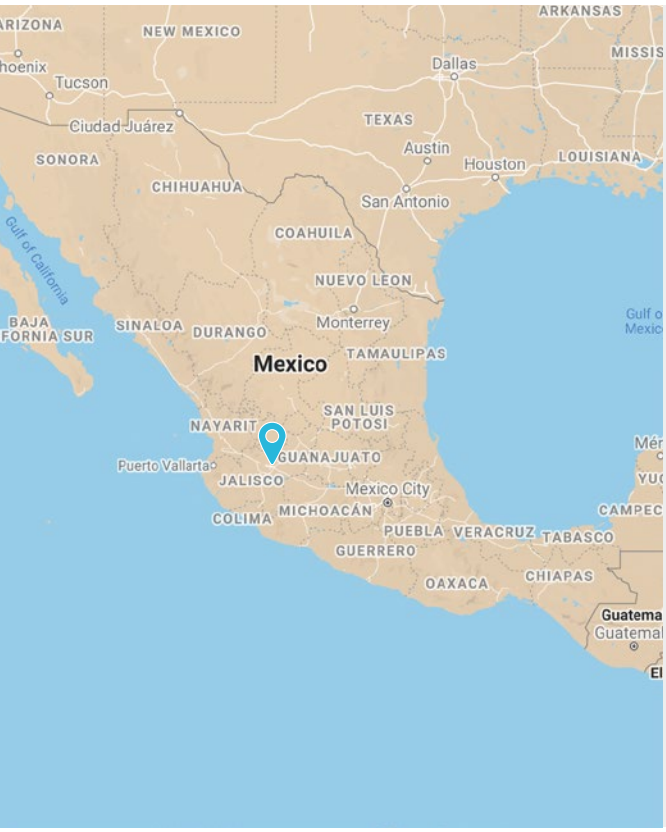
Guadalajara, Mexico

Partner city

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



Basic Information

Urban area: **151 km²**

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

Region capital city

GDP per capita: **USD 7,991**

Modal Share:

- **Formal public transport: 44.24%**
- **Walking: 26.9%**
- **Cycling: 2.73%**
- **Private cars: 15.7%**
- **Private motorbikes or 2-wheelers: 4.07%**
- **Taxis: 2.76%**
- **Moto taxis: 0.89%**
- **Other: 2.73%**

National GHG emissions per capita: **5.39 (tCO_2eq)**

Exposure to climate change: **MEDIUM**

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 inhabitants. GMA is comprised of nine municipalities. It is an important centre for industries focused on electronics and cybernetics which attracts many young professionals. The main activities in GMA are the manufacturing industry, trading, personal services and maintenance. The Metropolitan Area hosts 75% of the total industry of Jalisco's State.

Currently, the transport system of the Guadalajara Metropolitan Area is comprised of 233 routes of collective buses, two BRT corridors, three LTR lines, four lines of trolley buses and the public bicycle system. In 2021, the most recent BRT line comprising 41.5 km launched operations to connect all the peripheric areas of the metropolis, provide service to four municipalities, and connect with the rest of the mass transport network.

The Metropolitan Coordination established a management scheme among the municipalities comprising the metropolitan area. This scheme includes the Metropolitan Coordination Board, the nine mayors and the state governor, the Metropolitan Institute of Planning, the Metropolitan Citizen Council and the Metropolitan Planning Advisory Council.

The Metropolitan Planning Institute for Guadalajara's Metropolitan Area (IMEPLAN), the local counterpart, does not have the mandate and responsibility to finance mass public transport infrastructure. Further, it does not have the authority to borrow from international finance sources for infrastructure projects. However, it does have such authority for other more general types of projects, e.g. technical assistance. Systems and procedures are not in place to monitor, evaluate or report on urban mobility.

IMEPLAN aims to develop and propose metropolitan planning instruments, studies and project proposals, as well as mechanisms to improve the joint efforts of the Metropolitan Coordination Instances. IMEPLAN receives technical assistance to develop a Sustainable Urban Mobility Plan and a pilot project. The objective of this technical assistance is to coordinate and establish a plan for urban mobility for the nine municipalities of the metropolitan area, including various modes of accessible, economical, efficient and safe transport.

The technical assistance contributes to institutional strengthening by capacity development of the local team, facilitating exchanges with cities in Latin America and Europe, and having objective and technical resources for facing the issues on mobility.

Support from the Partnership

Technical assistance: Sustainable Urban Mobility Plan (SUMP) and Pilot Project

Funded by: European Commission

Funding amount: EUR 600,000

Implemented by: GIZ through the EUROCLIMA+ Program

Local counterpart: Metropolitan Planning Institute for the Guadalajara's Metropolitan Area (IMEPLAN)

Supported activities:

- Formulation of an Integral Sustainable Urban Mobility Plan for the metropolitan region integrating the nine municipalities, all modes of transport and aligned with the metropolitan land use plan.
- A pilot project to implement an innovative methodology for data collection and analysis on urban mobility through digital technology. Data gathered is an input for the SUMP formulation and evaluation.
- Capacity building for public institutions to achieve adequate planning processes in urban mobility.

Status of implementation

Project start: 2018 Q2

Project completion: 2022

Completed outputs:

- Status quo analysis (November 2019 – January 2020)
- Urban cargo logistics (January 2020)
- MobiliseDays (February 2019)
- SUMP Workshop (February 2020)
- SUMP Self-Assessment Workshop (August 2020)
- Development of SUMP strategy – co-creating vision and objectives (April – May 2020)
- Establishment and application of monitoring, reporting and verification (MRV) tools (MobiliseYourCity and Ecologistics) (March-August 2021)
- Update of urban mobility data, integrating non-motorised mobility, freight transport, and public transport (2021)
- Metropolitan Strategy for Emergent Mobility
- Integrated SUMP for the nine municipalities of Guadalajara's Metropolitan Area

Next expected outputs:

- Pilot Project: Mobile application for obtaining new information on citizen mobility patterns

SUMP key measures and cost estimates

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

Measure	Cost Estimate
Objective 1. Improve urban infrastructure and equipment to achieve sustainable mobility • Update urban development planning and land-use planning instruments in the state's cities • Improve urban equipment on public roads to facilitate the movement and coexistence of citizens • Adapt the use of roads to different modes of transportation • Increase urban center density. • Improve comprehensive accessibility	Cost estimates not provided
Objective 2. Increase the coverage and quality of public transportation services • Redesign routes based on origin-destination (work, education, social, recreational, commercial) purposes • Improve the quality of public transportation services • Increase the coverage of public transportation services	Cost estimates not provided
Objective 3. Increase the use of alternative means of transportation by discouraging the use of cars • Increase infrastructure that prioritises the use of alternative transportation • Coordinate the public transportation network to allow multimodality • Establish permanent education campaigns for citizen training in road safety and mobility	Cost estimates not provided

Core impact indicators baselines

The SUMP does not provide impact projections.

Indicator	Baseline - 2016
Total annual transport-related GHG emissions (Mt CO_2eq)	6.2 Mt CO_2eq
Annual transport related GHG emissions per capita (kg CO_2eq)	2,994 kg CO_2eq / capita
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	3.45 fatalities / 100,000 hab
Modal share Increase of the modal share of trips by public transport, walking and cycling	Formal public transport : 47% Informal public transport: 0,89% Walking : 26,9% Cycling : 2,73% TOTAL : 77,52%*

*Datos 2021 (Encuesta Origen – Destino COVID Área Metropolitana Guadalajara)

Perspectives for Implementation

SUMP as an instrument of metropolitan integration

The Guadalajara Metropolitan Area developed its Sustainable Urban Mobility Plan – SUMP. Supported by Euroclima, packages of measures were identified and included for the implementation of the plan along with the development of the Emerging Metropolitan Mobility Strategy (EMME) in 2021, as an articulation tool for the nine municipalities of the metropolis to include urban mobility measures, aligned with the strategic axes contained in the SUMP. This process favours the normative integration between urban mobility, land use planning and climate change actions, in order to have aligned strategies and actions whose implementation allows offering better living conditions to the population of the metropolis in the long term.

Insights from Practice: Lessons Learned from the SUMP Process

Developing mechanisms for citizen participation at the metropolitan level

It was important to resume the application of participation and governance processes on a metropolitan scale, so mechanisms were developed and implemented to integrate a collective vision where the reality of the nine municipalities was included and their needs were addressed as far as possible, based on their particularities, but with a metropolitan vision.

Highlights

Preparing a SUMP for a metropolitan region creates challenges and complexity – but it also enables providing the citizens with sustainable mobility services that transcend administrative boundaries

Facing metropolitan coordination, the SUMP development required participatory processes and decisions making with many stakeholders, mainly the nine municipalities of the metropolis. Therefore, the SUMP has had to consider nine different realities for mobility planning and an important alignment with other local instruments at different levels, namely: Climate Action Plan, Metropolitan Territorial Plans and, Municipal Development Plans.

The sustainability and implementation of the SUMP might depend on the commitment from many authorities in the metropolis. Therefore, the participatory process and involvement level of the set of institutions has been crucial, as well as the alignment with the municipal development plans to enable the implementation beyond the administrative periods and political will.

The Metropolitan Strategy of Emergent Mobility for the metropolitan area was launched and upcoming work aims at its integration with local development plans

The Metropolitan Area of Guadalajara capitalised on the pandemic crisis and the atypical mobility patterns for envisioning a wider vision of the metropolis, developing the Metropolitan Strategy of Emergent Mobility. This policy document provides nine strategic axes on sustainable urban mobility for the nine municipalities and enables an urban mobility common vision for the future. As a further step, and leveraging the administrative transition, the respective development plans of each municipality is expected to be aligned with the strategy.

Periplo represents the first step for a more dynamic, flexible and low-cost urban mobility planning, but its development requires resources from public institutions

Periplo is the app prepared in the framework of this technical assistance to be used as a practical participatory tool capable of engaging citizens in consolidating better mobility conditions. It is also a powerful instrument to monitor and evaluate sustainable urban mobility public policies in shorter periods by enabling adjustments and strengthening planning processes through dialogue between the government and inhabitants.

Developing this kind of pilot project requires awareness of the risks and opportunities of implementing a digital solution for urban mobility planning. It implies not only innovation but also technical skills (data, transport, software, etc.), infrastructure (hosting), budget (operation and maintenance), and more importantly, human capital to translate raw data into useful information for decision making. Periplo has been made available in 2022 to be used in the Metropolitan Area of Guadalajara. Its main challenge is to reach the minimum number of users to have significant or representative data. The commitment of the authorities and citizens should be aligned to make the digitalisation of urban mobility planning processes possible.

Digitalising sustainable urban mobility planning is an innovative solution used for the first time in the Latin American context with the potential to be replicated

Periplo is possibly the first case study on digitalisation for urban mobility planning in Latin America, as a first effort to replace traditional origin-destination surveys or complement them. Digital tools such as Periplo might gather daily data and enable monitoring and evaluation of the measures and actions implemented in the short term. Periplo has many opportunities to be improved but it represents an important step towards digitalisation in urban mobility planning.

Due to the limited availability of new or aggregated data, the factsheet has not been updated in 2024.