

MobiliseYourCity

Global Monitor

2021



For more information

MobiliseYourCity Secretariat, Brussels

www.mobiliseyourcity.net

email: contact@mobiliseyourcity.net

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Authors: Sasank Vemuri, Eléonore François-Jacobs, Mateo Gómez Jattin, Vincent Larondelle, Julien Ferdinand, Elena Tanzarella

Project factsheets and data collection: Nathaly Agurto, Setareh Ataian, François Carcel, Céline Carrier, Héloïse Chaumier, Anne Chaussavoine, Antoine Chèvre, Álvaro Cruz Fischer, Priscille de Coninck, Dominique De Longevialle, Maryna Denyschenko, Michael Engelskirchen, Ernesto Feilbogen, Akram Hamza, Klas Heising, Niklas Hutz, Pablo Juica, Dominika Kalinowska, Gauthier Kohler, Damien Le Bayon, Odile Ledésert, Sofia Martín Puerta, Valentine Monnier, Miriam Monterrubio Hernández, María Rosa Muñoz, Clément Musil, Tania Naurotte, Otar Nemsadze, Julie Pelata, Sandra Reverdi, Linda Schill, Suzanne Spooner, Mathieu Verdure, Corinna Winter, Nathalie Yannic.

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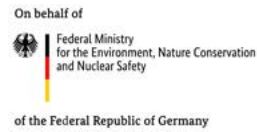
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Part of:



Foreword

Dear MobiliseYourCity Partners and friends,

Even in an extraordinary year when most of us have been moving around so little, time has been flying by.

The COVID-19 health crisis has profoundly impacted almost everyone and everything, almost everywhere. For those of us committed to sustainable mobility, the positive effects of the crisis such as the (temporary) drop in transport emissions, increase in remote work, and more walking and cycling, have been dampened by our concern for the long-term impacts on finances and the public perception of public transportation.

The need to clearly demonstrate the economic, social and environmental benefits of investing in sustainable urban mobility is greater than ever in this context of so many competing pressures for funding from strained local and national budgets.

As a leading global partnership for sustainable mobility with nearly 100 partners, including 63 cities and 15 countries, we are well-positioned to compile data to help make a compelling case, not just for continuing to support sustainable mobility, but for increasing the investment in sustainable mobility.

Working on this report gives us the rare opportunity to dive into the diverse actions being taken in 34 countries working to build low-carbon and just mobility systems. We looked at this compilation of experiences through the lens of the new strategy for the next five years, which enables implementation of projects and a fair transition in urban transport.

After a two-month period of data collection and analysis, the results are in: from the first completed projects, we were able to leverage 922 million euros to implement the sustainable mobility plans and programmes supported by the Partnership. This means that around 6.3 million people, mostly from the middle and poorer classes in their cities, will have

improved access to public transportation, giving them better access to jobs and the other urban amenities that our cities offer.

Better public transport is also coupled with nearly 90 million euros for dedicated infrastructure for walking and cycling, which will all result in an expected reduction of 14% of GHG emissions.

In addition to the aggregate results, this report presents some of the highlights of 2020: how effectively we were able to transition to online trainings, the increased interest in accelerating the transition to use other forms of data sources for data collection in mobility planning, the awareness of the importance and special vulnerability of informal transport workers, as well as those who rely on them.

The factsheets in the annex of the report give more granularity to complement the main report. They also offer a summary of the activities in each city and country receiving technical support for those interested in specific locations.

With urbanisation increasing rapidly, the demand is high and the time is short to shape the sustainable cities of the future. So, we are thrilled to see that the tools we developed to empower our members are being used by cities outside the Partnership,

We hope you enjoy reading the report and look forward to our continued collaboration to help shape the future we want.

Sasank Vemuri

Coordinator of the MobiliseYourCity Partnership



As a leading global Partnership for sustainable mobility, we help make a compelling case for increasing investment in sustainable mobility.

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Executive summary

A global partnership leading on sustainable urban mobility

Only five years after being launched at COP21 in Paris in 2015, the MobiliseYourCity Partnership has established itself as the leading global partnership of nearly 100 partners for sustainable urban mobility planning, policy development, and increasing investment for sustainable transport in developing and emerging economies.

The MobiliseYourCity Partnership works globally to generate knowledge, scale solutions and mobilise financial resources for sustainable mobility. Our partnership supports member cities and countries through four main service areas:

- Sustainable mobility planning and project preparation
- Implementation support (added in November 2020)
- Capacity building
- Advocacy

The MobiliseYourCity contributing partners have mobilised 38 million euros in grant financing to support our member cities and countries in advancing sustainable urban mobility. Our main implementing partners Agence Française de Développement (AFD) is supporting 24 SUMPs and 3 NUMP and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) is supporting 8 SUMP and 7 NUMP (including 3 NUMP and 2 SUMP in non-member countries and cities). CODATU, Cerema, ADEME and the Wuppertal Institute are also supporting cities in capacity building activities and pilot projects.

Thanks to the collaborative efforts of all our partners, we have already achieved results in each of our service areas. These results are presented throughout this report and are directly in line with the expectations set during the Partnership planning phase.

Mobility planning: supporting SUMP and NUMP

We support cities and countries through technical assistance to prepare implementation ready mobility plans and finance ready projects – Sustainable Urban Mobility Plans (SUMP) for cities and National Urban Mobility Policies or investment Programmes (NUMP) for countries.

By assisting cities and countries in the planning and implementation of effective measures to decarbonise 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).

With ongoing work in 43 cities and 12 countries over the world, we expect the Partnership's impacts to continue to grow and to see tangible results for sustainable mobility.

In 2020, despite the COVID-19 pandemic, 3 cities started preparing SUMP and 10 more will start their SUMP in 2021. The global Pandemic did, however, slow down implementation of technical assistance in many of our cities and countries.

Drawing from the first completed and ongoing projects in 34 countries, we are able to provide the following conclusions:

- We work in a quickly changing, complex environment, with large (1.7 million inhabitants on average) and fast-growing cities
- Public transport dominates both investment needs (80% of investment needs in 7 completed or nearly completed SUMP) and finance mobilised for implementation (78% of leveraged finance)
- Planning with paratransit is essential for urban mobility to be inclusive and green in MobiliseYourCity geographies. In Santo Domingo, for instance, paratransit represents 72% of the bus transportation offer
- Walking is often one of the most important means of movements to the residents of our member cities. In Dakar, for example, 70% of all trips are made by foot. SUMP are helping to mobilise finance to increase its attractiveness and safety

- With the exception of a few, cycling has a limited modal share in our member cities – but has great potential for growth
- Our data confirms general global trends but also has several limitations as the quality of data collected in our member cities and countries is still inconsistent

Mastering Mobility: Capacity building and methodologies

MobiliseYourCity equips practitioners with tested and scalable solutions. Together with our partners, we develop tailored methodologies and tools as well as deliver trainings on our focus areas (SUMP, NUMP, MRV).

In 2020, two essential elements were added to MobiliseYourCity's methodological framework:

- The MobiliseYourCity's Emissions Calculator, a scenario modelling tool that supports cities and countries project the GHG impact of their SUMP and NUMP and monitor their emissions
- The MobiliseYourCity's NUMP Guidelines, a consolidated methodological approach on why and how to develop a National Urban Mobility Policy and Investment Programme

The COVID-19 crisis accelerated the transition to digital tools for capacity building. We were able to deliver a first series of trainings for cities about to start a SUMP fully online. We also tested new formats such as co-creating online sessions to design with our Communities of Practice solutions to common problems such as the response to COVID-19 or the integration of paratransit in mobility plans.

More than 70 decision-makers and mobility planners from 23 cities from the Latin America Community of Practice participated in an online training programme on how to elaborate a Sustainable Urban Mobility Plan, with the support of EUROCLIMA+.

Our online platform is well on the path to becoming one of the international knowledge hubs on sustainable mobility planning for green cities with a remarkable repository of over 275 knowledge products and more than 35,000 visitors.



**We offer
practitioners tested
and scalable
solutions, tailored
methodologies, and
trainings on SUMP,
NUMP, and MRV.**

Advocacy: encouraging a systems' transformation

Over the last five years, we have continuously advocated for cities and countries to shift their approach from conventional transport planning to sustainable mobility, and for more resources to support this transition.

2020 was a peculiar year for global events as many conferences had to be postponed or cancelled because of the Global pandemic of COVID-19. As events started to shift to an online format, we went to meet the decision-makers where they were, offering our members the opportunity to speak directly wherever possible. In 2020, MobiliseYourCity partners reached 1,265 people by speaking on panels and moderating high-level discussions at key global or regional events.

With a new strategy and a new team, our communication has improved in style and scope. The Secretariat has been emphasising sharing insights from implementation and results to encourage more cities and countries to get on the sustainable mobility bandwagon.

With refocused messages, the reach of our communication has also been increasing. In addition to the people who have directly received the Global Monitor 2020, over 500 others have viewed it on our Knowledge Platform. Our bi-monthly newsletter in three languages now reaches nearly 1,800 people around the world and our social media audiences have significantly increased in 2020.

Behind the scene: life of the Partnership

The MobiliseYourCity Partnership is scaling up and continues extending its support to cities and countries.

Our partners contributed additional resources to help two member countries transition high-quality National Urban Mobility Policies and Investment Programmes to implementation as well as to enable hiring a new expert on capacity building. This brought the Partnership's resources from 36 to 38 million euros.

Four cities and two countries joined MobiliseYourCity in 2020, demonstrating their commitment to sustainable mobility and five new people joined the Secretariat in 2020 thanks to funding from AFD and BMU.

Going the extra mile: a new strategy for MobiliseYourCity

Based on a two-month consultation process with our partners, MobiliseYourCity has developed a new strategy for the next five years.

The new strategy redefines our vision and mission, adding social inclusion and economic equity objectives to the vision of a carbon neutral transport sector. It puts digital technologies at the centre of our action and identifies opportunities to scale up our impact through strategic partnerships.

The new strategy also adds a fourth service area to the three existing ones: implementation support. We identified a particular need for support for implementation for piloting small scale investments to support walking and cycling, professionalising paratransit, and supporting institutional and regulatory reforms.

1

The MobiliseYourCity Global Partnership

Since being launched in December 2015 at COP 21, the MobiliseYourCity Partnership has become the leading global partnership for sustainable urban mobility planning, policy development, and increasing investment for sustainable transport in developing and emerging economies. Our Implementing Organizations, primarily the Agence Française de Développement (AFD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), are working with cities and countries across the world to develop scalable solutions to improve mobility in complex environments.

Today, the Partnership has 63 member cities with a combined population of over 107 million people in 28 countries. Thanks to the generous contributions of the European Union, the Agence Française de Développement (AFD), the French Ministry for the Ecological Transition (MTE), the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU) and the French Facility for Global Environment (FFEM), as of February 2021, the Partnership has raised 38 million euros in grants to support 43 member cities and 12 member countries, 3 non-member countries and 3 non-member cities with technical assistance and

project preparation, which has already mobilised additional loans for concrete sustainable urban mobility projects. With this investment, we expect an additional 6.3 million people to have access to public transportation services.

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 Transport 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. We are an international transport initiative under the UN Marrakesh Partnership for Global Climate Action and a member of the SuM4ALL Consortium.

We are a partnership dedicated to enabling transformative change in urban mobility. By leveraging the unique core competencies of a wide range of organizations, we collaborate to generate solutions that exceed what we could do alone, helping make lasting positive change possible.



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 incubate scalable solutions, accelerate the adoption of proven approaches, and facilitate complex change processes to transform urban mobility.

We plan for transformative change: we support our member cities and countries to shift from road-centric transport planning to mobility planning that focuses on meeting the needs of all people while balancing the needs of our planet.

We bridge planning with implementation: while full implementation of mobility plans and investment programmes remains the responsibility of our member cities and countries, we secure results by accompanying our member cities from planning to implementation, through policy and regulatory reforms, small scale investments and digital technologies.

We build capacities and scale solutions: to facilitate lasting change at a global level, we focus on developing, deploying and scaling tested solutions that lead to real results. By bringing together global experts with local practitioners we can generate solutions that are ambitious, adaptable and achievable.

We motivate others through tangible results: we inspire our members to take bold, ambitious actions toward decarbonised and just mobility systems, and we animate others to support them to do so. We gain their trust by collecting and communicating results that will improve the lives of their people.

Who the Partnership brings together

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

- ✓ City and Country Members
- ✓ Donors
- ✓ Implementing Partners
- ✓ Knowledge and Network Partners

City and country members

The MobiliseYourCity Partnership has 63 member cities and 15 member countries. Our Implementing Partners are supporting 31 cities and 9 countries in preparing SUMPs and NUMPs respectively.

	Member cities	SUMPs	Member countries	NUMPs
Target	100	60	20	13
Worldwide	63	31 ¹	15	9 ²
Population	108 million people	70 million people	729 million people (urban population)	336 million people (urban population)
Africa	31	11	8	2
Asia	9	7	4	2
Latin America	17	9 ¹	3	5 ²
Eastern Europe	6	4	0	0

¹ Two in non-member cities

² Three in non-member countries

The MobiliseYourCity Global Partnership

Our members and donors

63 Cities

15 Countries

5 Donors

Latin-America and Caribbean

Colombia
Dominican Republic
Ecuador

Córdoba, Argentina
Baixada Santista, Brazil
Belo Horizonte, Brazil
Brasília, Brazil
Curitiba, Brazil
Fortaleza, Brazil
Recife, Brazil

Teresina, Brazil
Ibagué, Colombia
La Habana, Cuba
Santo Domingo, Dominican Republic
Ambato, Ecuador
Cuenca, Ecuador
Loja, Ecuador
Quito, Ecuador
Arequipa, Peru
Trujillo, Peru

Donors

European Union
France (AFD, FFEM, MTE)
Germany (BMU)

Eastern Europe

Tbilisi, Georgia
Czernowitz, Ukraine
Lviv, Ukraine
Poltava, Ukraine
Vinnytsia, Ukraine
Zhytomyr, Ukraine

Africa

Burkina Faso
Cameroon
Ethiopia
Madagascar
Morocco
Togo
Tunisia
Uganda

Bobo Dioulasso, Burkina Faso
Ouagadougou, Burkina Faso
Douala, Cameroon
Yaoundé, Cameroon
Abidjan, Côte d'Ivoire
Bouaké, Côte d'Ivoire
Dire Dawa, Ethiopia
Hawassa, Ethiopia
Kumasi, Ghana
Mahajanga, Madagascar
Antananarivo, Madagascar
Al-Assima (Rabat Salé), Morocco
Agadir, Morocco
Beni Mellal, Morocco
Casablanca, Morocco
El Jadida, Morocco

Fes, Morocco
Kenitra, Morocco
Khemisset, Morocco
Khouribga, Morocco
Marrakech, Morocco
Sefi, Morocco
Settat, Morocco
Oujda, Morocco
Maputo, Mozambique
Windhoek, Namibia
Niamey, Niger
Dakar, Senegal
Dodoma, Tanzania
Lomé, Togo
Sfax, Tunisia

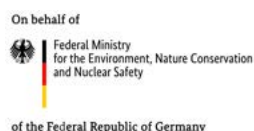
Asia

India
Philippines
Sri Lanka
Thailand

Ahmedabad, India
Kochi, India
Nagpur, India
Medan / Mebidangro, Indonesia
Mandalay, Myanmar
Abbottabad, Pakistan
Peshawar, Pakistan
Swat / Mingora, Pakistan
Kurunegala, Sri Lanka

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	19.5 M€
European Commission's Directorate-General for International Partnerships (DG INTPA) – EUROCLIMA+	13 M€
European Commission's Directorate-General for International Partnerships (DG INTPA) – Asian Investment Facility	3.5 M€
European Commission's Directorate-General for International Partnerships (DG INTPA) – Intra-ACP	3 M€
France	11.5 M€
Agence Française de Développement (AFD)	8 M€
French Ministry of Ecological Transition (MTE)	1.5 M€
French Facility for Global Environment (FFEM)	2 M€
Germany	7 M€
German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)	7 M€
TOTAL	38 M€

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	24 ¹	3	24.5 M€
GIZ	8 ²	7 ³	23.6 M€ ⁴

¹ Including collaborations or subcontracting with CODATU, Cerema and ADEME.

² Two in non-member cities

³ Three in non-member countries

⁴ Includes a 9.1M€ contribution from BMZ for SUMPs in Ukraine. Funding from donors and implemented by GIZ reached 14.5M€.

NB: Tbilisi and Tunisia are supported by both AFD and GIZ, and accounted twice in this table

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 already supported the development of three completed SUMPs (in Santo Domingo, Dominican Republic), and Douala and Yaoundé Cameroon) and two NUMPs (Cameroon and Tunisia). With 24.7 million euros for implementing MobiliseYourCity related activities, AFD is currently supporting the development of SUMPs and NUMPs in 24 cities and 3 countries respectively.

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

is Germany's leading provider of international cooperation services. As a federal enterprise, it supports the German Government in achieving its objectives in the field of international cooperation for sustainable development. GIZ is supporting the development of SUMPs and NUMPs and provides staff for the Secretariat of the Partnership. With 14.5 million euros for implementing MobiliseYourCity related activities, GIZ is currently supporting the development of SUMPs and NUMPs in 8 cities and 7 countries respectively. On behalf of the German Federal Ministry of Economic Cooperation and Development, the GIZ has also 5 MobiliseYourCity Partner Cities in Ukraine preparing SUMPs.

ADEME is a French public agency aiming at supporting the ecological transition. It is active in the implementation of public policy in the areas of the environment, energy and sustainable development.

CEREMA is a French public institution supporting public policies, working under the authority of the French Ministry of the Ecological and Inclusive Transition and the Ministry of Territories' Cohesion and Relationship with Local and Regional Authorities.

CODATU (Cooperation for urban mobility in the developing world) is an association with an international focus which works to promote sustainable mobility policies through training activities and scientific exchanges on urban and periurban mobility. CODATU provides staff to the Secretariat of the Partnership under a convention with the AFD. They collaborate with AFD on SUMPs, NUMPs and technical assistance in several locations.

The **European Bank for Reconstruction and Development (EBRD)** works across three continents to further progress towards 'market oriented economies and the promotion of private and entrepreneurial initiative'.

KfW is a German state-owned development bank, based in Frankfurt. It promotes sustainable prospects for people, companies, the environment and society. It focuses on topics in line with the UN's Sustainable Development Goals (SDGs).

Wuppertal Institute is a leading international think tank for sustainability research focused on impacts and practical application. The organisation's activities are centred on developing transformation processes aimed at shaping a climate-friendly and resource-efficient world. As part of MobiliseYourCity, the Wuppertal Institute supports the city of Belo Horizonte, Brazil, in the implementation of a pilot project.

Knowledge and Network Partners

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



ITDP is a global organization at the forefront of innovation, using technical expertise, direct advocacy, and policy guidance to mitigate the impacts of climate change, improve air quality, and support prosperous, sustainable, and equitable cities. They have worked with over 100 cities in more than 40 nations to design and implement transport and urban development systems and policy solutions that make cities more viable, fair, and liveable.

PLATFORMA is the pan-European coalition of towns and regions – and their national, EU and global associations – active in city-to-city and region-to-region development cooperation. They are a hub of expertise on European local and regional governments' international action and aim at boosting European local and regional governments' contribution to EU development cooperation policies and international frameworks.

UCLG, as a global network of cities and local, regional, and metropolitan governments and their associations, is committed to representing, defending, and amplifying the voices of local and regional governments to leave no one and no place behind.

UN Habitat works with partners to build inclusive, safe, resilient and sustainable cities and communities. UN-Habitat promotes urbanization as a positive transformative force for people and communities, reducing inequality, discrimination and poverty.

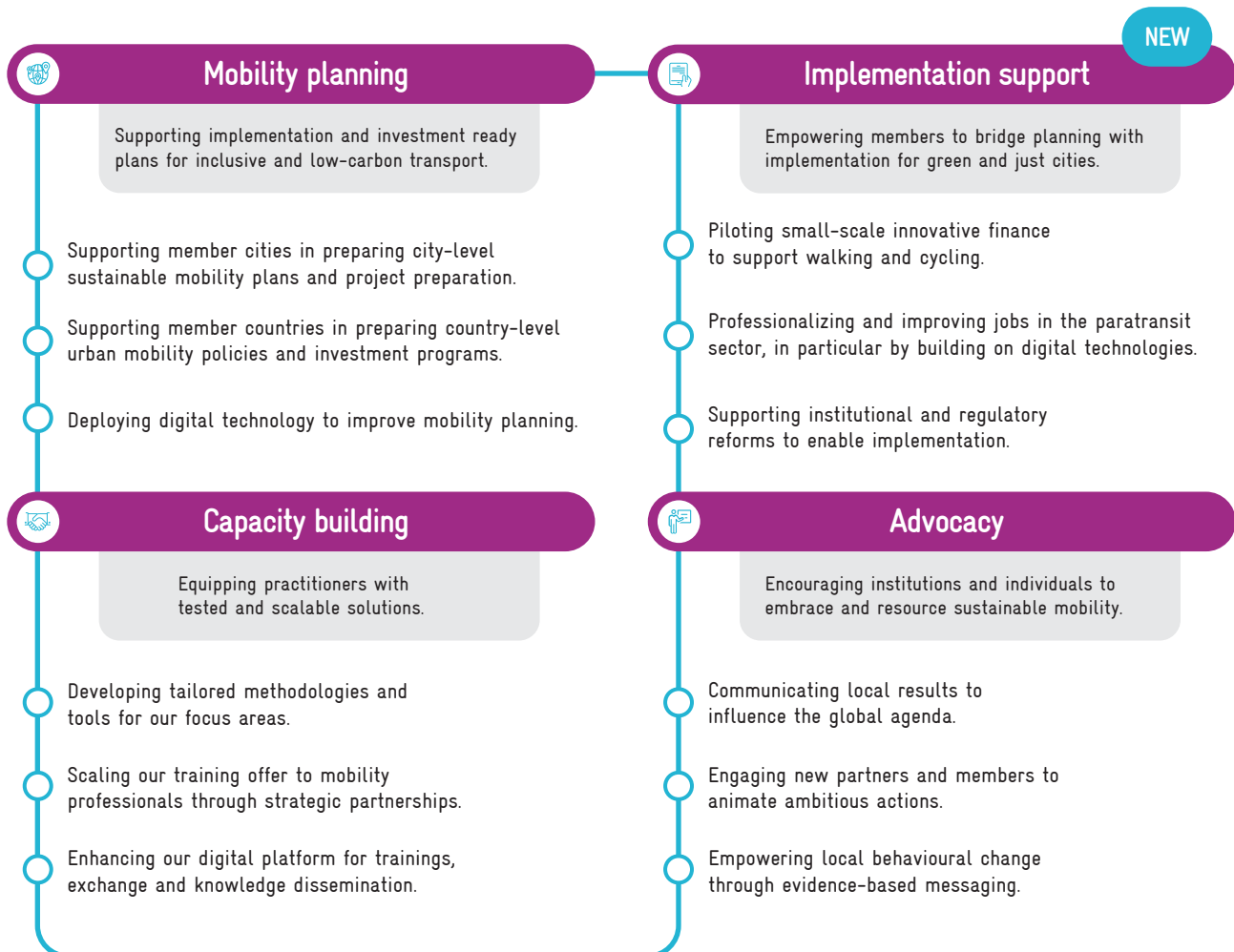
The European Cyclists' Federation (ECF) has been the voice of European cyclists for 30 years. Representing organisations in 40 countries with over 500 000 active members, the ECF is pledged to ensure that bicycle use achieves its fullest potential so as to bring about sustainable mobility and public well-being.



**Our partners
are key in
supporting cities
and countries
in advancing
sustainable urban
mobility.**

How we support cities and countries

The MobiliseYourCity Partnership supports member cities and countries through four main service areas. Already 38 million euros have been raised to fund projects in these four service areas.



Mobility planning

Supporting implementation and investment ready plans for inclusive and low-carbon transport

Our Implementing Organizations, primarily the Agence Française de Développement (AFD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), are working with cities and countries all over the world to prepare implementation ready mobility plans and finance ready projects to improve mobility in complex environments. They support national member countries to develop national urban mobility

policies and investment programs (Nump), and member cities to develop sustainable urban mobility plans (SUMPs), encouraging the use of digital technology to improve mobility planning.

Access to finance

After receiving technical Assistance for mobility planning and project preparation, member cities and countries are supported to identify accessible and affordable financing solutions by either directly financing certain parts of the SUMPs and Nump in the case of our banking partners and/or linking investments to other potential financiers of 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

We develop tailored methodologies and tools to build capacity to plan, finance and implement sustainable mobility solutions.

In-person and online training: we offer our members access to webinars and trainings to develop their skills to improve mobility in their city or country.

An online collaboration platform: to allow local partners to share their experience and get access to the latest knowledge on sustainable mobility, we are giving them the opportunity to exchange information and experiences with other cities and countries through our online social platform.

Advocacy

Encouraging institutions and individuals to embrace and resource sustainable mobility

We advocate for a change in how cities and countries approach mobility by using the enable-avoid-shift-and-improve model (EASI), which puts people's need for connection and access at the forefront of mobility planning. Because we are convinced that this is a successful way of improving urban mobility and decarbonising transport, we advocate for increased resources for technical assistance to scale up this approach and the financial resources to implement it. Our advocacy work is grounded in our experience in implementing this model through SUMPs and NUMPs in our member cities and countries.



We enable cities and countries to identify accessible and affordable financing options for sustainable mobility.

Our contribution to the SDGs

By assisting cities and countries in the planning and implementation of effective measures to decarbonise 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

Targets

3.6 - By 2020, halve the number of global deaths and injuries from road traffic accidents

MobiliseYourCity Contribution

Deaths and injuries from road traffic accidents will be reduced by 50% in Yaoundé, Cameroon and improved, but not yet quantified, in Douala and Santo Domingo, Dominican Republic.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

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 seven partner cities (Douala and Yaoundé in Cameroon, Santo Domingo in the Dominican Republic, Lviv, Poltava and Zhytomyr in Ukraine, and Casablanca in Morocco), 3 metro lines, 6 BRT corridors, 6 tram lines, 1 cable car, and more than 21 bus corridors and 34 transport hubs, stations and depots will be financed through mobilised investments by the Partnership.

38 M€ in TA provided by the Partnership has leveraged 922 M€ to build quality, reliable, sustainable and resilient infrastructure. An additional 15,6 billion € in investments in infrastructure have been identified and ready to be developed.

11 SUSTAINABLE CITIES AND COMMUNITIES

Targets

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 three partner cities, an additional 6.3 million people will benefit from improved access to safe, affordable, accessible and sustainable public transport. MobiliseYourCity is directly supporting an additional 40 cities with a combined population of 71 million people.

In Santo Domingo, 600 K\$ have been secured for improving access to Public Transport for disabled persons. Another 600 K\$ 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

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 9 countries integrate climate change measures into national policies through NUMPs.

17 PARTNERSHIPS FOR THE GOALS

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

38 M€ in TA provided by the Partnership has already mobilized 922 M€. The Partnership is confident that at least 4 B€ will be mobilized.

MobiliseYourCity is a global partnership for sustainable development that mobilises and shares knowledge, expertise, technology and financial resources, to support the achievement of the SDGs in 15 partner countries and 63 partner cities.

The Partnership has established a knowledge platform as a particular instrument to share knowledge on sustainable mobility.

Mobility Planning: supporting SUMPs and NUMPs

Our Implementing Partners, particularly the Agence Française de Développement (AFD) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), are working with 43 local governments and 12 national governments in 34 countries over the world to prepare implementation ready mobility plans and finance ready projects.

Whether specific local or national mobility issues necessitate a quick adjustment or a deep transformation, supporting and enabling sustainable change in urban mobility has complex implications for all other sectors of society. Therefore, policies and investments must be prepared using a systemic and participatory approach.

However, the preparation process is long and requires financial and technical resources that may not be available to the local or national authorities. Hence, supporting the preparation of projects and policies through technical assistance is a necessary intervention to enable further implementation of adequate measures to tackle local challenges in cities and to contribute to global sustainability agendas.

Despite the COVID-19 pandemic, 3 cities started preparing SUMPs last year (Dakar in Senegal, Arequipa in Peru, Medan in Indonesia) and 10 more will start their SUMPs in 2021. The global pandemic did, however, slow down implementation of technical assistance in many of our cities and countries. Travel of experts to the cities to work with local officials and data

collection to prepare mobility plans and projects have been the two aspects of the work that have been most negatively impacted. Also, cities, MobiliseYourCity partners and consultancy teams had to reflect on the impact of the pandemic on SUMP processes and to develop innovative solutions to continue to ensure quality of collected data and continued participatory process.

What is a NUMP?

A National Urban Mobility Policy or Investment Programme (NUMP) is a strategic, action-oriented framework for urban mobility, developed by national governments, enacted to enhance the capability of cities to plan, finance and implement projects and measures designed to fulfil the mobility needs of people and businesses in cities and their surroundings in a sustainable manner.

What is a SUMP?

A Sustainable Urban Mobility Plan (SUMP) is a strategic plan developed in a participatory and integrated way to meet people and businesses mobility needs in cities and to harmonize and integrate existing planning approaches. It sets cities on a sustainable course regarding land use and urban mobility. Because each city is starting with a different baseline of transport plans, the MobiliseYourCity implementing partners, and city partners work together to adapt the SUMP process for local needs.

In addition to SUMPs, the Partnership also supports cities with designing and implementing pilot projects on various mobility topics, such as introducing low speed zones around schools and preparing shared e-bicycles schemes.

We work in a quickly-changing, complex environment

MobiliseYourCity Members tend to be large, fast growing cities. In the 31 cities where the MobiliseYourCity Partners are supporting SUMPs, the average urban population is over 2.5 million with a growth rate over 2% - compared to, for example, Germany's annual growth in urban population of just under 0.2%.

Despite a large diversity of institutional and political contexts, a number of our members face several shared policy and fiscal constraint: at least 7 cities do not have any existing transport plan; at least 6 do not have the mandate to finance public transportation through their local budgets; at least 8 have no access to international financing due to regulatory and legal restrictions; and more than half face medium or high risk to the impacts of climate change.

Public transport dominates both investment needs and finance mobilized for implementation

The aggregated investment requirement for the full implementation of 7 completed or nearly completed SUMPs is 9 billion euros, of which almost 80%, or 6.7 billion euros, are needed for public transport infrastructure. Already, about 700 million euros were secured for public transport investments earmarked as priority in these SUMPs: more than 500 million euros for mass public transport infrastructure and an additional 200 million euros for procuring public transport vehicles. These investments include metro lines, BRT and bus corridors, cable cars, tramlines, stations/hubs/depots, and a large number of rolling stock, i.e. vehicles.

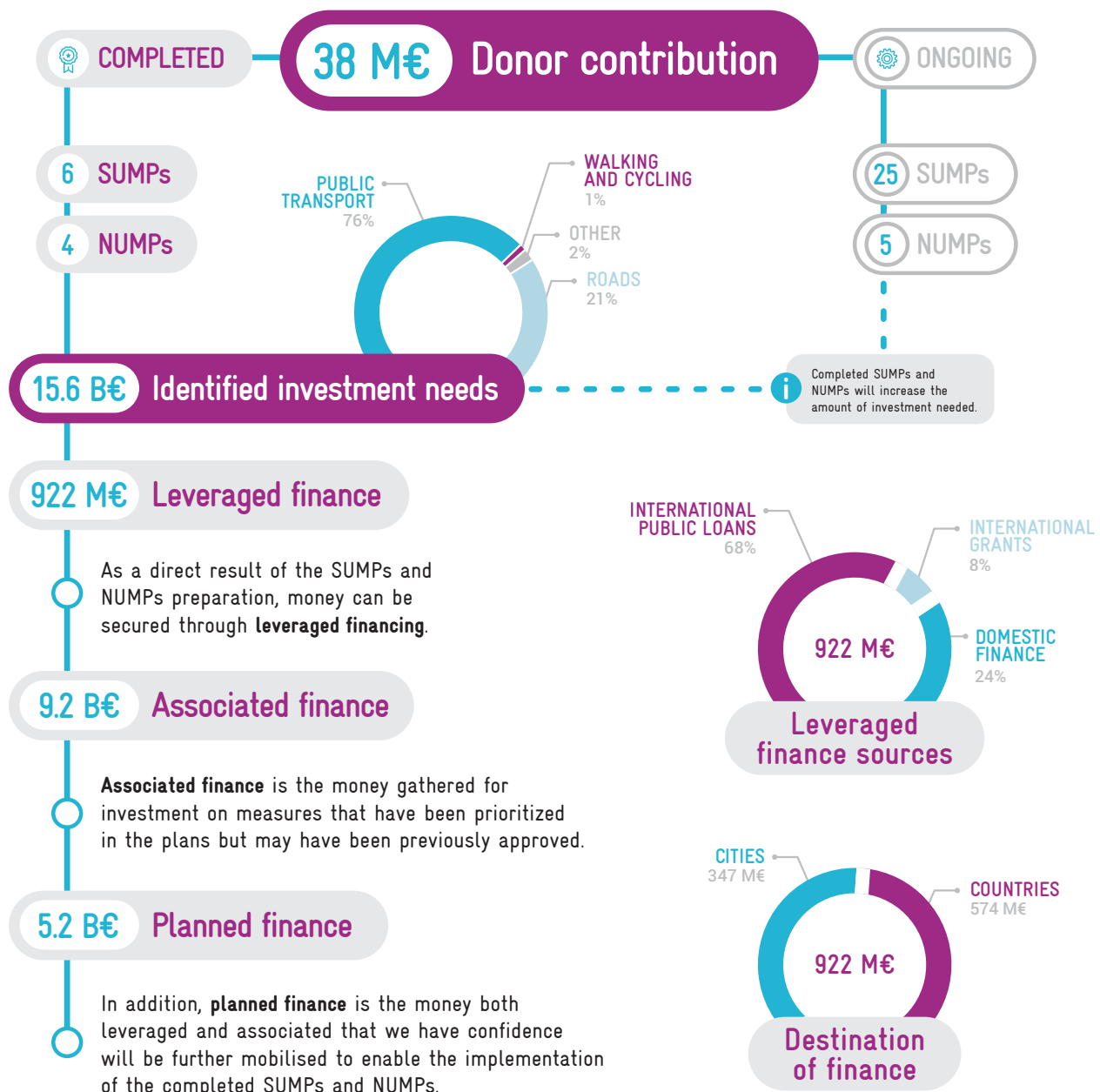
In addition to the investments for public transport, the SUMPs have also identified the need for nearly 2 billion euros to improve road infrastructure, over 88 million euros for dedicated walking and cycling facilities and over 11 million euros in investments to support the port area logistics. Of these identified investment needs, nearly 30% of the financing needed for active modes of travel and approximately 5% of the financing needed for improved roads has been already leveraged.



"In this plan, nothing that exists disappears. On the contrary, it restructures it, transforms it and favours it."

Alexandra Cedeño
Director INTRANT
Santo Domingo, Dominican Republic

The path from planning to finance



Getting to bankable projects

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**.

Having a mobility plan in place can help convince financiers to make loans, give a grant, or government agencies to design a subsidy programme.

From implementation to impact



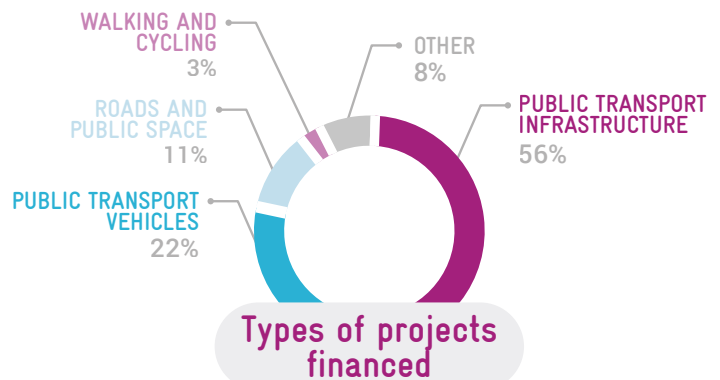
Assets and infrastructure with secured funding

9 Metro and tram lines

12 BRT and bus corridors

34 Hubs, stations, depots

550+ Buses (incl. BRT)



Projected impacts

6.95 6.95 MtCO₂eq mitigation of annual GHG emissions in 2030 (compared to BAU)

6.3 Million people with improved access to public transport

+6% Modal share of sustainable transport modes (compared to BAU)

✓ Improved road safety

✓ Improved job quality for transport workers



Contributing to green and smart cities

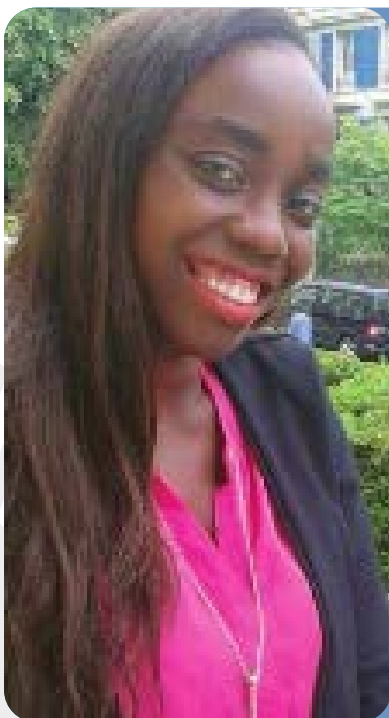
Paratransit as a key sub-sector to be addressed for more inclusive and green urban mobility in MobiliseYourCity geographies

Paratransit, or informal transport service providers like tuk-tuks, boda bodas, peseros and others, comprise a predominant share of all the trips made in the Global South and are responsible for a significant portion of urban transport related emissions. Despite their ubiquity, the solutions to this challenge of professionalising their services - including improving safety, upgrading their fleets to lower polluting vehicles, and better integrating them into formal transport systems - remain unintelligible. This is mainly due to the lack of data resulting from the informal nature of these services.

Through the urban mobility diagnosis conducted as an essential phase of every SUMP and NUMP, MobiliseYourCity is helping local and national authorities to close this knowledge gap in order to make informed decisions on how to improve this

vital sub-sector. For example, in Santo Domingo, Dominican Republic, 72% of buses operate at the margin of the law. In other words, the majority of public transport services in the Dominican Republic's capital is informal. In Douala, Cameroon, paratransit services capture 65% of all motorized trips. And approximately 200 thousand Jeepneys operate in The Philippines and generate 15.5% of the transport sector's GHG emissions.

Decarbonising paratransit vehicles is essential for greening the entire transport system. Paratransit fleets are found by the tens of thousands throughout cities in the Global South. They are characterised by small scale vehicles fleets, usually highly polluting and in many cases road-unworthy. Many vehicles surpass an age of 15 years. The results: air pollution, GHG emissions, unsafe and uncomfortable operations. The Philippines Urban Mobility Policy has shown that to electrify paratransit, it needs first to be professionalised and modernized in terms of improved business models, organisation, labour conditions and regulatory frameworks. Currently, paratransit operators lack the knowledge, financial resources, and incentives to become electric. The adopted SUMPs in Douala, Yaoundé, and Santo Domingo and the Tunisian and Philippines NUMPs are helping to create the ideal conditions through the identification of systemic approaches for paratransit reform and integration.



“The Douala SUMP enhanced a peaceful and efficient coexistence with paratransit. The aim is to establish multimodality between new buses and paratransit especially motorbikes taxis.”

Prisca Tene Mbimi

*Coordinator of the Douala Transport and Mobility Department
Douala, Cameroon*

Despite indisputable negative externalities, paratransit is often at the core of urban mobility systems in MobiliseYourCity's geographies and shall be considered as an opportunity to build on for a more inclusive transport system. These services are especially beneficial when they are well integrated into a city's public transport network. All of our completed SUMPs include creating or expanding mass transit through BRT, light rail and metro systems. In 2 of these, paratransit operators are to be integrated into formal public transport either as the new systems' operators, or their services rationalized to function as feeders to the main mass transit corridors, acting thereby as the main links between the urban periphery and the centre. In other words, paratransit is a key enabler of social, economic, and cultural participation for all citizens and a prerequisite for transitioning to green and sustainable urban mobility.

Walking is often one of the most important means of movement to the residents of our member cities, and SUMPs are helping to mobilize finance to increase its attractiveness and safety

The SUMP approach ensures that walking is not overlooked in urban transport planning and, just as importantly, our standard terms of reference ensures that walking is also considered during investment planning. 26 of our member cities have some level of information on modal share, of which 18 have data specific to walking; and all of them show that walking is a key transport mode, especially for the poorest.

In some of our member cities like Casablanca and Dakar, a significant majority of all trips within the city are made by foot; in these cases approximately 60% and 70% respectively. Even in cities such as Kochi and Nagpur where a relatively low percentage of trips are made by foot, at 12% and 10%, walking is still an essential way for people to get to where they want and need to go.



“With this plan we have the opportunity to create more inclusive and liveable cities, to have planning tools and reduce GHG emissions.”

Alexandra Cedeño
 Director INTRANT
 Santo Domingo, Dominican Republic

While nearly 60% of the investment needed for walking infrastructure that was identified for the SUMP's has been mobilised, the Partnership would like to do more on this topic, which is why this theme also has a prominent position in the new strategy for the Partnership.

With the exception of a few, cycling is limited in most of our members cities – but has great potential for growth

Latin America continues to be at the forefront of cycling. In the Brazilian cities of Baixada Santista and Teresina, cycling accounts for 15% and 12% of total trips, respectively. In Asia, the city of Mandalay, which is historically a cycling city, has also a relatively high modal share of 22% for cycling. Beyond these handful of cities, most other MobiliseYourCity members are not making the most of cycling.

Unexpectedly, the significant disparities between cities does not seem to be solely linked to the climate and topography of the cities. While the champions of cycling are relatively flat cities (Mandalay, Teresina, Baixada Santista), other cities with similarly favourable topographical and climatic conditions, such as Dakar or Antofagasta, have almost no cycling.

Further work should help to highlight how much enabling factors, such as developing cycling infrastructure that enables safe and efficient travel, providing e-bike options or promoting cycling to users, can be used to significantly increase the use of cycling as an attractive, safe and healthy means of transport.

Our data confirm general global trends but also has several limitations

The annual data collection exercise surfaces interesting facts and illuminates specifics and certain tendencies, but the quality of data is inconsistent due to a number of reasons ranging from the quality of the locally available data to the limited access the Secretariat has to certain types of information. For example, we would expect the 21 cities that have ongoing or completed SUMP's to have good data on the 'basic' information that would be collected during the diagnosis phase. However, we only have information from 7 of 21 cities on whether there is an operational transport authority, from 15 about whether these cities can borrow money to finance transport investment, from 13 on their level of sensitivity to the impacts of climate change, and only 26 cities have provided us with information on their current modal share.

We have a significant data blind spot regarding the mobilisation of domestic public finances. The Secretariat's relative closeness to our Implementing Partners that are also international financial institutions, as well the public availability of information from these organizations, facilitate tracking of international financing. Central government funding for NUMP's is also relatively easy to track because of the fewer numbers. However, use of local public finance for financing SUMP's and NUMP's measures is often more difficult to track in an updated and precise manner.

Mastering Mobility: capacity building and methodologies

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 methodologies are based on extensive global implementation experience:** our methodological framework consolidates the knowledge required to plan for sustainable urban mobility at the local and national level. It does so by merging theory with practice in highly actionable and scalable methodologies on SUMP, NUMP and greenhouse gas monitoring-reporting and verification MRV.
- **Our trainings 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 trainings and workshops to address key pressing issues and disseminate our methodological framework.

- **Our Communities of Practice enable peer learning, and also influence our methodological framework:** regional Communities of Practice in Africa, Asia and Latin America provide a space in which mobility practitioners with a common identity, a common goal, and common interests can learn from each other by sharing their experiences and co-creating, together with MobiliseYourCity, new knowledge and solutions to our common challenges.

The constant improvement and enhancement of our methodological service is nourished by an iterative and bidirectional exchange with our projects on the ground. We capitalise from the expertise generated through the elaboration and implementation of SUMP and NUMP, so that future interventions can benefit from this wealth of knowledge. Put succinctly: an effective methodology translates into better planning for sustainable urban mobility.

In 2020, two essential elements were added to MobiliseYourCity's methodological framework:

- MobiliseYourCity's Emissions Calculator
- MobiliseYourCity's NUMP Guidelines

The MobiliseYourCity's Emissions Calculator quickly became the methodical highlight of 2020

The [MobiliseYourCity Emissions Calculator](#) is a scenario modelling tool that supports cities and countries project the GHG impact of their SUMPs and NUMPs.

The tool has been specifically developed to measure the impact of Sustainable Urban Mobility Plans (SUMPs) and National Urban Mobility Policies and Investment Programs (NUMPs). It was designed for the quantification and monitoring of a 'package' of mitigation actions according to the ASIF (Activity, Structure, Intensity, Fuels) methodology.

To launch the Emissions Calculator, MobiliseYourCity conducted a [series of webinars](#) to introduce and share practical guidance on how to effectively navigate and use the tool. This series of virtual sessions were attended by 142 experts from member and non-member cities, national governments, implementing agencies, and knowledge and network partners eager to learn and put to use this valuable instrument for their own projects. A user manual and Frequently Asked Questions (FAQs) have been made openly available to facilitate the adoption of the tool.

The Emissions Calculator gained immediate attention after its publication. More than 1,900 people have visited the tool in our [knowledge platform](#), and 11 cities and 4 national governments have already started using the tool.

The first of its kind MobiliseYourCity's NUMP Guidelines were launched in December

After working with 9 countries on national urban mobility frameworks, MobiliseYourCity, together with the Urban Mobility Electric Initiative (UEMI), has condensed this wealth of knowledge and expertise generated throughout the years into the [NUMP Guidelines](#).

Like its precursor, the SUMP Guidelines, the NUMP variant represents the consolidated methodological approach on why and how to develop a National Urban Mobility Policy and Investment Programme.

The NUMP Guidelines are a valuable tool that help national governments and development practitioners make a direct connection between local action, on one side, and national and international priorities and goals, on the other. The methodological guidance provided in the publication presents all the explanations and



"The result of the implementation of the Tunisian NUMP? A clear and shared vision of the objectives for the future of mobility in Tunisia, but above all a concrete action plan and a real mobilisation on urban mobility issues."

Fathia Neji

*Deputy Director of Programs and International Cooperation at the Strategy and Projects Directorate within the Tunisian Ministry of Transport
Tunis, Tunisia*

steps to be taken to develop national frameworks that are reflective of the local needs and oriented towards their implementation. It does so by paying due attention to financing and monitoring, reporting and verification as constitutional elements within the planning process.

This first-class publication was launched during the first-class event, [En Route to COP26](#). Addressing the question on how to drive action for zero-emission transport, the event offered itself as an ideal avenue to share this valuable tool with more than a thousand participants working on decarbonising the sector.

With a new and strengthened team, the Secretariat led the delivery of the Mastering Mobility Training Series

In 2020, the MobiliseYourCity Partnership offered its first global training series ever on Sustainable Urban Mobility Plans (SUMP). The trainings sought to empower 11 MobiliseYourCity member cities that would soon start their own SUMP development process. Due to its high demand, more than 70 mobility practitioners from 24 African, Asian and East-European cities participated in the trainings.

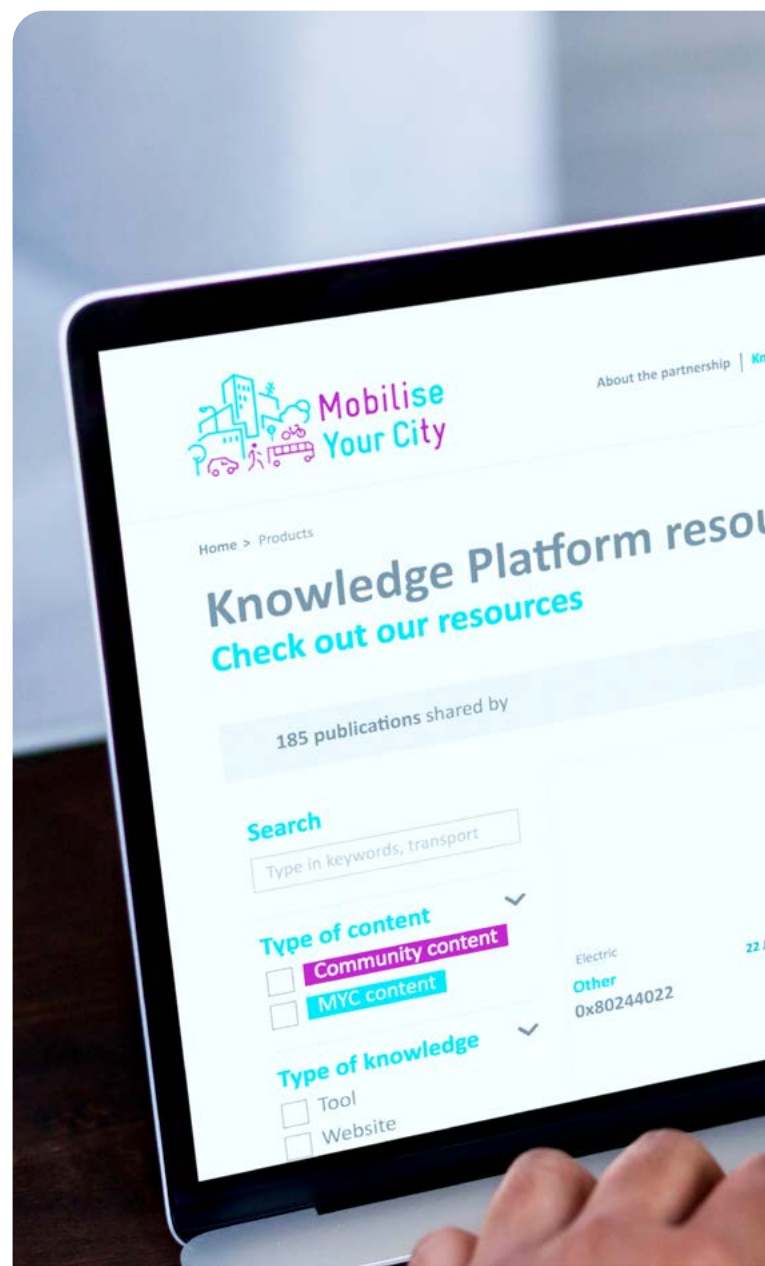
COVID-19 forced us to stay home, and accelerated our adoption of digital tools for capacity building

The Mastering Mobility Series provides evidence of the scalable potential of the Partnership's capacity building and methodological activities through digital tools and concerted action. The current pandemic compelled us to think outside of the box, thus allowing us to expand our reach by making use of digital solutions. By becoming digital by default, capacity building can be provided on a more flexible and frequent basis and target a much wider audience. This new

digital mindset allowed the MobiliseYourCity's global Secretariat to work much more closely with Implementing Partners such as AFD, Cerema, GIZ and CODATU to provide tailored trainings designed to equip mobility practitioners with the necessary skills to master the elaboration of a Sustainable Urban Mobility Plan for their cities.

During the Mastering Mobility Series, participants were trained on four topics:

- [Introduction to Sustainable Urban Mobility Plans \(SUMPs\)](#)
- [SUMPs and Gender](#)
- [SUMPs and Finance](#)
- [Deep-Dive into SUMP Phase I: Data needs and uses for conducting an urban mobility diagnosis](#)



Co-creating solutions to common problems with our Communities of Practice

A new participatory format was tested by MobiliseYourCity in 2020 to counteract the inability to meet together with our member countries and cities in regional events, as a result of the current pandemic.

Together with MobiliseYourCity's African Community of Practice, the Secretariat organised a virtual co-creation session to discuss the impacts of COVID-19 to urban transport systems in African cities. Main challenges were presented, potential solutions discussed, and avenues of cooperation identified to effectively deal with these changing circumstances. The findings of this event were used as valuable input for the development of the new strategy and served to identify paratransit as a key strategic area to be addressed by the Partnership in the upcoming years.

A second co-creation session was conducted in December with members of the African Community of Practice. This time, the focus was set on paratransit. AFD, CODATU and MobiliseYourCity Secretariat pooled their expertise on the topic and discussed, together with city officials and decision-makers, the main challenges and features of paratransit. The main objective was to develop a common

understanding and definition of this sub-sector. Based on the co-creation session, CODATU is currently preparing an inventory of more than 50 measures for paratransit reform that can be used in MobiliseYourCity contexts.

Our online platform is well on the path to becoming one of the sector's international knowledge hubs on sustainable mobility planning for green cities

After only one year of operations, MobiliseYourCity's online platform counts with a remarkable repository of over 275 knowledge products. This wealth of knowledge includes not only the Partnership's methodological documents, but also key publications from our Knowledge and Network Partners on urban mobility planning, active transport, public transport, tactical urbanism, financing and MRV, e-mobility, and much more.

The knowledge platform is gaining ever increasing attention from mobility practitioners, decision-makers and wider audiences. Since its launch in February 2020, 35,000 people have visited our website in search for practical knowledge on sustainable urban mobility planning.



"The learning programme has become a platform that is being constantly used by cities to solve problems that commonly arise in the planning process"

Diego Alejandro Márquez

*Planning Head of the Planning Institute of Guadalajara
Guadalajara, Mexico*

MobiliseYourCity tools and methodologies are being used in cities and countries beyond the Partnership

The benefits of the methodological framework are reaching beyond the Partnership. At least 11 cities or national governments non-members are using the Emissions Calculator, 5 cities have recruited consultants to support their SUMP preparations using the model terms of reference, and the NUMP Guidelines are being used by Paraguay and Uruguay, both non-members countries.

Latin American cities are exchanging and learning together, with the support of EUROCLIMA+

More than 70 decision-makers and mobility planners from 23 cities participated in an intensive training programme on how to elaborate a Sustainable Urban Mobility Plan. This comprehensive approach delved into the four SUMP phases and is strengthening those cities who are in the process of developing their own mobility plans with support from EUROCLIMA+: Antofagasta (Chile), Ambato (Ecuador), Guadalajara (Mexico), Havana (Cuba), Arequipa (Peru), Córdoba (Argentina) and Baixada Santista (Brazil). The training programme for Latin America has not only provided key methodological insights and tools to master a SUMP. Also, it has strengthened ties and fostered mutual support from the cities who are engaged in this process.



Our tools benefit more than just our members. At least 11 non-member cities or countries are using the Emissions Calculator.

Advocacy: encouraging a systems' transformation

We advocate for cities and countries to change their approach to transport from a conventional transport planning and engineering approach to a sustainable mobility approach.

This shift requires, among other things, to prioritising people's needs to connect to services and other citizens over infrastructure for private motor vehicles, to decarbonise mobility solutions, and to ensure equitable access and affordability of urban services for everyone in a city. We do this by encouraging the enable-avoid-shift-and-improve model (EASI) in our SUMPs and NUMPs.

Because we are convinced that this is a successful way of improving urban mobility and decarbonizing transport, we advocate for increased resources for technical assistance to scale up this approach to mobility planning and the financial resources to implement the measures that result from it. We do this to help close the investment gap for sustainable mobility.

Indeed, although the transport sector accounts for 25% of global energy-related GHG emissions, it only receives a fraction of climate financing. The MobiliseYourCity Partnership advocates for increased resources and action to support cities to decarbonise urban transport.

With only 29 countries having specified quantitative targets for transport, we also advocate for countries to enhance their Nationally Determined Contributions (NDCs) by better integrating transport solutions. Our global climate advocacy is enhanced by our active membership

in the Marrakesh Partnership for Global Climate Action and by working closely with our partners at SLOCAT.

Our advocacy work is grounded in our experience in implementing this model through SUMPs and NUMPs in our member cities and countries. We bring together the voices of our city and country partners to carry this message to global instances.

Broader participation, better representation, less emissions: contributing to events during a global pandemic

2020 was a peculiar year for global events as many conferences had to be postponed or cancelled because of the global pandemic of COVID-19. As a partnership, we have found alternative ways to bring up the voices of our city and country members to share their experiences and concerns associated to this challenging experience of a health crisis that also affected the transport sector.

In April, MobiliseYourCity gathered some members of the Africa Community of Practice to hear how the COVID-19 crisis had impacted their transport system and how they had responded.

Their experience was shared in an article and disseminated to our partners.

As events started to shift to an online format, we went to meet the decision-makers where they were, offering our members the opportunity to speak directly wherever possible. In 2020, MobiliseYourCity Partners reached 1,265 people by speaking on panels and moderating high-level discussions at the following key global or regional events:

Transport and Climate Change Week

2-5 March 2020

- » Gave a platform to the City of Antofagasta to present.
- » Building a case for investing in sustainable mobility as a key solution for the global climate crisis.

En Route to COP26 event: Catalysing immediate action in sustainable urban mobility – Do current opportunities help us deliver results sooner than we thought?

7 December 2020

- » Launched the NUMP guidelines to a global audience.
- » Giving the Ministry of Transport in the Philippines a platform.
- » Now also hosting the knowledge resources that were compiled during the En Route event on the MobiliseYourCity Knowledge Platform.

LOCS4Africa Let's get money moving – Climate finance for transport and Planning for finance in urban transport

3-12 November 2020

- » Allowed the Partnership to get closer to the Covenant of Mayors Sub-Saharan Africa (CoMSSA) and ICLEI

Climate Ambition Summit

December 2020

Video: [Mobility connects us](#)

- » Gave us an opportunity to help MTE showcase the progress made since COP21.

In addition, the MobiliseYourCity Secretariat participated in meetings and partnerships to influence the global agenda for more action and resources for sustainable urban mobility.

We presented the latest developments of the Partnership and exchanged with European and international actors on SUMP's at the Eltis bi-annual Meetings on SUMP's. We met with key French private sector players at the CODATU Club Affaires. We strengthened our links to the United Nations Framework Convention on Climate Change (UNFCCC) by deepening our engagement with the Marrakesh Partnership for Global Climate Action. We contributed in particular to the updating of the Climate Action Pathways for transport, which suggest that all cities with more than 500,000 prepare sustainable urban mobility plans.



We disseminated our flagship knowledge products through participation at global events.

With a new strategy and a new team, our communication has improved in style and scope

Building on a communication strategy completed in late 2019, in March 2020 we introduced the concept of the MobiliseYourCity service areas, and in April we launched a new newsletter with five distinct sections to reflect these services, complemented by a section on 'Behind the scenes'.

Led by the new staff for outreach and communications with financing from the AFD, the Secretariat has been emphasising sharing insights from implementation and results to encourage more cities and countries to get on the sustainable mobility bandwagon.

With refocused messages, the reach of our communication has also been increasing. In addition to the people who have directly received the Global Monitor 2020, over 500 others have viewed it on our Knowledge Platform. The bi-monthly MobiliseYourCity Connections Newsletter, now reaches nearly 1,800 people around the world in three languages: English, French and Spanish. With 71 new posts on Facebook, 122 on Twitter, 132 on LinkedIn, 2020 saw an increase of page likes of 87.5% on Facebook, 237.72% on LinkedIn and 23.03% on Twitter from March to December 2020.

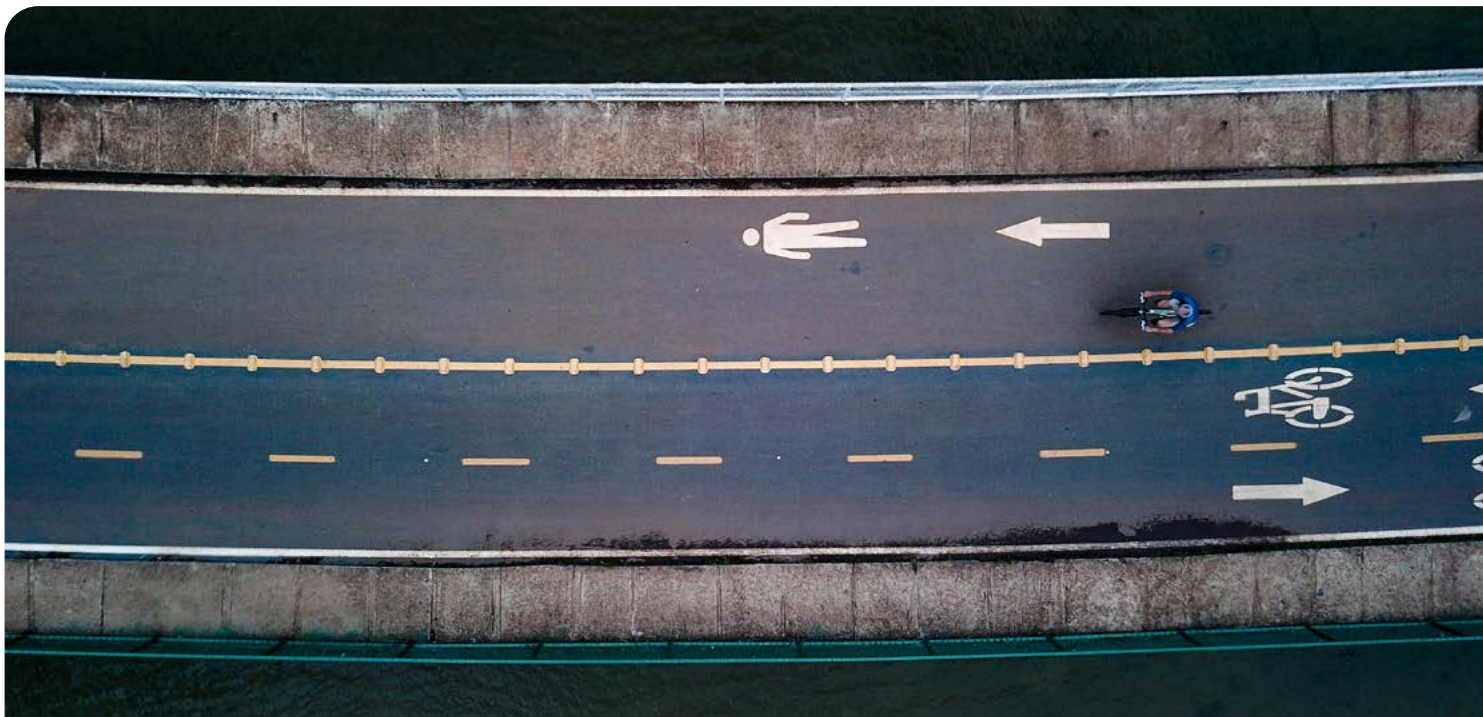
Sharpening and expanding our advocacy objectives for the next five years

The new MobiliseYourCity strategy co-created by our partners and presented during the 8th Steering Committee Meeting in November 2020 redefines some of the objectives of the Partnership in terms of advocacy.

MobiliseYourCity will keep advocating in favour of more action and resources for sustainable urban mobility. One major new element is to not only target institutions but also individuals. Indeed, our members have repeatedly raised the difficulty to encourage individual behavioural change for the adoption of sustainable mobility practices and we want to support cities in communicating better about this necessary change thanks to evidence-based messaging.

To better advocate for more resources for sustainable mobility, we will now emphasize the broad impacts of our work, not only on climate and the environment, but also on social and economic inclusion.

Because MobiliseYourCity fundamental strength lies in its partnerships, we will reinforce existing partnerships or initiate new ones on complementary topics.



Behind the Scene: the life of a global partnership

Four cities and two countries joined MobiliseYourCity in 2020

This year has been a dynamic year for the MobiliseYourCity Partnership. New partners, including four cities (Mandalay in Myanmar, Medan in Indonesia and Swat and Abbottabad in Pakistan) and two countries (Thailand and Chile), have officially joined the Partnership, expanding our thematic expertise and geographic spread. We are now nearly 100 partners strong, with 63 member cities and 15 member countries from the Global South.

A clear vision and mission: our new Strategy for the next five years

At the 8th Steering Committee Meeting in November 2020, the Partnership has shaped a new Strategy for the next 5 years. Moving forward from our initial vision, we will increasingly focus on coupling planning with implementation, and complementing mitigation with a socially inclusive and just transition. Together with our Partners we will continue shaping low-carbon mobility systems that contribute to efficient, safe, and just cities for all urban residents of today and the future.



"We are glad that MobiliseYourCity Project Management Unit for Asia has been recruited and has started to work in September 2020. This will enhance our cooperation with the Asian Development Bank. More than 5 SUMPs and 3 technical assistance programmes are ongoing."

Lise Breuil

*Head of Mobility and Transport Division, AFD
Paris, France*

From 36 M€ to 38 M€ in 2020: increased resources available to support two member countries and the MobiliseYourCity Secretariat

In October 2020, the German Ministry of Environment, Nature Conservation and Nuclear Safety (BMU), approved an additional 2 million euros to support the Partnership and selected country members. With BMU's extended financial contribution Colombia and the Philippines will be able to transition two high-quality National Urban Mobility Policies and Investment Programmes (NUMPs) to implementation.

Additionally, the new funding by BMU has enabled the Partnership's Secretariat to add a new expert on capacity building. The Secretariat has now the required resources to scale MobiliseYourCity's methodological framework and capacity building service, thereby complementing the valuable work being conducted at the local (through mobility planning) and regional (through Communities of Practice) levels.

Creation of a Project Management Unit in Asia: strengthening the local development of the Partnership

The Project Management Unit (PMU) for MobiliseYourCity in Asia was jointly recruited by AFD and ADB and started its activities in September 2020. The development and the management of this PMU was assigned to a consortium of consultants gathering Espelia, Artelia, CODATU and Institut Paris Region (IPR). This consortium is mainly composed by French entities but relies on a large pool of experts in mobility, transportation and urban planning, mainly coming from Asia and Europe.

In order to support the expansion of the MobiliseYourCity program in Asia, this PMU aims to provide technical and administrative support to respond to the needs of MobiliseYourCity member cities. The support will include SUMPs, thematic studies and capacity building services.

Five new people joined the Secretariat

2020 has been a year of changes at the MobiliseYourCity Secretariat. Despite the COVID-19 crisis, the Secretariat did not stop growing and five new professionals have joined the team since last February, bringing a breath of fresh air to Brussels' headquarters: Eléonore François-Jacobs, Partnerships and Outreach Manager, Julien Ferdinand, Communications Manager, Mateo Gómez, Associate Mobility Expert, Elena Tanzarella, Communications Intern and Anouchka Strunden, Mobility Expert Intern.

They joined Sasank Vemuri, Coordinator of the Partnership and head of the Secretariat and Vincent Larondelle, Monitoring and Evaluation Manager who had both joined the Partnership in 2019.

This expansion has been made possible thanks to additional funding from AFD and BMU.



Going the Extra Mile: a new strategy for MobiliseYourCity

Five years in action, the MobiliseYourCity Partnership reassessed its objectives, mission and overall vision to continue improving the support we offer our member cities and countries.

During a two-month co-creation process with our partners, we have developed a new strategy for the next five years which redefines our vision and mission, puts digital technologies at the centre of our action and identifies opportunities to scale up our impact through strategic additional support and strategic partnerships.

The new vision goes beyond a climate compatible mobility to now include social justice:

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.

By giving equal weight to the social, economic and environmental dimensions of sustainability as the core guiding principles of the Partnership, we bring the narrative of the Partnership in line with our already comprehensive methodology and practice: National Urban Mobility Policies and Investment Programmes (NUMPS) and Sustainable Urban Mobility Plans (SUMPs) are

already vehicles for an environmentally, socially and economically sustainable transition in urban transport.

Our mission revolves around four main components:

- We plan for transformative change
- We bridge planning with implementation
- We build capacities and scale solutions
- We motivate others through tangible results

It is summarised as follows:

Our mission is to incubate scalable solutions, accelerate the adoption of proven approaches, and facilitate complex change processes to transform urban mobility.

Concretely, this translates into the addition of a service area to bridge planning with implementation, bringing MobiliseYourCity's offer up to four service areas:

- **Mobility planning:** while continuing our core mandate of comprehensive planning, MobiliseYourCity will use digital tools to enable effective and inclusive planning and integrate measures for a just transition.

- **Implementation support:** to help bridge the existing “implementation gap” identified for certain small-scale and critical measures, we will offer implementation support on a selection of thematic areas: walking and cycling, paratransit and policy and regulatory reforms.
- **Capacity development:** in order to build capacities at scale, it is imperative that we collaborate with others to build on existing resources, develop synergies and new systems. We need to expand our methodological guidance to include sectoral issues that are ubiquitous in cities in the Global South.
- **Advocacy:** the Partnership will capitalise on its achievements to encourage more cities and countries to engage on the path to sustainable mobility. MobiliseYourCity will also sharpen its message to lenders and investors that Sustainable Urban Mobility Plans and National Urban Mobility Policies and Investment Programmes (SUMPs and NUMPs) are vehicles for identifying Paris compliant investments. The Partnership will then work towards an increased recognition of the link between cities and transport in organizations working on climate change.

Looking forward

In a continued effort to empower cities across the world to take ambitious action and transform mobility, we have already started to implement the strategy and are looking at innovative ways to give access to these complex mobility planning processes to cities beyond our immediate members. We remain more than ever committed to deliver concrete impact and are building on the first results to keep improving our services to our members.



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.

7 City and Country Factsheets

The MobiliseYourCity Partnership has 63 partner cities and 15 partner countries. Our Implementing Partners are supporting 31 cities and 9 countries in preparing SUMPs and NUMPs respectively.

31 Supported SUMPs

9 Supported NUMPs



The MobiliseYourCity Global Partnership

Status of technical assistance

- 31 Supported SUMP
- 14 Cities with non-SUMP Technical assistance
- 9 Supported NUMP
- 3 Countries with non-NUMP technical assistance

Latin-America and Caribbean

Completed

Santo Domingo, Dominican Republic
Peru

Ongoing

Belo Horizonte, Brazil*
Teresina, Brazil*
Chile
Antofagasta, Chile
Colombia
Ibagué, Colombia*
Ecuador
Ambato, Ecuador
Guadalajara, Mexico
Arequipa, Peru
Trujillo, Peru
Uruguay

Upcoming

Córdoba, Argentina
Baixada Santista, Brazil
La Habana, Cuba
Puebla, Mexico*

Africa

Completed

Cameroon
Douala, Cameroon
Yaoundé, Cameroon
Morocco*
Niamey, Niger*
Tunisia

Ongoing

Bouaké, Côte d'Ivoire
Dire Dawa, Ethiopia
Al-Assima (Rabat Salé), Morocco
Casablanca, Morocco
Kenitra, Morocco*
Khouribga, Morocco
Maputo, Mozambique
Oujda, Morocco*
Dakar, Senegal

Upcoming

Kumasi, Ghana
Madagascar*
Antananarivo, Madagascar*
Dodoma, Tanzania

Asia

Completed

The Philippines

Ongoing

India*
Ahmedabad, India
Kochi, India*
Nagpur, India*
Medan, Indonesia
Kurunegala, Sri Lanka
Thailand

Upcoming

Mandalay, Myanmar
Abbottabad, Pakistan
Peshawar, Pakistan
Mingora (Swat District), Pakistan

Eastern Europe

Completed

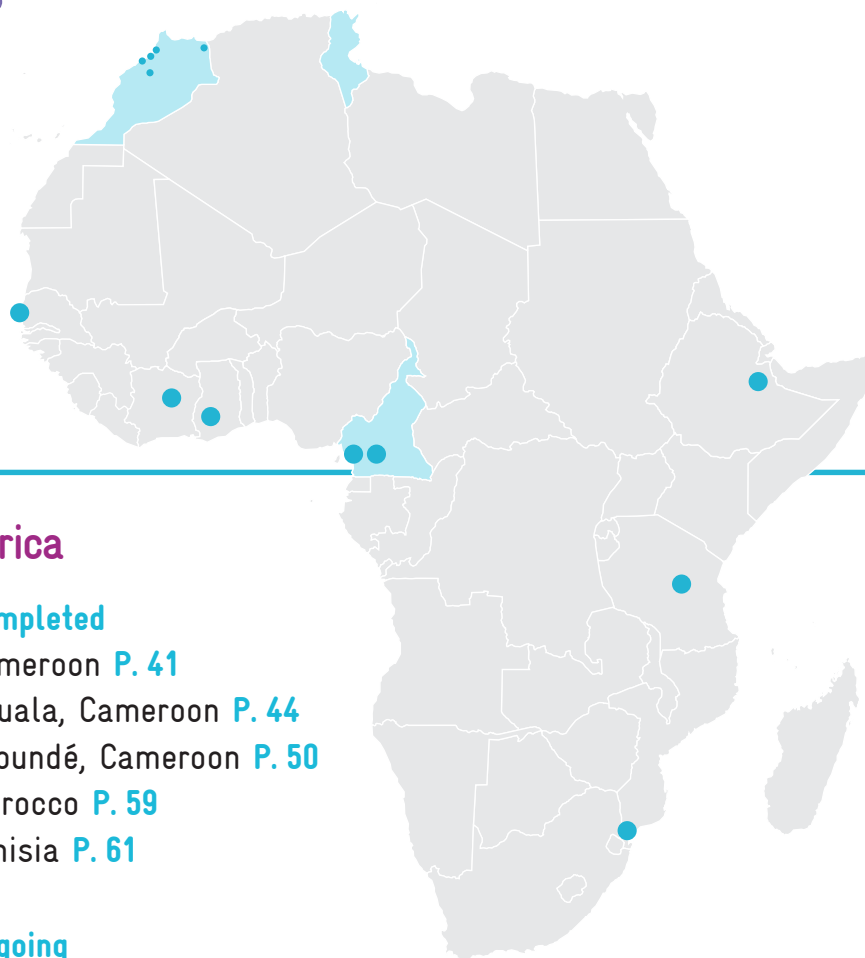
Czernowitz, Ukraine*
Lviv, Ukraine
Poltava, Ukraine
Vinnytsia, Ukraine*
Zhytomyr, Ukraine

Ongoing

Tbilisi, Georgia

*Supported with non-SUMP/NUMP technical assistance or pilot project.

Africa



Africa

Completed

Cameroon [P. 41](#)

Douala, Cameroon [P. 44](#)

Yaoundé, Cameroon [P. 50](#)

Morocco [P. 59](#)

Tunisia [P. 61](#)

Ongoing

Bouaké, Côte d'Ivoire [P. 65](#)

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Oujda, Morocco [P. 82](#)

Maputo, Mozambique [P. 84](#)

Dakar, Senegal [P. 88](#)

Upcoming

Kumasi, Ghana [P. 171](#)

Dodoma, Tanzania [P. 175](#)

Cameroon

Partner country

Status of the project: completed technical assistance



Basic Information

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

Percent of urban population: 57%

GDP per capita: USD 1,507

Percentage of the population living below the national poverty lines: 69%

Nationally Determined Contribution (NDC): no mobility related NDC

National GHG emissions per capita: 0,4 (tCO₂eq)

Proportion of transport related GHG emissions: 53%

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, economical 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 of course the most visible signs of these problems. The slowness, cost and discomfort of public transport also greatly affect 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 controlled.

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 organized in Yaoundé.

Support from the Partnership

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

Type of NUMP: Policy NUMP

Funded by: European Union

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 modernization and public transport;
- better use of state-of-the-art technologies for transport.

Status of implementation

Project start: 2018 Q1

Project completed: 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.

1. Strengthening the governance of urban mobility

- i. Strengthen the capacity of urban communities
- ii. Better integrate the activities of all urban mobility stakeholders
- iii. Strengthen MINH DU
- iv. Developing human resources and capacities at all levels
- v. Develop governance tools
- vi. Develop an approach for the metropolitan governance of urban governance of urban mobility

2. Improving the financing of urban mobility

- i. Urban communities should spend more and better on urban mobility
- ii. Strategic area 8: The State must continue to finance urban mobility while optimising its contributions

3. Restructuring and modernisation of public transport

- i. Introduce in Yaoundé and Douala strong public transport axes by bus, starting with the congested roads
- ii. Organise and professionalise the motorbike taxi sector by building on existing structures to drive organisation
- iii. Organise and professionalise taxi services in the main cities and encourage the development of new taxi services

4. Better use of transport technologies

- i. Gradually improving the vehicle fleet
- ii. Improving road maintenance technologies
- iii. Develop knowledge of the issues and institutional capacities in the digital field, and promote pilot projects

Highlights in the past year

66 M€ of external debt gets converted into investments for urban mobility in Yaoundé

Cameroon has benefited from a financial debt reduction mechanism (C2D financing) which allows AFD to return repayments in the form of subsidies for urban mobility. This mechanism has enabled to mobilize 66 million euros for the “Yaoundé Coeur de Ville” project, a priority road shaping investment project integrated into the Yaoundé SUMP. This project provides for the development of 3 major road intersections, with 2 bus stations and the inclusion of public transport, as well as pedestrian areas linked to the urban environment, including 2 markets.

Douala, Cameroon

Partner city

Status of the project: completed technical assistance



Basic Information

Urban area: 923 km²

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

GDP per capita: USD 2,952

Modal Share

Formal public transport: 0%

Informal public transport: 1%

Walking: 35%

Cycling: 0%

Private cars: 5%

Private motorbikes or 2-wheelers: 4%

Taxis: 12%

Moto taxis: 40%

Other: 3%

National GHG emissions per capita: 0.4 (tCO₂eq)

Region capital city

Context

The port City of Douala, the main economic hub of Cameroon, lies on a low coastal plateau, with many natural drains and flood prone valleys. With a population of more than 3.6 million inhabitants, which is expected to jump to 4 million by 2023, Douala is a dynamic, fast-growing city. Douala's rapid growth is particularly pronounced on the outskirts, where the access to formal public transport services is very low or non-existent. Urban sprawl is forcing people to travel further distances to access jobs, markets, health, and education. The low quality and inadequacy of infrastructure for walking and cycling adds up to the low provision of public transport services.

This combination of factors pushes travellers to rely on informal motorcycle taxis and mini-buses 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 outskirt areas but also in the city centre. This entails threats to the citizen health, safety, and comfort, as moto-taxis carrying multiple passengers are associated with higher risk of sexual harassment toward women. Aging or badly maintained vehicles also lead to a significant increase air and water pollution, and in greenhouse gas emissions.

Regulating and supervising urban development are major 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.

In addition to this, the lack of dialogue between the land-use planning, on the one hand, and mobility planning, on the other, exacerbates the urban transport problem. Above all, it is necessary to create the conditions for a viable integration between urban and transport planning. This diagnosis was translated into the need to initiate a planning approach that is more operational than those previously at work, in order to be able to respond to the challenges resulting from the rapid development of the metropolitan areas.

Support from the Partnership

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 322,000,000

Supported activities:

- Organization 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:
 - » Improving citizens' access to destinations, activities and services offered in Douala;
 - » Improving the urban environment in Douala;

Renewing the governance of Douala, its mobility, and projects

Status of implementation

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 centre 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 Manoka	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

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Project management, call for interest and contingency provision	63 M€ 2021: 15 M€ 2024: 37 M€ 2029: 11 M€	Domestic financing	2021 2024 2029
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 trucks parking			2021
Concerted plans and strategies for <ul style="list-style-type: none"> • 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 future plans after the SUMP			2029
Policy & regulation			
Informal transport project Continuous formalisation of moto-taxis and informal buses through the establishment of a new institution responsible for vocational training, schedules regulation, the administrative formalisation.		European Union	2024
Implementation of digital action plan <ul style="list-style-type: none"> • Open data policy • Support to development of information and service platforms • Mobility Observatory 			2024

Measures	Cost estimates in M€	Proposed Financing Source	Implementation by
Strengthening the capacity of police officers in relation to mobility			2024
Adaptation of public transport service 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 of air quality and water pollution			2029
Emergence of new public transport operators			2029
Public support to 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 expenses (CAPEX) estimates for different types of 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

Financing resulting from the SUMP	Source	Amount
International loan for the BRT and other investments	World Bank	220 M€
Domestic contribution to the BRT and other investments	Government of Cameroon	50 M€
Grant for the implementation of SUMP soft measures	European Union	2 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 CO ₂ eq -20%	0.548 Mt CO ₂ eq	0.95 Mt CO ₂ eq	0.76 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO₂eq)	-36 kg CO ₂ eq / capita -20.7%	161 kg CO ₂ eq / capita	174 kg CO ₂ eq / capita	138 kg CO ₂ eq / capita
Access Increase of the proportion of the population living 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
Modal share Increase of the modal shares of trips by public transport, walking and cycling	Formal public transport: +5% Informal public transport: 0% Walking: +6% Cycling: 0% TOTAL: +6%	Formal public transport: 2% Informal public transport: 1% Walking: 35% Cycling: 0% TOTAL: 38%	Formal public transport: 1% Informal public transport: 0% Walking: 34% Cycling: 0% TOTAL: 35%	Formal public transport: 6% Informal public transport: 0% Walking: 40% Cycling: 0% TOTAL: 46%
Road safety Decrease of traffic fatalities in the urban area, per 100.000 inhabitants	Improved but not quantified	Not quantified	Not quantified	Not quantified

Highlights in the past year

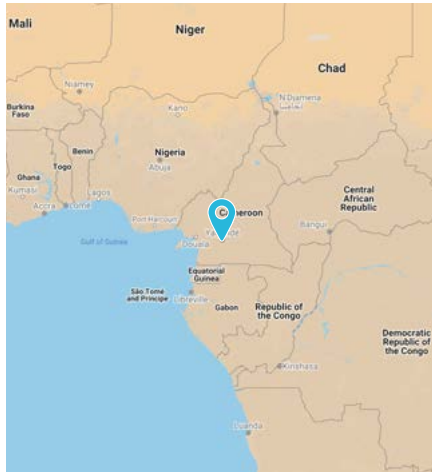
Pilot project to improve informal transport gets underway

Following the adoption of the SUMP, a pilot project for the professionalisation of motorbike taxis in Douala is being set up with the active participation of Codatu. The aim is to implement measures to improve motorbike taxi services for both drivers and users, and to provide public authorities with a knowledge base for regulating the system. Specific action points include the establishment of a contractual framework, a fleet-renewal policy, and the promotion or establishment of on-demand motorbike taxi platforms.

Yaoundé, Cameroon

Partner city

Status of the project: completed technical assistance



Basic Information

Urban area: 183 km²

Population: 4.1 million (2020, functional urban area) | Growth rate: 3.5%

GDP per capita: USD 1,529 (2018, Cameroon)

Key facts

City, Country	Yaoundé, Cameroon
Population	4.1 million (2020, functional urban area)
Growth rate	3.5%
Land area	Administrative limits: 304 km ² Urbanised area: 183 km ²
GDP per capita	1,529 \$ (2018, Cameroon)
Baseline motorization rate ¹	58 cars per 1000 inhabitants 18 motorbikes per 1000 inhabitants
Annual transport emissions per capita ²	241 kg CO _{2eq}
Local Partner (organization)	Urban Community of Yaoundé (CUI)
Implementing partners	Agence Française de Développement (AFD), Codatu
Donors supporting technical assistance for SUMP	French Facility for Global Environment (FFEM)
Amount in technical assistance	Approximately €350,000 ³
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
SUMP Vision	No concise vision formulated

¹ 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.

² For comparison, the annual transport (except air travel) emissions per capita in Germany are 1.61 tCO_{2eq}. Source: Die Umweltwirtschaft in Deutschland: Entwicklung, Struktur und internationale Wettbewerbsfähigkeit. www.umweltbundesamt.de

³ From a FFEM envelope of 2 M€.

<p>Approximate Total SUMP Investment Requirement (CAPEX/OPEX)</p>	<p>CAPEX by term</p> <ul style="list-style-type: none"> • 298,1 M€ (2025) / 554,7 M€ (2035) <p>Yearly OPEX to term</p> <ul style="list-style-type: none"> • 15 M€ (2035) <p>Total CAPEX & OPEX requirements by 2030</p> <ul style="list-style-type: none"> • CAPEX: 550 M€ • OPEX: 151 M€ • Total CAPEX and OPEX: 701 M€
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Diagnosis: Urban Mobility in Yaoundé

Like many other major cities in sub-Saharan Africa, Yaoundé is experiencing rapid population growth. The metropolis suffers from a lack of 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 offer, parking facilities or even simply roads and pedestrian areas. The economy of the city 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 reach a radius of 25 km by the end of the century. The increase in the demand for travel, and in 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 the consumption of more fuel 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.

There are about 8 million of trips travelled every day, from which one third are short distance trips travelled by walking 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.

All these modes of transport use the same poorly maintained road network, where only 300 km from 2700 km of roads are asphalted. The state of the road network limits both private and public transport. In particular, 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 and high-capacity modes (bus) and soft modes
- Degraded road surfaces or unmanaged intersections create traffic bottlenecks.
- Vehicle, 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 travelled every day by pedestrians and walking is the main mode of transport. However, the lack of sidewalk combined with a 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 categories of the population, and with an average occupation rate of 3 passengers, they are the main

motorized mode of transport. Taxis, even used collectively, are relatively expensive: for one passenger out of four, taxi fares only represent over 15% of their household income.

Moto-taxis: Moto-taxis are particularly present in the outlying districts. Their flexibility and agility allow them to use roads that are unpracticable for other vehicles, due to the poor state of the pavement or the narrowness of the road. Moto-taxis, often operated informally by very young drivers, are notably resistant to any regulation, which is nevertheless 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 cars. The car ownership rate, which is highly dependent on household income, is nevertheless increasing along with the standard of living.

Informal minibuses: Informal minibuses are of lesser importance in comparison to 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 fine particulate matters PM_{2.5} that were one hundred times higher than the WHO standard.

3. Safety and comforts are key issues to be addressed

Safety is a major 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 made by women, which can be linked to significant disparities in terms of 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 largest 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 extremely high, and the highest 20% of incomes are on average more than 7 times higher than the bottom 20%.

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

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, in spite of 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 develop together an integrated organisation for public transport and define a structuring infrastructure network and priority multimodal investment plans on the scale of the future large conurbation.

In total, financial resources allocated to the construction and maintenance of roads, 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 perspective of its mandate. The national level compensates financially with its much greater resources and the support of international donors, but coordination is insufficient between the city and the ministries responsible for urban development and public works.

The SUMP preparation process and stakeholder involvement

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

Throughout the process of 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 members of the technical committee, 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:

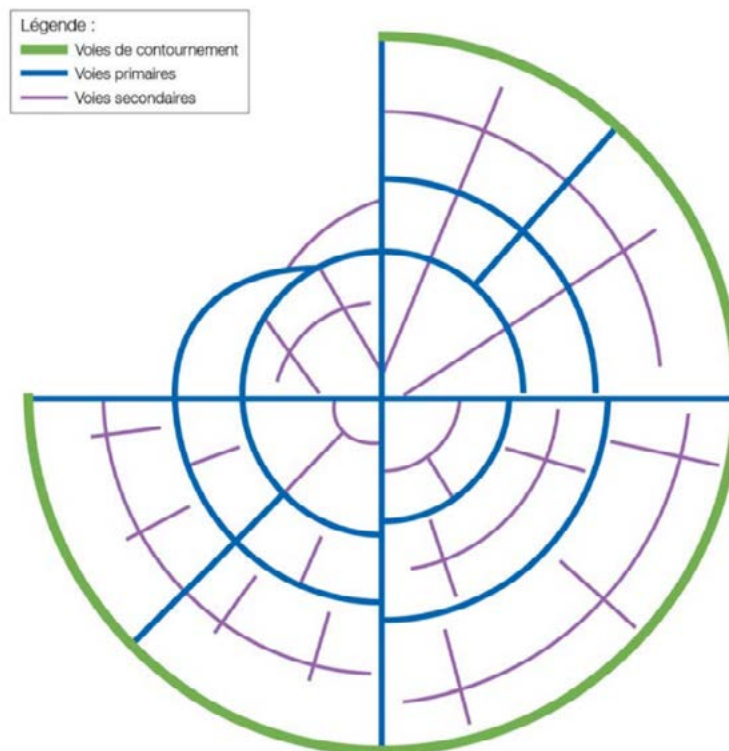
- A. The very short term: horizon of 1 to 2 years in order to highlight quick wins
- B. The medium term: horizon of 5 to 7 years in order to observe the effects of the first SUMP measures.
- C. The long term: horizon of 15 years to aim at significant results, to anticipate possible needs for reorientation.

Vision setting and definition of scenarios

Strategic Vision

The SUMP of Yaoundé does not propose clear vision and goals for urban mobility in the city. However, it fully adopts the EASI framework and puts a strong emphasis on 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 coherent road network: The Cross.

The network builds up on existing roads and makes use of north-south and east-west metropolitan axes, and of 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 in order 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 takes place, 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 increase sharply, especially 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 an important road infrastructure component in the short term, but focuses more on the creation of 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 structuring 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 offer that is affordable for the user and financially balanced. After having proven its effectiveness and relevance and gotten the adhesion of users, 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 in terms of public transport in the long term.

Key SUMP measures

Measures	Cost estimates in M€	Proposed Financing Source	Implemented by
Total cost	891.9 M€		
Physical investments, infrastructure and rolling stock	SUBTOTAL: 852.8 M€		
Bypass roads	2025: 157 M€ 2035: 304 M€	Domestic financing / No international financing identified	2025 2035
Primary roads	2025: 29.7 M€ 2035: 94.5 M€	Domestic financing / No international financing identified	2025 2035
Secondary roads	13 M€	Domestic financing / No international financing identified	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: 1.4 M€/year	AFD	2020 2035
Public transport lines (bus and minibus) and related road facilities	2025: 54.9 M€ 2035: 102.4 M€	Domestic financing / No international financing identified	2025 2035
Additional studies and plans	SUBTOTAL: 28.7 M€		
Studies and support reorganisation plan for bus lines	2025: 9.7 M€ 2035: 19 M€	Domestic financing / No international financing identified	2025 2035
Regulation, institution and policy reforms	SUBTOTAL: 10.4 M€		
Informal transport project			
Reform of the taxi and moto-taxi systems			
Continuous formalisation of moto-taxis and informal buses through the establishment of a new institution responsible for vocational training, schedules regulation, the 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 / No international financing identified	2020
Control and training centre for mobility and transport	3.8 M€	Domestic financing / No international financing identified	2023

Projected results and impact

The implementation of the measures identified in the SUMP is expected to lead to a significant impact in terms of GHG emission reduction, improvement of the modal share of sustainable transport modes, and more. The following table presents the expected results and impact.

Impact Area	Expected Impact																								
GHG emission (SDG 11)	<div>Projected emissions in absolute value:</div> <table><tr><td></td><td>Baseline 2018</td><td>BAU 2025</td><td>SUMP 2025</td><td>BAU 2035</td><td>SUMP 2035</td><td>SUMP vs BAU 2035</td></tr><tr><td>Per capita</td><td>241 kg CO_{2eq}</td><td>284 kg CO_{2eq}</td><td>251 kg CO_{2eq}</td><td>367 kg CO_{2eq}</td><td>271 kg CO_{2eq}</td><td>-26.16%</td></tr><tr><td>Total</td><td>0.78 Mt CO_{2eq}</td><td>1.14 Mt CO_{2eq}</td><td>1.01 Mt CO_{2eq}</td><td>2.00 Mt CO_{2eq}</td><td>1.48 Mt CO_{2eq}</td><td>-26.00%</td></tr></table> <div>Projected increase of annual GHG emissions by 2029, in percentage of the baseline:</div> <ul style="list-style-type: none">• Business-as-usual scenario: +101%• SUMP scenario: +59%		Baseline 2018	BAU 2025	SUMP 2025	BAU 2035	SUMP 2035	SUMP vs BAU 2035	Per capita	241 kg CO _{2eq}	284 kg CO _{2eq}	251 kg CO _{2eq}	367 kg CO _{2eq}	271 kg CO _{2eq}	-26.16%	Total	0.78 Mt CO _{2eq}	1.14 Mt CO _{2eq}	1.01 Mt CO _{2eq}	2.00 Mt CO _{2eq}	1.48 Mt CO _{2eq}	-26.00%			
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Accessibility (SDG 11)	<table><tr><td></td><td>Baseline 2018</td><td>BAU 2025</td><td>SUMP 2025</td><td>BAU 2035</td><td>SUMP 2035</td></tr><tr><td>Total population covered</td><td>2,212,283</td><td>4,028,557</td><td>4,028,557</td><td>5,599,757</td><td>5,599,757</td></tr><tr><td>Population at 500m or less of public transport stops</td><td>1,350,000</td><td>1,415,700</td><td>1,405,500</td><td>1,528,900</td><td>1,888,600</td></tr><tr><td>% Access</td><td>42%</td><td>35%</td><td>35%</td><td>27%</td><td>34%</td></tr></table>		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%
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% Access	42%	35%	35%	27%	34%																				
Air pollution (SDG 11)	Improved but not quantified																								
Modal share	<div>Percentage of total trips being realized with Public Transport</div> <table><tr><td></td><td>Baseline 2018</td><td>BAU 2025</td><td>SUMP 2025</td><td>BAU 2035</td><td>SUMP 2035</td></tr><tr><td>Modal share of Public Transport</td><td>2%</td><td>1%</td><td>9%</td><td>2%</td><td>19%</td></tr><tr><td>Modal share of walking and cycling</td><td>32%</td><td>31%</td><td>34%</td><td>29%</td><td>35%</td></tr><tr><td>Total</td><td>34%</td><td>32%</td><td>43%</td><td>31%</td><td>54%</td></tr></table>		Baseline 2018	BAU 2025	SUMP 2025	BAU 2035	SUMP 2035	Modal share of Public Transport	2%	1%	9%	2%	19%	Modal share of walking and cycling	32%	31%	34%	29%	35%	Total	34%	32%	43%	31%	54%
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Total	34%	32%	43%	31%	54%																				
Road safety (SDG 3)	<table><tr><td></td><td>Baseline 2018</td><td>SUMP 2025</td><td>SUMP 2035</td></tr><tr><td>Deaths</td><td>1000</td><td>800</td><td>500</td></tr><tr><td>Heavily wounded</td><td>5000</td><td>4000</td><td>2500</td></tr></table>		Baseline 2018	SUMP 2025	SUMP 2035	Deaths	1000	800	500	Heavily wounded	5000	4000	2500												
	Baseline 2018	SUMP 2025	SUMP 2035																						
Deaths	1000	800	500																						
Heavily wounded	5000	4000	2500																						
Mobilized finance (SDG 17)	<ul style="list-style-type: none">• 66 M€ - Secured international grant from AFD for "Yaoundé Coeur de Ville" project.• 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)																								
Expected institutional impact	The measures identified in the SUMP are complemented with a National Urban Mobility Policy, adopted in parallel to the SUMP process.																								

Lessons learned

On the occasion of the 3rd MobiliseYourCity conference in Yaoundé in 2019 and the official presentation of the SUMP, a reflection group⁴ composed of different stakeholders proposed areas for improvement for future SUMP, 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, are 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 on the basis of 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 the behaviour of respondents in terms of urban mobility. These two methodologies can be complementary and origin-destination surveys would allow the rapid identification of large masses of journeys.

- III. **Predictive traffic models are expensive to develop, can create the illusion of a “scientific” approach and may generate a gap between their results and their real appropriation by technicians and local elected officials.**

Recommendation: Limit the use of models, base them on the observation and expertise of local counterparts and consultants (expert opinion). The SUMP must help identifying “strong lines”, a concept that does not necessarily lead to the choice of one mode rather than another, and to 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 as a lever for the implementation of 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 national level (NUMP) should contribute to providing a legislative and legal framework and sources of funding.

⁴ Reflection group led by CODATU: Patrice Berger and Thibaut Descroux (UrbaLyon), Thierry Goin (CEREMA), Marie Dols (consultant), Philippe Bossuet (SYTRAL), Jean-Jacques Helluin, Mael Martinie, Sofia Martin, Antoine Clénot (CODATU).

Morocco

Partner country

Status of the project: completed technical assistance



Basic Information

Population: 35,740,000 | Growth rate: 1,20%

Percent of urban population: 58% (2010)

GDP per capita: USD 8,612 (2017)

Percent 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)

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 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, 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 the 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.

Support from the Partnership

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)

Objectives: 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 urban mobility national strategy.

NUMP key measures and cost estimates

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

Measures	Cost estimate
Integrate the mobility dimension into the actions of the other major related sectors	
Organising and planning urban mobility to contribute to sustainable development	
Maintaining and redeploying government funding	
Increase and rationalize funding from the municipalities	
Complete the legal and institutional framework and carry out pilot operations for all other possible sources of funding	
Building a legal and technical framework for new urban mobility solutions in terms of legislation, regulations, and technical choices	
Implement high-impact pilot projects	
Promoting an integrated and efficient organisation of all modes of public transport	
Maintain a realistic and easy-to-manage public transport fare policy	
Integrate the mobility dimension into the actions of the other major related sectors	
Organising and planning urban mobility to contribute to sustainable development	
Maintaining and redeploying government funding	
Adapt and operationalise the target organisational model for the governance of urban mobility	
Development of governance tools	
Strengthening institutional and human resource capacity for better governance at central and local levels	
Developing institutional capacity and skills for digital solutions for urban mobility	
Develop a better understanding of the challenges and priorities for action of digital technology as applied to urban mobility.	
Improving the delegated management of public transport	

Tunisia

Partner country

Status of the project: completed technical assistance



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 lines: 15.5%

Nationally Determined Contribution (NDC): Non-quantified transport related NDC

National GHG emissions per capita: 2,65 (tCO₂eq)

Proportion of transport related GHG emissions: 21%

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 urbanization that is expected to result in three fourths of the population living in urban areas by 2030. A growing citizenry exerts increasing pressure to the existing urban transport infrastructure, already characterized by an inefficient public transport service that has been historically unable to satisfy the mobility demands of the urban population. These factors have resulted in an increasing motorization 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 opposite relation to 1970s modal distribution, when public transport represented 70% of the modal share.
- The vehicle fleet has steadily 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, for example reducing average speeds to 7 km/h during rush hours in the capital city, Tunis.

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 250,000

Main purpose of the NUMP: 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 is comprehensive in nature and includes a broad package of measures to decarbonize transport, increase institutional capacities and improve the governance of the sector:

- Development of technical and institutional framework to support Tunisian cities in SUMP development
- Identification of sustainable urban mobility measures, including action plan for paratransit reform
- Establishment of national fund for urban mobility
- Establishment of National Urban Mobility Observatory
- Capacity building programme for local and national agencies
- Support to the ongoing decentralization process in the country through 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 undergoing with support from grant funding by AFD.

Status of implementation

Project start: 2017 Q1

Project completion: 2020 Q2

Completed outputs:

- Initial diagnostic and priority setting
- Definition of a vision and strategic orientations
- Definition of action plan, responsibilities and resources

- NUMP elaboration
- Official adoption of the NUMP by the national government
- Tunisian MRV approach
- Tunisian SUMP approach

Next expected outputs

- Support SUMP elaboration in 3 cities
- Mobilization of international experts to support the Ministry of Transport implement prioritized actions
- Preparation of framework and identification of administrative resources and competencies for the establishment of local transport authorities

NUMP key measures and cost estimates

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

Measure	Cost Estimate
Creation of structures at the local scale for urban mobility planning and management	EUR 150,000
Creation of a Central unit for technical assistance for the follow up on the SUMP's implementation	EUR 200,000
Creation of a National Urban Mobility Commission	EUR 60,000
Implementation of governance tools	EUR 50,000 (Technical Assistance)
Capacity building for the managerial staff	EUR 100,000
Integration of urban mobility programs in Engineers and urban planning studies	EUR 160,000
Information and awareness for civil society, medias and elected	EUR 100,000
Capacity buildings for operation managers, technical staff, and execution agents	EUR 50,000

Finance leverage

Financing resulting from the NUMP	Source	Amount
Grant fund	AFD	EUR 250,000

Associated financing supporting measures in the NUMP	Source	Amount
Grant fund	AFD	EUR 400,000

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2015	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO ₂ eq)	-3,300,000 tCO ₂ eq	9,200,000 tCO ₂ eq	15,300,000 tCO ₂ eq	12,000,000 tCO ₂ eq
Access Increase of the proportion of the population living 500 meters or less of a public transport stop	Unkown	Unkown	Unknown	80%
Modal share Increase of the modal shares of trips by public transport, walking and cycling	TOTAL: 31.4%	TOTAL: 53.6%	Unknown	TOTAL: 85%
Road safety Decrease of traffic fatalities in the urban area, per 100,000 inhabitants	-50%	-55 fatalities / 100,000 hab	Unknown	-22 fatalities / 100,000 hab

Highlights in the past year

Tunisia benefited from the realized potential of several Implementing Partners bringing their respective strengths to the project

Four MobiliseYourCity implementing partners collaborated in Tunisia, bringing together the stronger qualities of every organisation, such as technical expertise in energy and public transport or institutional strengthening, allowing to implement a better NUMP in a complex institutional environment.

The ownership and engagement of the Ministry of Transport was crucial for broad political buy-in

One of the greatest challenges encountered during the NUMP process has been the political backing and ownership of the other ministries. Awareness-raising activities were carried out by the design office at the Ministry of Transport, which conveyed the message to the various ministries and stakeholders (Ministry of Equipment and Housing, Ministry of Local Affairs, Ministry of Finance, etc.). This necessary coordination delayed the progress of the approach but was eventually fruitful and must be continued during the implementation phase of the NUMP.

Bouaké, Ivory Coast

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 120 km²

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

GDP per capita: USD 1,700 (national)

Modal Share*:

*Source: Urban Master Plan, 2014.

Informal public transport (Gbaka): 2%

Private cars: 8%

Private motorbikes or 2-wheelers: 74%

Taxis: 15%

Freight vehicles: 1%

National GHG emissions per capita: 0.98 (tCO₂eq)

Exposure to climate change: HIGH

Regional capital city

Context

Bouaké is located in the center of the country, at the intersection of two important international road axes connecting Abidjan, Burkina Faso, Mali, Ghana, southern Guinea and Liberia. The city is also a rail and air travel hub, as well as home to an important wholesale market of regional food products which is at the heart of its economy.

Transport system

The road networks

The main road network is well maintained and is organized around the North-South and East-West axis of the National Road Network, and other important axes connecting the center to the airport in the north-west and the military camp, in the north-east.

The secondary network is underdeveloped, resulting in the isolation of some neighborhoods. The tertiary network providing service within residential areas is generally difficult to drive.

Urban transport

An inventory carried out in 2014 estimates a total linear distance of 582 km, including 122 km (20%) of paved roads, mainly in the city center, 135 km (23%) of passable roads, maintained by the services of the city, and the rest, non-drivable roads serving in particular the peripheral districts. Individual motorization is relatively low, and parking is not yet a major problem, although it is gradually increasing. The road rights-of-way are wide but they are not designed to organize parking, nor to ensure the safety and comfort of pedestrians and cyclists. The practice of transport by bicycle is also very rare.

There is no longer a public transport company. The latter (The STUB), created in 2009, went bankrupt in 2011. A large part of the transport offer is provided by artisanal transport: moto-taxis, taxis and minibuses ("Gbakas"). Taxis represent a very important part of the rolling vehicles but pose certain problems, in particular because of their frequent use of butane gas as fuel, which brings great risks of explosions. Minibuses represent a smaller share of traffic but are more structured. The Ministry of Transport is currently planning to re-deploy a public transport service (bus) in 2021.

The most important mode of motorized transport is two-wheelers (including motorcycle taxis). It is economical, fast, better suited to road conditions and less sensitive to traffic congestion. However, motorcycles and moto-taxis have a predominant presence (60% in 2016) in accidents. Although hard to quantify, walking is an important mode of mobility.

Intercity transport

Interurban transport is partly provided by large transport companies, by coaches (UTB, AVS, Malex). Their private bus stations, located in tight spaces in the heart of the urban grid, attract commercial activities around them as well as transport operators creating very important traffic disruption points. The Ministry of Transport has been seeking since 2017 to promote the creation of a bus station for all carriers on the outskirts of the city, but this choice still poses problems.

The regional service, for the transport of people and goods, is provided by private vehicles (taxi-brousses), which tend to create informal stations throughout the city with strong negative impacts on traffic, and by minibuses (20 to 30 seats, called Massa / Dianra or Badjan) which sometimes use private spaces as stations, but more often public sites. These sites are rarely developed.

Freight

The transport of goods in the urban area is mainly provided by small vehicles (tricycles, pickups or tarpaulin vans), whose traffic and parking contribute greatly to traffic congestion. Heavy truck traffic and parking, especially those that cross the city without a more interesting alternative route, have a very negative impact on traffic and on the condition of the roads.

Institutional context

The local authorities most involved in issues related to improving urban mobility are the Town Hall of Bouaké, the Regional Directorate of Transport and the Prefecture. Local institutions do not yet have the means to organize and regulate the transverse and multi-sectoral issue related to mobility. This results in a lack of regulation and police power.

Challenges and main aim of the SUMP

Mobility in Bouaké faces several problems at the same time. They include:

- The overall organization of the city, with the presence of a single center, which attracts a lot of urban travels, and the low density of the urban grid which extends travel distances;
- The poor quality of the road network, its weak functional hierarchy and its radial organization which converges towards the city center;
- The lack of proper use of the asphalt-surfaced road (deficient organization of traffic, management of intersections and parking, serious road safety issues);
- Traffic congestion;

- Lack of public mass transport service. The trips from and to certain neighborhoods is limited to the use of moto-taxis and walking;
- The omnipresence of low-capacity passenger and goods transport service/paratransit sector;
- The local institutional weakness in being able to organize and regulate a transverse and multi-sectoral problem;
- A lack of regulation through the taking of coercive measures and the absence of police power regarding transport.

The challenge for the city of Bouaké today is to be able to adopt a strategy for sustainable urban mobility in line with the Urban Master Plan (SDU). This strategy is expected to take into account the current and future challenges linked to climate change and sustainable development, as well as accessibility.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission

Funding amount: EUR 400,000

Implemented by: AFD and CODATU through the MobiliseYourCity Africa Program

Local counterpart: Municipality of Bouaké

Status of implementation

Project start: 2021 Q1

Expected project completion: 2022 Q1

Completed outputs:

- Elaboration of specific Terms of Reference
- Launch of the consulting call
- Evaluation of the proposals
- Selection of the consultant and administrative assignment of the mission (contract signed in January 2021)
- Beginning of the assignment (Kick-off meetings scheduled for March 2021).

Next expected outputs:

- Signature of a Memorandum of Understanding between a delegate of the Municipality of Bouaké and AFD (2021 Q1)

Highlights in the past year

55 M€ loan approved by AFD to modernize interurban transport infrastructure around Bouaké

The Ivorian government and AFD ratified a 55 million euros loan agreement in June 2020 to continue the financing of the rehabilitation of the northern road between Bouaké and Ferkessedougou (220 km), the replacement of 11 structures in rural areas by metal bridges, the rehabilitation of the Felix-Houphouët-Boigny bridge (under way). The first part of this project has been financed by France through a debt to investment conversion mechanism and an AFD loan (for the northern road project), for a total amount of 311 million euros.

Regarding urban mobility in Abidjan, the Ivorian government and AFD signed an agreement to cofinance (with the World Bank) the construction of a 20 km East-West Bus Rapid Transit (BRT) line equipped with articulated electric buses between the communes of Yopougon and Bingerville in Abidjan, etc. The BRT is a component of the Abidjan Urban Mobility Project (PMUA).

The impact of COVID-19

The end of the political crisis at the beginning of the 2010s enabled the country to record one of the strongest GDP growths in the world, with growth rates still above 7% since 2012, despite a slight slowdown in recent years. This strong growth has helped raise the standard of living of Ivoirians, even though the current poverty rate remains high, above 40%. It is still too early to anticipate precisely the consequences of the COVID crisis on the Ivorian economy, with opposite effects (increase in public spending, reduction in the energy bill and in export earnings following the decline in certain agricultural products, especially cocoa and cashew nuts).

Regarding the study, the entire process of launching the consultation was slowed down in 2020. At this stage, we cannot predict the impact that the health crisis will continue to have on the development of the study.

In the first activities to be carried out during the start-up phase of the SUMP, the consultant is expected to analyze the post-crisis situation in Bouaké through the following studies:

- A qualitative analysis of the transport situation, comparing it to the situation prior to the health crisis. In particular, the following points should be answered:
 - » Is the current situation similar to the situation before the crisis?
 - » If not, is the situation expected to return to normal, and if so, by what timeframe?

This qualitative analysis will be based on interviews, field visits and available data.

- On the basis of this assessment, the consultant will identify:
 - » The risks and opportunities arising from the impact of COVID on urban mobility in Bouaké.
 - » The impact of COVID on the SUMP development process.

Dire Dawa, Ethiopia

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 70 km²

Population: 320,000 | Growth rate: 4%

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)

Exposure to climate change: HIGH

Region capital city

Context

Located on a large flat plain between Addis Ababa and Djibouti, Dire Dawa is meant to become the main economical hub of eastern Ethiopia. Nowadays, it presents a high density of commercial activities, including markets that generate important flows of goods and people at different scale, putting some pressure over roads and public spaces. In the midterm, national freight transit shall boom, 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 inhabitants). Dire Dawa is located on a secondary national/international freight corridor between Addis Abeba and Djibouti, meaning that a significant volume of trucks transits through the city. Dire Dawa currently does not have any transport master plan.

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

Dire Dawa road network is able to bear without major disturbance the different mobility flows going through the city, whether for transit, exchange or internal purposes. However, the network is extremely unbalanced in between, with an overwhelming weight of local roads and a limited lineage of structuring ones (primary, secondary, tertiary).

There is no existing mass transit system. Bajajs represent 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 quite a lot according to places in the city and time of the day. Bajaj is a fully private supply that only targets the most solvent market segments and

does not address properly the others, leaving some mobility demand unanswered. On peak hours a few minibuses provide a complementary supply to Bajaj on three routes. The publicly operated service City bus is very limited and consists of 10 urban routes limited to peak hours (four rides a day).

Urban, road and transport sectors are managed at both federal and local level. Although responsibilities and perimeters are properly defined, some interfaces regarding road or urban transports can be uneasy to manage. Both the City and the Region of Dire Dawa are under the authority of the Mayor. The nine urban Kebeles are managed by the City Administration 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).

Dire Dawa Administration, the local counterpart, has mandate and responsibility to finance mass public transport infrastructure and the running cost of public transports is part of the public authority's budget. Globally, the budget for the urban transport sector was set between 480 and 655 million BRR (14 – 19 M USD) in the past few years.

Challenges and main aim of the SUMP

Mobility in Dire Dawa faces several problems at the same time. They include:

- Lack of road network structuring
- Lack of integrated road axis management
- Lack of proper Bajaj supply structuration
- Lack of infrastructure for non-motorized modes leading to poor consideration
- Lack of robust logistic chains organization
- Lack of an integrated mobility strategy or multimodal approach
- Lack of coordination between economical, 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 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:

- Project implementation support of the city government for the preparation of a SUMP

Status of implementation

Project start: 2019 Q4

Expected project completion: 2021 Q4

Completed outputs:

- Reporting notes following missions 1 & 2
- Minutes of stakeholders meeting
- Surveys results
- Module 1 report (Urban mobility diagnosis)

Next expected outputs

- Module 2 report (Vision, goal setting and measure planning)

Highlights in the past year

Highlights from the past year

- One mission organized in Dire Dawa, including 3 focus groups, workshop with technical stakeholders and complementary field visits
- Meeting with Federal Transport Authority and WRI in Addis Ababa
- Delivery of the diagnosis in July 2020

Impact of COVID-19 on project preparation

Due to the sanitary crisis and the political context in Ethiopia, missions could not be resumed until February 2021, which delayed the project planning by about 6 months.

The SUMP process was expected to be conducted over a 12-months period, in 4 phases: kick off, diagnosis, vision and objectives, action plan and financing. Covid 19 constraints have added 6 months to this schedule.

Al-Assima, Morocco

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 1,910 km²

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

GDP per capita: USD 3,591

National GHG emissions per capita: 2.62 (tCO₂eq)

Exposure to climate change: HIGH

Country capital city

Context

Al-Assima has an existing mass transit system and master plan or similar document. The local counterparts, Etablissement de la Coopération Intercommunale Al-Assima ECIAA and Société du Tramway de Rabat-Salé (STRS), 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. Systems and procedures are not in place to monitor, evaluate and report on urban.

Al-Assima plans to develop a 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 STRS 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 expertise programme for the definition and implementation of local MRV-GHG approach, in link with national level (Rabat is one of the 3 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 the MobiliseYourCity Morocco

Local counterpart: Etablissement de la Coopération Intercommunale "Al-Assima" ECIAA, Société du Tramway de Rabat-Salé (STRS)

Supported activities:

Technical assistance to support STRS and the SUMP

- Deliverable reviews
- Support during the SUMP committees

Status of implementation

Project start: 2021 Q4

Expected project completion: 2022 Q4

Highlights in the past year

The procurement process for the SUMP study has been delayed for multiple reasons, including the COVID-19 pandemic. Uncertainties remain on the next steps to relaunch the procurement, as the crisis has endangered the overall economic sustainability of the tramway and bus network.

Casablanca, Morocco

Partner city

Status of the project: ongoing technical assistance



Basic Information

Grand Casablanca urban area: 1,117 km²

Population: 4,047,066 | Growth rate: 0.85%

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: %

Taxis: 4%

National GHG emissions per capita: 2.62 (tCO₂eq)

Exposure to climate change: HIGH

Region capital city

Context

Casablanca is the largest city of Morocco and one of the largest of Maghreb. It is also considered as the economic and business capital of the country.

The metropolitan area is facing exponential mobility growth with increasing traffic issues and related pollution. Since 2004, the Moroccan Government and the Municipality of Casablanca have developed a strategy to tackle these issues. The main achievement is the implementation of tramway line 1 and line 2 to develop efficient and green public transport. The tramway line 3 and 4 and the BRT line 5 and 6 are under construction. There is 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.

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 150,000 (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 national and local level in terms of low-carbon transport planning.

- Mission 1: Evaluation and assessment of the PDU 2004,
- Mission 2: Data collection, surveys, and counts,
- Mission 3: Realization of the diagnosis,
- Mission 4: Definition of scenarios and choice of a scenario,
- Mission 5: Formalization of the PDU Project,
- Mission 6: Design and implementation of a mobility observatory.

Status of implementation

Project start: 2017 Q3

Expected project completion: 2021 Q4

Completed outputs:

- Inventory and diagnosis ; goal setting and strategy development
- Scenario elaboration
- Formalization of the PDU project

Next expected outputs

- Approval of scenario setting
- SUMP action plan
- Monitoring and Reporting – MRV;

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 lines implementation	EUR 4,600,000,000
Bus network and taxis reorganisation and related bus lane	EUR 140,000,000
Circulation plan and parking policy upgrade	EUR 250,000,000
Non motorized transport policy upgrade	
Intermodality facilities upgrade	
Freight regulation enhancement	
Transversal: improve road safety and reduce private car disturbance	

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 impacts

Indicator	Impact 2030 (SUMP vs BAU)	Baseline - 2019	Projected 2030 BAU	Projected 2030 SUMP scenario
Total annual GHG emissions (Mt CO₂eq)	-0,1 Mt CO ₂ eq	1,05 Mt CO ₂ eq	1,50 Mt CO ₂ eq	1,40 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO₂eq)	-17 kg CO ₂ eq / capita	262 kg CO ₂ eq / capita	257 kg CO ₂ eq / capita	240 kg CO ₂ eq / capita

Highlights in the past year

100 M€ loan approved by AFD for light-rail in Casablanca

Agence Française de Développement (AFD) is supporting Morocco in the development of sustainable cities with efficient and low carbon means of transport. On November 2nd, 2020, this approach led to the signature of a 100-million-euro (1,1 billion dirhams) loan agreement combined with a 500,000 euro (5,5 million dirhams) technical assistance grant between the agency and Casa Transports, a local development company (SDL). The 100,5 million euro allocated by AFD will be used to build two new lines (T3 and T4) of the Casablanca tramway with a view to improving the mobility of city dwellers in a sustainable manner.

Kenitra, Morocco

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 76 km²

Population: 430,000 (2014) | Growth rate: 1.8%

GDP per capita: USD 3,007

National GHG emissions per capita: 2.62 (tCO₂eq)

Exposure to climate change: HIGH

Region capital city

Context

Kenitra is the 4th most important industrial city in Morocco and is strategically located 12 km from the Atlantic Ocean.

The city is currently involved in large-scale transport projects:

- The « Atlantic Free Zone » (AFZ), the largest industrial and export free zone in Africa, located 23 km east of the city and hosting industrial activities such as a major car manufacturing plant,
- The future port of Kenitra Atlantique,
- The new highspeed railway linking Tanger to Kenitra opened in November 2018.

Kenitra is undergoing a strong demographic and economic growth leading to significant transport problems. Most notably, the increasing number of daily travels by workers between Kenitra and the AFZ has led to traffic congestion, road safety issues and overall under optimisation of the mobility system.

Kenitra has an existing mass transit system, but there is no existing transport master plan or similar document.

The Local Counterpart 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 transport.

The city authority is currently developing two strategic plans in parallel: a planning document related to urban planning ("SDAU") and a planning document related to urban mobility ("PDU"). Meanwhile, the city of Kenitra is looking for solutions to limit traffic congestion while improving the information for commuters about other transport alternatives.

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: AFD

Funding amount: EUR 180,000

Implemented by: AFD through MobiliseYourCity Maroc

Local counterpart: Kenitra Province and Municipality ;

Supported activities:

- Finance and support the organization of an Open Innovation Challenge mobilising industrial companies from AFZ, local government, start up to tackle mobility issues using innovative approach

Status of implementation

Project start: 2021

Expected project completion: Q1 2022

Completed outputs:

Next expected outputs

- Proof of Concept of innovative approach for the transport between Kenitra and the Atlantic Free Zone.

Highlights in the past year

COVID-19 crisis has unfortunately delayed the pilot project, which is currently on standby.

Khourigba, Morocco

Partner city

Status of the project: ongoing technical assistance



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

Khourigba is an inland urban area and an industrial hub. It has no existing mass transit system and there are no existing transport master plan or similar document.

The Municipality of Khourigba, 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 and 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 Khourigba

Supported Activities:

- Support the Khourigba 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 implementation

Project start: Q2 2019

Expected project completion: Q4 2021

Completed outputs:

- Terms of reference for the SUMP
- Procurement process to hire a consultant for the SUMP study finalized

Next expected outputs

- Launching the SUMP process

Highlights in the past year

Following a first unfruitful procurement for the SUMP study, a second one has been finalized and the consultant has been chosen. The next step is to launch the study.

Oujda, Morocco

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 93 km²

Population: 494,300 | Growth rate: 3%

GDP per capita: Approx. USD 2,715

Modal Share

Formal public transport: 14%

Walking: 54%

Cycling: 2%

Private cars: 18%

Private motorbikes or 2-wheelers: 3%

Taxis: 7%

Other: 2%

National GHG emissions per capita: 2.62 (tCO₂eq)

Region capital city

Context

Oujda is a medium-sized city, capital of the Oriental region, located near the Algerian border. The city already has a Sustainable Urban Mobility Plan, called *Plan d'Action en faveur de l'Energie Durable (PAED) de la Commune d'Oujda*. The city's population increased significantly over the last years, but the growth is stabilizing. The economy is largely agriculture-based, and the border closure since 1994 has had a negative influence on the local economy, tourism, and agriculture.

Various development projects are in progress or realized, like the highway between Fès and Oujda or other development project targeting the industry or tourism. Oujda has an existing mass transit system and a transport master plan.

Support from the Partnership

Technical Assistance: Set-up of a mobility observatory and technical assistance related to road sharing and safe walking and cycling.

Funded by: FFEM

Implemented by: CEREMA through the MobiliseYourCity Morocco Program

Local counterpart: City council of Oujda

Supported Activities:

- to set-up of a mobility observatory,
- to improve road sharing and safe walking and cycling

Status of implementation

Project start: May 2018

Expected project completion: End 2020

Completed outputs:

- Goal Setting: 2018
- Monitoring & Reporting – MRV GHG: 06/2019
- Mobility observatory: 06/2019
- Capacity Development in traffic management and funding: 06/2019

Next expected outputs:

- Completion of the observatory
- Assistance on financing opportunities

Highlights in the past year

Capacity development in Traffic Management helps make the support concrete

The city received technical assistance on the issue of traffic. A diagnosis and technical proposals for further development were carried out in the form of action/training with the city's technicians. Cerema agents and city technicians travelled together through the streets to identify the issues and see what improvements could be made. The results were presented orally, and a report was written. The "traffic" commission then validated the proposals and requested their spatial extension.

The seamless course of this activity contrasted with the many challenges encountered in the process of setting up a mobility observatory. It shows that it is easier to work and communicate on infrastructure than on institutional reforms such as the set-up of a new data-collecting and data-managing organisation, such as the mobility observatory.

Maputo, Mozambique

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 2,200 km²

Population: 3,158,000 | Growth rate: +4.8%

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)

National capital city

Context

Maputo is the capital and most populous city in Mozambique with 3,158,000 inhabitants. It is located near the southern end of the country on a large natural bay on the Indian Ocean and is a port city, with an economy centered on commerce.

The current demand for public transport is greater than the offer, which leads to a growth in illegal transport and private vehicles ownership. Maputo is suffering from traffic congestion and irregular parking on public roads, a high number of road accidents and a lack of security for women in transport. 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.

The city of Maputo wants to develop a Sustainable Urban Mobility Plan to solve these issues and expand the public transport system to all neighborhoods. The plan shall also improve access routes and consolidate the overall transport system.

Transport system

An Urban transport master plan for the Great Maputo area has been prepared under JICA funding in 2014. According to this document, two dominant transport modes were walking (46%) and chapas/minibus (33%). Chapas/minibus are informal public transport, owned by private operators and operating on a "fill and go" system, usually waiting at terminal areas until being fully loaded before departing. Chapas are supposed to be licensed and about 4,500 chapas were licensed and operating in the Great Maputo in 2004. However, many additional chapas are operating without licenses.

The master plan forecast significant growth in mobility demand in the forthcoming year. Daily number of trips are expected to double from 2012 (3.3 million trips/day) to 2035 (expected 6.7 million trips per day).

As a result, road network congestion is expected to increase to unbearable levels if no action is taken to make mobility patterns more efficient in Maputo.

These mobility issues can undermine the economic development of the area (bad access to employment, poor health, time loss), affect especially urban poor and leads to unbearable impact on air quality and climate.

The 2014 master plan proposes a prioritized action plan to tackle these mobility challenges. Main proposed actions are the development of a mass rapid transit network combined to road network improvements.

Institutional context

The Metropolitan Transport Agency of Maputo was created in 2017 (through Decree No. 85/2017), but it was only in August 2018 that it started operating after the appointment of the PCA. Its main objective is to implement an urban mobility plan. AMT has responsibilities 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.

The AMT is chaired by a board composed by 5 people, of which 3 people works full time in the AMT. The AMT staff is supported by the think tank Waza that is involved as a partner under the T-SUM project. In 2019 the AFD approved a technical assistance package to AMT, with the financing of 2 technical assistance positions. The junior consultant started its activities in November 2019. The senior consultant just started at the beginning of 2021.

AMT precise role, competence, and financial framework still should be precisely defined but the Agency must progressively gain competence to plan, implement and manage collective public transport in the Metropolitan Area of Maputo. Refined objectives shall be reflected in a strategic plan for the AMT itself, aiming at 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. In that respect, the current SUMP assignment shall support AMT in the finalization of the Strategic Plan. The process of the SUMP elaboration shall also help in the structuration of the AMT and relationship with other main stakeholders.

Challenges and main aim of the SUMP

Main current mobility challenges in Maputo Metropolitan Area are:

- Rapid urban expansion;
- Lack of a land use plan with metropolitan perspective;
- Lack of transport strategy for the area;
- Low accessibility to workplaces, places of leisure, and other activities and unequal access to the city from different social strata;
- Not enough regulation;
- Lack of adequate infrastructure, especially non-motorised transport infrastructure;
- Car/road focused urban development;
- Growing motorisation, and worsening congestion;
- Unregulated parking;
- Inefficient public transport system: no mass transport offer, proliferation of informal and poorly regulated paratransit services ("chapas");
- Poor maintenance of transport infrastructure;

- Increased pollution and its effects;
- Increased number and severity of road accidents.

Main challenges for public stakeholders to tackle these urban mobility issues are:

- Poor coordination between public entities;
- Lack of a common vision and objectives;
- Limited technical and institutional capacity in matters related to mobility, transport, data management and management of companies and transport cooperatives.
- Limited options regarding revenues/tax collection from the transportation system

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Implemented by: AFD and CODATU through the MobiliseYourCity Africa Program

Local counterpart: Agencia metropolitana de transportes de Maputo (AMT)

Supported activities:

- SUMP for Maputo Metropolitan Area, managed by the local transport authority, *Agencia metropolitana de transportes de Maputo* (AMT)
- Technical Assistance to the AMT (Senior and Junior positions)
- Quick wins actions

Status of implementation

Project start: 2021 Q1

Expected project completion: 2022 Q4

Completed outputs:

- Mobilise Days (2019)
- Elaboration of specific Terms of Reference
- Launch of the consulting call
- Evaluation of the proposals
- Selection of the consultant and administrative assignment of the mission (February 2021)
- Beginning of the assignment

Next expected outputs:

Inception Mission (Rescheduled for April 2021)

Highlights in the past year

Impact of the COVID-19 pandemic

On September 7, 2020 Mozambique transitioned from a State of Emergency (SOE) to a State of Public Calamity (SOPC). The SOPC will continue indefinitely at the red alert level while the risk of spreading COVID-19 exists in Mozambique. This situation has caused a delay of 6 weeks in the project. The inception mission has been delayed by 4 weeks and should take place early April 2021. Preliminary traffic counts that were expected to be conducted during the Inception Meeting (in order to assess the impact of Covid19 pandemic in urban mobility in Maputo) were also delayed.

The delay of the Inception Mission also has an impact in obtaining critical information to define the methodology of the surveys campaign, its validation and, consequently, in the surveys campaign expected starting date. The expected delay of the surveys campaign starting date is around 5 weeks.

It has therefore been suggested to deliver a report on the survey's methodology, prior to the Inception Report, in order to be able to proceed with the surveys campaign at the earliest.

In the first activities to be carried out during the start-up phase of the SUMP, the consultant is expected to conduct a qualitative assessment of the current urban mobility situation in Maputo Metropolitan area and compare this situation to the urban mobility situation prevailing before COVID crisis. This assessment shall in particular provide answers to the following questions:

- Is the current situation similar to the situation before the crisis?
- If not, is the situation expected to return to normal, and if so, by what timeframe?

This qualitative analysis will be based on interviews, field visits and available data.

- On the basis of this assessment, the consultant will identify:
 - » The risks and opportunities arising from the impact of COVID on urban mobility in Maputo.
 - » The impact of COVID-19 on the SUMP development process.

If the COVID-19 crisis continues at the time of the surveys, the methodology related of data collection should be adapted:

- Household surveys: if local authorities allow it, it would be possible to maintain household surveys by imposing a mask on the interviewers and a physical distance of at least one meter from the surveyed family. This relates to the first contact. The rest of the survey is done via telephone;
- OD surveys of public transport: they cannot be carried out on board to ensure the safety of interviewers and respondents. They can be replaced by surveys at bus stops;

If the country finds itself under a new lockdown, the surveys will have to be postponed in order to observe the representative movements of the usual activities of the inhabitants of Maputo.

Dakar, Senegal

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 550 km²

Population: 3,835,019 (2020) | Growth rate: +2.5%

GDP per capita: USD 1,438 (2019)

Modal Share (in 2015)

Formal public transport: 10.2%

Informal public transport (minibuses): 5.9%

Walking: 70%

Private cars: 3.7%

Formal Taxis: 2.6%

Informal collective taxis: 3%

Private motorbikes or 2-wheelers: 0.8%

Other: 1.1%

Intermodal trip: 2.7%

National GHG emissions per capita: 0.6 tCO₂eq at national level in 2016: 2.1 tCO₂eq/capita

Exposure to climate change: MEDIUM

Context

The Dakar region brings together most of the administrative, political, economic and cultural functions of the country with approximately 3.1 million inhabitants in 2013. The region of Dakar hosts 25% of the country's total population and 50% of the urban population. Demographic projections anticipate 5 million inhabitants by 2030, with a growth rate twice as high as over the past thirty years.

The high density of the agglomeration (5,739 inhabitants/km²) hides significant disparities between the different urban areas, to which must be added strong territorial imbalances due to the peninsular geography and poorly controlled urbanization.

The *Conseil exécutif des Transports urbains de Dakar* (CETUD) is the organizing transport authority in Dakar. Its mission is to organize and regulate urban public transport offer and demand in order to create an economic environment for local operators and to promote the emergence of healthy and sustainable competition in accordance with the public transport policies defined by the State for the region of Dakar.

CETUD 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 in place to monitor, evaluate and report on urban.

CETUD established a transport master plan in 2007, which will be evaluated and updated as part of the SUMP project. The current urban transport operators in the agglomeration of Dakar are:

- The public bus operator Dakar Dem Dikk (DDD), a para-public society of transport that operates on 42 lines of standard buses.
- 14 companies (economic interest groups) of private operators, grouped under the AFTU's (Association pour le Financement des Transports Urbains), an organisation created in the renewal fleet program launched in 2005 by CETUD. They operate 64 lines of minibuses.
- Informal minibuses (Cars rapides and Ndiaga Ndiaye) operators, that have not yet joined the renewal fleet program.
- "Clando" collective taxis operators, also members of the informal sector. CETUD has initiated a project to formalize them.
- The PTB (Petit Train de Banlieue), a public rail operator, in charge of rail services between Dakar and its suburbs, until the expected commissioning of the new Regional Express Train.

Two mass rapid transit projects are currently implemented in Dakar:

- An Express Regional Train between Dakar downtown and the Blaise Diagne International Airport located in Diamniadio at 36 km distance
- A Bus Rapid Transit lane between Dakar downtown and Guédiawaye suburb

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 motorized modes. During the weekdays, the proportion of pedestrian is 70%.

Demographic, economic, and social changes in Dakar, the emergence of a new strategic framework (Urban master plan of Dakar, 2035), as well as the collection of new data (household surveys in 2015) led CETUD to revise the existing transport master plan (PDUD) established in 2007 in order to have a renewed strategy for urban mobility.

The objective of the SUMP project is to support CETUD in the evaluation of the PDUD and its revision through a Sustainable Urban Mobility Plan (SUMP) 2020-2035.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: FFEM

Funding amount: EUR 400,000

Implemented by: AFD through the MobiliseYourCity Africa

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

Supported Activities:

- Support of a SUMP preparation process for the city of Dakar, managed by the local mobility authority, *Conseil Exécutif des Transports Urbains de Dakar* (CETUD)

- Update the existing urban mobility plan into a SUMP which:
 - » Capitalises on 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 implementation

Project start: April 2020

Expected project completion: October 2021

Completed outputs:

- Evaluation of the existing transport master plan report
- Inception report

Next expected outputs

- Diagnostic report
- Reports about the vision, objectives, and action plan of the SUMP
- Reports about the monitoring and reporting of the SUMP
- Reports about the scenario and the financing of the SUMP
- Reports about the participatory process of the SUMP

Core impact indicators baselines

Indicator	Baseline (the data was collected during different years)				
Total annual transport related GHG emissions (Mt CO ₂ eq)	1.05 Mt CO ₂ eq (2016, Dakar City administrative limits only)				
Annual transport related GHG emissions per capita (kg CO ₂ eq)	2.1 tCO ₂ eq / capita in 2016				
Access to public transport Proportion of the population living 500 meters or less of a public transport stop	Data in 2019 (Etude de la Situation de Référence du BRT)				
		Dakar	Guédiawaye	Pikine	Rufisque
	Dakar Dem Dikk	76.2%	76.7%	48.9%	18.4%
	AFTU	68.4%	64.4%	49.6%	15.8%
	Cars Rapides	40.4%	36.64%	22.08%	0
	Ndiaga Ndiaye	37.34%	16.75%	24.82%	4.63%
	Informal collective taxi	45.8%	76.5%	58.3%	21.1%

Indicator	Baseline (the data was collected during different years)
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	45 µg/m³ of PM2.5
Modal share of sustainable modes of transport Modal shares of trips by public transport, walking and cycling	Formal public transport: 10.2% Informal public transport: 5.9% Walking: 70% Cycling: 0% Informal collective taxis: 3% Intermodal trips: 2.7% TOTAL: 91.8%
Modal share of other modes of transport	Private cars: 3.7% Private motorbikes or 2-wheelers: 0.8% Formal taxis: 2.6% Other: 1.1%
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	2.9 fatalities / 100,000 inhabitants (2014)
Affordability of public transport Percentage of disposable household income spent on public transport (by the second quintile income group)	14.3% (2015, EMTASUD)

Highlights in the past year

2020 was marked by the inception of the SUMP project. The consultant conducted a series of interviews with local stakeholders to assess the existing transport master plan. A workshop to present the results of the evaluation and to launch the SUMP itself was held in December 2020.

The COVID-19 crisis and the containment measures taken by the different states made it difficult for the consultant to travel to Dakar. Much of the work was accomplished remotely. This pandemic caused delays in the planning of the study.

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Asia

Completed

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The Philippines

Partner city

Status of the project: **completed technical assistance**



Basic Information

Population: 109,180,815 | **Growth rate:** 1.55%
Percent of urban population: 51.2%
GDP per capita: USD 3,485
Percentage of the population living below the national poverty lines: 16.6%
Annual average infrastructure expenditures as percent of GDP: 5%
Nationally Determined Contribution (NDC): 148 MtCO₂e (2015 INDC)
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 urbanizing, 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% p.a. In 2020, after the COVID-19 pandemic and following the protracted lockdowns, GDP dropped by 9.5%. The economy is expected to recover in 2021 as the economy continues to reopen and vaccinations begin.

Active transport and public transport have historically been underfunded on the national and local levels, despite 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, it was estimated that congestion was costing 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 road crashes.

The Philippines faces a range of challenges constraining the ability of the country 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 is able to support local governments plan and implement sustainable urban mobility systems, with particular focus 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 its development was done closely with the Department of Transportation. It has likewise been approved by the National Economic and Development Authority—the country’s oversight planning agency—who recognized that it was in line with the National Transport Policy released in 2017.

TRANSfer 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 datapoints to monitor them.

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

Main purpose of the NUMP:

- Offer cities a general enabling framework for SUMPs
- Identification of measures to support improvements in active transport and urban freight

Objectives: The Philippines NUMP comprises social, environmental, and economic objectives:

- 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) with government, academia, and private sector
- Technical studies for government (e.g., improvements in public transport operations, building on the Jeepney+ NAMA)
- 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)

NUMP key measures and cost estimates

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

Measure	Cost Estimate
Develop National walking and cycling Policy	EUR 200,000
Collect data to enable planning	EUR 300,000
Increase dedicated staff in Department of Transportation & Local Government Units	EUR 55,000,000
Increase focus on NMT in 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 behaviors that discourage walking and cycling	EUR 5,000,000
Train existing and future staff on planning for walking and cycling	EUR 1,000,000
Jeepney modernization program	EUR 5,800,000,000
Develop freight data collection mechanism	EUR 200,000
Develop and implement vehicle standards	EUR 300,000
Establish national freight operator dialogue forum	EUR 300,000
Measure	Cost Estimate
Support consolidation and professionalization 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
Pilot phase of Jeepney+ NAMA (equity subsidy and social support programme)		EUR 56 000 000
Support for local production of public transport manufacturer	National government	EUR 150 000 000
	Development Bank of the Philippines	EUR 8 140 000

Associated financing supporting measures in the NUMP	Source	Amount
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 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

Associated financing supporting measures in the NUMP	Source	Amount
Budget for common station connecting LRT 1, MRT 3, MRT 7 and Subway	National government	EUR 48,800,000

Projected impacts

Indicator	Impact 2030 (NUMP vs BAU)	Baseline - 2020	Projected 2030 BAU	Projected 2030 NUMP scenario
Total annual GHG emissions (Mt CO ₂ eq)	-2.5 Mt CO ₂ eq	20 Mt CO ₂ eq	29.5 Mt CO ₂ eq	27 Mt CO ₂ eq

Highlights in the past year

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, more green spaces, and stronger government financial support for public transport. However, the continued spread of the virus and widespread lockdowns have also affected implementation of the PUV Modernization Program and any urban freight initiatives.

The Philippine NUMP continues to be implemented in coordination with the Department of Transportation and the National and Economic Development Authority, providing insights on active transport and public transport measures, as well as guidance on sustainable urban mobility indicators.

India

Partner country

Status of the project: completed technical assistance



Basic Information

Population: 1 352 642 280 (2018) | Growth rate: 1.1%

Percent 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 lines: 21.9% (2011)

Nationally Determined Contribution (NDC):

Unquantified transport related NDC

National GHG emissions per capita: 1.728 (tCO₂eq)

Context

Home to more than one out of every six inhabitants of the planet, India has the size and weight of a continent. Every city has its own transport system, and their level of development is heterogeneous. The steady economic growth in cities is counterbalanced by the insufficient planning of urban development and the subsequent mobility issues. Private modes of transport are growing rapidly at the expense of public and non-motorised transport, which is suffering from lack of investment in infrastructure. The consequences are road congestion, lack of parking space, deteriorating air quality in cities and increased number of traffic crashes.

A specific MobiliseYourCity programme for India aims at supporting three pilot cities, Nagpur, Kochi and Ahmedabad in their efforts to reduce their Green House Gas (GHG) emissions related to urban transport by implementing urban mobility plans at local level and to help India at national level to improve their sustainable transport policy.

The programme is implemented with the support of the Ministry of Housing and Urban Affairs and the Government of India at the national level, and the support of the pilot cities through their respective municipal corporations.

At the national level, the foremost tasks include to ensure the linking of urban transport policies to GHG emission reduction and develop an MRV structure to measure and report the outcomes to access climate finance. The envisaged strategy and its operational documentation tools will contribute in achieving the Nationally Determined Contributions (NDCs) outlined by the Government of India under the Paris Agreement, which is "to reduce the emission intensity of its GDP by 33%-35% by 2030 from 2005 level". The strategy, known as 'Climate Change Mitigation Strategy for Urban Transport (CCMSUT) in India and definition and preparation of an MRV system', is prepared with support of French Development Agency (AFD) and Urban Mass Transit Company Ltd. (PIU of MobiliseYourCity India Programme).

Support from the Partnership

Technical Assistance: Elaboration of a climate change mitigation strategy in the urban transport sector

Funded by: EU Asia Investment Facility (AIF)

Implemented by: AFD through the MobiliseYourCity India Project

Local counterpart: Ministry of Housing and Urban Affairs (MoHUA)

Main purpose of the technical assistance:

Support India at the national level to improve their sustainable transport policy (policy-based strategy), notably by elaborating a Climate Change Mitigation Strategy (CCMS) that could be registered under the United Nations Framework Convention on Climate Change (UNFCCC).

Supported activities:

- At 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.
- Linking urban transport policies to GHG emissions reduction as part of the climate change mitigation agenda.
- At local level, MobiliseYourCity is providing support to three pilot cities - Nagpur, Kochi and Ahmedabad - in their efforts to reduce GHG emissions in the urban transport sector by elaborating and implementing SUMP.

Status of implementation

Project start: 2018 Q3

Expected project completion: 2021 Q4

Completed outputs:

- First Project Steering committee meeting

Next expected outputs

- CMP toolkit upgradation work and recruitment of a consultant in charge of supporting the elaboration of the CCMS (September 2020)
- National Mobilise Days (November 2020)

Highlights in the past year

Focus on public transport system resilience, and non-motorised alternatives, as pandemic severely impacts profitability

Transportation is a fast-growing sector linked with infrastructure development, adoption of new technologies and innovative funding mechanisms. However, the Covid-19 pandemic has strongly reduced revenue and brought new operational and management challenges. Major issues affect collective transport in particular and are related to the decrease in attendance, volatile demand, additional costs of security and disinfection measures, or availability of staff.

Over the past year, knowledge and guidelines have been shared via webinars on how to approach the financial and operational challenges faced by public transport systems, for crisis management, but also in perspective of the post-covid recovery. Electric buses might be part of the response strategy, as they have lower operation costs and higher reliable, on top of the low emissions of GHG and air pollutants.

The stakeholders involved in MobiliseYourCity India have contributed significantly to knowledge development and sharing, and have held webinars and published guidelines on smart-mobility, non-motorised transport modes, the link between air quality and urban planning, tactical urbanism, multimodal integration, and many other topics. These contents are available online on the MobiliseYourCity knowledge platform.

Ahmedabad, India

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 1,866 km²

Population: 7,800,000 | Growth rate: 2.54%

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

Region capital city

Context

Ahmedabad is one of the oldest and densely populated cities in Gujarat and being a hub to industries, including manufacturing, services, textiles etc. is further experiencing rapid growth in its region. 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 south west part of the Greater Ahmedabad area. To strengthen the growth in city, another major employment node, called GIFT city is being planned between Ahmedabad and Gandhinagar as a major financial centre. While some industrial investments are also being envisaged in Kadi, Kalol, and Mehmedabad; Sanand, Dehgam, Kheda and Bavla are being developed as residential towns.¹

All these planned developments are going to add another 1.75 million trips in the study area by 2031, a 15%-fold increase from the current levels. Today, about 21% of population is covered by public transport system in Ahmedabad, whereby the mode share for Public Transport is about 11 per cent with about 0.9 million passengers boarding on AMTS (Ahmedabad Municipal Transport Service) buses and 0.15 million on BRTS. Ahmedabad has a compact city structure having poly centric nodes & mixed land use throughout the city, along major roads. Trip patterns are dispersed as a result of which the average trip lengths (5.5km) are lower than comparable size cities in India.

Until 2007, Urban Transport was a State function, and had been systematically been taken care of in the city of Ahmedabad, especially in the old heritage city. Ahmedabad Municipal Transport Services (AMTS) consists of 201 routes covering 549 kms of road. AMTS has a coverage area spread over 88% of developed AMC area. With reference to the AMTS data 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 has been deployed in Ahmedabad in 2009 and is operated Ahmedabad Janmarg Limited (AJL), a special purpose vehicle (SPV) formulated by Ahmedabad Municipal Corporation, Ahmedabad

¹ Integrated Mobility Plan for Greater Ahmedabad Region, Vol. 1

Urban Development Authority and Government of Gujarat. The BRT system operates on 13 routes with a network length of 82 kms with a daily ridership of 130,000 passengers daily 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, whereby it can possibly borrow from international finance sources too. The performance of bus services is monitored and evaluated periodically by Municipal Corporation.

The local authority is willing to strengthen integrated land-use transport planning, aiming at addressing the lack of land for public spaces, public transport utility or depots and the absence of walking and cycling infrastructure. Other important challenges are the promotion of fare integration of public transport, the last mile connectivity, the reduction of the travel distance and time and the adoption of on-street design, management, and integration in Local Area Plans.

The technical assistance contributes to institutional strengthening by strengthening the capacity of urban local bodies on mobility issues and sustainable urban development. This program aims at undertaking the strategic studies and as well provide knowledge sharing to the city stakeholders through capacity buildings.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Union

Funding amount: Approx. EUR 700,000

Implemented by: AFD through the MobiliseYourCity India Project and supported by UMTC as 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: October 2018

Expected project completion: Last quarter 2021

Completed outputs:

- MoU signed and MobiliseDays conducted – Feb 2019
- First three meetings for Local Steering committee completed – October 2019, December 2019, and January 2021
- Training & capacity building workshops – October 2019, December 2019, February 2020
- Online Webinars were conducted during the period of June 2020 – January 2021

Next expected outputs:

- Final Report for study on Handbook for 'Physical integration of Interchange Stations'
- Mobilization of Consultant and first report of SUMP

Core impact indicators baselines

Indicator	Baseline – N/A
Total annual transport related GHG emissions (Mt CO ₂ eq)	2273.7 Gg CO ₂ eq ² As per 2015 study
Annual transport related GHG emissions per capita (kg CO ₂ eq)	1.8 t CO ₂ eq / capita ³ As per the 2015 study
Access to public transport Proportion of the population living 500 meters or less of a public transport stop	21% (IMP 2031)
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	33 µg/m ³ of PM2.5 ⁴ As on Date 13-02-2021
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	5 fatalities / 100,000 hab (2019)
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	N/A

Highlights in the past year

Since June 2019, three training workshops took place in Ahmedabad through EU and AFD along with support from WRI and UMTC as project implementing unit. These training workshops were on following topics:

1. Low carbon and sustainable urban transport
2. Contracts and procurement
3. Road safety

During 2020, due to the covid-19 restrictions, all the physical trainings were conducted on digital platform.

The first MobiliseYourCity Day of February 2019 in Ahmedabad has permitted the identification of multiple projects by the stakeholders. Two projects have been chosen later by the Steering Committee and validated by the AMC for implementation under MobiliseYourCity program in Ahmedabad:

- Preparation of Sustainable Urban Mobility Plan (SUMP), this SUMP will include the upgrade of the Integrated Mobility Plan of Ahmedabad (IMP) prepared in 2014. The tender was prepared in June 2020 and relaunched on November 2020. Procurement of consultant is underway.

Preparation of a "Handbook for physical integration of transit interchanges": The contract for study on preparation of "Handbook for physical integration of transit interchanges" has been signed mid- January 2020, consultant has been engaged but the launch of the activities has been affected by the pandemic situation in France in India since March 2020. Data collection, surveys, etc. became difficult due to covid-19 situation and drastic change in existing traffic scenario. Modification of scope was agreed upon on November 2020 and Ahmedabad Municipal Corporation endorsed the Diagnostic Report submitted by the consultant (Consortium of Artelia Ville & transport and AREP) in Dec 2020. Consultant will prepare a Handbook including guidelines for physical planning of transit interchanges based on 3 examples of stations, selected through online workshop with AMC. Final report is due in May 2021.

² http://wgbis.ces.iisc.ernet.in/energy/paper/GHG_footprint/RSER_bharath2015.pdf

³ http://wgbis.ces.iisc.ernet.in/energy/paper/GHG_footprint/RSER_bharath2015.pdf

⁴ <https://aqicn.org/station/>

Kochi, India

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 632 km²

Population: 2,100,000 (2011) | Growth rate: 1%

Coastal City

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 motorized: 7%

National GHG emissions per capita: 2.41 (tCO₂eq)

Context

Kochi, one of the most important cities in South India is also known as the commercial capital of Kerala. Its influence area spreads much wider than the municipal corporation area of 95 km² and its 650,000 inhabitants. The mobility demand in the city is exploding and as per the latest estimates, the metropolitan region accounts for almost two million passenger trips per day (CMP, 2017).

AFD has supported the city of Kochi in the construction of a light metro and the restructuring of its urban mobility. An innovation-driven project that greatly 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 in development. The city has introduced an integrated smart card, has an agreement with rickshaw associations, and integrated metro stations with walking and cycling infrastructure.

The city has two railway stations, namely Ernakulam North and Ernakulam South, with an estimated daily passenger volume of 65,000. The two stations are linked through a 3.8 km corridor with major activity centers, including Ambedkar Stadium, Lissie Hospital, KSRTC Bus terminal & depot. However, the connectivity is poor, and dominant modes of transport are walking and auto-rickshaw (intermediate public transport). And despite continuous efforts, the urban local authority has not been able to improve the connectivity between the two stations because of lack of a suitable design and clarity on the optimal movement patterns.

In the recent years, there has been a renewed interest on the need to improve mobility along the corridor. The City plans its development as a green corridor, improving connectivity as well as aesthetics, cleanliness, and security, thereby raising land value all along. The intent is also to facilitate multi-modal integration by improving the accessibility of metro stations with the identified activity centers. The specific objective of the project is to promote mobility focusing on pedestrians and non-motorized modes to create a more walkable, safe, environment friendly and humane city.

Several challenges remain to be tackled: lack of appropriation of the Comprehensive Mobility Plan (CMP) by the involved stakeholders, the lack of consideration for climate impact in the CMP, disappointing metro ridership and revenues (probably caused by inappropriate fares and competition with city buses), and lack of data availability on urban mobility.

Support from the Partnership

Technical Assistance: Improve existing city mobility plan and support prefeasibility study for priority pilot project

Funded by: EU Asia Investment Facility (AIF)

Funding amount: Approx. USD 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. Elaboration of a toolkit for the preparation of sustainable and appropriated Comprehensive Mobility Plans (CMPs), and definition of monitoring indicators;
2. Capacity-building for Municipal Corporations and Unified Metropolitan Transport Authorities to (i) implement the toolkit in their cities, (ii) elaborate strategies for low carbon transport with the city stakeholders, (iii) ensure monitoring of the implementation of those strategies through data collection, and (iv) transfer the data at the national level;
3. Preparation of CMP improvements with city stakeholders: bus route rationalization study in Kochi;
4. Preparation of a prefeasibility for a priority pilot project: North South Green Mobility corridor in Kochi;
5. Creation of a dedicated unit within Urban Local Bodies to collect data and monitor the progress of CMP implementation as a "mobility observatory."

Status of implementation

Project start: 2018 Q4

Expected project completion: 2021 Q4

Completed outputs:

- Mobilise Days
- Launch of the Bus Route rationalization study

Next expected outputs:

- Diagnosis report
- Draft final report
- North-South Green Mobility corridor

Highlights in the past year

Kochi includes the development of green and active mobility in its mobility budget

The MobiliseYourCity project in Kochi promotes mobility focusing on pedestrians and non-motorized modes to create a more walkable, safe, environment friendly and humane city. It is undertaken within the framework of NUTP 2006 and in coherence with various other sustainable and smart mobility projects being implemented in Kochi. The study duration six months and the kickoff meeting with the selected SUEZ consultants was held in December 2019.

In March 2020, implementation of the study recommendations got the adhesion of a broad stakeholder base and was approved in the Kochi Municipal Corporation budget for the financial year 2020-21.

With a view of overcoming and tackling the urban mobility challenges, Kochi is the first MobiliseYourCity member in India to execute a green mobility corridor connectivity between two railway stations.

Nagpur, India

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 217 km²

Population: 2,893,000 | Growth rate: 1.5%

GDP per capita: USD 3,000

Modal Share

Formal public transport: 9.8%¹Informal 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

Region capital city

Context

Nagpur as known as the Orange city of India, is third largest city in the state of Maharashtra and second capital of the state. It is the seat of annual winter session of the Maharashtra State Vidhan Sabha. Nagpur lies precisely at center of the country with Zero Mile Marker indicating the geographical center of India. It is a major commercial and political centre of the Vidarbha region of Maharashtra.¹

With nearly 3 million people, Nagpur accounts for 6.5% of the total urban population of the state. The total population of study area, which includes the surrounding towns of Kamptee, Kalmeshwar, Hingna, is 3.6 million in 2020².

Nagpur has been the main center of commerce and is an important trading location. The city is also home to various food manufacturing units. The city is also undertaking the Multi-Model International Passenger and Cargo Hub Airport at Nagpur' (MIHAN) project, which is the biggest economic development project currently underway in India in terms of investments.

Nagpur is one amongst the Indian cities having a Metro Rail System. Majority of commuters currently commute through Buses as the metro project is still undergoing. The share of PT is 9.8%. Informal public transport such as Auto rickshaws however has more share of commuters (26%) and the share of private vehicles is higher compared to public transport and accounts to 50%.

¹ Nagpur Metro Phase 2 DPR

² <https://www.macrotrends.net/cities/21347/nagpur/population>

Phase I of Nagpur metro was sanctioned in 2015 and construction began soon after by December 2020, Nagpur metro has started commercial operations at 16 of its station, and also received approval for Phase 2. Nagpur metro has taken initiatives to integrate the metro with other modes, physically through station and area design as well as fare integration through app and Card.

Apart from metro, the city bus services are crucial mode of transport and are run by Nagpur Municipal Corporation (NMC) providing connectivity within the city and nearby suburban areas such as Butibori, Katol, Kalamna etc. NMC recently procured e-buses, and allocated to run under “Tejaswini Scheme” a bus service reserved for woman passengers only. 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 for preparation of Transition Plan to E-Buses.

A proposal is also sent to Maharashtra Government for establishing Unified Metropolitan Transport Authority (UMTA) in Nagpur and the proposal is under consideration.

As other Municipal Corporations in India, Nagpur Municipal Corporation, the local counterpart, 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 are monitored and evaluated periodically by Municipal Corporations.

As the ongoing development of a metro will provide a new leap in public transport to counter the negative impact of the increase in private vehicle traffic and provide more sustainable mobility solution for the future, the city also faces significant issues, such as the financial sustainability of the public transport system and the very low walkability of the city which lacks 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 last comprehensive mobility plan (CMP) was prepared in 2013 and since CMPs are revised in 10 years, a new CMP may be taken up in coming years. Further mobility needs, patterns and challenges have been changed with introduction of metro in the city. The old CMP did not focus on e-mobility aspect which is gaining traction in last few years.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Union

Funding amount: EUR 700,000

Implemented by: AFD through the MobiliseYourCity India Programme

Local counterpart: Nagpur Municipal Corporation via Nagpur Smart and Sustainable City Development Corporation Limited

Supported Activities:

1. Study of “Transition Plan of Municipal buses to Electric Buses”
2. Creation of a mobility observatory for SUMP project

Status of implementation

Project start: October 2018

Expected project completion: Last quarter 2021

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
- Training & capacity building workshop - July 2019, December 2019 and February 2020
- Online webinars were conducted during the period of June 2020 – Jan 2021

Next expected outputs:

- The final report of Priority project “Transition Planning of municipal bus fleet upgrade (Diesel to Electric Buses)” study is in process;
- SUMP-Mobility database

Core impact indicators baselines

Indicator	Baseline – N / A
Total annual transport related GHG emissions (Mt CO ₂ eq)	507,300 Mt CO ₂ eq ³
Annual transport related GHG emissions per capita (kg CO ₂ eq)	197 kg CO ₂ eq / capita
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	49.2 µg/m ³ of PM2.5 ⁴
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	10 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% ⁵

³ Working paper 1.5o C Alignment for Indian Cities: Case Study of Nagpur

⁴ <https://www.iqair.com/us/india/maharashtra/nagpur>

⁵ CMP Nagpur 2013

Highlights in the past year

Due to Covid-19 pandemic situation and lockdown restriction imposed nationwide, the progress of the project in 2020 has been strongly negatively affected. Nagpur Municipal Corporation, which the local counterpart, was responsible for responding to this health crisis. Visits and meetings originally planned for furthering the MobiliseYourCity India Programme were also delayed. Online and virtual meetings, webinars and presentations have been conducted with counterparts when possible.

One study and one pilot that were identified as priorities for Nagpur during the MobilizeDays held in 2019, are progressing:

- “Transition Planning of Municipal Bus Fleet Upgrade (Diesel to Electric Buses)”: The kick-off meeting to prepare the study on was conducted in January 2020 and the study progressed well despite restrictions due to pandemic. Nagpur Smart and Sustainable City Development Corporation Limited (NSSCDCL) endorsed the deliverables submitted by the consultant for 4 tasks out of 6. The study is supposed to be finalized by the middle of 2021;
- Mobility Observatory-MRV system for Nagpur: To create synergy between 3 indian MYC cities, creation of Mobility Observatory in Nagpur & Kochi have been included along with SUMP preparation study for Ahmedabad. TOR has been launched in June and November 2020 and the consultant will be on board in T1 2021.

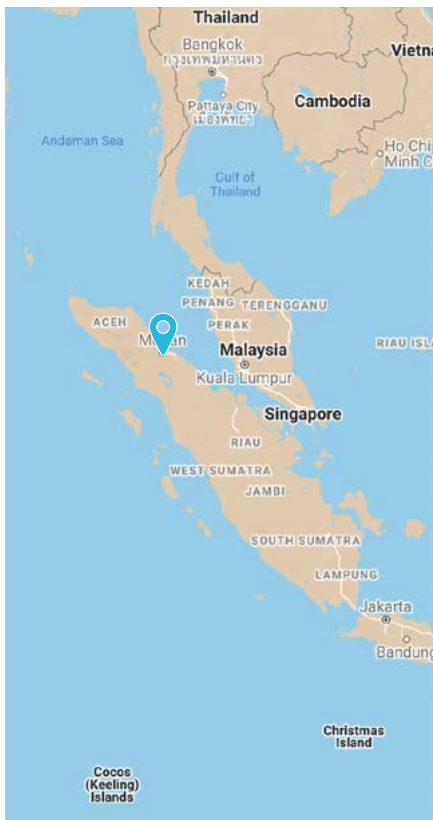
Two MYC participatory events took place in Nagpur in 2020:

- 3rd training- ‘Road Safety- Creating Cities Safer by Design’ was undertaken on 17th Feb 2020;
- 3rd LSC meeting held online, on 4th Dec 2020.

Medan, Indonesia

Partner city

Status of the project: ongoing technical assistance



Basic information

Urban area: 3,151 km²

Population: 4,795,186 | Growth rate: +1.1%

GDP per capita: USD 12,400

Modal Share

Formal public transport: 1.85%

Informal public transport: 63.8%

Private cars: 5.54%

Private motorbikes or 2-wheelers: 11.7%

Taxis: 16.11% (by E-Hailing transport services (motorcycle, car - such as Gojek, Grab...))

Other: 0.2%

National GHG emissions per capita: 3.45 (tCO₂eq)

Regional Capital City

Context

Located in the northern part of Sumatra Island, Medan is the capital and largest city of the North Sumatra Province and the 4th largest city in Indonesia. Its population is 2.3 million inhabitants, while the population of its metropolitan area is 4.8 million, and it is expected to continue to grow. Medan Metropolitan Area is composed of four Kota (cities) and two Kabupaten (regencies): Kota Medan, Kota Binjai, Kabupaten Deli Serdang and (part of) Kabupaten Karo

Belawan, the 3rd biggest container port in Indonesia, is located in Medan, as well as Kualanamu International Airport (the 5th busiest airport of the country). The city's economic growth rate of 6.4% is higher than the national average, which makes the Medan metropolitan area an important industrial and economic in Indonesia.

The Medan Metropolitan Area is facing a rapid increase of private motorised vehicles use (predominantly motorcycles). In the meantime, road lengths are increasing by only 0.8% a year. The increased number of vehicles causes congestion issues.

Public transportations operate on fixed routes in Medan and consist of public passenger cars and small, medium and large buses. The area also benefits from a rail network as an alternative transport mode. It is to be noted that there is no Public Transport Authority in the City of Medan and the Metropolitan Area.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

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:

- Support of a SUMP process for the Medan Metropolitan Area
- Capacity development activities (after inception phase approval)
- Develop a citizen participation process and a communication plan
- Creation of an observatory on urban mobility data and GHG emissions

Status of implementation

Project start: 2020 09

Expected project completion: 2021 09

Completed outputs:

- Inception Phase

Next expected outputs

- Diagnosis
- Construction of scenarios and formulation of priority measures
- Action plan that includes indicators and budget and financing measures
- Establishment of an Observatory on urban mobility data and GHG emissions

Highlights in the past year

The SUMP elaboration started in September 2020 in spite of the COVID-19 crisis. The Consultant started the "inception phase" and organised the "MobiliseYourCity MobiliseDays" in Medan on October 22-23, 2020. As of Q1 2021, the SUMP is in its diagnostic phase.

The COVID-19 crisis has had an impact on the project implementation in the first semester of 2021. Indeed, the Consultant and their local on-site staff have experienced some difficulties to perform the expected surveys (as for instance the Public transport passenger Origin-Destination survey or the household survey) needed for the SUMP diagnosis phase, which will impact the progress of the project and the delivery of the diagnostic.

Kurunegala, Sri Lanka

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 11 km²

Population: 122,172 | Growth rate: 1.4%

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

Region capital city

Context

Kurunegala has 120,000 inhabitants, including 30,000 in the urban core. Despite being a relatively small town 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, Kurunegala urban area will count 1,000,000 inhabitants by 2050. This city should meet an annual growth rate of 2.5%, the highest of Sri Lanka. Kurunegala should become one of the main urban centre – 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 has to 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 South East of the urban core) and is located on a rail axis, but 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 implementation

Project start: March 2019

Expected project completion: March 2021

Completed outputs:

- Inception report (September 2019)
- Diagnosis report (March 2020)
- Scenario elaboration and comparison report (1st Draft, May 2020/ Revised Draft, December 2020)

Next expected outputs

- SUMP (February/March 2021)

Core impact indicators baselines

Indicator	Baseline - 2020
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	30 µg/m³ of PM2.5
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	37 fatalities / 100,000 hab

Highlights in the past year

The SUMP elaboration had a satisfying progress from its start until the first half of 2020 with the delivery of the diagnostic and the draft of the proposed scenarios.

The COVID-19 crisis impacted the progress of the SUMP elaboration. Submitted documents have not been approved by the Kurunegala Municipality and other local counterparts since the last quarter of 2020, which has slowed down the SUMP process and postponed the SUMP final approval to 2021.

Thailand

Partner country

Status of the project: ongoing technical assistance



Population: 65.93 million (2016) | Growth rate: 0.25%

Percentage of urban population: 51.4%

GDP per capita: USD 8,134 (NESDC, 2020)

Percentage of the population living below the national poverty lines: 7.2%

Annual average infrastructure expenditures as percent of GDP: 20.5%, 655,805.7 million baht out of 3.2 trillion (2020)

Nationally Determined Contribution (NDC):

Thailand NDC is to reduce GHG emissions by 20% (115.6 MtCO₂) from projected BAU level by 2030.

Transport will aim to reduce 41 MtCO₂ or 35.5% of the total NDC target (MoT)

National GHG emissions per capita: 3.99 (tCO₂eq) (Including Land Use, Land Use Change and Forestry)

Proportion of transport related GHG emissions: 27.21% (including LULUCF 2016)

Exposure to climate change: HIGH

Context

Thailand is located in the heart of Southeast Asia and it borders with 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 58.59% to the total GDP. It is followed by the agriculture sector which employs 31.62% of the active workforce and contributes 8% to the GDP. Lastly is the industry sector which employs 22.63% of the active workforce and contributes 33.4% to 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 a negative GDP growth in 2020 for the first time since 1998.

Private vehicle is the most popular mode of transportation in Thailand. Bangkok has the most diversified transport offer in the country. The BTS (skytrain), MRT (subway), metered taxis, motorcycle taxis, Tuk Tuks, to name a few, are ways people can commute around the capital. However, Bangkok is still notorious for traffic congestion as people prefer to use private vehicles for convenience and flexibility. To travel around the country or to the suburbs, there is an abundance of minivans and buses that serve most cities and popular destinations. Thailand also has 38 airports and seven of them 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 serve every part of the country albeit it is not a high-speed train.

The national government has decided to develop a NUMP called the Thai Clean Mobility Program to reduce GHG emissions from the transport sector, reduce air pollution and promote modal shift away from motorized private vehicles to public transport.

The development of the NUMP is a participatory process and requires several preparatory steps and discussions. These steps include:

- Building on existing sector studies to assess current funding, financing and transport planning mechanisms and implementation of cities and national government
- Identifying support needs for cities that are to be included in the NUMP (capacity, financial instruments, funding, planning procedures, institutional framework)
- Assessing the current main barriers for 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 Program (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:

The ‘Thai Clean Mobility Program’ consists of three pillars:

- Congestion charging
- Set-up of a Clean Transport Fund
- Bus modernization and reform

Supported activities:

- Inter-ministerial agencies to create detailed design of the Thai Clean Mobility Program

Status of implementation

Project start: 2017 Q1

Expected project completion: 2022 Q2

Completed outputs:

- Study Tour to Berlin and London (February 2020)

Next expected outputs

- Pre-feasibility study on congestion charging design for Bangkok
- 2 congestion charge videos for communication and educational purposes for broad public as well as for the expert and policy maker community
- ENCON fund proposal
- Study for development of Clean Transport fund
- City symposium for green public transport

Core impact indicators baselines

Indicator	Baseline - 2016
Total annual transport related GHG emissions (Mt CO₂eq)	68.26 Mt CO ₂ eq (2016) from energy sector
Annual transport related GHG emissions per capita (kg CO₂eq)	1.03 kg CO ₂ eq / capita (2016)
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	11 fatalities / 100,000 habitants (2020)

Highlights in the past year

A study tour to London and Berlin was a great opportunity for the project partner (The Office of Transport and Traffic Policy Planning, Thailand) to learn more about how congestion charging has been implemented in other cities and consolidated the working relationship and engagement with OTP on the specific topic.

Impact of the COVID-19 pandemic

Events, working group meetings on congestion charge and a steering group meeting had to be delayed due to COVID-19.

Eastern Europe

Eastern Europe

Completed

Czernowitz, Ukraine P. 119

Lviv, Ukraine P. 120

Poltava, Ukraine P. 123

Vinnytsia, Ukraine P. 125

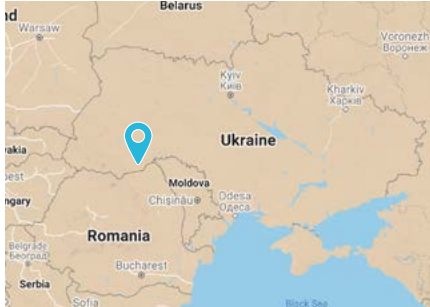
Zhytomyr, Ukraine P. 126



Czernowitz, Ukraine

Partner city

Status of the project: completed technical assistance



Basic Information

Urban area: 153 km²

Population: 266,366 |

Region capital city

Context:

Czernowitz is a medium-sized city in western Ukraine and the capital of its region. It is an important cultural centre and an international transport hub.

The city's transport infrastructure is car-oriented. The high level of car ownership and narrow streets of the city is causing increased congestion problems. The city therefore requires the development of modern solutions that will make it comfortable for all users.

For years, the operation of the public transport system in Czernowitz has been poorly aligned with the development of infrastructure, such as the opening of an inter-city bus station, and the changing demand for transport, in terms of timetable, frequency and routes.

The weak supply of public transport services is, in fact, an opportunity for new players, capable of offering comfortable and competitive transport, to enter the market. The reorientation of traffic flows and the change of priorities in the field of transport should make Czernowitz a more attractive city and allow the realisation of its touristic potential.

The integrated development concept of Czernowitz 2030 is the result of the joint work of specialists from the Czernowitz City Council with local and international experts. Citizens and public initiatives have taken part in the creation of this document. This strategic document includes the Czernowitz 2030 Transport and Mobility Sustainable Development Concept.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

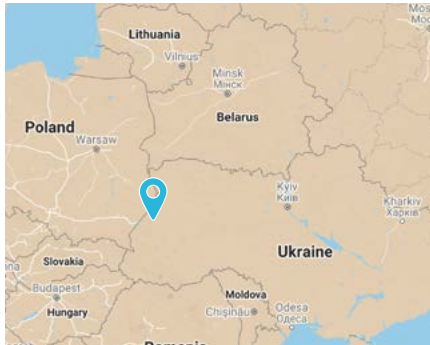
Funding amount: EUR 9.000.000

Implemented by: GIZ

Lviv, Ukraine

Partner city

Status of the project: completed technical assistance



Basic Information

Urban area: 171.71 km²

Population: 734,000 | Growth rate: 0%

GDP per capita: USD 8,668

Region capital city

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 attractiveness 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 center, let alone UNESCO heritage, cars are banned totally from the center. This is in theory true for the inner cordon of world heritage area in Lviv too but not always in practice. Moreover, the historical center 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 center, 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 (€M)
Public transport and NMT	
Street shaping urban roads and traffic management	
Other measures	
Total	

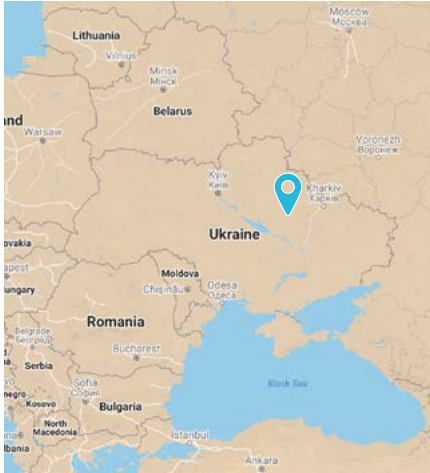
Finance leverage

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

Poltova, Ukraine

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 103 km²

Population: 286,649 | Growth rate: -0,5%

GDP per capita: USD 4,621.31

Region capital city

Context

The poor quality of roads in Ukraine became apparent with the increase of motor vehicles in the early 2000s. Currently, less than 2% of Ukraine's road network can be considered of high quality and modern and 50% fail to meet basic criteria. This causes, amongst other issues, an annual 3% GDP loss. Therefore, there is a strong need for investment. Ukraine has steadily been receiving one of the world's lowest scores for road quality in the Global Competitiveness Index.

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)

Funding amount: EUR 9,100,000

Implemented by: GIZ through the project Integrated urban development in Ukraine.

Local counterpart: Poltova City Council

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: 2019

Expected project completion: 2023

Completed outputs:

- Purchase of 11 buses in 2019
- Preparation of an Invest project "Update of Poltava Trolleybus Park " Loan contract by EBRD. For acquisition of 40 low floor new trolleybuses and 3 traction substations.
- Creation of a working group for cycling infrastructure development was created in Poltava and meet regularly

Next expected outputs

- Make cycling more attractive by developing safe cycling

SUMP key measures and cost estimates

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

Measure	Cost Estimate
Short term acquisition of 11 buses	EUR 800,000
Acquisition of 40 low floor trolleybuses and modernisation of 3 traction substations	EUR 10,000,000
Setup of a working group for cycling infrastructures and appointment of a cycling envoy	

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

Urban transport investment measure	Cost Estimate
Public transport and NMT	
Street shaping urban roads and traffic management	
Other measures	

Finance leverage

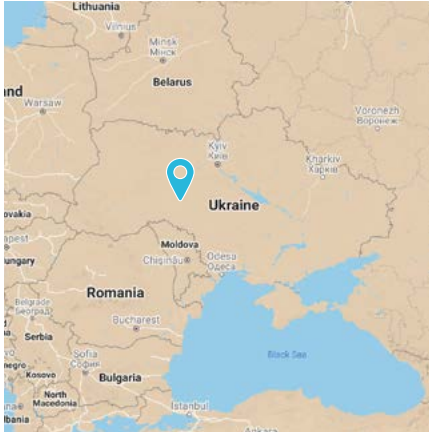
Financing resulting from the SUMP	Source	Amount
Loan leveraged through MobiliseYourCity	EBRD	EUR 10,000,000

Associated financing supporting measures in the SUMP	Source	Amount
Grant for the development of the Poltava 2030 Concept	EU DG NEAR	EUR 2,000,000

Vinnytsia, Ukraine

Partner city

Status of the project: completed technical assistance



Basic Information

Urban area: 113 km²

Population: 369,900 (2018) | Growth rate: 0,27%

GDP per capita: USD 4,621

Region capital city

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: 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: Vinnytsia City Council

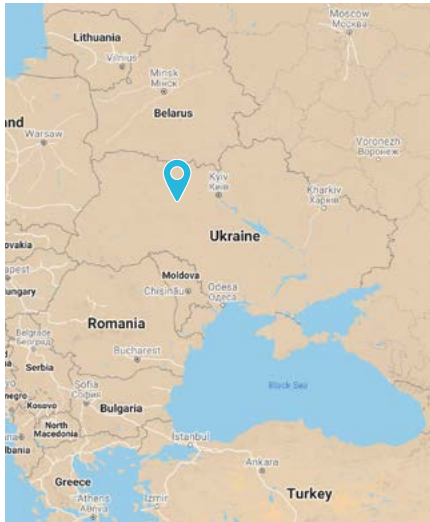
Supported activities:

- 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

Zhytomyr, Ukraine

Partner city

Status of the project: completed technical assistance



Basic Information

Urban area: 93 km²

Population: 264,300 (2018)

GDP per capita: USD 3,400

Modal share:

Motorized vehicles: 15%

Public transport: 46%

Walking: 37.8%

Cycling: 1.3%

Region capital city

Context

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

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 (in progress 2019 -2020)	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 Caribbean

Latin-America and Caribbean

Completed

Santo Domingo, Dominican Republic [P. 129](#)

Ongoing

Belo Horizonte, Brazil [P. 136](#)

Teresina, Brazil [P. 138](#)

Chile [P. 141](#)

Antofagasta, Chile [P. 145](#)

Colombia [P. 149](#)

Ibagué, Colombia [P. 152](#)

Ecuador [P. 153](#)

Ambato, Ecuador [P. 156](#)

Guadalajara, Mexico [P. 158](#)

Arequipa, Peru [P. 161](#)

Trujillo, Peru [P. 164](#)

Uruguay [P. 168](#)

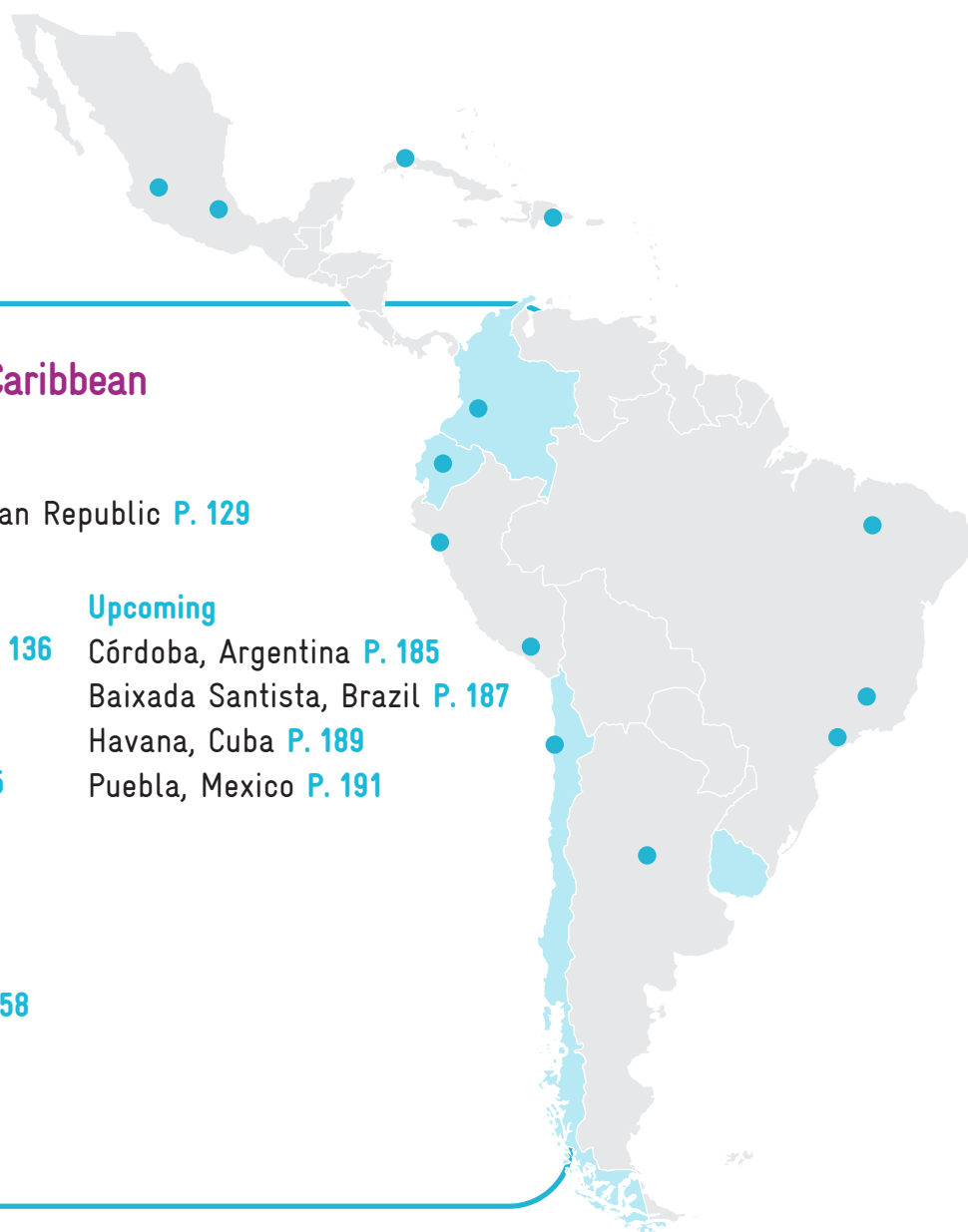
Upcoming

Córdoba, Argentina [P. 185](#)

Baixada Santista, Brazil [P. 187](#)

Havana, Cuba [P. 189](#)

Puebla, Mexico [P. 191](#)



Santo Domingo, Dominican Republic

Partner city

Status of the project: completed technical assistance



Basic Information

Urban area: 1,300 km²

Population: 3.4 million

GDP per capita: USD 9,700

Key facts

City, Country	Santo Domingo, Dominican Republic
Population	3.4 million
Land area	1,300 km ²
GDP per capita	\$ 9,700
Baseline motorization rate ¹	155.5 vehicles per 1000 inhabitants
Annual transport emissions per capita ²	128 g CO _{2eq}
Local Partner (organization)	Instituto Nacional de Transporte Terrestre (INTRANT)
Implementing partners	Agence Française de Développement (AFD)
Donors supporting technical assistance for SUMP	Agence Française de Développement (AFD), European Union (EU), Inter-American Development Bank
Amount in technical assistance	~ 550.000 USD
SUMP Implementation timeline	<ul style="list-style-type: none"> • Joined MobiliseYourCity in June 2017 • MobiliseDays in October 2017 • Start of SUMP in March 2018 • SUMP completed and approved in September 2019

1 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.

2 For comparison, the annual transport (except air travel) emissions per capita in Germany are 1.61 tCO_{2eq}. Source: Die Umweltwirtschaft in Deutschland: Entwicklung, Struktur und internationale Wettbewerbsfähigkeit. www.umweltbundesamt.de

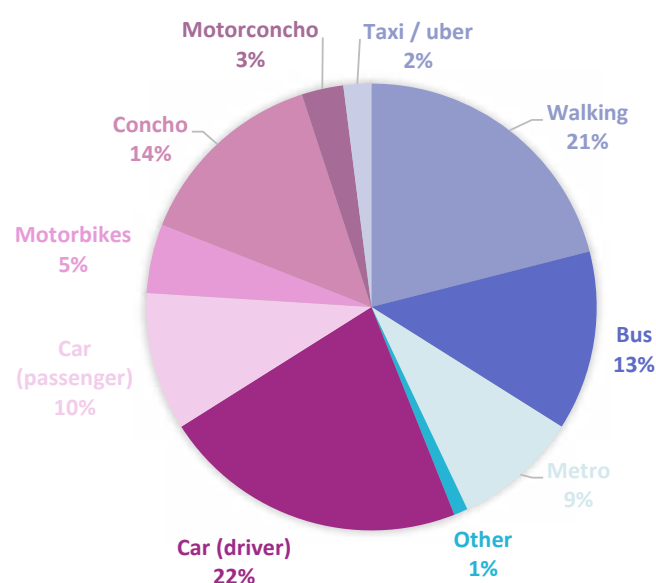
City, Country	Santo Domingo, Dominican Republic
SUMP Vision	An integrated approach to improve access to sustainable mobility services and socioeconomic opportunities for all citizens by integrating urban and transport planning, enhancing sustainable transport modes, and strengthening institutional, technical, and financial capacities of local transport authorities.
Key expected results (GHG, modal share and access)	<p>Compared to 2018, in a SUMP scenario by 2030 Santo Domingo can expect to</p> <ul style="list-style-type: none"> • 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	<p>USD 2.6 billion</p> <p>Mass transit (CAPEX + OPEX - annual)</p> <ul style="list-style-type: none"> • 2018 (Baseline): 60 • 2023 (SUMP): 64 • 2025 (SUMP): 160 • 2030 (SUMP): 200

Diagnosis of urban mobility in Santo Domingo

Existing Mobility and transport services

Located in the Caribbean region, Santo Domingo is the administrative, economic, and political capital of Dominican Republic. With a population estimated at more than 3.5 million inhabitants, representing one third of the total country population, and with a projection of 4 million in 2030, Santo Domingo is a dynamic fast-growing city.

The current system of transportation in the City of Santo Domingo has been mostly the result of a historically unregulated, uneven, and rapid urbanization. The results are vastly different levels of service, socio-economic 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, the latter being particularly affected by the lack of public services, including formal public transport.



Graph 1: Modal share in Santo Domingo

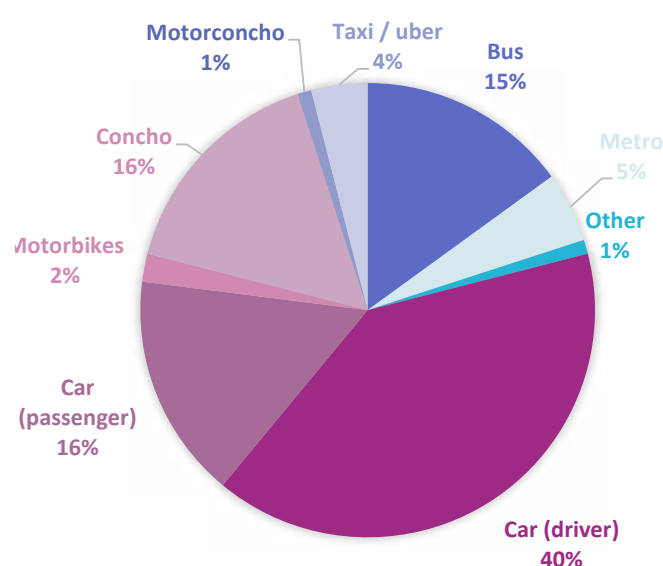
This development pathway has fostered a transport system that is mainly based on motorized individual transport, with little consideration of public spaces and pedestrians and a nearly complete disregard for cyclists. Currently, motorization rates range from 40 to 60 per cent depending on the municipality. Additionally, the high urban density in the National District and the very narrow main roads in the peripheral municipalities heavily constrains the ability to expand public spaces and to repurpose current roads for mass rapid transit services.

Public Transport in the city comprises a wide variety of formal and informal services. The formal system comprises 2 metro lines, 1 aerial tramway line and 11 bus lines, the latter being serviced by a relatively small fleet of 160 buses operated by a state-owned bus company. The informal services are constituted by 3,000 mini- and minibuses and 16,000 informal taxis (so-called 'conchos') that operate along 84 and 114 fixed lines, respectively. These numbers reveal the predominance of informal over formal transport: 14% of total trips are made with conchos, 13% with buses and 9% with the metro.

Social, environmental, and economic aspects.

The prevalence of informal transport, together with high motorization rates, means that mobility is highly fragmented and atomized. This not only results in high congestion and long commuting times (>1 hour/day). Informal transport services are also characterized for being uncomfortable and insecure. The inferior quality of service is partly compensated by cheaper fares. However, because fare policy lies at 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 in terms of a deteriorating vehicle fleet (75% of the vehicles are more than 15 years old) and under-qualified drivers. These factors contribute to both high levels of 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.

Mobility is heavily influenced by gender. On average, men make 0.5 more trips than women a day. This is explained partly by the fact that 40% of men are employed, whereas only 26% of women have a full-time job and other 25% stay at home.



Graph 2: GHG emissions by transport mode

Institutional and financial situation

Until the passing of Law 63-17 in 2017 the institutional landscape was equally characterized by a high degree of fragmentation and low regulatory and enforcement capacities of public authorities which allowed for the mostly unregulated development of public transport in Santo Domingo.

Since 2017, INTRANT has been established as the national road transport authority with the purpose of centralizing all regulatory and decision-making competences regarding public transport. Among its central tasks, INTRANT is responsible for regulating and formalizing public transport by establishing minimum service and quality standards as a precondition for licences, centralizing fare policy and promoting the corporatization of informal operators in order to facilitate their participation in the integrated public transport system that is currently under development.

Despite 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 to 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 as a whole 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 in order to assess the impact of the SUMP, each one developed with a different level of ambition.

- **Baseline scenario:** no SUMP implementation takes place, but existing laws and regulations are implemented. These include organizing and regulating the public transport network, enhancing the metro and aerial tramway systems, developing a vehicle modernization program for buses and informal services, among others.
- **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% modernization 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), 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.

The ambitious scenario was selected by INTRANT as the basis for the subsequent definition and selection of measures. The measures selected and 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)
Total cost	2.556,11		
Physical (Infrastructure, rolling stock, etc.)			
Metro Lines 1 & 2: Increase passenger capacity	480	OPRET3, donors (AFD)	2019-2024
Metro Line 2: Line extension	564	MOPC4, 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 intermunicipal 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 public bike-sharing system	15	MOPC, municipalities	Until 2030
Develop 'green' corridor along the river basin	5	Municipalities, MOPC	Until 2025

3 National transport planning authority (Oficina para el Reordenamiento del Transporte)

4 Ministry of public works and communications

Measures	Cost estimates (million USD)	Proposed Financing Source	Implementation schedule (year)
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 image and attractiveness of 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 ⁵	Until 2025
Implement merchandise delivery and pick-up plan in 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 modernization policy	0,3	INTRANT, Ministry of finance	Until 2023
Bus fleet modernization policy		operators	Until 2023
Parking policy	0,6	INTRANT, municipalities, MOPC	Until 2030
Regulation of HDV transit	0,3	INTRANT	Until 2023

Expected results and impact

Impact Area	Expected Impact
GHG emission (SDG 11)	Yearly reduction of GHG emissions relative to 2018 (baseline year) <ul style="list-style-type: none"> • 2023: -4% • 2025: -7% • 2030: - 20%
Accessibility (SDG 11)	Percentage of the total population with access to public transport <ul style="list-style-type: none"> • 2018 (baseline): 10% • 2023: 25% • 2025: 36% • 2030: 43%

⁵ National port authority

Impact Area	Expected Impact
Air pollution (SDG 11)	Not quantified
Modal share	Percentage of total trips being realized with Public Transport <ul style="list-style-type: none"> • 2018 (baseline): 36% • 2023: 39% • 2025: 41% • 2030: 44%
Road safety (SDG 3)	Not quantified
Mobilized finance (SDG 17)	Leveraged international finance <ul style="list-style-type: none"> • EU-CIF: 10 m€ (secured, until 2023) Associated international and domestic investments <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • KM of sidewalks: 150 km • KM of cycle lanes: 150 km • KM of mass rapid transit lines: 109,3 km
Expected institutional impact	<p>The recently created road transport authority, INTRANT, will reduce institutional fragmentation by centralizing regulatory and planning functions. This will contribute to improved cooperation between the sector's strategic, tactical, and operational levels.</p> <p>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.</p> <p>Not only is the new institutional arrangement in the sector a necessary step for building capacity and rationalizing authority. Moreover, the SUMP process offers itself as a great learning opportunity.</p>

Lessons learned

The importance of a leading transport authority

The creation of 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 centralizing regulatory and planning functions. This will contribute to improved 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 rationalizing authority. Moreover, the SUMP process offers itself as a great learning opportunity.

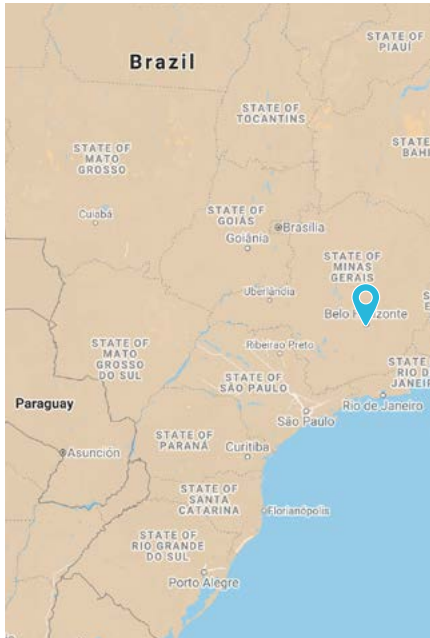
A radical change in priorities

Santo Domingo's SUMP may serve as a reminder of an indisputable fact: a sustainable, attractive, accessible, and safe transport system can only be realized by an enabling physical infrastructure that prioritizes 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".

Belo Horizonte, Brasil

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 14,420 km²

Population: 5,700,000 | Growth rate: 1.05%

GDP per capita: USD 17,239

Modal Share:

Formal public transport: 28.1%

Walking: 34.8%

Cycling: 0.4%

Private cars: 36.6%

National GHG emissions per capita: 5.12 (tCO₂eq)

Region capital city

Context

Belo Horizonte has a series of plans (Master Plan, PlanMob-BH, Belo Horizonte – a Smart City, etc.) and policies in place that are reviewed and monitored on a regular basis to help guide the urban development of the city. Belo Horizonte has already made important progress towards sustainability and in the medium and long run Belo Horizonte envisions becoming an example of smart and sustainable urban development for Brazil and Latin America.

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.

With regard to 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) motorized 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.

Support from the Partnership

Technical Assistance: Pilot Project development

Funded by: BMU through the International Climate Initiative (IKI)

Funding amount: EUR 100,000

Implemented by: the Wuppertal Institute and UN-Habitat through the project Urban Pathways which is ongoing (2017-2021)

Local counterpart: Belo Horizonte Transport and Traffic Company (BHTRANS)

Supported Activities:

Establishment of a partnership with the city of Bremen, Germany, which helps Belo Horizonte implement a Zone 30 and a "bicycle street". The Zone 30 pilot-project foresees a wide deployment of vertical and horizontal signalling, reallocation and repositioning of parking spaces to provide the reduction of the speed, and enlargement of sidewalks with the creation of small areas of coexistence for pedestrians with the insertion of urban furniture. 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.

Status of implementation

Project start: 2017

Expected project completion: 2021

Completed outputs:

- Implementation of Zone 30 in Cachoeirinha neighbourhood

Teresina, Brazil

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 1,755 km²

Population: 1,021,229 | Growth rate: 1.21%

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

Region capital city

Context

Teresina has an area of 1,392 km² and constitutes an Integrated Region of Economic Development (RIDE). Its population is of 1,203,922 inhabitants, including 844,250 in the Municipality of Teresina, with an average density of 584,94 hab / km² (IBGE, 2010). Its geographical makes it an important road junction as the city maintains the best road distance with all the Northeastern capitals. This potentially favours economic activities

The mobility in Teresina has been hampered by the growth model. The immediate effect is on public transport: increased distances per trip, reduced fluidity and safety and traffic efficiency (correct application of the execution processes), efficiency (obtaining desirable results) and effectiveness (guarantee of continuity), increased cost implementation, maintenance and compromising its quality. 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 car trips (24.8%), and municipal public transport (21.3%); with less representation, bicycle trips (11.8%) and motorcycles (5.8%). The results indicate a low relative participation of the bus trips, indicating a difficulty of access of the population to the collective service of public transportation, due to the relation between income and income.

The current bus network system in Teresina is structured through 103 regular bus routes that was operated by 4 main operators (together it comprises 13 companies) that offered 110 trips/month, with an operational fleet of 470 vehicles and a technical reserve of 80 vehicles. This network is supplemented by 8 alternative service routes, operated by 45 vehicles from minor operators organized under the SINTRAPI (Alternative Passenger Transport Operators Union).

During the last year, the current system (called conventional system) has gradually been replaced by the new Integrated BRT System. In the conventional system the bus routes were classified into (i) radial – linking neighborhoods to the CBD – Central Business District; (ii) circular – performing complete circuits, leaving and arriving at the same terminal station; (iii) diametrais – connecting two points of the city passing through the CBD.

Almost all routes were directed to the CBD, which led to a high rate of overlapping of itineraries and a complete saturation of some routes in the system.

The Integrated BRT System introduces a new feeder-trunk system, operating with a set of feeder lines that connects neighborhoods to zone terminal, and trunk lines (BRT) departing from terminals to city center or linking terminals. It divides the city in 4 main zones (South, Southeast, East, Center-North -Teresina doesn't have West zone inside the municipal jurisdiction), each zone with 2 bus terminals, and the CBD has 4 unloading terminals. The bus route concession was bidded by zone, and each operator holds the concession for the set of routes of a zone. The scheme below illustrates the difference in design of the two systems:

Teresina Municipality Town Hall, 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 partially in place to monitor, evaluate and report on urban transport.

The project will implement 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.

The technical assistance contributes to institutional strengthening by tackling trust issues between all the stakeholders of the mobility sector 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 (SEMPPLAN)

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

Expected project completion: 2021

Completed outputs:

- Signature of a MoU between Teresina and AFD
- Finalization Diagnosis

Next expected outputs

- Setup of The Open Innovation.
- Pilot Conception
- Proof of concept
- Scale-up strategy

Core impact indicators baselines

Indicator	Baseline - 2020
Total annual transport related GHG emissions (Mt CO ₂ eq)(Brazil)	1,070.08 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)(Brazil)	5,120 kg CO ₂ eq / capita
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	13 µg/m ³ of PM2.5
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	22.8 fatalities / 100,000 hab

Highlights in the past year

The first phase of the support project is concluded, and the main results are the consolidation of the diagnosis, with the identification of a security and trust problem in the public transport system, especially towards women due to the increased violence rate. Likewise, the low punctuality or lack of precise information about the schedules; lack of real-time data; and lack or inconsistency of information for administrators and users, raises the level of distrust at a general level. Likewise, a review of technology was conducted and the list of problems identified to launch the open innovation phase.

Since the COVID-19 pandemic began, the progress of the Teresina project has been slow due to the limited availability of the beneficiary to attend the project meetings and review the products delivered by the consultant. Therefore, the support of AFD in the exhaustive review of the products and the follow-up of the consultancy has offset the delays generated by the health crisis. Additionally, the impossibility of holding meeting has affected the diagnosis phase, and consultations had to be taken online, through surveys and virtual workshops.

Chile

Partner country

Status of the project: ongoing technical assistance



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 lines: 10.9%

Annual average infrastructure expenditures as percentage of GDP: 2.2% (source: Consejo de Políticas de Infraestructura)

Nationally Determined Contribution (NDC)¹:

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 (tCO₂e)

Proportion of transport related GHG emissions: 24.1% (2016)

Exposure to climate change: HIGH

Context

The Republic of Chile is a country in South America. It 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 (291,930 sq mi) and has a population of 17.5 million as of 2017. The capital and largest city is Santiago.¹

Chile has an economy characterized 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, machinery industrial vehicles and natural gas - reached \$ 72,200 million. On the other hand, the public debt was estimated at 10.1% of the GDP and the external debt at USD 102.1 billion at the end of 2012. The GDP contracted 6% in 2020 and is estimated to grow by 4.2% in 2021.

By 2030, CO₂e emissions from the transport sector are expected to increase by 36% compared to 2007, reaching the value of 46.4 megatons CO₂e. This trajectory is currently strongly correlated with GDP growth, and the business-as-usual projections for 2050 go from 44.5 megatons CO₂e for low GDP growth projections to 84.4 megatons CO₂e for high GDP growth projections.

¹ These measures are not explicit in the NDC commitments, but modelled as part of the proposed carbon neutrality scenario.

The Ministry of Transport and Telecommunications (MTT) is politically in charge of the development of transport in Chile. Every 10 years approximately, it develops transport plans for the main cities of the country, in addition to administering public transport contracts, administering the subsidies to public transport, and other powers.

Due to a highly centralised system, Chilean cities have very few attributions for planning sustainable urban mobility. However, as of 2021, due to a new decentralization law, cities will receive new powers in this area. Since October 2019, Chile has been subject to a deep social and political crisis, which has led to a referendum for the replacement of the current constitution. This may generate further changes to the current political structure of the country.

Even though Chile has pushed for the electrification of public transport, the country shows high levels of inequality in terms of development between the capital Santiago and the rest of the cities. Indeed, public transport is still informal in several cities and does not meet the same qualitative and quantitative standards as in the capital.

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.

Technical assistance for the development of the NUMP will strengthen the institutional framework in the country mainly through the facilitation of dialogue and agreements from a multisectoral (dialogue 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 Communications

Main purpose of the NUMP:

- Offer cities and regions a general enabling framework for SUMPs
- Provide technical guidance on a wide range of technical issues relevant for the transport sector in the context of reducing GHG emissions

Supported activities:

- Design of a National Programme for Sustainable Mobility
- Elaboration of the Strategy for Sustainable Urban Mobility (writing, revising, promoting the participation of other institutions in the process)
- Various NUMP Chile roundtable meetings and strategical planning of the NUMP activities to be realised in 2021
- 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 on fighting climate change (Emissions Inventory, Emissions Projection, Status Quo Analysis, among others)

Status of implementation

Project start: Q4 2018

Expected project completion: Q4 2021

Completed outputs:

- NUMP Workshops in Quito, Ecuador and Bogota, Colombia (March 2019 and February 2020)
- Status quo analysis and series of multisectoral workshops for building a common understanding of the urban mobility situation, including mobility challenges and current actions being implemented by 7 sectoral ministries
- Emissions Inventory from the transport sector (bottom-up methodology)
- Internal round of 3 workshops (Nov-Dec 2020) with the participation of representatives most departments (regional and national) from 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)

Next expected outputs

- Emissions projections from the transport sector, both for a BAU scenario and alternative scenarios using bottom-up methodologies (including transport modelling)
- National Strategy for Sustainable Mobility (vision, objectives, goals and general measures)
- Program to support the adoption of sustainable measures in the urban mobility sector for cities and regions
- MRV scheme at a national level

Core impact indicators baselines

Indicator	Baseline - 2018
Total annual transport related GHG emissions (Mt CO ₂ eq, national average)	13.1 Mt CO ₂ eq (source: emissions inventory, MTT)
Annual transport related GHG emissions per capita (kg CO ₂ eq, national average)	853 kg CO ₂ eq / capita
Access to public transport in urban areas Proportion of the population living 500 metres or less of a public transport stop (national average)	75% (source: SIEDU)
Indicator	Baseline - 2018
Air pollution Mean urban air pollution of particulate matter (in µg PM _{2.5}) at road-based monitoring stations (national average)	26.25 µg/m ³ of PM _{2.5} (source: SIEDU)
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants (national average)	9.09 fatalities / 100,000 hab (source: SIEDU)
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	not available at a national level

Highlights in the past year

During 2020, various studies and processes that will help define the future National Sustainable Mobility Strategy and Programme were developed. Below are some of the main products of that year:

- Development of an Emissions Inventory of the Transportation Sector
- Development of a multisectoral and multilevel dialogue process to define the vision, objectives, and goals of the Strategy
- Start of the MRV scheme

The pandemic and the social and political crisis have delayed the NUMP development. Indeed, the rise in the cost of public transport has played a major role in the beginning of the social crisis and the COVID-19 crisis has led to many changes in priorities.

Antofagasta, Chile

Partner city

Status of the project: ongoing technical assistance



Basic Information

Antofagasta urban area: 30,718 km²

Population: 388,545 | Growth rate: 2%

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

Region capital city

Context

Antofagasta is a city 30 kilometres long and on average 2 km wide, where about 360 thousand citizens live, according to the 2017 census. The city, whose economic development is mainly linked to the copper mining industry, is characterized for being the destination of tens of thousands of migrants seeking job opportunities. The intercensal variation (2002-2017) shows a higher population increase of 22.99%, which is greater than the growth experienced by the country (16.26%). The absolute growth of the population in Antofagasta stands out, with 72,396 new inhabitants in the intercensal period. An important part of them are immigrants who come to the region attracted by the climate and job opportunities.

Around 100,000 vehicles circulate daily in the city, and the average travel distances are between 5.9 and 7.4 km. Geographic restrictions and demographic pressures have pushed the development of the city to the north and the south. More than 60% of the population lives in the northern sector. However, most of the city's services, employment, and economic activities remain concentrated in the centre, creating congestion and putting additional stress on the city's already fatigued and poorly functioning transportation network. The transportation 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, have promoted a series of mobility initiatives that complement the current public transportation system and the urban transportation master plan. However, these are not necessarily linked to each other and their impact, in terms of emissions, has not been modelled.

The regional government of Antofagasta has the mandate and responsibility to finance mass public transport infrastructure, but not its operation. It has 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 Plan has been established, as well as a Social Board responsible for including demands and perspectives of citizens and other stakeholders into the SUMP. Along with this, a website has been set up (www.movilidadantofagasta.cl) that functions as the main communication tool with citizens, hosting surveys and news, among others.

Phases 1, 2 and 3 of the SUMP development process have now been completed. there is already a consolidated vision, objectives, indicators, and goals for the Plan, being able to start with the planning of measures and the modelling associated with them.

The official launch of the SUMP is estimated to be September 2021.

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+ Program

Local counterpart: Regional Government of Antofagasta

Supported Activities:

- Develop an Integrated Sustainable Urban Mobility Plan, which adds environmental goals and MRV mechanisms to existing measures and isolated modal plans.
- Support the integration of various modes of transport and improve existing bike lanes, sidewalks and public transport infrastructure.
- Formalise the Technical Board for Sustainable Mobility in the city.
- Train regional and municipal government officials.
- Promote citizen empowerment and provide them with access to the decision-making arena, with a particular focus on investments.

Status of implementation

Project start: May 2018

Expected project completion: Last quarter 2021

Completed outputs:

- Signature of a MoU between the Intendente of Antofagasta and GIZ.
- Status quo analysis including emissions inventory.
- Strategic development (vision, objectives, indicators, and goals).
- Strategy for communications and participatory proces, including web page and social networks accounts.
- 3/5 online surveys.
- Implementation of the Technical Board.
- Implementation of the Social Board.

Next expected outputs:

- Finalize Measure Development phase (including finance).
- Finalize Implementation and Monitoring phase.
- Finalize MRV plan.
- Implement an Observatory for Sustainable Urban Mobility in the city of Antofagasta.
- Launching of the Plan.

Core impact indicators baselines

Indicator	Baseline - 2018
Total annual transport related GHG emissions (Mt CO ₂ eq)	0.372 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	940 kg CO ₂ eq / capita
Access to public transport Proportion of the population living 500 meters or less of a public transport stop	80.4%
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	10.5 µg/m ³ of PM2.5
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	5.56 fatalities / 100,000 hab

Highlights in the past year

The main highlight of the previous year was the definition of a vision, objectives, indicators, and goals for the SUMP. These can still undergo modifications.

Vision

A city whose mobility system is based on the principles of sustainable urban development, which reduces the effects on climate change, which promotes equity and social justice in public space, which improves the habitability and quality of life of its citizens through a city on a human scale, and that collaborates with the economic diversification of the region.

Strategic objectives

1. Promote and consolidate the generation of sub-centres throughout the city, bringing needs closer to people's places of residence, and reducing long-distance and time-consuming trips.
2. Increase the use of sustainable transport modes in the urban context, improving the operating conditions and accessibility of public transport, walking and cycling.
3. Reduce and rationalize the use of cars, creating the conditions for less dependence on them.
4. Manage logistics and the integration of its associated activities in the urban fabric, including both large-scale logistics (mainly focused on port activity) and urban logistics of the "last mile".
5. Improve the habitability and quality of public spaces, setting conditions and standards of urban design on a human scale.
6. Promote the use of low-emission technologies across the entire urban mobility system.
7. Promote economic diversification in the region through the mobility system, which goes beyond the predominant paradigm of the mining sector in favour of other sectors, such as the technological and scientific sector (with an emphasis on astronomy) and tourism.

Impact of COVID-19 on project preparation

COVID-19, added to the social and political crisis in Chile and has had a strong impact on the development of the Plan, mainly due to the decrease in the workforce of the institutions involved in the development of the SUMP. Along with this, it is worth mentioning the strong impact that COVID-19 has had on public transport, where the operating companies threaten to go bankrupt due to the decrease in income from passenger levels. In relation to measures to facilitate mobility, Antofagasta has widened sidewalks, which allow the movement of pedestrians with greater social distancing.

How will the SUMP transition to approval and implementation?

The Regional Governor, who will be democratically elected for the first time since the return to democracy in Chile in April 2021, is the main authority in charge of approving the SUMP. In any case, with the intention of carrying out a validated approval by different actors, it has been established that the Governor will consult the Regional Council, Local Government, Regional Ministerial Secretary of Transportation, among other organizations, all of which are already part of the Technical Board.

The SUMP process contributes to institutional strengthening

Institutional strengthening has occurred mainly through the facilitation of multi-level, multi-stakeholder, and multi-sector dialogues through the technical and social boards. In addition to this, a series of capacity development activities with different actors from the technical board have been conducted. These instances include: participation in the Transport and Climate Change Week 2020 (organized by GIZ), ongoing participation of urban leaders (co-organized by Women in Motion), participation in the formulation of bankable climate projects (co-organized by INCAE), and participation in trainings on SUMP development (co-organized by Rupprecht Consult), among others.

Colombia

Partner country

Status of the project: ongoing technical assistance



Basic Information

Population: 50 662 678 (2020) | Growth rate: 0.8%

Percent of urban population: 77.1%

GDP per capita: USD 16,264

Percentage of the population living below the national poverty lines: 27%

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 (tCO₂eq)

Proportion of transport related GHG emissions: 12%

Exposure to climate change: High

Context

Colombia is the third most populated country in Latin America after Brazil and Mexico. The capital city Bogotá has the biggest population number and is the centre of the economic, political and financial activities in the country. About 77.1% of its citizens live in cities and the other 22.9% in rural areas where access to education, public health and other basic services is still in many regions limited. Poverty and inequality are big 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 (UNAL, 2018). The Gross Domestic Product has been growing for the last two decades, with an average annual growth rate of 3.8%, according to the reports of the National Ministry of Finance and Public Credit. This is a remarkable achievement given the country's long-standing internal conflict. Colombia is an upper middle-income country (World Bank). Historically, petroleum and other energetic products have played an important role in Colombia's economy. The country's priority exports and industrial growth areas are petroleum, electronics, agriculture, information technology, and shipbuilding.

Since ground transportation in Colombia was responsible for 12% of the overall country GHG emissions (29 MtCO₂e) in 2017, tackling the transport sector is crucial for complying with climate change mitigation goals and electric mobility can be a major tool for achieving this. Additionally, public concern about the negative impacts of air pollution on public health has increased over the past years. According to latest studies, in Colombia urban air pollution is responsible of 10 thousand premature deaths and 75% of national health costs. The transport sector (Diesel freight and public transport, mainly) is responsible for 25% of PM_{2.5} emissions in large cities, which is the most relevant air pollutant.

Buses play an important role in Colombia's transport landscape. However, given the increasing urban population densities and the deteriorating air quality (23% of Bogotá's local air pollution is generated by buses), the bus systems' various configurations – from small feeder buses to bi-articulated high frequency buses – together 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 considered to be key for complying with climate commitments, for promoting green growth, and for protecting human health, the National Government has started developing a National E-Mobility Strategy in 2019.

As electric busses have considerably higher upfront investment costs compared to traditional technologies and the technology is relatively new in Colombia, the aim of the technical assistance is to overcome these barriers with a program that supports the electrification of Colombia's public passenger transportation systems.

The technical assistance has four workstreams:

- **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 financial conditions of public passenger transportation in Colombia, to construct in conjunction with our counterparts an instrument to facilitate investments on electric fleet and infrastructure.
- **Design of coordination and governance scheme:** Through a systemic process with the national government counterparts, define the decision-making frameworks and processes to approve and follow up on the policies and plans that enable technological advancement.
- **Design of 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: BMU

Implemented by: GIZ through the TRANSfer III project

Local counterpart: Ministry of Transportation

Main purpose of the NUMP:

The TRANSfer project is developing a National E-Bus Promotion Program that comprises a technical and financial design, MRV system and a steering structure.

Supported activities:

- E-bus workshop in Cali, Colombia (24-25 February 2020, 70 participants from cities, Ministry of Transportation, and academia)
- Support to the governance on the recently established inter-ministerial Roundtable for Sustainable Transport
- Support in the organization of roundtables on the National Strategy for Sustainable Transport

Status of implementation

Project start: 2019 Q1

Expected project completion: 2021 Q4

Completed outputs:

- Financial Study on E-Buses in Colombia
- Pre-Feasibility Study
- E-bus workshop in Cali, Colombia (24-25 February 2020, 70 participants from cities, Ministry of Transportation, and academia)
- Design of MRV Model
- Proposal for governance structure

Next expected outputs

- Assessment of regulatory and capacity building needs of e-bus operation
- Structuring of E-Mobility fund

Core impact indicators baselines

Indicator	Baseline - 2017
Total annual transport related GHG emissions (Mt CO ₂ eq)	29 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	591 kg CO ₂ eq / capita
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	14 fatalities / 100,000 hab

Highlights in the past year

The latest Colombian National Development Plan for the first time allows national co-financing of up to 70% for clean technologies in massive transport systems. Additionally, the Colombian Government established an increasing quota stating that by 2035 100% of the new buses that are to be incorporated into public transport systems need to be electric.

To help the industry make the most of this government support, GIZ offered an E-Bus Workshop for 70 mobility experts, academics and decision makers from eleven Colombian cities in Cali in February 2020. The participants analysed appropriate scenarios to accelerate electric vehicle technology in public transport systems and discussed the motivations, requirements, challenges and advances in electric mobility.

During 2020 GIZ supported the Interinstitutional Roundtable on Sustainable Transport in the design of the National Strategy for Sustainable Transport.

The proposal of an E-Bus Fund is under development.

The impact of COVID-19 on project preparation.

In Colombia, the transport sector is responsible for 36% of energy-related greenhouse gas emissions, mainly due to road transport, which is almost exclusively dependent on fossil fuels. In particular, carbon-intensive transport modes such as motorbikes account for a large part of the growing vehicle fleet (58%) and are also the biggest competitor to public transport, which loses about 2% of passenger numbers annually. This trend could worsen in the wake of COVID 19, as people increasingly switch to private transport for fear of contagion and the falling passenger numbers increase the deficits of the transport companies. According to initial estimates by the Colombian government in June 2020, the shortfalls in the largest seven cities due to the pandemic already amount to 1.8 trillion pesos, about 436 million Euros.

Ibagué, Colombia

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 56,8 km²

Population: 529,635 | Growth rate: 0.69%

GDP per capita: USD 5,024

National GHG emissions per capita: 3.58 (tCO₂eq)

Region capital city

Context

Mobility accounts for 32% of total CO₂ emissions in Ibagué, which makes it the second most polluting sector in the city. The city has 22 kilometres of cycle infrastructure and a public bicycle system with a single station and 20 units, from which an average of 16 journeys are made per day.

The project implemented by GIZ through the EUROCLIMA+ Program consists in a pilot plan for the implementation of a sharing system for assisted pedalling bicycles for the city of Ibagué. This system will have five stations and 135 bicycles across the city centre. The strategic objective of the project is to increase the number of residents and circulating populations in the city centre using shared pedalling bicycles, thus promoting the general use of cycling as main mode of transportation. Additionally, the pilot project aims to build capacities for sustainable mobility of public authorities. Ensuring the sustainability of the initiative by developing a strategic planning document and developing a business model that combines the involvement and financing of the public and private sectors will be important steps of the project.

The technical assistance contributes to institutional strengthening by improving the capacities of the mayor's staff linked to the project by linking them to the private sector and other experiences through the Community of Practice.

Support from the Partnership

Technical Assistance: Pilot Project

Funded by: European Commission

Funding amount: EUR 500,000

Implemented by: GIZ through the EUROCLIMA+ Program

Local counterpart: Ibagué Municipality

Supported Activities:

- Formulation of a pilot plan
- Development of a strategic planning document that ensures the sustainability of the initiative
- Capacity building of public authorities for sustainable mobility planning

Status of implementation

Project start: 2019

Ecuador

Partner country

Status of the project: ongoing technical assistance



Basic Information

Population: 17,084,358 | Growth rate: 1.8%

Percent of urban population: 64%

GDP per capita: USD 6,346

Percentage of the population living below the national poverty lines: 21.5%

Annual average infrastructure expenditures as percent of GDP: 1.63%

Nationally Determined Contribution (NDC):
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, its population is 17,084,358, of which 2,735,987 live in its capital Quito. 64% of the population resides in urban areas especially in the capital, Guayaquil and Cuenca. Its GDP is USD 6,346 and its poverty rate is 21.5% in 2019. The Gini Coefficient index, which measures income inequality, is 0.447%.

The country's transport system is divided into three parts, road, water and air. By road, there are buses, trolleybuses, and taxis, which are the most widely used services in the country, followed by air, where about 15 cities have their own airport. Finally, we have the fluvial one that has boats and canoes especially in the Amazonia or places where it is only possible to accede by sea or fluvial way.

MTOP will be the entity that will accompany the consulting firm in the formulation of the NUMP. MTOP is the governing entity of the National Multimodal Transport System (land, air, sea, non-motorized). Its vision is to formulate, implement and evaluate policies, regulations, plans, programs and projects that guarantee a safe and competitive transport network, minimising environmental impact and contributing to the social and economic development of the country.

The objective of this project is to define a national strategy for low carbon mobility that is applicable to all the Decentralised Autonomous Governments of the country and that allows a considerable reduction of greenhouse gases, maintaining levels of equity and accessibility.

Ecuador's NUMP will consider the improvement of bus and truck units; knowledge of routes, frequencies, and unit locations; promotion of non-motorised transport; 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

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:

- Offer cities a general enabling framework for SUMPs
- Regulation on a specific set of technical issues
- Regulation on wide range of technical issues
- Technical guidance on a specific set of technical issues
- Technical guidance on an on 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 Plan 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: Q1 2021

Expected project completion: Q2 2022

Completed outputs:

- Signature of a MoU between the Ecuador and AFD
- Signing contract Q4 by December 2020

Next expected outputs

- Follow-up on the consultant's initial activities in January 2021

Core impact indicators baselines

Indicator	Baseline - 2020
Total annual transport related GHG emissions (Mt CO ₂ eq)	15.07 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	243 kg CO ₂ eq / capita
Air pollution Mean urban air pollution of particulate matter (in µg PM2.5) at road-based monitoring stations	18 µg/m ³ of PM2.5
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	33 fatalities / 100,000 hab
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group	14.6%

Highlights in the past year

In the last quarter of 2020, a contract was signed between AFD and a consulting firm to initiate the formulation of Ecuador's NUMP.

Impact of the COVID-19 pandemic

COVID-19 pandemic changed the progress of project activities as government teams have had to focus on meeting this new challenge. Similarly, quarantine measures and restrictions on international flights postponed or cancelled events and meetings. Therefore, measures were taken to use virtual media to replace scheduled events in the country and to reach agreements on the signing of consultancy agreements between the beneficiary, the consultancy and the AFD.

Ambato, Ecuador

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 1,009 km²

Population: 178,000 | Growth rate: 0.78%

GDP per capita: USD 12,652

National GHG emissions per capita: 3.82 (tCO₂eq)

Region capital city

Context

The private vehicle is the main mode of transport in Ambato, used by 40% of the population.

The growth in private vehicle ownership is faster than the growth of the population and today the rate of car ownership is 180 cars per thousand inhabitants, while the national rate is 133 cars per thousand inhabitants.

The objective of the project in Ambato, Ecuador, is to update the Transportation and Mobility Master Plan for Ambato Canton with a focus on sustainable mobility. It includes the optimization of existing transport systems in the regional capital city and aims at improving mobility in urban and rural areas in order to improve the citizen's quality of life. The project involves greater participation of the citizens. Additionally, the project is strengthening institutions by building capacity to implement the Master Plan and its future updates.

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+ Program

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 the Canton of Ambato
- 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

Status of implementation

Project start: Q2 2018

Expected project completion: Q3 2021

Next expected outputs:

- Preparation & Analysis Phase: Tender for remaining phases of the SUMP development

Highlights in the past year

Ambato moves toward sustainable urban mobility

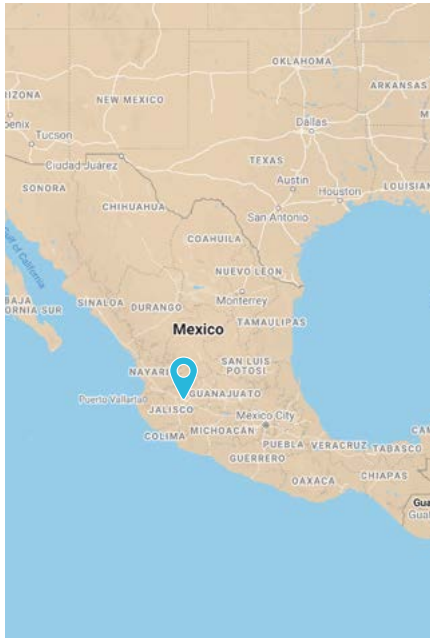
Within the framework agreement signed between the Municipal Decentralised Autonomous Government of Ambato and GIZ, the workshop “Ambato towards sustainable urban mobility” was organised in April 2019 with the participation of 50 people from the public sector, private sector, transport operators, citizen groups and associations of people with reduced mobility.

The purpose of the workshop was to inform about what this municipal project entails and to jointly develop a vision of where Ambato's mobility should go in the future. For this, diverse group dynamics were organised to identify the challenges that must be faced and opportunities for Ambato to achieve this innovative vision.

Guadalajara, Mexico

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 151 km²

Population: 5,243,392 | Growth rate: 1.2%

GDP per capita: USD 7,991

Modal Share

Formal public transport: 24%

Walking: 42%

Cycling: 8%

Private cars: 26%

National GHG emissions per capita: 5.39 (tCO₂eq)

Region capital city

Context

The Guadalajara Metropolitan Area (GMA) is the third most populated zone in Mexico and it is located in the centre of Jalisco's State with 5.2 million of inhabitants. GMA is comprised of 9 municipalities. It is an important centre for industries focused on electronics and cybernetics which attracts many young professionals. The main activities in GMA are manufacture industry, trading, personal services and maintenance. The Metropolitan Area hosts 75% of the total industry of Jalisco's State.

Currently, the transport system of the Guadalajara Metropolitan Area is comprised of 207 routes of paratransit, 1 line of BRT, 3 lines of Light Train, 4 lines of Trolleybuses and the public bicycle system. In 2021, a second BRT line of 41.5 km will be available to connect all the peripheric area of the metropolis, providing service to 4 municipalities directly and connecting with the mass transport mentioned above.

The Metropolitan Coordination establishes a coordination scheme among the municipalities that comprise the metropolitan areas. This scheme is comprised of the Metropolitan Coordination Board, the 9 mayors and the state governor, the Metropolitan Institute of Planning, the Metropolitan Citizen Council and the Metropolitan Planning Advisory Council.

The Metropolitan Institute Planning aims to develop and propose metropolitan planning instruments, studies and project proposals, as well as mechanisms that improve the coupling of the Metropolitan Coordination Instances. It receives technical assistance to develop a Sustainable Urban Mobility Plan and pilot project. The objective of this project is to coordinate and establish a plan on mobility planning between the 9 municipalities that comprise the metropolitan area, including various modes of accessible, economic, efficient and safe transport.

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:

- MobiliseDays (February 2019)
- SUMP Workshop (February 2020)

Status of implementation

Project start: Q2 2018

Expected project completion: Q4 2021

Completed outputs:

- Status quo analysis (November 2019 – January 2020)
- Urban cargo logistics (January 2020)
- Financial mechanisms (January – February 2020)
- Development of SUMP strategy – co-creating vision and objectives (April – May 2020)

Next expected outputs

- Integrated SUMP for the 9 municipalities of Guadalajara's Metropolitan Area
- Update of urban mobility data, integrating non-motorized mobility, freight transport, and public transport (formal and informal).
- Establishment and application of MRV tools (MYC and Ecologistics)
- Pilot Project: Mobile application for obtaining new information on citizen mobility patterns

Highlights in the past year

IMEPLAN team developed its capacities on financing and freight transport enabling a better understanding of how those topics can be included in the SUMP strengthening and updating. Besides, IMEPLAN and many local stakeholders participated in the SUMP Self-Assessment process which aimed to identify prioritised actions and areas to work on, considering the COVID-19 situation.

Impact of the COVID-19 pandemic

Activities planned for 2020 in the Guadalajara Metropolitan Area, such as collecting data for the status quo analysis, had to stop and be postponed to 2021 because of COVID-19. This created important delays for the expected outputs.

However, the Guadalajara Metropolitan Area (GMA), has been implementing various measures in the context of the COVID-19 crisis, such as the deployment of bicycle lanes, promoting the use of bicycles and sanitising the units of the public bicycle system, as well as developing strategies to provide free and safe daily transportation to all people who work in the health sector of the metropolis. The metropolitan area also worked on strategies to answer gender issues in public transport, in particular to increase safety for women.

How will the SUMP transition to approval and implementation?

Governance mechanisms established for the Guadalajara Metropolitan Area require to conduct a public consultation with stakeholders and that the Monitoring and Evaluation Commission reviews the SUMP document. After that, the approval of the SUMP will be conducted by the Majors of the 9 municipalities of the Metropolis and the Governor of the Jalisco's State. Once the SUMP is approved, it must be published in the Gazette of Jalisco's State.

Institutional strengthening and improved access to information

While developing a SUMP in the Guadalajara Metropolitan Area, the SUMP process contributed to strengthening institutions in the area by involving several main institutions and stakeholders in the technical assistance, such as the Metropolitan Mobility Board, the Mobility and Transportation Institute of Jalisco or other committees and universities. It thus strengthened the capacities of the IMEPLAN team and the municipal representatives.

The SUMP development also increased participation of the general public on mobility issues and promoted the exchange between citizens and public officials by including civil society networks and NGO's in the development process.

Besides developing a Sustainable Urban Mobility Plan, another pilot project included the development of a mobile application to obtain new information on mobility patterns of citizens by collecting origin and destination data. The collected data can further help to enhance the sustainability of the mobility system of the entire Metropolitan Area of Guadalajara through improved access to information.

Arequipa, Peru

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 3,700,00 km²

Population: 910,000 | Growth rate: 1.09%

GDP per capita: USD 10,277

Modal Share

Formal public transport: 47%

Private cars: 30%

Taxis: 23%

National GHG emissions per capita: 2.82 (tCO₂eq)

Exposure to climate change: HIGH

Region capital city

Context

Urban mobility in Arequipa represents an issue highlighted by transport data in 2016, which recorded 52,877 infractions, 5,410 accidents and 128 fatalities and 5,282 non-fatal victims. In 2008, the population clearly preferred to travel by bus, with 63% of all journeys made on an average day, 16.6% of which on foot. By 2017, on the main north-south and south-north axis of the city, which crosses the historic centre, 47% of journeys were made by public transport, 30% by private vehicle and 23% by taxi.

This would indicate a modal choice influenced by:

- The growth of the vehicle fleet without considering the type of service and demand; as of 2016, there are 261,600 vehicles (25% taxis and 46% private cars).
- The low quality of the public transport service, which the user perceives as unsafe conditioned by the 4,000 units of low capacity, poor maintenance, and which are over 20 years old, operating 240 routes.
- The disarticulation of the urban infrastructure with low connectivity between the urban units of the city, road discontinuity and the variation of sections in continuous sectors, aggravated by the superposition of the urban centrality and the historical one.

Arequipa has no mass transit system, but a first light rail system on the main 15 km long NW-SE corridor is planned. 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. 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.

The objective of this SUMP project is to develop a city model that promotes more sustainable modes of travel (pedestrian, bicycle and mass public transport). The main expected results are:

- Improve the urban mobility system and incorporate new technologies reducing travel times and needs, accidents and articulating the Integrated Transportation System
- Reduce the effects of climate change and greenhouse gas emissions, as well as the consumption of non-renewable energy
- Improve urban social equity, ensuring universal accessibility while promoting alternative use of the road system and promoting healthier modes of use
- Develop institutional capacities in the different actors involved with urban mobility issues

The technical assistance contributes to institutional strengthening by:

- Regulating the sustainable urban mobility management
- Promoting projects to be executed by the municipality
- Financing mechanisms for infrastructure and equipment and monitoring system

Support from the Partnership

Technical Assistance: EGIS - RUPRECHT

Funded by: European Union

Funding amount: EUR 500,000

Implemented by: AFD through the EUROCLIMA+ Program

Local counterpart: Municipality of Arequipa, 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 implementation

Project start: March 2020 (signature of the EC+ agreement with the Municipality), October 2020 (start of the technical assistance contract)

Expected project completion: February 2022

Completed outputs:

- Forum on challenges and opportunities for Sustainable Urban Mobility
- Participation plan
- Communication plan

Next expected outputs

- Expectations survey
- Diagnostic workshop
- Diagnostic mobility

Highlights in the past year

In December 2020, the mayor of the provincial municipality of Arequipa, Omar Candia, together with the representative of the French cooperation, communicated to the population of Arequipa about the beginning of the formulation of the Sustainable Urban Mobility Plan (SUMP). Also, the Forum “Challenges and opportunities for Sustainable Urban Mobility” was held virtually, with more than 100 participants and with the participation of architect Solangel Fernández, Minister of Housing, Construction and Sanitation.

Impact of the COVID-19 pandemic

The decrease in travel, as a result of the COVID situation, especially that of motorized vehicles, is delaying the collection of data (surveys and transport traffic tickets). A way to identify virtual information for the year 2019 is being analysed.

The active participation of different actors of urban mobility in Arequipa encounters difficulties in adapting to the forms of virtual meetings. Given this, it has been proposed to carry out more participation activities through interest groups.

Trujillo, Peru

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 1,769 km²

Population: 962,369 (Census 2017) | Growth rate: 1.65%

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%

National GHG emissions per capita: 3.05 (tCO₂eq)

Exposure to climate change: HIGH

Region capital city

Context

Trujillo, a coastal city in northern Peru, is the capital of the province of the same name, as well as the department of La Libertad. Its geographic location and connectivity with the major cities on the coast and in the highlands of northern Peru make it an important economic centre. The aforementioned factors and the existence of the CHAVIMOCHIC irrigation project have contributed to the growth of sectors such as export agribusiness, mining, fishing, and commerce. These sectors are the ones that contribute the highest percentage to the regional GDP.

There is no existing mass transit system in Trujillo, but there is an existing transport master plan or similar document.

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 motorized 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 in the next few years, the first road corridor for busses is expected to be implemented. 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 priorities for the city in their Sustainable Urban Mobility Plan (SUMP), as well as non-motorized transport measures (i.e. implementation of 25km of temporary bicycle lines). This plan (SUMP) is key in the efforts of local government to transform their mobility by implementing sustainable and safe transport and mobility solutions. To develop this SUMP, local government represented by the Provincial Municipality received technical assistance from the German cooperation for development, implemented by GIZ.

The Ministry of Transport and Communications (MTC), the national 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 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 organism of urban transport in the metropolitan area of the city, and Gerencia de Transporte, Tránsito y Seguridad Vial, the cargo and passenger transport regulatory and supervisory area). In addition, the Municipality created in 2018 the Sustainable Urban Mobility Committee (COMUS for its Spanish acronym), 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 improve public transport services, 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 own resources. Through cooperation agreements between MTC and international institutions, it has been possible to finance important studies, such as the one carried out for the proposal of the north-south road corridor.

Optimising traffic flow, as well as 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 TRANSPeru, 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 to improve the transport sector.

The goal of Trujillo's SUMP 2020 - 2030 is to improve urban mobility conditions in the city, prioritising the use of public transport and non-motorised modes, while improving the quality of life of their 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 new institutional capacities installation, which will contribute to improving the management processes of public transport services.
- 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 7,300,000

Implemented by: GIZ through the Sustainable Urban Mobility in Secondary Cities in Peru (DKTI)

Local counterpart: Ministry of Transport and Communications (MTC) 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 implementation

Project start: 2017

Expected project completion: 2021

Completed outputs:

- The Management Unit (UGP) of the National Program for Sustainable Urban Mobility (PROMOVILIDAD) is in operation. Coordination between actors at the national and subnational levels in the planning and implementation of investment measures and projects has improved.

Next expected outputs

- Improved coordination mechanisms within cities (among relevant stakeholders) as well as between local governments and ministries.
- Increased capacity of cities for implementation of 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, methods, and financing concepts for sustainable mobility.

Core impact indicators baselines

Indicator	Baseline – 2017
Total annual transport related GHG emissions (Mt CO ₂ eq)	376,677 Mt CO ₂ eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	391.41 kg CO ₂ eq / capita
Access to public transport Proportion of the population living 500 meters or less of a public transport stop	no data available
Air pollution Mean urban air pollution of particulate matter (in µg PM10) at road-based monitoring stations	59.67 µg/m ³ of PM10

Indicator	Baseline – 2017
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	7 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 data available

Highlights in the past year

In the midst of a very complex 2020, public officials of Trujillo's local government were able to conclude the process to plan the city's urban mobility. Thanks to their efforts Trujillo now has a Sustainable Urban Mobility Plan (SUMP). This plan is in the implementation phase through the first short-term measure related to infrastructure for non-motorised transport through the bicycle network for the metropolitan area of the city of Trujillo. This planning process has strengthened the capacities of the technical teams by incorporating methodologies for information management, planning, and improving the interrelation with relevant local, regional and national institutions and actors.

During the first months of the pandemic, it was necessary to reduce the level of face-to-face coordination. Therefore, new channels and ways to interact in a virtual context were set up. In addition, short-term priorities were established with local counterparts and MTC. At the same time, the project considered how to incorporate into national policies, regulations, and instruments with local impact, measures, and strategies to address the new context. This affected the previous rhythm of implementation of activities as some lost urgency and others gain great momentum during the pandemic. This was the case of implementing non-motorised transport measures and measures to restrict the use of private vehicles, which had a positive impact on reducing GHG levels.

Finally, among the measures passed by MTC during 2020, a subsidy scheme was approved in order to facilitate the access of public transport carriers to resources for vehicle sanitation. Thus, reducing the likelihood of infection within public transport units. With financial support from the MTC, the MPT distributed safety elements such as face masks and face shields for public transport carriers and promoted the buses' permanent disinfection.

Uruguay

Partner country

Status of the project: ongoing technical assistance



Basic Information

Population: 3,387,605 | Growth rate: 0,35%

Percent of urban population: 96.1%

GDP per capita: USD 17,277

Percent of population living below the national poverty lines: 8.1%

Nationally Determined Contribution (NDC):

Unquantified transport related NDC

National GHG emissions per capita: 1.90 (tCO₂eq)

Proportion of transport related GHG emissions: 41%

Context

More than half of total energy-related GHG emissions are generated by the transport sector in Uruguay. Urban electric mobility has the potential to maximise the benefits of the country's very low-carbon electricity matrix, thus facilitating a structural transformation of the transport sector in order to reduce the sector's carbon footprint and contribute to further co-benefits, such as reducing air and noise pollution.

Support from the Partnership

Technical Assistance: National Urban Mobility Policy or Program (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; National Energy Directorate; Climate Change Division of the Ministry of Housing, Territorial Planning and Environment

Objectives: The project aims to strengthen capacities in the planning of 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 vehicular electrification

Status of implementation

Project start: 2018 Q2

Next expected outputs

- E-mobility NUMP
- Technical guide for incorporating criteria on Sustainable Urban Mobility into urban planning
- Regulatory instruments and standards for electric vehicles in urban areas

Upcoming technical assistance



Kumasi, Ghana

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 2,603 km²

Population: 3,190,473 | Growth rate: + 4.43%

GDP per capita: USD 4,700 (National)

Modal Share

Formal public transport (Bus): 15%

Informal public transport (Trotro): 53%

Private cars: 14%

Taxis: 12%

Freight vehicles: 1%

Other (LDV): 4%

National GHG emissions per capita: 1.5 (tCO₂eq)

Exposure to climate change: MEDIUM

Region capital city

Context

Since the 2010s, more than half of the population lives in urban areas in Ghana. Despite their rapid expansion in size and population, most cities remain small by world standards.

In the last few years, institutions have been unable to cope with the rapid urban transition and Ghana has started to see the side effects of rapid urbanization, including congestion, unregulated urban expansion, and limited access to services and affordable quality housing.

The second largest city in Ghana is Kumasi. The greater Kumasi Metropolitan Area (gKMA) is the result of multiple extensions of the cities perimeter, including the inner Kumasi (KMA) and twelve additional municipalities and districts. It covers a total land area of 2,603km² with a total population of 3,190,473.

Kumasi is set to more than double its population. The population density is expected to substantially increase from 159 people per hectare (in 2010) to 279 per hectare in 2033.

Transport system

Rapid urbanization 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, inadequate facilities for walking and cycling, occupation of roads by hawkers, and so on.

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

The limited capacity of these vehicles is compensated by their large number. Distribution of the vehicles 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.

A study carried out in 2011 found that 68% of users travel by *trotro*/buses, 12% by taxis. By contrast, *trotros* occupy less than 30% of road space usage, while private vehicles carrying only 14% of passengers account for 33%. The congestion level also affects the route choice for drivers.

The city has received 60 buses from the Ministry of Transport for the introduction of a mass transit service (pilot BRT), but only 20/25 are operated as the rest of the fleet waits for full study and implementation.

Institutional context

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 providing priority for operators using traffic management measures.

There is an existing Greater Kumasi Urban Development Master Plan, which was sponsored by JICA and coordinated by the Spatial Planning Department of KMA in collaboration with the 6 adjoining Assemblies that formed the gKMA. Unfortunately, there have been neither formal coordination among them nor any higher-level authority to regulate inter-MMDA transport.

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

Challenges and main aim of the SUMP

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

- Poor integrated land use planning and control procedures, resulting in urban sprawl, traffic congestion on major roads and poor road safety
- Poor traffic management and poor condition of existing road network, connected with a low traffic capacity, misuse of road space and parking issues, and lack of continuity of pedestrian space
- Inadequate facilities and general inefficiency of the public transport system, which is unable to meet the demand
- Institutional framework not optimised for mobility operators and organisations, affecting profitability and preventing fleet renewal and enforcement of policies
- An excessive level of air pollution, because of the exhaust gas from a fleet of vehicles that is mainly old and poorly maintained

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:

- Regulate public transport (incl. paratransit) for efficiency, safety and affordability;

- Improve traffic management and traffic safety measures, particularly reducing traffic congestion in the city center;
- Improve pedestrian/Non-Motorized Transport facilities for walkability and safety;
- Improve the institutional and financial framework in view of greater effectiveness for planning, designing, building, regulating and operating the mobility system in the city;
- Improve technical capacity of the professionals in the area of 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 subregion.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 500,000

Implemented by: AFD and CODATU through the MobiliseYourCity Africa Program

Local counterpart: Kumasi Metropolitan Assembly (KMA)

Status of implementation

Project start: 2021 Q1

Expected project completion: 2022 Q3

Completed outputs:

- Signature of a Memorandum of Understanding between a delegate of Kumasi Metropolitan Assembly (KMA) – representing the different assemblies of the Greater Kumasi Metropolitan Area (GMA) and AFD (June 30th, 2020)
- Elaboration of specific Terms of Reference
- Launch of the consulting call
- Evaluation of the proposals

Next expected outputs:

- Beginning of the assignment (Kick-off meetings scheduled for April 2021).

The impact of COVID-19

Regarding the study, the entire process of launching the consultation was slowed down in 2020. At this stage, we cannot predict the impact that the health crisis will continue to have on the development of the study.

In the first activities to be carried out during the start-up phase of the SUMP, the consultant is expected to analyze the post-crisis situation in Kumasi through the following studies:

- A qualitative analysis of the transport situation, comparing it to the situation prior to the health crisis. In particular, the following points should be answered:
 - » Is the current situation similar to the situation before the crisis?
 - » If not, is the situation expected to return to normal, and if so, by what timeframe?

This qualitative analysis will be based on interviews, field visits and available data.

If necessary, the consultant shall adapt the methodology and logistic to potential sanitary constraints post COVID-19.

Dodoma, Tanzania

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 2,576 km²

Population: 410,956 | Growth rate: +2.1%

GDP per capita: USD 1,122 (Tanzania)

National GHG emissions per capita: 0.23 (tCO₂eq)

Region capital city

Context

The Government of the United Republic of Tanzania decided to transfer the national capital from Dar es Salaam to Dodoma in October 1973 to stimulate economic development of the central regions of Tanzania, decongest continued growth of Dar es Salaam city, and redistribute economic benefits to the wider population of Tanzania. The decision also aimed at promoting the productivity of the city and bringing government services closer to the people at heart of the country.

Since then, Dodoma has become a regional economic hub, serving as a main junction connecting the country's main economic centres through four trunk roads: Dar es Salaam to the east, Singida to the west, Arusha to the north and Iringa to the south.

Dodoma's road infrastructure has been mainly developed for motorized transport. Walking and cycling infrastructure is very limited and the use of these non-motorized modes still represents a significant challenge, thus discouraging its use and promoting the adoption of private motorized transportation.

Public transport is largely informal in nature and mainly serviced by small carrying capacity buses, famously known as Daladala. Daladalas are operated by the private sector and usually suffer from poor service conditions. The majority of operators do not comply with traffic laws and safety regulations, leading to high accident rates, congestion, air pollution and unworthy labour conditions.

A city Master Plan was prepared in 2019 for the period 2019-2039, with the objective of identifying realistic plans and proposals that are consistent with the government decision to have all key government institutions relocated to the capital by June 2018.

The Vision of this Master Plan is to develop Dodoma as a National Capital City that is economically competitive, socially inclusive, environmentally sustainable, vibrant, safe and convenient.

The Master Plan identified a list of urban mobility measures, including the expansion of public transport and non-motorized infrastructure and the construction of a light railway system. The elaboration of a Sustainable Urban Mobility Plan with support from MobiliseYourCity will complement and expand the city's Master Plan by developing an own vision, objectives and identifying additional measures for the transport sector.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 350,000

Implemented by: AFD

Local counterpart: Municipality of Dodoma; The President's Office Regional Administration and Local Government

Supported activities:

As an important step for MobiliseYourCity in Tanzania, the Municipality of Dodoma, with support from a EUR 350,000 grant provided by AFD, will elaborate a Sustainable Urban Mobility Plan (SUMP) for the Dodoma Metropolitan area with the aim of reducing GHG emissions and improving the quality of urban life.

The expected overall outcome of the assignment is a Sustainable Urban Mobility Plan (SUMP), to be validated and adopted by the Municipal Council of Dodoma.

Status of implementation

Project start: 2021 Q2

Expected project completion: 2022 Q2

Mandalay, Myanmar

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 315.4 km²

Population: 1,469,193 | Growth rate: +2.1%

GDP per capita: USD 1,221 (2015)

Modal Share

Formal public transport: 2.6%

Cycling: 21.6%

Private cars: 5.6%

Private motorbikes or 2-wheelers: 70.2%

National GHG emissions per capita: 0.31 (tCO₂eq)

Context

Mandalay is the second largest city in Myanmar and is known for being an important centre of Myanmar culture and Buddhism. Mandalay is also the main commercial and economic hub in upper Myanmar. Currently, Mandalay's area is 314.7 km² and consists of six townships, but the city is expanding toward the south where the modern international airport is located.

The population of the municipal area is about 1.4 million while the number of inhabitants at the metropolitan scale is over 1.7 million. According to the Mandalay City Development Concept Plan, by 2040 it is estimated that the population will grow to more than 3 million. The increase of the population will require a stronger offer of urban services, including mobility services.

In the past, Mandalay was known to be a city for bicycles. Today it has become a city for motorcycles, which is by far the first mode of transportation, representing around 70% of the modal share. Since the opening of the country to the global economy in 2012, car ownership has progressed rapidly. It was however starting from a very low level. Public transport remains very minimal and limited. Today, although the city is crossed by a railway track, the only mode of public transport in Mandalay is the public bus network, with 57 bus routes.

Mandalay transportation issues are mostly related to road congestion at peak hours. However, due to the rise in ownership of private motorised vehicles, traffic congestion is increasing together with road safety issues and air pollution. However, the absence of a comprehensive urban mobility plan combined with the current growth of the city are preventing major investment in the sector.

Mandalay's ambition is to develop a smart, green, and clean city, supported by an integrated and sustainable urban mobility system. Elaborating a long-term vision and strategy for sustainable mobility should allow to preserve and strengthen the quality of life. The city wants to promote the use of a comprehensive public transport system and limit the use of private vehicles.

Concretely, the City of Mandalay is preparing a Sustainable Urban Mobility Plan (SUMP) which will focus on improving accessibility to public services and amenities. The SUMP should help develop a public transport network to reduce the congestion in the city centre and to improve traffic management in general. This Plan will seek to professionalise private bus operators and provide incentives to replace the old bus fleets by low carbon vehicles.

Beyond these improvements of the public transport system, the SUMP will promote walking and cycling in the city. It will also help set up policies to improve road safety and air quality in the city.

AFD is supporting both the Mandalay City Development Council (MCDC) and Mandalay Regional Government (MRG) in their efforts to establish a sustainable urban mobility policy. The project comprises the development of a SUMP, the development of local and regional capacities, and the creation of an observatory on urban mobility data and GHG emissions.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 500,000

Implemented by: AFD through MobiliseYourCity Asia

Local counterpart: Mandalay City Development Council (MCDC)

Supported activities:

- Development of a SUMP for the city of Mandalay
- Creation of an Observatory on urban mobility data and GHG emissions

Status of implementation

Project start: February 2021

Expected project completion: February 2022

Abbottabad, Pakistan

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 1,967 km²

Population: 981,590 (district scale)

Growth rate: 1.82%

GDP per capita: USD 1,284 (Pakistan, 2019)

Context

The city of Abbottabad is located 61 km northeast of Rawalpindi, in the Hazara Division of Khyber Pakhtunkhwa province, in the northwest of 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 spread over an area of 1,967 km². The administration of the city is under District Administrator Abbottabad.

Currently, the major 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/flyover, parking areas, intersection improvement, facilities for non-motorized transport
- Lack of road safety and traffic management
- Air pollution from vehicles
- Lack of master plan framework for urbanization and transportation
- Lack of formalised institutional setup for addressing mobility issues

The Local Counterpart, the Khyber Pakhtunkhwa Urban Mobility Authority, 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 matters.

The SUMP elaboration aims at providing a comprehensive sustainable mobility plan at the urban scale and at proposing a conceptual design for priority projects to identify.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 355,000

Implemented by: AFD and ADB through MobiliseYourCity Asia

Local counterpart: Transport Department Government of Khyber Pakhtunkhwa province and the Khyber Pakhtunkhwa Urban Mobility Authority

Supported activities:

- Support the SUMP process for the city of Abbottabad
- Conceptual design for priority projects to identify

Status of implementation

Project start: May 2021

Expected project completion: February 2022

Peshawar, Pakistan

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 1,217 km²

Population: 4,269,079 | Growth rate: +3.29%

GDP per capita: USD 1,482 (Pakistan)

Modal Share

Formal public transport: 15%

Private cars: 62%

Private motorbikes or 2-wheelers: 22%

Freight vehicles: 1%

National GHG emissions per capita: 1.99 (tCO₂eq)

Context

Peshawar is the capital city of Khyber Pakhtunkhwa province. This city is located 160 km West of Pakistan's capital city Islamabad. It has 1,970,042 inhabitants, spread over an area of 157 km². The metropolitan area counts 4,269,079 inhabitants spread over an area of 1,217 km². The city is run by the Peshawar Municipal Corporation.

The city has recently introduced a BRT system, the "Zu Peshawar". It was conceived and built with assistance from the Asian Development Bank (ADB) and the French Development Agency (AFD) and started operating in August 2020. Operated by TransPeshawar, the BRT system includes one main corridor stretching over 28 km from Chamkani in the East, to Hayatabad and Karkhano Market in the West, while 8 other BRT routes serve the most important neighbourhoods in the city.

According to a feasibility study conducted ahead of the implementation of the BRT system, the modal share of cars and motorcycles dominated largely, representing respectively 62% and 22%. Public transport, including Rickshaws only represented 15% of the modal share.

Peshawar is lacking a sufficient public service offer, forcing people to rely on private cars and leading to traffic congestion, road safety issues and poor air quality. It is lacking sufficient road networks, including infrastructure for non-motorised transport and proper traffic management. The city has also identified a need for better control of land use and development.

To overcome these challenges and prepare a comprehensive plan addressing not only transport issues but also improving the quality of life in the city, or taking into account the development of the local economy or health related issues, the Khyber Pathtunkhwa Urban Mobility Authority (KPUMA) has decided to develop a Sustainable Urban Mobility Plan (SUMP).

The SUMP should allow in particular to develop a Transport Management Plan and establish a Road Safety Authority. It will also include measures to improve non-motorized transport. Another area of the SUMP should consist in equipping the city to better monitor traffic and GHG emissions. Finally, it will build capacities in KPUMA.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 1,200,000 (budget includes SUMP for 3 cities in the Khyber Pakhtunkhwa province)

Implemented by: AFD and ADB through MobiliseYourCity Asia

Local counterpart: Transport Department Government of Khyber Pakhtunkhwa province and the Khyber Pathhtunkhwa Urban Mobility Authority

Supported activities:

- Development of a SUMP for the city of Peshawar
- Conceptual design for identified priority projects

Status of implementation

Project start: May 2021

Expected project completion: February 2022

Mingora (Swat District), Pakistan

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 5,337 km² (district scale)

Population: 2,309,570 (district scale)

National GHG emissions per capita: 1.99 (tCO₂eq)

Context

Mingora is identified as the largest city and commercial centre of the Swat district, while Swat's capital is Saidu Sharif. Mingora is located on the Swat river side, north of Saidu Sharif. This district is part of the Malakand division of Khyber Pakhtunkhwa province of Pakistan. It is renowned for its natural beauty and well known as a tourist centre.

The population of the district is 2,309,570, spread over 5,337 km². Mingora is connected by the N-95 and N-45 highways to Peshawar and Islamabad through Mardan. Locally, the administration is run by the Deputy Commissioner. Tehsil Municipal Administration runs urban transport matters and the Regional Transport Authority regulates private vehicles.

Mingora suffers from inadequate road capacity (including infrastructure facilities such as flyovers and underpasses) in view of 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, markings) and a lack of proper regulations enforcement by traffic wardens. There is currently no masterplan for transportation and land use available.

The local Counterpart, the Khyber Pakhtunkhwa Urban Mobility Authority has the mandate and responsibility to finance mass public transport infrastructure. 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 SUMP elaboration aims at providing a comprehensive sustainable mobility plan at the urban scale and at proposing conceptual design for priority projects to identify.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: AFD

Funding amount: EUR 1,200,000 (budget includes SUMP for 3 cities in the Khyber Pakhtunkhwa province)

Implemented by: AFD and ADB through MobiliseYourCity Asia

Local counterpart: Transport Department Government of Khyber Pakhtunkhwa province and the Khyber Paththunkhwa Urban Mobility Authority

Supported activities:

- Development of a Sustainable Urban Mobility Plan
- Conceptual design for priority projects

Status of implementation

Project start: May 2021

Expected project completion: February 2022

Córdoba, Argentina

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 576 km²

Population: 1,600,000 | Growth rate: +0.4%

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

Region capital city

Context

The City of Córdoba is the capital of the Province of Córdoba and is located in the centre of the territory. It is positioned in the foothills of Sierras Chicas and crossed by the Suquía river and by the La Cañada stream. The singular topography, characterized by terraces, makes it difficult to implement and develop a good mobility system and infrastructure.

Córdoba has an urban area of 576 km² and an estimated population of 1,600,000 inhabitants, which makes it the second-largest city in the country after Buenos Aires. 83% of the population of the Metropolitan Area of Córdoba is leaving in the city of Córdoba.

The Province of Córdoba bases its economy on services and technological activities (64% of the Gross Geographic Product), the automotive industry (26.5% of GGP) and the primary sector (9.5% of GGP).

The city is organized by radio centric system which generates challenges for urban and mobility planning. Its population density is low (63 inhabitants/km²). However, there are sectors with a high density that do not receive basic transport services. This imbalance has existed for the last 50 years.

In the metropolitan area of Córdoba, there are 2,556,906 motorised and non-motorised trips made each day. 85.4% of these trips originate or/and end in the capital city, which reveals the importance of the city 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. If the entire population is taken into account, this average drops to 1.84 trips per person per working day. Motorised modes are

predominant (69.9%). In the last 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 bus and trolleybus operated by three private firms and a public one. 70 lines compose the system, with 8 central corridors, 2 circle lines, 3 trolleybus lines, 6 district lines and 1 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 included 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, greater road safety and the preservation of the environment. This master plan needs to be updated and consolidated to be validated by institutional actors as well as the community.

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.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Union

Funding amount: EUR 600,000

Implemented by: AFD through the EC+ Program

Local counterpart: Municipalidad de Córdoba

Supported activities:

- SUMP for Córdoba
- Updated origin / destination survey
- Study of the city's central area to propose structuring actions for the transformation into a low-emissions area
- Prediction model of current and future mobility scenarios, including short, medium, and long-term strategies
- Technical document on mitigation and emissions reduction of SUMP implementation

Status of implementation

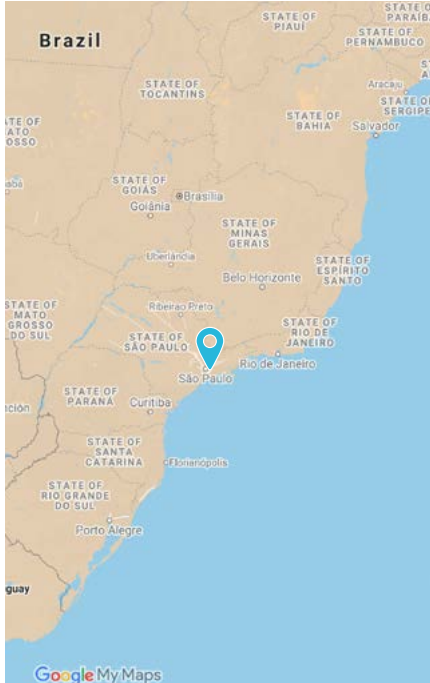
Project start: 2021 Q2

Expected project completion: 2022 Q4

Baixada Santista, Brazil

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 2,422 km²

Population: 1,892,314 | Growth rate: +1.24%

GDP per capita: USD 16,771

Modal Share

Formal public transport: 30%

Walking: 32%

Cycling: 15%

Private cars: 16%

Private motorbikes or 2-wheelers: 4%

National GHG emissions per capita: 5.12 (tCO₂eq)

Exposure to climate change: MEDIUM

Region capital city

Context

The Metropolitan Region of Baixada Santista (RMBS), established in 1996, is 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 the population of the state of São Paulo. It also represents the 4% of the state GDP and is recognized as one of the most important metropolitan regions of Brazil for its important harbor and strong industrial and tourist sectors.

185,247 people travel daily at RMBS, 13.38% of them to the Metropolitan Region of São Paulo (RMSP) and 77.95% within RMBS. The current 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. A specificity of the region is the seasonality of tourism activities which highly impacts the transport system.

Today there are approximately 230,000 vehicles registered at RMBS and the private vehicle fleet is expanding at a faster rate than the population growth. The metropolitan roads serve the metropolitan bus transportation, operated by EMTU, but 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 routes which belong to the municipalities are not equipped with bicycle lanes. The RMBS currently has about 220 km of bike lanes and cycle paths in place.

There is no transport master plan or similar document for the metropolitan region, although some of the municipalities have their own transport master plans. Baixada Santista Metropolitan Agency (AGEM), the local counterpart, does not have the mandate and responsibility to finance mass public transport infrastructure. Instead, the Government of the State of São Paulo acts directly in the region, especially on the issue of mobility, through the Secretariat of Metropolitan Transport (STM), the Secretariat of Logistics and Transport (SLT), and the Metropolitan Company of Urban Transport (EMTU). It 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.

The region is going to receive technical assistance to develop a regional urban mobility and logistics plan for Baixada Santista which will guide actions and investments for the short, medium and long-term. The new plan should allow to expand and integrate different modes of passenger transport. It will improve traffic flows and decrease travel times for people. The modal share of public transport and bicycles should both increase.

The technical assistance should also contribute to strengthening 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 should allow to propose actions that streamline the mobility system and present alternatives that maximize the potential for sustainability of each mode of transport, to achieve adequate standards for the movement of people and loads in the region. Finally, it should help establish a Monitoring and Evaluation System (SIMA) with a set of sustainable mobility and logistics indicators that can provide constant 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 Bajada Santista, which guides actions and investments for the short (2021), medium (2026) and long-term (to 2030).

Status of implementation

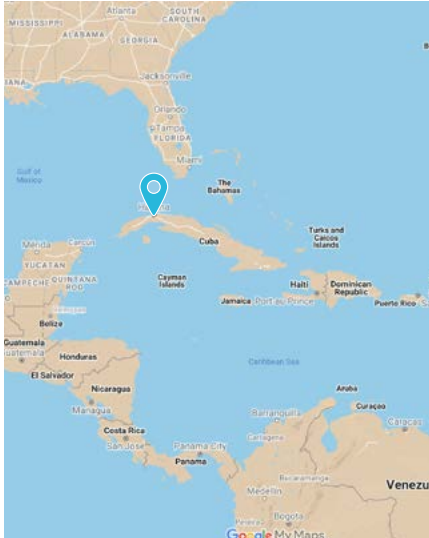
Project start: Q1 2021

Expected project completion: Q2 2022

Havana, Cuba

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 728 km²

Population: 2,140,423 | Growth rate: 0.16%

GDP per capita: USD 8,821

National GHG emissions per capita: 3.74 (tCO₂eq)

Exposure to climate change: HIGH

Country Capital City

Context

Havana, the Cuban capital, occupies 728,26 km² (0.7% of the national area). Its 15 municipalities are home to 2.13 million inhabitants, 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 notably with a gross population density of around 41,000 inhabitants/km² while the net density in the residential areas of the city is only 18,000 inhabitants/km² approximately.

Havana is a city with a polycentric structure. Its growth has preserved the oldest fabrics of some neighbourhoods. The axes that linked the oldest nucleus with the periphery were the basis for the growth from the founding heart to the west, southwest, south, and southeast, which defined a tree-like pattern for the communication routes.

The bay, the fundamental reason for the final location of the city, conditioned a slower pace in the expansion of the city towards the east. The construction of the tunnel of the bay in 1958 allowed for the beginning of the development in this direction. These aspects determined the current structure of the transportation system, which follows a territorial model with a central zone, an intermediate zone and a peripheral zone. Despite the development beyond the central zone, the main concentrations of jobs, the cultural/recreational infrastructure and tourism are in a narrow strip close to the sea, which conditions current mobility patterns, where even today the tunnel is presented as insufficient in terms of mobility.

The city has a mass transit system and already has an existing transport master plan or similar document.

In Havana, mass bus transportation (or "guaguas") is basically organised into three categories:

- Buses with the letter P and a number ("Main routes"), a fleet of "articulated" buses with greater capacity (from the Chinese brand Yutong Bus).
- Buses with the letter A ("secondary routes"), "conventional" buses, with approximately 100 routes.

Both the secondary and main routes are operated by the Havana Provincial Transportation Company, which operates 17 main routes and 104 secondary routes and has 17 bus terminals for their operations. There are also bus services between Havana and other provinces (Viazul, Transtur, Transgaviota, in CUC, National Buses in CUP).

The Ministry of Transportation (MITRANS) has the responsibility to organise the transportation sector in Cuba and the General Directorate of Provincial Transportation of Havana (DGTPH) has the responsibility to organise the transportation sector in Havana. The General Directorate of Provincial Transport of Havana (DGTPH), the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure. It is “the body in charge of directing and controlling compliance with the state policy for the transportation of passengers, cargo, its auxiliary and related services, its infrastructure and the financing of services related to urban passenger transportation, taking into account the development plans of the city, with the fundamental objective of satisfying the growing mobility needs of the population with the quality and safety required “. 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.

Despite being a polycentric city, the main metropolitan functions and the largest number of jobs are only concentrated in the so-called central areas of Havana. The remaining sub-centres have weakened, limiting their ability to offer service and employment to the population. This forces an important part of the population that lives far away from the centre to commute daily to access basic services (schools, hospitals, shops, etc.). The poor conditions of the existing urban mass transport imply that citizens consume excessive time just for their transportation.

The main aims of the SUMP are to generate a high-quality document in line with Cuba’s urban mobility policy and to strengthen the capacities of local experts and other stakeholders.

The technical assistance contributes to institutional strengthening by adopting an integrated approach, building capacity and offering dedicated trainings.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) and pilot project

Funded by: European Commission

Funding amount: EUR 700,000

Implemented by: AFD through the EUROCLIMA+ Program

Local counterpart: General Directorate of Provincial Transport of Havana (DGTPH)

Supported activities:

- Development of a SUMP for the city of Havana
- Definition and preparation of a Pilot Project of sustainable mobility in the city
- Definition and preparation of a project to improve mobility on the 10 de Octubre corridor, Havana

Status of implementation

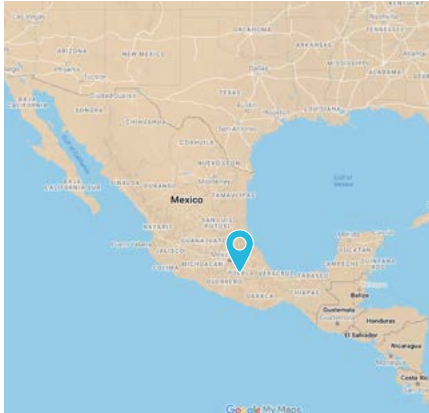
Project start: 2021 Q1

Expected project completion: 2022 Q2

Puebla, Mexico

Partner city

Status of the project: upcoming technical assistance



Basic Information

Urban area: 689,87 km²

Population: 3,250,000 | Growth rate: 1.59%

GDP per capita: USD 12,184

National GHG emissions per capita: 5.39 (tCO₂eq)

Region capital city

Context

Located at the Valley of Puebla also known as the Valley of Cuertlaxcoapan, Puebla has a current population of 3,250,000 people, which makes it the fourth largest city in Mexico and the fourth largest Metropolitan area in Mexico.

The BRT public transport of the city does not guarantee an intermodality scheme by itself. For instance, the RUTA system currently has bicycle parking at only two terminals and in one stop on Line 1, representing 4% of the total number of passenger boarding and alighting points on both lines of the system.

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

Status of implementation

Expected Project start: 2018

Expected project completion: 2020

Completed outputs:

Next expected outputs:

- Preparation of the Executive Project for mass bicycle parking and a cycling infrastructure corridor for sustainable intermodality with the Margaritas Terminal of the RUTA public transport system
- Development of the Executive Project for bicycle parking, improved access and integration with the Terminal, and a cycling infrastructure corridor
- Construction of 1.5 km of bicycle lanes on Calle 11 Sur



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