

General context

Hannover Region, together with the city of Hannover, is the capital and largest city in the German state of Lower Saxony. The Hannover Region (including the city) is the 13th largest city in Germany. The city Hannover itself lies at the confluence of the river Leine and its tributary the Ihme river, in the south of the North German Plain. The Hannover Region is the largest region in the Hannover–Braunschweig–Göttingen–Wolfsburg Metropolitan Region.

Formed in 2001, the Hannover regional authority serves 1.2 million inhabitants in 21 towns and municipalities - including the state capital Hannover. Among other things, Region Hannover is responsible for local public transport and the waste disposal, but also for local social welfare, vocational schools, and municipal hospitals. Environment, regional planning and local recreation, as well as economic and employment promotion are further areas of responsibility.

Modal share

According to the latest statistics from 2020, the share of different transportation modes in the city was as follows: 45% of the trips were made by car (of which 35% were made as car drivers and 10% as car passengers). Public transport accounted for 14% of the trips, while cycling and walking represented 17% and 24% respectively. This indicates that the city has a notable rate of active mobility, while at the same time showing an important dependency on private cars.

Mobility offer

Hannover Region in Germany has several organized mobility services aiming to meet the transportation needs of residents and commuters.

Hannover has an extensive public transportation network consisting of buses, trams, and regional bus and trains operated by various public companies. The primary public transport operator is ÜSTRA, which runs the tram and bus services in the city and regiobus in surrounding areas. Additionally, the national-level operator Deutsche Bahn runs regional trains. The Hannover S-Bahn is a suburban rail system that provides convenient connectivity between the city centre and the surrounding regions. It is operated by Transdev Hannover. The On-demand system "sprinti" is currently available in 3 of the 21 municipalities. It is operated by via. From October 2023, Sprinti on demand transport will be gradually extended to the other municipalities in tariff zone C. The sprinti On Demand system is fully integrated in our existing tariff system and can be booked via the own app. Car-sharing services in Hannover are provided by stadtmobil.

Traditional taxi services are also available in Hanover Region, with several private taxi companies operating mostly in the city of Hannover.

Ride-hailing service is provided by private operator MOIA, with a full electric fleet, all over the city. Hiring and payment is possible through a dedicated app.

Bike-sharing service is under the Greater Hannover Transport Association called "SprintRAD" but is currently under tendering process. It is available all over the city. E-scooter sharing service is provided by traditional companies, such as Tier and Bolt, all around the city of Hannover and some of the municipalities near Hannover.

The public transport authority, Greater Hannover Transport Association (GVH), provides a mobile app – "Mein GVH" - that integrates all public transport services and provides information. Moreover, the app integrates all type of tickets and passes, allowing the optimisation of travel planning.

Germany has established a national framework of low emission zones. With the exception of motorcycles, low emission zones refer to all types of motor vehicles²⁰. In the city of Hannover vehicles that exceed a total vehicle weight of 12 tonnes are prohibited from operating in transit traffic.

Transport data collection and integration

In Hannover, there are transportation and traffic data collection systems in place that gather data from various sources, including general traffic, public transport, and alternative mobility services. However, the data collection process lacks a central hub, with each organization independently managing its own data.

Consideration on public transport service

The public transport service in Hannover offers a variety of modes, such as buses, trams, trains that cover the whole city and its surroundings. It is also planned that the service will include bicycles. The public transport service in Hannover has several *strengths*, such as:

- **Coverage** the public transport system covers most of the urban area and regional areas, with a high density of bus, tram, and regional bus and train lines.
- **Affordable and accessible** the fares are reasonable and there are discounts for students, seniors and low-income groups. The public transport service in Hannover is also accessible for people with disabilities, as most vehicles and stations are equipped with ramps, lifts and audio-visual information systems.
- **Environmentally friendly and sustainable** the public transport service in Hannover uses renewable energy sources, such as solar panels and biogas, to power some of its vehicles and facilities. It also promotes the use of bicycles, which are available for rent at many stations and bike racks.
- **Convenient and comfortable -** The public transport service in Hannover operates on a regular and frequent schedule, with minimal delays and disruptions. The vehicles are modern, clean and spacious, with free Wi-Fi and air conditioning. The stations are well-maintained and safe.

Relation between major mobility stakeholders

The operators are coordinated by the Greater Hannover Transport Association (GVH), which is a public-private partnership between the city of Hannover, the region of Hannover, and the state of Lower Saxony. The GVH is responsible for setting the fares, timetables, and quality standards for the mobility services, as well as for planning and financing the infrastructure and vehicles.

The GVH also cooperates with other stakeholders such as the Chamber of Commerce, the University of Hannover, and the environmental association BUND to promote sustainable and innovative mobility solutions in Hannover.

ÜSTRA is owned by the city of Hannover and the state of Lower Saxony. It operates under a contract with the Hannover Region Transport Association (GVH).

S-Bahn is operated by Transdev Hannover, regional trains are operated by Deutsche Bahn or others under contracts with the respective regional and national transportation authorities.

The car-sharing provider is stadtmobil, a group of seven regional companies with a common brand, common marketing, common website, reservation system, and common development of software and car access technology. It cooperates with ÜSTRA and GVH to offer integrated mobility solutions since 1999, such as combined tickets or discounts for public transport users.

²⁰ <u>Germany (urbanaccessregulations.eu)</u>

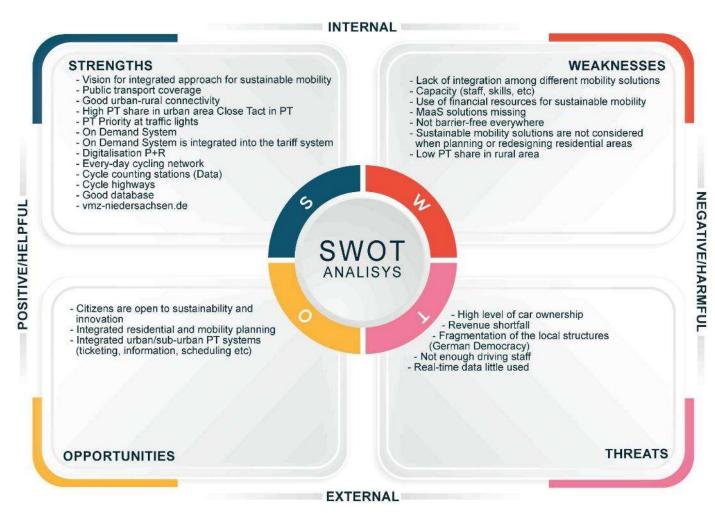
Vision and policies for sustainable mobility and climate neutrality

Hannover Region is a city committed to sustainable mobility. Over the last five years, the city has developed a vision that aims to reduce individual car use in favour of more environmentally friendly modes of transport and an integrated approach in providing sustainable mobility. The city's political leadership is open to sustainability and innovation and supports the implementation of the mobility vision. Technical staff in the mobility-related departments of the city administration also contribute to driving sustainability and innovation in the city. Citizens and civil society in Hannover are also interested and involved in sustainable mobility.

The German Federal Government has also made clear its commitment to support and promote public transport as the most sustainable travel option at local and regional level, by providing the national level Deutschland-Ticket allowing unlimited local and regional travel anywhere in the country for a 49 euro monthly fee. Based on an initial analysis following its introduction, the Deutschland-Ticket contributed to an increase in both the number of recorded passengers and monthly public transport subscriptions in the Hannover Region.

SWOT analysis

The results of the Hannover Region SWOT analysis carried out with the main stakeholders in UPPER project are presented in the figure below:



The SWOT analysis has identified several *accelerating strategies* for enhancing public transportation in the Hannover Region.

- Ensure a strong commitment from Hannover Region and its municipalities to approve and implement the Sustainable Urban Mobility Plan. This will establish a clear vision, goals, and strategies for improving transportation and decreasing environmental impacts in the region.
- Expansion of "sprinti": the "sprinti" initiative has undergone a successful pilot project, demonstrating its efficacy as a flexible on-demand public transport service that effectively bridges the gap between rural regions and urban hubs. There is a strategic intention to extend the coverage of this service to beyond regions, improve its frequency and reliability, and facilitate its integration with various transport modes.
- Expansion of mobile stations: increase the number and extent of these mobile stations, while also expanding the range of services and improving their accessibility and user-friendliness. There is a network of mobile stations that provide a range of mobility services, including bike and car sharing, charging stations, parking spaces, and information points.
- Good networking among decision-makers: based on already established relationships and cooperation between diverse stakeholders, including regional and local authorities, transport operators, businesses, civil society, and academia, maintaining a collaboration and communication and the involvement of additional actors and sectors in the planning and execution of mobility initiatives became a strategical action.
- Digitalization: represents a crucial facilitator in enhancing mobility and mitigating emissions. Digital tools and platforms will be used to collect and analyse data, monitor and investigate performance, provide instantaneous information and feedback, enhance user experience and participation, and facilitate innovation and experimentation.
- Make use of new technologies: the availability of emerging technologies shows good opportunities to enhance various aspects of mobility, including efficiency, safety, comfort, and sustainability and provide a good opportunity to examine and incorporate various solutions in a manner that aligns with our overall vision and objectives in the field of mobility.

The SWOT analysis revealed some *improvement strategies* that can help Hannover Region to achieve its vision for a sustainable and liveable city:

- Promote multimodality by people to use different modes of transport according to their needs and preferences, rather than relying on a single mode. This can reduce congestion, pollution, and costs, as well as improve health and well-being, by providing, for instance integrated and accessible public transport, improving the infrastructure and safety for walking and cycling
- Increase the quality of stay in street spaces aiming to enhance the social and economic vitality of the city, as well as the environmental quality.
- Redistribution of road space by balancing the allocation of road space among different modes of transport, rather than prioritizing cars over other users. This redistribution of road space could be made by reducing the number and width of car lanes, expanding the sidewalks and bike lanes, creating bus lanes and priority signals, and implementing traffic calming measures.
- Mobility management measures aiming to influence travel behaviour in favour of public transport and sustainable mobility
- Bicycle parking garage facilitation of the use of bicycles as a convenient and sustainable mode of transport, rather than discouraging it due to lack of facilities.

The *resilience strategy* for public transport in Hannover, as the key outcomes of the SWOT analysis shall take into consideration the following aspects:

- PT for all demographic groups: provide public transport services that meet the needs and preferences of different segments of the population, such as elderly, disabled, low-income, or young people.
- Sufficient funding: need for adequate and stable funding sources for public transport operations and maintenance, as well as for investments in infrastructure and technology. The strategy proposes to diversify the funding sources by exploring options such as subsidies, fares, taxes, fees, or partnerships.
- Attractive/Easy access to PT: make public transport more attractive and accessible to potential users by improving the quality, reliability, and frequency of public transport services, as well as by enhancing the connectivity, integration, and accessibility of public transport networks. The strategy also aims to improve the information and communication systems for public transport users and providers.
- Follow-up financing: securing follow-up financing for public transport projects after their initial implementation. The strategy suggests monitoring and evaluate the performance and impact of public transport projects, as well as to communicate and disseminate the results and benefits to stakeholders and decision-makers.

- Parking management: reduce the negative effects of car use and parking on urban mobility and liveability by implementing parking policies and measures that discourage car use and encourage public transport use. The strategy also plans to improve the management and regulation of parking supply and demand in the city.
- Well-designed digital tariff: simplify and optimize the tariff system for public transport users by adopting a digital tariff and increase the convenience and flexibility of public transport payment methods.

The SWOT analysis conducted by Hannover revealed some *intervention strategies* that needs to be addressed to remain competitive and profitable.

- Avoid missing out on some opportunities to implement innovation, such as developing new products or services, improving customer experience, or adopting new technologies.
- Not providing adequate payment for driving personnel.
- Ignoring the potential of digitalisation and MaaS (Mobility as a Service), which could make Hannover lose market share to more agile and customer-oriented competitors.



The last regional SUMP was adopted in 2011 and is currently being updated (VEP 2035+).