

General context

Valencia is the capital of the Valencian Community. With 801,545 inhabitants it is the core of a metropolitan area of more than 1.5 million inhabitants. It is one of the most important cities in Spain, both for its social, economic and political relevance. Valencia has an economy based on the services sector, tourism, industry and agriculture. Valencia is also a centre of innovation, education and culture, with numerous universities.

The city is strongly committed to becoming a smart, sustainable city. Mobility is one of the pillars of the smart city strategy, while smart mobility has been playing a crucial role in the delivery of the SUMP. In less than a decade, a range of new services has been developed that help inhabitants and visitors to plan their journeys and get around more efficiently and sustainably.

Modal share

According to the Mobility plan of the metropolitan area of Valencia, the most popular mode of transportation in the city is walking, which accounts for 42.3% of all trips. Cycling has a modal share of 4.1%. Public transportation is used by 20.9% of the population, with the majority (14%) using the EMT services, followed by the metro and tram (6.5%). In the metropolitan area, regional bus services have a low modal share of 1.4%. The private car is still the preferred choice for 31.8% of the residents, despite the traffic congestion and environmental impact. However, the overall share of public transportation exceeds 20%, suggesting that it has the capacity to attract additional users due to its regional coverage, operating schedule, frequency, fare, information integration, and adaptability to demand.

Mobility offer

Given its role in the region, Valencia has developed an extensive public transport network of buses, metro, tram, and commuter trains that cover city area and its metropolitan and regional area. The offer of public transport is supplemented by taxi, on-demand transportation and a wide range of new mobility services (NMS) (e.g. ride-hailing, electric moped, and bike sharing). Among these mobility services, only ride-hailing and taxi services provide coverage for the regional area, while the rest of the services are available exclusively within the city limits.

The public transport service company in Valencia provides a total of 53 urban bus routes, consisting of 43 daytime lines, 10 night-time lines, and a dedicated door-to-door service responding to people with disabilities. The public bicycle rental system known as VALENBISI is operated by the company JCDecaux. It encompasses a network of 277 stations, offering a total of 5,502 anchor points and a fleet of 2,750 bicycles. The taxi mobility service comprises a total of 3,000 licenses, which includes rental vehicles with drivers (VTC) associated with companies like Uber and Cabify, contributing an additional 450 licenses to the system. The city has recently introduced carsharing services through the implementation of an electric vehicle fleet provided by the company CarGreen.

Like numerous other cities across Europe as well as worldwide, the public transport sector experienced a downturn during the pandemic because of a substantial decrease in demand. This situation delayed projects aiming to renew the public transport fleet and the corresponding infrastructure. Authorities and public transport operators have changed networks and services, strengthening operating capacity, investing in new technology to give real-time user information, managing occupancy, and applying security measures. Moreover, the pandemic period has shown how important public transport is for basic services. After the pandemic, the mobility levels increased due to economic rebound, as it was recently observed.

A wide range of goods delivery methods, including van and bicycle use, through direct delivery and self-pickup, are included in the last/first mile delivery services. Ride-hailing companies also provide last mile delivery services.

The city of Valencia has implemented a regulatory measure known as the Control d'Accessos Àrea de Prioritat Residencial (APR) "Ciutat Vella Nord" to manage access to the area. The aforementioned program places emphasis

on the needs and preferences of the individuals who reside within the designated area. The access regulation became effective on December 2021¹.

Transport data collection and integration

The integration of sustainable transportation modes, such as bus, metro, tram, Valenbisi bike sharing, own bike or walking), is observed in both the fare system and information and travel planning. The application - EMT Valencia - additionally incorporates a travel planning tool that calculates pathways taking into account either an individual or a combination of eco-friendly transportation modalities. The development of a nationwide Mobility as a Service (MaaS) platform is presently being planned by the Ministry of Transport, with support from the Next Generation European Fund.

Real-time transport/traffic data is systematically collected for different types of transport, including public transport, alternative mobility services and goods delivery. This process is carried out in an integrated manner, under the coordination of Valencia City Council, which supervises traffic and parking management, and also uses various traffic simulation tools to ascertain the impact of disruptions. Additionally, the transport authority is responsible for fare collection. This facilitates rapid adaptation in the event of different circumstances and demonstrates an orientation towards digitalisation and streamlining of the entire transportation system.

Consideration on public transport service

The public transport system in Valencia has many strengths that make it a convenient and efficient option for the mobility of its citizens and visitors. Some of these strengths are:

- **Availability** - the public transport service operates 24 hours a day, seven days a week, with different modes and services to suit different needs and preferences.
- **Coverage/network density** - the public transport service covers the entire urban area of Valencia, as well as some neighbouring municipalities, with a high density of stops and stations that ensure a short walking distance to access the service.
- **Accessibility** - the public transport system is designed to be accessible for all users, including those with reduced mobility, visual or hearing impairments, or other special needs.
- **Frequency** - the public transport system offers a high frequency of service, especially during peak hours, to minimize waiting times and ensure a smooth travel experience.
- **Reliability** - the public transport system follows published schedules and routes with a high degree of punctuality. In case of disruptions or incidents, the system provides real-time information and alternative solutions to minimize the impact on users.
- **Integration** - the public transport system is well integrated within itself and with other transport modes, such as walking, cycling, or taxi. The system also offers intermodal facilities, such park-and-ride locations at multiple metro stops, bike parking, or bike-sharing stations, to facilitate the combination of different modes.
- **Payment options** - the public transport system offers a variety of payment options to suit different needs and preferences, as well as a unified tariff system covering both buses and the tram and metro system. Users can choose between single tickets, multi-trip tickets, monthly or annual passes, tourist cards, or contactless cards that allow them to pay as they go. Users can also use their mobile phones to pay for their trips.
- **Vehicle comfort/accessibility** - the public transport system provides comfortable and accessible vehicles that meet high standards of quality, safety, and environmental performance.
- **Information provision** - the public transport system provides clear and comprehensive information about its services, both before and during the trip. Users can access information through various channels, such as websites, mobile apps, social media, call centres, or customer service offices. Users can also find information at stops and stations, such as maps, timetables, fares, or service alerts.

¹ [Valencia - Limited Traffic Zone \(urbanaccessregulations.eu\)](https://urbanaccessregulations.eu)

- **Safe and secure stops/stations and vehicles** - the public transport system always ensures the safety and security of its users and staff. Stops and stations have adequate lighting, signage, surveillance, and emergency systems.
- **Capacity to collect information and to adapt to the demand** - the public transport system uses advanced technologies and methods to collect and analyse data about its performance and user behaviour. The system uses this data to improve its planning, management, operation, and maintenance processes.

On the other hand, to raise its level of attractiveness of public transport, it is thought that the pricing structure would be revised, and additional amenities that contribute to an increase in level of comfort may need to be provided.

Relation between major mobility stakeholders

Urban mobility services are subject to a significant level of regulation. The enforcement of this regulation is delegated to two governing bodies – the Valencia City Council and Transport Authority (Autoridad de Transporte Metropolitano de Valencia), based upon the jurisdiction covered by the corresponding area. The public transport sector in Valencia is characterized by the presence of both public (EMT, Metrovalencia) and private (Metrobus) operators. The public operators have direct relation with and are controlled by the City Council, while the private operator is granted with a public service contract by the Metropolitan Transport Authority. The provision of on-demand transportation services is facilitated by the public operator EMT.

Taxi and ride-hailing services that operate within the regional area are granted an operating license by the Comunidad Autónoma de Valencia (Regional Authority). On the other hand, e-scooter and bike sharing services are subject to regulation by the City Council. Bike-sharing service is provided by Valenbisi, a public company managed by EMT, while e-scooter sharing service is provided by private companies and receive authorizations regulated by the Valencia City Council.

With a legal regulatory framework in place, relationships with operators of public transportation and on-demand services are very successful. The private ridesharing and e-scooter services needs better integration in the general transport offer. The City Council is open to collaboration with the Regional Transport Authority to establish a legal structure for the operation of these services. This will enable them to integrate with public transportation and extend their coverage to the regional level.

The logistic companies use the electric vehicles within urban areas for goods delivery, in accordance with local regulation in force.

Vision and policies for sustainable mobility and climate neutrality

Valencia is a city that strives to achieve sustainable development in all its aspects. Valencia's vision for sustainable development is based on a participatory and collaborative approach, involving all stakeholders in the co-creation and co-implementation of sustainable policies and actions. The city is committed to sharing its experiences and best practices with other cities and regions, as well as learning from them. Valencia believes that sustainability is not only a responsibility, but also an opportunity for innovation, competitiveness, and well-being.

The mobility policies of Valencia are ambitious and comprehensive, with a focus on implementing modern advances in transportation and mobility, shifting from individual car use to more sustainable modes, improving the efficiency of the transport system, and adopting a user-centric approach to sustainable mobility.

This is backed by the local leadership and the technical personnel from departments relevant to mobility, but the citizens and civil society appear to be most concerned with having efficient public services. Moreover, city administration is aware of and closely follows all developments in sustainable mobility.

The Municipality has departments that are specifically focused on topics related to mobility and climate neutrality. Furthermore, Valencia emphasizes the importance on collaborating with relevant groups of stakeholders and thus considered it essential to create a dedicated department. The involvement of stakeholders and civil society in the decision-making process is a continuous process. The final decisions are made only after a thorough stakeholder and civil society consultation process.

The local and regional actors have developed an excellent level of collaboration in order to achieve an in-depth perspective on development strategies and action plans. Examples of such plans include SUMP², SECAP³, Smart City⁴, and Climate Neutrality Action Plan⁵. The Valencia 2030-Climate Mission strategy has been formulated using a "five helix" approach that incorporates the participation of public administration, regional government and public transport operators, private sector, academia and universities, NGOs and media. The strategy proposes an action plan in line with the European mission of 100 European climate-neutral cities. A section dedicated to mobility and transportation is part of this action plan, which is based on 12 climate-neutral policies.

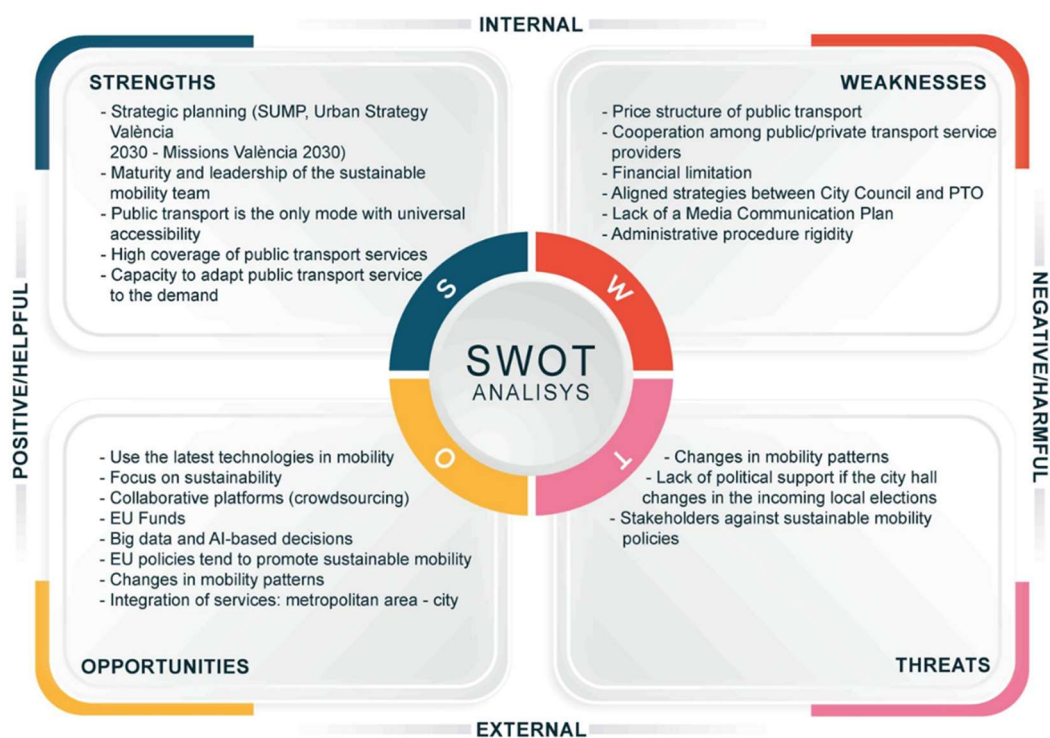
Ensuring that diverse actors and institutions support and implement sustainable mobility policies is one of the greatest challenges for the Valencia City Council. Some of the key factors that can facilitate or hinder this process are political and professional acceptability, clear motivation for change, data driven decision, engagement of citizens and stakeholders, administrative delivery, and funding mechanisms.

Even though the level of funds allocated for mobility are perceived as only "acceptable", they are well used for the implementation of sustainable transportation actions. Valencia complements its local funds with European funds, such as the Next Generation initiative, to implement sustainable mobility projects.

Engaging with stakeholders and citizens in decision-making for sustainable urban mobility is a key factor for achieving the goals of urban mobility planning. The level of cooperation between the different relevant stakeholders in Valencia is good, and for maintaining and improving it through regular communication, consultation, and feedback mechanisms the city has a special department in charge with stakeholder engagement. A wide consultation with stakeholders and citizens is carried out before implementation of diverse policies and measures, thus a final decision being made based on stakeholders' views. However, limited financial resources could be a barrier for organising engagement activities with stakeholders.

SWOT analysis

The results of the Valencia SWOT analysis carried out with the main stakeholders in the UPPER project are presented in the figure below.



² https://mediambient.gva.es/es/web/movilidad-urbana/valencia/-/asset_publisher/AMTCKYGUkr3B/content/pmome-valencia

³ <https://www.valencia.es/es/-/plan-de-acci%C3%B3n-para-el-clima-y-la-energ%C3%ADa-sostenible-paces->

⁴ https://smartcity.valencia.es/?page_id=8553

⁵ <https://estrategiaurbanavlc2030.es/>

The SWOT analysis identified some **acceleration strategies** that aim to leverage the declared Strengths and Opportunities. These strategies are intended to enhance the performance and sustainability of the public transport system:

- Extension of Smart City technologies: expanding the use of digital and intelligent technologies to optimize the operation, management and planning of the public transport system.
- Integration of mobility information: creating a unified and comprehensive platform for providing mobility information to public transport users and potential users. The platform would integrate data from various sources, such as public transport operators, transport authorities (City Council, Regional Transport Authority, etc. private mobility providers, to offer real-time and personalized information on routes, schedules, fares, disruptions, alternatives and multimodal options. The goal of this strategy is to increase the attractiveness, convenience and satisfaction of public transport use, as well as to encourage modal shift from private to public transport.
- Improvement of information and knowledge about the public transport network, such as its routes, schedules, fares and benefits, through campaigns, education and incentives
- Design of urban space under parameters of sustainability of mobility: applying principles of sustainable urban design to create a built environment that supports and promotes public transport use. This would include measures such as creating more pedestrian areas and bicycle lanes, reducing parking spaces, and promoting mixed-use development.
- Coordination of transport and land planning: this would require strengthening the institutional capacity and collaboration among different stakeholders involved in transport and land development. The coordination would ensure that transport and land planning are mutually supportive and complementary, rather than conflicting or contradictory.

The **improvement strategies** that aim to minimize the declared weaknesses of the urban public transport system by taking advantage of the opportunities that exist are:

- Coordination with metropolitan transport: establishing a better coordination and integration between the city's public transport system and the metropolitan transport network, which includes buses, trains that connect the city with its surrounding areas. This would improve the accessibility and connectivity of the city, reduce congestion and pollution, and increase the efficiency and reliability of the transport system.
- Implementation of new payment modes: introducing new payment modes for the public transport system, such as smart cards, mobile applications, or contactless payments. This would simplify the payment process, reduce fraud and evasion, and increase the efficiency and convenience of the system.
- Improvement of intermodality: enabling the users to easily switch between different modes of transport within the same trip. This would increase the flexibility and attractiveness of the system, reduce travel time and optimize the trips.
- Effective integration of MetroBús with urban services: This strategy involves integrating the MetroBús (regional bus transport service) that operates in several municipalities around Valencia, into the city's public transport system. This would expand the coverage and capacity of the public transport system, improve the coordination and complementarity between different modes of transport, and provide more options and benefits for the users.
- Innovative ways to access funds: finding innovative ways to access funds for financing the improvement and expansion of the public transport system, such as public-private partnerships, grants, etc. This would increase the availability and diversity of financial resources and reduce the dependence on public subsidies.

To enhance the **resilience** of the public transport system, some **strategies** were proposed based on the declared strengths in order to minimize threats. These strategies are:

- Improvement of the levels of accessibility of the bus network: increase the coverage and connectivity of the bus network, so that more people can access public transport services easily and conveniently. This can reduce the dependency on private cars and improve the modal share of public transport.
- Improvement of public transport service efficiency (bus lanes, traffic light prioritisation, etc): improve the speed and punctuality of public transport vehicles, by reducing the interference from other road users and giving priority to buses at intersections. This can enhance the attractiveness and competitiveness of public transport and increase the satisfaction and fidelity of users.
- Improvement of the public transport network and services: improve the quality and diversity of public transport services, by offering more options and amenities for users. This can include increasing the frequency and capacity of buses, introducing new routes, etc.

- Obligation to develop & implement strategic plans: ensure that public transport operators and authorities have clear and coherent plans for enhancing the public transport systems. This can improve the preparedness and awareness of different stakeholders and levels of governance and facilitate their coordination and collaboration.

Intervention strategies that are designed to mitigate perceived weaknesses and threats identified in the SWOT analysis can be considered.

- Promotion of sustainable mobility: reduce the environmental and social impacts of transport by encouraging the use of public transport, cycling, walking and other sustainable modes. It also involves investing in infrastructure, policies and incentives that support these modes and discourage the use of private vehicles.
- Improve of the communication process: improve the transparency, accountability, and participation of the various stakeholders engaged in the planning and management of public transport with potential to increase trust, collaboration, and agreement among the public, private, and civil society, while also enhancing understanding and support of the advantages and obstacles associated with sustainable mobility
- Lobby for culture change related with mobility: engage with various stakeholders, such as politicians, media, civil society, businesses and users, to raise awareness and influence attitudes and behaviours towards public transport. It also involves advocating for more supportive policies and regulations that favour public transport over private cars.
- Creation of a contract between City Administration and public transport operators to guarantee financial stability: negotiating a long-term contract with the City Administration that defines the roles and responsibilities of both parties, as well as the funding mechanisms and performance indicators for the public transport operators.
- Plan to fulfil new modes/services with new mobility patterns: adapt to the changing needs and preferences of the users by offering new modes/services that complement the existing ones. It also involves conducting market research, feasibility studies and pilot projects to test and implement these new modes and services.

SUMP

In accordance with article 10 of Law 6/2011, of April 1st, on Mobility of the Valencian Community, the City Council, after submitting the Sustainable Urban Mobility Plan (SUMP) of the city of València to the public information process by a period of 1 month, being published in the Official Journal (BOP) on October 14th, 2013, and after studying the allegations made, it was finally approved in Plenary session on December 27th, 2013.

The SUMP of València aims to promote sustainable and efficient transportation in the city. The SUMP of València is a strategic planning tool aimed at dealing with the challenges of urban mobility and promoting sustainable transport options. It includes strategies to improve public transportation, encourage walking and cycling, reduce emissions, and improve overall mobility within the city.

Among the 17 strategies included in the plan 5 transversal sustainable mobility strategies could be highlighted: deepen the aspects of mobility management with the help of the new information technologies, integrate urban design with sustainable mobility criteria, communicate and promote sustainable mobility, decarbonize the transportation system and interconnect territorial and urban planning with mobility infrastructures.

At the regional level, preliminary results of PMoMe València, that is, València Metropolitan Mobility Plan, show that at the Valencian Community 12 million trips are made daily (people over 16 years old), of which 40%, almost 4.7 million, take place in the Metropolitan Area of València.

Mobility patterns in the València Metropolitan Area show that 28% of trips are made over distances of less than one and a half kilometers, which are very easy to do walking. Another 39% of people travel between 1.5 and 5 kilometers, within the range of the bicycle, and 18% of trips are made up to 10 kilometers, in which public transport is very competitive.

According to data from PMoMe València, more than 9 million trips are registered in the Valencian Community and almost 4 million trips in the Metropolitan Area of València could be made with sustainable ways of transport (walking, by bike or by public transport).

The PMoMe of the València Area will design the set of mobility strategies and proposals to ensure that the maximum number of trips are made in a sustainable way, thus following the urban mobility guidelines promulgated by the European Commission.