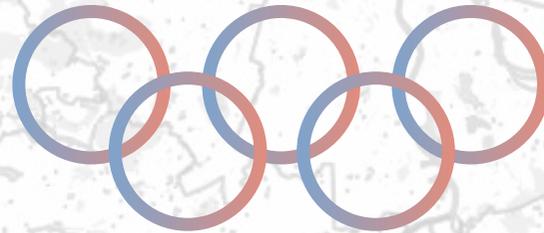


Assessing the Urban Legacy of Paris 2024



UNIVERSITÉ
PARIS-EST CRÉTEIL
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ÉCOLE
D'URBANISME
DE
PARIS



IRDS
INSTITUT RÉGIONAL DE
DÉVELOPPEMENT DU SPORT

**ÉCOLE
D'URBANISME
DE
PARIS**

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A collective study produced by the students of the **M2 International Master in Urban Planning and Studies Track European Studies** as part of the Planning Studio in 2022-2023.

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PREFACE

Paris will host the Summer Olympic and Paralympic Games from July to September 2024, an important event for the city and the country as it will mark the 100th anniversary of the 1924 Paris Summer Olympic Games, with a colossal vision of **celebrating this mega event along the Seine**. This uniqueness is not only limited to the opening ceremony. Paris offers compact and sustainable games that utilise **95 % existing or temporary venues**, the only city to do so in recent years.

The 5% left embody one of the bold promises made for the Olympics: the **urban regeneration of Seine-Saint-Denis**. This previously industrial department located to the north (15 minutes by train from Paris city centre) is one of Paris' historically deprived areas, the poorest of the metropolis that could thus benefit the most from the Games, renowned **urban accelerators**.

The two main new venues are the Athletes' Village and the Media Cluster, comprised of residential units, parks, school, sports park, swimming pool among many other infrastructure facilities. The newly built housing units serve as residences for the athletes and journalists during the Games which will be later **transformed into housing units for the inhabitants**. The Olympic Works Delivery Company - SOLIDEO - was established to deliver these projects which makes it one of the main actors behind the Olympic projects.

The new projects and improved facilities across municipalities in Seine-St-Denis are hailed as the legacy of the Paris 2024 Games. The Games have been considered as a **catalyst to achieve long term goals for improving inhabitants' lives**.



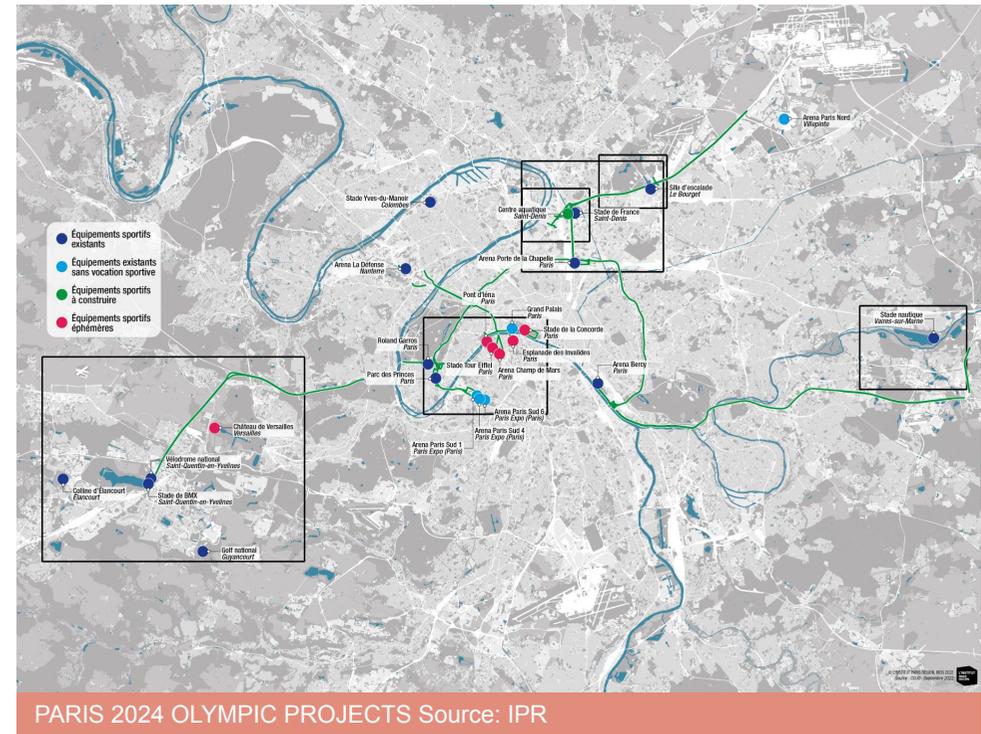
INTRODUCTION

The idea of leaving behind a positive legacy for the Olympic Games host cities in the 21st century has become a **growing necessity more than ever before**. However, hosting a mega event comes at a cost and is not an easy task which is why cities turn their back from consideration to host the Olympic Games. The International Olympic Committee (IOC) has responded to this by introducing its new norm in 2014: **“The objective is the framing of the Olympic Games in terms of sustainability and legacy with a new emphasis on the Games as an opportunity to integrate cities’ long-term planning needs into bidding and hosting the event”**. The aspired change is intended to reduce the scope of work and associated costs for the host cities.

Moreover, ever since the 1992 Games in Barcelona that demonstrated a strategic integration of the Olympic Games for its urban transformation, there has been a paradigm shift in the way Olympic Games are perceived. The Games are seen as a catalyst for host cities in their efforts to improve the urban fabric. Hence, there is a **growing trend for mega event host cities to bid on the promise of urban regeneration legitimising the concept of urban legacies**. However, there is a complexity and novelty in defining and understanding the concept of ‘urban legacy’.

Paris has, since the bidding phase in 2015, elaborated **ambitious goals** for the Games as they are not only a sporting mega event but also a real development opportunity at the metropolitan level. The **urban regeneration of Seine-Saint-Denis** is at the heart of the development projects led by the Games.

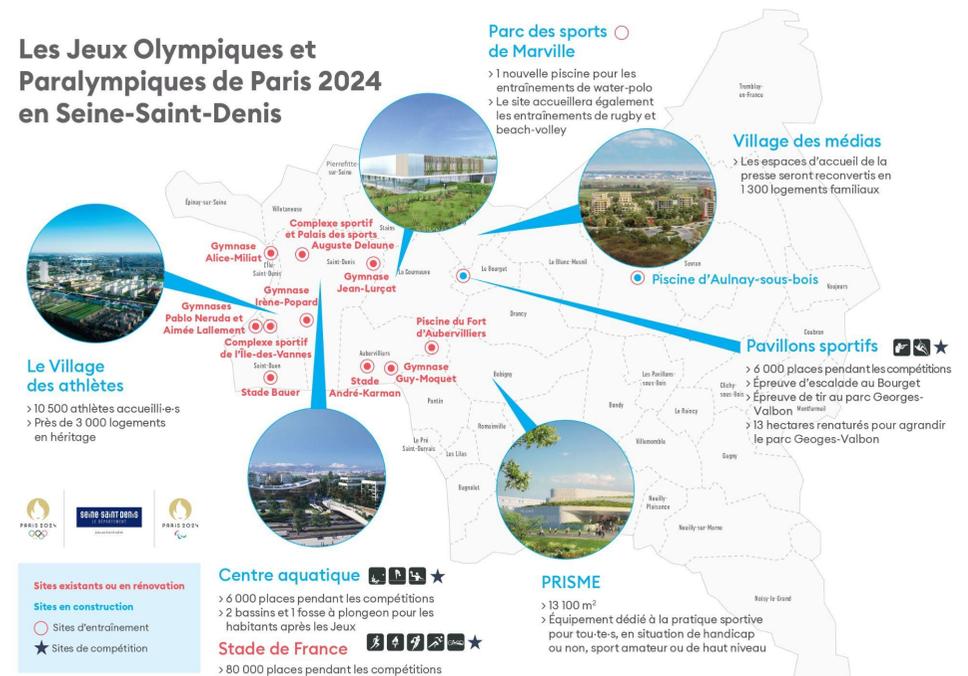
In the context of the urban realm, the legacy of Paris 2024 is crucial considering the ambitious vision. It defines long-term goals aiming at **accelerating the development of the metropolis** (social, economic, sustainable). The main bidding resolutions of Paris are to **rehabilitate and enhance the River Seine**, key landmark in the Games’ perspective; to **protect and expand green spaces** in the metropolis; to **increase the reliability and resilience of the transportation networks**.



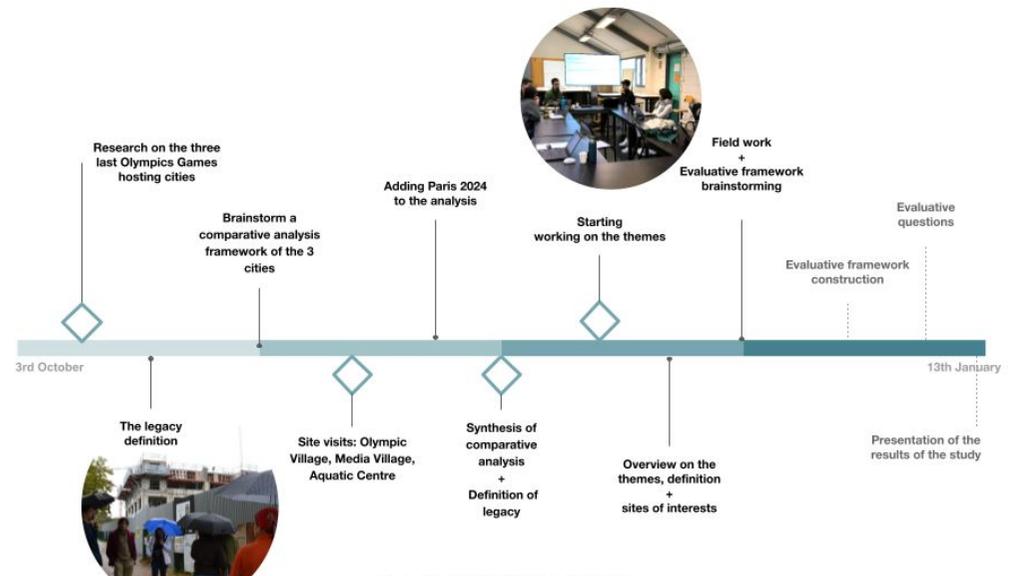
Straddling across different municipalities, major projects are taking place in the department, such as: the Aquatic Centre which will host the swimming competitions, the renovation of five swimming pools; the **Pleyel** bridge linking the Aquatic Centre to the Stade de France; the **Athletes' Village** and the **Media Cluster**; regeneration of **Terrain des Essences**, a formerly polluted land, to host a dedicated biodiversity park; the creation of a cyclable loop to allow soft mobility to the venues; the creation of a soundproof wall on the highway A86, and the burial of high-voltage power lines, that are highly awaited by residents; and the Pleyel station - also part of the metropolitan project of the Grand Paris Express, which will provide an important mobility hub at the scale of the Greater Paris.

This study aims to present a better understanding of urban legacy and to provide principles to evaluate the urban legacy of Paris 2024. On the one hand, this report offers learnings from the past three Olympics in **London 2012**, **Rio 2016** and **Tokyo 2020** that helped in defining urban legacy and breaking down its complexity. On the other hand, it provides a detailed overview of what are the place-based stakes and challenges of the Olympic Games' ongoing projects in Seine-Saint-Denis within three major themes: **blue and green spaces, mobility & public spaces**. It is important to note that evaluating urban legacy is not only an iterative process but also a multidimensional and multiscalar one.

This study was carried out by students of diverse backgrounds such as geography, architecture, political sciences, landscape architecture and urban planning. It is relevant to note that this study was conducted while the Olympic project constructions are still ongoing and is thus based on the envisioned expected legacy.



OLYMPIC PROJECTS IN SEINE-ST-DENIS Source: seinesaintdenis.fr



TIMELINE OF THE STUDY Source: Authors, 2022

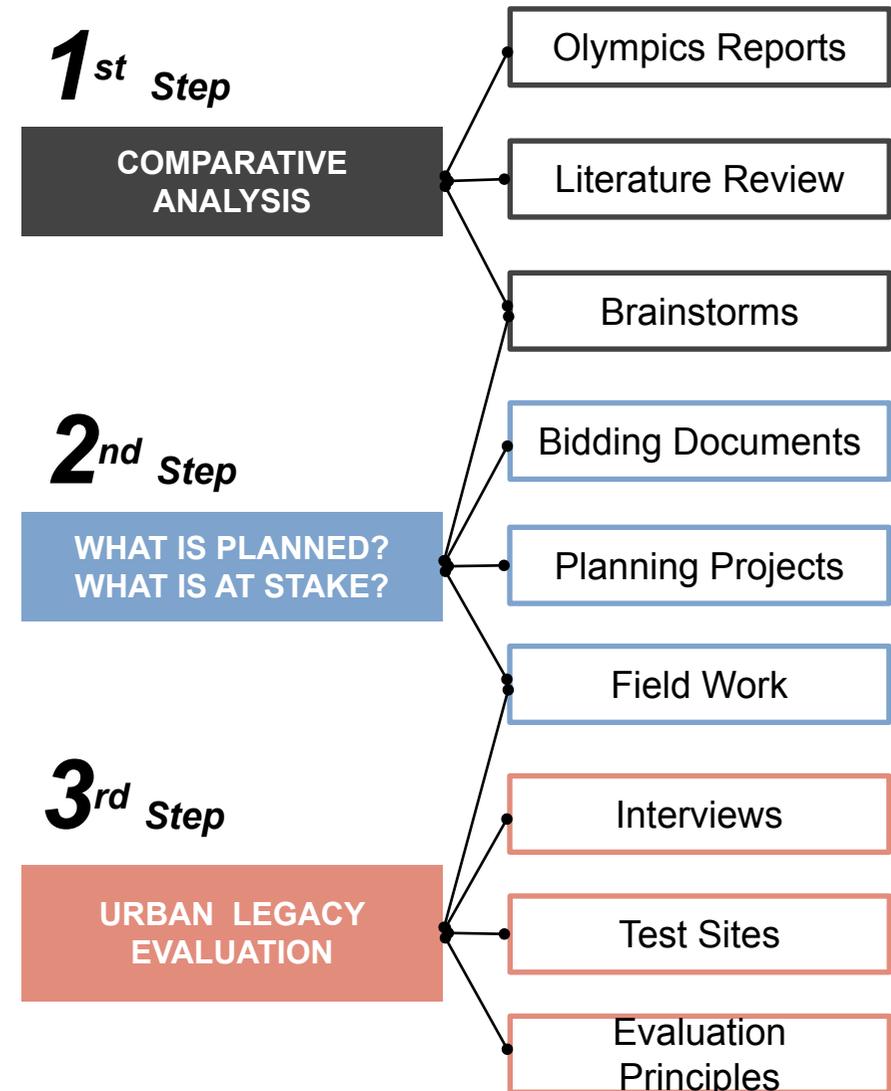
METHODOLOGY: UNDERSTANDING AND EVALUATING URBAN LEGACY

A detailed methodology of this study which highlights the steps followed to conduct the study is seen below:

Step 1. The first phase of the study consisted of understanding what legacy means for the city of Paris by analysing the legacy of the past Olympic Games host cities. After close reading of Olympic reports and a literature review of the topic, a **comparative analysis** was undertaken: seven topics were determined. The choice of topic relied on the topics most often analysed in literature. With this first study stakes in the context of urban legacy of the Olympic Games were identified, which supported in defining the concept.

Step 2. Urban legacy across 3 themes: **Blue and Green Spaces, Mobility, and Public Spaces**. This included desk research of Paris bidding documents, planned projects by local govts & Olympic Games, and field work. This process allowed supported the formulation of questions to further reflect and set up the premises of the evaluation principles.

Step 3. The next phase was the choice of legacy objects in order to build the Evaluation principles on the “known unknowns” (Manzenreiter, 2006) of urban legacy. This place-based analysis requires a capacity to **forward-thinking** supported by careful research of planning documents, interviews and field-works. This phase necessitated to develop the evaluation principles. The evaluation principles should be seen as suggestions and opportunities of reflection for competent authorities regarding how urban legacy should be assessed.



01

Legacies of London Rio & Tokyo Olympics

A multi-sectoral approach to urban legacy

OLYMPIC LEGACIES

Although there has been much research on Olympic legacies and measuring them in recent years, a **comparative approach of previous host cities** with the aim of informing a legacy for Paris is in need of the hour. The 2012 London Olympic Games has been dubbed as the ‘Legacy Games’, the 2016 Rio Olympic Games as the ‘first South American city’ to host the Olympic Games and the most recent one in Tokyo in 2020 will be remembered as the ‘Games during the Covid-19 outbreak’.

In this study, to get a comprehensive outlook on the legacies of the past three Olympic and Paralympic Games and to inform our task of developing an evaluating framework to measure the urban Olympic legacy in Paris, a **comparative analysis approach** was undertaken to determine the Olympic legacies across **different themes** (which are discussed in detail in the following chapters).

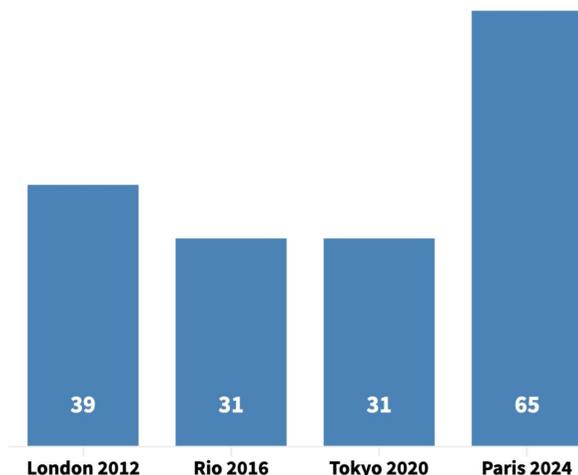
First, let’s take a look at the olympic legacies through the lens of the International Olympic Committee (IOC). The International Olympic Committee defines Olympic Legacy as :

*“the result of a vision. It encompasses all the **tangible and intangible long-term benefits** initiated or accelerated by the hosting of the Olympic Games/sport events for people, cities/territories and the Olympic Movement.”*

In the vocabulary associated with the word legacy, “urban” does not appear in the collocates. The comparative analysis will show that **the notion of legacy must be refined** in order to understand the impacts and benefits of Olympic Games on the urban environment, societies and policies.



Collocates of the word “legacy” in the official candidacy documents of London, Rio & Tokyo.



Occurrences of the word “legacy” in the official candidacy documents

Sources: IOC Library, elaboration by the authors on the official candidacy documents of the OGs.
Image: Authors, 2022

LEGACY, A MULTI-LAYERED PHENOMENON

Each country provides forward-thinking documents to **elaborate a strategy long before hosting the games** to better prepare the Olympic Games' legacy. They provide **legacy themes** (synthesised in the grid) that state the **different goals to reach**. For example, London aimed at transforming East London and create business attractivity in the city or more recently, Tokyo aimed at recovering after the 2011 Great East Japan Earthquake and its economic crisis.

Each legacy strategy share similar topics related to sports, health, social insertion / sense of community, sustainable goals and economic development. These initiatives spans across different scales and the legacy is not just for the city but for the host nation and across the globe. Therefore, a **multiscalar and multisector approach of legacy is necessary to achieve an understanding of urban legacy**.

Scale	London	Rio	Tokyo	Paris
City	<p>Regeneration</p> <p>Regeneration and rejuvenation of East London (former industrial district, poor community lacking infrastructure, job opportunities, etc)</p>	<p>Catalyst</p> <p>Social integration, through programs for job generation, education and community outreach</p>	<p>Accessibility</p> <p>Development of an accessible city and an increase in the level of living conditions for all inhabitants</p>	<p>Regeneration</p> <p>Boost growth and appeal. Improve the quality of life for local people and the image of Seine-Saint-Denis</p>
National	<p>Catalyst</p> <p>Strengthening a sense of community + uniting the nation, a "catalyst for economic and social good, not only in the host city but across the country as a whole"</p>	<p>Representation</p> <p>Highlight Brazil's success as an emerging power, reinforcing its status as a major and growing economy and visitor destination</p>	<p>Economic booster</p> <p>All citizens would be relieved from the recent economic crisis, actively involving those affected by the 2011 earthquake</p>	<p>Sport development</p> <p>Support the development of local sports facilities in mainland France and French overseas territories. Involving citizens involved under the "We are committed" banner</p>
International	<p>Soft power</p> <p>"Deliver the most sustainable OG of modern times"</p> <p>(David Stubbs, <i>Head of sustainability</i>)</p>	<p>Soft Power</p> <p>Sustainability goals on water conservation, renewable energy, carbon neutral Games, and waste management</p>	<p>Soft power</p> <p>Bolster Tokyo's role on the global stage promoting its advancements in the sustainability and technological sector</p>	<p>Soft power</p> <p>Games to be set as an inspiring edition. Environmental transition developing innovative tools and promoting widespread awareness</p>

LEGACY GOVERNANCE PROCESSES

WHO IS IN CHARGE AND WHAT IS THEIR ROLE?

A mega event provides a new policy space where **old and new actors interact** to negotiate the meaning of legacy and how particular visions are achieved. For this, **legacy bodies are created** usually after the Games take place to take forward the legacy for the host city. Their responsibility include the management of the Olympic Parks and integrating the built housing.

LEGACY	London	Rio	Tokyo	Paris
LEGACY BODIES	The London Legacy Development Corporation (LLDC) was established in 2012 by the mayor of London replacing the Olympic Park Legacy Company and the planning powers of the Olympic Delivery Authority (see appendix)	The Olympic Legacy Governance Authority (AGLO) created by the municipality of Rio after the extinction of the Olympic Public Authority but it was dissolved in 2019.	The Tokyo Organising Committee of the Games drafted a legacy reporting framework, with the Tokyo Metropolitan Government (TMG) in charge of implementing it.	SOLIDEO is delivering the works and execution of the operations. The Paris 2024 drafted in 2018 “The Legacy and Sustainability plan for the Paris 2024 Olympic and Paralympic Games”.
ROLE	Responsible for the regeneration legacy from the London 2012 Games including overall responsibility for the Queen Elizabeth Olympic Park, ownership of the permanent venues and development powers	Responsible to draw up proposals for the reuse of the Park and supervising and promoting “ legacy mode ” in return to “ game mode ” (a concept initiated by AECOM master planning).	Under the “Tokyo Sports Legacy Vision,” the TMG laid out a bold strategy for the future, to make efficient use of legacy facilities from the Games, and to increase the adoption of sports in the city, regardless of gender, age or ability.	As for Paris, the question arises, is there a legacy body responsible for maintaining the projects after the Games along with carrying post-Games reports?
				

LEGACY EVALUATION

Across the different sessions of the Games, the methodology of the legacy assessment is not the same. It differs according to the bid of the OG, depending on which objectives were met on time, which will be met after the Games session and which will not be met or have been forgotten. The description of the legacy also varied depending on the source. For instance, Official bodies Evaluation had positive connotations to legacy whereas, the research community or the media were critical about the legacies.

For London, Rio, Tokyo and Paris, different scales were taken into account to assess the legacy: at the scale of the city, the national territory and internationally. The legacy evaluation is also a necessary step in order to create long term strategies.

Who evaluated Olympic Legacies?

Official Bodies

- International Olympic Committee
- Governmental Agencies (e.g. Sports)
- Non-profits supported by the host city

Research Community

- Academia
- Researchers
- Journalists
- Media



How were Olympic Legacies evaluated?

Quantitative Approach

- Desk research
- In-situ data collection
- Polls, Surveys

Qualitative Approach

- Desk research
- Stakeholder Consultations
- Focus groups, Surveys

What was evaluated?

Bidding Promises

- Every host city bid on certain promises. Be it urban regeneration, improved transport infrastructure, social housing initiatives, increased sporting participation, economic boost, or providing employment opportunities.
- The evaluation was against the objectives set by the host city.

Indicators across 3 Main Themes

- Economic
 - Social
 - Environmental
- By Olympic Committee and scholars.

When was it evaluated?

Pre-Games Evaluation

- In order to assess the impact of the Games on the public realm.

Post-Games Evaluation

- Legacy evaluation was generally carried out after the Games took place after the sites were modified to long term use.
- A periodical evaluation is seen in the case of London. A decade evaluation is the most recent one by the LLDC and media critiques.

WHY AND HOW TO COMPARE?

COMPARATIVE ANALYSIS: OBJECTIVES

How to find a method to compare the last three Olympic Games - respectively London 2012, Rio de Janeiro 2016 and Tokyo 2020. The aim was to **identify the differences and similarities** of the last three events, in order to **synthesise** the elements that would make sense for the reflection on the **urban legacy** of the Olympics.

To carry out this work, it was decided to focus on different **themes**. These themes act as broad categories; they contribute to the understanding of the Olympics urban legacy. In choosing these themes, the **Olympic legacy bids** of previous host cities gave an understanding of the issues surrounding mega-events such as the Olympic Games.

For the previous Olympic Games and those of Paris 2024, certain common themes appear in the **legacy strategies** of the organising cities. For example, while environmental sustainability is a key issue today, it was also a major concern in the London 2012 and Tokyo Olympic bids, which is why it was chosen as a theme in the comparative analysis. Other recurring themes were taken into account, such as the economy, the sporting legacy, etc.

To ensure ease of comparison, **common indicators were used** (see appendix) within these themes that would allow to synthesise a large amount of information for each theme. For example, for the economic aspect, GDP growth, the number of jobs created and the increase in tourism were indicators used. This work has therefore led to look at six themes dealing with legacy, each of which has its own **indicators for comparison**, as shown opposite.



OLYMPICS AS A CATALYST FOR URBAN REGENERATION

SPATIAL LEGACY: OLYMPIC URBAN DEVELOPMENT

According to the International Olympic Committee, the Olympic Games should provide "sustainable environmental legacies". Among the most important of these legacies **are the sites that have been rehabilitated and revived in the host cities**. Therefore, the cities that submitted bids for the Olympic Games selected the locations of the **Olympic sites and stadiums according to the long-term planning and urban regeneration of these areas**.

The London bid team proposed to the IOC that the part of **East London was in need of regeneration**, and part of the aims of the Olympics was to completely transform this area that was lagging behind the rest. The idea was to leave a **lasting legacy or impact not just for sport but for the urban area**. In **consequence**, the Lee Valley was at a crossing point of a whole series of transport and environmental planning policies and initiatives and the Olympics gave a focus for immediate action.

While in Rio, the committee focused on the alignment of the Games plan with long-term city objectives, benefitting from the opportunity to revitalise some areas. The territorial strategy agreed on providing **four 'Olympic clusters' spread throughout the city: Barra, Deodoro, Copacabana and Maracanã**. The candidature team also highlighted that two of the zones of Barra and Maracanã were in areas of the city that were expanding rapidly and in need of housing and infrastructure and of which the Olympic Games could provide a catalyst for development. As a result, **each of the zones will share the impact of interventions and will benefit from Games-related projects** that fit with the long-term needs of the local communities and the city as a whole.

Tokyo aimed to bring the Two Zones concept, which could build a **bridge between the past legacy with the "Tokyo Waterfront City"** area where the main advancement would occur. The 'Heritage Zone' is home to several historic venues from the Tokyo 1964 Olympics that will be used again for the 2020 games. **Moreover, the 'Tokyo Bay Zone' promised to serve as a model for innovative urban development symbolising the future of the city**

For Paris, the bid focused that the Olympic Games is expected to accelerate regional development particularly in the Seine-Saint-Denis which is the main site for the Games.



OLYMPIC SITE IN EAST LONDON



OLYMPIC SITES IN RIO



OLYMPIC SITE IN TOKYO WATERFRONT

*Images taken from Google Earth, modified by the authors

SPATIAL LEGACY. FROM VISIONS TO REALITIES



QUEEN ELIZABETH PARK MASTERPLAN

LONDON

OLYMPIC SITES BEFORE AND AFTER



2002



2022

A Green Legacy



BARRA OLYMPIC PARK MASTERPLAN

RIO



2012



2020

An Abandoned Legacy



OLYMPIC PARK IN TOKYO BAY

TOKYO



2019?



2021

Legacy?

VENUES AND WHITE ELEPHANTS

SPATIAL LEGACY: BUILT VENUES

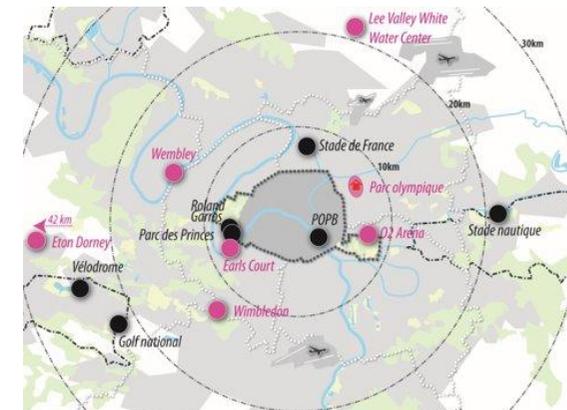
The spatial planning for the Games and legacy in London was formed in **the context of a broader strategic plan for the city, and this was key to understanding strategies to avoid white elephants.** White elephants are large infrastructure projects, parklands, and/or iconic venues that **are abandoned** and not used through **failures** to manage the high costs associated with the construction and to secure long-term management and uses.

The Olympic games were held in 21 venues within Greater London and 5 venues outside London and are compact in terms of distance in between. The venues were a mix of existing venues (40%), temporary (45%) and **only 15% were newly built** for the Games. Since the games, there is no sign of any white elephants left behind.

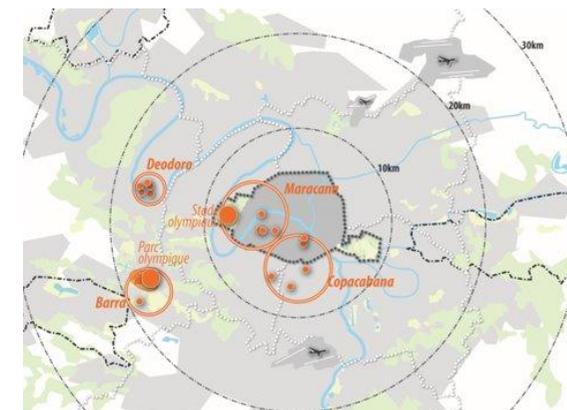
In Rio, there were 32 venues across the four Olympic clusters which are not in a compact form and **rather scattered around the city.** 50% of the venues were existing, 20% were temporary ones and **30% were completely new.** Contrary to the London case, Rio had witnessed the presence of many white elephants despite their effort to avoid them. Many sites such as the aquatic venue, handball venue, Maracana's stadium, golf site, Olympic velodrome and many others still stand left out **without any maintenance or re-use.**

Tokyo has the most compact Olympic sites in comparison with London, Rio and Paris. However, **due to the pandemic Covid-19,** the competition venues of the Tokyo Olympics were fiercely cut down, in order to lower the overall expenditure. Out of 43 Tokyo 2020 competition venues, **only 8 were built** specifically for the Games.

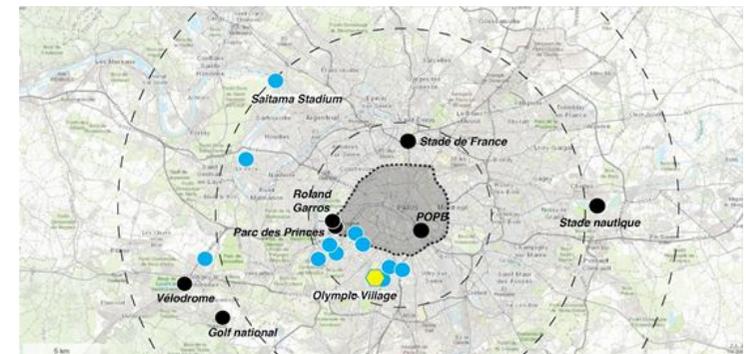
Paris being the first host city to apply the new norm of the IOC Agenda 2020, prioritised also the use of existing venues and infrastructure. **Only 5% of the venues will be new** while having 75% of existing venues and 21% of temporary structures. This strategy is step towards reducing the high budgets for the Olympics on one side, and avoiding unused venues in the future.



JOP LONDON 2012 ON ÎLE-DE-FRANCE MAP, Source : IPR



JOP RIO 2016 ON ÎLE-DE-FRANCE MAP, Source : IPR work



JOP TOKYO 2020 ON ÎLE-DE-FRANCE MAP, Source: Authors' work

A VECTOR OF USES: SPORTING VENUES & PUBLIC POLICIES

WHAT SPORTING LEGACY FOR THE GAMES?

Uniting the countries of the world through **sport, mixing cultures, sharing sporting activities**: this is what the legacy claims and aspires to be. By raising interest in sports, hosting the Olympic Games can lead to the launch of new training programmes, the creation of new facilities and the acquisition of new equipment.

In **London**, the International Inspiration sports programme has created more than 900 **sports-related projects** that have helped 12 million adolescents in 20 countries. In **Brazil**, the sports legacy is reflected in a public policy called "Transforma". It aims to **expand sports provision** in schools and promote Olympic values of excellence. In **Tokyo**, the **participation** of residents in sports **has risen** from 39.2% in 2007 to 69% in 2021. Finally, in **Paris**, the aim is to use sport as an **educational tool** to change the way young people look at **disability** and encourage them to take part in sports (Paris 2024 Organising Committee, 2021).

The host cities have also worked on the legacy of the built environment **through the Olympic venues**. In London, the five permanent sports facilities are open to the public and to sports competitions (Olympic Legacy IOC, 2013). In Rio, many of the infrastructures built for the event are now abandoned. This is the phenomenon of "white elephants" (TRADE R., 2016). Tokyo has tried to limit new construction, with the exception of a few notable facilities (the Olympic stadium, the aquatic stadium or the Ariake Arena). Finally, in Paris, 95% of the Olympic venues are already built, limiting additional costs and the risk of abandoning venues like those in Rio.

SPORTING LEGACY OF OLYMPICS GAMES - LONDON - RIO - TOKYO - PARIS

	London	Rio	Tokyo	Paris
Policies to favour youth sports	<p>National School Sports Week 14.000 schools and 5 million young people (2012)</p> <p>International Inspiration Sports Program. 900 sports-related projects - 12 millions adolescents in 20 countries</p>	<p>Transforma policy</p> <p>8 million young students, 16 000 schools, 3023 towns and cities -> benefited from sport offer expansion</p>	<p>Education program</p> <p>1 million Japanese students participated in Olympic and Paralympic education programs</p>	<p>'30 minutes of sport per day' N/A</p> <p>National day of school sport At the beginning of each new school year</p>
Olympic venues built	8 Olympic venues built	14 Olympic venues built	<ul style="list-style-type: none"> . Olympic Stadium . Aquatic Stadium . Ariake Arena 	Olympic swimming pool

ENHANCING SPORTING BEHAVIOURS

Through the Games, society evolves as well as urban (re)development projects, thanks to sport.

Changing sporting behaviours is one of the objectives of the sporting legacy. In London, Rio and Tokyo, one of the priorities of the legacy was to **facilitate access** to sports activities for the population and in particular for young people: Tokyo integrated sport into everyday life and for the 2024 Games, Paris is using sports to change the way young people look at disability and to involve them.

This objective **gives place to an evolution of mindset**, for the inhabitants of the host city as well as for the spectators and athletes who participate.

OCCUPATIONALLY SHORT-TERM, RESIDENTIALLY LONG-TERM

SOCIAL LEGACY: EMPLOYMENT & HOUSING

From the insights of former games, the social impacts of the Olympic Games are mainly occupationally short-term **and residentially long-term**. But even the long-term impacts are not always inclusive for all the groups and everyone in the city, though the Olympics games might always be regarded as a precious development opportunity for the whole city.

The two-week Games have always been an event that join people from around the globe. **The estimated numbers of new jobs provided are always dazzling**. But it is worth mentioning that **the economic benefit the citizens could obtain from the Olympics is relatively limited and sometimes unexpected**.

The **major positive social effect of the Olympics focuses on housing supplements**. In most previous Olympics, **the villages became major housing projects** after the games. In London, the Olympic Village was transformed into the “Queen Elizabeth Olympic Park” with more than 2,800 flats, of which 40% will be affordable, and 2,650 extra affordable housing near the park. However, not all the subsequent developments met the residential objectives of the poor. What is even worse is that eviction was usually **inevitable**.

Though the housing built is not always inclusive for all, **the subsequent real estate developments seem to be glamorous and attractive for all**. Tokyo was not aiming at transferring the Olympic village for future social housing in the first place. After the Games, the village is being continuously developed by major big real estate companies in Japan. The Village’s 3,600 housing units will be revamped and sold as private residences starting at \$445,000 to \$2 million per unit.

As for the 2024 Paris games, **affordable housing supplements share parallel progress with real estate development**. An average of **20%-40%** of housing units will be provided as affordable housing. The possible social impacts are still waiting to be evaluated but the tendency of rent increase has been observed.

Theme	London	Rio	Tokyo	Paris
 Employment	30,000 jobs	90,000 temporary employees 5000 permanent jobs	Estimated 1.9 million new job opportunities nationwide Much reduced because of the pandemic	150,000 jobs will be created for organising the games
 Housing	2,800 flats, 40% affordable 2,650 extra affordable In total 3,770 affordable housing	No social housing as promised Condominiums sold in the free market after the Games	No social housing planned at first place Olympic Village will be real estate developments	An average of 20%-40% social housing. Dugny, 20% of 1300 units ST-Denis, 25%-40% of 1715 units

COMPARATIVE ANALYSIS OF SOCIAL LEGACY IN FOUR CITIES
 Source: Statista, See appendix for other references

DECREASING COSTS? REASONS TO HOST THE OLYMPICS

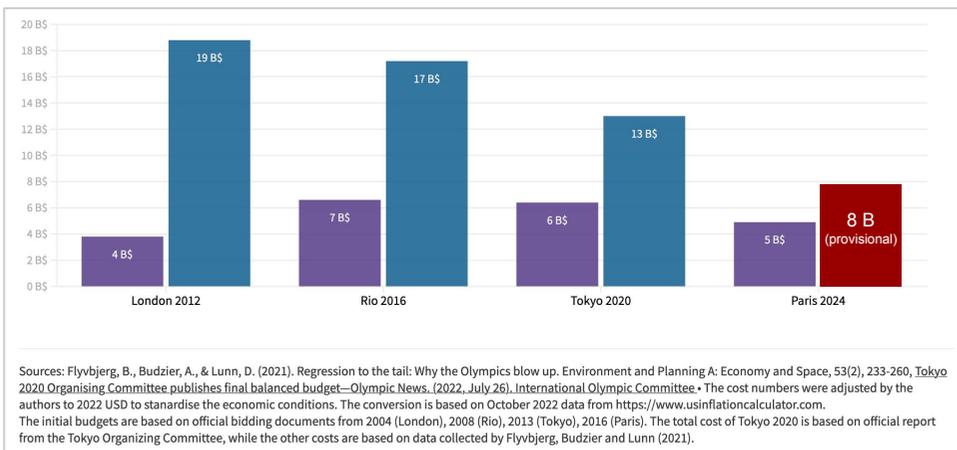
WHAT IS THE ECONOMIC LEGACY OF THE GAMES?

A recently published paper describes the costs of the Olympic Games as “**subject to infinite mean and variance, with dire consequences for predictability and planning**” (Flyvbjerg et al., 2021). According to the authors, different variables will come into play in generating unexpected costs for an organising city, with a phenomenon that will present unexpected costs “larger than the largest so far, and thus more disruptive and less plannable”. The same study provided an overall accounting of the cost of organising the sporting events of the Olympics as detailed in the figure, with costs for Tokyo 2020 derived from official numbers of the Olympic Committee. The chart shows the **overrun costs that each of the three cities had to cover**, with expenditures much higher than anticipated in the candidature phases of each Olympics.

It can also be noted how **the total costs of the Olympic Games tend to decrease** over the last three Summer Olympic Games, a trend that is mainly **due to fewer new venues built** from scratch compared to previous Games.

For the three cities taken into account in this analysis, other economic aspects include the number of new jobs generated by the Games and the increase in tourism. These factors have a **direct impact on the “urban legacy” of Olympic Games**. Regarding jobs, all three cities experienced a boost in new temporary workers connected to the organisation of the event, with London and Rio registering around 100,000 workers, but data on the job legacy of the Games are not definitive nor consistent. While for Rio there was a general depression of the economy during and after the Games, in London official numbers state an addition of 110,000 new jobs from 2012 to 2017. In Tokyo, projections show that the OG will help boost the job market.

The second aspect to take into account is **city tourism**. During the OGs, in London, there was a 1.1% increase in tourists compared to 2011, while Rio registered a 4.6% increase from 2015. Both cities experienced tourism growth in the following years, partly thanks to the media coverage provided by the event. On the other hand, Tokyo suffered in this aspect due to the Covid-19 pandemic, which forced a one-year delay with no tourists allowed in Japan for the Games. Nonetheless, also in this case projections show a future increase in tourism thanks to investments in infrastructures and facilities, which could push the country to reach 40 million visitors per year.



COST OF THE OLYMPIC GAMES: comparison between the initial bidding budget and the total cost of the last three Summer Olympic Games, in US billion dollars

SUSTAINABLE MEGA-EVENTS ?

WHAT SUSTAINABLE LEGACY FOR THE GAMES?

Are the Olympics letting a sustainable urban legacy over time ?

The 9 indicators based on the SDGs of Social, Economic and Ecological (Müller, M.2021) allowed us to quantify the sustainability of all the past Olympics with the same indicators. A downward trend over time, Barcelona were the most sustainable OG in 1992 while Rio (2016) were the less. Despite these measures, **the sustainability of the Olympic Games has decreased over time, particularly in its ecological and social dimensions.**

What made the games more or less sustainable?

London: Facility built on a former polluted site and enhancing biodiversity may leave a positive environmental legacy (+)

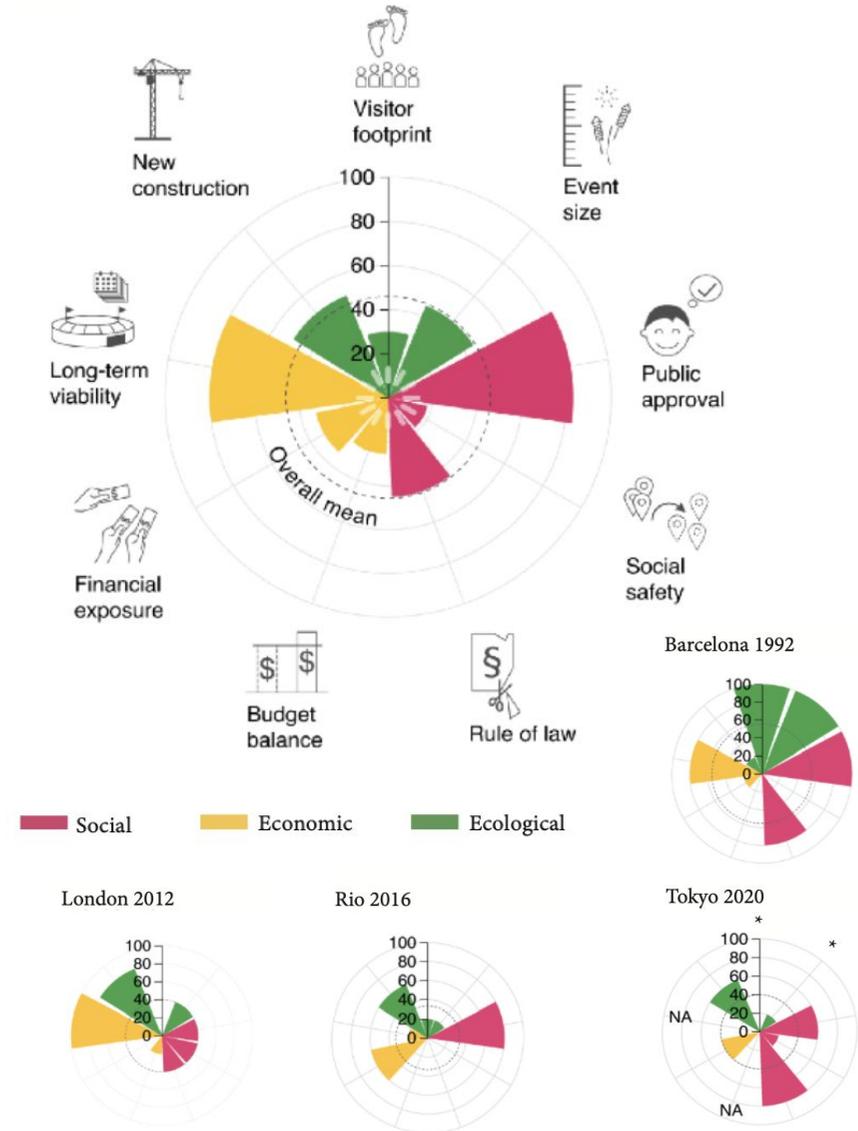
Rio: Bypassing laws and building in protected natural areas (-)

Tokyo: The aquatic centre was built on a former garden, contributing to soil sealing (-)

Paris: policies of regenerating biodiversity and improving the Seine water (+) / contested urbanisation (Jardins d'Aubervilliers, Parc de la Courneuve) (-)

These examples illustrate the importance of going back and forth between different themes to grasp all the factors making up the project to establish its legacy afterward. **It raise the question of creating or mandate an independent body to develop, monitor and enforce credible sustainability standards to ensure the legacy in the cities.** This will improve the current situation, where each Olympic host city sets its own sustainability targets and is not held accountable when it fails to meet them.

OVERALL MEANING OF SUMMER GAMES SUSTAINABILITY SINCE 1992



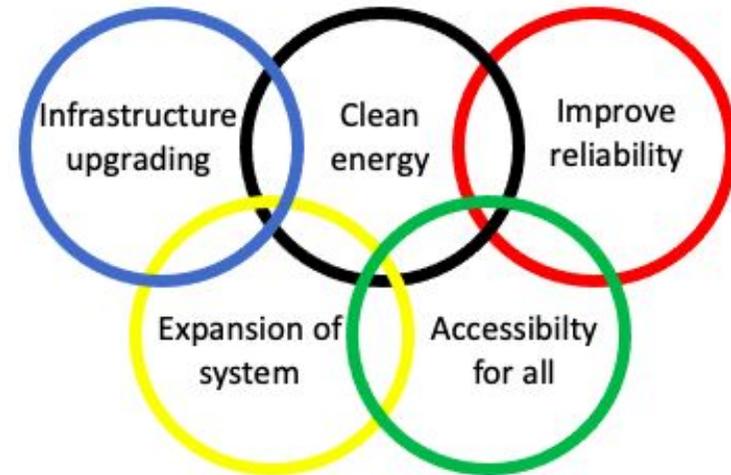
TOWARDS SUSTAINABLE MOBILITY AND FAIRNESS?

WHAT MOBILITY LEGACY FOR THE GAMES?

Mobility is a core issue in Olympic Games as it contributes to defining the “futurescape” (Adams, 2006) of the city, and a major theme to be taken into account when studying urban heritage. **The transportation infrastructure system built and/or renovated for the Olympic Games is part of the Olympic legacy strategy** as it shapes the urban fabric and redesigns urban mobility practices, both during and after the Games.

The **urban legacy in terms of mobility varies a lot from city to city**. After intense regeneration processes and hosting the Games, **Stratford (East) became the second most connected part of London after King’s Cross**, ending the enclaved of the neighbourhood and making it an attractive location for residents and businesses. In Rio, the legacy is contested by associations and residents both: **the new lines built for the Olympics only benefit the already favoured areas of the city and do not connect the most disadvantaged ones**. The study of Rio highlights the importance of questioning for whom the infrastructures are being built. In Tokyo, even though it is not yet possible to evaluate the legacy, it can be argued that as the city already benefited from an efficient transport system, **the improvements made for the Games only increased its resilience**.

Paris’ aim for the Olympic Games is to make all the sporting venues accessible by public transport. **The mobility legacy in Paris intertwines with the works of the Grand Paris Express project** (cf. Mobility section). Shuttle services connecting the city to the airports and clean-energy buses will be added to the existing transport system. The use of personal cars will be limited with the implementation of parking policies near competition sites.



MOBILITY IN DESIGNING THE “FUTUREScape” OF THE CITY AS PART OF THE OLYMPIC GAMES LEGACY - LONDON, RIO, TOKYO, PARIS. Source: Authors’ work

London	Rio	Tokyo	Paris
Improve and extend the existing mobility system Promote use of public transports and limit the use of personal vehicles Increased reliability			
Make East London accessible Station and tracks refurbishment	New connection from Barra to Zona del Sul - extension of line 4 of Rio’s Subway	Accommodate disabled users Increase use of renewable energies	To be seen...

02

Urban Legacy

How to define and assess urban legacy?

DEFINING URBAN LEGACY

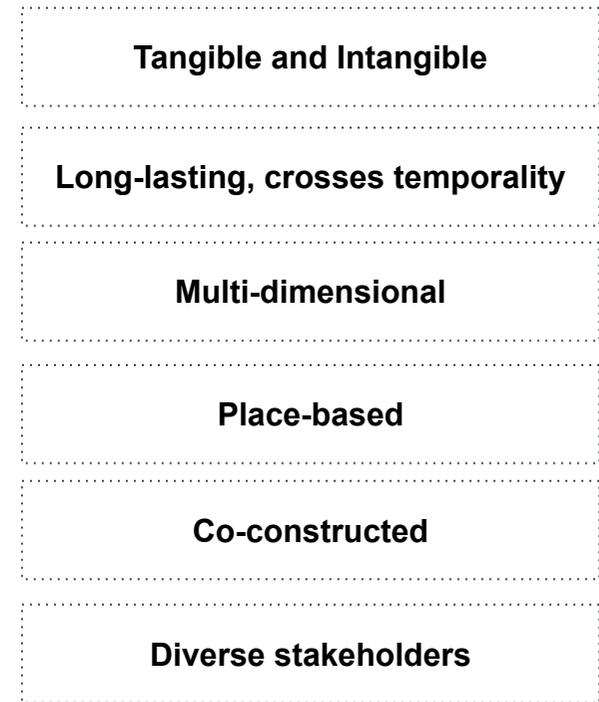
Observing the legacies of London, Rio and Tokyo, the Olympic Games induces spatially transformation of the urban fabric of host cities. Following the example of the 1992 Games in Barcelona one of the first cities to strategically integrate the Olympic Games for urban transformation, it has been a **growing trend for mega event host cities to bid on the promise of urban regeneration and renewal legitimising the concept of urban legacies.**

It is important to note that urban legacy has not necessarily resulted in a positive one but as noted in the comparative analysis, legacies are also contested. “Mega-event city building is not a monolithic process, and **urban legacies can also be resisted and challenged.**” (Sue Brownill, 2013)

Due to the novelty and complexity of the urban legacy concept 6 key characteristics are proposed in defining urban legacy based on Holger Preuss’ (2015) definition of legacy and the findings of the comparative analysis of the past three host cities including scholarly literature.

1. Urban legacy could be material, such as the transformation of the territorial landscape and immaterial such as its effect on society (tangible & intangible)
2. Urban legacy crosses temporality and scales. Its long lasting benefits are initiated or accelerated by the hosting of the Olympic Games (long-lasting)
3. Urban legacy refers to the effects and consequences we bear from previous actions, visions and strategies for the city. (multidimensional)
4. Urban legacy is place-based and territorialised between the city’s strategies and Olympics vision (place-based)
5. Urban legacy is a result of a co-created strategy through new governance processes (co-constructed)
6. Finally, urban legacy could positively affect some stakeholders where it could also bring negative outcomes for others. It is much more than the inherited infrastructure and encompasses people and biodiversity (diverse stakeholders)

In order to comprehensively assess the urban legacy of the 2024 Games in Paris, legacies through three transversal themes: Water and Greenscapes, Mobility and Public Spaces are studied.



URBAN LEGACY THROUGH 3 THEMES:



Water and Greenscapes



Mobility



Public spaces

HOW TO EVALUATE URBAN LEGACY?

5 PRINCIPLES

While the promises of urban legacies are convincing, **how to measure the long-term effects on the urban realm and over how much time?** “The evaluation of the legacy of the Olympics is a complex task that involves more than quantifying the potential revenue and expenditure” (Preuss, 2015). Accordingly, and taking into account the evaluation of previous Olympics legacies, five principles are to be acknowledged to evaluate the urban legacy for Paris 2024.

The five principles are as follows:

1. **Analyse through multiple dimensions and scales**
2. **Bring in the place-based approach**
3. **Respond to local needs and challenges**
4. **Acknowledge the plurality of actors**
5. **Respect the duality of legacy**

1/ Analyse with multiple dimensions

Since urban legacy does not only concern infrastructures but also encompasses urban life, nature, symbols, and landmarks, its evaluation should also focus on different **dimensions including green and waterscapes, biodiversity, public spaces, and mobility**. Such analysis has to address the multi-scalar impact of the Games, especially given that the majority of locations are outside the city of Paris. For instance, it is essential to look at the **neighborhood scale, the city level, and the metropolis as whole**. In view of this, and to better comprehend the complexity of urban legacy, the evaluation has to be carried out at **different times**, starting with pre-Games assessment (the present), and post-Games evaluation (6 months, 2,5 and 10 years after).

2/ Bring in the place-based approach

The Olympics legacy is not an isolated island but is highly associated with urban space and its facets. The 2024 Olympic Games sites and facilities are distributed around Paris, with the suburbs having a strong interaction with the existing urban fabrics. Using a place-based strategy which revolves around specific sites, it is possible to highlight the spatial features of urban legacy, which can then be applied to other sites as a model. Since Paris 2024 focuses on Seine-Saint-Denis as a main area for urban regeneration, the place-based approach would be specifically tailored to address new objects, namely the housing projects of the Athletes' Village and Media Cluster, the Aquatic Center, and the renaturation of Terrain des Essences.

3/ Respond to local needs and challenges

The two-week mega event will have a major impact on the inherent urban planning and project construction process. A successful Olympics will depend on what it leaves behind, a material legacy in the form of urban infrastructures, landscapes and architectures. However, it is critical to look at how the Games respond to local needs in its immaterial legacy. The Seine-Saint-Denis department is known to have its challenges and demands as one of the most deprived areas in the region: there is an unequal or absence of coverage of green areas in some cities, inadequate and inaccessible public transportation, and incoherent connections between public spaces. **The Paris 2024 Games should be evaluated according to the extent they address the existing needs of cities in Seine-Saint-Denis considering them and responding to future concerns without alienating local communities in the process.**

4/ Acknowledge the plurality of actors

Urban legacy needs to involve **different stakeholders with different individual initiatives**. Understanding who the stakeholders are is key to adopting a critical eye in the evaluation of urban legacy. This allows to interpret information provided through official documents and identify narratives in the public discourse. Around Paris 2024 many actors are involved, with different objectives and agendas. **The IOC aims for a successful Olympics, while SOLIDEO is concerned with delivering all construction projects on time. On the other hand, local governments such as the city of Paris and the Metropole du Grand Paris are more concerned by the impact of the Games after they take place.** The inhabitants are also major actors since they will bear the consequences, especially in Seine-Saint-Denis. Gathering different perspectives is essential in the analysis of the topics that are at the core of urban legacy and its different outcomes.

5/ Respect the duality of legacy

Urban legacy needs critical thinking of **both positive and negative aspects**. Legacy as a neutral term is not only about glory. It could be a burden or even a trap, as all things will be inherited for the next decades. While the IOC reports reveal only the positive outcomes of the Games for the host cities, the assessment of urban legacy should bravely face the duality rather than just present the positives. Objective evaluation that takes into account the negative impacts of the Games, as well as their triumphs, is indispensable and is usually carried on by ad-hoc legacy bodies along with local and national governments.

5 PRINCIPLES

ANALYSE THROUGH MULTIPLE DIMENSIONS

adopting a timeframe and a scale for evaluation

BRING IN THE PLACE-BASED APPROACH

defining the spatial distribution of issues and impacts

RESPOND TO LOCAL NEEDS & CHALLENGES

addressing existing and emerging demands

ACKNOWLEDGE THE PLURALITY OF ACTORS

assessing the stakeholders throughout the Games

RESPECT THE DUALITY OF LEGACY

looking at initial expectations and actual outcomes

5 PRINCIPLES FOR EVALUATING THE URBAN LEGACY

SEINE-SAINT-DENIS: A PLACE-BASED LEGACY

THE PROMISE OF PARIS 2024 FOR SEINE-SAINT-DENIS

One of the Olympics' main pillars stands to host the Games is the promise of reinvigorating the Greater Paris, pushing for economic and urban regeneration, using the Seine river as a unifying element. Seine-Saint-Denis is at the heart of the developments.

The photos on the right offers a glimpse of the department and its proximity to the Seine and Paris.



AERIAL PICTURE OF THE AREA Sources: Authors' work on Géoportail, 2022

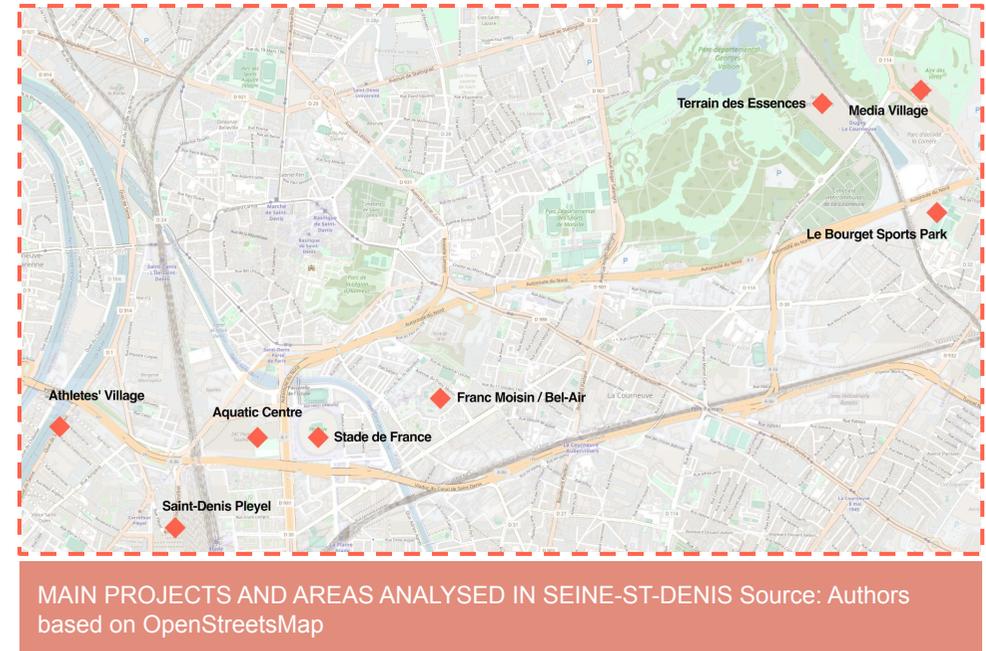
FIELDWORK PICTURES IN SEINE-ST-DENIS Sources: Authors' work, 2022

THE PROMISE OF PARIS 2024 FOR SEINE-SAINT-DENIS

Seine-Saint Denis located in Paris' northern periphery where the games will take place is comprised between Le Bourget airport to the east, and the Seine river to the west. It is a post-industrial, congested, polluted territory whose transformation is a real urban and social challenge.

For the Seine-St-Denis area, it is the opportunity of an urban acceleration, a challenge to improve the urban life quality and answer the social issues in a short period of time and with a lot of new investments. The new infrastructures will provide a new housing estates as well than sports facilities, suppose to reinforce the swimming teaching. This is also the opportunity to face climate issues and assure a better access to green outdoors places, to implement a well-deserved mobility network, quicker and closer to reach Paris or employment hubs (La Défense). Last but not least it's the possibility to give space and improve public spaces, offering a better access to facilities and welcoming places inside the neighbourhoods.

The promises made for the Games are appealing, however such goals need to be looked at with a critical eye to ensure the benefits and the respect of these promises. An analysis is required, focusing on a place-based approach to evaluate the consequences and the legacy inputs of this Games in the different areas of Seine-St-Denis where projects as been planned and set up.



In the following chapters the place-based approach will be addressed through the three main thematic that are raised for the analysis as they answered the main urban goals and promises from Paris 2024.

03

The Potential of the Blue Green Legacy

Looking forward to a much needed legacy

OPPORTUNITIES FOR A LIVING LEGACY, A GROWING LEGACY

WHAT IS THE BLUE-GREEN LEGACY?

The term blue-green allows us to **expand the definition of water and greenways by encompassing the entire green spaces and water network**, from the smallest scale to the largest. Indeed, it is important to see the close entanglement of these different forms in an ultra-urban context.

Studying this subject leads us to reflect on the **different typologies embraced by the term "blue-green"** but this is specific to each site. The richness of this theme is also its complexity. Indeed, it is necessary to understand both the extent of the networks that go far beyond the boundaries of the evaluation site and the external effects that have direct consequences on the site. Also, one works with the unexpected, a study material that is mobile, living, sensitive, perishable but also has the capacity to regenerate, evolve, grow, and strengthen.

The high expectations set by the organisers of the Paris Games are a real **challenge** and the outcome is still unknown (see figures on the right). Studying the potential legacy is an obvious necessity that may allow to protect and accompany in the long term what has been initiated for 2024 and will face new challenges in the future.



A LEGACY TO PREVENT Image Source Red! Reporterre, 2019



A LEGACY TO LOOK FORWARD TO Image Source: SOLIDEO

LEARNING FROM THE PAST

THREE OLYMPIC BLUE-GREEN LEGACIES

	LONDON, 2012 Queen Elizabeth Olympic Park	RIO, 2016 Barra Olympic Park	TOKYO, 2020 Olympic Village
Blue-Green Bidding Visions	Regeneration of East London communities and its environment. Legacy for the environment	A new biodiverse urban quartier that mimics natural local environment. Ecological principles to capture & improve water quality.	Dedicated themes “Climate Change”, “Natural Environment and Biodiversity” for delivery of Games
Current Situation	226 ha - parkland & open space 12 ha - woods with 13,000 trees 6.5 km - waterways	Abandoned	3,600 new housing units on 44 ha 2.6 ha - park 1.4 ha - greenway park
Blue-Green Impact	Ecological corridor connecting Thames, Lee Valley Regional Park and Hackney Marshes.		The parks created on the manmade island is serves mainly for the newly built apartment complexes.
Ecosystem Services: Supporting, Provisioning, Regulating, Cultural	Supporting - soil formation Provisioning - food for wildlife Regulating - climate regulation Cultural - recreational, aesthetic		Cultural - Recreational

London kept its promise in terms of leaving a legacy for the environment. The London Games resulted in creating a multidimensional park that is not only useful and open to the residents of East London but for all of London. Moreover, it created a biodiverse green haven for the urban wildlife. **A legacy for the environment, involves not just human centric uses but also centered around the other living beings.**

In the case of Rio, an opportunity to create a biodiverse neighbourhood was wasted and in Tokyo, it appears that the bayfront green spaces have been secondary thought and exclusive.



COLOSSAL GUIDELINES IN A SHORT TIME

BLUE-GREEN VISION OF THE PARIS BIDDING

The bidding document of the Olympic Games 2024 in Paris concerning the green and blue legacy is composed of big projects of **water management, renaturation of banks and wastelands.**

On water, the Seine is highlighted as the guiding element of the games. If this seems attractive and a positive point for the territory, it is difficult to imagine achieving such objectives in such a short time and one can wonder **how to continue the implementation of these initiatives after the games.**

On green legacy, the renaturation projects are at core, in addition to new pocket gardens in residential areas that don't seem to match the renderings produced for the new sites.

These projects raise issues at the regional level, as well as at the neighbourhood and residential block level. **It is important to remember that these projects must be integrated into an existing blue-green network.**



RENDERING OF THE ATHLETES' VILLAGE Source: SOLIDEO

BLUE-GREEN PROJECTS FROM THE PARIS BIDDING DOCUMENT:



The rehabilitation and enhancement of the River Seine and its canals that leave a lasting legacy, including enabling swimming again in its waters” (*part 1, p. 38-39*)

B
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“1.6 km of restored river banks and canals” (*part 3, p. 88-89*)



“Zero rainwater discharge into wastewater network” (*part 3, p. 88-89*)



The protection of new natural spaces and endangered wildlife within the protected Georges- Valbon parkland (*part 1, p. 38-39*)

G
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“More than 10 hectares of gardens, including shared and private gardens with a ratio of 15 m2 for each household” (*part 3, p. 88-89*)



“Enhancing natural areas within the city by with 100 new hectares of green roofs and walls, 30 new hectares of green spaces, and planting of 20,000 trees” (*part 1, p. 38-39*)

IS SEINE THE HEART OF THE LEGACY?

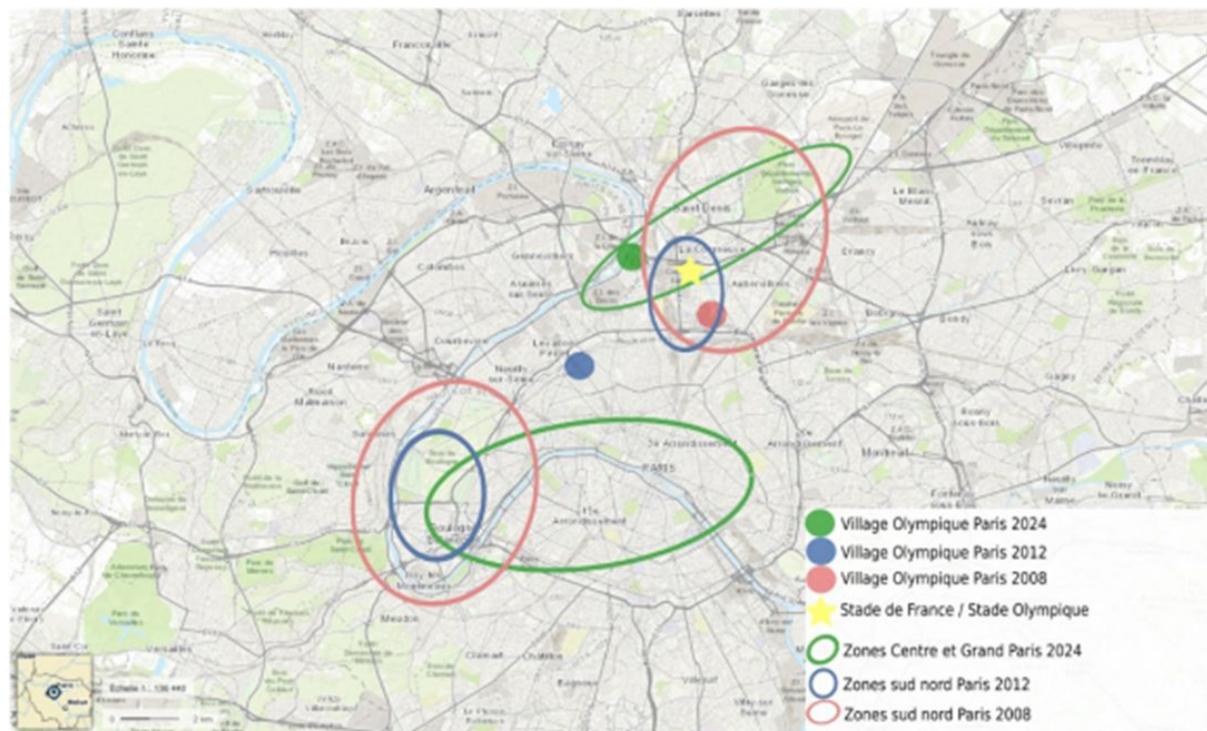
SEINE AS AN OBJECT OF AN URBAN PROJECT ACROSS SCALES

Paris 2024 has the ambition of **hosting the swimming competitions in the Seine**. The choice is made to occupy the Seine despite the scale of the work and the investments to be made. It offers the largest surface of water available in the two main sites determined, in Paris as in Seine-Saint-Denis.

Looking at the map of the Paris 2008, 2012, 2024 Olympic urban projects produced by Alexandre Faure (2020), the most striking difference with the territorial influence of the previous candidacies is indeed **the inclusion of the Seine on almost -all of Paris as well as along the three municipalities of Seine-Saint-Denis** where the Olympic Village will be located.

The Paris bid file reveals the Seine as increasingly considered by public action as **an opportunity to affirm a symbolic link on the scale of the regional territory**, in addition to being used as the element that will link the various sites planned for the sporting events of the JOP 2024, from Bercy to Saint-Denis.

When talking about the legacy for the Paris region, **it is bathing facilities and not only open water swimming competitions** that public action wishes to leave as a **“legacy”** when the Games end.



Synthetic map of Paris Olympic urban projects 2008, 2012, 2024. Source: Alexandre Faure, 2020.

Policies implemented to change the situation:

- **Equipping the wastewater treatment stations** of Valenton (Val-de-Marne) and Noisy-le-Grand (Seine-Saint-Denis) with systems to clean up the water discharged into the natural environment.
- **Resorbing bad connections** in homes to reduce contamination of rainwater by wastewater.
- **Prohibiting the discharge of sewage from boats into the river** (Olympic law) and equipping ports with connection facilities.
- **Promoting greater vegetation to flow rainwater into the natural ground**

OBJECTIVES FOR A BLUE-GREEN LEGACY

FROM A BROAD BIDDING VISION TO SPECIFIC OBJECTIVES

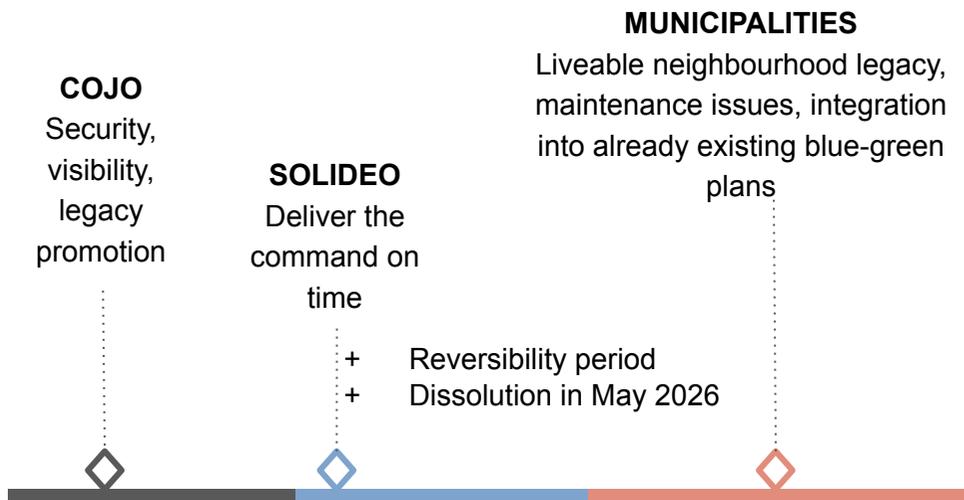
OBJECTIVES THAT DIFFER FROM OFFICIALS

First it's important to understand the **different timelines objectives of the officials** dealing with the games. In fact, if the COJO promote the legacy, it's only an intention and nothing will be made to have it respected after the games. **The SOLIDEO purpose is to deliver the command on time**, respecting the deals and the plans made before the games. The blue-green legacy is part of it but after the delivery there will be no more follow-up. Finally, the one benefiting of the long-term legacy are **the municipalities and its inhabitants, they will have to take in charge the legacy** left after the games and integrate it the long-term into the already existing blue-green plans, protection and maintenance.

OUR OWN OBJECTIVES FOR THE LEGACY EVALUATION

Looking at the existing needs, **the bidding vision and planned projects seem to be not in tandem**. In order to leave a positive blue green legacy there's a need to avoid the fragmented approach to addressing blue green projects/elements. Therefore, **we propose our objectives, stemming from our place-based study**, to evaluate more precisely the blue-green legacy and it's issues:

Creating a holistic and resilient Seine & Greenscapes for people, supported by strengthened policies.



- Long term uses, evolution of what has been implemented**
- Resilience to face the climate issues, a liveable area**
- Water and greenscapes access for people**
- Improved uses, inclusive / accessible spaces and well connected**

ATHLETES' VILLAGE: RECONNECTING WITH THE SEINE

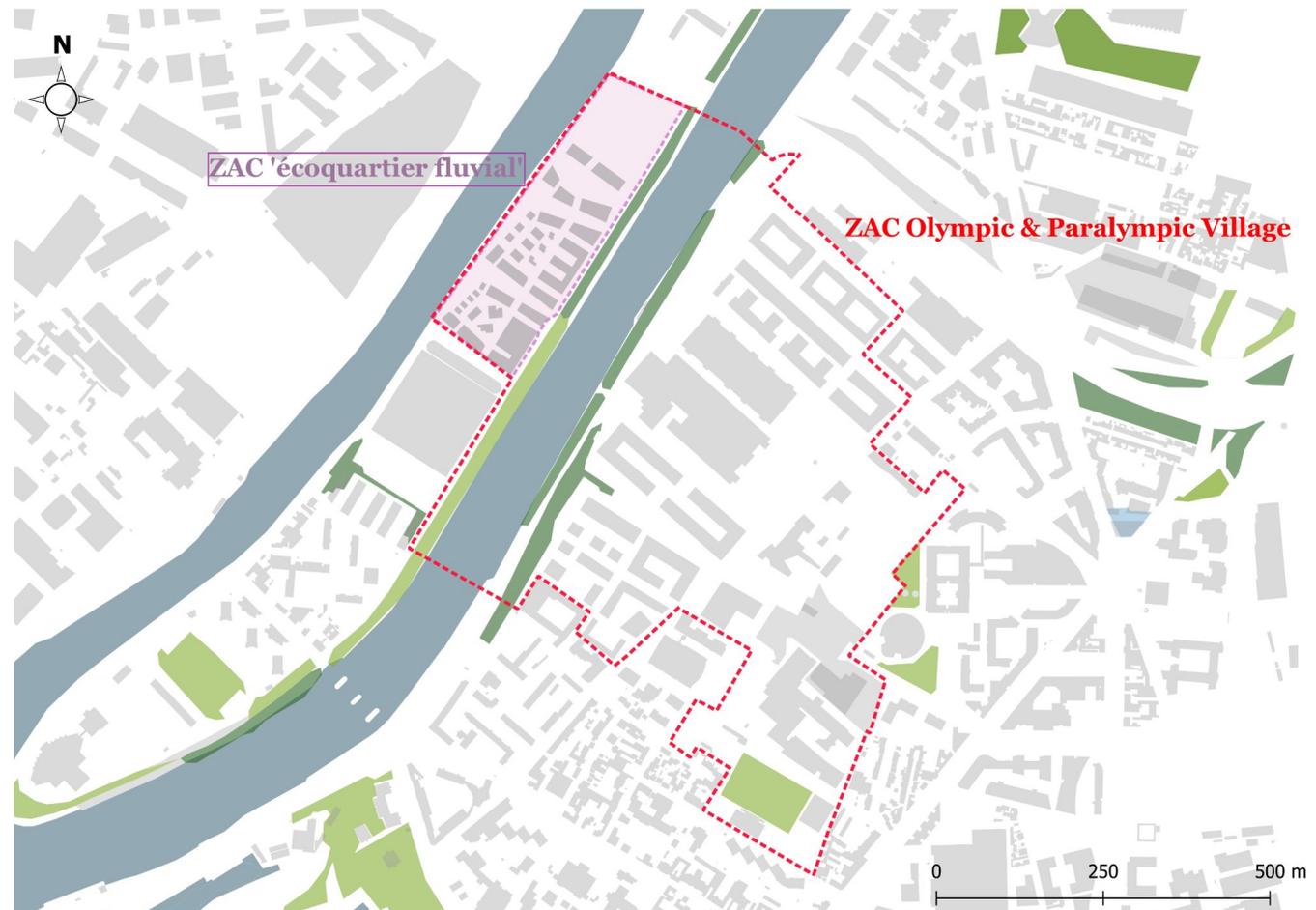
BLUE-GREEN AREA OF INTEREST

The Athletes' village is one of the main building projects for the Olympic Games 2024.

The Village is located in the Seine-Saint-Denis department, to the interface of Île-Saint-Denis, Saint-Denis and Saint-Ouen municipalities. Its particular location is mainly due to two ZAC: 'écoquartier fluvial' and the 'Olympic & Paralympic Village' one.

On the one hand, the ZAC 'écoquartier fluvial' was launched in 2007 by the Île-Saint-Denis municipality to create an **eco-neighborhood** on the southern part of the island. And on the other hand, when Paris was chosen as the host city for the Olympics, the **SOLIDEO initiated a ZAC to build the Olympic & Paralympic village including the ZAC écoquartier fluvial.**

Then, the Olympic Village will be deployed on the eastern and western side of the Seine, and where blue-green legacy will be at stake regarding the on-going projects: the eco-neighborhood & Olympic village with **green corridors, and the Seine as a blue corridor.**



athletes' village MAP. Source: Author's work 2022, based on Opendata Seine-Saint-Denis, Opendata ville de Paris

MEDIA CLUSTER: A NEW HUB FOR DIVERSE ACTIVITIES

BLUE-GREEN AREA OF INTEREST

The Media Cluster is an area located in Seine-Saint-Denis at the intersection of the municipalities of Dugny, La Courneuve, and Le Bourget. The site is structured around three projects, all included in the 'Cluster des Médias' ZAC.

The first one is the Terrain des Essences; **old industrial polluted site** neighboring the Georges-Valbon departemental park.

The second one is the area dedicated for the construction of the **Media Village**, hence the name of the ZAC 'Cluster des Médias'. Its purpose is to **provide housing** for the OGs staff during the competition, located in Dugny.

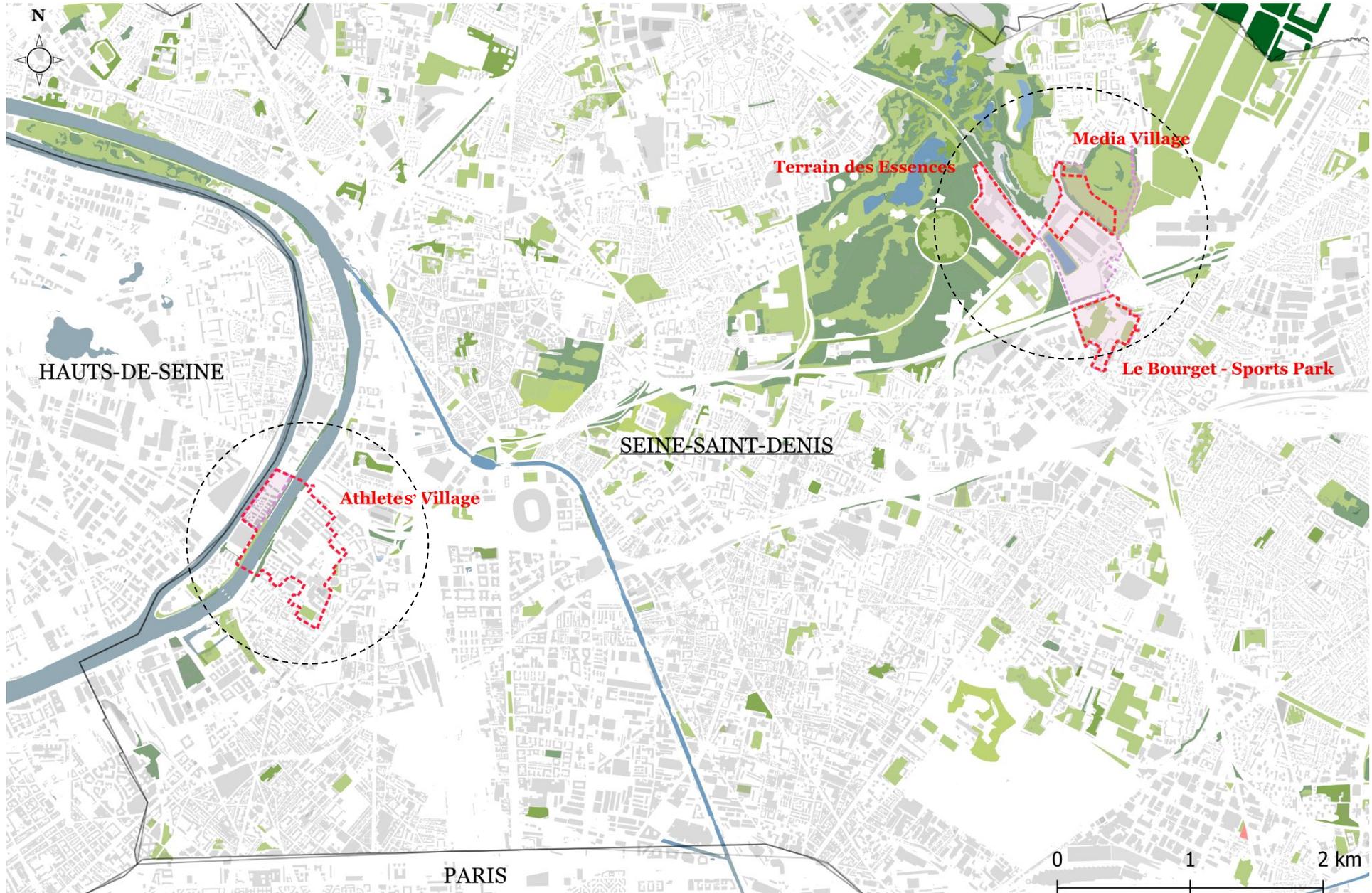
The third site is the **Sports Park 'Le Bourget'**, situated in the eponymous municipality near the Le Bourget Airport.

Those sites are interesting to underline blue-green projects & their legacy since they are **involved in renaturation plans** at different scales, and are included in ecological corridors strategies ('Trame verte et bleue').



MEDIA CLUSTER MAP. Source: Author's work 2022, based on Opendata Seine-Saint-Denis, Opendata ville de Paris

BLUE-GREEN CHALLENGES FOR SEINE-SAINT-DENIS

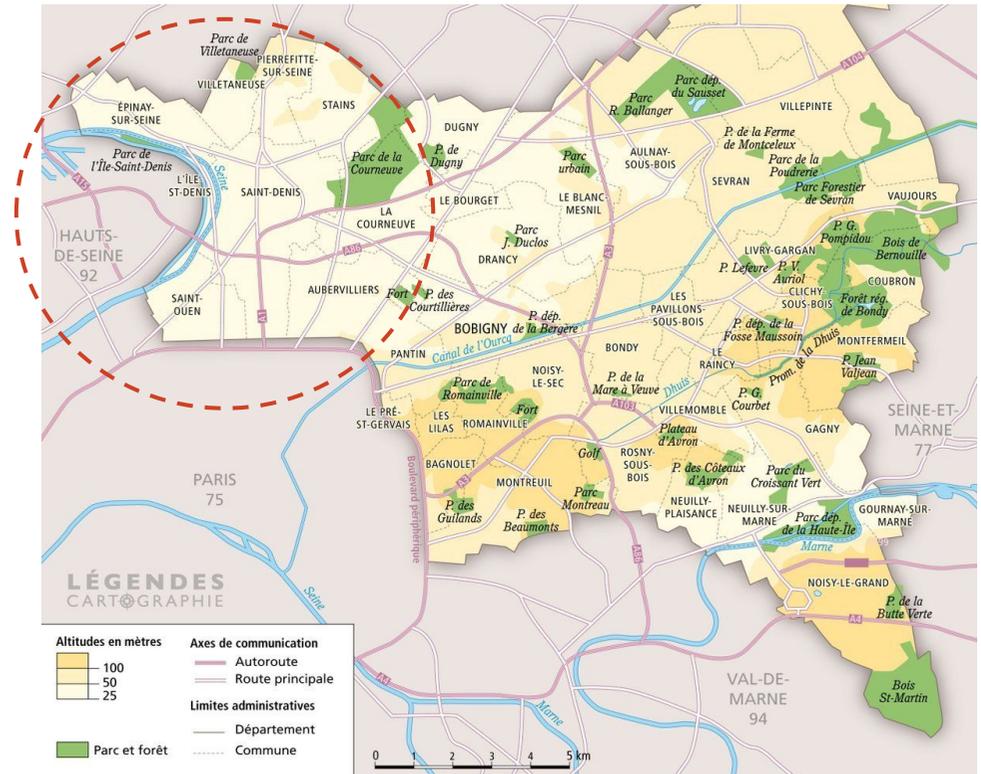
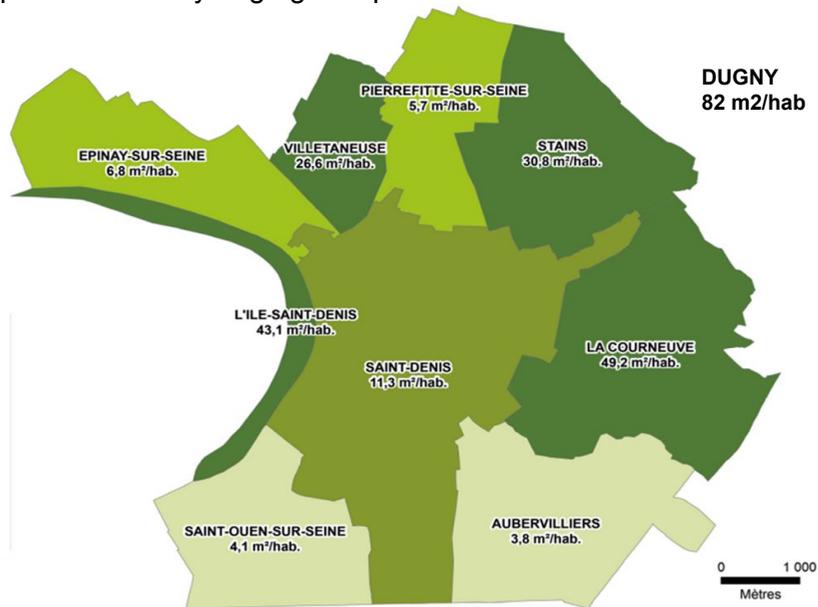


Map of areas of interest. Source: Author's work 2022 based on, Opendata Ville de Paris, Opendata Seine-Saint-Denis

AN UNEQUAL COVERAGE OF GREEN SPACES

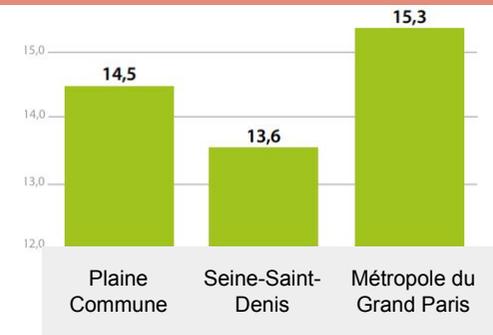
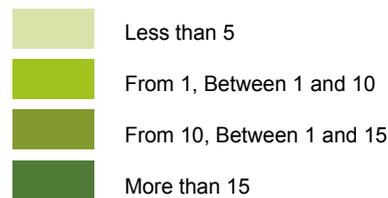
EXISTING NEEDS IN SEINE ST-DENIS: GREEN

The strong disparity of the presence of green areas between different territories raises strong issues of accessibility to green spaces. With **14.5 m² of natural spaces per inhabitant in 2019**, Plaine Commune has a higher ratio than Seine-Saint-Denis (13.6 m²/capita) but lower to the metropolitan ratio (15.3 m²/capita), knowing that the **advised proportion by WHO is 15m²**. The territory of Plaine Commune nevertheless presents a very **uneven coverage in natural areas**. Île-Saint-Denis (Departmental Park of Île-Saint-Denis), La Courneuve and Stains (Departmental Park Georges Valbon) as well as Villetaneuse (Regional Park of Butte Pinson), characterised by the presence of large green spaces, present of the very high ratios while the other cities in the territory are severely deficient with the exception of Saint-Denis where the area lacks the presence of any large green parks.



MAP OF FORESTS AND PARKS IN SEINE-SAINT-DENIS, Source: LegendesCarto

Legend: In m2 per inhabitant



SPACES WITH NATURAL CHARACTER ACCESSIBLE TO THE PUBLIC IN 2019
Source: Institut Paris Region - Base des Espaces Verts in 2020

A POORLY DEVELOPED RIVER RESOURCE

EXISTING NEEDS IN SEINE ST-DENIS: BLUE

Another considerable issue on this site is the **management of the river**. Such a presence is not negligible and calls for responding to potential floods since the site is located in the river plain. This sensitive site also represents an important potential to answer the needs of the inhabitants. **The river represent potential corridors and high quality environment. However, the river is strongly enclosed and embanked.** It's surrounded by cars lines and the banks are very steep as well as the perception of the river is hidden.



Potential floodings, more sudden and high



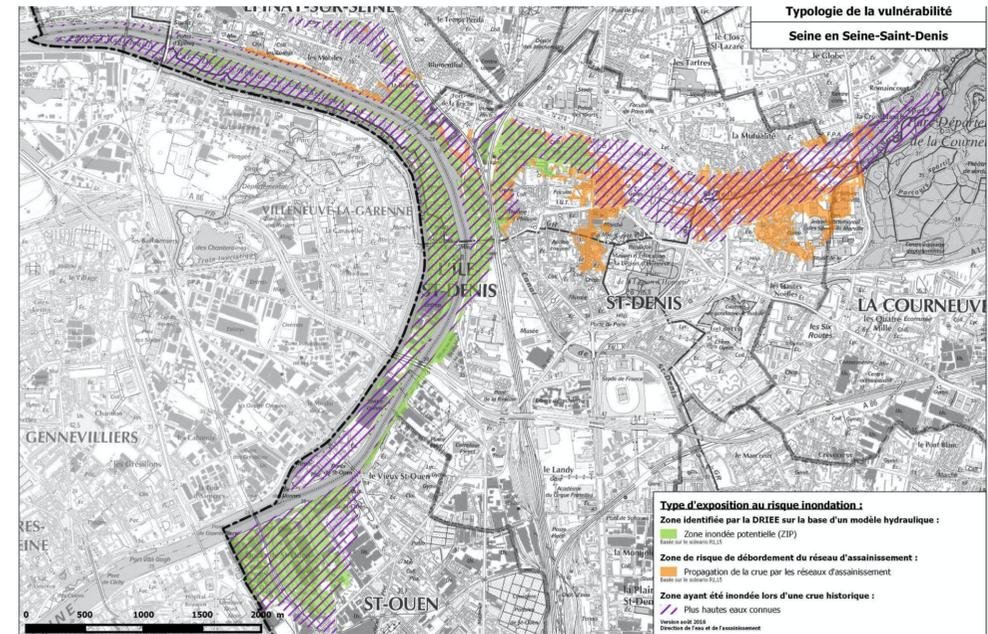
Limited pedestrian crossing connecting residents across the river



10 m wide banks with limited access or rest areas for pedestrians



Ultra dense urbanisation with poor quality environment along the river



SENSITIVE AREA STUDY REPORT, 2016 Source: Seine St Denis Département



ST DENIS ISLAND AND THE ENCLOSED RIVER ACCESSES Source: Saccage

HOW IS SEINE-ST-DENIS ADDRESSING ITS NEEDS?

AN OVERVIEW OF THE ONGOING PROJECTS

A Scheme for Green Environment in Seine-Saint-Denis

The Department of Seine-Saint-Denis has put in place a **policy of green spaces** to harmonise the urban landscape by preserving green spaces. The plan for a green environment (SEVES) adopted in July 2013 by the General Council responds to the challenges of maintaining the green spaces throughout the department. They demanded a **minimum surface area of green spaces of 12 m² per inhabitant**.

Trame Verte et Bleue in Seine-Saint-Denis

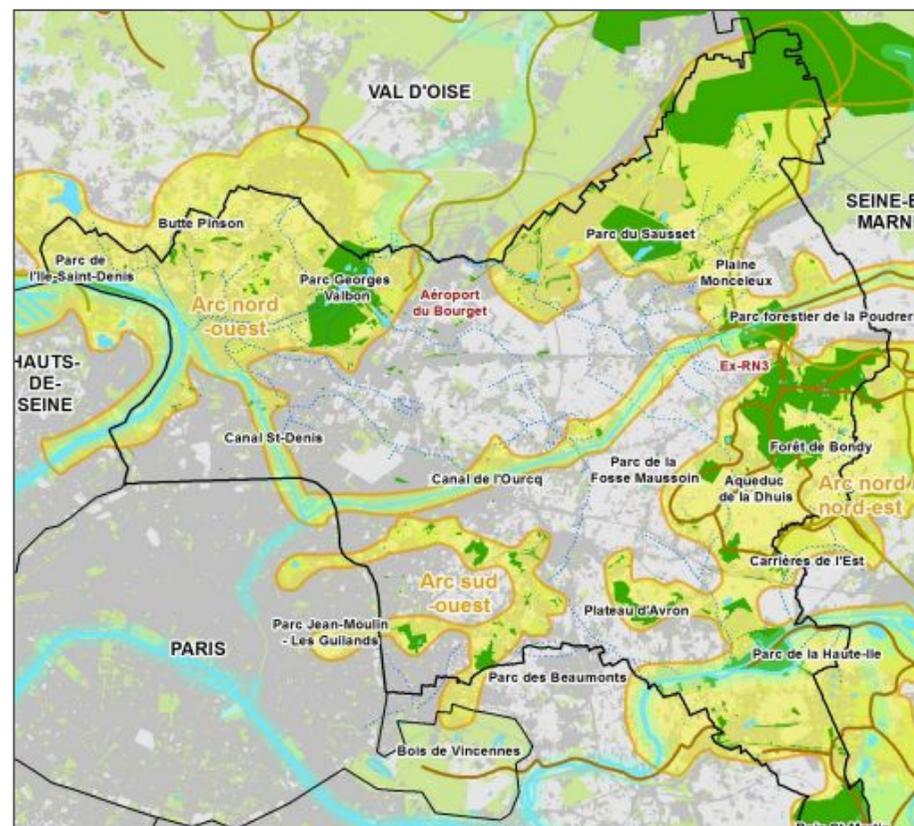
As part of the Seine-Saint-Denis green and blue infrastructure, the plan is also implemented in order to maintain the existing corridors and multiply the potential spaces in proximity to large reservoirs in order to **preserve the present urban biodiversity**.

Canopy Plan in Seine-Saint-Denis

Additionally, the Department of Seine-Saint-Denis has adopted in 2020 its Canopy Plan, which aims to **put trees at the heart of the urban landscape**. Through this strategy, the Departmental Council intends to strengthen its action in favor of ecological transition for the benefit of all its inhabitant with the main objective of **increasing the tree cover of the territory from 16% to 20% by 2030, and to plant 30.000 trees**.

Reinvent the Seine

The “Reinvent the Seine” project is aimed at **refreshing the Seine riverbanks in the greater Paris region** of Ile-de-France where the banks of the Saint-Denis, la Villette and Ourcq canals are also included.



- Water surface
- Open space
- Biodiversity reservoirs and complementary natural environments
- Corridor of the wooded sub-tram
- Corridor of the herbaceous sub-work
- The components of the blue sub-trame
- Busted watercourse
- Optimal envelope for the territory

THE COMPONENTS OF THE DEPARTMENTAL TRAME VERTE ET BLEUE-
PROPOSAL OF AN OPTIMAL ENVELOPE FOR THE TERRITORY.
Source: Seine-Saint-Denis departmental resources

A MULTIDIMENSIONAL APPROACH FOR EVALUATION

OUR METHODOLOGY

Our methodology for a blue-green legacy evaluation of the 2024 Paris Games involves a multidimensional approach where **data & analysis was collected and done for the two areas of interest**, the athletes' village and the media cluster.



- + Blue-green state of the art of past 3 Olympics
- + Paris OG 2024 blue-green research
- + Fieldwork



- + Blue-Green issues identified across four main pillars: **Governance, Social, Spatial, Environment**
- + Framework derived from the blue-green typologies



- + Objective defined for a holistic & resilient blue-green legacy
- + Present & potential actors mapped for a blue-green legacy



- + 4 key Evaluation questions raised
**EMBEDDED
LONG-LASTING
JUST TRANSITION
INTEGRATED NETWORK**

EVALUATIVE FRAMEWORK

To lead evaluation & analysis, it was chosen to pick up the **most relevant typologies** of the analyzed two sites to form the blue-green legacy framework. This different typologies do not have the same scale of influence and allowed us to focus on relevant **place-based issues** for the legacy evaluation.

WATER AND GREENSCAPES TYPOLOGIES



A LEGACY ON ITS WAY...

FIRST FINDINGS FROM THE FIELDWORK

By going to the venues, it is clear that the **legacy does not yet exist** and that the blue-green legacy is not a priority for the opening of the 2024 games. The assessment must be based on the needs of the chosen sites and their surroundings and the promises made.

** All pictures taken by the authors*



MEDIA VILLAGE, BUILDING IN THE PARK. 2022



ILE-ST-DENIS, THE HIDDEN RIVER. 2022



ST-DENIS, URBAN PATCHWORK. 2022



TERRAIN DES ESSENCES, NEW PARK AREA. 2022



ST-DENIS, STEEP RIVER EMBANKMENTS. 2022



OLYMPIC VILLAGE, FUTURE GREENWAYS. 2022



MEDIA VILLAGE, PRIVATE WATER RESERVOIR. 2022

INTEGRATING INTO A NETWORK ?

AN EXISTING NETWORK TO CONNECT TO

The below maps show the **existing planned corridors** in the Ile-de-France region, specifically in Seine-Saint-Denis. In both sites, there is a noticeable **absence of any green corridors**. In the athletes' village (on the left), the only green corridors are the ones from Pleyel Station but stop at Rue Ampere, and the second is part of the river banks in Ile-Saint-Denis. Whereas in the media cluster, green corridors are exclusive to the inside of George Valbon park and none is outside. **The Olympic Games projects are proposing new green corridors into the areas.**

PERMEABILITY



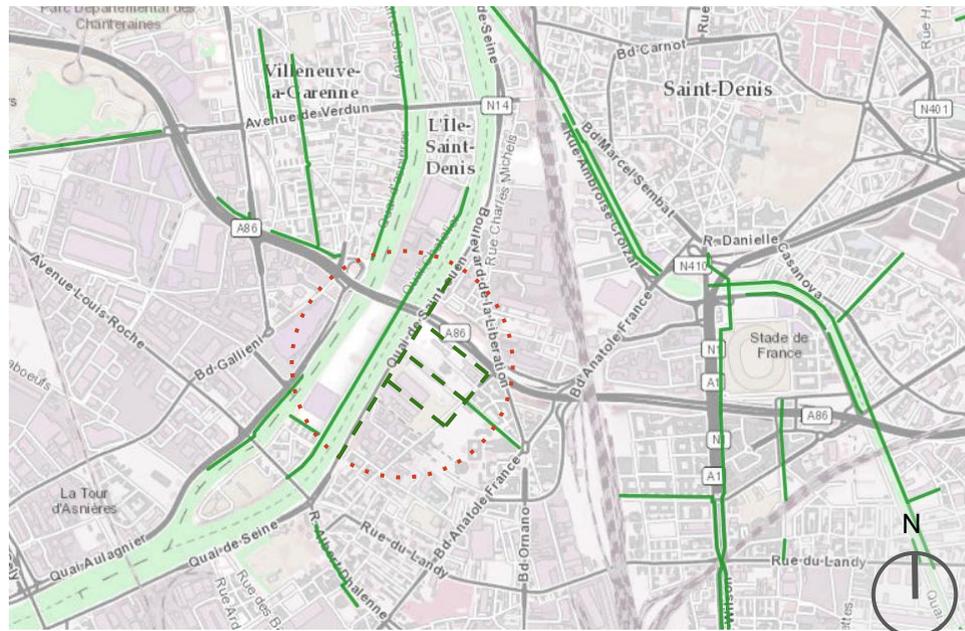
EMBANKMENTS



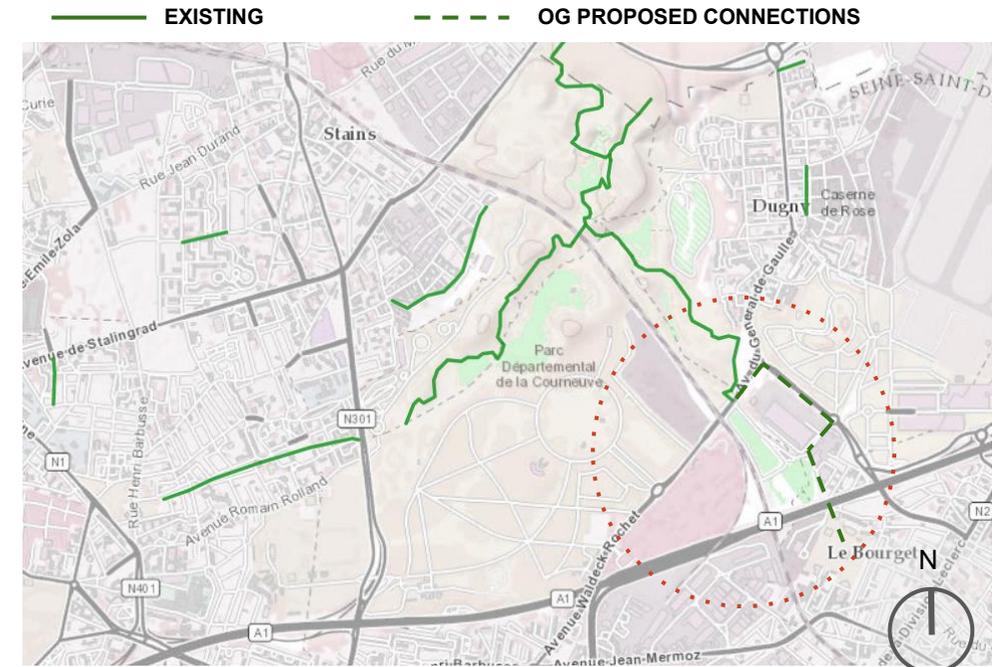
ALLEY



In the Athletes' Village, the corridors open to the Seine where the river embankments are being revitalised, **more than 6 green alleys are mentioned**. In the Media Cluster, **the main green corridors are in the conceptualised Garden City in Dugny**, in addition to the one linking the Valbon Park with the new Sports Park in Le Bourget. In addition, to the green corridors, the blue green projects initiated by the Olympics and are expected to remain as a legacy in the athletes' village and media cluster are shown in the following master plans.



GREEN CORRIDORS AROUND THE ATHLETES VILLAGE EXISTING + PROPOSED BY JOP. sources: Plateforme open data de l'Institut paris Region



GREEN CORRIDORS AROUND THE MEDIA CLUSTER EXISTING + PROPOSED BY JOP. sources: Plateforme open data de l'Institut paris Region

ATHLETES' VILLAGE EXPECTED LEGACY

BLUE-GREEN PROJECTS RESULTING FROM THE 2024 OLYMPICS

1.3 Ha Park

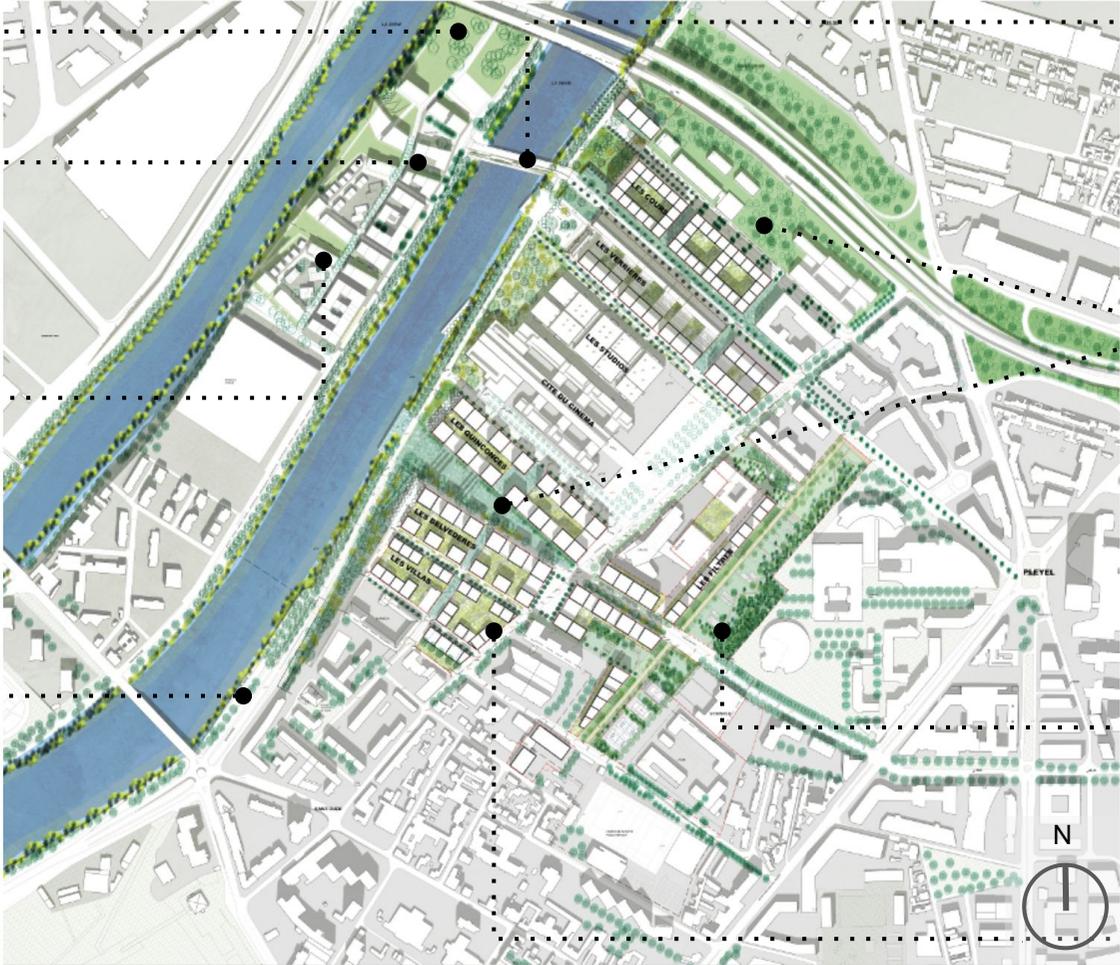
1200 m² Nautical base



Balconies 80%
Ecoquartier Fluvial Local renewal program since 2009



River embankments
1,6 km



Pedestrian bridge
140m



Pedestrian Promenade & Alleys: 1 mail + more than 6 alleys



2,5 Ha Park

Roof-tops
15 m² per flat

RENDERED PLAN OF ATHLETES' VILLAGE. Sources: Dominique Perrault Architects

MEDIA CLUSTER EXPECTED LEGACY

BLUE-GREEN PROJECTS RESULTING FROM THE 2024 OLYMPICS



1/3 Biodiverse Site in Terrain des Essence



13 Ha Renaturation Project in Terrain des Essence



Sports Park in Le Bourget: **1000 new trees** to be planted at the redesigned park



RENDERED PLAN OF THE MEDIA CLUSTER. Sources: TVK Architects



Garden City in Dugny: **11,000 trees** within the entire ZAC



Landscaping RD 50 : **2,800 m²** of planted area



One pedestrian Bridge on A1 connecting different sectors of Dugny and Le Bourget

GREEN SPACES AT THE HEART OF CONFLICTS

A CONTESTED LEGACY

The Media Cluster has witnessed the highest contestation in terms of environmental motives. First, a portion of the Aire des Vents that is initially part of George Valbon Park was sold to Solideo to build the Media Cluster. Also, despite the renaturation project of Terrain des Essence, the original idea was to accommodate the shooting competitions. This has additionally created a clash with environmentalists who claimed that it would severely disturb the biodiversity in the park. Lastly, the bathing project which was the department's goal imposes a threat to the biodiversity in the park.



RENDERED PLAN OF THE MEDIA CLUSTER. Sources: TVK Architects

Threatening Natura 2000

Bathing Project in La Courneuve Park initiated by the Seine Saint-Denis Department will lead to a loss of biodiversity according to MNLE 93

Disturbing Biodiversity:

Terrains des Essences Shooting events will disturb the biodiversity. Update: planned events relocate + contestation from MNLE 93 and Collectif pour le Triangle des Gonesses

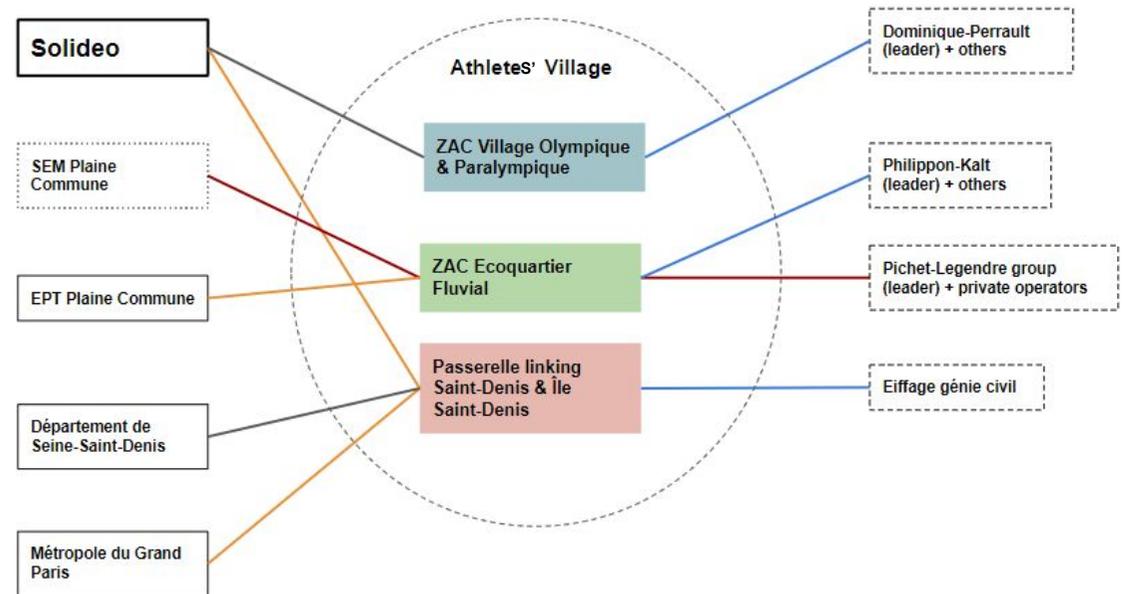
Building on Green Areas:

Media Village: Being built on Aire des Vents this urbanisation of a green space was contested by MNLE 93

WHO'S RESPONSIBILITY FOR A LASTING LEGACY?

THE **CURRENT** Athletes' village: STRONG COOPERATION

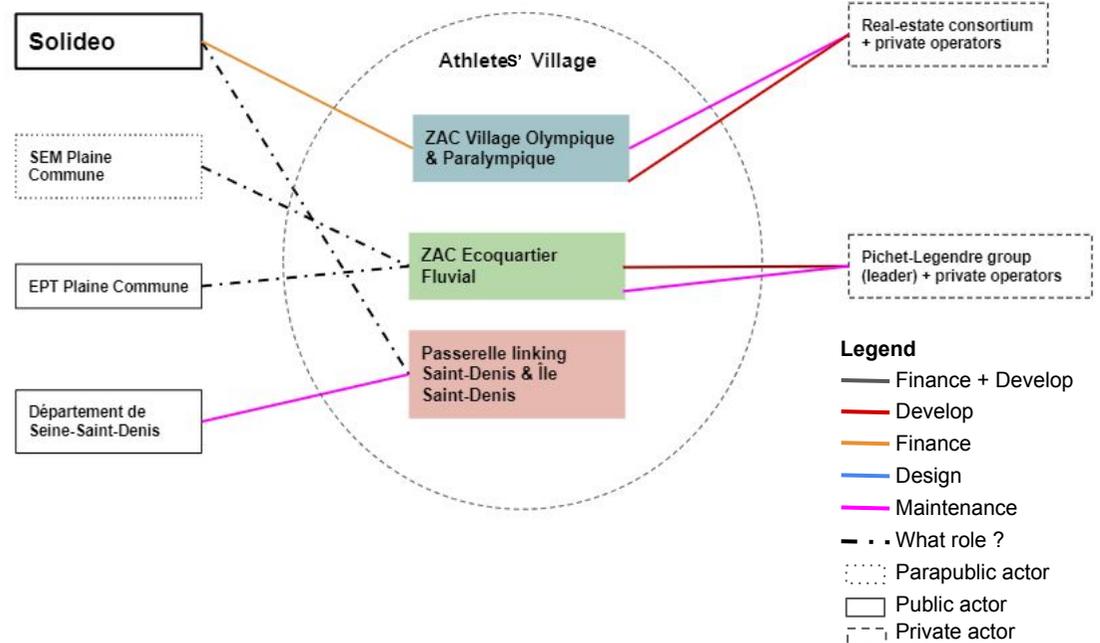
A complexity exists in the number of actors associated with the ongoing projects at the athletes' village. For example, the ZAC ecoquartier fluvial is developed by **SEM Plaine Commune** since the project started in 2007. Whereas, **SOLIDEO** is in charge of the **ZAC Village Olympique & Paralympic** and contributes to other projects on the site such as the bridge linking Saint-Denis & Île-Saint-Denis. The SEM Plaine Commune & SOLIDEO chose urban planners & architects **private firms** to design and are creating a blue-green network (Dominique-Perrault, Phillipon-Kalt). But what is the strategy for the river Seine on a long-term basis?



THE **FUTURE** Athletes' village: MANY UNKNOWNNS

How to think about the **future governance of the athletes' village?** While some functions will be carried out by certain predefined actors, such as the reversibility of housing provided by private operators, other unknowns are raising questions.

Will SOLIDEO have any actions on the maintenance of the blue-green elements that were created by them? What would be the role of the inter-municipalities (Plaine Commune), concerning the blue-green corridor along the Ecoquartier fluvial ZAC?



- Legend**
- Finance + Develop
 - Develop
 - Finance
 - Design
 - Maintenance
 - . - . What role ?
 - ⋯ Parapublic actor
 - Public actor
 - ▭ Private actor

WHO'S RESPONSIBILITY FOR A LASTING LEGACY ?

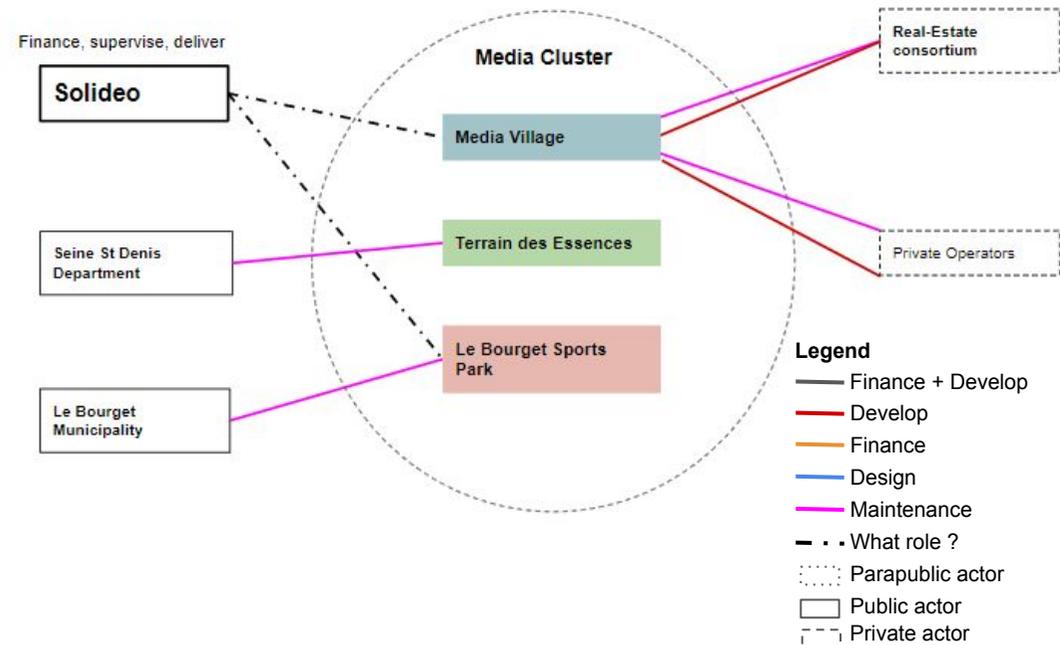
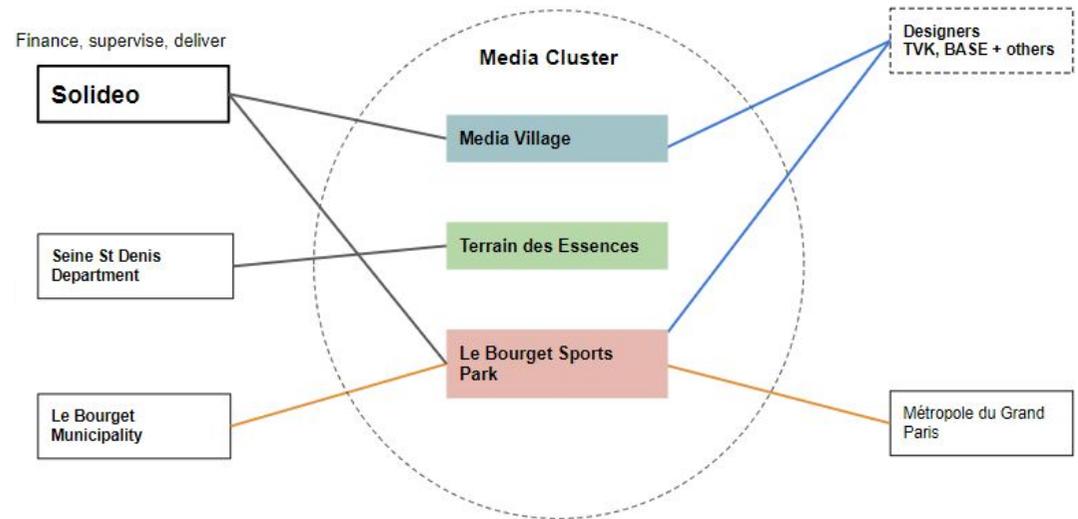
MEDIA CLUSTER PROJECTS: **ACTUALLY** LED BY PUBLIC ACTORS ...

For the Media Cluster, the SOLIDEO is the **main stakeholder** that develops and finance the Media Village and Le Bourget Sports Park projects. Thus, SOLIDEO fixes the blue/green requirements for the projects, overlapping **Departmental strategies** (Seine-Saint-Denis) of Trame Verte & Trame Bleue. For the Terrain des Essences, **the Seine-Saint-Denis Departement** is the main stakeholder in charge of renaturation. If the public sphere fixes the objectives in terms of blue-green, the private sphere is in charge of designing the projects.

... AND ALSO PRIVATELY DRIVEN IN THE **FUTURE**

On the media cluster site, **private operators will be in charge of the development and management** of the media village, while public actors will be in charge of the Terrain des Essences and the Bourget sports park. SOLIDEO remains the unknown: what roles will it have?

Is the role of SOLIDEO the Media Cluster limited to the reversibility works? Is the future maintenance of this alive legacy integrated across the complex network of local govts and management systems? Who is really accountable to maintain the blue-green legacy?



THE FOUR DIMENSIONS OF BLUE-GREEN LEGACY EVALUATION

Looking at the existing needs, the expected legacy, the actors in charge of the sites and the mentioned objectives to reach a long-term resilient blue-green legacy, we arrive at the idea that the evaluation questions should be supported by **4 dimensions** that will provide an effective legacy support. It is important to note that these pillars are **interdependent and interconnected**.



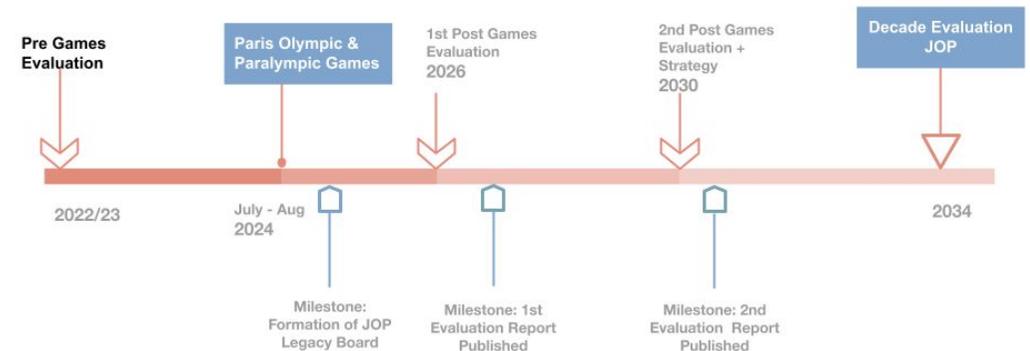
FOUR DIMENSIONS, Source: Author's work

4 dimensions were chosen that highlight the main concerns and needs of the blue-green legacy as a first step into examining the impacts of the 2024 Games on key areas of interest of this study.

HOW DO YOU MEASURE...?

We recommend a set of general evaluation methods such as interviews, focus or discussion groups, surveys of beneficiaries at local and regional levels, field observations, scientific studies, visitor experiences and social media responses.

A timeline is proposed for the evaluation of this alive blue-green legacy. The evaluation should take place periodically to fully assess the blue-green legacy.



EVALUATION TIMELINE, Source: Author's work

ASSESSING BLUE GREEN LEGACY

THROUGH FOUR EVALUATION QUESTIONS

1. EMBEDDEDNESS: To what extent are the Olympic Games addressing the need for more urban green spaces?

Dimensions: Social + Environmental + Spatial

Sub-questions:

- What is the **percentage of new green spaces** created in comparison to the dense built area in the Olympic sites?
- Will the legacy remain essentially confined to the ZAC perimeter of the Olympic works or will it be integrated in a larger scale?
- Are the inhabitants benefitting from the new projects in the Olympic sites?
- How are the olympics **contributing to enhancing the biodiversity?**

Indicators: Proportion of green spaces per inhabitant, new parks

Methods: Measuring green areas and comparing with previous proportions, measuring the quality ecologically speaking of this new spaces

2. LONG-LASTING: Has the legacy planning been limited to 'reversibility works' of infrastructure?

Dimensions: Governance + Environmental + Spatial

Sub-questions:

- How to **create multi-scalar comprehensive governance** to efficiently manage green/blue projects?
- How the **blue/ green legacy will be protected** in the future from urban pressures and densification?
- Will the quality of the Seine river still be a main concern after the games?
- Will the bathing sites be open for the citizens after the Games and not only for swimming competitions?

Indicators: Quality of water, well-established vegetation, biodiversity ratio, perception/feelings from the inhabitants

Methods: Survey to enquire about how the river is perceived, established a legacy stakeholders supervision, create a grid of maintenance values with ratio

3. JUST TRANSITIONS: To what extent are the Olympic Games contributing to environmentally just spaces and climate change adaptation strategies?

Dimension: Environmental + Governance

Sub-questions:

- Will the green and blue corridors (vegetation, waterbodies) be prepared /planned for **drought and climate change**? How they will evolve over the course of time? Will it allow the same uses?

Indicators: Permeable surfaces measures, renaturation ratio, biodiversity ratio, ecosystem services efficacy, inhabitants experiences of the place

Methods: studies of the evolution, climate measurements (rainwater fall, temperatures, humidity, livability, dead ratio, species appearances or disappearances ratio, landscapes transformation to be able to compare the situation)

4. INTEGRATED NETWORK: How are the Olympic Games projects linking existing open spaces and blue-green corridors?

Dimension: Environmental + Spatial + Governance + Social

Sub-questions:

- How to **connect the Olympic sites green-blue framework to other projects**?
- Are the uses created along the river banks harmonious or fragmenting the landscapes?
- For whom have the corridors been made (human/animals/vegetation)? Are they exclusive or mixed?

Indicators: Accessibility to green corridors, measure of trees and green elements, visual connection

Methods: Field observations, GIS surveys, people's perception surveys

KEY TAKEAWAYS FOR A LASTING BLUE-GREEN LEGACY

Analysing these projects, which are part of other local environmental strategies (such as the Canopy Plan) or departmental ones (Trame Verte et Bleue), questions arose.

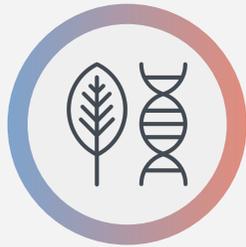
New projects lead to a coherent management of spaces; how to make them accessible, are they linked to other blue-green projects in the territory and what governance to establish as a legacy?

As highlighted in this study for a blue-green legacy, it is observed that in order to assess the legacy of the 2024 Games on blue-green elements one needs to **address the interlinkages of those elements**.

The athletes' village situated in a historically disadvantaged area and the Media Village encroaching a green space, should not just be known for its contestations but for a **blue-green legacy** that it plans to leave behind. Hence, we recommend the following:

RECOGNITION

The blue-green projects should be recognised as an alive legacy that requires care and maintenance for lasting benefits.



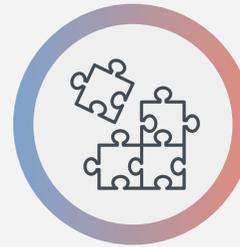
CO-OPERATION

There's a need of stakeholders who are sensible to the understanding of the alive legacy and who champion actions to leave behind a blue-green legacy.



ADAPTATION

There's a need to assess in the future how these spaces are used and perceived by the inhabitants and look if they are addressing the local challenges



INTEGRATION

What is the strategy at multiple scales ? Will the projects and developments will end up as a piecemeal developments ?



04

Mobility Legacy Reshaping Territories

A challenging legacy: how do the Olympics reshape mobility behaviors?

MOBILITY: A PANORAMA TO RETHINK LIFESTYLE

WHAT IS MOBILITY?

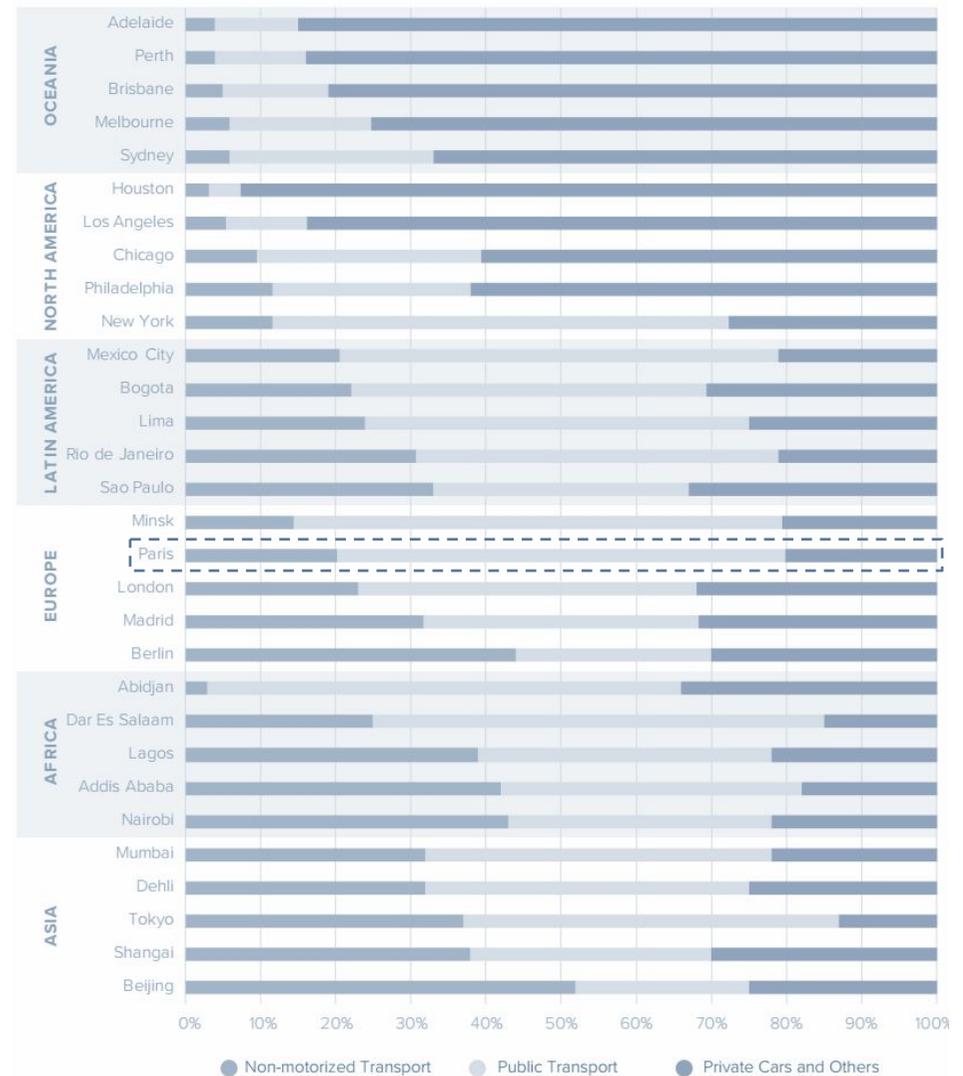
What does mobility stand for? In sociology, social mobility stands for the phenomenon of **shifting individuals within social space** (Sorokin, 1927), while in geography, spatial mobility means the **physical movement of people, goods, and information**. As for mobility in a city, it mainly means movement, which is the main component of everyday life. Mobility could be seen as a link between the various daily activities and the activity itself.

Mobility matters because how we move shapes the way we live.

From the 2018 report of the Global Commission on the Economy and Climate, we could understand mobility by observing the analysis of the modal share of most major cities in the world. Urban form and transport modes must shift for cities to meet 21st-century challenges. Larger cities in North America have typically invested heavily in car-based transport systems, with much urban land used for roads and car parks. Cities in Europe are more likely to have well-developed public transport systems and cycling networks. For example, **Paris has one the highest mobility shares of public transport while the share of walking and cycling still has a great potential compared with counterparts in Europe.**

Mobility provides us with a panorama to rethink our ideal lifestyle, as all our everyday activities are closely connected with the movement we have. By discussing the mobility legacy, **how the Olympics could reshape our lifestyle?** Will one have better quality public transportation? Will there be more cycling lanes? Will one no longer depend on private vehicles for work?

The answers to these questions will be embodied in our analysis of the mobility legacy of the Paris 2024 Olympics.



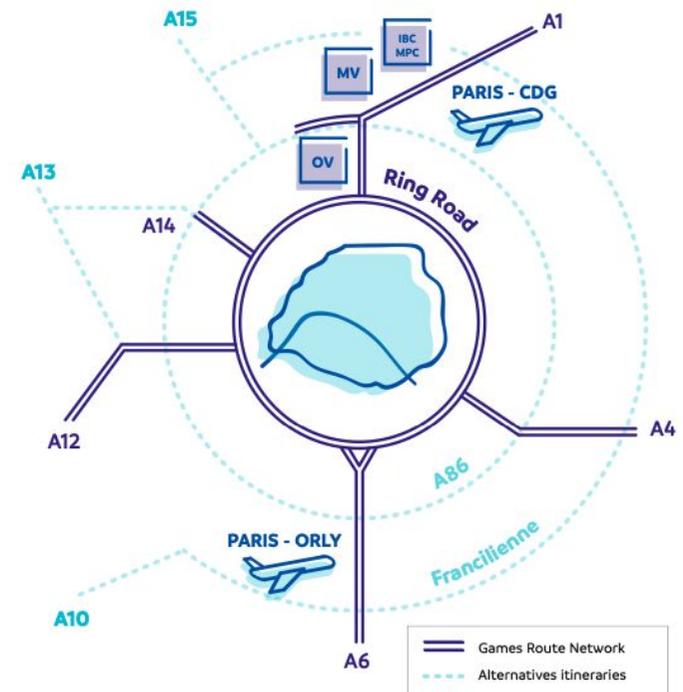
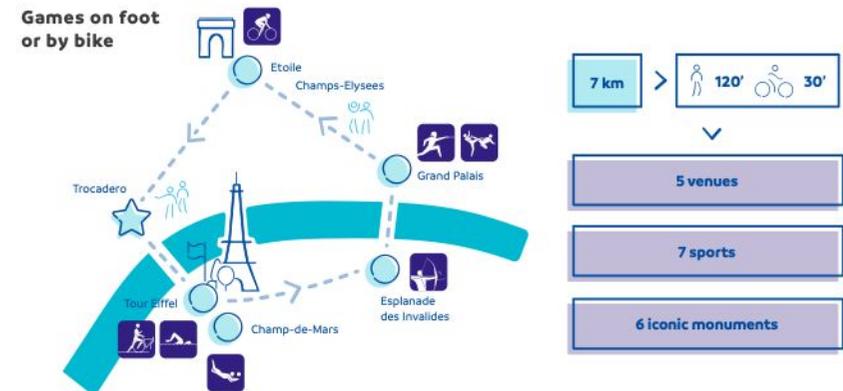
MODAL SHARE FOR LARGEST CITIES IN EACH REGION
 -DIVIDED INTO NON-MOTORISED TRANSPORT (WALKING & CYCLING), PUBLIC TRANSPORT, AND PRIVATE MOTORISED OPTIONS Source: New Climate Economy

PARIS' AMBITIOUS VISION FOR TRANSPORT AND MOBILITY

RELIABILITY, RESILIENCE, SPEED AND SAFETY

The Olympic Committee for the 2024 Paris Olympic and Paralympic Games has set ambitious goals:

- Delivering **compact Games** thanks to comprehensive road and rail networks: August traditionally experiences a decrease in traffic (17% on roads, 35% in public transport) allowing for a smoother experience during the Games. This factor in addition to different transportation improvements aims to guarantee that 85% of athletes are accommodated within 30 minutes of their venue and that the furthest venue is 45 minutes away from the athletes' Village.
- **100% of spectators travel by public transport:** to encourage the use of public transport, no additional car parking areas planned.
- **Free public transport for accredited individuals and ticket holders:** travel passes will be included in the price of the ticket. In addition to that, the Navigo pass allows access to alternative mobilities (Velib' bike sharing, Autolib' electric car sharing). Improvement of the pass are planned to allow purchase of tickets online.
- **Putting one of the world's best public transport systems at the service of the Games:** to the already efficient system, cycling and walking itineraries are to be elaborated to make the venues in the Paris Centre Zone accessible by foot and bike - part of Paris' ambition to become the world's cycling capital
- **Robust and well-tested transport governance and traffic management:** the purpose-built governance structure for transport (Coordination of Olympic Transport Operations) designed an efficient mobility system while ensuring minimal disruption to usual movements of residents. Expressways are planned on the main highways to ensure smooth traffic for designated authorities. The road network design includes numerous alternative routes for maximum efficiency in case of unexpected incidents and congestion.



METHODOLOGY: THREE SCALES OF MOBILITY

EVALUATION FRAMEWORK ON MOBILITY

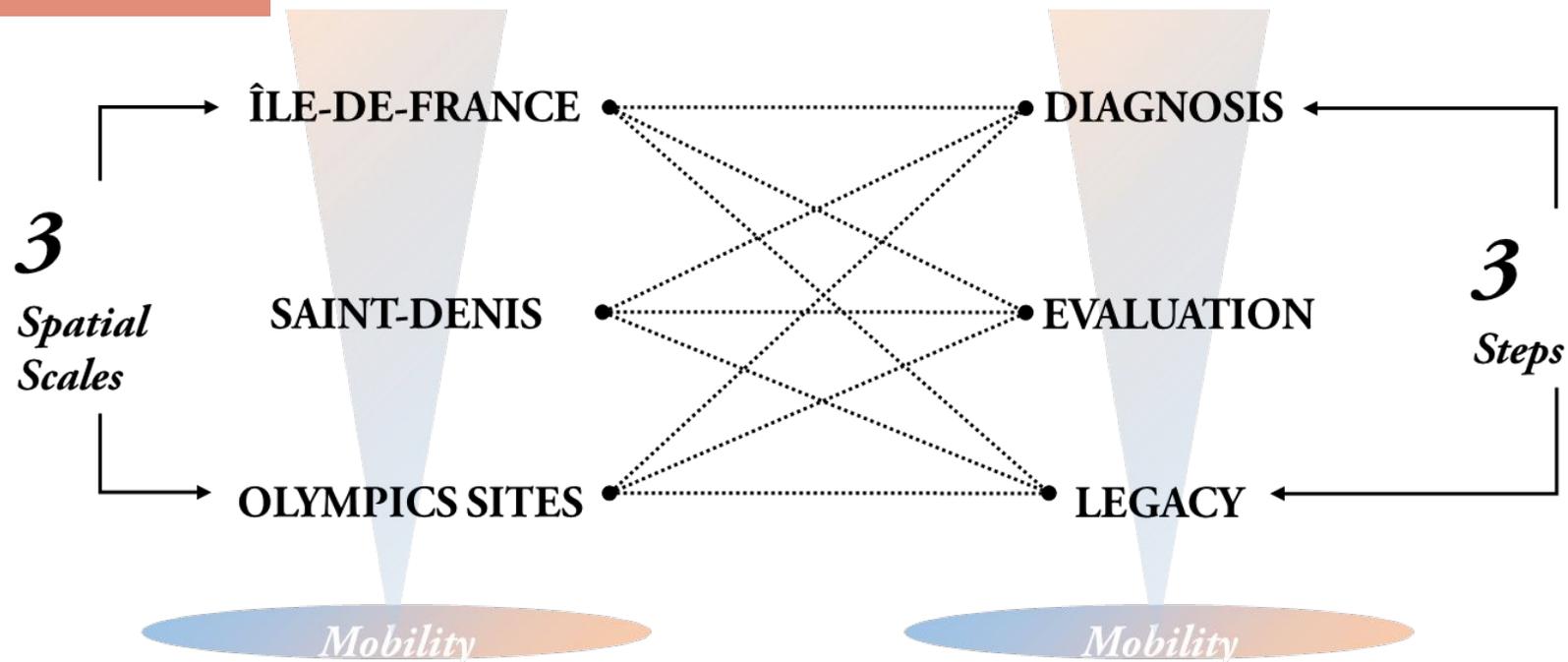
Mobility is strongly connected to geographical space. **The mobility of Paris could be better analysed under more specific spatial territories, which should include at least three spatial levels.**

Firstly, Île-de-France represents the regional level, focusing on the macro-regional issues of the great Paris region. Secondly, the Saint-Denis area, where most of the Olympic objects will be located, is a territory with administrative functions. **Plaine Commune is the scope of study at this level.** Finally, the Olympics sites are the district-level practice of mobility, with the implementation of infrastructures and mobility innovations.

Other than the three spatial scales, the legacy analysis will follow a three-step process. Firstly, the mobility diagnosis will provide a comprehensive understanding of the mobility features and challenges under each scales. Then, in the mobility evaluation, Saint-Denis Pleyel is the analysing object and evaluate the mobility legacy of this certain spatial container. Finally, answering the evaluation questions and propose a conclusion of the mobility legacy after diagnosis analysis and objective evaluation is adequate.

It is also important to point out that the evaluation framework is highly dynamic, as the three steps are always interacting with the three spatial scales throughout the whole analysis process.

METHODOLOGY Source :Authors' Work



MOBILITY IN ÎLE-DE-FRANCE: TERRITORIALLY UNBALANCED

A NEED OF MOBILITY SHIFT

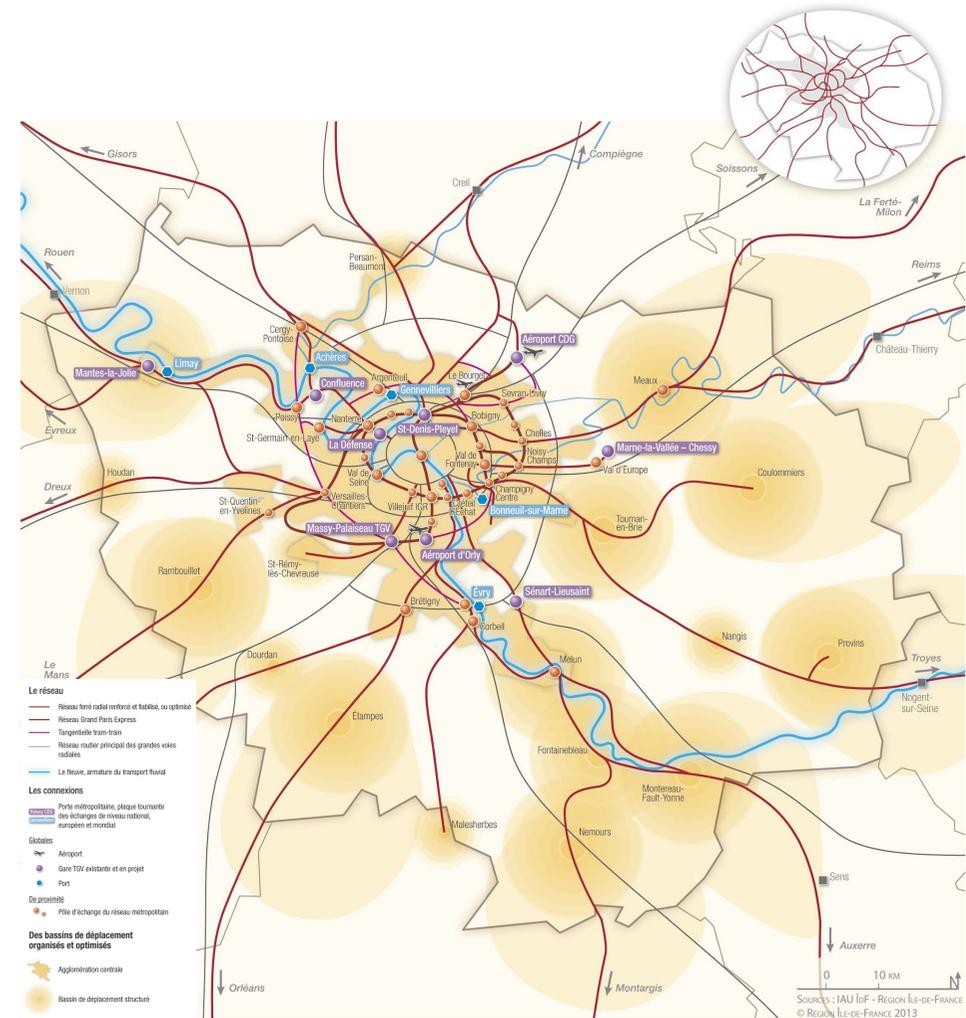
Île-de-France has already developed an efficient transport system in roads and public transport networks, which is an undeniable asset for the region. However, **this system remains territorially unbalanced and limited in capacity in the face of the evolution of travel demand.**

The Île-de-France 2030 master plan expressed an emphasis on the compactness of urbanised spaces, which can be defined as limiting urban sprawl and the average travel distance. **Increasing the compactness of urbanised areas** on a regional scale means locating additional inhabitants and jobs in the most public transport accessible areas. That also called for a shift in urban development: designing a life less dependent on cars.

It could be concluded that **there will be a shift of mobility development in the Île-de-France region**, as the criterion of speed is no longer essential. A more balanced regional mobility structure should be constructed, especially considering the newly developed urban fabrics in the inner suburbs. The quality of mobility, whether professional, recreational or domestic, should be emphasised, especially better public transport services should be adapted to these areas.

Thus, the **SDRIF(Le Schéma directeur de la région Île-de-France)** sets out four objectives for mobility :

- (1) To **modernise and optimise** the existing networks to meet the immediate needs of the people of Ile-de-France
- (2) To **meet the needs of suburb-to-suburb travel**
- (3) To **organise the public transport** offer in the inner and the outer suburbs in order to meet the increasing need to provide connections from one center to another
- (4) To **promote new mobility** systems



ÎLE-DE-FRANCE 2030 MASTER PLAN - LINKING-STRUCTURE
-A MORE CONNECTIVE AND MORE SUSTAINABLE REGION Source: Île-de-France 2030 Report 2

MAJOR STAKE : SUBURBAN AREAS WITH LOW ACCESSIBILITY

INSUFFICIENT PUBLIC TRANSPORT IN SUBURBAN AREAS

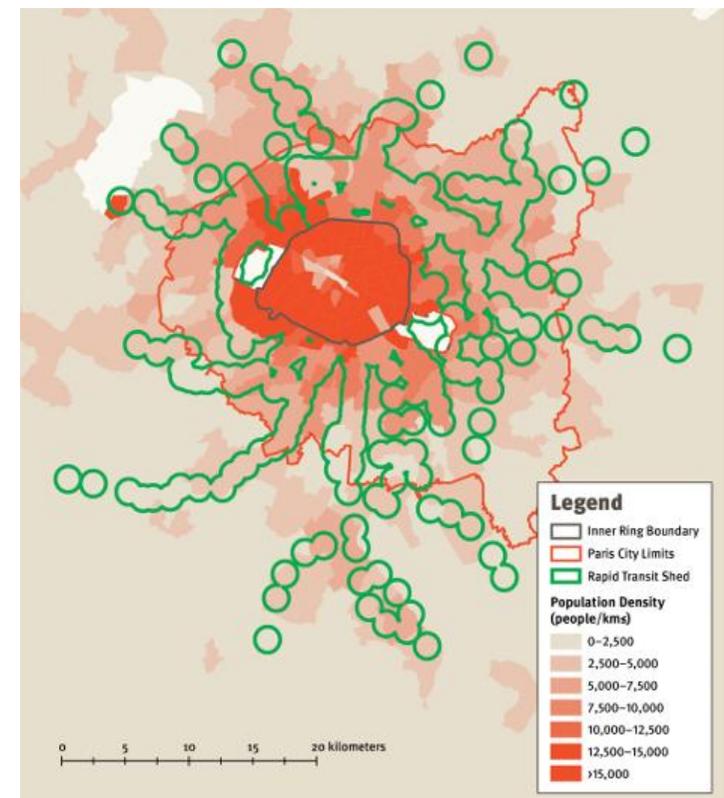
The Île-de-France region has **become unbalanced**, with a well-served centre, a dense urban fabric in the inner suburbs but with insufficient public transport facilities, and large suburbs depending on private cars. The imbalance between the center and the suburbs in transport development has attracted academic attention.

A new study by the non-profit New York-based Institute of Transportation and Development Policy (ITDP) has found that 100% of people in the city of Paris have easy access to rapid transportation. However, **in the suburbs of Paris, only 50% of people can claim that they have similarly easy access, which was defined as a kilometer or less from a train, bus, or metro line.**

Paris was one of the major examples of cities that have expanded beyond prescribed political boundaries without effective regional transport plans. Mass transit systems should grow as cities grow; yet in most cities, governments still rely on automobile traffic as the primary way of getting people around. In today's megacities, road space is already massively congested with car ownership presently at only 10-30 percent, yet building more roads remains a misguided top infrastructure priority. Governments need to better serve the other 70-90 percent of the population without cars, and provide better mobility choices for everyone.

- Clayton Lane, ITDP's chief executive officer

The map on the right shows exactly how this lays out. Living within the green borders including inside the small circles indicates proximity to stations. It is clear **that the further from central Paris you get, the easier it is to fall outside the green zone**. The study pointed out that just 2.2 million people live within the city walls, while 12.1 million live on the outside. The survey may come as no surprise to those who know the challenges of Paris, a city divided between its hyper-accessible center and harder to reach suburbs.



TRANSIT SHEDS AND POPULATION DENSITY
IN THE PARIS REGION Source : Institute of Transportation and Development Policy (ITDP)

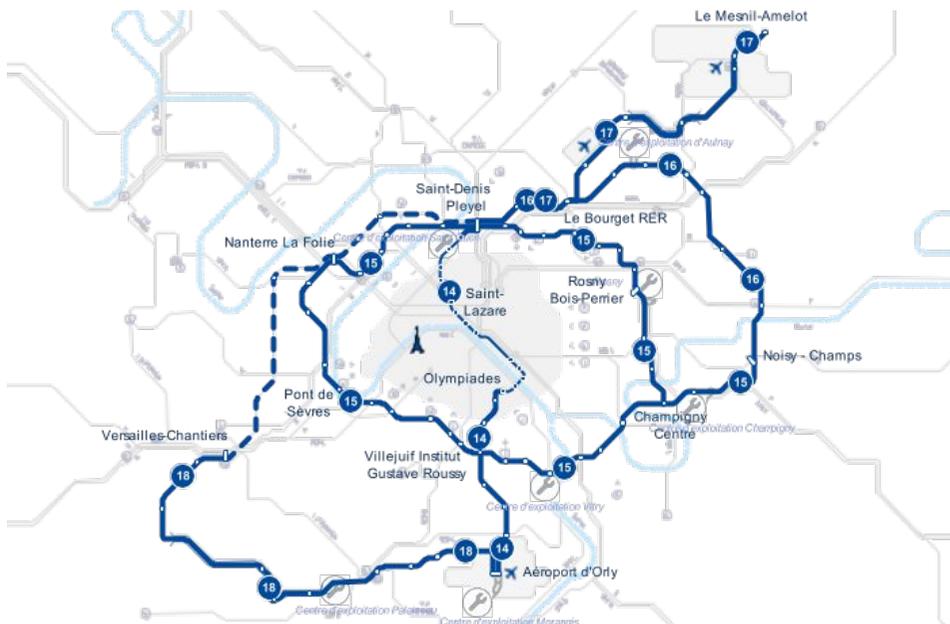
GRAND PARIS EXPRESS: A MUTUAL LEGACY

OVERLAPPING RELATION WITH THE OLYMPICS

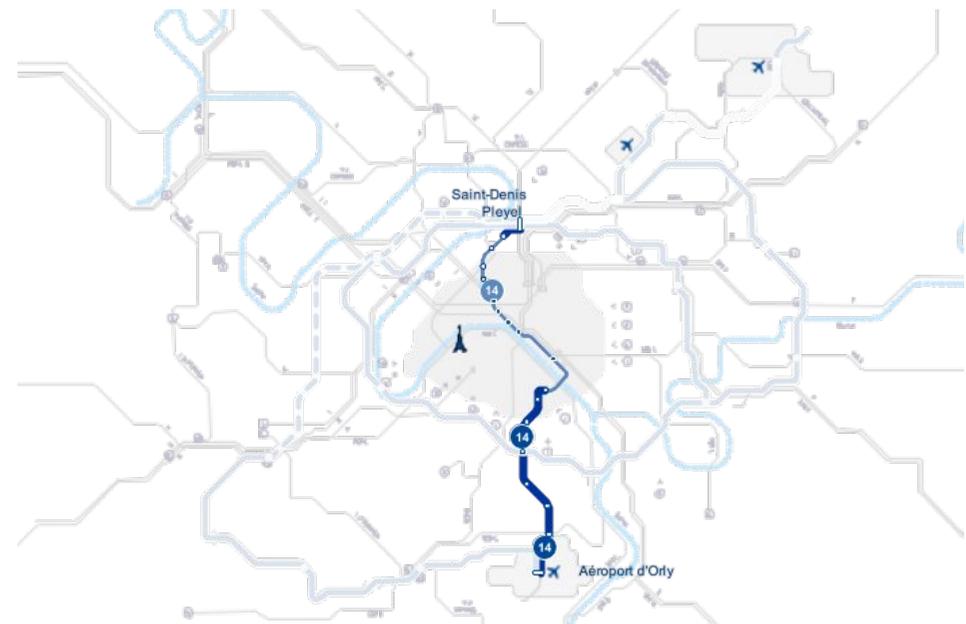
To enhance the connectivity of the suburbs, the **Grand Paris Express (GPE)** is the most significant transport project of the next decade in Île-de-France. The Grand Paris Express will complete the current transportation system with four new metro lines around the capital (15, 16, 17, and 18), serving the inner and outer suburbs. This transport network will gradually be brought into service between 2024 and 2030. With 200 km of new lines and 68 stations, 2 to 3 million passengers are expected to travel every day.

Before the Olympics, the northern extension of the metro 14 will connect the Saint-Denis-Pleyel Hub. However, other lines will not be

finished by then. **This reveals an ambivalent but also subtle relation between the major transport constructions and the Paris Olympics Games.** The GPE project was initially launched independently and helped cut down the budget of the Olympics Games as this massive transportation construction was not included in the 5 billion dollar bidding budget. However, the Olympic Games accelerate the construction and enhance the image of the Grand Paris. Technically speaking, most of the Olympic objects are not located in the city of Paris but within Greater Paris. This could be a starting point to understand the mobility legacy of the Paris Olympic Games, a mutual legacy of overlapping relation.



GRAND PARIS EXPRESS PLANNING IN 2030 Source : Societe Du Grand Paris



GRAND PARIS EXPRESS CONSTRUCTION BY 2024 PARIS OLYMPIC GAMES

MOBILITY IN SAINT-DENIS: INEQUALITY AND INJUSTICE

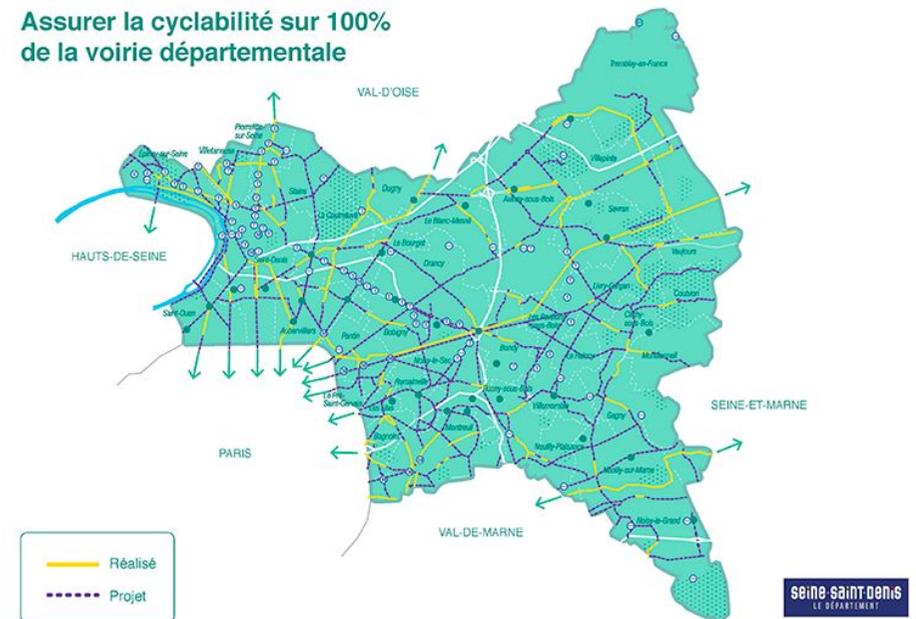
In the analysis of Seine-Saint-Denis, it is important to mention that the territory is not homogenous. Quite the opposite, it is highly fragmented and thus requires a careful and place-based analysis that cannot be generalised at the scale of the department. The INSEE clearly divides the departement into five different zones and the focus is on the one furthest West: Saint-Denis and Saint-Ouen as it is integrally part of the Olympic Strategy and thus legacy, unlike the rest of the departement. This zone is described as an “**economic metropolisation zone**”, result of the strong connections with Paris (physical by public transport, and immaterial - economic and tertiary activity) and the concentration of new projects (work and business spaces, housing, transport etc.).

Since the 2000's, the Saint-Denis and Saint-Ouen area have become one of the **most important tertiary sector hubs in Ile-de-France, representing 21% of employment in the departement** (INSEE, 2015). The proximity to Paris generates high numbers of commuters everyday. The evolution of the area from its industrial past to metropolitan functions has lead to a strong increase of management jobs representing 38% of all jobs in the area (INSEE, 2015). In parallel, data from Saint-Denis shows that 35% of residents do not have secondary education diplomas, that unemployment rates are high (in particular for young people of which 35% are unemployed) and that there is a minority of higher income professionals on the territory. This data strikingly clashes with the prior, **meaning that the highest paid workers in Saint-Denis live outside the city and that residents tend to work outside their city of residence.**

Additional data on mobility shows that 62% of residents in Saint-Denis are public transport users, and rates of car ownerships are extremely low in the area. **Even though their use of car is minimal, Saint-Denis residents bear the consequences of pollution and congestion on their territory (major highways).** Furthermore, while those same residents are high users of public transport, the accessibility and efficiency of the latter are still weak. Those observations call for reflections on the just city regarding mobility and equality.

In addition to important problems of spatial **fragmentation** and spatial **mismatch** in Saint-Denis, the area faces mobility issues: **congestion** (in public transport and on the roads), **reliability** and **efficiency** of the services, **pollution** (air and sound), **accessibility**, and **enclavement**. The Grand Paris Express as well as the efforts of the municipality aim at combating those issues. Plaine commune has put in place a bike plan (Plan Vélo) in order to make the whole departement accessible by bike, and has inscribed as an objective to make all residents only 8 minutes away by bike from a public transport station. This plan combined with the improvements linked to the Grand Paris Express will, in term, make the department accessible for all and hopefully eradicate enclavement.

Assurer la cyclabilité sur 100% de la voirie départementale



PLAN VELO OF PLAINE COMMUNE Source: PLAINE COMMUNE

GAMES-LEAD MOBILITY OPTIMISATIONS IN SAINT-DENIS

CHALLENGES, PROJECTS AND LEGACY

The Paris Olympic Games seem to be a real opportunity for Saint-Denis, and are accelerating improvements in public transports. Thereby, the Games can be seen as an “**urban accelerator**”.

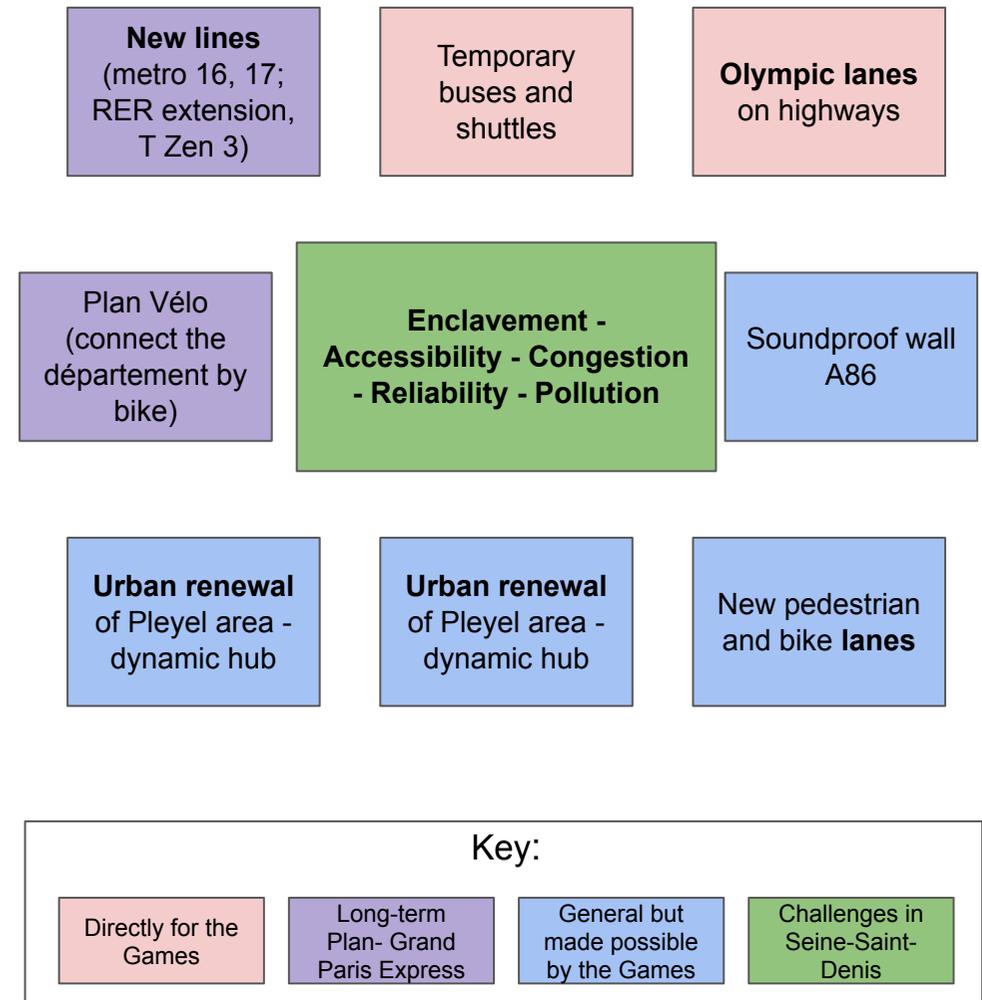
The scheme pictures the biggest mobility challenges faced in the departement and the solutions put forward by the municipalities. Many of the solutions have been made possible by the Games although they are part of the **metropolitan plan of the Grand Paris Express**, non-related to the event. The Grand Paris Express is a mobility project aiming at connecting the suburbs and increasing accessibility within them. Saint-Denis is an important sector of the plan with the Pleyel Station as its symbol.

The Olympic Games have motivated the construction of several mobility objects which will thus be considered as urban legacies of the event. The most important ones are:

- **two bridges** (franchissement Pleyel and passerelle de l’Ile Saint-Denis): those projects were long overdue for the residents as well as the municipalities as they are essential to the accessibility and unity of Saint-Denis as one area. The Pleyel bridge will enable individuals to go from the Stade de France to the Aquatic Centre during the Games but more than this, it consists in a key element for the residents as it brings an end to the railway-linked **fragmentation** of the city. Similarly, the other bridge will enable quicker and smoother accessibility to the Ile-Saint-Denis.
- the **soundproof wall of the highway A86**: this wall has long been awaited by the inhabitants to make their area more pleasant and reduce pollution, the Games strongly contributed to the realisation of this project.
- the **Pleyel Station** which will be expanded and improved (cf. section 4).

DIAGNOSIS Source: Authors' Work

Biggest challenges and the Olympic Games' related optimisations



MOBILITY IN OLYMPIC SITES: RELIABLE AND SOFT MOBILITY

ALLOW ALL SPECTATORS TO USE PUBLIC TRANSPORT AND SOFT MOBILITIES

The emphasis is on **accessibility to public transport** during the Games. The Olympic bid focuses on more **reliable, resilient, fast and safe mobility for everyone**. The main vision for the mobility of athletes and spectators is consistent with the original bid, which is to allow 100% travel by public transport or soft mobility. As mentioned earlier, transport tickets will be included in the price of the Olympic Games ticket. The already existing public transport will mainly carry the 10 million spectators and the 200,000 professionals athletes expected to attend. In order to **avoid a build-up of crowds** on public transport in the Ile-de-France region, Ile-de-France Mobilités (IDFM) is planning to **reinforce the network** by opening additional bus routes. These buses will serve the outlying sites during the Games period. They even planned a pedestrian circle for most of the venues so that spectators can travel on foot or by bike. Thereby, electric **buses and the bicycle system** will be an **effective supplement to existing public transport**.



RER V System Planning Source: Ile-de-France Mobilités

SPECIFIC MOBILITIES FOR ATHLETES AND VISITORS

From the initial network, **1400 buses (electric or biogas) will be chartered to travel between the Olympic village, accommodations, press rooms, training sites and the venues**. These buses will be reserved for athletes and accredited persons: approximately 200 000 people, including 15 000 athletes. For visitors, Île-de-France Mobilités is also ensuring that venues are served by shuttles and buses to the Games sites. However, the first call for tenders made by IDFM linked to the recent bus driver crisis to transport the 200 000 athletes and accredited persons did not attract any candidates. As a result, a new procedure was launched on December 21st 2022.

A lane will be reserved for athletes' vehicles during the Games, from July 1st to September 15th 2024 on the Paris ring road. This Olympic lane was voted by the Paris Council in may 2022. Media, officials and emergency services vehicles will be able to use those lanes to guarantee optimised and safe access to the venues.

THE OLYMPIC GAMES GENERATORS OF MOBILITY INNOVATIONS?

The objectives related to the improvement of mobility are unavoidably linked to innovations in terms of **adaptation to new travel demands**, improvement of **quality of life, reduction of air and noise pollution**, and car dependency. Introducing innovations is reflected through new digital platforms during the games, intelligent payment, information and roaming system. **Passenger information** is the key to ensuring an **intelligent and flexible** payment, information and roaming **system**. SNCF, RATP and IDFM want to work on these new digital platforms following a common set of specifications driven by IDFM. **Innovative transports** are also proposed: The "Urbanloop" shuttles imagined in 2017 by engineering school students in Nancy are an example. The vehicles are automated, operate without batteries and guaranteed zero CO2 emissions.

A MULTI-LEVEL EVALUATION BASED IN ST-DENIS PLEYEL

OUR ANALYSING OBJECT

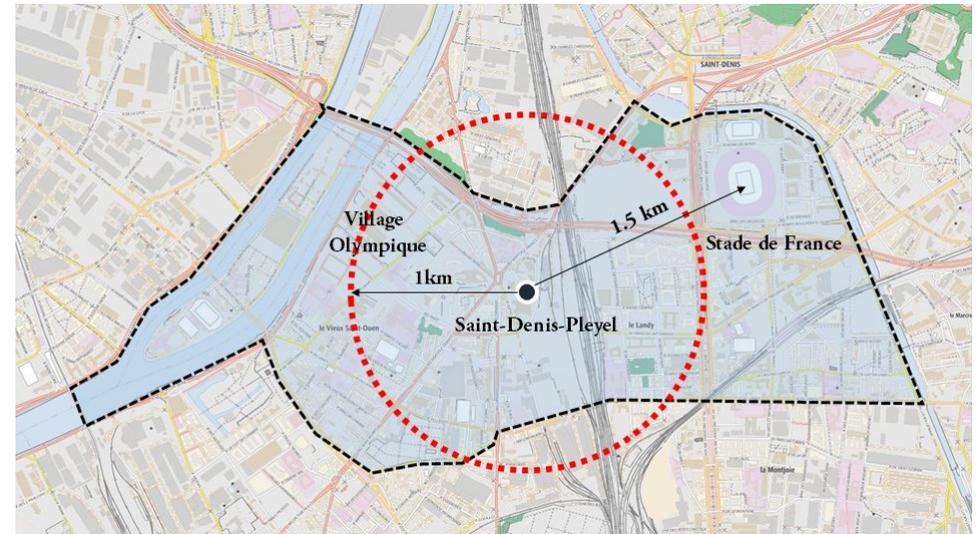
The **Saint-Denis Pleyel hub** is a future Paris metro station located in Saint-Denis on metro line 14, which is expected to be its terminus in 2024. It should also be the terminus of lines 16 and 17, and provide a connection with the line 15 of the Grand Paris Express. Saint-Denis-Pleyel station is intended to accommodate 250,000 passengers per day, making it the most important hub of the Grand Paris Express, comparable in terms of passenger numbers to Châtelet-Les-Halles. The station will be located in the extreme southwest of Saint-Denis, at the corner of Rue Pleyel and Rue Francisque-Poulbot, 300 meters from Rue du Landy, which marks the boundary with Saint-Ouen-sur-Seine.

The **Saint-Denis Pleyel area** is the study's analysing object because of the following reasons:

(1) It is an area of **diverse mobilities**. There will be a variety of transportation modes including four metro lines, one RER line, pedestrian systems, and bicycle systems in this area. This could provide abundant material for analysing the mobility of the future Paris

(2) It is a place that will soon be **reshaped because of the Olympics and subsequent new constructions**. At present, this area is highly fragmented by highways and railways. New mobility systems will soon be introduced to the area because of the Olympic Games. The station is in the center of the riverside athletes' village, the aquatic center, and the national stadium. It will be the object which fully reflects the comprehensive effects of the Olympic games.

(3) It will be a possible **test site for the 15-minute city concept**. We have chosen an area of 4 km² within the hub's radius of 1 km-1.5 km. Considering the future construction of a pedestrian system, this area would be accessible by foot, an opportunity for the implementation of the 15-minute city concept.



SAINT-DENIS-PLEYEL AREA Source: Authors' Work



SAINT-DENIS-PLEYEL STATION Source: Le Parisien

LEGACY EVALUATION QUESTIONS

MULTI-LEVEL SPATIAL EVALUATION APPROACH

Saint-Denis Pleyel is the limit test of mobility legacy. Continuing with our Evaluation framework, it is relevant to experiment it with a **multi-level spatial evaluation approach while keeping a forward-thinking mindset.**

At the Île-de-France level, the focus is on the **mobility positioning of Saint-Denis Pleyel by comparing it with the hubs of La Défense and Châtelet-Les-Halles.** The answer should be a regional interpretation of this area from a comparative perspective.

At the Saint-Denis level, looking into the **local planning documents and blueprints of Plaine Commune,** focusing on how it interacts with local demands of mobility shift, which is also a vital goal in the Master Plan 2030 of Great Paris, is relevant. Plaine Commune could be seen as a 45-minute territory, with public facilities and dynamic urban life.

At the district level, introducing the **15-minute city concept** to test if Saint-Denis Pleyel could be an implementation site is an idea. The regeneration of the current pedestrian and cycling systems provides an opportunity for the possibility of a 15-minute community life.

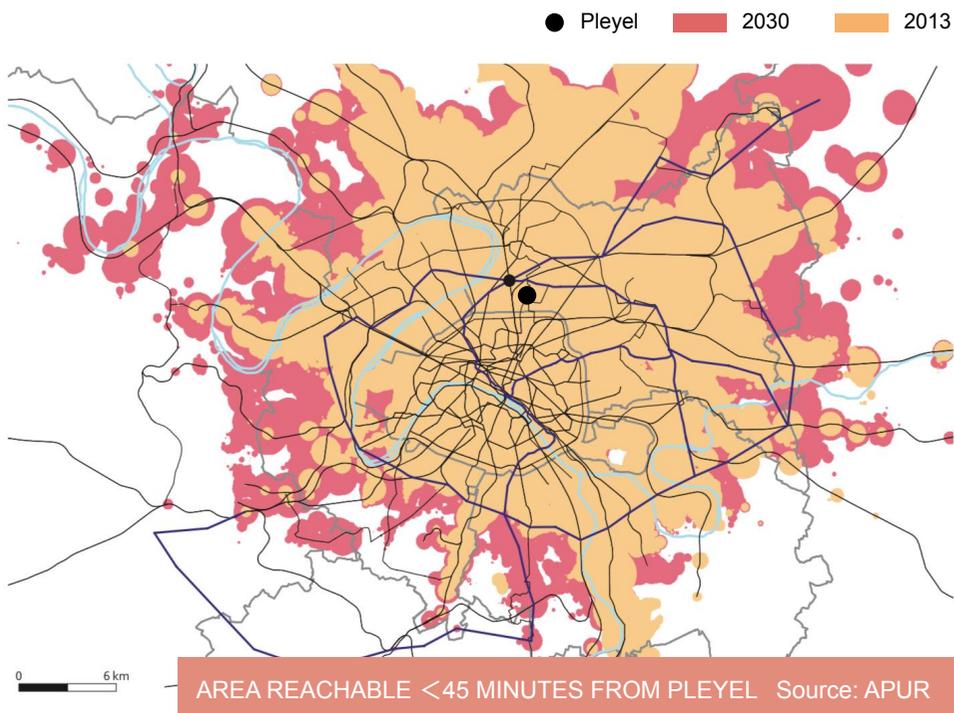


SAINT-DENIS PLEYEL AS A FUTURE REGIONAL HUB

THE NEW CENTRALITY OF THE GRAND PARIS

The Pleyel area is at the **heart of new mobilities**. With the future meeting of five metro lines and two RER lines, Pleyel is going to be the **most interconnected district of Greater Paris**. The territorial transformation of the district makes it a dynamic area and **not solely a place of transit**. The objective is to make the area attractive through new public activities, new connections, new professional activities and new housing facilities. One of the challenges is to **develop a mixed environment** at the intersection of a crucial mobility hub.

As illustrated in the map below, the accessibility to Paris and the Greater Paris from Pleyel is expected to improve. The areas accessible in less than 45 minutes will extend increasingly over the region.



Pleyel will benefit from its **proximity to mobility hubs** such as Saint-Lazare (11 minutes), Charles De Gaulle airport (35 minutes) and La Défense business district (13 minutes). This future hub is destined to become the **largest station of the Grand Paris Express**.

CHÂTELET-LES-HALLES AND PLEYEL - HUB COMPARISON

Châtelet:

Area: 0,412 km²



9 372 inhabitants (2022)



5 lines, 3 RER
750 000 travellers each day

Source: RATP Group, INSEE

Pleyel:

Area: 2,02 km²



7 200 inhabitants (2022)
17 200 inhabitants (2030)



5 lines, 2 RER
250 000 travellers each day

Source: Société du Grand Paris

Pleyel is seen as the new Châtelet of Greater Paris due to its centrality and its many future transport lines. These two underground stations are comparable: they both accommodate a large number of passengers and hold a **central position** in the public transport network.

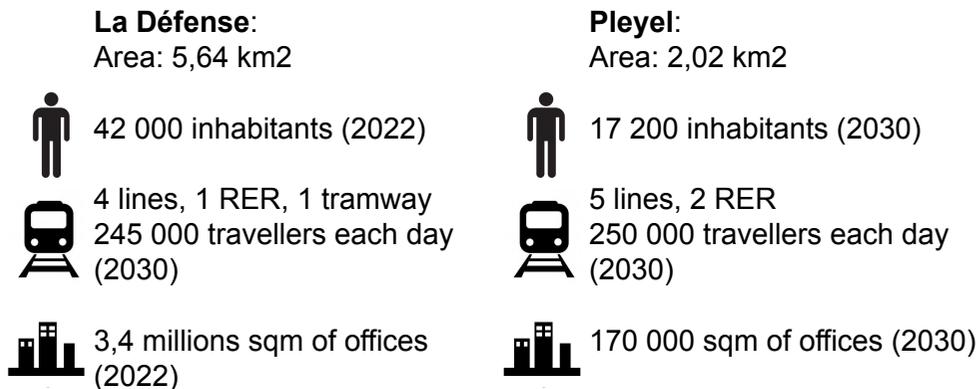
However, it is noticeable that the development of Pleyel is focused on the creation of green spaces and housing for diverse demands. In addition, the density of inhabitants is quite different between Châtelet and Pleyel and may indicate a **difference in living comfort** between the two hubs. Living habits are bound to be different by 2030 as the urban development of these areas does not follow the same objectives. In this regard, the **Pleyel hub appears to be more diversified**, with the aim of attracting workers, students and families, to create a dynamic environment with various public services.

MORE THAN JUST A MOBILITY HUB

LA DEFENSE AND PLEYEL - HUB COMPARISON

With the Grand Paris Express, Pleyel will be really close to Europe's leading business centre, La Défense. It will only take 13 minutes to reach La Défense from Pleyel, compared to 26 minutes today.

Is Pleyel a future residential business district near Europe's leading business centre?



Source: Etablissement Public Paris La Défense

Source: Société du Grand Paris

New mobility will allow these two districts to be even more **connected to the region's transport network**. They are comparable in terms of population density, both focused on urban innovation, and will be welcoming a similar number of travellers by 2030. La Défense also plans to create green spaces, which are non-existent today.

However, Pleyel will concentrate more transport lines and, above all, **does not aspire to become the new business centre of the Grand Paris**. Even though many offices will be created, the area is growing around new professional activities, housing projects and green spaces. It is interesting to notice that **new mobilities** in both hubs give rise to a **development of urban spaces** and that an urban legacy will emerge from these redevelopments.

WHAT KIND OF HUB WILL THE PLEYEL AREA BE?

The **mixed development** of Pleyel will allow the area to be more complete and comprehensive as an urban environment for future users and residents and is **not limited to a mobility hub**.

The new Pleyel hub faces many **challenges**:

- Developing a mixed environment and not just a business district and place of transit
- Limiting the risk of "over-supply" of offices often following the increase of transport services in an area
- Integrating safe lanes for bicycles and pedestrians to give priority to active mobility and public transport (bicycles, pedestrians, buses)
- Decreasing pollution linked to road traffic (air and noise)

Although the Olympic Games and the Grand Paris Express projects were initially launched independently, the Olympic Games accelerated the construction process and **developed the image of the Greater Paris**. A common legacy is therefore being built around the development of new centres such as Pleyel. With the opening of the new line, this district will benefit from additional infrastructure by 2030 and the strengthening of the transport network should help ease traffic congestion.

Today, Saint-Denis and the Pleyel district are well served by public transport. **The development of Greater Paris and the Olympic Games will make Pleyel the heart of the Greater Paris**.

Finally, Pleyel could become the **example of an innovative hub** that is not just about passengers. The hub **aims to offer a quality of life** to its future inhabitants and workers (creation of 4.5 hectares of parks for example) and will thus evolve into a **diversified urban hub**.

SAINT-DENIS-PLEYEL AS A MOBILITY MODAL SHIFT CATALYST

INTO A WALKING AND CYCLING TERRITORY

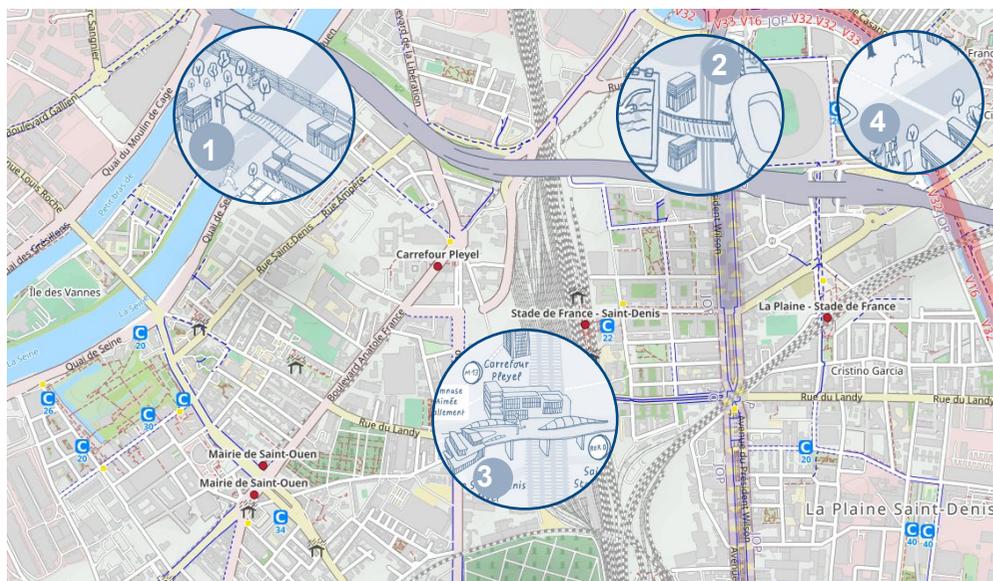
According to the local travel plan of Plaine Commune 2016-2020, 43% of households do not own a car. The residents walk and use public transportation very frequently. Within Plaine Commune, 68% of travels are made exclusively on foot. However, 25% to 30% of trips are still made by car for shopping, leisure activities, and personal business. **In the heart of the urban area, more than 20% of trips by car are less than 1 kilometer long. This reflects that Plaine Commune has a great modal shift potential for short-distance trips.**

The local travel plan of Plaine Commune also put up with five goals of mobility development, two of which have an emphasis on the mobility shift into walking and cycling. Many cyclable routes will be created and the pedestrian system will be elevated.

Four new footbridges will be seen after the Olympics:

- Bridge between Île-Saint-Denis and Saint-Denis
- Bridge between the Olympic Aquatic Center and the Stade de France
- Bridge above the Saint-Denis canal at the Millénaire level
- Bridge between the Franc-Moisin district and the Stade de France district

The mobility modes in this area will be significantly shifted after the Olympic Games. **For travels within the territory, a pedestrian and cycling system could provide residents with safe and sustainable travel experiences.** For outside travels, it would be highly efficient to transit and shift travel modes at hubs.



FOOTBRIDGE SYSTEM IN PLEYEL Source: Author's Work (Left) SOLIDEO (Right)



SAINT-DENIS-PLEYEL AS THE IMPLEMENTATION OF 15-MIN CITY

THE OLYMPIC GAMES, URBAN SPEED BUMP?

The 15-minute city is an increasingly spreading objective in urban planning and governance. It has been adopted in several cities and large metropolis across the world such as Barcelona, Singapore and Shanghai.

Carlos Moreno, Human Smart city specialist explains that to achieve the 15-minute city, it needs “a transformation of the urban space, still strongly monofunctional (...) towards a polycentric city, driven by four major components: **proximity, diversity, density, ubiquity**”.

This systemic change project stems from contextual elements and issues. Saint-Denis seems to be leaning towards a model of the 15-minute city:

- increased consciousness of the environment and pollution
- increased accessibility : bridges, cyclable lanes
- importance given to bikes (plan vélo) and soft mobilities
- multimodal et multiscalar hub
- multifunctional hub: residential, commercial, professional, leisure etc.
- Moreno’s four major components seem to be gathered

THE 15-MINUTE CITY, AN URBAN UTOPIA?

The 15-minute city perspective faces **some limitations**:

- Is it scale limited and only applicable to the Pleyel area residents?
- Whom is this project for? As the area is a hub at a metropolitan scale, commuting time for workers living outside the area will exceed 15 minutes. Is it only for those who will live and work in Pleyel?

The **paradox of speed** in the metropolis seems to be arising in the case of Pleyel; because commuting speed increases, people move out of city centres thus increasing distance. In consequence, the time spent commuting stays unchanged. This paradox is only confirmed with the rise of new ways of working (working from home). This paradox leads us to think that the 15-minute city is more a way of **implementing new mentalities** than a feasible perspective at the scale of the Paris metropolis. The 15-minute city is a guideline, an ideal to work towards in terms of urban planning which the Olympic Games are accelerating and encouraging with their resolution of the 45-minute accessibility to all sporting venues for athletes and spectators. The Olympic Games constitute a real impetus to this urban model and push municipalities and the metropolis to consider mobility in a large time-frame, also embodied by the Grand Paris Express project.



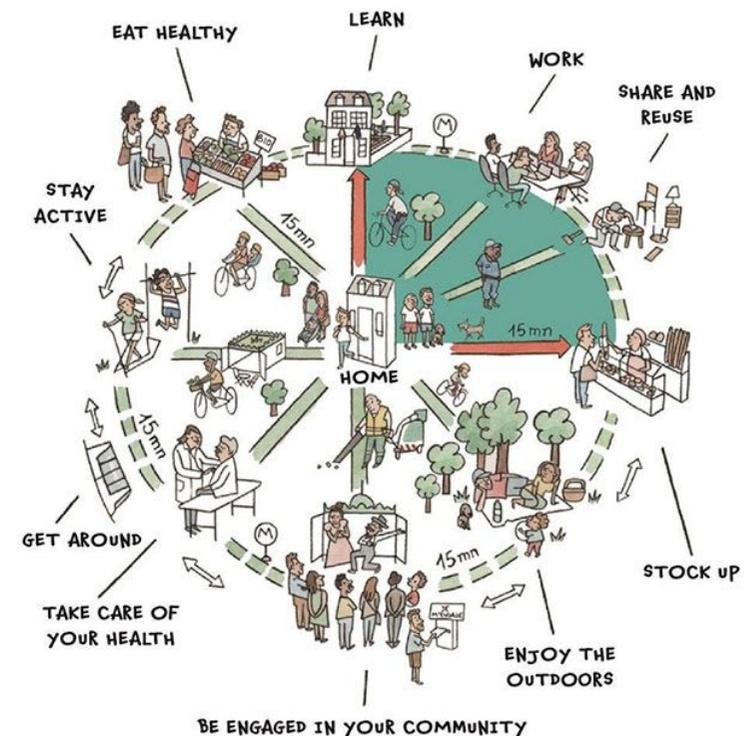
PLEYEL DISTRICT AFTER OLYMPICS Source: LAMBERT.LENACK

SAINT-DENIS-PLEYEL AS THE IMPLEMENTATION OF 15-MIN CITY

OLYMPIC BID AND PARIS VISION: THE 15-MINUTE CITY, AN AMBITIOUS PLANNING PROJECT

The Pleyel district planning orientations combined with the motivations of the municipalities, intermunicipalities and metropolis are building a complex area in Pleyel **that could be described as a 15-minute town within a 45-minute city**. The Olympic bid states that “85% of athletes will be accommodated within 30 minutes of their competition venue” and “the most remote venue is located less than 45 minutes away from the Olympic and Paralympic Village”. Those objectives were defined through the lens of the metropolitan region, at the next scale, the bid states that all athletes would train within 20 minutes of the Olympic Village.

The bid puts Pleyel at the centre of the objectives, only reinforced by the Grand Paris Express which aims at making of **Pleyel a hub comparable to Chatelet-Les-Halles and La Défense**. Pleyel is at the heart of strong urban renovation projects including of course the public transport sector, but also a densification of economic activities, an increase of housing facilities and the creation of cultural and leisure amenities, making the area a real multifunctional district.



THE 15-MINUTE CITY CONCEPT Source: Eukalypton (2020)

<p>Towards chrono-urbanism, mixed development and a polycentric city:</p> <ul style="list-style-type: none"> - proximity: all necessities to urban life accessible within 15 minutes - diversity: all services - density: concentration of services and amenities - ubiquity: omnipresence of services 	<p>Key elements:</p> <ul style="list-style-type: none"> - public transport efficiency - urban density : hubs - investment in urban realm - cooperation and joint thinking between local government, communities and private actors 	<p>Why?</p> <ul style="list-style-type: none"> - limit car-development - limit urban sprawl - sustainability - increase livability and pleasantness
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ANSWERS TO EVALUATION QUESTIONS

A MULTIDIMENSIONAL LEGACY ON SAINT-DENIS PLEYEL

1/ Could the Saint-Denis Pleyel be more than a hub for transit?

- This mobility hub will be the centre of a new scale: the regional scale
- It could represent a **new way of getting around Ile-de-France**, faster and more accessible, innovative in terms of new technologies
- It could embody a new kind of mobility hub that allows the territory to renew itself
- This regional mobility hub could then give rise to a diversified urban hub

2/ Have the Olympics provided a modal shift of mobility?

- The urge for a **modal shift** appeared frequently in the local plan of Plaine Commune, which emphasises the importance of walking and cycling systems
- The implementation of a modal shift is highly related to the transportation facilities, including footbridges, cycling lanes, and transit facilities
- Without the Olympics, it would be difficult for a new modal system to really take shape, due to limited budget and inefficient planning implementation
- The Olympics accelerate the process of the modal shift of mobility

3/ Could the Pleyel area be an implementation site of the 15-min city concept?

- Positive Olympic Games- driven impetus
- An ambitious perspective that could work only with the collaboration of stakeholders at different scales (district, municipal and metropolitan)
- The making of Pleyel as a multifunctional hub seems to be going in the direction of the 15-minute city
- Paradox of speed: How will planners ensure the residents stay in Pleyel considering the increasing efficiency of public transport linked to the Grand Paris Express? Efforts need to be made to guarantee the pleasantness of the district

FOUR DIMENSIONS OF MOBILITY LEGACY

MULTI-DIMENSIONAL CONNOTATIONS

From the above analysis, here are summarised four aspects of connotations about mobility legacy.

1/ MUTUAL LEGACY

The legacy of the Olympic Games and the major transportation projects like the Grand Paris Express are **mutual achievements and mutual effects**.

2/ MINDSET LEGACY

The newest concepts of urban mobility, such as the 15-minute city, the compact city, and green and sustainable mobility technologies, represent a **shift of new mode of lifestyle**. These will contribute to a wider change in people's mindsets and habits in everyday mobility.

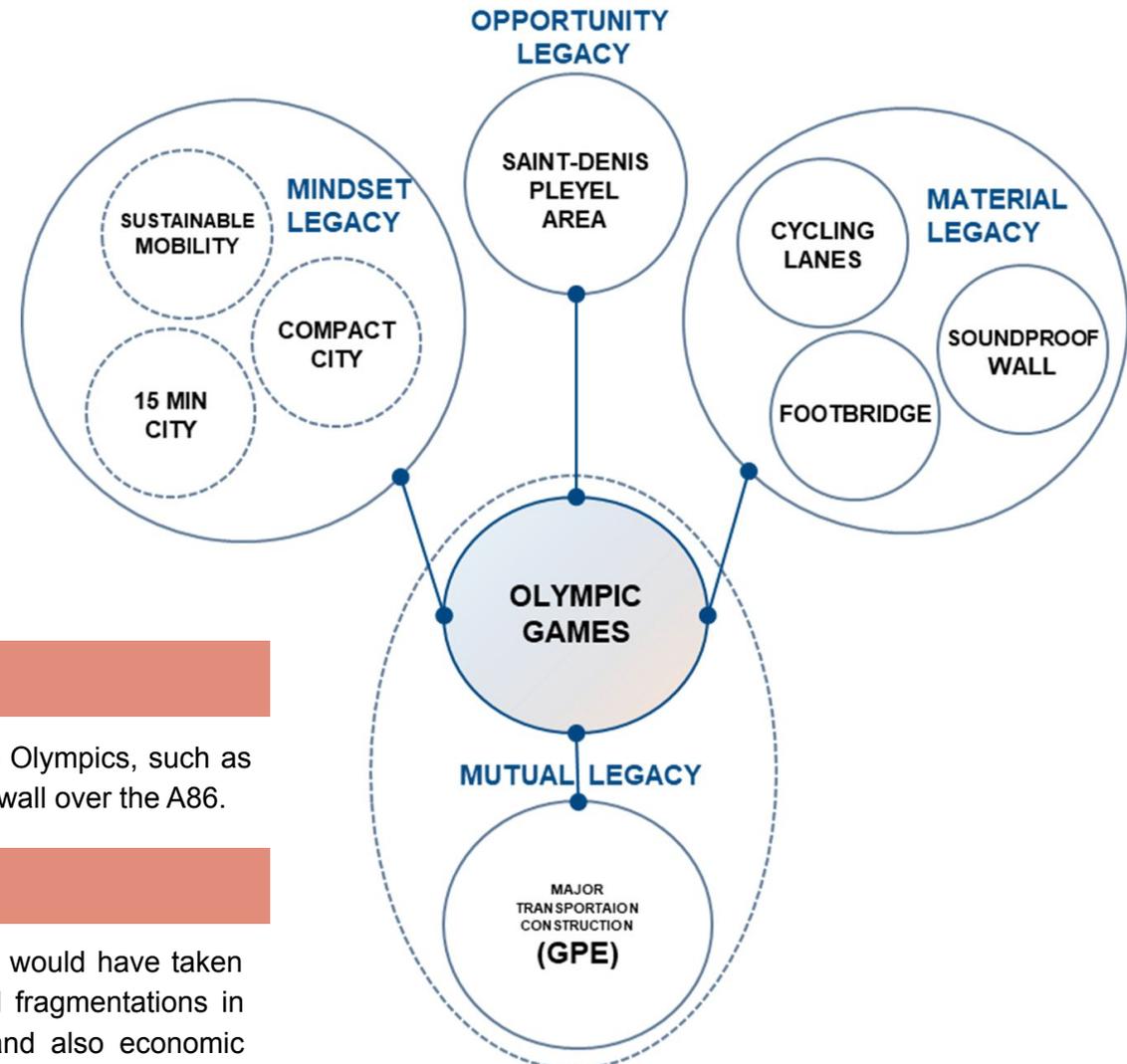
3/ MATERIAL LEGACY

This encompasses the newly constructed infrastructure for the Olympics, such as the bike and pedestrian lanes, footbridges, and the soundproof wall over the A86.

4/ OPPORTUNITY LEGACY

The Olympic Games provide **development opportunities** that would have taken more time to materialise without them. Opportunities to mend fragmentations in Seine-Saint-Denis, but also at the scale of the metropolis, and also economic opportunities (Pleyel), only to cite a few.

MOBILITY LEGACY Source :Authors' Work



05

Public Spaces and Landmarks

Connecting the “islands” of Saint-Denis

AVOIDING “NEW ISLANDS” IN SAINT-DENIS

A PLACE-BASED APPROACH

The analysis aims to **investigate the impact of the Olympic Games developments on public spaces in the Seine-Saint-Denis Department**, particularly in the Saint-Denis area located between the future Aquatic Centre and the Olympic Village. This area was chosen because the construction of these two new facilities is expected to bring significant changes to the urban landscape of Saint-Denis and the surrounding areas

Our analysis of public spaces tackles **two scales**:

1. the city scale, through the archipelago model analysis
2. the neighborhood scale, with the Stade de France comparative analysis

1. AN ARCHIPELAGO OF NEW DEVELOPMENTS

From a previous analysis of host cities, urban developments can be viewed as **built islands** and **archipelago models** in its urban fabric. In city planning, the archipelago metaphor is used to express a **fragmented state** of the built environment. This understanding is based on several observations. Firstly, the projects, in their **massive scale**, are causing a **sudden shock** to its surrounding as it is not being a result of natural urban growth but rather a part of a master plan. Secondly, the fragmented developments can be seen as **self-sufficient** in the sense that they accommodate facilities needed by inhabitants on a daily basis (eg. housing, schools, recreational centers..). Finally, all the developments share a **common ground** which, in this case, stands for the city of Saint-Denis. In other words, each island is a part of the whole composition.

The development projects of Saint-Denis can be seen as segregated parts drawing boundaries within their context. Our concern, however, focuses on public spaces subject to **exclusion** from the rest of the city. Public spaces are spread along its territories, yet without coherence or links that join the latter, thus failing to represent a unifying function of the area. It is to be noted that some developments are not related to the Olympic games, but they have been included in the scope of work because they contribute to the **archipelago model** and play a vital role in changing the morphology of the city’s urban fabric.

2. STADE DE FRANCE AS A MODEL OF ANALYSIS

Moving from the city scale examination of the archipelago model to a focus object for analysis, the Stade de France public space was chosen for the following reasons. First, it was built for the **FIFA World Cup** when France was selected to be the host city in 1992, thus hosting a previous sport mega event similar to the OG. Second, its **location** in Saint-Denis, specifically its proximity to the Aquatic Center, provokes similar issues to other developmental projects sharing the same context. Therefore, the evaluation of Stade de France represents a sample that, if applied to other public spaces, can bring up other elements to be evaluated.

WHICH PUBLIC SPACES?

STARTING FROM ACADEMIC LITERATURE

The goal of this section is to understand **how public spaces are going to be affected by Paris 2024**. In order to understand this, firstly it is capital to define what public spaces are and how they are differentiated in space at different scales. There are different definitions of public space that can be adopted in order to investigate and identify critical aspects in the development and evolution of urban spaces through the Olympic Games. The *Atelier Parisien d'Urbanisme* (APUR) defines public spaces as spaces that

*“like the built-up spaces that surround them and from which they cannot be dissociated, contribute to the urban landscape of a city. They provide **accessibility** and **services** and are also spaces where **local life** and **practices** take place and are supported.”* (APUR, 2022)

In order to analyse public spaces in light of the future developments that will affect the Paris region, a more narrow, yet neutral definition of urban public spaces can be derived from Carmona et al. (2008, p. 4):

*“Public space (broadly defined) relates to all those parts of the **built and natural environment**, **public and private**, **internal and external**, **urban and rural**, where the public have **free**, although not necessarily unrestricted, access. It encompasses: all the **streets**, **squares** and other rights of way, whether predominantly in residential, commercial or community/civic uses; the **open spaces and parks**; the **open countryside**; the*

*‘public/private’ spaces both **internal and external** where public access is welcomed – if controlled – such as private shopping centres or rail and bus stations; and the interiors of key public and civic buildings such as libraries, churches, or town halls.”*



Built and Natural Environment



Internal and External Environment



Public and Private Environment



Urban and Rural Environment

Stanley et al. (2012) consequently adapted this definition with a classification of **urban open spaces**, encompassing a mix of form and function including both functionally specific and multi-purpose categories. Stanley et al. define in such a manner seven major types of open spaces:

- food production areas
- parks and gardens, recreational space
- plazas, streets
- transport facilities
- incidental space

A CLASSIFICATION OF PUBLIC SPACES

	City Scale	Neighborhood Scale
Transport Facilities	Train & metro stations	Métro & bus stops
Streets	Central boulevards, promenade, canal	Street space and sidewalk
Plazas	Large formal Plazas	Smaller neighborhood plazas
Recreational Space	Stadium, green belts, riverside	Sports facilities, playgrounds
Incident Space	Natural features and semi-wide areas	Empty lots, transit borders
Parks and Gardens	Major formal parks and garden space	Institutional gardens, small parks, cemeteries
Food Production	Agricultural field	Grazing commons, Community gardens
Commercial Activities	Mall, open-air markets	Shops, street vendors
Educational facilities	Public universities, national libraries	Public schools, public libraries

Green spaces
 Grey spaces
 Green/Grey spaces

PUBLIC SPACES: A CLASSIFICATION BASED ON STANLEY ET AL. (2012)
 Grid source: the authors based on Stanley et. al

Spaces within each category are further categorised in scale, with the **city scale** referring to open spaces associated with major institutions that are nationally or municipally symbolic or oriented to large segments of the population and an **intermediate scale** referring to spaces that serve multiple residences in a more localised portion of the city, such as a **district** or **neighbourhood**.

What follows is an adaption of this categorisation of spaces, following Carmona's definition of public spaces, with the addition by the authors of two other types of spaces:

- commercial activities
- educational facilities

These additions were deemed useful in order to also consider in the analysis those spaces which are not opened but are often **accessible** to the public or directly interact with community life. Clearly, a broader and more complex debate on the classification of these spaces based on the concepts of **openness** and **accessibility** would be needed.

As the original model, the table also represents the differentiation between **'green space'** and **'grey space'**, to take into account on the one hand the presence of vegetation or water and on the other hand the prevalence of civic-oriented spaces or hard landscaped areas, hence addressing **urban ecology** and **human-environmental relations** in planning.

DIFFERENT VISIONS FOR PUBLIC SPACES

A LOOK AT PREVIOUS OLYMPIC GAMES

Working on public spaces raises methodological and operational questions, especially given the necessity to work on the specific relations between space and legacy, on which this report focuses.

While the concept of public space is basically not mentioned in the official bidding documents of Paris 2024, it is a recurring element raised in the Legacy Plan that will be further discussed in this section. In previous OGs, legacy documents discussed public spaces with a strict relation to **new facilities, parks, or housing developments** built for the Games and to their impact in improving community life. For example, the Tokyo 2020 Legacy Reporting Framework states that the Games served a “**barrier-free renovation of transportation facilities and public spaces**” which “promoted city development with a concept of universal design that will be accelerated, leading to the realisation of an attractive city where everyone can travel safely and smoothly and spend time at peace”. For Rio and London the focus was on **parks and plazas**, and the spaces between facilities in the public space. What must be discussed is that public spaces are more vast, and the transformations that occur because of the OG should also consider the urban areas that are not directly affected by the new direct developments of the Games.

Bidding Documents	Tokyo	Rio	London	Paris
Public spaces focus	“Barrier-free” Transportation	Parks and plazas, spaces between facilities		?

SPORTS AS A DRIVER FOR PUBLIC SPACES

In the Paris 2024 legacy plan, public spaces are mentioned as part of the transformation of the Saint-Denis area, through sports and community activities. In this regard, the **24 sites in 24 urban areas** project was launched. This initiative, driven by the Seine-Saint-Denis departmental council and funded by Paris 2024, emphasised on the use of sports as a driver for activating public spaces. The project, under the name “**Bel été solidaire**”, was launched with a 3-day event in summer 2020, and proceeded with the placement of stands in parks across the department to encourage people to be part of the Games programme and Paralympic disciplines.



Photos: 24 sites in 24 urban areas.
Source: Seine Saint Denis

THE SCATTERED DEVELOPMENTS OF SAINT-DENIS

KEY NEW PUBLIC SPACES

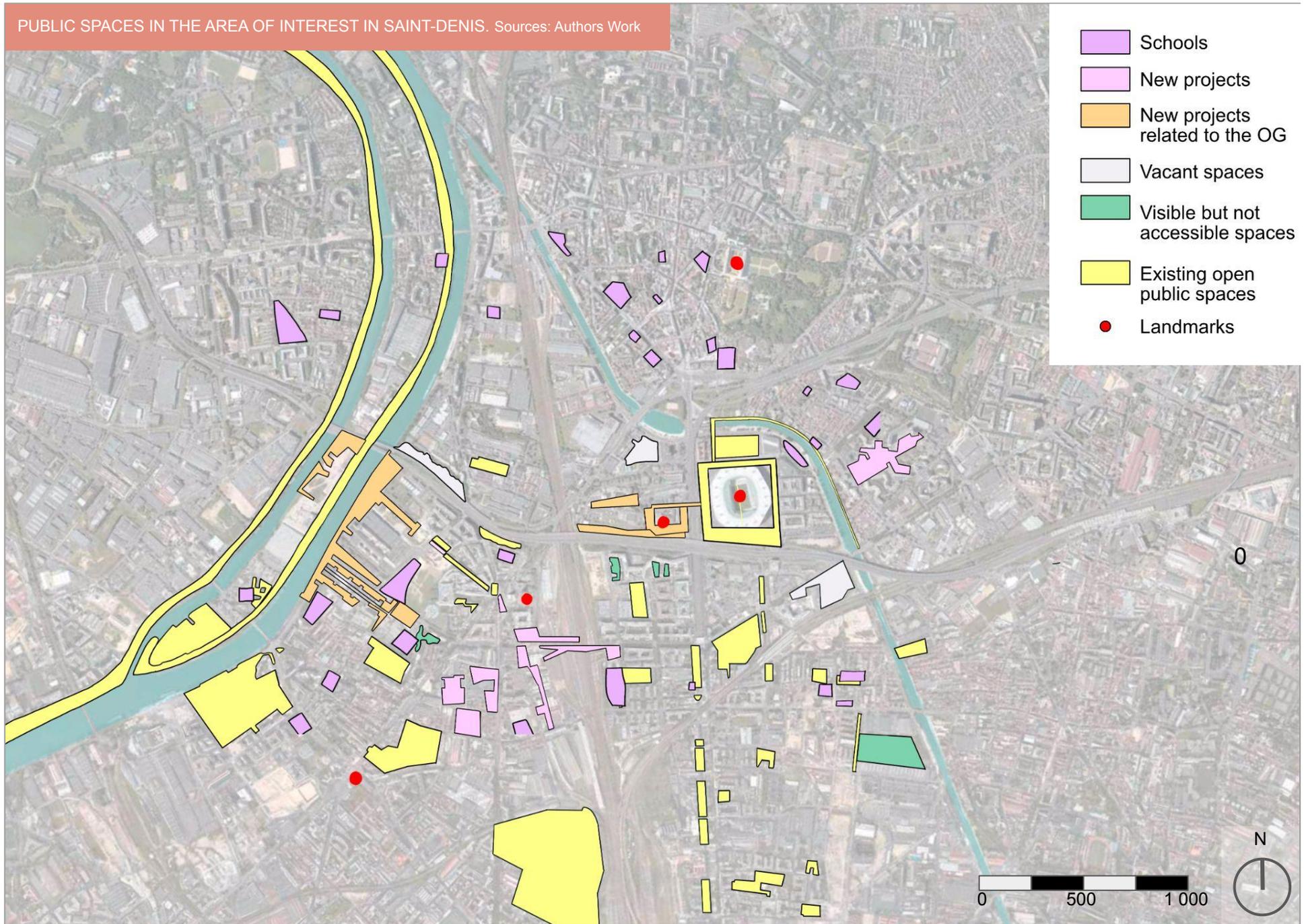
Plaine Commune, the main inter-municipal body concerned by the 2024 games, defines a group of developments as pivotal for the future of the area which is taken into analysis. Mapping those developments allows us to consider them in relation to the Paris 2024 main projects. **They appear as scattered islands that are disconnected from each other.** In some cases, the narrative of the projects links the opportunity and the value of urban transformation to the OGs, without being financially or operationally connected to the works delivered by the SOLIDEO.

The **Saint-Denis Pleyel station** in the heart of Saint-Denis is set to become the largest and busiest station on the Grand Paris Express, serving over 250,000 passengers per day. It will be connected to four metro lines and will also have connections to line 13 and the RER D, making it easily accessible from Paris and other major centers in the Ile-de-France region. The station will also have a 4,000 square meter cultural facility on the upper floors, which is part of the "Imagine Pleyel" initiative launched by the Societé du Grand Paris to create a "cultural hub" in the neighborhood. The **Hall de décufrage Pleyel** is a large, industrial space that will be refurbished by EDF as part of the "Odysée Pleyel" project, the winning submission in the first edition of the C40 Reinventing Cities contest that will serve as a space for start-ups and NGOs with a large hall for community sports and cultural events.

The **Franc Moisin/Bel Air neighborhood** in the north-east of the area is undergoing major renovations. The district has a population of nearly 13,000 and is located near the Stade de France and the Saint-Denis canal. It has a variety of facilities, including an urban park, a media library, a sports complex, and several schools.

However, the district has areas of degraded housing. It is also isolated, with limited connections to the outside. A new renewal project aims to transform the district on a larger scale, renovating public spaces and fostering connections with the Stade de France area. **The district is therefore relevant in the context of Paris 2024, providing the possibility to unify the new public spaces in Saint-Denis with existing ones.**





LANDMARKS OF SAINT-DENIS

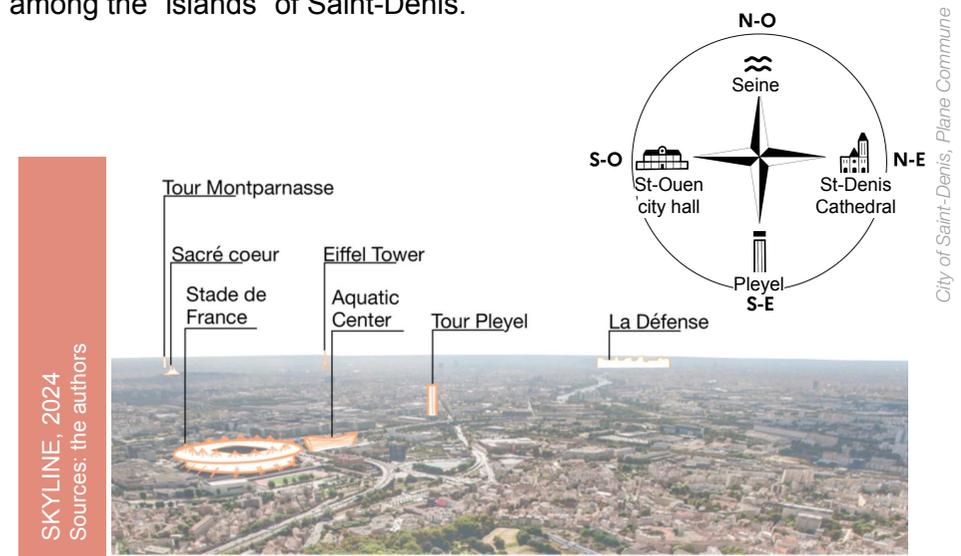
Buildings and landscape features are major landmarks that can be seen from a distance. Indeed, the **river Seine** and the **Canal Saint Denis** are Ariadne's threads that allow one to move around the city. They also mark the transition from one space to another while offering a large public space open to the sky and to the opposite bank, like a breathing space in the city. The Seine is a promenade connecting most of the Olympic venues. It also reconnects people with the geography of the city. Unlike buildings, the river is a long lasting landmark.

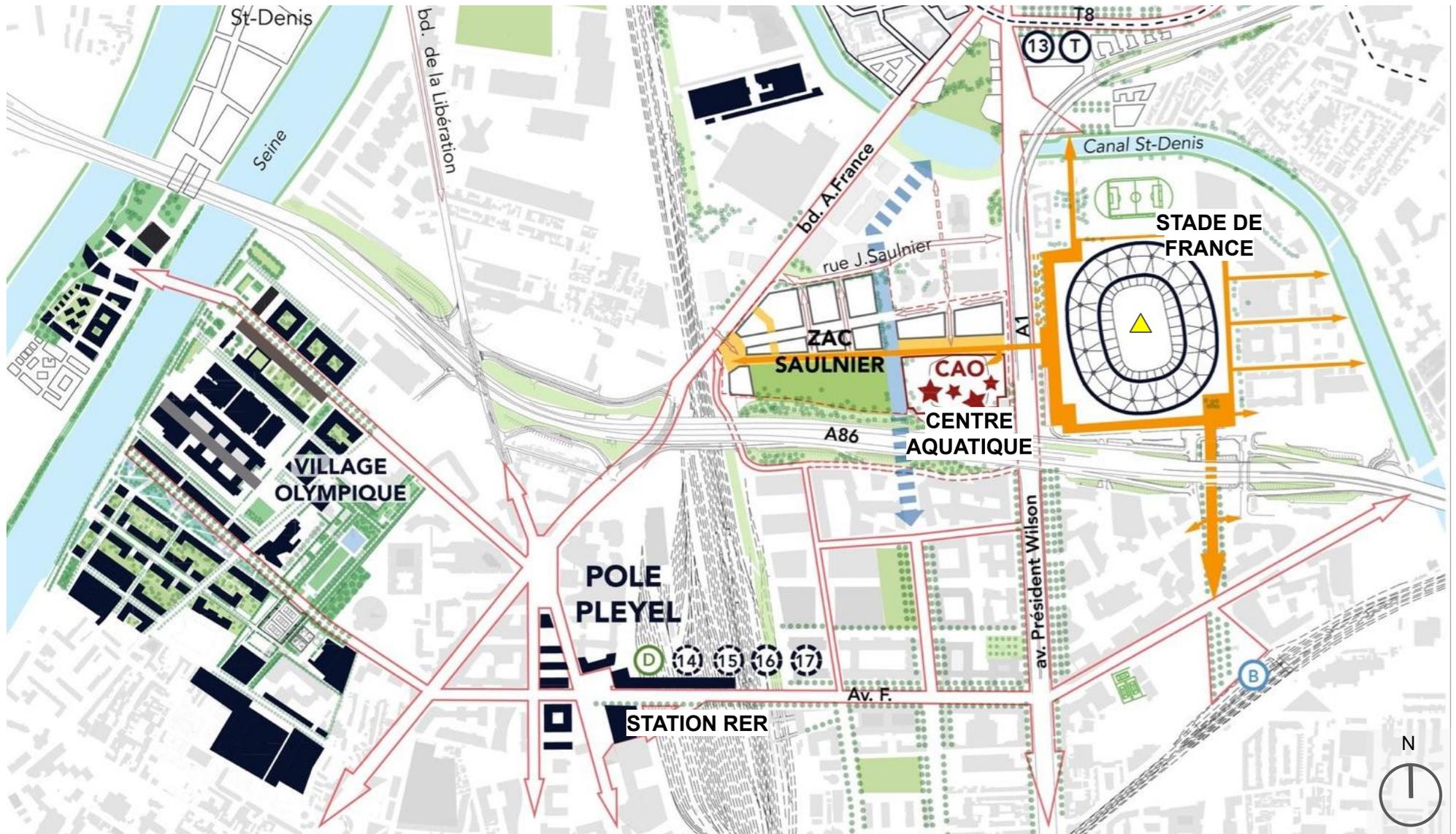
The **Pleyel Tower**, often described as a landmark building of northern Paris, is undergoing renovations. Despite changing its function, the tower will retain its original architectural design, and after the restructuring, it will contain a luxury hotel and offices. It is distinguished from its surroundings by its height. Therefore, it serves as a landmark and gives a sense of belonging representing the identity of the city.



Another existing landmark in the area is the **Stade de France**. Major renovation works will interest the interior equipment of the stadium, but much importance shall be given to the exterior esplanade, which will connect the area to the new neighborhood of the Aquatic Centre.

The newest addition in the landscape of Saint-Denis will indeed be the **Olympic Aquatic Center**, one of the major sports facilities that are under construction for the Games. The Aquatic Centre, as it was the case with the construction of the Stade de France, will change the landscape and the skyline of the city. A new “landscape compass”, as a navigation tool, similar to the signs that can be found walking around the streets of Saint-Denis, could inspire further discussion on the landmarks of the city and on the effects of the new public spaces among the “islands” of Saint-Denis.



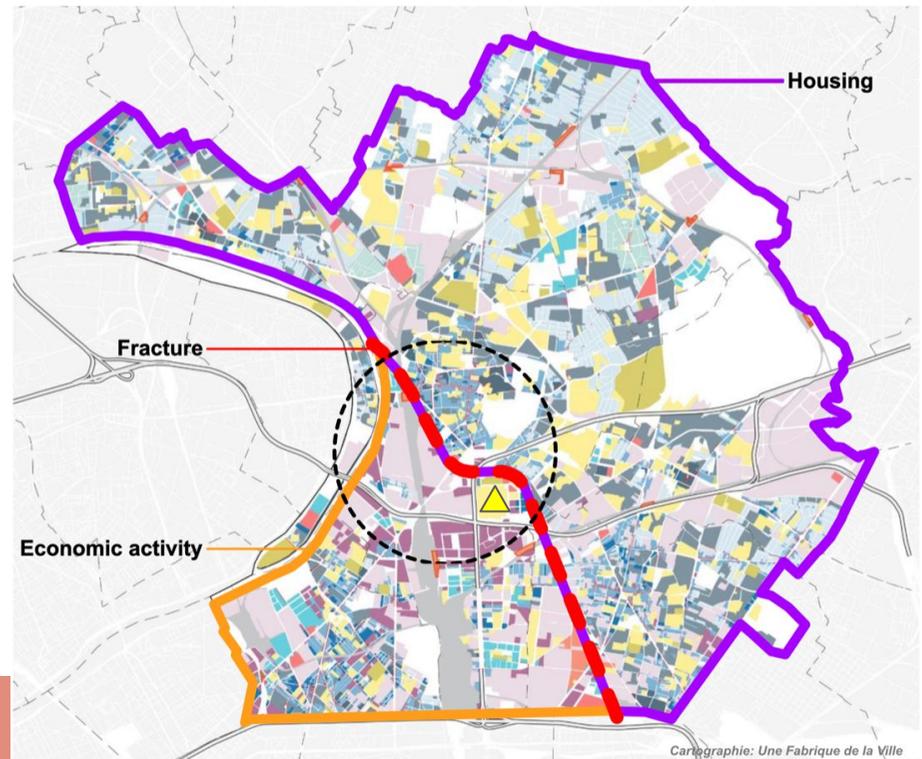
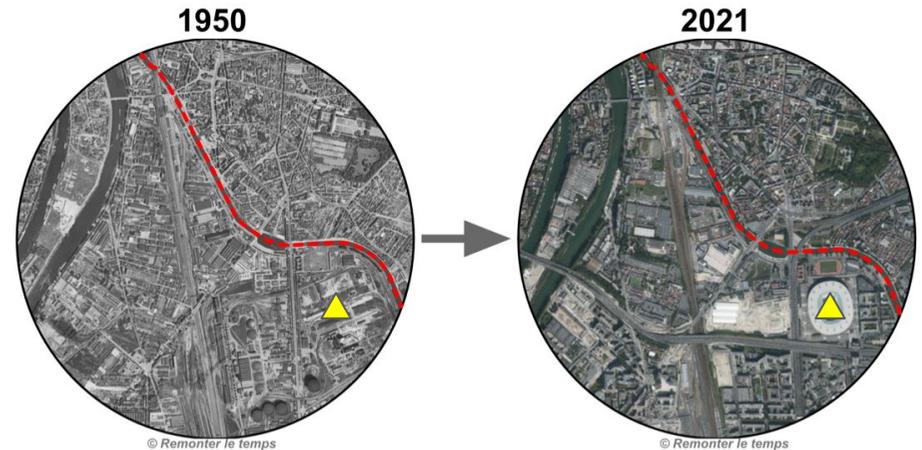


Map of the different Olympic facilities and projects in Saint-Denis. Sources: Leclercq Associés, Authors work

PLAINE COMMUNE: A DIVIDED TERRITORY

Plaine Commune is divided between the north and the south by the Canal Saint Denis and the highway. **The south part** is dedicated to **economic activities** whereas **the housing** is located **in the north**. It creates a large-scale fracture between the areas of everyday activities (housing, local shops, sports infrastructures, schools, etc.) and the areas of strong economic activity (mall, stadium, industries). Therefore, the succession of infrastructures in the city acts as barriers that limit the overall coherence, heterogeneity and interest of the city. This macro-level analysis illustrates the **micro-level situation of Saint-Denis**. The Stade de France area for example is an island separated by the highway and the canal limiting its accessibility to pedestrians, isolating it from the rest of the city. It favours the implantation of large car-friendly accessible commercial facilities Truffaut and Leroy Merlin limiting the interest of inhabitants for the neighborhood. Therefore, when walking along the Stade de France, there is no everyday life interest to cross the esplanade because of a lack of local shops or facilities making it a large lifeless plaza.

At the level of Saint-Denis, The public spaces are not made for people to stay but for people to move from one place to another, on a linear path. The public spaces are referred to as streets and roads. Spaces are therefore not welcoming in a mix of air and noise pollution. Moreover, the local shops are replaced by Truffaut or Leroy Merlin with a metropolitan attraction radius. The Stade de France (▲) neighbourhood is thus **not made to be lived by people but for the economic activity to strive**.



NORTH-SOUTH DIVISION: HOUSING V. ECONOMIC ACTIVITIES

Sources: Institut Paris Region - Base des Espaces Verts in 2020, Remonter le temps, Author's work

CONNECTING THE “ISLANDS”

It is essential to question **the scale of attractiveness of public spaces impacted by the OG**. Indeed, our analysis will show the presence of **major and minor** public spaces, with the former having communal or even metropolitan importance due to the presence of specific facilities (swimming pool, church, park, etc.). They act as centres of the network and their accessibility (disability, transport) and visibility (landmark) must be reinforced. **Minor public spaces act on the scale of the neighbourhood as meeting or gathering places** for the local population. They can be intimate (alleyway, small square) and provide a link between the various major public spaces, like bridges between islands. The whole constitutes the district, municipal, inter-municipal and then departmental network of public spaces, forming an **archipelago**. It is therefore appropriate to question the public spaces themselves, which constitute "islands" in Saint-Denis, as they are now so disconnected from each other, often divided by transport infrastructures. Their interfaces, generally made up of latent spaces, "shores" without function, can become levers for the development of new connections between public spaces. Indeed, the legacy of the historical development of Saint-Denis characterises the relationship of the inhabitants to the great landscape, to the skyline of the surrounding cities. Indeed, most of the current connections between the different islands are characterised by the play of heights.

For example, the pathway from the RER station to the Olympic Village allows to gain height through a succession of bridges that mark the passage from one public space to another and accentuate the urban fracture and the feeling of moving from island to island. It also contributes to offer panoramas of the landmarks of the neighbouring cities and thus visually reconnect Saint-Denis to its context.

However, connecting the “islands” also means **connecting the dots between new and former uses**. Indeed, when questioning the developments of the Olympic Games, it is important to understand **how they will shape the city and its public spaces**. Therefore, it is interesting to compare photographs taken by Robert Doisneau with ours. In the eye of Doisneau, plazas are lively places to gather when the legacy of the 1998 world cup led to a lifeless esplanade. Former agricultural activities led to community gardens now on the edge of being replaced by new construction works.



FROM FORMER USES (LEFT) TO USES INHERITED (RIGHT)
Source: Robert Doisneau, Author's work

A HOLISTIC APPROACH TO PUBLIC SPACES

The development of the Pleyel district is closely tied to the completion of the **Franchissement Urbain**. A bridge will be built to cross the railway lines and connect the two stations in the transport hub. It is designed to be a part of the city, providing an east-west link that is open to all modes of transport and allowing the Grand Paris Express and RER D lines to connect. It will also be an important part of the 2024 Olympic and Paralympic Games, providing access to the Stade de France and Aquatic Center from the Olympic Village.

At the center of the Franchissement, there will be a large public space, revolving around the construction of new housing, partly dedicated to social housing, and will not include new commercial or office buildings as per the original design project. The Aquatic Centre and the Franc Moisin / Bel Air neighborhood will also have bridges that are going to function as connectors with the rest of the city of Saint-Denis and the Seine-Saint-Denis Department.

These bridges cannot be defined as public spaces by themselves. On the other end, they underline the fact that even if public spaces can be categorised and dissected, it is difficult to take them apart from the rest of the city. **The selection of projects and the application of the archipelago model to our analysis aims to show how mobility, green and blue areas, infrastructure projects, and landmarks are inherently connected in creating public spaces.** This is why the following section aims to analyse the Stade de France area, assessing the most critical issues when dealing with new public spaces in order to better apprehend and question the legacy of the 2024 Olympic Games.

This analysis therefore questions how to live in this archipelago of landmarks, whose history has seen a succession of large-scale projects. **How can the monumental public spaces inherited from these projects be reconciled with everyday life? Who is going to take charge of the new public spaces?** How is contestation going to be addressed in the future? The legacy of uses also needs to be taken into consideration, how to link former uses with the emergence of new ones?

RESPONSIBILITIES AND CONTESTATION

WHO TAKES CHARGE OF PUBLIC SPACES?

The venues for the Olympic games mainly fall under the responsibility of SOLIDEO prior to the completion of the games. That after the games, the responsibility of managing the public spaces within those venues will be shifted to the real estate companies, along with the local authorities to which they geographically belong. Regarding urban development projects that do not fall directly under the Olympic Games projects, different governmental actors are in charge of those projects. The figure below shows a summary of the main actors identified as responsible at present of the public spaces analysed in this section. In some cases it is explicit that **public and private actors will continue to be in charge of the upkeep of the spaces**, but in other cases future transformation and management are not clearly addressed. The question that arises is if and when a **governance model** for the new public spaces will be designed in order to provide coherence to the new and existing public spaces after Paris 2024.

OPENING THE DECISION-MAKING PROCESS

An interview with the group “Saccage 2024” suggests that the developments analysed in this section have in common the **exclusion of the inhabitants** in the planning phases, and are at risk of excluding communities in their future uses, giving space to gentrifying dynamics that are usually paralleled to low-income areas such as Saint-Denis. Indeed, new buildings are being built with higher rents than what currently exists in the targeted neighbourhoods, which will create gentrification. The **privatisation of previously public spaces**, for example in La Courneuve with the Village des Médias, removes hectares of parkland to make space for a new neighbourhood with a lower rate of social housing. “Saccage 2024” states that it is not a legacy chosen by the inhabitants, but one that is top-down. Indeed, the planning processes do not take into account the real needs of the inhabitants and the current ecological issues (e.g. Aubervillier, Saint-Denis and La Courneuve have a very little green space ratio per inhabitant). There are **accelerations of public consultation processes** that can limit the possibility for inhabitants to express their vision of Saint-Denis, of what is going to happen to their neighborhood, and of who will be able to use these new spaces.

For “Saccage 2024”, the factors cited above influence **the liveability of public spaces**: privatisation, concreting, lack of concertation, gentrification. In their opinion, public spaces are therefore becoming profitable spaces sold to developers to make profits, disconnected from communities and public life. This perspective calls for the need of new connections, of a different approach to the management and governance of new public spaces in the future.

Plaine Commune / Métropole du Grand Paris / City of Saint-Denis / City of Saint-Ouen / EDF / Stade de France Consortium / Société du Grand Paris / Real estate agencies	
ANRU / COJO / SOLIDEO / development companies	?
Now	After Paris 2024
<p>MAIN ACTORS CONCERNED WITH THE MANAGEMENT OF THE PUBLIC SPACES ANALYSED BEFORE AND AFTER PARIS 2024. Source: Authors' work</p>	

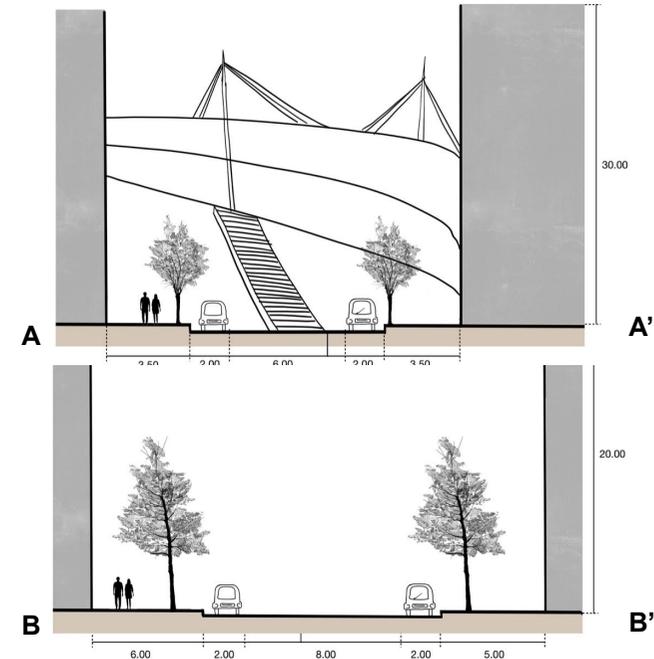
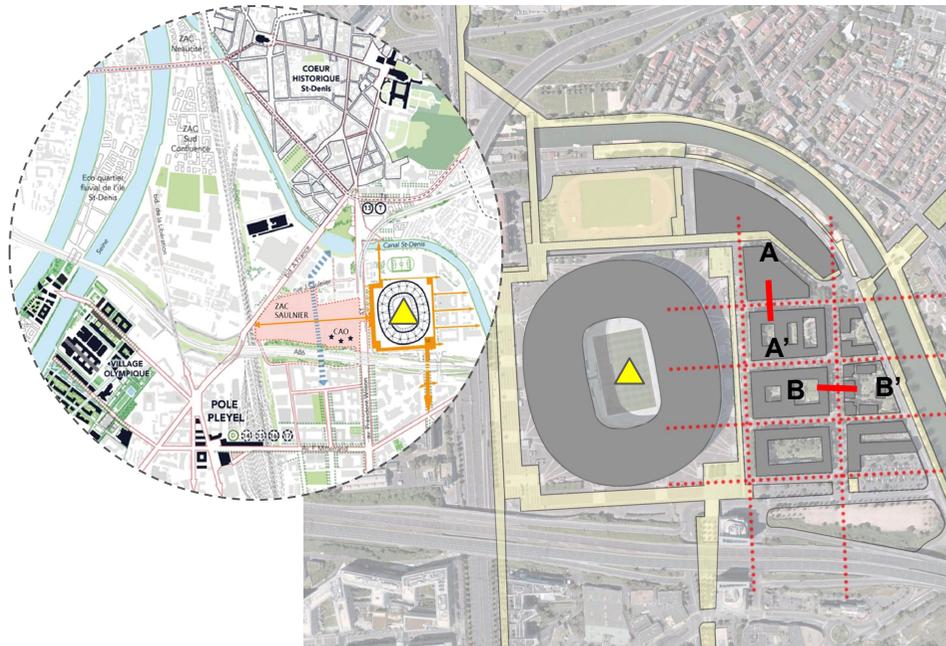
WHAT CAN BE LEARNED FROM A PAST MEGA-EVENT?

STADE DE FRANCE AS A PRECEDENT

It is interesting to understand the development of the **Aquatic Centre** with a similar project held in Saint-Denis in the 2000s : the Stade de France area (▲), located in the vicinity of the 2024 Aquatic Center.

Analysing the development in the Stade de France area and the use of public spaces 24 years later, can be used to **raise evaluation questions** that could then be tested on other public spaces related to the Olympic Games, since the Stade was built in order to host another mega-event, the 1998 FIFA World Cup.

The Stade de France area is mainly occupied by tertiary activity buildings, initiated in the 1990s. The neighborhood follows a grid plan that creates a uniform office neighborhood, each building having a similar template. Moreover, the buildings are introverted contributing to make the neighborhood less permeable, less accessible visually and physically, limiting its urban integration. Most buildings therefore have private gardens inside the blocks, inaccessible to “visitors”. The neighborhood seems unwelcoming and unused as there is no place to gather.



GRID PLAN OF THE STADE DE FRANCE NEIGHBORHOOD. Sources: Apple maps, Authors' work, Leclercq Associés

SECTIONS OF STADE DE FRANCE. Sources: Author's work

A REPEATED URBAN MODEL

The same model of introverted blocks / inaccessibility is also applied to the Olympic village. Indeed, the images below, taken during a field trip, emphasise the closed inner blocks spaces, protected by fences preventing the public from entering. Therefore, **the question of privatisation and thus accessibility is to be raised.** The definition of public spaces in the Olympic Village area seems to be similar to the one that is defined for the Stade de France, limiting itself to a typology of streets and roads. Contrary to the Stade de France, they vary in width to define their uses from narrowest to widest: path, road, playground. This further exemplifies the model of Stade de France and shows that it can be applied to other urban developments elsewhere.



Fences preventing from entering the blocks (Olympic Village area)

Narrow path connecting the housing units (Olympic Village area)

A LIFELESS PIAZZA

If the Olympic Games are to be a means of revitalising the south of Plaine Commune, it is necessary to **question the scale of the public spaces in order to determine their uses and the target public.**

The Stade de France, although located in Saint-Denis, has a **metropolitan influence.** It is the heart of various sport and cultural events attracting people from the Ile-de-France region and even from other regions. The public open spaces surrounding the Stadium (e.g. esplanade) are therefore planned accordingly.

However, the security and crowd management aspects predominate over the quality of the space and its potential multi-functionality. Indeed, the very nature of the space, inert, does not constitute a welcoming public space:

- Absence of furniture allowing to sit down (benches),
- Absence of shops on the esplanade open outside of event periods,
- High exposure to bad weather (wind, rain, sun),
- High noise and visual pollution due to the highway.

It is therefore necessary to **think of conviviality spaces** with devices allowing to protect oneself from the wind and to gather for daily activities (drinking a coffee, etc). Moreover, the absence of vegetation favours a feeling of lifelessness and hostility reinforced by the abundance of security devices (surveillance cameras, barriers).

The absence of vegetation also contributes to the urban heat island phenomenon.

BRIDGES: PLATFORMS FOR MULTIPLE VIEWS

The connection between the Stade de France area and its surroundings is relevant to question: the crossing of the motorway, the canal and soon the Aquatic Centre.

As the Stadium is elevated, all its connections are made by footbridges or bridges, **isolating the Stadium from the neighbouring districts**. These bridges allow us to be elevated and thus open up views on the distance. The **landmarks** and the skyline of the surrounding towns are staged, while the **play of heights** is essential to give rhythm to the already linear route and to offer a real urban composition of public spaces in the city. **However, the spaces underneath these pedestrian crossings must be given great consideration in urban planning** so they do not become latent, isolated, unoccupied and inaccessible spaces in the shadow of the structures, conducive to the development of undesirable activities. On the contrary, they must become potential urban development areas to be reclaimed, linking spaces to attenuate the fractures between the different public spaces of the city, and limiting the zoning of functions and populations.

Photo X., STADE DE FRANCE
FROM THE FOOTBRIDGE
Sources: the authors



A VISION FOR A SUSTAINABLE CITY

Thus, in order to develop a positive urban legacy following the Olympic Games, it is important to question the meshing of public spaces also in terms of meshing of **coolness islands**. This position allows us to guide the development and programming of public spaces according to the objectives of limiting global warming in the light of the ambitions of Paris 2050 expressed in *Paris S'invente* (Paris +2.5°C).



PARIS' VISION FOR PUBLIC SPACES - TOWARDS 2050. Sources: Paris S'invente

This utopian vision of Parisian public spaces also questions their uses and their transformation dynamics. **The urban legacy of the Paris 2024 Olympic Games can therefore be a driving force for urban change and a model for the sustainable development of the city of tomorrow**, from a reconversion of spaces used for economic life to spaces for urban life.

Questioning the sustainable development of the city, our analysis represents a sample that, if applied elsewhere, can bring up other elements to be evaluated. The main elements to be addressed when evaluating public space are its **scale, attractiveness, connections and accessibility, governance and uses**, to be considered for the aftermath of the Olympic Games.

EVALUATION QUESTIONS FOR PUBLIC SPACES

The proposed questions follow **5 main topics** which have been explored in the analysis of Saint Denis and of the Stade de France area and that derive from the Evaluation principles exposed in chapter 2. These are deemed essential to determine if the new public spaces of Paris 2024 and those surrounding them will positively be integrated in the territory. This framework allows to respond to the main concern raised in this section, namely the threat of public spaces which after the Olympic Games could be disconnected from the city of Saint-Denis with no coherent objectives or strategies. **Each category and sub question requires various methodological approaches, which can be applied in the Aquatic Centre development, as well as in other public spaces.** The methodologies could include surveys, mapping, and field observations.

1. SCALE: understanding the spatial context of the new public spaces and their connection with existing ones, before and after the Games

Questions:

- Is there a **sufficient supply of local shops** to ensure everyday life in the new residential spaces built for Paris 2024?
- Are there **key historic or landscape features (landmarks)**?
- Is the inherited or newly created topography being used to offer views on landmarks?
- Are there similar facilities nearby that would make this public space a white elephant? What is the attraction radius of the public space?

Indicators:

Presence of local shops, landmarks and panoramas, presence of surrounding facilities

2. ATTRACTIVENESS: analysing the material and immaterial factors that make the public spaces welcoming, meaningful, and comfortable

Questions:

- Does the **public space feel secure** (open, no narrow places, crowded)?
- Is there **visible security in the public space** (CCTV, barriers, guards)? If so, does it fits the needs of the space?
- Are there a sufficient **amount of spaces to rest** (benches, sanitary facilities, shops) accessible to everyone (disabled, children, elderly) around the new public space?
- What devices are in place to limit the exposure to pollution (noise, atmospheric, visual)? What infrastructures can be identifies as emitting pollution (highways, industries, air lane, etc.)?
- Is the public space clean and well maintained?
- Is the public space part of the city's vegetation network? Are the ground cover materials permeable to allow rainwater to infiltrate into the soil?

Indicators:

Feeling of security, Security devices, Furniture to rest, Pollution levels, Maintenance level, Vegetation and heat islands, Ground cover materials (glare, permeability)

3. CONNECTIONS AND ACCESSIBILITY: assessing the integration of public spaces within the existing networks and their level of accessibility before, during and after the Games

Questions:

- Is the public space **connected to mobility networks**?
- Is the public space integrated in the public spaces mesh at different larger scales?
- Is the space free to access?
- Are there spaces protected from weather conditions (resting areas sheltered from the sun) accessible by everyone?

Indicators:

Accessibility, Privatisation, Shelter areas for weather conditions

4. GOVERNANCE: the new public spaces' integration depends on the actors who take charge of their maintenance and delivery to the citizens of the areas involved by the Games

Questions:

- **Is there a clear governance scheme of the public space?**
- Have citizens / local associations been involved in the definition of the space and its uses?

Indicators:

Implementation of new ad-hoc governing bodies, Number of actors involved in the decision making process

5. USES: are the public spaces engaging (promoting active uses), social (encouraging social interactions) and robust (adaptable in the face of change)?

Questions:

- Can the new public spaces **support events** (size, barrier free space, ground materials adapted to high attendance, etc.)?
- Are there new spaces for leisure (playground, sports)? Are they complementary to close leisure facilities around?
- Have former uses been taken into consideration for the definition of the new public spaces?
- Is the light adapted to night uses?
- Are temporary uses allowed in the public space?
- Is the public space intended to be mono or multi-functional?
- Does it include furniture (benches, treepots, etc.) for the space to host different activities (market, sport / cultural events, leisure, etc)?
- Can the space be adapted to unplanned uses?

Indicators: Presence of leisure activities, nightlife uses, temporary uses, possibility of modularity, existence of alternative uses

IN NEED OF A LONG-LASTING URBAN LEGACY

The analysis of the three themes highlights the real need of a **comprehensive vision** for the urban legacy of the 2024 Olympic Games. A vision which will be crucial for the achievement of a meaningful legacy after the Games both in the short and in the long-term is the one that addresses the needs and challenges of the area. Forward-thinking is an ability vital to the realisation of the objectives presented in the bidding of the Paris 2024 Games.

The Olympic Games are defined as a real opportunity for Paris as a city and mostly at the metropolitan scale, in the Seine-Saint-Denis department. **A successful urban legacy** will be the result of **concrete actions** that follow commitments on topics such as accessibility, equality among territories (namely through a decrease of territorial fragmentation), improvement of living standards, and tourism attractivity. However, the question still remains on which governing body will manage and improve the urban legacy?

LEARNING FROM THE PAST

This report suggests that many challenges that lie ahead for Paris in the aftermath of the Games must be addressed **relying on the experiences of other cities**. This is why the pressure on Paris 2024 is high: a coherent and cohesive legacy strategy must follow the successes of the past, and strive towards the expected solutions that address the failures of previous Olympics.

URBAN LEGACY ACROSS SCALES & THEMES

Urban legacy can be evaluated adopting different approaches, which will interact with spatial, economic, social, and environmental dimensions. **Through the lenses of three crucial topics** related to urban development –blue and green, mobility, public spaces–

the Olympic Games must be analysed according to the place-based needs of local communities.

The **blue-green** legacy of Paris 2024 should be assessed around multi dimensions of having an alive legacy. An increase of the biodiversity levels of the metro area, along with an improved accessibility of water bodies – especially with new, active uses of the Seine river should be a priority.

The Games should also have a positive impact on **mobility** and transportation in the Paris region. Intertwining with existing major infrastructure projects such as the Grand Paris Express, Paris 2024 should mark a turn towards innovative practices, like the 15-minutes city, implementing blueprints for new mobility connections and hubs.

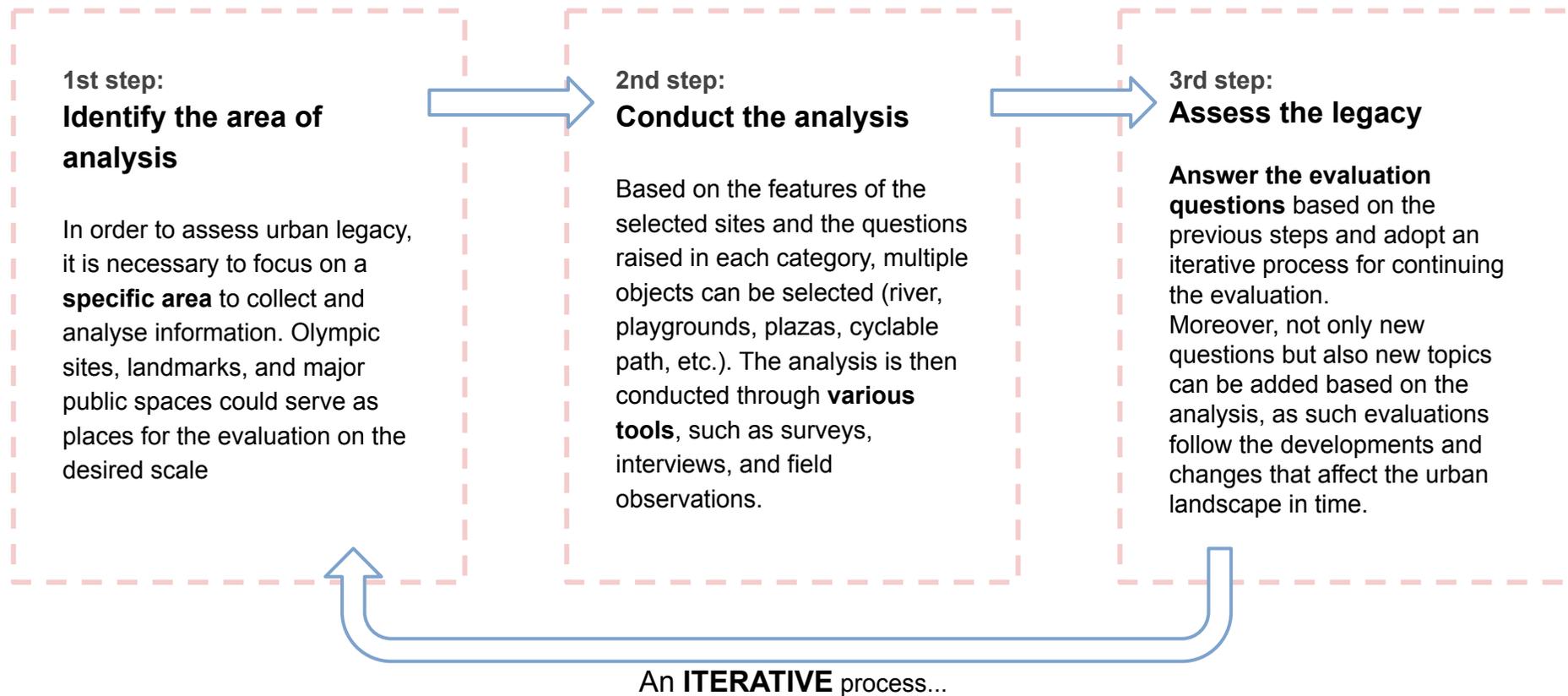
The legacy of **public spaces** will be evaluated based on the integration of new developments and housing projects in the existing urban fabric. Addressing issues and concerns among local communities should be essential in determining whether the accessibility and uses of space will be impacted by the Olympics.

In conclusion, the evaluation must consider the evolution of various elements **before, throughout, and in the aftermath of the event**, keeping into consideration **the evaluation principles**.

APPENDIX I

WHAT'S NEXT? METHODOLOGY FOR URBAN LEGACY EVALUATION

From the above analysis, urban legacy is **multi-dimensional**. The principles of evaluation presented in chapter 2 suggest for a **holistic approach that** should be adopted in order to assess the legacy based on the three topics explored in this report (green-blue, mobility, public spaces). Here 3 steps are proposed to adopt the approach and replicate it on different scales and sites in the aftermath of Paris 2024.



APPENDIX II

LONDON LEGACY DEVELOPMENT CORPORATION (LLDC)

LLDC was established in 2012 by the mayor of London replacing the Olympic Park Legacy Company and the planning powers of the Olympic Delivery Authority.

GOVERNANCE: Currently LLDC is governed by a board consisting of industry leaders which chart a strategy and business plan for the park. Addition to this, a governing body is in charge of managing the stadium.

KEY GOVERNANCE STRATEGIES:

- Open and transparent meetings and policies.
- Environmental sustainability is the priority in setting the plans and managing the park.
- 'Park Panel' a forum for local communities to voice their opinion.
- Relevant documents and publications are made available for the public.



Who we are

We were created to use the once-in-a-lifetime opportunity of the London 2012 Games and the creation of Queen Elizabeth Olympic Park to develop a dynamic new heart for East London,



How we work

We publish regular updates on our plans for the Park and the area around it - from details of our approach to sustainability to information about how to make the most of the Park as a visitor. Downloads of these publications can be found below.



Supporting communities

We want Queen Elizabeth Olympic Park to be a new heart for east London, and bring jobs, investment, homes and amazing new leisure opportunities to the people who live near and around it.



Transforming East London

Queen Elizabeth Olympic Park is at the heart of a new east London - one where diversity and cultural vibrancy meet economic growth and the city's newest, cleanest and most sustainable communities.

Source: <https://www.queenelizabetholympicpark.co.uk/our-story>

APPENDIX III: UNDERSTANDING THE PAST LEGACIES

Indicator/themes	LONDON	RIO	TOKYO
Historical Context	UK has previously lost the bid 3 times Birmingham for 1992 and Manchester for 1996 and 2000 The 2008 economic crisis	First Southern American city to host the Olympics Brazil facing economic crisis,	Tokyo bade to show the recovery of the 2011 Great East Japan Earthquake Tokyo Olympics 2020 had to postpone due to the COVID-19
The Vision	Delivering the experience of a lifetime for athletes and leaving a legacy for sport in Britain	The promotion of the city and Brazil as a safe place for investments	Showcasing the world's best technologies adopted in developing competition venues and during Games.
Goals	Regeneration and Rejuvenation of East London. Catalyst for social and economic good, nationwide	Catalyst for social integration and economic development. Representation: showing Brazil as an emerging power	Accessibility for all residents in the city and increase general living conditions. Economic booster to balance the impact of the 2011 earthquake
Legacy body	London Legacy Development Corporation, created in 2012, still operating today	Olympic Legacy Governance Authority, created in 2016 but dissolved in 2019	Tokyo Metropolitan Government in charge of the legacy framework
Legacy Scale	International: To deliver the most sustainable OG of modern times. National: Creating the "festival effect" of the OG that creates an "event-related pride" that strengthens a sense of community and uniting the nation Local: The main legacy would be to East London where the main development would occur.	International: Reduction of the environmental impact, and footprint, of projects related to the Games Rio 2016 National: Rio 2016 will place Brazil in the global spotlight, reinforcing its status as a major and growing economy and unique visitor destination Local: the Games will transform their city with new infrastructure, new environmental, physical and social initiatives and opportunities for all.	International: Bolster Japan's role in the global stage, particularly by promoting its advancements in the sustainability and technological sectors National: Relieve all citizens from the recent economic crisis, actively involving those affected by the 2011 earthquake Local: Develop an accessible city and increase the living conditions for all inhabitants
The Legacy Bid	- Make the UK a world leading sporting nation - Transform the heart of East London - Inspire a generation of young people and create new jobs, business and volunteering opportunities - Make the Olympic park a blueprint of sustainable living and developing sustainable communities -Demonstrate the UK is a creative inclusive and welcoming place to live in and visit	- Transformation of the city - Enhanced public transport through the development of the High Performance Transport Ring - New housing, retail and leisure outlets in the Maracanã and Deodoro zones - Social inclusion: homes, training and jobs - Sporting facilities and initiatives to develop sport in Brazil and South America	- Revive and recover after the Great East Japan Earthquake of 2011 and its subsequent economic crisis; - Re-implement national plans left unfinished in the 1940/1964 Olympic Games. - Share The values of Japan - Use Japan's technological assets to benefit sport - Creating a free barrier city improving the Inhabitants life condition

Indicator/themes	LONDON	RIO	TOKYO
Spatial Legacy	Regeneration of East London (public transport, economic, social, environmental projects) 	4 Olympic clusters Barra, Deodoro, Copacabana and Maracanã designed to fit long-term needs of the city (housing and infrastructure) 	Creation of 2 zones and a bridge to show the sustainability of the past Olympic legacy while seeking urban development innovations 
“White elephants” (referring to venues expensive to maintain but without any use to the area) and venues	None for now: venues were 40% existing, 45% temporary, 15% new	Most are because of the lack of maintenance and funding. Venues were 50% existing, 20% temporary, 30% new	None because of the compactness of the Games. Only 18% of venues were new
Social Legacy	Olympic Village = 2,800 flats (40% affordable). But eviction was inevitable during the construction	No social housing, all housing units were sold to the free market after the Games	Olympic Village = 3,600 housing units but none are social housing
Economic Legacy	Jobs: +117,000 (2017) Tourism: +1,1% In 2018 compared to 2011	Jobs: 5,000 permanent jobs (due to general economic depression) Tourism: +4,6% after 2015	Impact on jobs and tourism are limited because of the Covid-19 crisis
Sustainability Legacy	Positive: venues built with sustainable materials on former polluted site, creation of green areas enhancing biodiversity	Negative: bypassed laws and venues built on protected natural areas	Negative: venue built on former gardens contributing to soil sealing
Mobility Legacy	Stratford becomes the second most connected area of London, ending its enclavement. Station and tracks refurbishments	New public transport lines that don't connect the already disadvantaged areas lacking accessibility	Improvements in public transport increased their resilience for disabled people and beginning of a shift towards renewable energies

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