process, its objective, key definitions, vision, measures, costs, roadmap, among other details.

Updated in December 2023

Colombia

Partner country

Status of the project: Completed National Urban Mobility Policy or Programme



Basic Information

Population: 50,662,678 (2020) | Growth rate: 0.8%

Percentage of urban population: 77.1%

GDP per capita: USD 5,334

Percentage of the population living below the national

poverty line: 27%

Annual average infrastructure expenditures as a

percentage of GDP: 1.8%

Nationally Determined Contribution (NDC): Committed reduction of 51% of overall GHG emissions compared to BAU by 2030, unquantified mobility target

National GHG emissions per capita: 3.75 (tCO,eq)

Proportion of transport-related GHG emissions: 12%

Exposure to climate change: Very High

Context

Colombia is Latin America's third most populated country after Brazil and Mexico. Bogota is the country's capital, the most populated city, and economic, political, and financial centre. 77.1% of Colombian citizens live in cities. Access to education, public health and other essential services is still limited in rural areas. Poverty and inequality are significant challenges for Colombia, with a multidimensional poverty index of 20.2% and a GINI index of 0.522, placing it as the second-most unequal country in Latin America, only after Honduras. According to the National Ministry of Finance and Public Credit reports, Colombia's Gross Domestic Product (GDP) has been growing for the last two decades, with an average annual growth rate of 3.8%. This economic growth is remarkable, given the country's long-standing internal conflict. Colombia is an upper-middle-income country. Historically, oil and other energy products have played an important role in Colombia's economy. The country's exports and industrial growth areas are oil, electronics, agriculture, information technology, and shipbuilding.

In 2018 road transportation in Colombia was responsible for 12% of the overall country-wide GHG emissions (37.8 MtCO₂e), and tackling the transport sector is crucial for complying with climate change mitigation goals. Electric mobility can be a powerful tool for achieving such goals. Additionally, public concern about the negative impacts of air pollution on public health has increased over the past years. The transport sector (mainly diesel freight and public transport) is responsible for 25% of $PM_{2,5}$ emissions in large cities, the most relevant air pollutant in the Colombian context.

Buses are important in Colombia's transport landscape, from small feeder buses to bi-articulated high-frequency buses. They contribute to 23% of Bogota's local air pollution. However, given the increasing urban population densities and the deteriorating air quality, the bus systems' various configurations present an untapped potential for providing access to clean urban mobility. Electrification of public transport is an intersectoral priority of at least four national policy agendas (Energy Efficiency, Climate Change, Air Pollution and Urban Mobility) and three international policy commitments: the Paris Agreement, the New Urban Agenda and the Sustainable Development Goals.

Since the electrification of transport is vital for complying with climate commitments, promoting green growth, and protecting human health, the national government has started developing a National E-Mobility Strategy in 2019. As electric buses have considerably higher upfront investment costs than traditional technologies and the technology is relatively new in Colombia, the technical assistance aimed to overcome these barriers with a program that supports the electrification of Colombia's public passenger transportation systems.

The technical assistance had four workstreams aiming at creating a suitable environment for electromobility deployment in cities without significant zero-emission fleets:

- Technical and regulatory design: Identify the technical and regulatory needs that should be located at the transport policy level in the country to enable the transition to electric public transport systems.
- Financial design: Analyse the context, barriers, costs, and economic conditions of public passenger transportation in Colombia to construct, jointly with other counterparts, an instrument to facilitate investments in electric fleets and infrastructure.
- Design a coordination and governance scheme: Through a systemic process with the national government counterparts, define the decision-making frameworks and methods to approve and follow up on the policies and plans that enable technological advancement.
- Design of an MRV system: Build methodologies and capacities to monitor the development of policies and their impacts, especially regarding the mitigation of Greenhouse Gases.

Support from the Partnership

Technical Assistance: National Urban Mobility Policy or Programme (NUMP)

Type of NUMP: Programme NUMP

Funded by: German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

(BMUV)

Funded amount: EUR 800.000

Implemented by: GIZ through the TRANSfer III project

Local counterpart: Ministry of Transportation

The primary purpose of the NUMP

The TRANSfer project helped develop a National E-Bus Promotion Programme. This programme comprises a national investment fund to finance the upgrade of public transportation fleets. It is intended to set the institutional arrangements and capacities for large-scale monitoring, reporting and verification methodology for e-bus deployment.

Supported activities:

- Financial and economic analysis for e-bus deployment at a large scale.
- Prefeasibility of a public investment fund.
- Support to legally structure a national fund for e-buses.
- Supporting implementation of a national framework on e-mobility and its governance.
- Diagnosis of technical gaps and barriers for policymakers.
- Ex-ante and ex-post MRV system preparation.

Status of NUMP development

Project start date: 2019 Q1

NUMP adoption date: 2022 Q1

Completed outputs:

- Zero emissions vehicles' investment fund for buses and freight legally established
- Fleet replacement and investment scenarios for every transport system in the country
- Prefeasibility, structure proposal and stakeholder awareness for the instrument
- · National-scale institutional arrangement for e-mobility
- Operation and maintenance of an e-bus training program in place with an employability and gender perspective
- Course for e-buses system planning and electricity procurement for operators
- Mitigation potential and MRV methodologies for e-buses in line with the National Registry of Emissions Reductions (RENARE)
- Assessment of regulatory and capacity building needs, technical and policy barriers for e-bus deployment
- International course on transport systems based on e-buses (with Moving Chile)
- Employability strategy and technical curriculum with a gender perspective
- Electricity procurement guidelines
- E-bus workshop in Cali, Colombia (24-25 February 2020, 70 participants from cities, the Ministry of Transportation, and academia)
- Fund included in the current Government (2022-2026) plan, extended to fund instruments for taxis.

Next expected outputs:

The fund design and setting has not been finished by the end of 2024.

NUMP key measures and cost estimates

The following table highlights the most significant measures identified in the NUMP.

Measure	Cost Estimate
Public fund to finance bus fleet renewal (estimated from medium investment scenarios)	USD 460 million

The following table summarises the total capital expenditure (CAPEX) estimates for different types of measures in the NUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Nationwide bus fleet renewal (estimated from medium investment scenarios)	USD 850 million
Street shaping urban roads and traffic management	0
Other measures	0
Total	USD 850 million

Finance leverage

Leveraged financing (resulting or enabled by the NUMP preparation process)

Financing resulting from the NUMP	Source	Amount
E-motion project funding proposal for Latin America to the Green Climate Fund	AFD	EUR 570.000
Public fund investment manuals and implementation	IADB	EUR 300.000

Projected impacts

Indicator	Impact 2030 (NUMP vs BAU)	Baseline - 2019	Projected 2030 BAU	Projected 2030 NUMP scenario
Total annual GHG emissions (Mt CO2eq)	-5.7 ⁵⁸ Mt CO₂eq	34 Mt CO₂eq	43.4 Mt CO₂eq	37.7 Mt CO₂eq
Annual transport-related GHG emissions per capita (kg CO ₂ eq)	- 113 kg CO₂eq / capita	675 kg CO₂eq / capita	862 kg CO₂eq / capita	749 kg CO₂eq / capita

Insights from practice: lessons learned from the NUMP process

The decision-makers ownership of the project contributes to keeping it alive

The experience with Colombia's technology upgrade fund showed that the key to achieving the project's adoption and implementation is to generate ownership among decision-makers and their advising teams. Also, it is necessary to shield the process from political conditions by achieving their legal approval as part of more significant initiatives.

The electrification of public transport in Colombia still needs public investment to cover capital costs.

Studies indicated that the difference between the total cost of ownership of an internal combustion engine bus and an electric unit was considerably high. As a result, transport authorities and public transport operators in intermediate and small-sized cities cannot cover electrification's capital costs through soft loans. Instead, a considerable package of subsidies from the national government is required to make the e-bus technology competitive regarding its capital investment costs.

Nationwide emission reduction programmes in the transport sector can be comprehensive but flexible.

The technical assistance in Colombia did not follow the traditional NUMP formulation approach. It tried to meet the needs of four pre-identified barriers for deploying electric mobility nationally and achieving effective mitigation outcomes. Thus, the project's four workstreams (finance, governance, capacities and MRV) interacted harmoniously to deliver concrete results related to the political and financial commitment to the renewal of the public transport fleet in the country. However, the project did not follow the guidelines for formulating a NUMP.

⁵⁸ Calculations made by the MobiliseYourCity Secretariat based on Colombia's first NDC (https://unfccc.int/NDCREG) and Colombia's MRV method (https://changing-transport.org/wp-content/uploads/Infografia-traCS-EN-1.pdf)

Electrification's sustainability goes beyond ensuring funds and includes support infrastructure, capacity development, and systemic change.

Building capacities in electric mobility within the transport sector is critical to ensuring the sustainability of a solid fleet-renewal policy. Transport authorities must interact with the energy sector to enable fertile conditions for electromobility deployment. Moreover, operators and technicians need to be trained in the maintenance and mechanics of electric vehicle systems so that operation management is not at risk. The inclusion of a gender focus in this component is intended to close the gender gap and enable women access to jobs in the transport sector.

Perspectives for NUMP implementation

The Colombian Congress approved a 2021 Law creating the national fund for e-bus renewal.

In 2021, a national law for climate action (Ley 2169 - 2021) was enacted, aiming to establish goals and actions to achieve carbon neutrality, climate resilience and low-carbon development in Colombia in the short, medium, and medium-long term. The law creates a national fund for the technological upgrading of public transport systems and freight fleets. This fund will promote purchasing low or zero-emission vehicles and the support infrastructure required for the energy supply. The potential financial sources for the fund include local authorities, non-reimbursable technical cooperation, grants, and financial revenues, among others. Together with the government, the implementing partner (GIZ) is committed to keeping the support to find feasible funding alternatives to feed the created fund.

Despite the change in the National Government, GIZ positioned the project on the political agenda for implementation.

The technological upgrade fund for public transportation fleets and light freight was a process approved by Law 2169 in December 2021. Its implementation has been a dynamic process since 2022. This is significant since the country changed its national government, and the new administration reprised its implementation.

The fund was written in law, so its implementation was practically assured. Nonetheless, GIZ carried out the following activities for the project to be kept in the hands of decision-makers:

- Ensuring investment manual resources with other cooperating institutions
- Including the mandate for implementation and potential funding sources as part of the new administration's government plan
- Adding additional transport modes (Taxis and heavy freight) to the fund's scope.

Highlights from previous years

The technology upgrade fund includes the national government's (2022-2026) strategic sustainable mobility and decarbonisation tools.

The new government validated the implementation of the fund, including the possible funding alternative that could be used for the investment (General Budget, Demand Management Tools, and green taxes) and broadening the scope to taxis and heavy-duty freight.

Updated in December 2024

Ibagué, Colombia

Status of the project: Completed Pilot Project

Partner city



Basic Information

Urban area: 56.8 km²

Population: 529,635 | Growth rate: 0.69%

Region capital city

GDP per capita: USD 5,024

Modal Share:

Formal public transport: 34.37% Informal public transport: 0.3%

Walking: 26.89% Cycling: 0.9% Private cars: 11.1%

Private motorbikes or 2-wheelers: 15.08%

Taxis: 7.26% Other: 4.7%

National GHG emissions per capita: 3.58 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

lbagué has 541,101 inhabitants (DANE, 2018), of which 501,991 (92.77 %) are located in the municipal capital and 39,110 (7.23 %) in populated and dispersed rural centres. The urban area is positioned in the Andean region with great ecological riches. Its strategic position in the country enables strong economic, social, and cultural interactions with cities such as Bogotá and Cali, located 205 km and 279 km away. According to the Ibagué Sostenible report (2018), the city has great opportunities to consolidate its vocation and play a more relevant role at the national level. Regarding its territorial articulation, Ibagué is an obligatory point of passage between the Pacific Ocean and the centre of the country. This location has positioned the city as a critical nodefacilitating the mobilisation of passengers and cargo. Additionally, Ibagué's economy revolves around commerce, services, agriculture, and mining, generating products and services that add value.

In recent years, Ibagué's urban growth, especially on its outskirts, has generated accessibility problems to the city's downtown area and caused travel times to increase substantially. Hence, it is important to integrate new mobility models that connect the historic centre where much of the urban equipment is located. The Mobility and Public Space Master Plan estimated that 905,000 trips are made every day in Ibagué, of which 36% are made to commute, 25% to study, 11% for personal errands and the remaining 28% for shopping, accessing health, recreation, and other activities. Mobility accounts for 32% of Ibagué's total CO_2 emissions, making it the second most polluting sector in the city. The city has 35.4 kilometres of cycle infrastructure.

The municipality of Ibagué does not yet have exclusive roads for public transportation since the Strategic Public Transportation System (SEPT – Mass Transit System) was approved in August 2020 and is now under implementation. According to the city's Mobility and Public Space Master Plan, the public transportation service has 32 routes with a

fleet of 1,018 vehicles, of which 73% are buses, 16% are coaches, and the remaining 11% are minibuses. The Mayor's Office of Ibagué, headed by Mayor Andrés Fabián Hurtado Barrera (2020-2024), has 15 sectoral secretariats: General, Planning, Finance, Administrative, Government, Health, Education, Economic Development, Culture, Environment and Risk Management, Community Social Development, Agriculture and Rural Development, Infrastructure, Mobility and Information and Communication Technologies – TIC. The local counterpart, INFIBAGUÉ, Ibagué Municipality, has the mandate and responsibility to finance the construction of a mass public transport infrastructure. However, it does not have the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate and report on urban mobility.

The project implemented by GIZ through the EUROCLIMA+ Program consists of a pilot plan for implementing a sharing system for assisted pedalling bicycles for the city of Ibagué. This system will have eight stations, 69 mechanical bicycles and 16 electric-assisted bicycles across the city centre. The project's strategic objective is to increase the number of residents and circulating populations downtown using shared bicycles while promoting cycling as a primary mode of transportation. Additionally, the pilot project aims to build public authorities' capacity for sustainable mobility. The pilot seeks to reduce the levels of environmental pollution from mobile sources and promote healthy lifestyles by increasing the modal share of bicycles from individual motorised transport.

For implementing the public bicycle system pilot, EUROCLIMA+ is a strategic ally with *INFIBAGUÉ*. This entity seeks to encourage, promote, and contribute to sustainable development and foster a social sense of the city by bringing together government agencies, economic associations and citizens. INFIBAGUÉ will be responsible for the implementation of the pilot project. To this end, licenses have been arranged with the Planning Secretariat to install the stations in public spaces, and the pilot's mechanisms for future sustainability have been coordinated with the Municipal Council.

The technical assistance contributes to institutional strengthening by improving the capacities of the mayor's staff involved in the project. It links them to the private sector and other experiences through the Community of Practice on sustainable urban mobility.

Support from the Partnership

Technical Assistance: Pilot Project Development

Funded by: European Commission

Funding amount: EUR 500,000

Implemented by: GIZ through the EUROCLIMA+ Program

Local counterpart: Ibagué Municipality - INFIBAGUÉ

Finance leverage: 195,000 EUR approx (ordinary budget from local government up to 2024)

Supported activities:

- Formulation of a bike-sharing pilot project.
- Development of a strategic planning document that ensures the project's sustainability.
- Proposal of a business model combining both public and private resources for the bike-sharing system.
- Building public authority capacity for sustainable mobility planning.

Status of implementation

Project start: 2019 Q2

Project completion: 2023 Q2

Completed outputs:

- Technical, legal and financial structuring in the feasibility stage and support in the tender process for system implementation.
- Successfully completed the tender process, in which the implementation and start-up of the pilot was awarded in O3 of 2021.
- INFIBAGUÉ managed permits to install stations in public spaces with the Planning Secretariat.
- · Manufactured bicycles and stations.
- · Completed software development.
- The bicycles arrived in the country at the end of March 2022.
- Installation and station deployment Q3, 2022
- Tender process to select an operator in November 2022
- Pilot project private operator selection and contract signing in January 2023
- Inauguration of the system in February 2023
- Deliverables of consultant additional support (operational scheme options) in March 2023

Insights from Practice: Key Pilot Project Takeaways

Considering that the transport sector in Ibagué is the second most responsible for CO₂ emissions, promoting strategies to decarbonise transport is paramount. Implementing a public bicycle pilot aligns with this objective, promoting healthy lifestyle habits and offering alternatives for low-income people.

Lessons Learned from Ibagué

Implementing public bicycle systems requires a clear and defined steering structure within the city. Ideally, This should be implemented from the project structuring stage to reach maturity and operate smoothly.

In the same way, the city must select a business model according to its specific conditions. It is advisable to incorporate various funding sources to reach financial closure more easily.

Results and perspectives for scaling

The findings and lessons learned from the structuring process of the Ibagué public bicycle system are part of the <u>Guide</u> <u>for the implementation of Public Bicycle Systems</u> issued by the Colombian national government on August 2, 2022, with the support of EUROCLIMA+ and the C40 Cities Finance Facility as part of the actions included in the <u>National Active</u> <u>Mobility Strategy with a gender and differential approach - ENMA</u>, also supported by EUROCLIMA+. This guide contains a step-by-step guide and recommendations for replicating and scaling up the implementation of public bicycle systems in Colombia.

Highlights in the past year

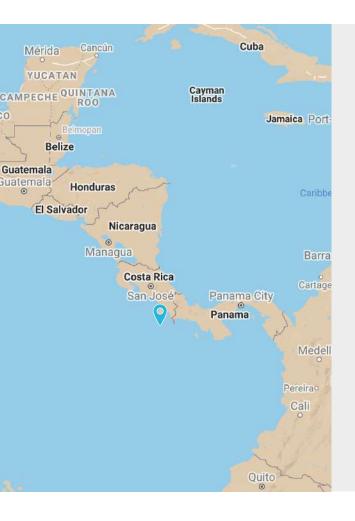
The system was put into service in February 2023 through an indirect public operation scheme (private operator paid by the local government). It has more than 700 active users who have made more than 3,000 trips together, each with a journey time of 25 minutes.

From 2024, the system will start to be operated directly by Infibagué, who has acquired the needed experience to have better control at a lower cost during these first months of operation.

Curridabat & Montes de Oca, Costa Rica

Partner city

Status of the project: Completed pilot project



Basic Information

Urban area: Curridabat 15.92 km²

Montes de Oca 15.16 km²

Population: 79,577 (Curridabat) and 62,533 (Montes de Oca) | Growth rate: 0.78% (Curridabat) and 0.36% (Montes de Oca)

Cantons of the Metropolitan Area of San José

GDP per capita: USD 11,215

Modal Share (Metropolitan San Jose Area, 2016):

Formal public transport: 26%

Informal public transport: 2%

Walking: 36% Cycling: 1%

Private cars: 27%

Private motorbikes or 2-wheelers: 5%

Taxis: 2% Train: 1%

Exposure to climate change: MEDIUM

Context

Montes de Oca and Curridabat are two of the 21 municipalities of the Metropolitan area of San José, an urban agglomeration with more than 1.5 million inhabitants (one-fourth of the total national population). They are conurbations in the east zone of the metropolitan sprawl. Both cantons are highly developed and have a service-based economy. Moreover, Montes de Oca hosts many well-known universities in the country. Most of the residential and commercial activities for both municipalities are located in connection to the border with the canton of San Jose, Costa Rica's capital.

As of 2016, more than 2.6 million trips were generated within the metropolitan area of San Jose in a working day. Although sustainable transport alternatives dominate the modal split (36% walking and 26% public transport), private modes (cars and motorbikes) have gained relevance, sharing 32% of the total trips. The motorisation rate is 0.5 cars per household and is expected to grow 4% annually. In contrast, cycling has very low penetration as a transport mode.

Half of the trips in Curridabat and Montes de Oca are either internal or "inter-cantonal", falling within their own territorial boundaries. The rest have the canton of San Jose as their destination. Historically, and due to their geographic and social circumstances, cycling has held a more significant role in urban mobility in Curridabat and Montes de Oca than in neighbouring districts. This preference for the bicycle is influenced by the presence of students in the area and the working class in medium- and low-income settlements (mostly men).

The municipalities have no mass transit system, as in the rest of the metropolitan area. However, in 2017, an Integral Sustainable Urban Mobility Plan (PIMUS, for its Spanish acronym) was formulated for the metro area of San Jose, aiming to integrate all modes of transport with urban planning. The PIMUS proposes the promotion of active modes of transport and the deployment of cycling infrastructure.

Since 2002, Curridabat's administration has promoted and encouraged a progressive and environmental vision of the city. Under the slogan "Ciudad Dulce" (Sweet City), the local government has undertaken interventions favouring biodiversity and the balance between constructed and natural environments. The canton has set a long-term commitment to active mobility. Decision-makers and city officials in both municipalities consider themselves active urban cyclists. In turn, Montes de Oca implemented one of the first dedicated cycling lanes in the metropolitan area, enhancing its connection with the canton of San Jose.

The local counterparts do not have the mandate and responsibility to finance mass public transport as it is a national jurisdiction. As for the transport or cycling infrastructure, responsibilities are shared between national and local authorities, depending on the type of roads on which cycling lanes are located. Systems and procedures are partially in place to monitor, evaluate and report on urban mobility.

Considerable efforts were needed to consolidate the existing cycling infrastructure and to enlarge it beyond isolated initiatives. Additionally, governance schemes that could enable the construction and maintenance of cycling infrastructure were missing, leading to limited coordination between national ministers and local governments. In this context, the lack and atomisation of cycling infrastructure, and the ambiguous responsibilities of public authorities for active mobility planning, threatened the long-term scalability of such initiatives.

The objective of the pilot project was to improve the conditions for the mobility and accessibility of urban cyclists in the cantons of Curridabat and Montes de Oca by developing cycling demand data, a plan for cycling infrastructure for both cantons, and the design and adequacy of a prioritised network of cycling lanes. Participatory and educational processes for data collection and systematisation were implemented with cycling communities in the study area, although the pandemic limited in-person activities.

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: European Union through EUROCLIMA+

Funding amount: EUR 400,000

Implemented by: GIZ through the EUROCLIMA+ Program

Local counterpart: Municipality of Montes de Oca, Municipality of Curridabat, Ministry of Public Infrastructure and Transport, Ministry of Planning, Ministry of the Environment (through the Dirección de Cambio Climático) and Ministry of Foreign Affairs

Supported activities:

- Information gathering: Collect information on cycling infrastructure needs in a participatory manner in the cantons
 of Montes de Oca and Curridabat.
- Diagnostic: Identify the infrastructure needs of people who use bicycles as a means of transport, prioritised based on data collected, technical criteria, and participation.
- Implementation: Design and build the infrastructure in the cantons of Montes de Oca and Curridabat while strengthening the urban cycling planning capacities.
- Evaluation: Systematise and disseminate experiences and lessons learned during the project implementation

Status of implementation

Project start: 2019 Q4

Project completion: 2022 Q1

Completed outputs:

- Participatory data collection: participatory workshops with medium- and low-income cyclists to collect information
 on urban cycling in the canton identified participants' infrastructure and capacity needs for urban cycling. During the
 lockdowns related to the COVID-19 pandemic, some workshops were held virtually, and information was gathered
 through interviews and secondary sources.
- Prioritised planned infrastructure: identified priority infrastructure for urban cycling based on collected data and technical and participatory criteria. This proposal included 54km of cycling lanes in Montes de Oca and 60km in Curridabat. 20 km were to be implemented with EUROCLIMA+ funds.
- Adequation of cycling lanes: permanent implementation of an initial 4 km cycling lane in Montes de Oca in March 2021, followed by another 16 km in a second phase finished in late 2021.
- Scaling-up experience: experience and lessons learned documented and disseminated to promote the development of similar and complementary projects in other San Jose Metropolitan Area cantons.
- Strengthening capacities: The population of the cantons of Curridabat and Montes de Oca sensitised about better urban cycling.

Insights from practice: key pilot project takeaways

Tactical cycling interventions favour the efficient use of resources

The selection of tactical alternatives for bicycle lane implementation was a wise move that enhanced efficiency regarding the use of the limited available resources. Thus, the bike lanes were implemented with the minimal required elements for their operation, though ensuring adequate conditions of road safety and considering the national technical guidelines. The bicycle lanes implemented in this project became permanent as the experience tested and provided feedback to the national technical guidelines for cycling infrastructure adopted during the project execution. Other activities to foster intermodality were linked to the pilot project, such as cycle-friendly adequations in train stops to allow cyclists to access public transport facilities.

Both political commitment and interinstitutional coordination enable project success

The driver for the success of this project was the joint political commitment regarding active mobility and the coordinated work among technical officials and decision-makers. This group of collaborators was flexible and acted promptly to tackle emergent challenges. They also leveraged opportunities, especially those from the sanitary situation in the pandemic. This group sought to enable synergies with other public and private stakeholders and civil society stakeholders. A governance structure for active mobility was created: "Red Intercantonal de Movilidad Activa - RIMA" (Intercantonal Network of active mobility) to consolidate the cycling and walking network among different levels of government.

The pilot project contributed to building capacities within the local authority for cycling.

The project's greatest impact lies in the knowledge and institutional capacity it has built beyond its physical infrastructure. A key lesson is the importance of empowering national and subnational entities to design projects that drive transformative change towards sustainable mobility. The pilot initiative provided valuable insights into overcoming technical and logistical challenges, such as collecting cyclist demand data using digital tools, adapting international cycling infrastructure guidelines to Costa Rica's context, and managing political and administrative transitions. The project also highlighted the need for improved communication between local and national authorities, stronger regional coordination, and more effective governance structures involving both municipalities and citizens. Refining design and construction processes, enhancing documentation and knowledge sharing, and ensuring a gender-inclusive approach are critical aspects of future initiatives.

Results and perspectives for scaling

Replicability in the near future is ensured due to the assignment of both national and local resources to continue the cycling network expansion

Replicability in the future is expected to occur through a snowball effect. Efforts aimed at planning cycling infrastructure at the metropolitan level produced the Intermunicipal Territorial Plan for Active Mobility.

As the municipalities gain experience in implementing adequate cycling infrastructure and better coordinating with the national government, implementation of the rest of the cycling lanes is likely to occur. Curridabat's municipality is already financing the expansion of its cycling network. This situation enables the incremental improvement of the existing network in both the short and long term. The Council of Road Safety (COSEVI for its name in Spanish) will also contribute to installing bollards in zones where cars reach high speeds.

Curridabat and Montes de Oca push cycling forward on the metropolitan policy agenda

With the launch of the RIMA, both Curridabat and Montes de Oca took the lead in continuing the implementation of the Intermunicipal Plan for Active Mobility, encouraging neighbouring municipalities to undertake actions to deploy walking and cycling infrastructure.

Stakeholders and project participants achieved coordination with the Costa Rican Railway Institute (INCOFER for its acronym in Spanish) to allow cyclists access to the train infrastructure. The model is replicable.

The municipalities approved budgets to expand cycling infrastructure. The Pilot Project also leveraged additional financial resources from the EU-funded MUEVE project to build part of the priority cycling corridors.

The success of the Project proves that sustainable mobility initiatives can thrive through strategic public-private partnerships and active citizen participation. Its execution model, adapted to Costa Rica's administrative framework, demonstrated efficiency, transparency, and agility, avoiding bureaucratic delays while ensuring high-quality implementation. This experience provides a replicable framework for other municipalities in the Greater Metropolitan Area, where similar interventions are needed. The project also serves as a platform for regional knowledge exchange, particularly within the Euroclima Community of Practice, fostering collaboration among like-minded stakeholders. While transforming Latin American cities requires time and substantial investment, this initiative has set a precedent, acting as a catalyst for change and paving the way for more human-centred, sustainable, and equitable urban environments.⁵⁹

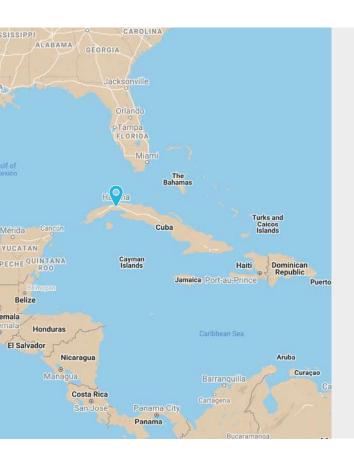
Updated in December 2024

To know more about the Project's results and outcomes, and about the Euroclima's Urban Mobility component at large, please visit https://www.dropbox.com/scl/fi/6qxrciz62nujjnb7i42kz/Movilidad-Urbana-Euroclima-Resultados-y-lecciones-2018-2024.pdf?rlkey=nhinfi1r4n0by256rf1rp6u0d&e=1&dl=0

Havana, Cuba

Status of the project: Completed Sustainable Urban Mobility Plan and ongoing pilot project

Partner city



Basic Information

Urban area: 728 km²

Population: 2,132,183 | Growth rate: 0.16%

Type pf city: Country capital city GDP per capita: USD 9,499 (2020)

Modal Share:

Formal public transport: 43,6%

Walking: 46,2% Cycling: 1,1% Private cars: 6%

Private motorbikes or 2-wheelers: 3,2%

Taxis: N/A

Moto taxis and Freight vehicles: N/A

National GHG emissions per capita: 3.74 (tCO₂eq)

Exposure to climate change: HIGH

Context

Havana, the Cuban capital, occupies 728,26 km², representing 0.7% of the national area. With 15 municipalities, Havana is home to almost 20% of the country's population. The municipalities Centro Habana, Habana Vieja, Cerro, Plaza de la Revolución and Diez de Octubre are the most densely populated. Centro Habana stands out with a population density of 41,000 inhabitants/km² while the net density in the city's residential areas is around 18,000 inhabitants/km².

Havana has a polycentric structure, and its growth has preserved the oldest factories in some neighbourhoods. The axes that linked the old city with the periphery were the basis for the sprawl from the founding heart to the west, southwest, south, and southeast, which defined a tree-like pattern for transportation routes.

The bay, the main reason for the city's location, conditioned a slower pace in the city's expansion towards the east. The construction of the tunnel of the bay in 1958 allowed for the beginning of development in this direction. These aspects determined the current structure of the transportation system, which follows a territorial model with a central, an intermediate and a peripheral zone. Despite the development beyond the central area, the main concentration of jobs, cultural, tourism, and recreational infrastructure is in a narrow strip close to the sea, which conditions current mobility patterns. Today the capacity of the tunnel seems insufficient.

Despite being a polycentric city, metropolitan functions and most jobs are in Havana's so-called central areas. The remaining sub-centres have weakened, limiting their ability to offer service and employment to the population. This situation forces many people living far away from the centre to commute daily to access essential services (schools, hospitals, shops, etc.). The poor condition of the existing urban mass transport implies that citizens consume excessive time for transportation.

The city has a public transit system and an existing transport master plan or similar document. Havana has organised its public bus transportation (or guaguas) into two categories: a fleet of articulated buses with greater capacity for main routes, and conventional buses for approximately 100 secondary routes.

Both the secondary and primary routes are operated by the Havana Provincial Transportation Company, which operates 17 main routes and 104 secondary corridors and has 17 bus terminals for their operations. There are also bus services between Havana and other provinces (Viazul, Transtur, Transgaviota in CUC, and National Buses in CUP).

The Ministry of Transportation (MITRANS) is responsible for organising the transportation sector in Cuba, and the General Directorate of Provincial Transportation of Havana (DGTPH) is responsible for managing the transportation sector in Havana. DGTPH, the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure. It does not have the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate and report on urban transport.

The technical cooperation seeks to formulate a Sustainable Urban Mobility Plan (SUMP) in Havana, allowing for a diagnosis of the city's mobility, and sponsoring working sessions with the Convention of Territorial Planning and Urbanism and the Scientific Convention of Engineering and Architecture. The SUMP will generate proposals implying a change in modal distribution and improving transit, public transport, cycling, and pedestrian mobility. In turn, the pilot project seeks to recover the Eje de Galeano to guarantee high pedestrian flow and thus provide better public pedestrian spaces that ensure accessibility.

The transformation of the pedestrian heavy Eje de Galeano will be an example of a pro-sustainable urban mobility transformation with an impact on improving the urban environment and a great impulse for the reception of the SUMP. This pilot project expects to decrease the pollution load, increase pedestrian safety on the axis, and improve access to public space, social resources, and cultural facilities.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) and pilot project

Funded by: European Commission

Funding amount: EUR 600,000

Implemented by: AFD through the EUROCLIMA+ Programme

Local counterpart: General Directorate of Provincial Transport of Havana (DGTPH)

Supported activities (SUMP):

• Development of a SUMP for the city of Havana

Supported activities (Pilot Project):

- Creating and preparing a pilot project to improve sustainable mobility in the city. The project improves public spaces in the Eje de Galeano to guarantee pedestrian flux and accessibility.
- Definition and preparation of a project to improve mobility on the 10 de Octubre corridor, Havana.

Status of SUMP development

Project start: 2021 Q1

Project completion: 2022 Q2

Completed outputs:

- Diagnosis and evaluation: inventory and analysis of the current situation
- Vision and strategic goals
- Action plan
- Monitoring, Reporting and Verification (MRV) Plan
- Final approved Sustainable Urban Mobility Plan (SUMP)

Status of implementation (Pilot Project)

Project start: 2022 Q1

Project completion: Closed 2022 Q1

Expected outputs:

- Diagnostic proposal and perimeter of the sustainable mobility Pilot Project
- Preliminary design and technical specifications of the Pilot Project

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Total 1,093,466,924 USD⁶⁰

Measure Cost Estimate 32,539,332 USD 1. Pedestrian mobility 10,500 USD Establish regulation on pedestrian infrastructure and plan its application Adapt and preserve sidewalks 25,836,089 USD Widen sidewalks 5,000,533 USD Generate more walking and shared-use streets 1,692,210 USD 7,203,513 USD 2. Cycling mobility 10,418 USD Elaborate a Cycling Director Plan for Havana 104.178 USD Awareness-raising campaign about cycling 10,418 USD Develop a network for buying, selling, and repairing bicycles Create safe cycling infrastructure, including parking spaces 4,136,324 USD Extend the bike-sharing system 2,942,175 USD 942,590,406 USD 3. Public transport and intermodality Improve gender equality in the public transport system 10,417 USD Implement the fleet renewal plan and guarantee the fleet's sustainability 631,292,963 USD Plan the public transport network restructuring 266,802 USD

originally, the budget was split into two sections. A number of measures' costs were calculated in the local currency (CUP) and the remaining ones in euros. This division was proposed to link the measure with potential sources of finance available (domestic or international). The table shows the total cost for each measure converted into USD.

Measure

Develop social networks for electric three-wheelers	4,736,641 USD
Implement mass-transit axes and structure public transport networks	118,715,163 USD
Integrate the public transport system's operations, information, technology and fares	20,488,098 USD
Physical integration: Develop Urban Passenger Stations	167,080,322 USD
4. Urban logistics	77,216 USD
Create on-loading and off-loading zones	66,798 USD
Strengthen the freight transport management policy and relocate the stores	10,418 USD
5. Mobility management and road safety	4,896,356 USD ⁶¹
Make a Road Safety Plan with a Zero Vision focus	10,418 USD
Reduce speed limits on roads with the most traffic violence	10,418 USD
Design safe road crossings with signalling and traffic lights	781,333 USD
Reorganise road space and generate low-traffic zones	(already contained in other measure's costs)
Improve road maintenance and connectivity	4,083,769 USD (per year)
Parking policy	10,418 USD
6. Electric mobility and transport decarbonisation	4,034,883 USD
Develop an electric mobility action plan	10,418 USD
Decarbonise the omnibus fleet	4,003,629 USD
Promote electric mobility	10,418 USD
Decarbonise urban logistics and promote intermodality	10,418 USD

The following table summarises the total capital expenditure (CapEx) estimates for different types of measures in the SUMP.

Urban transport investment measures	CapEx Estimate (USD M)
Public transport and NMT	961,432,420 USD
Street shaping urban roads and traffic management	4,083,769 ⁶² USD
Other measures (Transport electrification)	4,003,689 USD
Total	969,519,818 USD

 $^{^{\}rm 61}$ This total includes only one year of the 'Improve road maintenance and connectivity' measure to simplify calculations

⁶² Cost estimate per year

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2021	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO2eq)	Not quantified	1,72 Mt CO₂eq	Not quantified	Not quantified
Annual transport related GHG emissions per capita (kg ${\tt CO_2eq}$)	Not quantified	805 kg CO₂eq ⁶³ / capita	Not quantified	Not quantified
Modal share Increase of the modal shares of trips by public transport, walking and cycling	TOTAL: +0.86%	Formal public transport: 43.6%	Formal public transport: 43.8%	Formal public transport: 44.5%
		Walking: 46.2%	Walking: 46.2%	Walking: 46.2%
		Cycling: 1.1%	Cycling: 1.1%	Cycling: 1.1%
		TOTAL: 90.9%	TOTAL: 91.1%	TOTAL: 91.8%

Perspectives for implementation

The SUMP development enabled the participation of both institutions and citizens.

The development of the SUMP was a collaborative effort that involved various stakeholders, including a Technical Committee and the city's residents. The Technical Committee, a consultative and executive body comprising experts from different fields, provided invaluable support in making strategic decisions. To ensure the plan reflected the needs and aspirations of the city's residents, a range of participatory activities were organised. These included work meetings, participatory workshops, discussion tables, interviews, and focus groups. These initiatives gave the citizens a voice, allowing them to actively contribute to developing a more sustainable and inclusive transportation system for their city.

Insights from practice: lessons learned from the SUMP process

Immense financial contributions are needed to ensure SUMP implementation

Havana's SUMP, completed in June 2022, aims to improve the city's transport system by expanding public transport services, promoting cycling and walking, and optimising traffic flow. It is expected to address various city challenges, such as traffic congestion, air pollution, and inadequate public transportation services. The successful adoption and implementation of the SUMP are expected to improve the quality of life for Havana's residents and enhance the city's economic competitiveness.

Implementing the SUMP requires a significant investment that exceeds the previous 20 years' level, with a more robust national contribution in foreign and national currency. Achieving this effort involves a structural change in financing in the transport sector and a well-defined national contribution to the SUMP action plan, including infrastructure and road safety.

Highlights in the past year

Neomovilidad project finishes successfully in December 2024

The Neomovilidad project, funded by UNDP and GEF, has transformed transportation in Havana with an ecological, inclusive, and gender-equity approach. Achievements include a pilot public bike rental station, logging over 13,000 services and significantly reducing carbon emissions. Additionally, three routes with 25 electric tricycles were introduced in peripheral areas, offering affordable fares and promoting women as drivers.

Updated in December 2024

⁶³ Estimation by the MobiliseYourCity Secretariat based on SUMP deliverables.

Santo Domingo, Dominican Republic

Partner city

Status of the project: Completed Sustainable Urban Mobility Plan & Ongoing implementation support



Basic Information

Population: 3.66 Million Urban area: 1,300 km²

Motorisation rate: 155.5 vehicles per 1,000 inhabitants

Transport emissions per capita: 128 g CO₂eq

GDP per capita: USD 9,700

Santo Domingo chose the most ambitious path amongst the scenarios identified for its urban mobility plan, which is primarily dedicated to developing a high-capacity public transport offer.

Critical mobility challenges	The SUMP in a nutshell Selected SUMP Measures Total plan: \$ 2.6 billion for urban mobility, from which \$1.25 billion is already financed	Projected SUMP impact in 2030
Only 10% of the population has access to formal public transport	\$ 1,8 billion to build a public transport offer with over.	
The predominance of private cars and informal transport services	From which: • \$ 1 billion to extend and improve the metro network • \$ 763 million for BRT, tramway and buses • Improvement of attractivity, inclusivity and communication of public transport	 Annual greenhouse gas emissions will be reduced by 20% in 2030 Increase access to formal public transport from 10% to 43% of the population of Gran Santo Domingo The increased modal share of all public
	 \$ 656 million for improved roads and streets Modernisation policies for private and public transport vehicles 	transport combined from 36% to 44% • 110 km of mass rapid transit lines
Transport inequality: deplorable conditions of transport for users without a private car	 \$ 47 million for non-motorised transport infrastructure and a green corridor along the river 15 M€ for a bike-sharing system Social tariff policy 	 150 km of new or improved cycle lanes 150 km of new or enhanced sidewalk Improved affordability of public transport
Wide variety of non-integrated transport services	Integrated tariff policy	The leading role of the new transport authority INTRANT

Support from the Partnership: mobility planning

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) Development

Funded by: EU INTRA ACP

Funding amount: 550,000 EUR

Implemented by: Agence Française de Développement (AFD)

Local counterpart: Instituto Nacional de Transport Terrestre (INTRANT)

Baseline motorisation rate ⁶⁴	155.5 vehicles per 1000 inhabitants
Annual transport emissions per capita ⁶⁵	128 g CO₂eq
SUMP Implementation timeline	Joined MobiliseYourCity in June 2017 MobiliseDays in October 2017 Start of SUMP in March 2018 SUMP was completed and approved in September 2019
SUMP Vision	Reach an integrated approach to improve access to sustainable mobility services and socioeconomic opportunities for all citizens by integrating urban and transport planning, enhancing sustainable transport modes, and strengthening local transport authorities' institutional, technical, and financial capacities.
Key expected results (GHG, modal share and access)	Compared to 2018, in a SUMP scenario, by 2030, Santo Domingo can expect to Increase access to public transportation to 43% of Santo Domingo citizens from 10% Increase total trips taken by public transport to 44% from 36% Reduce GHG emissions by 30% compared to a business as usual (no SUMP)
Total SUMP Investment Requirement	USD 2.6 billion Mass transit (CAPEX + OPEX - annual) • 2018 (Baseline): 60 • 2023 (SUMP): 64 • 2025 (SUMP): 160 • 2030 (SUMP): 200

⁵⁴ For comparison with motorisation rates in European capital cities, Berlin has a motorisation rate of 330 car per 1000 inhabitants, and other capital cities in Austria, Belgium, Denmark, France, Hungary, Ireland and the Netherlands have a motorisation rate under 450 cars per 1000 inhabitants. Source: Eurostat Regional Yearbook 2020.

⁵⁵ For comparison, the annual transport (except air travel) emissions per capita in Germany are 1.61 tC02eq. Source: Die Umweltwirtschaft in Deutschland: Entwicklung, Struktur und internationale Wettbewerbsfähigkeit. www.umweltbundesamt.de

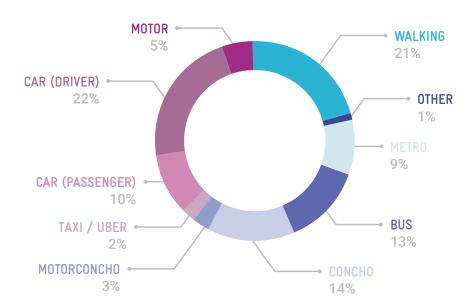
Diagnosis of urban mobility in Santo Domingo

1. Existing Mobility and transport services

Located in the Caribbean region, Santo Domingo is the administrative, economic, and political capital of the Dominican Republic. With a population estimated at more than 3.5 million inhabitants, representing one-third of the total country population, and a projection of 4 million in 2030, Santo Domingo is a dynamic, fast-growing city.

The current transportation system in the City of Santo Domingo has primarily resulted from historically unregulated, uneven, and rapid urbanisation. The results are vastly different service levels, socioeconomic activities, and quality of life across the city's municipalities. The starkest differences can be observed between the city centre – the 'National District' – and its periphery, mainly affected by the lack of public services, including formal public transport.

This development pathway has fostered a transport system mainly based on individual motorised transport, with little consideration for public spaces and pedestrians and a nearly complete disregard for cyclists. Motorisation rates range from 40 to 60 per cent, depending on the municipality. Additionally, the high urban density in the National District and the very narrow main roads in the peripheral cities heavily constrain the ability to expand public spaces and repurpose current roads for mass rapid transit services.

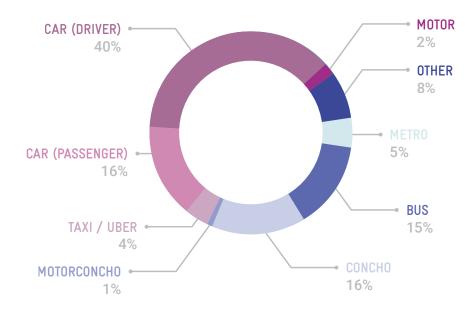


Graph 1. Modal share in Santo Domingo

Public transport in the city comprises various formal and informal services. The formal system includes two metro lines, one aerial tramway and 11 bus lines. The latter is serviced by a relatively small fleet of 160 buses operated by a state-owned bus company. 3,000 mini- and microbuses and 16,000 informal taxis (so-called 'conchos') constitute the informal services that run along 84 and 114 fixed lines, respectively. These numbers reveal the predominance of informal over formal transport: 14% of total trips are made by conchos, 13% by buses and 9% by metro.

2. Social, environmental, and economic aspects.

The prevalence of informal transport and high motorisation rates means mobility is highly fragmented and atomised. This situation not only results in high congestion and long commuting times (>1 hour/day). Informal transport services are also characterised as being uncomfortable and insecure. Cheaper fares partly compensate for the inferior quality of service. However, because fare policy lies in the hands of informal transport associations, they may abuse this power to set fares at unreasonably high levels. Self-regulation has also resulted in low-quality standards regarding a deteriorating vehicle fleet (75% of the vehicles are over 15 years old) and under-qualified drivers. These factors contribute to high traffic accidents, air pollution and GHG emissions. Consequently, informal taxis and private cars account for the highest share of the sector's GHG emissions, accounting for 16% and 56% of total emissions, respectively.



Graph 2. GHG emissions by transport mode

Gender heavily influences mobility. On average, men make 0.5 more trips than women a day. This pattern is explained partly by the fact that 40% of men are employed, whereas only 26% of women have a full-time job, and the other 25% stay home

3. Institutional and financial situation

Until the passing of Law 63-17 in 2017, the institutional landscape was equally characterised by a high degree of fragmentation and low regulatory and enforcement capacities of public authorities, allowing for the mostly unregulated development of public transport in Santo Domingo.

Since 2017, INTRANT has become the national road transport authority to centralise all regulatory and decision-making competencies regarding public transport. Among its central tasks, INTRANT is responsible for regulating and formalising public transport, establishing minimum service and quality standards for licences, centralising fare policy and promoting the corporatisation of informal operators. Informal transport operators should participate in the integrated public transport system currently under development.

Although the creation of INTRANT, the financial landscape is still fragmented at the national level across various ministries and very limited at the municipal level, which makes the latter dependent on the former. It is expected that INTRANT will help channel, manage, and leverage financial resources and improve coordination among central stakeholders.

The SUMP preparation process and stakeholder involvement

Several participatory formats were selected for stakeholder involvement.

- Steering committee to communicate the progress of the SUMP, discuss and decide on political decisions.
- Bilateral meetings to present and discuss technical and political decisions with municipalities and ministries.
- Focal groups will work on topics selected by INTRANT (public space with neighbourhood committees; school transport with educational institutions and parents).
- Face-to-face interviews and working tables to enhance knowledge of specific sectors (logistics) or geographic areas (municipalities).

Vision and goals

Strategic Vision: An integrated approach to improve access to sustainable mobility services and socioeconomic opportunities for all citizens by integrating urban and transport planning, enhancing sustainable transport modes, and strengthening institutional, technical, and financial capacities of local transport authorities

SUMP Goals and targets

- Develop a comprehensive and integrated transport network that responds to the different realities of the constituting municipalities and the increasing demand for mobility.
- Guarantee equal access to the population and (re-)establish connectivity in areas affected by natural and infrastructural barriers.
- Promote the use of sustainable modes of transport (collective and active), and enhance the public transport
 network, improve and expand walking and cycling infrastructure and integrate urban and transport planning
- Align and strengthen institutional, technical, and financial conditions for the implementation of a sustainable mobility system

Test scenarios and selected scenario

Three specific scenarios were defined to assess the impact of the SUMP; each one developed with a different level of ambition.

- Baseline scenario: no SUMP implementation occurs, but existing laws and regulations are implemented. These include organising and regulating the public transport network, enhancing the metro and aerial tramway systems, and developing a vehicle modernisation program for buses and informal services.
- Central scenario: this scenario builds on the baseline but assumes additional measures are implemented, such as
 enhancing road infrastructure, integrating transport modes, increasing accessibility, creating an investment fund for
 public transport, and achieving 100% modernisation of the current fleet.
- Ambitious scenario: this scenario includes additional milestones by factoring in the establishment of a robust
 financial system with a wide variety of financing sources and instruments (incl. congestion charging and property
 tax), the inclusion of transport demand management measures, promotion of active and collective transport modes,
 and the creation of additional incentives to companies and individuals to shift to sustainable transport modes.

INTRANT selected the ambitious scenario as the basis for the following definition and selection of measures. The selected measures and the expected impacts of the ambitious scenario are presented in the following sections.

The city of Santo Domingo has opted for the ambitious scenario.

Key SUMP measures

Measures	Cost estimates (million USD)	Proposed Financing Source	Implementation schedule (year)
Physical (Infrastructure, rolling stock, etc.)			
Metro Lines 1 & 2: Increase passenger capacity	480	OPRET ⁶⁶ , donors (AFD)	2019-2024
Metro Line 2: Line extension	564	MOPC ⁶⁷ , donors	2025-2030
Construction of 5 BRT or LRT corridors	603	MOPC, donors	2021-2025
Construction of 4 aerial tramway lines	159	MOPC, donors	2021-2030
Creation of 5 express busway lines	1,51	MOPC, donors	2019-2030
Infrastructural improvement of inter-municipal networks	606	MOPC	Until 2025
Infrastructural improvement of internal municipal networks	50	MOPC	Until 2023
Improvement and expansion of sidewalks and cycling lanes	42	MOPC, municipalities	Until 2023
Integration of public transport modes	0,3	INTRANT	Until 2020
Implement a public bike-sharing system	15	MOPC, municipalities	Until 2030
Develop a 'green' corridor along the river basin	5	Municipalities, MOPC	Until 2025
Provide parking areas in port zones	0,3	AUPORDOM	Until 2023
Technical (studies, plans, designs, etc.)			
Design of secondary (complementary) bus network	0,3	INTRANT	2029-2030
Study on school transport services	0,3	INTRANT	2021-2023
Studies on improvement of transport demand management	1	INTRANT	2021-2023
Improve access to persons with disabilities	0,6	INTRANT, MOPC, municipalities, operators	Until 2023
Improve the image and attractiveness of the bus system	20	Municipalities, MOPC, operators	Until 2023
Improve communications of public transport services for users	0,6	INTRANT, donors	Until 2023
Integrate city-port interface management in national and local planning	0,3	AUPORDOM ⁶⁸	Until 2025
Implement merchandise delivery and pick-up plan in the port areas	0,3	AUPORDOM	Until 2023
Studies to support urban and transport planning integration	0,6	INTRANT, municipalities	Until 2025
Policy & regulation			
Integrated tariff policy	0,6	INTRANT, operators, government	Until 2025
Social tariff policy	0,6	INTRANT, operators, government	Until 2025
Transport demand management policy	0,6	INTRANT	Until 2023
Private vehicle fleet modernisation policy	0,3	INTRANT, Ministry of Finance	Until 2023
Bus fleet modernisation policy		operators	Until 2023
Parking policy	0,6	INTRANT, municipalities, MOPC	Until 2030
Regulation of HDV transit	0,3	INTRANT	Until 2023
Total cost	2.556,11		

 $^{^{\}rm ss}$ National transport planning authority (Oficina para el Reordenamiento del Transporte)

 $^{^{\}rm 67}$ Ministry of public works and communications

⁶⁸ National port authority

Expected results and impact

Impact Area	Expected Impact	
GHG emission (SDG 11)	Yearly reduction of GHG emissions relative to 2018 (baseline year) • 2023: -4% • 2025: -7% • 2030: - 20%	
Accessibility (SDG 11)	Percentage of the total population with access to public transport • 2018 (baseline): 10% • 2023: 25% • 2025: 36% • 2030: 43%	
Air pollution (SDG 11)	Not quantified	
Modal share	Percentage of total trips made by Public Transport • 2018 (baseline): 36% • 2023: 39% • 2025: 41% • 2030: 44%	
Road safety (SDG 3)	Not quantified	
Mobilised finance (SDG 17)	Leveraged international finance • EU-CIF: 10 m€ (secured until 2023) Associated international and domestic investments • AFD: 436 m€ (planned, until 2030) • Domestic finance and AFD: 245 m€ (secured loan) • Domestic finance and AFD: 590 m€ (planned loan)	
Infrastructure and assets with committed financing (SDG 9)	New roads to be built by 2030 KM of sidewalks: 150 km KM of cycle lanes: 150 km KM of mass rapid transit lines: 109,3 km	
	The recently created road transport authority, INTRANT, will reduce institutional fragmentation by centralising regulatory and planning functions. This will improve cooperation between the sector's strategic, tactical, and operational levels.	
Expected institutional impact	The leading role of INTRANT in the development and implementation of the SUMP will help channel and leverage additional financial resources from private, public and international stakeholders for the implementation phase.	
	Not only is the new institutional arrangement in the sector a necessary step for building capacity and rationalising authority, but the SUMP process also offers a great learning opportunity.	

SUMP finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Secured	Amount
Assitance to support SUMP implementation	EU CIF	Secured	10 M EUR
Assitance to support SUMP implementation	AFD	Secured	0.4 M EUR
Sustainable Urban mobility programme for the Dominican Republic (2025-2029)	EU-LACIF	Secured	10 M EUR

Associated financing

Description	Source of financing	Secured	Amount
New Metro Line 3	AFD	Planned	
Metro Line 2 Capacity increase project (2025-2029)	AFD	Secured	178.62 M EUR
Metro Line 2 Extension (L2C)	BCIE	Secured	250 M EUR
Metro Line 1 Capacity increase project (2020-2026)	AFD	Secured	220 M EUR
Cable Car Line 2 (2019-2023)	Domestic finance	Secured	105 M EUR

Insights from practice: Lessons learned from the SUMP development process

The importance of a leading transport authority

Creating a state-level transport authority opens a new perspective for urban mobility governance and management. The recently created road transport authority, INTRANT, will reduce institutional fragmentation by centralising regulatory and planning functions, improving cooperation between the sector's strategic, tactical, and operational levels.

The leading role of INTRANT in the development and implementation of the SUMP will help channel and leverage additional financial resources from private, public, and international stakeholders for the implementation phase. Not only is the new institutional arrangement in the sector a necessary step for building capacity and rationalising authority, but the SUMP process offers a great learning opportunity.

A radical change in priorities

Santo Domingo's SUMP may serve as a reminder of an indisputable fact: a sustainable, attractive, accessible, and safe transport system can only be realised by an enabling physical infrastructure that prioritises public and active transport. The city's SUMP is an example of transport planning done right. As the saying goes, "if you plan for cars and traffic, you get cars and traffic. If you plan for people and places, you get people and places".

Support from the Partnership: Implementation support

Project description

Technical Assistance: Assistance for the Implementation of the Sustainable Urban Mobility Plan - AIPMUS Santo Domingo

Funded by: EU (through the Caribbean Investment Facility)

Funding amount: 10,000,000 Implemented by: AFD

Local counterpart & SUMP Implementation agency: INTRANT.

Supported activities:

- Strengthening service capacity related to the National Urban Mobility Plan in the Dominican Republic, focusing on non-motorised transport, public transit, smart mobility, and institutional strengthening.
- Implementing the SUMP in Gran Santo Domingo, including pre- or feasibility studies and pilot projects.

The EU supports technical assistance to INTRANT for four years to contribute to implementing SUMP actions, overseeing contract execution, and reinforcing technical capacities. The aim is to help the city transition from the SUMP planning process to the implementation phase. The AISUMP defines concrete short-term actions to advance implementation, complementing the general vision outlined in the SUMP. Key early projects in Santo Domingo include transforming the public transport system, deploying electric mobility, promoting active mobility, managing traffic, and urban logistics. Eighteen high-priority projects for the first year of technical assistance have been proposed, with fifteen additional studies or pilot projects to be considered later.

While the SUMP provides a general overview of the city's urban mobility vision, the AIPMUS defines concrete actions in the short term to advance implementation. Implementation mainly involves transitioning from SUMP measures to project preparation. In Santo Domingo's case, early SUMP projects include transforming the public transport system, electromobility deployment, active mobility promotion, traffic management and urban logistics. So far, 26 projects have been identified as high-priority, of which nine have been completely finalised, five are ongoing, and 13 are upcoming. The prioritisation was done based on dialogue among different public authorities.

Status of the project execution:

The project had two execution phases, one between the 2021 and 2024 kick-off and a second phase between 2024 and 2026.

First phase – Kicking off implementation (2021-2024): This phase focused on activities related to planning the public transport network, capacity building and institutional strengthening, and transport modelling. In this first phase, guidelines to design cycling infrastructure were launched, and a study was conducted to identify the best fare model for Santo Domingo. Lastly, a new transport model was developed to support decision-making, assess scenarios and quantify the impacts of transport interventions.

Second phase – technical studies and infrastructure design (2024-2026): This phase includes more detailed studies for project preparation. Integrated public transport system and paratransit sector

AFD is supporting the project preparation for the Metropolitan Train and studies for the conceptual design for a BRT project, including an e-BRT corridor. The project also supports implementing the fare policy chosen in both Gran Santo Domingo and Santiago de los Caballeros. The studies to structure the intercity terminal are ongoing, including technical, legal, and financial aspects. This intermodal hub is expected to have a connection point between the cable car system, the metro, and intercity buses.

Moreover, some 'conchos' unions have started the formalisation process by creating bus companies. 900 of these conchos have been replaced by 141 buses in the three intervened corridor in Santo Domingo as of 2024.

The transformation of the city's paratransit sector includes increasing the operational and organisational capacities of former concho unions, and defining the role of INTRANT in managing institutional relationships with the recently formed bus operators. The AIPMUS project also supports a study to explore 'motoconchos' Integration with the overall public transport network and identification of the most suitable corridors for operation as a last-mile solution.

AFD supports INTRANT in formalising individual conchos operators in identified corridors.

Electromobility

As the Dominican Republic has experienced growth in electric vehicle use, momentum to engage private companies in the further deployment of electromobility is in place in Gran Santo Domingo. In 2020, city officials visited Bogota to see its experience in the sector, especially regarding public transport. INTRANT is working on "Avenida Ecológica" - a bus priority corridor – which is expected to operate with electric buses. The AIMPUS project supports the development of the TORs for the project including infrastructure design and operational model. The rolling stock purchase will be done later during the feasibility phase. , bus service "ecological corridor".

⁶⁹ Popular name for moto-taxis in Santo Domingo

Active mobility

Especially in the 'National District', where most of the economic activities and the historical centre are located, there is an intention from the local government to strengthen the use of active modes.

- Cycle lanes: 10 km of cycling lanes have been built, which inspired the production of national cycling-lanes implementation guidelines (already published and adopted). The cycle lanes in the Distrito Nacional are expected to be revitalised. The project supports the implementation of an 'Alameda' in Santiago de Los Caballeros, connecting relevant corridors with the central station, the monorail, and the cable car⁷⁰.
- Bike sharing system: Initiatives such as the bike-sharing system leverage the interaction between mobility and economic development. The bikesharing system was designed byAC&A⁷¹. In the framework of Euroclima's new phase, FIAPP is interested in continuing to support the bike-sharing system.
- Pilots: Some pilots have been developed to provide bike lanes, as well as the development of guidelines on complete streets.

Traffic management and urban logistics

Traffic officers are trained in good practices regarding traffic management and law enforcement that are aligned with the new law on urban mobility. The Santo Domingo Road Plan was finalised. The development of the Traffic plan is ongoing, including a model specifically for traffic analysis. A round table of urban logistics has been implemented with relevant stakeholders.

Data collection and digitalisation

The AIPMUS Project will support updating the Gran Santo Domingo Mobility household survey, whose last edition was carried out more than 5 years ago. An information system to support public transport operation is under design, and a wayfinding and user app to facilitate data availability and flux is expected to be supported.

Main SUMP implementation challenges

Impact and risk analysis – environmental assessment and donor requirements, but not a systematic practice in the Dominican Republic.

INTRANT faces significant capacity constraints in implementing the SUMP due to limited staff and a shortage of locally trained urban mobility experts. The recently established INTRANT struggles to meet the demands of the extensive list of urban mobility projects proposed in the SUMP. While the staff is highly knowledgeable, their numbers remain insufficient for the city's needs. Additionally, experts in urban mobility trained within the Dominican Republic are scarce. Local universities offer limited programmes in urban transport planning, resulting in a shortage of locally trained professionals. As a result, most INTRANT staff have gained their expertise abroad, which can make it difficult to address context-specific challenges related to the prioritised projects. To successfully implement the SUMP, aligning the team's values with the SUMP proposals and fostering a paradigm shift in urban mobility planning is essential.

Financial resources for SUMP implementation are not guaranteed, as budgets are allocated nationally.

Urban mobility projects must compete for funding against other sectors. However, a key advantage is that urban transport is one of the few sectors with the potential to generate revenue—through fares, on-road parking fees, and fines. These earnings could be reinvested into SUMP initiatives, providing a potential financial sustainability mechanism. Up until now, these revenues are not in place.

⁷⁰ Public transport services in Santo Domingo include metro, metropolitan train, and cable car, whereas in Santiago de los Caballeros, existing public transport services include metro and cable car.

⁷¹ https://despacio.org/portfolio/egis-aipmus-rpdom/

Political commitment is essential to advancing sustainable urban mobility projects in Santo Domingo.

Many interventions face resistance because they challenge the status quo and the traditional allocation of street space. For example, opposition to repurposing car lanes for cycling infrastructure is standard, as the number of urban cyclists remains low. To address these challenges, decision-makers need training and awareness of the sustainable mobility paradigm. Civil society support and international funding are crucial in keeping the topic on the political agenda. Rather than imposing changes, fostering participation, engagement, and awareness can help demonstrate the benefits of sustainable mobility solutions.

Effective SUMP implementation requires continuous multi-level and inter-institutional coordination.

Effective multi-level and inter-institutional coordination is crucial for implementing SUMP projects. A continuous flow of information and collaboration between national and local authorities and institutions is needed to define responsibilities clearly. Many projects require national approval but rely on local regulation, making seamless coordination essential. The newly established Fideicomiso para el Transporte Masivo is mandated to promote mass transit projects, yet raising awareness of SUMP measures remains challenging. Creating opportunities for exchange can enhance coordination, improve governance, and ensure successful implementation.

Takeaways on SUMP implementation support

INTRANT's growing technical capacity

INTRANT has strengthened its technical expertise throughout the SUMP implementation, allowing it to lead project development with minimal external consulting. While some specialised support is still needed, the institution is increasingly capable of managing urban mobility projects or is on its path to empowering more to manage the projects.

Early stages of SUMP implementation remain in mere studies

The advantage of the current AIPMUS portfolio is that most projects focus on studies, which are easier to execute. However, translating these studies into on-the-ground implementation remains a challenge. There is a risk that projects do not materialise into tangible improvements, emphasising the need for strong political will and strategic follow-up.

Highlights from last year

Through the Latin American and Caribbean Investment Facility, the EU has recently approved 10 M EUR for further support of SUMP implementation in Santo Domingo. AFD designed the project with the support of CODATU and Expertise France.

There is interest in supporting the implementation of Santo Domingo's bike-sharing system under the Global Gateway program in Latin America (formerly Euroclima). The AIPMUS project has provided an update on its progress to ensure that FIIAP⁷² can take over the project without duplicating previous efforts.

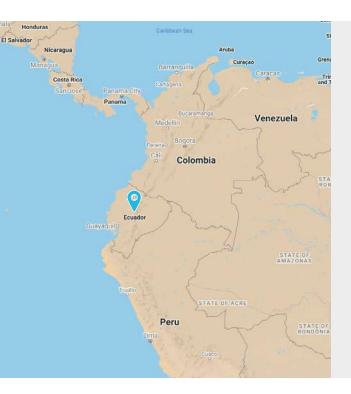
Updated in December 2024

⁷² FIIAP is the International and Ibero-American Foundation for Administration and Public Policies – a Spanish development agency and implementing partner of the Global Gateway investments in Latin America https://www.fiiapp.org/en/

Ecuador

Partner country

Status of the project: Completed National Urban Mobility Policy or Programme



Basic Information

Population: 17,084,358 | Growth rate: 1.8% Percentage of urban population: 64%

GDP per capita: USD 6,346

Percentage of the population living below the national

poverty line: 21.5%

Annual average infrastructure expenditures as percentage

of GDP: 1.63%

Nationally Determined Contribution (NDC): general

e-mobility transport related NDC

National GHG emissions per capita: 2.43 (tCO₂eq) Proportion of transport related GHG emissions: 21%

Exposure to climate change: MEDIUM

Context

Ecuador is located on the west coast of South America with a population of 17 million people, of whom 64% reside in urban areas, notably Quito, Guayaquil, and Cuenca. The Andes range divides the country into three primary geographical regions: the Coast, the Sierra, and the Amazon. Between 2009 and 2015, the Multidimensional Poverty Index fell by 10.2%, signifying that 1.9 million Ecuadorians overcame poverty in that period. The Gini Coefficient index, a measure of income inequality, stands at 0.447%. Besides the oil industry, other significant economic sectors include manufacturing, retail, construction, agriculture, and services.

The absence of planning instruments has led to a dispersed urban expansion in the country. The rapid urbanisation process has resulted in the emergence of vulnerable urban areas. As of 2018, the transport sector's GHG emissions accounted for 48.5% of the total energy-related emissions in Ecuador, with road transport constituting 94.4% of the total transport demand. The most widely utilised transportation services in the country are buses, trolleybuses, and taxis. The three main Ecuadorian cities have implemented low-carbon mass transit projects: Quito has a 22-km metro line, Guayaquil has implemented a 4-km cable car, and Cuenca operates a 11-km tramway. Additionally, some other Autonomous Decentralised Governments have undertaken actions on sustainable mobility, including electromobility and active modes.

The Ministry of Transport and Public Works (MTOP - its acronym in Spanish), the governing entity of the National Multimodal Transport System, encompasses road, air, sea, and non-motorized transport. Its vision is to formulate, implement and evaluate policies, regulations, plans, programmes and projects that ensure a safe and competitive transport network, minimising environmental impact and contributing to the social and economic development of the country. In turn, the Autonomous Decentralised Governments are responsible for planning, regulating, and controlling land transport, transit, road safety, commercial, and collective transport services, among others.

The objective of this project is to define a national strategy for low-carbon mobility applicable to all the Decentralised Autonomous Governments of the country, allowing for a considerable reduction of greenhouse gases while maintaining levels of equity and accessibility.

Ecuador's National Urban Mobility Policy (NUMP) focuses on improving buses and trucks, enhancing knowledge of routes, frequencies, and unit locations, promoting non-motorised transport, providing economic incentives to reduce greenhouse gases, and planning for land use and urban mobility.

Support from the Partnership

Technical Assistance: National Urban Mobility Policy or Program (NUMP)

Type of NUMP: Mixed NUMP (Sectoral strategies and support or investment programme)

Funded by: European Union

Funding amount: EUR 500,000

Implemented by: AFD through the EUROCLIMA+ Program

Local counterpart: Ministry of Transportation and Public Works (MTOP)

Main purpose of the NUMP

The main purpose of the National Urban Mobility Policy is to:

- Offer cities a general enabling framework for SUMP formulation
- · Provide regulation on a specific set of technical issues
- Provide regulation on a wide range of technical issues
- Provide technical guidance on a specific set of technical issues
- Provide technical guidance on a wide range of technical issues
- Define a national strategy for low-carbon mobility that is applicable to all Decentralised Autonomous Governments
 in the country and that allows for a considerable reduction in greenhouse gases while maintaining levels of equity
 and accessibility

Supported activities:

- Preparation of a Low-Carbon Urban Mobility Policy, including policies and strategies for the reduction of greenhouse gases.
- Preparation of technical guidelines for decentralised autonomous governments for the implementation of the strategy at the local level.

Status of implementation

Project start date: 2021 Q1

NUMP completion date: 2023 Q1

Completed outputs:

The following deliverables have been provided by the consultant:

- Diagnostic support document
- Scenario construction and evaluation criteria
- Methodology for the participatory strategy phase
- Vision, strategy and objectives
- NUMP Action Plan
- Measurement, reporting, and verification plan for the National Urban Mobility Policy
- · Final content of three cross-cutting guidelines
- A sustainable urban transport financing strategy
- · A legislative reform proposal document

NUMP key measures and cost estimates

The following table highlights the most significant measures identified in the NUMP.

Measure	Cost Estimate
Implementation of the Sustainable Urban Mobility Information System (SIM) to make it accessible to public and private actors (2030)	USD 2,000,000.00
Structuring and implementation of the comprehensive Urban Mobility Research System (SIIV) based on the participation of the Academy and the sustainable operation of SUM Observatories.	USD 9,952,000.00
Institutionalise the SUM Planning System (SIPLAN), which establishes criteria, parameters and methodologies to ensure the quality, coherence, and articulation of the national and urban SUM instruments.	USD 4,925,000.00
Technical support to the Municipalities (GAD) for the promotion of sustainable mobility	USD 150,000.00
Promotion of the development of Sustainable Urban Mobility Plans (SUMP) and Transport Plans to Work (PTT)	USD 825,000.00
Strengthening municipal finances	USD 560,000.00
Financial education SUM - with a focus on co-benefits	USD 100,000.00
Creation of the NUMP monitoring and evaluation system	USD 100,000.00

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the NUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Public transport and NMT	USD 30,500,000.00
Street shaping urban roads and traffic management	USD 28,550,000.00
Other measures	USD 18,612,000.00
Total	USD 77,662,000.00

Finance leverage

Leveraged financing (resulting or enabled by the NUMP preparation process)

Description	Source of financing	Secured?	Amount
Promotion of the creation of high-quality and safe pedestrian and cycling routes.	CAF	Planned	USD 450,000.00
Promotion of intermodality between non-motorised modes and public transport	BID	Planned	USD 10,000,000.00
Support for the creation of low emission zones and restrictions on the use of the most polluting vehicles.	AFD	Planned	USD 1,000,000.00
Support for the renewal of fleets with less polluting vehicles	GIZ	Planned	USD 10,000,000.00
Support for the optimization of urban public transport systems	BID	Planned	USD 5,000,000.00
Creation of bus lanes and HOV	ВМ	Planned	USD 8,500,000.00
Improvement of traffic management systems	GIZ	Planned	USD 10,000,000.00
Parking management	AFD	Planned	USD 3,000,000.00

Associated financing (independently secured financing for measures related to the NUMP)

Source of financing	Secured?	Amount
AFD	Planned	USD 10,000,000.00
AFD	Planned	USD 50,000.00
AFD	Planned	USD 1,000,000.00
AFD	Planned	USD 50,000.00
	AFD AFD	AFD Planned AFD Planned AFD Planned

Projected impacts

Indicator	Impact 2030 (NUMP vs BAU)	Baseline - 2020	Projected 2030 BAU	Projected 2030 NUMP scenario
Total annual GHG emissions (Mt CO2eq)	- 0.5 Mt CO₂eq	15.07 Mt CO₂eq	16.01 Mt CO₂eq	15.48 Mt CO₂eq
Annual transport related GHG emissions per capita (kg CO_2eq)	- 27 kg CO₂eq/ capita	243 kg CO₂eq/ capita	258 kg CO₂eq/ capita	231 kg CO₂eq/ capita
Access Increase of the proportion of the population living within 500 meters or less of a public transport stop	+ 10 %	65 %	70 %	80 %
Air pollution Decrease in mean urban air pollution of particulate matter (in µg PM _{2.5}) at road-based monitoring stations	- 1.7 μg/m³ of PM2.s	18 µg/m³ of PM2.5	18 μg/m³ of PM2.5	16.3 μg/m³ of PM _{2.5}
	Formal public transport: +10%	Formal public transport: 54%	Formal public transport: 50%	Formal public transport: 60%
Modal share Increase of the modal shares of trips by public	Informal public transport: -3%	Informal public transport: 5%	Informal public transport: 5%	Informal public transport: 2%
transport, walking and cycling	Walking: +2%	Walking: 18%	Walking: 18%	Walking: 20%
	Cycling: +2%	Cycling: 0%	Cycling: 1%	Cycling: 3%
	TOTAL: +11%	TOTAL: 77%	TOTAL: 74%	TOTAL: 85%
Road safety Decrease in traffic fatalities in the urban area, per 100,000 inhabitants	- 5 fatalities/ 100,000 hab	33 fatalities/ 100,000 hab	32 fatalities/ 100,000 hab	27 fatalities/ 100,000 hab
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	- 4.6%	14.6%	14.6%	10%

Insights from practice: Lessons learned from the NUMP process

A thorough baseline study is essential to tailor policies to each municipality's specific needs, despite common guiding parameters.

At the beginning of the policy formulation process, it is important to conduct an adequate baseline study which determines the specific needs of each municipality. Although there are common parameters with which a policy can be built, an in-depth study of local needs and available information for each case and municipality is essential.

Regulated participatory processes build trust, and virtual adaptations during COVID-19 increased engagement in NUMP workshops.

Participatory processes involving key stakeholders should be regulated activities aimed at achieving consensus in decision-making, and agreements reached must be honoured to foster trust in future endeavors. The methodology for data collection and event organisation was adapted to accommodate the COVID-19 health crisis. Transitioning events to virtual platforms allowed for increased attendance at NUMP workshops, surpassing the initial attendance goals set at the beginning of the project's outset.

Perspectives for implementation

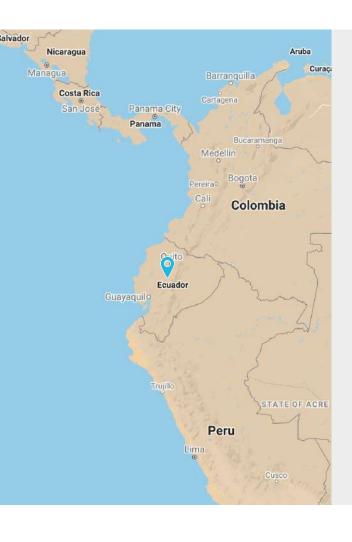
The NUMP development concluded on June 21, 2023, culminating in the launch event of the "Política Nacional de Movilidad Urbana del Ecuador" (PNMUS), attended by the Ministry of Transportation and Public Works of Ecuador and representatives of the French Agency Development, the European Union and the Euroclima program. During this event, the transversal guides, synthesis, and general document of the PNMUS were publicly released. An extension was granted to the initial contract of the project to allow the consultant to satisfactorily finalise all consultancy deliverables.

Updated in December 2024

Ambato, Ecuador

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 1,009 km²

Population: 329,856 | Growth rate: 0.78%

Regional capital city

GDP per capita: USD 12,652 Formal public transport: 34% Informal public transport: 3%

> Walking: 12% Cycling: 1% Private cars: 34%

Private motorbikes or 2-wheelers: 3%

Taxis: 9% Moto taxis: 0% Freight vehicles: N/A

Other: 4%

National GHG emissions per capita: 3.82 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

Ambato is the capital of the Tungurahua province. It is in a mountainous region between 2,500 and 2,750 meters above sea level. The city has a complex topography characterised by ravines, slopes and depressions that make up several regular plains that limit urban development, especially road and transport planning. Ambato is also one of the most significant urban centres in the country. Its regional and national centrality makes the city a commercial, industrial, and connecting node between the Amazonian, coastal and highland regions. The benefits of being such a vital node have brought problems of air pollution, noise, mobility, and road safety. Ambato's rapid growth affects urban transport development, which faces traffic congestion and accidents.

In this context, there are four fundamental problems in mobility. The first is the rugged topography that makes it difficult to connect and use modes of transport such as bicycles. The second is a centralised urban structure, which requires that most trips have the urban centre as their destination, an area with insufficient infrastructure and public space to handle traffic flows. The third is the outdated Transport and Mobility Master Plan, which does not present proposals related to sustainable mobility. Finally, the increasing private car fleet causes noise, visual and environmental pollution, long travel times, high fuel consumption, and GHG emissions. The growth in private vehicle ownership is faster than the growth of the population. Today, the rate of car ownership is 180 cars per one thousand inhabitants. In comparison, the national rate is 133 cars per one thousand inhabitants.

The existing mass transit system is based upon privately operated buses that grew organically with little planning. In 2022, the Municipality of Ambato fully assumed the constitutional and legal responsibility to manage mobility within the urban and rural limits. Because of this, the Municipality has continuously prepared itself to manage this sector. Updating the 2013 Transport and Mobility Master Plan through a SUMP process was the first and most significant step in this direction. The SUMP process has enabled the Municipality to access funding from the Ecuadorean Development Bank, which will execute a credit operation from the KfW for sustainable mobility. The Municipality can access international credit operations with a warranty from the national government. The monitoring capacity of the Municipality will be strengthened during the first semester of 2023 via GIZ's Intermediate Sustainable Cities II program.

The objective of the technical assistance in Ambato was to update the Transportation and Mobility Master Plan for the Ambato Canton with a focus on sustainable mobility. It included optimising existing transport systems in the regional capital city and aimed to improve mobility in urban and rural areas to enhance citizens' quality of life. The project involved greater participation from citizens, especially from vulnerable groups. Additionally, the project enabled the local authority to present proposals to national and international agents, who could provide further technical assistance and funding under the new umbrella of sustainable mobility.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission

Funding amount: EUR 500,000

Implemented by: GIZ through the EUROCLIMA+ Programme

Local counterpart: Decentralised Autonomous Government Municipality of Ambato - Directorate of Transit,

Transportation and Mobility

Supported Activities:

- · Optimisation of the Transport systems
- Update of the Transportation and Mobility Master Plan for Ambato Canton
- Development of a specific portfolio of mitigation programmes and projects in urban mobility, demand management for private transport, improvement of public transport, and promotion of active transport

Finance leverage: USD 52,850,000

Status of the SUMP process

Project start date: 2018 Q2

SUMP adoption date: 2023 Q1

Completed outputs:

- Prospective diagnostic
- Technical vision, objectives and measures proposed
- · Participatory vision, objectives and measures development
- Capacity development strategy
- Communication strategy
- Draft ordinance for enforcing SUMP

Next expected outputs

MRV follow-up tool

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate		
Urban interventions plan for sustainable mobility:			
a. Urban intervention plan in three main urban corridors	LISD 777M+~ 0M		
b. Special urban plan for the previous Terminal Terrestre (city centre)	USD 7.77M to 9M		
c. Special urban plan for the downtown market area			
Public space and landscape plan:			
a. Renovation of Cevallos Park and its area of influence			
b. Public space planning - Peri-urban influence centrality, Wholesale Food Market			
c. Special urban plan for Terminal Terrestre Sur			
d. Urban landscape and mobility planning along the Ambato River	USD 12.9M to 15M		
e. Programme for the implementation and improvement of air quality and noise control and monitoring capacity			
f. Programme of creation and restoration of green areas through tree planting, the rescue of green areas and the river			
g. Environmental and landscape monitoring improvement plan: rescuing and protecting the landscape of the slopes and the river			
Demand management plan:			
a. Legal, technological, administrative, and economic plan for congestion reduction and optimisation of car and motorcycle use			
b. Feasibility studies for implementing a logistics activity zone (ZAL, for its acronym in Spanish).	USD 3.9M to 4.5M		
c. Update of the specific regulations to organise circulation and schedules of freight vehicles according to their capacity			
d. Construction of the ZAL			
e. Application of the new regulations for the circulation of freight vehicles in urban areas			
Programme for an accessible, clean, low-carbon public transport:			
a. Project: Public transport service in the historical centre through a cable car from Pinillo Central Park to Ambato's city centre (2 km)			
b. Reorganisation of urban and rural public transport services	USD 25.9M to 30M		
c. Universal accessibility to public transport for people in situations of disability and vulnerable groups			
d. Implementation of an integrated transport system			
Sustainable-mobility infrastructure plan			
a. Network of bikeways	LICD 20 EN4+2 22N4		
b. Pedestrian road network	USB 28.5M to 33M		
c. Pacification of the motorised sub-system in cross-roads			
Programme for reducing GHG emissions from transport			
a. GHG monitoring plan	USD 6.5M to 7.5M		
b. E-vehicles promotion plan (cars, motorcycles)	02D 0'2INI (0 \'22NI		
c. Urban-logistics e-vehicles promotion plan			

Measure	Cost Estimate	
Programme to reduce inequality, poverty and gender gaps in mobility		
a. Qualitative and quantitative characterisation with a gender approach		
b. Cross-cutting incorporation of the gender approach to mobility projects		
Inclusion of the gender approach in communication strategies	USD 7.8M to 9M	
Promotion of active mobility with a gender perspective	7.0W to 9W	
c. Risk management with a gender perspective		
d. Promoting safety and women's protection in public spaces		
e. Citizen participation aimed at the effective engagement of women's organisations		
Programme to improve the accessibility of rural and specific populations		
a. Technical and economic feasibility study for a sustainable suspended public transport system	USD 13M to 15M	
b. Intersectoral articulation between regulations and instruments of urban, mobility, transport and transit planning		
c. Plan to improve accessibility to the rural areas		
Road/pedestrian safety, perception and "cultura ciudadana"		
a. Update of the existing strategic road safety plan	USD 13M to 15M	
b. Special attention to road violence increase due to motorcycle use	020 1310 (0 1310)	
c. Road safety campaigns		
Institutional, technical, financial and legal strengthening		
a. Observatory for the generation and processing of data on urban mobility and GHG emissions		
b. Optimisation study of the municipal and institutional structure dedicated to mobility and coordination for its implementation	USD 10.4M to 12	
c. Implementation of the Capacity Building Plan		
d. SUMP Financing Plan		

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Public transport and NMT	USD 74,500,000.00
Street shaping urban roads and traffic management	USD 24,450,000.00
Other measures	USD 51,050,000.00
Total	USD 150,000,000.00

Finance leverage

Leveraged financing (resulting or enabled by the SUMP preparation process)

Description	Source of financing	Secured	Amount
Loans and PPPs for public transport and NMT measures	Ecuadorean Development Bank (BdE) and private sector (operators)	Planned	USD 52,150,000
Loans for shaping road and traffic management	Multilateral banks	Planned	USD 17,115,000
Loans and international cooperation for plans, municipal strengthening, studies	Multilateral banks, BdE (KfW) and cooperation agencies	Planned	USD 35,674,500
Cooperation for Urban Mobility Observatory	GIZ	Secured	USD 30,500
Cooperation for MRV system implementation	Euroclima+ GIZ	Secured (both)	USD 7,000 USD 23,000

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2020	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO2eq)	No available data	0.611 Mt CO₂eq	0.756 Mt CO₂eq	No available data
Annual transport-related GHG emissions per capita (kg CO_2eq)	No available data	3,43 kg CO₂eq / capita	4,25 kg CO₂eq / capita	No available data
Access Increase of the proportion of the population living 500 meters or less of a public transport stop	+3%	65%	65%	68%
Air pollution Decrease in mean urban air pollution of particulate matter (in µg PM _{2.5}) at road-based monitoring stations	No available data	7.48 µg/m³ of PM₂.₅	No available data	No available data
	Formal public transport: 4%	Formal public transport: 47%	Formal public transport: 48%	Formal public transport: 51%
Modal share Increase in the modal shares of public	Informal public transport: -1%	Informal public transport: 1%	Informal public transport: 1%	Informal public transport: 0%
transport, walking and cycling trips.	Walking: 1%	Walking: 13%	Walking: 13%	Walking: 14%
	Cycling: 1%	Cycling: 1%	Cycling: 1%	Cycling: 2%
	TOTAL: 7%	TOTAL: 62%	TOTAL: 63%	TOTAL: 67%
Road safety Decrease in traffic fatalities in the urban area per 100,000 inhabitants	-2.9 fatalities/100 000 hab	18.9 fatalities/100 000 hab	18.9 fatalities/100 000 hab	16 fatalities/100 000 hab
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group.	No available data	No available data	No available data	No available data

Perspectives for SUMP implementation

The SUMP as a catalyst for Ambato's new Mobility Master Plan

The SUMP will complement the development of the Ambato Mobility Master Plan, an instrument that will outline the roadmap and be adopted as public policy. This will develop the vision and mission of the Public Mobility Agency, which will be created with the technical support of GIZ under the CISII programme as the new transport authority for Ambato.

Strengthening Governance for Sustainable Urban Mobility⁷³

For Ambato's Sustainable Urban Mobility Plan (SUMP) to succeed, it is crucial to address key governance challenges from the outset. Strengthening stakeholder coordination through a dedicated urban mobility body can ensure continuity in planning and management. Enhancing officials' technical and administrative capacities will improve decision-making and implementation while adopting change management mechanisms to help navigate challenges in project execution. Public participation is also essential to ensure that mobility policies reflect citizens' needs, which can be achieved through consultations and engagement spaces. Additionally, prioritising sustainable mobility by investing in infrastructure for non-motorized transport, such as bike lanes and sidewalks, will contribute to a more livable city. Since SUMP implementation is long-term, strong political and financial commitment from municipal authorities is necessary. Ensuring administrative stability will be key to maintaining progress and achieving the plan's objectives.

Insights from practice: lessons learned from the SUMP process

The SUMP's gender and social inclusion analysis was a game-changer in mobility

The gender and social inclusion analysis revealed the problematic situation women, children, and older people had to deal with to move around the city. By showing the situation, mobility agents became aware of the need to implement changes in the mobility system to serve citizens better. The public transport debate hereby moved from funding to effective services.

Expectations must be continuously managed when implementing Ambato's Mobility Master Plan.

During the implementation of the Mobility Master Plan, which will contain the SUMP, the public, who is directly involved in mobility and citizen stakeholders, will demand information. The municipality must design a strategy to communicate the process and moderate expectations that rise spontaneously if not managed. It is crucial to maintain regular communication with the media.

Challenges in Ambato's SUMP Development

Ambato faced two significant challenges in developing its Sustainable Urban Mobility Plan (SUMP): a shortened timeline and administrative changes. The process was completed in nine months, far less than the typical three years, requiring efficiency measures. Additionally, the city had four different directors of Transit, Land Transport, and Road Safety between 2018 and May 2023, causing instability and bringing new perspectives and experiences.

⁷³ To know more about lesons learned on Ambato's SUMP development process, and the Euroclima Urban Mobility component at large please consult https://despacio.org/portfolio/movilidad-urbana-euroclima-resultados-y-lecciones-2018-2024/

Highlights from the past years

Ambato has completed its SUMP development process.

In 2022, the SUMP development process was in complete execution. Despite time constraints from previous delays, Ambato has finalised the SUMP and is preparing for its adoption and implementation through its Mobility Master Plan. Citizen participation was key to clearly identifying the inclusion gaps that needed to be addressed by the city's mobility system.

Sustainable modes of transport have been positioned as a feasible solution for citizens.

After almost a year of post-pandemic normality, the diagnosed modal distribution has changed towards retaking previous transport behaviours, e.g., increased public and private car use. However, the sustainable mobility discussion promoted during the SUMP development has taken root in citizens' mindsets. Sustainable, active mobility modes are becoming a steadfast demand for citizens. Furthermore, the municipal mobility authorities are now aware of the new perceptions and needs that must be satisfied through sustainable and inclusive measures.

Though monitoring systems are needed, the SUMP has increased access to finance for implementation.

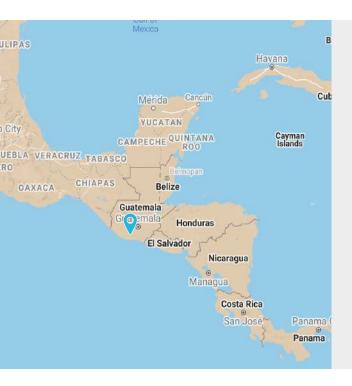
To fully implement Ambato's Mobility Master Plan, the Municipality must integrate an MRV tool and the mobility observatory. GIZ could continue supporting the Municipality in adopting these instruments and strengthening institutions to execute them. Finally, the availability of the SUMP has allowed the city to be highly and favourably considered for funding from the Ecuadorean Development Bank and the KfW.

Updated in December 2024

San Juan Comalapa, Guatemala

Partner city

Status of the project: Completed pilot project / technical assistance



Basic Information

Urban area: 76 km²

Population: 48,597 | Growth rate: 2.4%

GDP per capita: USD 1,158

Modal Share:

Formal public transport: 10%

Tuk Tuks: 14% Walking: 42% Cycling: 12%

Private cars: 7%

Private motorbikes or 2-wheelers: 9%

Other: 6%

National GHG emissions per capita: 2.40 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

San Juan Comalapa is an administrative department of Chimaltenango, Guatemala, with 48,597 inhabitants. Most (94%) of the population belongs to the indigenous group of Kaqchikel Maya, with Kaqchikel as the official language. San Juan Comalapa is a rural and low-income area of Guatemala, and the municipality includes the city of San Juan Comalapa and 20 surrounding villages. On average, 639 people per km² inhabit the region. It is a compact municipality with many slopes; therefore, transport modes are frequently difficult to access, and tuk-tuks have emerged as a feasible transport solution for the community.

Traditionally, family roles are highly genderised; therefore, women mainly fulfil household and care activities. Gender role division implies different mobility solutions for women and men, as women take daily trips to complete various caretaking and housekeeping activities. For example, women travel significantly more often by tuk-tuk (25%) than men (6%). In contrast, men use bicycles for 20% of their trips. Moreover, 11% of the population has difficulties accessing urban mobility services.

The contracting agreement between tuk-tuk providers and the local authorities allows transport services in the municipality for a fare of GTQ 3.00 (~USD 0.39). Currently, 200 tuk-tuks are registered (each half of the tuk-tuk fleet operates every other day). Most of the fleet is in poor condition and has already exceeded its life cycle. Public transport works informally through tuk-tuks, providing services similar to taxis with no formal stops. Buses only exist in the outskirts of the municipality, and there is no existing transport authority or mobility secretariat in San Juan Comalapa.

The Electric Tricycle Pilot project, part of the EUROCLIMA+ programme, sought to introduce electric transport to boost the renewal of old petrol-powered tuk-tuks and increase the accessibility of public transportation.

In Guatemala, there are regulations regarding importing electric vehicles, and several incentives to reduce the cost of their implementation are in place. However, most of these incentives apply in only three regions in Guatemala. Two regulations in progress, the Law on Incentives for the Import of Non-Conventional Energy Automobiles, presented in 2018, and the Law on Electromobility, introduced in 2019, have not been approved yet.

In the municipal pilot project's first implementation phase, nine electric tricycles and their charging stations were introduced. Two units for public transport, four for waste collection, and three for social transport (transport of people with mobility limitations or disabled).

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: European Union

Funding amount: EUR 250,000

Implemented by: GIZ through the Program EUROCLIMA+ Programme

Local counterpart: Municipality of San Juan Comalapa, Commission for Urbanity, Security and Infrastructure

Supported activities:

- Implement two electric tuk-tuks to increase sustainable public transport options for the municipality
- Increase accessibility by implementing three tuk-tuks for people with mobility difficulties
- Provide rubbish collection in areas that are difficult to access by implementing four electric tricycles
- Empower women through their participation in tuk-tuk owners' meetings.
- Provide technical training on maintenance, operation and management of tuk-tuks.

Status of implementation

Project start: 2018 Q3

Project completion: 2022 Q3

Completed outputs:

- Base studies: Analysis of the current mobility situation, state-of-the-art and market survey
- Training strategy
- Communication and dissemination strategy
- · Definition of technical specifications
- Management, business and operation model. Implementation Roadmap
- Implementation of the communication strategy and impact stories
- Procurement of units: launch of tender and procurement of nine electric tuk-tuks
- Implementation of the pilot project: nine electric tuk-tuks and the start of the project test phase

Core impact indicators baselines

The pilot project does not include a projection of future impact, and only baseline data are presented in the following table.

Indicator	Baseline - 2016
Total annual transport-related GHG emissions (Mt CO2eq)	9,234.15 Kt CO₂ eq
Annual transport-related GHG emissions per capita (kg CO2eq)	0.01191 kg CO₂eq / capita
Air pollution Mean urban air pollution of particulate matter (in µg PM _{2.5}) at road-based monitoring stations	36-43 μg/m³ of PM _{2.5}
Road safety Annual traffic fatalities in the urban area per 100,000 inhabitants	19 fatalities / 100,000 habs (data of 2013)

Insights from practice: key pilot project takeaways

The introduction of new technologies in the transport system requires a deep review of the institutional political context

Introducing electric tuk-tuks in San Juan Comalapa's transport system required a detailed review of the market's institutional political context where it intervenes. Local authorities faced operational barriers that were difficult to solve despite their good intentions, such as:

- The widespread rejection of unknown technologies, even in a pilot phase,
- The incorrect selection of the implementation strategy based on "giving away" units without solid award criteria, which was discouraged from the beginning by GIZ,
- The non-adherence of drivers in a local association reflected the political differences between the various stakeholders that make up the local transport system.
- Differences in criteria and objectives between federal and local authorities added complexity to the project.

While these barriers could have been identified in the early design stages, GIZ adopted various strategies to address them.

- Development of a communication and awareness strategy
- Development of a training strategy aimed at local administration personnel, drivers and mechanics
- Definition of the units' technical specifications to be incorporated with local actors to save mistakes from previous experience.
- Develop alternative management and operation models to empower local authorities and traditional tuk-tuk drivers (creating municipal management companies, public-private participation models, and introducing promotion models based on the result of financing, among others)

Electric mobility is a feasible solution for local transport systems.

The project aimed to promote sustainable urban mobility in San Juan Comalapa by introducing electric Tuc Tucs in the local transport system. The project's managers considered using this technology to provide social services such as daily transfers of older people and children with special needs to rehabilitation therapies and waste collection in difficult access areas.

The project integrated a gender perspective to empower women and ensure their participation

The project intends to address the greenhouse and local emissions in San Juan Comalapa coming from the operation of tuk-tuks powered by fossil fuels while empowering women and strengthening their participation in transport services. The inclusion of the gender component in the project seeks to improve the perception of security and safety among women when using the new electric units. The project also aims to increase women's influence in the city's decision-making processes, highlight the need to consider gender balance in any policy, programme, or project, and define its objectives and activities.

Early interinstitutional coordination and capacity development is crucial for project completion

Interinstitutional coordination needs to be enhanced when implementing this type of project, as many stakeholders are involved and do not necessarily have knowledge of mobility projects. Other dependencies of the municipality and the national government had to be involved in earlier stages of the project to obtain the required endorsements or approvals. Education, waste collection, and other sectors are linked to the project execution, which adds complexity to its management. Capacities in the management and execution of mobility projects enable the full involvement of some local authorities that might not have sufficient staff or experience.

Legal limitations were an opportunity to support national industry

The project only considered the purchase of vehicles manufactured in Guatemala to overcome regulatory limitations related to the importation of the tuk-tuk units, thus supporting the national industry and showcasing the multiple benefits of the project.

Results and perspectives for scaling

Other cities and manufacturers have expressed interest in replicating the experience

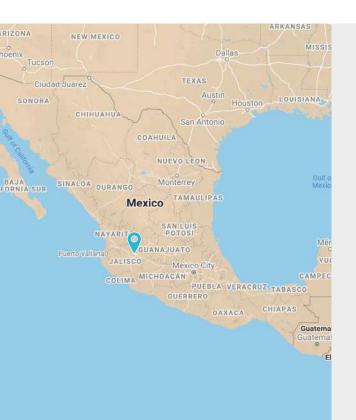
Although the project participants did not solve the definition of adequate operational management models for San Juan Comalapa, it was possible to generate interest from both federal and local authorities in other cities about the benefits of electromobility. Excellent results were also obtained, working hand in hand with local suppliers going through a market development phase, for which this experience provided visibility and concrete results. It was also possible to strengthen local consultants who accompanied this project and became true promoters of sustainable mobility.

Last update in December 2023

Guadalajara, Mexico

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 151 km²

Population: 5,243,392 | Growth rate: 1.2%

Region capital city

GDP per capita: USD 7,991

Modal Share:

Formal public transport: 44.24%

Walking: 26.9% Cycling: 2.73%

Private cars: 15.7%

Private motorbikes or 2-wheelers: 4.07%

Taxis: 2.76% Moto taxis: 0.89% Other: 2.73%

National GHG emissions per capita: 5.39 (tCO₂eq)

Exposure to climate change: MEDIUM

Context

The Guadalajara Metropolitan Area (GMA) is the third most populated zone in Mexico, and it is in the centre of Jalisco's State with 5.2 million inhabitants. GMA comprises nine municipalities and is a centre for electronics and cybernetics industries, attracting many young professionals. The main activities in GMA are the manufacturing industry, trading, personal services and maintenance. The Metropolitan Area hosts 75% of the total sector of Jalisco's State.

Currently, the Guadalajara Metropolitan Area transport system comprises 233 routes of collective buses, two BRT corridors, three LTR lines, four lines of Trolleybuses and a public bicycle system. In 2021, the most recent BRT line comprising 41.5 km launched operations to connect the peripheric areas, provide service to four municipalities, and connect with the rest of the mass transport network.

The Metropolitan Coordination established a management scheme among the municipalities. This scheme includes the Metropolitan Coordination Board, the nine mayors and the state governor, the Metropolitan Institute of Planning, the Metropolitan Citizen Council and the Metropolitan Planning Advisory Council.

The Metropolitan Planning Institute for Guadalajara's Metropolitan Area (IMEPLAN), the local counterpart, does not have the mandate and responsibility to finance mass public transport infrastructure. Further, it does not have the authority to borrow from international finance sources for infrastructure projects. However, it does have such authority for other more general types of projects, e.g. technical assistance. Systems and procedures are not in place to monitor, evaluate or report on urban mobility.

IMEPLAN aims to develop and propose metropolitan planning instruments, studies and project proposals, as well as mechanisms to improve the joint efforts of the Metropolitan Coordination Instances. IMEPLAN receives technical assistance to develop a Sustainable Urban Mobility Plan and a pilot project. This technical assistance aimed to coordinate and establish a plan for urban mobility for the nine metropolitan area municipalities, including various modes of accessible, economical, efficient and safe transport.

This technical assistance contributes to institutional strengthening through the capacity development of the local team, facilitating exchanges with cities in Latin America and Europe, and having objective and technical resources for facing the issues of mobility.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) and Pilot Project

Funded by: European Commission

Funding amount: EUR 600,000

Implemented by: GIZ through the EUROCLIMA+ Program

Local counterpart: Metropolitan Planning Institute for the Guadalajara's Metropolitan Area (IMEPLAN)

Supported Activities:

- Formulation of an Integral Sustainable Urban Mobility Plan for the metropolitan region, integrating the nine municipalities and all modes of transport and aligning them with the metropolitan land use plan.
- A pilot project to implement an innovative methodology for data collection and analysis on urban mobility through digital technology. The data gathered is an input for the SUMP formulation and evaluation.
- · Capacity building for public institutions to achieve adequate planning processes in urban mobility.

Status of the SUMP process

Project start: 2018 Q2

Project completion: 2022 Q2

Completed outputs:

- Status quo analysis (November 2019 January 2020)
- Urban cargo logistics (January 2020)
- MobiliseDays (February 2019)
- SUMP Workshop (February 2020)
- SUMP Self-Assessment Workshop (August 2020)
- Development of SUMP strategy co-creating vision and objectives (April May 2020)
- Establishment and application of monitoring, reporting and verification (MRV) tools (MobiliseYourCity and Ecologistics) (March-August 2021)
- Update of urban mobility data, integrating non-motorized mobility, freight transport, and public transport (2021)
- Metropolitan Strategy for Emergent Mobility
- Integrated SUMP for the nine municipalities of Guadalajara's Metropolitan Area
- Adopted by the Junta de Coordinación Metropolitana in November 2024

Next expected outputs

- Pilot Project: Mobile application for obtaining new information on citizen mobility patterns
- Start the implementation of the approved SUMP

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate	
Objective 1. Improve urban infrastructure and equipment to achieve sustainable mobility		
Update urban development planning and land-use planning instruments in the state's cities.		
• Improve urban equipment on public roads to facilitate the movement and coexistence of citizens.	Cost estimates not provided	
Adapt the use of roads to different modes of transportation.		
Increase urban centre density.		
Improve comprehensive accessibility.		
Objective 2. Increase the coverage and quality of public transportation services		
Redesign routes based on origin-destination (work, education, social, recreational, commercial) purposes.		
Improve the quality of public transportation services.	Cost estimates not provided	
Increase the coverage of public transportation services.		
Objective 3. Increase the use of alternative means of transportation by discouraging the use of cars		
• Increase infrastructure that prioritises the use of alternative transportation.	0	
Coordinate the public transportation network to allow multimodality.	Cost estimates not provided	
Establish permanent education campaigns for citizen training in road safety and mobility.		

Core impact indicators baselines

The SUMP does not provide impact projections.

Indicator	Baseline - 2016
Total annual transport-related GHG emissions (Mt CO2eq)	6.2 Mt CO₂eq
Annual transport-related GHG emissions per capita (kg CO2eq)	2,994 kg CO₂eq / capita
Road safety Annual traffic fatalities in the urban area per 100,000 inhabitants	3.45 fatalities / 100,000 hab
Modal share Increase of the modal shares of trips by public transport, walking and cycling	Formal public transport: 47% Informal public transport: 0,89% Walking: 26,9% Cycling: 2,73%
	TOTAL: 77,52% ⁷⁴

Datos 2021 (Encuesta Origen – Destino COVID Área Metropolitana Guadalajara)

Perspectives for Implementation

SUMP as an instrument of metropolitan integration

The Guadalajara Metropolitan Area developed its Sustainable Urban Mobility Plan – SUMP. Supported by Euroclima, packages of measures were identified and included for the implementation of the plan along with the development of the Emerging Metropolitan Mobility Strategy (EMME) in 2021 as an articulation tool for the nine municipalities to include urban mobility measures, aligned with the strategic axes contained in the SUMP. This process favours the normative integration between urban mobility, land use planning, and climate change actions, as well as aligning strategies and actions whose implementation allows better living conditions for the metropolis's population in the long term.

Insights from Practice: Lessons Learned from the SUMP Process

Developing mechanisms for citizen participation at the metropolitan level

Mechanisms were developed and implemented to integrate a collective vision where the reality of the nine municipalities was included, and their needs were addressed based on their particularities considering a metropolitan vision.

Preparing a SUMP for a metropolitan region creates challenges and complexity – but it also provides the citizens with sustainable mobility services that transcend administrative boundaries.

Facing metropolitan coordination, the SUMP development required participatory processes and decision-making with many stakeholders from the nine municipalities. Therefore, the SUMP considered nine different realities for mobility planning and an important alignment with other local instruments at various levels: Climate Action Plans, Metropolitan Territorial Plans and Municipal Development Plans.

The sustainability and implementation of the SUMP might depend on the commitment of many authorities. Therefore, the participatory process and involvement level of the set of institutions have been crucial, as well as the alignment with the municipal development plans to enable the implementation beyond the administrative periods and political will.

Highlights in previous years

The Metropolitan Strategy of Emergent Mobility for the metropolitan area was launched, and upcoming work aims to integrate it with local development plans.

The Metropolitan Area of Guadalajara capitalised on the pandemic crisis and the atypical mobility patterns to envision a broader vision of the city, developing the Metropolitan Strategy of Emergent Mobility. This policy document provides nine strategic axes for sustainable urban mobility for the nine municipalities and enables a shared vision for the future. As a further step and leveraging the administrative transition, the respective development plans of each city are expected to be aligned with the strategy.

Periplo represents the first step for more dynamic, flexible and low-cost urban mobility planning, but its development requires resources from public institutions.

Periplo is the app prepared in the framework of this technical assistance to be used as a practical participatory tool capable of engaging citizens in consolidating better mobility conditions. It is also a powerful instrument for monitoring and evaluating sustainable urban mobility public policies in shorter periods by enabling adjustments and strengthening planning processes through dialogue between the government and inhabitants. However, the app was never launched to the public due to concerns over data security from the local government.

Developing this pilot project requires awareness of the risks and opportunities of implementing a digital solution for urban mobility planning. It implies not only innovation but also technical skills (data, transport, software, etc.), infrastructure (hosting), budget (operation and maintenance), and, more importantly, human capital to translate raw data into useful information for decision-making. Periplo was made available in 2022 to be used in the Guadalajara Metropolitan Area. Its main challenge is to reach the minimum number of users to have representative data. The commitment of the authorities and citizens should be aligned to make the digitalisation of urban mobility planning processes possible.

Digitalising sustainable urban mobility planning is an innovative solution used for the first time in the Latin American context replication potential.

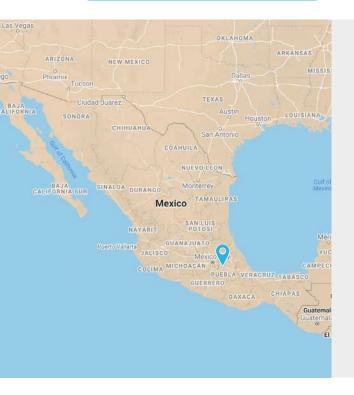
Periplo is possibly the first case study on digitalisation for urban mobility planning in Latin America as a first effort to replace traditional origin-destination surveys or complement them. Digital tools such as Periplo might gather daily data and enable monitoring and evaluation of the measures and actions implemented in the short term. Periplo has many opportunities to be improved, but it represents an important step towards digitalisation in urban mobility planning.

Updated in December 2024

Puebla, Mexico

Status of the project: Completed pilot project

Partner city



Basic Information

Urban area: 563.4 km²

Population: 3,250,000 | Growth rate: 1.59%

Type of city: Regional capital city GDP per capita: USD 12,184

Modal Share:

Formal public transport: 0.7%

Private cars: 75.5%

Private motorbikes or 2-wheelers: 5.2%

Taxis: 1.1%

Freight vehicles: 18.2%

National GHG emissions per capita: 5.39 (tCO₂eq)

Exposure to climate change: Medium

Context

Located in the Valley of Puebla also known as the Valley of Cuetlaxcoapan, Puebla has a current population of 3,250,000 people, making it the fourth largest city and also the fourth largest metropolitan area in Mexico. The territory of Puebla consists of 563,4 km², with an urbanised area corresponding to 43.1%. In the last four decades, the urban area of the municipality of Puebla has grown by more than 500%, while the urban population barely doubled in the same period. Since 1960, the city of Puebla has become a national reference for important public investments and the attraction of external capital and foreign direct investment. As a consequence, a mono-centric and compact urbanisation process was transformed into an extensive and low-density city, initiating developments further and further away from the city centre near its municipal boundaries.

In 2015, Puebla registered a vehicle fleet of 578,784 motorised vehicles in circulation, composed of 75.5% cars, 1.1% public or private passenger transport, 18.2% freight transport and 5.2% motorbikes. In this sense, for 2015 the motorisation rate of the municipality was 277 vehicles per 1,000 inhabitants. According to the statistics, the number of private cars in the municipality of Puebla grew five times more than the municipal population in a period of twenty years (1995-2015), this situation represents a disproportionate increase in private motorised transport that reproduces unsustainable patterns of mobility and urban development.

The city's BRT public transport does not guarantee an intermodal scheme, as there is no integrated system facilitating the transfer from one mode of transport to another.

The local counterpart has the mandate and responsibility to finance public transport infrastructure. It does not have authority to borrow from international finance sources. Systems are partially in place to monitor, evaluate and report on urban mobility.

A large percentage of cyclists come from neighborhoods located in the south of the city, where the Margaritas terminal from Line 2 is located. The pilot project's goal is to connect this population with the BRT system through the installation of safe and accessible bicycle parking spaces at the terminal. It seeks to facilitate conditions for BRT users to use bicycles as a complementary alternative in their travel chain, as well as to encourage active modes of transport over motorized private vehicles. This pilot project is part of the national sustainable urban mobility strategy and the sustainable mobility program of the municipality of Puebla, approved in 2017.

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: European Commission

Funding amount: EUR 500,000

Implemented by: AFD through the EUROCLIMA+ Program

Local counterpart: Secretary of Mobility Puebla

Supported activities:

Implementation of the pilot project of the BRT's Margaritas terminal: implementing bicycle parking infrastructure and equipment, new bike lanes, and a potential fee system. The project has three components:

- Technical, financial, environmental, and social studies
- Construction monitoring
- Communication and visibility of the project

Status of implementation

Project start: 2021 Q1

Expected project completion: 2024 Q2

Completed outputs:

- Plan of participatory processes
- · Report on the results of participatory processes
- · Communication and awareness-raising plan
- Diagnostic document
- · Preliminary proposal of solutions
- Implementation plan
- Monitoring, reporting and verification (MRV) plan of the project's impacts
- Project implemented and operating

Insights from practice: key pilot project takeaways

Urban sprawl caused by car-centric planning must be countered with sustainable mobility solutions that promote accessibility and equity⁷⁵.

The Municipality of Puebla, particularly in the southern area, has faced challenges due to urban sprawl driven by car-centric development. This has led to congestion, inequality, and high pollution levels. To reverse these impacts, sustainable urban mobility systems must be implemented, ensuring equitable, safe, and efficient access to the city's opportunities. The Sustainable Intramodality Project, aligned with the Municipal Development Plan, aims to shift away from motorised transport dependency and foster intermodal mobility to improve residents' quality of life.

Strengthening and clarifying legal frameworks is essential to support and scale sustainable mobility solutions effectively.

Clear and robust regulations are crucial for the successful implementation and long-term sustainability of mobility projects. In Puebla, the current legal framework is insufficient and vague, posing challenges in the expansion of sustainable transport infrastructure. The lesson from the intramodality project highlights the need to strengthen and review policies that ensure the integration of active modes and sustainable mobility practices into urban planning. By establishing clear legal requirements and ensuring enforcement, the municipality can create a solid foundation for scaling mobility solutions like the Biciestacionamiento Masivo, ensuring broader and more effective impact.

Results and perspectives for scaling

Pilot projects are key to proving the feasibility of sustainable mobility solutions and driving broader adoption.

The Biciestacionamiento Masivo project demonstrates the effectiveness of pilot initiatives in transforming mobility systems. By aligning with the existing urban mobility plans, this pilot not only contributes to improving local connectivity but also serves as a model for larger-scale implementation. The project's success underscores the importance of pilot projects in testing, proving, and expanding sustainable mobility solutions, showing that incremental steps can lead to broader adoption across different levels of government and other cities

The project provides a replicable model for integrating cycling with BRT systems

Active modes, particularly bicycles, offer a strong opportunity to enhance connectivity with mass transit systems through replicable models. In the Margaritas area terminal, the high volume of cyclists highlights the need for intermodal systems that ensure safe and convenient travel across Puebla. The pilot project aims to promote cycling, increase BRT usage, and reduce GHG emissions. This model can be easily replicated in other Latin American cities with BRT systems, fostering seamless integration between public transport and cycling, a growing mode of transport in the region that contributes to reducing environmental impact.

The Project is designed for scalable growth and community integration, offering a model for sustainable mobility that can be replicated in other areas.

The Massive Bicycle Parking Project is designed for scalable implementation, beginning with 200 bicycle anchorage ports in a two-story building. The structure is pre-engineered for vertical expansion, ensuring that future growth can be carried out as resources become available without disrupting operations. This phased approach enhances feasibility while keeping the project adaptable and replicable in other parts of the city, as well as nationally and internationally.

⁷⁵ To know more about lessons learned from the Euroclima's urban mobility component visit https://despacio.org/portfolio/movilidad-urbana-euroclima-resultados-y-lecciones-2018-2024/

Beyond bicycle parking, the facility serves as a multifunctional community hub, offering a children's play area, an adult exercise zone, a pet area, and public restrooms. To maximize impact, the city plans to develop dedicated bicycle lanes connecting the facility to surrounding neighborhoods, ensuring safe and convenient cycling infrastructure. This integration will drive user adoption and set a strong precedent for expanding similar mobility solutions elsewhere.

Highlights in the past year

On February 27, 2024, the inauguration event of the massive bicycle parking was held, with the participation of the Secretariat of Mobility and Infrastructure of the City Council of the Municipality of Puebla, AFD representatives and Councilors of the Puebla City Council. That day the operation began.

Updated in December 2024

Arequipa, Peru

Status of the project: Completed Sustainable Urban Mobility Plan

Partner city



Basic Information

Urban area: 3,700,00 km2

Population: 910,000 | Growth rate: 1.09%

Region capital city

GDP per capita: USD 10,277

Modal Share:

Formal public transport: 46%

Private cars: 18%

Taxis: 13% Walking: 17% Cycling: 1%

Private motorbikes or 2-wheelers: 1%

Other: 4%

National GHG emissions per capita: 2.82 (tCO₂eq)

Exposure to climate change: HIGH

Context

Urban mobility in Arequipa presents challenges according to transport data from 2016, which reports 52,877 infractions, 5,410 accidents, 128 fatalities and 5,282 non-fatal victims. Two thousand-eight public buses accounted for 63% of the modal share, while walking represented 16.6%. By 2017, on the city's main north-south and south-north axes, which traverse the historic centre, 47% of journeys were made by public transport, 30% by private vehicle and 23% by taxi.

Several factors explain the modal choice, including:

- Growth of the vehicle fleet without consideration of service and demand; as of 2016, are 261,600 vehicles present (25% taxis and 46% private cars).
- Low-qualitypublic transport service. Users perceive public transport as unsafe due to its low capacity, poorly maintenance units operating 240 routes with an average age of over 20 years
- Disjointed urban infrastructure between the activity centres, road discontinuity and the variation of sections within continuous corridors. The overlay of the urban centrality and the historic centre exacerbates urban mobility challenges.

Transport and mobility challenges in Arequipa were key elements that prompted the development of the SUMP. The lack of an integrated and agreed-upon vision for mobility in the city has compromised the system's quality and coverage, leading to isolated actions and significant investments in infrastructure without significant returns for residents' quality of life.

Developing Arequipa's SUMP constituted an essential step toward improving mobility in the metropolitan region. This process included fundraising activities to achieve implementation and cooperation efforts between the municipality and various institutions to develop and implement sustainable urban mobility measures with a comprehensive vision.

In this context, the National Government and the Provincial Municipality of Arequipa have entered into technical cooperation agreements to enhance mass public transport and sustainable urban mobility in an integral and consensual manner. Agreements exist between the Ministry of Transport and Communications (MTC), the Agence Française de Développement (AFD) and CODATU, with the Provincial Municipality of Arequipa (MPA, its acronym in Spanish) as a primary beneficiary of the project. Another agreement is between the MTC and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to implement the project 'Sustainable Urban Transport in Selected Cities in the North and South of Peru' (DKTI). The third agreement is between the MPA and the MTC to finance Arequipa's Integral Transport System (SIT) project.

AFD has been working with the MPA since 2016 on urban mobility within the framework of the AFD-MTC-MPA Cooperation Agreement. In recent years, AFD has worked with the MPA on direct cooperation and joint work projects, including developing Arequipa's Sustainable Urban Mobility Plan - SUMP (2020-2022). Arequipa did not have a SUMP or a comprehensive policy strategy on urban mobility for the metropolitan area, making implementing actions with a shared vision challenging.

Arequipa lacks a mass rapid transit system, but the city has planned a first light rail on the central 15 km NW-SE corridor. Currently, its public transport system relies on non-integrated bus lines. There is an existing transport master plan or similar document (Route Regulatory Plan 2016).

The Municipality of Arequipa, the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure. However, it lacks the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate and report on urban transport.

This SUMP project aims to develop a city model that promotes more sustainable travel modes (walking, cycling, and mass public transport). The main expected results are:

- Improving the urban mobility system and incorporating new technologies to reduce travel times and road accidents, and implementing the Integrated Transportation System
- Reducing the effects of transport on climate change and non-renewable energy consumption
- Improving urban social equity by ensuring universal accessibility, promoting alternative use of the road system, and encouraging healthier modes of transportation
- Developing institutional capacities for the various stakeholders involved in urban mobility issues

The technical assistance provided to Arequipa contributes to institutional strengthening by regulating sustainable urban mobility management, promoting projects to be executed by the municipality, and establishing financing mechanisms for infrastructure, equipment and monitoring systems.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Union

Funding amount: EUR 500,000

Implemented by: AFD through the EUROCLIMA+ Programme

Local counterpart: Municipality of Areguipa, Municipal Planning Institute (IMPLA)

Supported activities:

- Development of the integrated public transport network
- · Strategic programmes and projects to optimise the operation of freight transport and urban logistics
- Implementation plan
- Monitoring system

Status of the SUMP process

Project start date: 2020 Q4

SUMP adoption projected date: 2024 Q1

Completed outputs:

- Forum on challenges and opportunities for Sustainable Urban Mobility
- Participation plan
- Communication plan
- Expectations survey
- Diagnostic workshop
- Mobility assessment
- Definition of the vision, strategic objectives, and scenario construction
- Action plan, budget, and financing
- · Follow-up, reporting, and implementation support
- Publication
- SUMP adoption

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

O1. Promote greater participation in Pedestrian and Bicycle Mobility	USD 170,088,068.32
O2. Promote a transformation of public transport towards a massive, integrated, and multimodal system	USD 885,787,428.01
03. Promote more rational and efficient use of private transport	USD 427,779,033.66
O4. Promote more sustainable management of freight transport and urban logistics	USD 8,703,246.07
O5. Promote intelligent traffic management for regulation, monitoring, and control	USD 39,248,638.74
O6. Promote a reduction in the environmental impacts of mobility and traffic crashes	USD 37,150,133.09
O7. Promote an improvement in universal accessibility, inclusion, equity, and gender	USD 145,920,411.78
08. Promote institutional strengthening, governance, and civic culture	USD 6,188,481.68
09. Promote a financial sustainability scheme for sustainable mobility	USD 1,842,931.94
O10. Promote a mobility model that supports sustainable urban development in the metropolitan area	USD 0.00

The following table summarises the total capital expenses (CAPEX) estimates for different measures in the SUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Public transport and NMT	USD 727,661,666.
Street shaping urban roads and traffic management	USD 472,892,695.9
Other measures	USD 3,956,919
Total	USD 1,204,511,281.44

Core impact indicator baselines

Indicator	Baseline - 2017-2021	Projected 2042 SUMP scenario
Total annual GHG emissions (t CO2eq)	360,200t CO₂eq	252,140 t CO₂eq
Annual transport-related GHG emissions per capita (kg CO2eq)	1923.6 kg CO₂eq / capita	Not available
Access Increase the proportion of the population living within 500 meters or less of a public transport stop	61%	70%
Air pollution Decrease in the mean urban air pollution of particulate matter (in $\mu g \ PM_{2.5}$) at road-based monitoring stations	9 μg/m³ of PM2.5	Not available
Modal share Increase of the modal shares of trips by public transport, walking, and cycling	Formal public transport: 46 % Informal public transport: No data Walking: 17 % Cycling: 1 % TOTAL: 62 %	Not available
Road safety Decrease in traffic fatalities in the urban area per 100.000 inhabitants	0.91 fatalities / 100,000 hab	≤5 fatalities / 100,000 hab
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	12%	Not available

Perspectives for implementation

Although not yet adopted, the SUMP is moving forward by securing funding for its implementation.

The SUMP undergoes consideration by plenary councillors, culminating in its approval by the Municipal Council through a Municipal Ordinance. Transitioning towards sustainable urban mobility systems necessitates initial financing for capital investments and ongoing revenue streams to ensure long-term sustainability.

Meeting the high infrastructure endowment requirements entails financial contributions from the State and other sources. The allocation of funds from each source will ultimately hinge on technical feasibility, project inclusion in the Multiannual Investment Programming (subject to meeting their requirements), and alignment of SUMP objectives with the Development Plan, including Metropolitan and Master Plans and other technical instruments. The ultimate goal is for the SUMP to evolve into a comprehensive mobility planning tool with a sustainability approach. Primary financing sources, categorised into central and complementary sources, are developed by program, implementation horizon, and potential funding source.

Insights from practice: lessons learned from the SUMP process

SUMPs offer an opportunity to prioritise limited resources based on a collectively agreed upon long-term perspective

Addressing urban mobility from a sustainable approach amid significant challenges in the transport sector and resource constraints necessitates a strategic roadmap with a forward-looking vision.

The case of Arequipa highlights the importance of dialogue in mobility planning, emphasising its relevance and legitimacy. Pertinence arises because a mobility project is not an end but must primarily serve its beneficiaries—the citizens. Their participation is crucial for establishing a diagnosis and defining expectations that form the foundation of an SUMP. In Arequipa, the pandemic and severe health restrictions deeply affected the city and posed evident challenges to organising this dialogue. Fortunately, prior efforts supported by GIZ and using new communication technologies and social media helped overcome these difficulties.

Arequipa's SUMP also proposes an ordering and prioritisation framework with robust opportunities for adaptation. Additionally, the participatory nature of the process reinforces the legitimacy and continuity of planning exercises over 10 to 15 years, a critical factor in contexts where elected representatives and institutional teams frequently change. Arequipa serves as a compelling example, having had no fewer than four mayors during its SUMP's preparation, development, and approval. The broad participatory approach ensures the resilience and permanence of the SUMP against political alternations and institutional shifts.

Highlights of the past year

Although, due to the municipal processes and political shifts, the schedule for finalising, presenting, and approving the SUMP was delayed, the Plan was adopted in 2024 as the roadmap for promoting sustainable mobility in the Municipality. The document provides guidelines to promote and adapt mobility challenges to the city's reality and needs and defines a desired future scenario to achieve this objective.

Updated in December 2024

Trujillo, Peru

Status of the project: Completed technical assistance

Partner city



Basic Information

Urban area: 1,769 km²

Population: 962,369 (Census 2017) | Growth rate: 1.65%

Type of city: Region capital city GDP per capita: USD 6,942

Modal Share:

Public transport: 31.2%

Walking: 18.4% Cycling: 1.1%

Private cars: 15.5%

Taxis: 25.4%

Other: Collective cabs: 8.4%

Nationally Determined Contribution (NDC): /transport-

related NDC

National GHG emissions per capita: 3.05 (tCO₂eq)

Exposure to climate change: HIGH

Context

Trujillo, a coastal city in northern Peru, is the capital of the province of the same name. Its geographic location and connectivity with the major cities on the coast and north Peru's highlands make it an important economic centre. The aforementioned factors and the existence of the CHAVIMOCHIC irrigation project, which was started in the 1960s by the National Development Institute (INADE) and extends throughout much of the coast of the La Libertad Region, have contributed to the growth of sectors such as export agribusiness, mining, fishing, and commerce. These sectors contribute the highest percentage to the regional GDP.

The metropolitan area of Trujillo generates 2,298,000 trips per day, with an average rate of 2.4 trips per person/day. Of these trips, 80% represent motorised transport, of which urban passenger transport services represent 65% (provided through the services of minibuses, combis, collective taxis, and cabs). Trujillo does not have an integrated transport system, but the first bus road corridor is expected to be implemented in the next few years. This corridor will link the northern and southern parts of the city with a Bus Rapid Transit (BRT) system. This measure represents one of the town's priorities in its Sustainable Urban Mobility Plan (SUMP) and non-motorized transport measures (i.e., implementation of 25km of temporary bicycle lines). This SUMP is key in the efforts of local governments to transform their mobility by implementing sustainable and safe transport and mobility solutions. To develop this SUMP, the local government, represented by the Provincial Municipality, received technical assistance from the German development cooperation, which GIZ implemented.

The Ministry of Transport and Communications (MTC), through the National Program for Sustainable Urban Mobility (Promovilidad), seeks to develop integrated transport systems in cities other than the Peruvian capital. To achieve this, Promovilidad offers technical assistance to local governments. Systems and procedures are partially in place to monitor, evaluate and report on urban transport.

Trujillo Provincial Municipality (MPT for its Spanish initials), the local counterpart, possesses entities that are specialised in urban transport and urban mobility within its institutional structure, such as Transportes Metropolitanos de Trujillo (TMT), the planning organisation of urban transport in the metropolitan area of the city, and the Transport, Transit and Road Safety General Office (GTTSV for its Spanish initials) the cargo and passenger transport regulatory and supervisory area). In addition, the Municipality created the Sustainable Urban Mobility Committee (COMUS for its Spanish acronym) in 2018, a participatory coordination space chaired by the mayor and formed by representatives of institutions and relevant local stakeholders.

Due to its administrative competencies, the MPT manages the implementation of investment projects and all measures that contribute to improving public transport services and ensuring sustainable urban mobility for the population. Although they do not have significant funding, they are implementing a network of temporary bicycle lanes through an agreement with MTC for 500,000 EUR. In addition, the MPT authorises and supervises the current transport service with its resources. Through cooperation agreements between MTC and international institutions, it has been possible to finance essential studies, such as the one carried out for the proposal of the north-south road corridor, financed by funds from the German Cooperation through KfW.

Optimising traffic flow and implementing an integrated and efficient public transportation system are key elements in mitigating greenhouse gas (GHG) emissions. It also reduces transport costs and improves the quality of life in urban areas. Based on this context, the Peruvian government has developed the NAMA TRANSPerú, which consists of a series of measures to transform the urban transport sector. One of the areas prioritised as part of this matrix highlights the need to support local governments in improving the transport sector.

Trujillo's SUMP 2020 - 2030 aims to improve urban mobility conditions in the city, prioritising the use of public transport and non-motorized modes while enhancing the quality of life of its inhabitants. Therefore, Trujillo's SUMP is perfectly aligned with MTC's urban transport sector strategy, represented by the National Urban Transport Policy and the National Program for Sustainable Urban Mobility. Likewise, this local planning instrument promotes modes of travel with less environmental impact, an integrated, multimodal, low-carbon, and efficient public transportation system, accessibility, and social equity. These are the new challenges that the MPT is taking on and has already implemented in the city.

Technical assistance contributes to institutional development by:

- Strengthening the skills of the MPT's technical teams for mobility and urban transport measures management.
 This has allowed the installation of new institutional capacities, which will improve public transport services' management processes.
- Redesigning the institutional structure, establishing areas, functions, and responsibilities for promoting and managing the city's urban mobility with a focus on sustainability and gender equality.
- Establishing coordination models between national and local public agencies within the transport sector and local coordination spaces between relevant stakeholders in the city, such as the aforementioned COMUS.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: German Federal Ministry for Economic Cooperation and Development (BMZ)

Funding amount: EUR 1,215,000⁷⁶

Implemented by: GIZ through the Sustainable Urban Mobility in Secondary Cities in Peru (DKTI)

The total funding amount of the technical assistance is EUR 7,300,000. However, the DKTI programme supports six cities in Peru. This number assumes an even allocation of funds among Trujillo, Arequipa, Piura, Cusco, Huamanga and Chiclayo.

Local counterpart: Ministry of Transport and Communications (MTC), through the National Program for Sustainable Urban Mobility (Promovilidad), and selected local governments

Supported activities:

- Establishment and strengthening of the National Program for Sustainable Urban Mobility (locally known as Promovilidad) through support for MTC
- Establishment of coordination mechanisms at city level (e.g., stakeholder dialogue) and with local governments and ministries
- Strengthening urban planning and implementation capacity of local governments
- Promotion of exchanges on innovative technologies, methods, and financing mechanisms

Status of SUMP development

Project start: 2017

Project completion: 2022 Q2

Completed outputs:

- Coordination between actors at the national and sub-national levels in the planning and implementation of investment measures and projects has improved.
- Improved coordination mechanisms within cities and between local governments and ministries.
- Increased cities' capacity to implement measures: municipalities apply technical and institutional capacities in the planning and implementation of sustainable urban mobility measures.
- Innovative technology, methods, and financial mechanisms: Transport managers and planners are aware of proven innovative technologies, processes, and financing concepts for sustainable mobility.

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Sub-programme for universal accessibility and elimination of architectural barriers at intersections in Trujillo's historical city centre Programme for the maintenance, improvement, and enlargement of the walking surface of Trujillo's metropolitan area Sub-programme for the implementation of a core network of bicycle paths. EUR 1,267,787.80 EUR 2,157,703.36 Final phase structuring of the North-South Core Corridor project in the framework of the Integrated Public Transport System Implementation and operation of the Integrated Public Transport System with a final route regulation plan. EUR 86,178,645.76 Network of Integrated Public Transport System bus stops on feeder corridors. EUR 14,109,206.86 Integral sub-programme for the optimisation and extension of the traffic light network in the metropolitan area EUR 6,270,758.60 Tbillisi Bus Transit (TBT) USD 63,365,561 Better Buses and Minibuses USD 126,487,010 Urban Freight Policy	Measure	Cost Estimate ⁷⁷
metropolitan area Sub-programme for the implementation of a core network of bicycle paths. EUR 2,157,703.36 Final phase structuring of the North-South Core Corridor project in the framework of the Integrated Public Transport System Implementation and operation of the Integrated Public Transport System with a final route regulation plan. EUR 86,178,645.76 Network of Integrated Public Transport System bus stops on feeder corridors. EUR 14,109,206.86 Integral sub-programme for the optimisation and extension of the traffic light network in the metropolitan area EUR 6,270,758.60 Tbillisi Bus Transit (TBT) Better Buses and Minibuses USD 126,487,010		EUR 509,499.14
Final phase structuring of the North-South Core Corridor project in the framework of the Integrated Public Transport System Implementation and operation of the Integrated Public Transport System with a final route regulation plan. EUR 86,178,645.76 Network of Integrated Public Transport System bus stops on feeder corridors. EUR 14,109,206.86 Integral sub-programme for the optimisation and extension of the traffic light network in the metropolitan area EUR 6,270,758.60 Tbillisi Bus Transit (TBT) USD 63,365,561 USD 126,487,010		EUR 1,267,787.80
Transport System Implementation and operation of the Integrated Public Transport System with a final route regulation plan. EUR 86,178,645.76 Network of Integrated Public Transport System bus stops on feeder corridors. EUR 14,109,206.86 Integral sub-programme for the optimisation and extension of the traffic light network in the metropolitan area EUR 6,270,758.60 USD 63,365,561 Better Buses and Minibuses USD 126,487,010	Sub-programme for the implementation of a core network of bicycle paths.	EUR 2,157,703.36
Network of Integrated Public Transport System bus stops on feeder corridors. EUR 14,109,206.86 Integral sub-programme for the optimisation and extension of the traffic light network in the metropolitan area EUR 6,270,758.60 USD 63,365,561 Better Buses and Minibuses USD 126,487,010		EUR 7,037,296.13
Integral sub-programme for the optimisation and extension of the traffic light network in the metropolitan area Tbilisi Bus Transit (TBT) Better Buses and Minibuses EUR 6,270,758.60 USD 63,365,561 USD 126,487,010	Implementation and operation of the Integrated Public Transport System with a final route regulation plan.	EUR 86,178,645.76
Tbilisi Bus Transit (TBT) Better Buses and Minibuses USD 63,365,561 USD 126,487,010	Network of Integrated Public Transport System bus stops on feeder corridors.	EUR 14,109,206.86
Better Buses and Minibuses USD 126,487,010	Integral sub-programme for the optimisation and extension of the traffic light network in the metropolitan area	EUR 6,270,758.60
	Tbilisi Bus Transit (TBT)	USD 63,365,561
Urban Freight Policy USD 572,600	Better Buses and Minibuses	USD 126,487,010
	Urban Freight Policy	USD 572,600

⁷⁷ Trujillo's SUMP was originally budgeted in PEN. For this factsheet the costs were converted into EUR using InforEuro currency exchange rate. At the time of the conversion, 1 EUR = 4.516 PEN. This applies to all EUR amounts in the document.

Finance leverage

Financing resulting from the SUMP	Source	Amount
Implementation of sustainable non-motorized transport systems (pop-up cycle lanes).	Ministry of Transport and Communications (MTC)	EUR 404,532.27
Investment project: construction of north-south corridor and complementary roads ⁷⁸	KFW	EUR 60,000,000
	CAF	EUR 30,000,000
	Ministry of Transport - Domestic Funding	EUR 20,000,000

Associated financing supporting measures in the SUMP	Source	Amount
Pilot project "Promotion of public space recovery and non-motorized transport - Muévete Trujillo, Trujillo, Peru".	TUMI	EUR 73,660.88

Projected impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2017	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual transport-related GHG emissions (Mt CO_2eq)	-423,36 t CO₂eq	376,677 t CO₂eq	767, 487 Tn de CO2 t CO2eq	355,132 t CO₂eq
Annual transport-related GHG emissions per capita $(kg\ CO_2eq)^{79}$	-387 kg CO₂eq / capita -54%	354 kg CO₂eq / capita	721 kg CO₂eq / capita	334 kg CO₂eq / capita
Air pollution Decrease in mean urban air pollution of particulate matter (in µg PM10) at road-based monitoring stations	Impact not quantified	59.67 μg/m³ of PM10	Impact not quantified	Impact not quantified
	Public transport: +17.4%	Public transport: 31.2%	Public transport: 27.6%	Public transport: 45%
	Walking: +11 %	Walking: 18.4%	Walking: 14%	Walking: 25 %
	Cycling: +3.2 %	Cycling: 1.1%	Cycling: 0.8 %	Cycling: 4 %
Modal share Increase of the modal shares of trips by public	Private cars: -3.7 %	Private cars: 15.5%	Private cars: 18.7 %	Private cars: 11 %
transport, walking and cycling, in the SUMP scenario compared to the BAU scenario	Taxis: -14.3%	Taxis: 25.4%	Taxis: 29.3%	Taxis: 15 %
	Collective cabs: -9.6%	Collective cabs: 8.4%	Collective cabs: 9.6 %	Collective cabs: 00 %
	%	%	%	%
	TOTAL: +22%	TOTAL: 58%	TOTAL: 52%	TOTAL: 74%
Road safety Decrease in traffic fatalities in the urban area per 100.000 inhabitants	-4.4 fatalities / 100 000 hab	7.3 fatalities / 100 000 hab	9.9 fatalities / 100 000 hab	5 fatalities / 100 000 hab

 $^{^{71} \, \}text{https://www.gob.pe/institucion/mtc/noticias/1030803-mtc-coordina-avances-de-proyectos-de-inversion-en-transporte-urbano-para-trujillo-y-otras-ciudades$

⁷⁹ Calculation made by MobiliseYourCity Secretariat based on SUMP deliverables.

Insights from practice: lessons learned from the technical assistance

Communication products helped to make the SUMP more approachable for citizens and raise awareness of sustainable mobility

During the first quarter of the year, communication strategies were implemented to improve the understanding of the plan among the most significant number of civil society stakeholders. Given the context of the pandemic, digital media and social networks were used to make the SUMP more understandable; digital documents were produced with key messages and short videos explaining the importance of having a clear vision of the city with a focus on sustainable mobility and urban transport, the need for this type of planning instrument and its benefits on the creation of a city on a human scale and with environmental commitment.

A series of awareness-raising workshops followed these communication actions to clear up doubts about the SUMP and clarify its content and proposals. Local representatives and several citizens participated in each workshop held by local authorities. The last seminar of the series gathered representatives from central government institutions, such as the Ministry of Transport and Communications (MTC), the Ministry of Housing, Construction and Sanitation (MVCS), and regional and local authorities.

Urban mobility planning with a participatory approach allows ownership and engagement.

As the SUMP planning cycle contains different actions and steps to be undertaken during the SUMP formulation, there is a need to conceive a strategy for participation and communication so the interests of the diverse stakeholders are considered in the early stages of the project. Participation and effective communication enable the adequate convergence of objectives regarding urban mobility when formulating the SUMP. The trust built, and the constant dialogue between public authorities and citizens contribute to consolidating further phases, such as implementation.

Specifically, Trujillo's experience formulated a guideline for strategic communication and citizenship participation during the design and implementation of SUMPs in Peru. This guideline proposes orienting principles to facilitate the SUMP planning and implementation processes beyond mere diffusion and dissemination campaigns or regular one-direction presentations. The viability and success of the SUMP depend on how much its evolution is related to citizenship demands and perspectives.

Perspectives for SUMP Implementation

Implementation of the adopted SUMP has started through interinstitutional coordination bodies.

Trujillo's SUMP focuses on the city's metropolitan area and has a time frame until 2030 for its implementation. After the City Council approved it in April 2021, Trujillo became the first Peruvian city to develop and institutionalise a SUMP.

Transportes Metropolitanos de Trujillo (TMT) is currently responsible for the COMUS' Technical Management Unit, in which three other municipality areas participate. This Unit is responsible for organising and overseeing the progressive implementation of the SUMP. Therefore, it oversees seeking funding through national government entities such as the Ministry of Economy and Finance (MEF), the Ministry of Transport and Communications (MTC), the Ministry of Housing, Construction and Sanitation (MVCS), the Ministry of Environment (MINAM); and at the local level through the Regional Government of La Libertad as well as public, private and cooperation organisations. The implementation process started by establishing a roadmap, mapping critical actions and measures, and clarifying responsibilities to monitor progress within the technical team to ensure orderly and prioritised progress in the SUMPUMP.

There is still a long road ahead in terms of implementation. Still, Trujillo's Municipality and TMT are committed to facing the challenges on the road to transforming their mobility, such as raising the required amounts (both from public and private funds) to achieve the SUMP's goal fully.

Highlights in the past year

Trujillo will be the first city to implement a bus scrapping programme with the support and technical assistance from KfW.80

An international tender process was launched in September 2024 for project preparation for the BRT North-South corridor.81

 $[\]textcolor{red}{^{\$0}} \, \underline{\text{https://www.gob.pe/institucion/tmt/noticias/1031090-trujillo-sera-la-primera-ciudad-en-implementar-un-programa-de-chatarreo} \\$

^{*†} https://www.gob.pe/institucion/promovilidad/noticias/1037724-mtc-lanza-convocatoria-internacional-para-elaborar-estudio-de-corredor-norte-sur-en-trujillo

Uruguay

Status of the project: Completed National Urban Mobility Policy

Partner country



Basic Information

Population: 3,499,451 (2023) | Growth rate: 0,35%

Percentage of urban population: 96.1%

GDP per capita: USD 17,277

Percentage of population living below the national poverty

line: 8.1%

Annual average infrastructure expenditures as a percent

of GDP: 5,9%

Nationally Determined Contribution (NDC): Unquantified

transport-related NDC

National GHG emissions per capita: 1.90 (tCO₂eq) Proportion of transport-related GHG emissions: 41%

Exposure to climate change: MEDIUM

Context

Uruguay has a high urbanisation rate, with 95% of its population living in cities and a continued migration trend from rural areas to urban centres. Urban expansion occurs at low densities, with half of the population concentrated in Montevideo's metropolitan area. Other cities are significantly smaller, with few exceeding 100,000 inhabitants.

While Uruguay has high access rates to public services such as water and electricity, urban growth has often been unplanned, leading to settlements with inadequate public transport infrastructure. As a result, transport systems are inefficient, costly, and of low quality. Many residents, including those from low-income sectors, have shifted to motorcycles or private vehicles. Economic growth has further fueled a rise in private vehicle ownership, reducing public transport demand and worsening congestion, air pollution, and noise in cities like Montevideo.

Due to the small size of most Uruguayan cities, public transport is often unviable at scale and, in some cases, nonexistent. This increases reliance on private vehicles, creating mobility barriers for those who cannot afford a motorcycle or car.

The public transport sector is highly regulated, with Departmental Governments (GGDD) responsible for granting public transport services and establishing the requirements for corridors and units, e.g. buses and taxis. Electric mobility has been promoted jointly through the Working Group on Energy Efficiency in Transport, led by the Ministry of Industry, Energy and Mining (MIEM) with the participation of the Ministry of Transport and Public Construction (MTOP), the Ministry of Economy and Finance (MEF), the Ministry of Housing and Territorial Planning (MVOT) and the Ministry of the Environment (MA), the national public electricity company (UTE), and the Departmental Government of Montevideo (IM).

Private and social groups engaged in urban mobility include business sectors and civil society, such as bicycle user groups. Public transport companies and taxi drivers collaborate with departmental governments and urban mobility ministries. In recent years, business groups have been key in advancing electric mobility in Uruguay. Various stakeholders have contributed to promoting instruments, training, regulatory awareness, and discussions on the benefits and challenges of electric mobility implementation.

Transport accounts for nearly half of Uruguay's energy-related GHG emissions. Urban electric mobility can maximise the benefits of the country's low-carbon electricity matrix. Transforming the transport sector can reduce carbon footprint while providing co-benefits such as lower air and noise pollution. Given that GGDD is the leading authority for urban transport, with autonomy from the national level, policy processes involve strong participation through vertical and horizontal governance structures.

Aligned with MobiliseYourCity's framework for National Urban Mobility Policies (NUMP), this technical assistance takes a holistic approach to NUMP formulation. The NUMP in Uruguay aims to enhance access to urban centres through sustainable transport alternatives. Following a "ready-to-implement" approach, the technical assistance has supported policy design, implementation instruments (guides), financing mechanisms for specific measures, and a capacity-building roadmap. It has also facilitated strategic planning, concept design exchanges, workshops, and meetings while providing detailed insights into transport-oriented city planning, e-mobility solutions, and financing mechanisms.

Support from the Partnership

Technical Assistance: National Urban Mobility Policy or Program (NUMP)

Type of NUMP: Policy NUMP

Funded by: European Commission

Funding amount: EUR 1,000,000

Implemented by: GIZ through the EUROCLIMA+ Program

Local counterpart: Ministry of Industry, Energy and Mining (MIEM); National Energy Directorate; Climate Change Division of the Ministry of Housing, Territorial Planning and Environment

The primary purpose of the NUMP

Objectives: The project aims to strengthen capacities in planning sustainable urban mobility and to lay the foundations for a national program to promote electric urban mobility that includes the development of technical, regulatory, and financial mechanisms.

Supported activities:

- Incorporation of e-mobility into territorial planning instruments
- Development of standards and regulations for new technologies
- Development of financial tools to promote and accelerate public and private investment for vehicle fleet electrification
- Capacity building and institutional strengthening for public and private actors to facilitate vehicle electrification

Status of implementation

Project start: 2018 Q2

Expected project completion: Not defined

Completed outputs:

- National Sustainable Urban Mobility Planning Guide
- National e-mobility guide
- Draft of the National Sustainable Mobility Policy
- A participatory process with national and subnational stakeholders
- 5 Cities have been supported to move towards sustainable mobility

- Capacity building diagnosis and recommendations for a cross-cutting educational system. A capacity development
 program on designing Mobility Plans at the city level was agreed upon with the University of Buenos Aires (UBA)
 and 12 practitioners from 6 cities. 0202 The program consists of an 8-week self-learning program to be monitored
 by the UBA online.
- Roadmap for the dissemination of policy and its implementation instruments. The GTP (Project Working Group, for
 its acronym in Spanish) decided to strengthen institutional capacity by creating a Multisectoral Sustainable Mobility
 Commission (CIMS). This commission will be piloted with support from Country-Dialogue (a new methodological
 cooperation format financed by the EUROCLIMA Programme).
- National Policy document.

Next expected outputs

- E-mobility solutions guide
- Cost estimation of the policy implementation. The cost will be estimated after pilot implementation in six cities in the design phase, with support from the country dialogue of EUROCLIMA's new phase.

Core impact indicators baselines

Indicator	Baseline - 2020
Total annual transport-related GHG emissions (Mt CO2eq)	4,09 Mt CO ₂ eq ⁸²
Annual transport-related GHG emissions per capita (kg CO2eq)	1,170 kg CO₂eq / capita
Air pollution Mean urban air pollution of particulate matter (in μg PM _{2.5}) at road-based monitoring stations (Montevideo)	10 μg/m³ of PM _{2.5} ^{g3}
Road safety Annual traffic fatalities in the urban area per 100,000 inhabitants	12,06 fatalities ⁸⁴ / 100,000 hab

Perspectives for implementation

The GTP is responsible for advocating for successful NUMP implementation in Uruguay

The GTP has the technical responsibility to develop the NUMP to be adopted at the political level. Its way of working is a replica of the Working Group on Energy Efficiency in Transport, an essential promoter of electric mobility in Uruguay that the Ministry of Industry, Energy and Mining (MIEM) chaired. The GTP has representatives from the environmental, transport, economy, territorial planning ministries, the national public company for electric mobility (UTE) and the Departmental Municipality of Montevideo (IM).

Inspired by these years of joint work building the NUMP, they proposed the creation of the Inter-institutional Commission for Sustainable Mobility (CIMS). This commission will lead the implementation of the NUMP and fill the gap between the national and city levels.

⁸² https://catalogodatos.gub.uy/dataset/miem-emisiones-de-co2-por-sector

⁸³ https://montevideo.gub.uy/sites/default/files/biblioteca/informeanual2023.pdf

⁴ https://www.gub.uy/unidad-nacional-seguridad-vial/comunicacion/noticias/informe-datos-siniestralidad-vial-del-ano-2023

Insights from practice: lessons learned from the NUMP process

Although costly and time-consuming, participation enhances NUMP development.

While the need to consider the perspectives of each stakeholder group slowed down the policy development process, including diverse vantage points improved the setting of objectives and allocating responsibilities.

In this context, communication is critical. We advise implementing a dialogue process that engages stakeholders. The input provided by stakeholders should be integrated into an iterative process. We harness the cooperation of stakeholders committed to the policy's implementation, which is one of the most valuable outcomes of the policy process.

Vertical coordination is crucial to effectively meeting local institutions' needs for sustainable urban mobility.

Vertical coordination is crucial for involving stakeholders and ensuring the viability and implementation of the policy. It is essential to carry out this process in several steps to recognise challenges and identify solutions. For example, municipal representatives must tailor their ambitions accordingly if the national government promotes sustainable mobility without providing resources to meet stated goals.

NUMP implementation foresees additional support documents and an adequate governance framework.

The institutional complexity of Uruguay has required an additional effort in coordination. The NUMP implementation transcends the policy document and entails the creation of a National Commission for Sustainable Mobility (CIMS as its acronym in Spanish), the <u>Sustainable Mobility Planning Guide</u>, the <u>E-mobility Guide</u>, a Financing Mechanism, and other actions. A national law will frame Uruguay's NUMP, and the CIMS will lead the enacting of the law. After its adoption, the CIMS is expected to lead and coordinate the process for cities to formulate their Sustainable Urban Mobility Plans. Among other responsibilities, the CIMS will regulate access to funds and coordinate local capacity-building.

Sustainable urban mobility planning tools must be adapted to the local context.

Introducing the "ready-to-implement" policy aspect required work time alongside the counterpart to agree on a format tailored to the national regulatory framework. This "ready-to-implement" methodology came late, and its inclusion into the ongoing process created some friction. However, the counterpart kept a holistic perspective, which is crucial to refining the covered aspects. The early engagement of cities was essential to know their challenges and needs for implementation. This process strengthened momentum and commitment from the stakeholders' ecosystem. The methodology provided flexibility to cover sustainable urban mobility planning aspects at the national level while giving room for specific country needs and identity.

2022 was a year for consolidation of a vivid and complex process to reach the NUMP adoption.

The adopted strategy for promoting municipal engagement with the national vision was to provide cities with a solid knowledge base for change. Two guidebooks for municipal authorities now accompany the National Urban Mobility Policy. Specifically, the mobility planning guide supports strategy development at the city level and includes measures and recommendations to consider when planning a sustainable multimodal mobility system. Cities also received an e-mobility guide that offers solutions and highlights aspects to consider when building an e-mobility system at the city level.

There is a lack of commitment and coordination among the ministries involved in policy approval.

The approval and publication of the policy require an interministerial resolution. This must be an agreement between the Ministry of Industry, Energy and Mining (MIEM), the Ministry of Transport and Public Construction (MTOP), the Ministry of Economy and Finance (MEF), and the Ministry of Housing and Territorial Planning (MVOT). Not all ministries are interested and willing to participate in this agreement. A needed strategy to coordinate and bring together the interests of these ministries to reach an agreement is currently being developed.

Highlights in the past year

Invitation to participate: advancing adoption.

In 2024, the National Sustainable Urban Mobility Policy (NUMP) was opened for public consultation as part of the National Sectoral Program for Territorial Planning and Sustainable Development. This marks a significant step toward its approval and future implementation.

Paraguay

Status of the project: Ongoing National Urban Mobility Policy

Partner country



Basic Information

Population: 6,109,903 | Growth rate: 3.7% (projection 2022)

Percent of urban population: 68.98% (2022)

GDP per capita: USD \$ 4 949 (2020)

Percentage of the population living below the national

poverty line: 23.5%

Annual average infrastructure expenditures as a per cent of

GDP: 2.25%

Nationally Determined Contribution (NDC): no mobility/

transport-related NDC

National GHG emissions per capita: 8.77 (tCO₂eq)(2019)85

Proportion of transport-related GHG emissions: 20%

 $(2019)^{86}$

Climate change risk: Very Low

Context

Paraguay is a landlocked country in South America, bordered by Brazil to the east, Argentina to the south and west, and Bolivia to the north. Paraguay has 6.1 million inhabitants; Asunción is the capital and largest city with 522,000 inhabitants. The official languages are Guarani and Spanish. Paraguay has an economy characterised by a large informal sector. Since the beginning of 2000, Paraguay has experienced a substantial poverty reduction and shared prosperity. Paraguay is the fifth largest soybean producer in the world. Since 2014, the Paraguayan economy has grown at an average annual rate of 4% due to strong soybean production and high world prices, at a time when other countries in the region have contracted. The country faces essential challenges to sustain and expand its social achievements. Most of the rural population depends on family farming, which places them at a higher risk of poverty. There has been a migration process from rural areas to the country's urban centres in search of better education and employment opportunities.

As a landlocked state, Paraguay depends on its transport and logistics infrastructure, which connects it to regional markets and international seaports. River transport is concentrated on the Paraguay River, where 60% of the country's foreign trade transits. Paraguay's railway system consisted mainly of a 376 km standard gauge main line. All rail traffic has been suspended, except for weekly tourist steam trains and short cross-border freight trains with Argentina. The bus network serves public passenger transport. The urban transport network is extensive and has relatively good population coverage. Cargo transportation is covered by trucks, trailers and other diesel fuel-consuming modes.

Regarding the vehicle fleet size, data from the Directorate of the Registry of Motor Vehicles shows that vehicles have increased by more than 30% in 5 years to 2,684,358 in 2021, leading to a motorisation rate of 439 cars per 1,000

MADES-DNCC/PNUD-FMAM. 2024. Informe del Inventario Nacional de Gases de Efecto Invernadero de Paraguay, serie 1990-2019. Proyecto CCNelBA3. Asunción, Py. 645. https://unfccc.int/sites/default/files/resource/IIN_INGEI1990-2019_PARAGUAY_vf%5B1%5D.pdf

MADES-DNCC/PNUD-FMAM. 2024. Informe del Inventario Nacional de Gases de Efecto Invernadero de Paraguay, serie 1990-2019. Proyecto CCNelBA3. Asunción, Py. 645. https://unfccc.int/sites/default/files/resource/IIN_INGEI1990-2019_PARAGUAY_vf%5B1%5D.pdf

inhabitants. This vehicle fleet growth is related to increased GDP per capita, urbanisation and population growth. Another characteristic of the Paraguayan automotive sector is the second-hand used vehicle imports part of the automotive fleet. The transportation sector is the largest consumer of petroleum products in Paraguay. Sectoral consumption doubled between 2007 and 2017. Regarding the fuel used, about 71% is Diesel. Both gasoline and diesel fuels must be mixed; the first is ethanol, and the second is biofuels. Gasoline prices are among the highest in Latin America.

Paraguay is the largest generator of hydroelectric power per capita in the world, and 20% of its electricity generation is destined for internal consumption. Electricity fares are among the lowest in the region. Almost 100% of oil products are imported, explaining the high costs. For these reasons, Paraguay has a very high potential for electric mobility. Public transport has a strategic potential to spearhead electric mobility through electric buses. This project prioritises electric mobility in multimodal urban public transport on the Paraguayan political agenda. The project's main product was the consolidation of a Master Plan for Urban, Electric and Multimodal Public Transport that incorporates all actions related to electromobility in the transport sector, including public passengers and cargo transport. Training activities will strengthen the development of the plan, the involvement of non-state actors, regional exchange, and the identification and management of appropriate financial resources for its implementation.

Support from the Partnership

Technical Assistance: National Urban Mobility Policy or Program (NUMP)

Type of NUMP: Policy NUMP

Funded by: European Commission

Funding amount: EUR 300,000

Implemented by: GIZ through the EUROCLIMA+ Program

Local counterpart: Ministerio de Obras Públicas y Comunicaciones – Viceministerio de Transporte (MOPC VMT); Ministerio del Ambiente y Desarrollo Sostenible (MADES).

The primary purpose of the NUMP

- Promoting electric mobility in multimodal urban public transport in Paraguay to reduce GHG and achieve Nationally Determined Contributions (NDCs).
- Prioritisation of electric mobility in multimodal urban public transport in the Paraguayan political agenda.

Supported activities:

- Develop a Master Plan for Urban, Electric and Multimodal Public Transport and a Monitoring, Reporting and Verification (MRV) scheme.
- Strengthen public sector capacities for implementing electric transport systems and establish regional cooperation.
- Involve non-state actors in implementing electric transport systems promoted by the Master Plan.
- Identify strategic electric mobility pilot projects and potential funding sources.

Status of implementation

Project start date: 2021 Q3

NUMP completion date: 2023 Q4

Completed outputs:

- Development and validation of the EC+ project concept
- · Pre-study in preparation for the NUMP
- · Recruitment of consultancy for the elaboration of the NUMP
- Master Plan for Urban, Electric and Multimodal Public Transport and Logistics
- Monitoring, Reporting and Verification Scheme (MRV)
- Capacity development and training courses with local counterparts
- Information and awareness campaign on sustainable urban mobility and electrification of transport, including implementation of a website platform
- Roadmap for the implementation of strategic pilot projects

Finance leverage

Description	Source of financing	Secured	Amount
Grant TASK Centre	South Korea ODA	Secured	EUR 15,000,000

Core impact indicators baselines

Indicator	Baseline - 2019
Total annual transport-related GHG emissions (Mt CO2eq)	7.13 Mt CO ₂ eq
Annual transport-related GHG emissions per capita (kg CO2eq)	1,166 kg CO₂eq / capita
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	10 μg/m³ of PM _{2.5}
Road safety Annual traffic fatalities in the urban area per 100,000 inhabitants	21 fatalities / 100,000 hab

Insights from practice: lessons learned from the NUMP process

Paraguay has a unique opportunity to lead electric mobility in the region.

The NUMP is an unprecedented national effort developed through participatory workshops with high-level representatives and technical experts from key institutions, ensuring comprehensive feedback and validation of its commitments.

With abundant renewable energy from its major hydropower plants, Itaipú and Yacyretá, Paraguay has a unique opportunity to lead the region in electric mobility, aiming to become a benchmark in Latin America by 2040.

Highlights in the past year

Paraguay strengthens urban mobility with new technical assistance from Korea.

In 2024, the Paraguayan Congress approved a memorandum of understanding for creating the TASK Centre, a joint initiative with South Korea to develop the automotive industry—particularly auto parts manufacturing—and a pilot electric mobility plan.

South Korea will contribute \$15–18 million in non-reimbursable development assistance for advanced equipment and expert deployment in key areas like automotive production, technical education, and electric mobility. At the same time, Paraguay will provide infrastructure and cover operational costs as part of its 2030 National Development Plan.

Peru

Partner country

Status of the project: Ongoing implementation support



Basic Information

Population: 31,989,256 | Growth rate: 1.7%

Percent of urban population: 77.9%

GDP per capita: USD \$ 6,941

Percentage of the population living below the national

poverty lines: 20.5%

Nationally Determined Contribution (NDC): Quantified

transport / mobility related NDCNational

GHG emissions per capita: 2.052 tons per capita

Proportion of transport related GHG emissions: 12%

Exposure to climate change: HIGH

Context

Peru, located on South America's Pacific coast, has a highly concentrated urban population in its capital and largest city, Lima, while the rest of the country has very few urban centres with over one million inhabitants. This imbalance hinders the equitable distribution of wealth and creates dependency, as socio-economic, political, and social dynamics in Lima often set a precedent that is replicated across other regions.

Peru has a complex administrative system, established by the central government, consisting of three divisions: department, province, and district. Each has clear jurisdiction and autonomy over various government responsibilities, but this structure often leads to uncoordination, overlapping responsibilities, and competition for investment and national support. These challenges create difficulties in territorial development planning and control, ultimately hindering cities' ability to effectively manage issues such as territorial organisation, water resources, solid waste, and urban mobility.

According to the 2019 Household Survey (ENAHO), 72.7% of the economically active population (EAP) in Peru is employed informally, which accounts for about two-thirds of the total EAP (INEI, 2020). Despite labour flexibilization policies such as the reduction of severance pay, the promotion of part-time contracts in the 1990s, and the creation of simplified regimes to lower the costs and bureaucratic hurdles for formalisation in the 2000s, informality continues to rise in the country.

The population dynamics in Peru have shown a clear trend of urbanization, with a significant shift away from rural areas. Currently, 32% of the country's population resides in the Lima-Callao metropolitan area. When including the next ten largest cities—Arequipa, Trujillo, Chiclayo, Iquitos, Piura, Cusco, Chimbote, Huancayo, Pucallpa, and Tacna—this percentage rises to 47% of the total population. This rapid urban growth has worsened urban transportation issues, including poor-quality urban transport services, a poorly structured and very fragmented public transportation systems, and the proliferation of unsustainable modes of transport, such as an increase in private car ownership, taxis, and moto taxis. These factors have led to severe congestion, high accident rates, and elevated levels of greenhouse gas (GHG) emissions and other pollutants, which result in significant social costs.

Although urban public transport is the primary mode of travel—given the country's low vehicle ownership rate—it faces significant challenges. The system is plagued by low traffic speeds, unreliable service, an aging and poorly maintained fleet, a lack of intermodality and integration in between services and modes, and inefficient route planning, with overlapping and excessively long routes. Additionally, informal service operations, a reliance on low-capacity vehicles, widespread disregard for traffic regulations, and a lack of effective control mechanisms further contribute to its poor quality.

Although the Organic Law of Municipalities (Law No. 27867) grants provincial municipalities exclusive authority to regulate urban and interurban transport within their jurisdiction (Article 81), local governments in Peru often face significant institutional weaknesses and limited investment capacity. To address this, the Ministry of Transport and Communications (MTC) created Promovilidad to support local governments in implementing the four priority objectives of the National Urban Transportation Policy (Peru NUMP)⁸⁷. Additionally, in recent years, various national programmes under the Ministry of Housing, Construction, and Sanitation (MVCS) have been established to provide technical assistance to local governments in urban planning, public space investment, and related areas⁸⁸.

Supreme Decree No. 012-2019-MTC, issued on April 9, 2019, approved the National Urban Transportation Policy (PNTU) to address the challenges of mobility for people and goods in urban areas. The policy sets a roadmap toward 2030 with four key objectives: (i) establishing efficient public urban transportation systems, (ii) improving governance in urban transport, (iii) developing transport services with appropriate infrastructure, and (iv) ensuring that urban transport meets the population's needs in alignment with urban development.

To achieve these objectives, the policy outlines fourteen guidelines and thirteen key services, all aimed at creating urban transportation systems that are safe, reliable, inclusive, accessible, high-quality, well-coordinated, and financially, economically, and environmentally sustainable. The ultimate goal is to significantly improve urban mobility by reducing daily travel time by at least 30%, lowering traffic-related fatalities to five per 100,000 inhabitants, and cutting greenhouse gas emissions by 20%.

A key challenge of the current PNTU is that it cannot be considered a fully comprehensive Sustainable Urban Mobility Policy, as it prioritises certain aspects over others. While it acknowledges various elements of sustainable mobility, its focus—reflected in the priority order of components and the existing impact assessment indicators—leans heavily toward urban public transport, and sometimes counterproductively in the undiscriminated betterment of transit conditions. As a result, other crucial aspects, such as non-motorized transport and travel demand management, receive less attention and development.

Support from the Partnership: Implementation Support

Project description

Technical Assistance: Support for Promovilidad (FEXTE)

Funded by: AFD through the Fund for Technical Expertise and Experience Transfers (FEXTE)

Funding amount: EUR 800,000

Implemented by: CODATU

Local counterpart: Promovilidad - (National Program of Urban Sustainable Transportation, under the Peruvian Ministry of

Transport and Communications)

The German Government (BMZ) supported Peru to develop its NUMP through the project "Peru – Sustainable Urban Transport" – also known as TRANSPerú. Visit https://mitigation-action.org/projects/peru-sustainable-urban-transport/ to find out more.

^{**} The two ministries have been competing for authority over urban mobility, as evidenced by the National System of Multiannual Programming and Investment Management (Invierte. Pe), which divides responsibilities for Sustainable Urban Mobility services. Under this system:

[•] The Ministry of Transport and Communications (MTC) oversees services such as the Corridor Transport System, Cable Transport System, and Railway Transport System.

[•] The Ministry of Housing, Construction, and Sanitation (MVCS) is responsible for a "Sustainable Urban Mobility" service. However, in practice, this service covers only a limited range of urban mobility-related actions, primarily focusing on creating, improving, or rehabilitating roads and sidewalks in urban areas.

Supported activities:

- Capacity building and exchange of experience on mass transport technologies, interoperability, fare integration and single ticketing, gender issues in transport, active modes and institutional coordination.
- Technical assistance and support in drawing up and supervising opportunity or feasibility studies for Integrated Transport Systems (ITS) in priority cities.

Status of the project implementation

Project start: 2022

Expected project completion: 2026

Completed Outputs:

- Capacity-building and exchange of expertise activities
- First National Forum on Safe and Sustainable Urban Mobility (FONAMUSS 2023) Organised to promote dialogue and collaboration on urban mobility.
- Study trip to Colombia A Peruvian delegation visited Bogotá and Medellín to observe best practices in urban mobility.
- Urban mobility training cycle Conducted using MobiliseYourCity training materials to build local capacity.
- Four macro-regional workshops Focused on urban mobility planning to engage stakeholders across different regions.
- Conferences and webinars Organised and participated in events to share knowledge and experiences on urban mobility.
- · Technical assistance activities
- Assessment of transport reform in Arequipa Analysis of progress toward an integrated transport system.
- Drafting and reviewing Terms of Reference for a feasibility study on public transport corridors in three Peruvian cities (to be financed by EU LAIF funds): Piura, Huamanga and Juliaca.
- Drafting and reviewing Terms of Reference for Sustainable Urban Mobility Plans (SUMPs) in four Peruvian cities (to be financed by EU LAIF funds): Juliaca, Chiclayo, Chimbote-Nuevo Chimbote, Huancayo.
- Development of a strategic institutional plan for Promovilidad to enhance its performance.
- Creation of a monitoring tool to track the implementation of SUMPs in Peruvian cities.
- Support for internal information management processes to improve efficiency

Next expected Outputs:

- Supporting structuring a sustainable and resilient urban mobility investment program for six provincial cities in Peru, including preparing a diagnostic and overall concept note.
- Developing concept notes for superblock projects and interventions to improve intersections with high accident rates.
- Preparing a feasibility study for a superblock project as part of the sustainable and resilient urban mobility investment program for six provincial cities in Peru.

Main NUMP implementation challenges

Institutional instability and lack of coordination hinder urban mobility progress

Institutional instability within both central and local governments has been a significant challenge, marked by high staff turnover and the politicisation of positions. This instability is compounded by the involvement of a diverse range of actors—including government agencies, international cooperation bodies, and civil society—without effective spaces for discussion or coordination. As a result, there is a lack of shared understanding among politicians and specialists, leading to misalignment on guiding principles, priorities, and strategies to improve the current urban mobility paradigm.

Financial constraints and lack of integration into local budget planning

A significant challenge in Peru is the lack of integration between urban mobility planning and local budget allocation. Despite the existence of Sustainable Urban Mobility Plans (SUMPs) and urban plans that outline key projects, many of these initiatives are not included in the local budget planning process. This is compounded by a broader absence of a planning culture, where proposed projects often lack the financial backing required for implementation, hindering progress toward improving urban mobility across the country.

Lack of political will and influence of interest groups in urban mobility reform

A significant challenge in Peru is the fluctuating local political will and interest in the issues promoted by the NUMP. In some cases, there is a clear lack of commitment at the local level, which has slowed down many of the program's initiatives. Additionally, the influence of interest groups—whose income depends on the current transport system—often outweighs the demands of citizens who suffer from the poor conditions of the system. This dynamic impedes efforts to push forward urban mobility reforms.

Lack of technical capacity in urban mobility planning and project formulation

A key challenge in Peru is the lack of technical capacity in urban mobility planning and the formulation of sustainable projects. This is partly due to the unattractive nature of positions offered to professionals within public administration, making it difficult to attract and retain the necessary expertise in the involved institutions. As a result, the formulation and implementation of effective urban mobility solutions are hindered, impeding progress toward more sustainable and efficient systems.

Insights from practice: Takeaways on NUMP implementation support

Institutional and political challenges hinder NUMP implementation

Despite the technical cooperation and financial support from AFD, CODATU, and MobiliseYourCity, the implementation of Peru's NUMPs in secondary cities beyond Lima faces significant institutional and political challenges. At national level, one of the most significant barriers is the silo approach that exists between the Ministry of Transport and Telecommunications (MTC) and the Ministry of Housing (MVCS) regarding a national framework for sustainable urban mobility. Both ministries have a mandate related to urban mobility and tend to compete rather than to work together. The investment management system of the Ministry of Finance reinforces this competition.

At the local level, limited political commitment, scarce resources, and the strong influence of interest groups defending the status quo in transport policies further hinder progress. In general, the insufficient coordination among stakeholders is a recurring issue in the country. Addressing these barriers is essential to implementing sustainable urban mobility projects and initiatives.

Technical capacity and financial integration are key to success

The success of Peru's NUMP implementation depends on the overcoming of legal and institutional barriers existing at national level; as well as the improvement of local financial and technical capacity in view of a better urban mobility planning that ensures that the identified actions and projects are integrated into local budget planning, a more efficient project formulation and implementation. MobiliseYourCity's support through CODATU and AFD has provided crucial expertise and redirected funds to help structure sustainable urban mobility investment programmes in six Peruvian cities, but long-term progress will require improving the attractiveness of specialized public administration positions to attract and retain necessary expertise.

Highlights in the past year

AFD and CODATU signed a one-year extension to their technical cooperation agreement to continue supporting Promovilidad. As part of this extension, available FEXTE funds will be redirected to help structure and formulate a Sustainable Urban Mobility Investment Program for six Peruvian cities. This effort will position AFD as a potential co-financier alongside the World Bank.

