

# Córdoba, Argentina

Partner city

Status of the project: Completed Sustainable Urban Mobility Plan



## Basic Information

Urban area: 576 km<sup>2</sup>

Population: 1,600,000 | Growth rate: +0.4%

Region capital city

GDP per capita: USD 12,000

Modal Share:

Formal public transport: 32.2%

Walking: 27.2%

Cycling: 2.6%

Private cars: 26.1%

Private motorbikes or 2-wheelers: 5.8%

Taxis: 5%

Other: 0.3%

National GHG emissions per capita: 8.35 (tCO<sub>2</sub>eq)

Exposure to climate change: HIGH

## Context

The City of Córdoba is the capital of the Province of Córdoba and is located in the centre of the territory. The singular topography, characterised by terraces, makes it particularly challenging to implement and develop suitable infrastructure and a mobility system.

Córdoba has an urban area of 576 km<sup>2</sup> and an estimated population of 1,600,000, making it the second-largest city in the country after Buenos Aires. 83% of the population of the Metropolitan Area of Córdoba lives in Córdoba. The economy of the Province of Córdoba is based on services and technological activities (64% of the gross geographic product - GGP), the automotive industry (26.5% of GGP) and the primary sector (9.5% of GGP).

The city is organised by a radio-centric system, which generates urban and mobility planning challenges. Its population density is low (63 inhabitants/km<sup>2</sup>). However, high-density areas do not receive basic transport services. This imbalance has existed for the last 50 years.

In the metropolitan area of Córdoba, 2,556,906 motorised and non-motorised trips are made daily. 85.4% of these trips originate and/or end in the capital city, revealing the city's importance within the metropolitan area. Trips are made by 74.7% of the population, which shows a relatively high mobility rate (2.47 trips per working day) when considering the group of people who make at least one trip per day. Considering the entire population, this average drops to 1.84 trips per person per working day. Motorised modes are the predominant mode (69.9%). In recent years, a series of actions have been encouraging the growth of individual mobility to the detriment of mass transport.

A mass transit system is in place with buses and trolleybuses operated by three private firms and a public one. Seventy lines compose the system, with eight central corridors, two circle lines, three trolleybus lines, six district lines and one airport line.

There is an existing transport master plan, which was approved in 2014 and financed by CAF (Development Bank of Latin America). Its main objectives include the promotion of mass transit, the development of non-motorised transport, the promotion of the rational use of private motorised transport, the generation of new travel patterns that allow for more efficient use of the network infrastructure, better road safety and the preservation of the environment. This master plan must be updated and consolidated to be validated by institutional actors and the community.

The *Municipalidad de Córdoba*, the local counterpart, has the mandate and responsibility to finance mass public transport infrastructure. It has the authority to borrow from international finance sources. Systems and procedures are partially in place to monitor, evaluate and report on urban matters. The technical assistance contributes to institutional strengthening by facilitating spaces for exchange between the different areas of the municipality and discussions to have a shared vision of mobility for the city.

## Support from the Partnership

**Technical Assistance:** Sustainable Urban Mobility Plan (SUMP) and Pilot project

**Funded by:** European Union

**Funding amount:** EUR 600,000

**Implemented by AFD through the Euroclima+ Program**

**Local counterpart:** Municipalidad de Córdoba

**Supported activities (SUMP):**

- SUMP for Córdoba.
- Study the city's central area to propose structuring actions for the transformation into a low-emissions area.
- Updated origin/destination survey and prediction model of current and future mobility scenarios, including short-, medium-, and long-term strategies.
- Technical document on the projected GHG mitigation impact of the SUMP implementation.

## Status of SUMP development

**Project start:** 2021 Q2

**Expected project completion:** 2023 Q4

**Completed outputs:**

- Preliminary report.
- Diagnosis and evaluation report.

**Next expected outputs**

- Definition of a vision, strategic objectives and scenario building.
- Action plan, budget and funding.
- Monitoring, reporting and accompanying implementation.

## Core impact indicators baselines

Indicator	Baseline - 2022	Projected 2030 BAU	Projected 2030 SUMP Scenario B ("Estabilizar")	Projected 2030 SUMP Scenario C ("Revertir")
<b>Total annual transport-related GHG emissions</b> (tCO <sub>2</sub> eq)	450,000 t CO <sub>2</sub> eq	528,000 t CO <sub>2</sub> eq	501,000 t CO <sub>2</sub> eq	464,000 t CO <sub>2</sub> eq
<b>Annual transport-related GHG emissions per capita</b> (kg CO <sub>2</sub> eq)	281kg CO <sub>2</sub> eq / capita	330kg CO <sub>2</sub> eq / capita	313kg CO <sub>2</sub> eq / capita	290kg CO <sub>2</sub> eq / capita

## Insights from practice: lessons learned from the SUMP process

### Córdoba's SUMP relied on existing data and stakeholder engagement to overcome COVID-19 challenges and Argentina's fragmented transport governance.

The formulation of Córdoba's SUMP, implemented by AFD, began during the COVID-19 crisis, limiting opportunities for in-person meetings and field surveys. The consulting team relied on existing documentation, primarily the 2014 Mobility Plan, and engaged extensively with stakeholders from Córdoba and its surrounding cities. This was crucial given Argentina's fragmented responsibility for urban transport, where municipalities oversee local transport, provinces manage interurban transport, and national authorities handle the railway system.

Córdoba's SUMP prioritises gender and inclusion, integrating "mobility of care" to support vulnerable groups. Córdoba's SUMP emphasises gender and inclusion, prioritising vulnerable groups such as children, older adults, individuals with disabilities, and especially women. The concept of "mobility of care" was integrated into the project and supported by data-driven decision-making. Studies revealed that care-related travel, such as accompanying or assisting others, accounts for 12% of total trips in the area. However, disparities remain—individuals with disabilities, for instance, undertake just 0.68 trips daily, half that of individuals without disabilities.

### A strong private sector link drives sustainable mobility through innovation and investment, while solid governance ensures a well-defined SUMP to prioritise actions.

For developing a project such as a SUMP, the link with the private sector is crucial in promoting sustainable mobility since companies can offer innovative solutions, investments in infrastructure, and sustainable transport services. It is also necessary to have a solid and effective governance scheme that promotes sustainable mobility with a comprehensive approach, involving all actors in the territory, both public and private. Additionally, based on a solid diagnosis, the SUMP must be consolidated as a roadmap to prioritise actions and measures for more sustainable mobility.

## Perspectives for SUMP Implementation

### With 16 transport authorities involved, interinstitutional dialogue led to the creation of the Intermunicipal Metropolitan Management Entity in 2022.

Córdoba's transport governance includes 16 authorities, necessitating interinstitutional dialogue, supported by surveys of 2,500 households, traffic counts, stakeholder interviews, and the Gran Córdoba Forum. Regular virtual meetings fostered collaboration, aligning perspectives across stakeholders. Initially hesitant to involve neighbouring cities, Córdoba's municipal government shifted its approach, establishing a Metropolitan Affairs Secretariat and creating the Intermunicipal Metropolitan Management Entity, signed into action on 4 March 2022 with nine neighbouring municipalities. This collaboration became a cornerstone of the SUMP process.