

General context

The Île-de-France Region, known as well as Paris Region, is composed of Paris City (105 km²) and seven departments (or counties) centred on its innermost department and capital, Paris. There is also the “agglomeration” which is not an administrative level but is considered as the dense part of Île-de-France (2.860 km²), whereas Île-de-France Region has a land area of 12.011 km². Around the department of Paris, urbanization fills a first concentric ring of three departments commonly known as the “petite couronne” - small ring and extends into a second outer ring of four departments known as the “grande couronne” - large ring⁷.

The Communauté d'agglomération Versailles Grand Parc (VGP), located in the Île-de-France region is an intercommunal structure – “agglomeration” comprised of 18 communes, with the core of it being the city of Versailles. The area is situated within the administrative boundaries of the Yvelines and Essonne departments. The geographical extent of the region measures 123.6 km². Given this situation, Versailles Grand Parc has a special feature among the other UPPER cities, representing an urban agglomeration. With its dependence on Ile de France Mobilité (IDFM), governance related to mobility in VGP is very complex. For example, the SUMP is developed at regional level by the regional authority, namely IDFM.

As a major economic hub, historic land of know-how and home to prestigious international research and higher education centres, the Agglomeration hosts 28,000 economic establishments, including companies with international influence. Moreover, Versailles Grand Parc authority, in partnership with IDFM dedicates a significant part of the budget to help the transport organizing authority in its choices in order to respond as closely as possible to the needs of users: routes, bus stops, and at the same time, develops cycling paths, favouring daily connections.

Modal share

The region shows a high share of public transport (32.3%), but a rather low degree of use of active modes of transport, such as cycling (1.7%) and walking (4.5%). Therefore, the modal share of cars and utility trucks remains quite high (56.2%), even though the transport offer is diverse: public transport, taxis, ride-hailing, on-demand services and e-scooters, which are supplied by both public and private operators. Moreover, public transport service is included in the Ile de France regional public transport offer and only e-scooter services operate primarily at the local level. The very low shares of active travel modes are a consequence of the peculiarities of the VGP site, with a large number of trips having only one of their O-D points within the area, as well as the large distances that need to be covered by the trips – see surface areas above.

Mobility offer

Mobility services in Versailles Grand Parc are various, starting with public transport (bus, tram, trains), taxi, on-demand transport, ride-hailing and e-scooters. Being included in the Ile de France region, the Agglomeration is under the umbrella of the regional public transport organised by IDFM. Only e-scooter services operate on local level, being present in several municipalities within the Agglomeration.

The impact of the COVID-19 pandemic cannot be estimated very well at the level of Versailles Grand Parc because of the lack of data, and the complexity of the governance structure. However, as in any other places, COVID-19 has

⁷ Nguyen-Luong, D., Courel, J. –D3.2 - Technical report for Stage 3 city, Paris Agglomeration, CREATE Project, H2020, December 2016

impacted the public transportation in the region. VGP together with the municipalities in its competence and the major stakeholders in transportation in the area, make effort to improve the quality of the public transport offer.

Transport data collection and integration

Mobility services are integrated through mobility hubs and shared infrastructure, while only public transport and on demand services benefit from an integrated payment and information platforms. Travel planning functionalities are only available for public transport and e-scooters. Through the activities of UPPER, Versailles Grand Parc aims to develop a MaaS platform not only for the urban agglomeration, but also for the entire Ile de France region.

Transport/traffic data collection are not centralised, even though there are various forms for collection (census, real time, automatic fare collection, etc.) or when required for specific projects. The collection of traffic data and alternative mobility services is conducted within the area. The regional authority holds, collects, and use the data for public transport management, whereas parking information is collected by each municipality and is not standardized.

Regarding last-mile delivery, services are provided in the area via direct delivery with vehicles or self-pickup, however neither of these services are regulated.

Consideration on public transport service

VGP is in a unique situation in UPPER, therefore any analysis of the public transport in this location could reveal many interesting aspects, either positive supporting the development of a good public transport in the area or certain barriers that may cause difficulties in securing a good transport offer. These aspects are mainly generated by the local administrative organisation. The complexity of the governance system, typical for France, is the major starting point in trying to understand what can be done to improve the transportation system in general, and in this part of Ile de France, in particular. Within the analysis done in UPPER to understand the public transport system in VGP, certain strengths and weaknesses have been observed for the existing public transport system. Some of the **strengths** are:

- **Availability:** public transport system operates from early morning to late night, every day of the week.
- **Coverage/network density:** public transport network covers most of the area of Versailles Grand Parc
- **Travel time:** public transport system offers fast and direct connections between different parts of Versailles Grand Parc and the municipalities in Ile de France Region.
- **Integration:** public transport system is well integrated with other transport modes. Users can easily transfer within the public transport system or to other modes using a single ticket or card.
- **Payment options:** The public transport system accepts various payment options, such as cash, credit/debit cards, mobile apps, and smart cards. Users can choose the most convenient option for them and benefit from discounts and incentives.
- **Vehicle comfort/accessibility:** public transport vehicles are comfortable and accessible for all users, including those with special needs or disabilities.
- **Information provision:** easy and accurate information about the transport services, such as timetables, routes, fares, and disruptions.

However, some of the **weaknesses** of the public transport service in Versailles Grand Parc have been identified:

- **Accessibility of public transport stops/stations:** some stops/stations are not well-connected to the surrounding sidewalks or paths.
- **Reliability:** public transport vehicles sometimes experience delays due to traffic congestion. Users may experience longer waiting times or missed connections as a result.
- **Frequency of services:** public transport service does not offer enough vehicles during peak hours or in some areas with high demand.

Relation between major mobility stakeholders

Public transport service in Versailles Grand Parc relies on the IDFM regulations. The primary modes of public transport in Versailles Grand Parc include buses, RER (Réseau Express Régional), and trains, all of which are operated by public operators, including Keolis and Transdev. These modes cover an important part of the area and facilitate the interconnection of cities and the Ile de France region.

In Grand Parc, there are taxi services provided by licensed private operators. Ride-hailing services are provided by private operators. Public transport operators such as Keolis and Transdev are responsible for the operation of on-demand services. E-scooters are currently being operated by the private operator TIER in some municipalities.

The relations with the operators of public services (public transport, on-demand services and e-scooters) are perceived as good by the VGP representatives, but given the particularities of the area, it is difficult to assess relationships with private mobility providers.

Vision and policies for sustainable mobility and climate neutrality

Ile de France - Versailles Grand Parc's mobility strategies are ambitious, with a focus on a user-centric approach towards sustainable transportation. This is supported by political leadership, technical personnel from mobility-related departments, and citizens and civil society who are receptive to sustainability and innovation. Furthermore, the local administration is aware of sustainability and mobility innovations and tries to apply those that are appropriate to the particular circumstances and legal field of action.

Given the form of governance, planning for sustainable mobility and climate neutrality is carried out at regional and national level, although there are departments at local level that address these aspects. Therefore, organisational fragmentation seems to be one of the main barriers when it comes to planning, besides engaging economic and business groups. In addition, climate neutrality planning needs more political support and the development of appropriate procedures and policy tools.

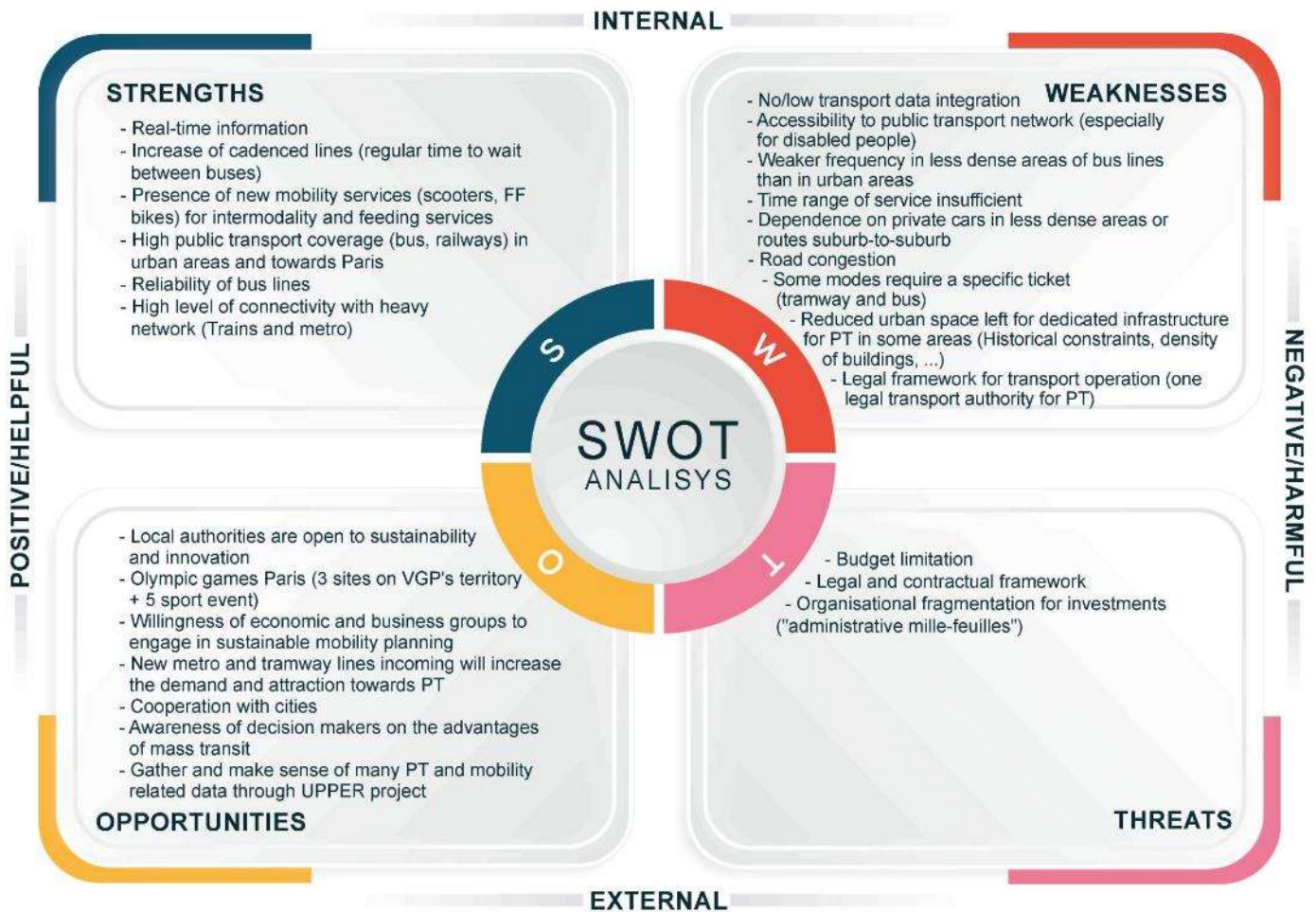
The regional authority - IDFM - provides the financial resources for the development of sustainable mobility projects, which are highly dependent on the nature of the project. Depending on the scope and impact of these projects, funding can be allocated from both the local and regional budgets. In any case, for the implementation of mobility policies, public, political, and professional acceptability, data-driven decision making, funding mechanisms, and the implementation of appropriate measures at the appropriate moment are considered essential. However, unclear responsibilities and a lack of clarity in the legal framework can be major obstacles in this regard.

Although the cooperation with various stakeholders is considered important, and the relationship between the public administration and stakeholders is considered good, here there is still no department that deals with the relationship with them. Stakeholder engagement is carried out through various partnerships with NGOs, universities and research centres or is outsourced to an external consultant. Stakeholders, as well as civil society are consulted, when taking the decision about mobility policies. However, inadequate instruments or procedures could be considered the main barriers regarding stakeholder engagement and participation.

The sustainable mobility in VGP as previously mentioned is influenced by local decisions, but also by decisions taken at regional and central level. A good example of this aspect is the project Grand Paris Express (line 18) that has been recently approved and it is part of the initiative to improve the links between different suburban centres. Once completed, Line 18 has a high potential for the area as it should improve the connection with many points of the interest in the region and also the access to Airport Orly.

SWOT analysis

The results of the Versailles Grand Parc SWOT analysis carried out with the main stakeholders in UPPER project are presented in the figure below:



The SWOT analysis identified some *acceleration strategies* that aim to leverage the stated Strengths and Opportunities:

- Integrate new mobility services, such as shared scooters and bikes (self-service bike hire), into the existing public transport network. These services can provide intermodal options for travellers who need to switch between different modes of transport, as well as feeding services for those who live or work in areas with low public transport coverage.
- More involvement in the Observatory⁸, a platform that fosters cooperation and knowledge exchange between cities that are implementing or planning to implement sustainable urban mobility plans. The Observatory can help the public transport operators to learn from the best practices and challenges of other cities, as well as to showcase their own achievements and innovations. The Observatory can also facilitate the access to funding opportunities and technical assistance for improving the quality and efficiency of the public transport services.

⁸ <https://www.iledefrance-mobilites.fr/en/mobility-observatory>

The SWOT analysis revealed some **improvement strategies** to address the weaknesses and opportunities of the public transport in Versailles Grand Parc:

- Promote public transport for tourists at off-peak hours and during the weekend, when the demand is lower and the capacity is higher, a strategy that might attract more users.
- Implement MaaS, which can improve the perception of public transport and increase its interest. MaaS can provide integrated and personalized mobility solutions tailored to the needs and preferences of different travellers.
- Use the UPPER observatory, which will offer a better view on actions to take in favour of allocation of resources, sustainability and all mobilities.

The SWOT analysis suggested some strengths and threats for public transport, which require some **resilience strategies** to approach them effectively:

- Introduction of new mobility services by local authorities, which will complement the existing transportation options and increase the attractiveness of the area.
- Active participation in the Observatory and share best practices and lessons learned. This will enhance the cooperation and coordination among local and regional stakeholders and mitigate administrative complexity.

Based on the SWOT analysis, two possible **intervention strategies** to address the weaknesses and threats related to mobility in the Versailles Grand Parc area could be:

- Development of new cycling infrastructures, such as bike lanes, bike parking, bike sharing, etc., to encourage more people to use bicycles as a sustainable and healthy mode of transport, and
- Implementing traffic calming measures, enforcing road safety rules, such as reducing speed limits, etc., to reduce congestion, noise and air pollution, and to improve the quality of life of residents and visitors.

SUMP + UPPER measures

The SUMP, developed by the regional mobility authority, is adopted Ile de France region wide. The present version covers the period 2010-2020 (a first evaluation was conducted in 2017), was re-evaluated in 2020, and is currently being revised. The following version will cover the period from 2020 to 2030 and is close to completion. In the context of the UPPER project, Versailles Grand Parc expected to develop a series of measures that will have a valuable contribution to the new SUMP. Some of the measures were partially or not implemented during SUMP 2010-2020 and are going to be integrated in the new SUMP 2020-2030.

SUMP action/measure/project related to public transport	UPPER Measures
Challenge 8: Build a governance system that empowers stakeholders in the implementation of the SUMP	IDF_01 Participative governance framework for the update of the regional SUMP
Challenge 5: Acting on the conditions of use of individual motorized modes	IDF_03 Impact evaluation and future design of low emission zones and restricted traffic zones
ENV 1: Support the development of new vehicles (sustainable vehicles)	IDF_03 Impact evaluation and future design of low emission zones and restricted traffic zones
Challenge 1/Action 1.1: Act locally for a city more favourable to the use of alternatives to the car	IDF_04 Added-value services in multimodal nodes to integrate active modes with PT

Challenge 2/Action 2.5: Develop quality multimodal exchange hubs	IDF_04 Added-value services in multimodal nodes to integrate active modes with PT
Challenge 4/Action 4.3: Encourage and promote the practice of cycling for all	IDF_04 Added-value services in multimodal nodes to integrate active modes with PT
Challenge 2/Action 2.6: Improving passenger information in public transport	IDF_05 Promote the use of the PT service by visitors in large events (via better information through the app)
Challenge 9/Action 9.3: Provide complete, multimodal information, accessible to all and develop mobility advice	IDF_05 Promote the use of the PT service by visitors in large events (via better information through the app)
Challenge 4/Action 4.1: Make the road cycle-friendly	IDF_07 To incentivise the use of Public Transport for commuters (via management of mobility credit and gamification challenges through the use of active modes)
Challenge 4/Action 4.2: Promote bicycle parking	IDF_07 To incentivise the use of Public Transport for commuters (via management of mobility credit and gamification challenges through the use of active modes)
Challenge 4/Action 4.3: Encourage and promote the practice of cycling for all	IDF_07 To incentivise the use of Public Transport for commuters (via management of mobility credit and gamification challenges through the use of active modes)
Challenge 1: Building a city more favourable to travel on foot, by bike and by public transport	IDF_07 To incentivise the use of Public Transport for commuters
Challenge 2/Action 2.1: A reinforced and more efficient rail network	IDF_08 Improve public perception of PT (by improving the offer and the network in general)
Challenge 2/Action 2.4: A more attractive bus network	IDF_08 Improve public perception of PT (by improving the offer and the network in general)
Challenge 2/Action 2.5: Develop quality multimodal exchange hubs	IDF_08 Improve public perception of PT (by improving the offer and the network in general)
Challenge 2/Action 2.6: Improving passenger information in public transport	IDF_08 Improve public perception of PT (by improving the offer and the network in general)
Challenge 9: Making Ile-de-France residents responsible for their travel	IDF_09 To promote a culture around Public Transport through education