# IMPACT OF THE 2024 OLYMPIC GAMES ON THE DEVELOPMENT OF PARIS\*

#### Monika Šmiralová, Jarmila Husenicová

The Olympic and Paralympic Games act as a multiplier for the overall transformation of large metropolitan areas, with an increasing emphasis on the need for sustainable and inclusive development. Preparations for the 2024 Summer Olympics in Paris have triggered significant investment in the development of the transport network, the renovation of public spaces and the construction of new sports facilities. These changes have affected not only the physical shape of the city, but also its social fabric and economic development. This article analyses the impact of the 2024 Summer Olympics on the construction and transformation of Paris. It aims to assess the impacts of the Olympic Games, in particular on the urban planning, infrastructure and socio-economic dynamics of the city.

#### Introduction

Sport and Olympic Games, as those in Paris, can play a unique role in uniting the world in peaceful competition and in building a more inclusive society [1]. The Olympic project can be an asset or a burden for a city. If investments are not used wisely there may be a feeling that the work and resources spent have been wasted. As the examples of Motreal (1976) and Athens (2004) show, some oversized facilities can remain unused and abandoned - so-called white elephants. There is also the risk that the country will go into debt for the next few decades, as in the case of Canada and Greece. On the other hand, cities can benefit well from the Olympic Games, as was the case of Tokyo (1964) and Barcelona (1992) [2]. Building useful facilities means thinking about their legacy at the design stage, so that they later serve as sustainable urban districts with housing, offices and commercial spaces for residents.

The Olympic Games are a great opportunity to improve urban infrastructure in the form of public transport, and to acquire new amenities in the form of Olympic stadiums and sports venues, conference centres, galleries, theme parks, housing and other infrastructure. It is also an opportunity for the ecological transformation of cities in the form of transforming brownfield sites, introducing a circular economy, building sustainable neighbourhoods, etc.

The organisation of sporting events improves the tourist attractiveness of a given country [3]. Today, more than ever, tourists are looking for immersive experiences that go beyond traditional sightseeing. For many, the thrill of watching a game or attending a local sporting event is a benefit with greater depth of experience [4].

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# Paris as a Venue for the 2024 Olympic Games

A total of 10,714 athletes have taken part in Paris 2024 Olympics. The estimated cost of hosting the 2024 Olympic Games in Paris was €4.38 billion [5]. Approximately 6,000 jobs were created during the preparation and running of the Olympic Games.

Paris, as the host metropolis of the Olympic Games, became the focus of global attention for several months. However, in addition to the prestige, this also means a commitment to building the necessary infrastructure. Social, economic and environmental sustainability were central to Paris 2024's winning bid to host the Games. In the case of Paris, it is also about promoting an overall image of a country that supports progres-

sive solutions. In particular, it is about transforming Paris in favour of a sustainable city. The Paris 2024 Olympic and Paralympic Games will set new standards for environmental responsibility and demonstrate how to sustainably host global sporting events in an era of accelerating environmental change.

Paris becomes therefore one of the most environmentally responsible in Olympic history, with the French committing to halve emissions compared to the London 2012 and Rio 2016 averages [6].

### International Olympic Committee and Agenda 2020+5

Olympic candidacy is a difficult process. The project must meet strict criteria, for example in the areas of transport, security, health services, accommodation, the environment and, of course, sports fields [2]. In 2021, the International Olympic Committee (IOC) approved a strategy called Agenda 2020+5, which contains a set of fifteen recommendations. They are based on key trends that have been identified as likely to be crucial in a post-covid world [7]. Among other things, this agenda calls for cities to be more environmentally responsible, to use existing sites to reduce their ecological footprint.

The 2024 Paris Olympics took place in a specific context where political

<sup>\*</sup> Slovenský překlad článku je uveřejněn na webových stránkách časopisu.

discourse became part of sport strategies. Elected municipal leaders, mostly of a left-wing political orientation, pushed concepts for urban and social innovation and inclusion, with the aim of building on the young population, attracting the middle class, improving the environment and social life through sports facilities and public spaces that will remain as a legacy of the Olympic Games. In order to create a symbiosis between the Olympic legacy and the development of the Paris metropolitan area in the spirit of modern trends, the new urban development has manifested itself in three themes: housing (aimed at the middle class), public space (the reclamation of the banks of the Seine) and transport (such as a profound reorganisation of mobility in the Paris region).

The Olympic Committee requires credible evidence that all planned facilities and infrastructure would be built in time [2]. During the implementation of the Paris Olympics Agenda, specific measures and laws had to be taken to speed up the approval processes, as construction had to take place over a seven-year period. The main measure in Paris was the deregulation of urban planning - the so-called Olympic Law no. 2018-202 [18]. This law, adopted on 26 March 2018, includes measures to accelerate construction works. The law includes simplified procedures for the issuance of construction permits

and shortened time limits for appeals against decisions on construction permits. The measures included in the law were designed to ensure the efficient and rapid completion of all necessary infrastructure projects for the Paris 2024 Olympic Games, while minimising bureaucratic hurdles and ensuring the protection of the environment and cultural heritage. The Law also simplified the sale of land, speeding up the procedural nature of the necessary public discussions, environmental impact reviews and planning procedures.

#### **New Construction**

Paris 2024 Olympics had excellent existing infrastructure that had already hosted major international sporting events in the past: the Stade de France in Saint-Denis, the Roland-Garros complex in Paris, the national velodrome in Saint-Quentin-en-Yvelines, the Pierre-Mauroy stadium in Lille, and the La Défense Arena in Nanterre, Paris [8].

In fact, it was the State that became the main driver of the Paris 2024 Olympic and Paralympic Games, mainly through SOLIDEO (Société de livraison des ouvrages olympiques) and the relevant local authorities.

A number of sports facilities have been renovated and modernised to meet the needs of the Olympic Games. Temporary infrastructure, incorporated into the historic city centre, was also used for the Games, including archery and para-archery at the Invalides, beach volleyball and blind football at the foot of the Eiffel Tower, and skateboarding at Place de la Concorde. These temporary spaces offered opportunities to take the sport out of the stadiums in order to open up the games as widely as possible while minimising the impact on climate and the environment compared to newly built facilities [8]. At the same time, Paris has seized the opportunity to transform the most beautiful Parisian monuments into a stage for sporting competitions that deliver spectacular and more responsible games [8].

The Paris Games are also an example of French know-how, especially in the field of wood buildings, but also in eco-design using low-carbon and recyclable materials with the use of low-carbon techniques, consisting of more energy-efficient solutions such as photovoltaic panels, the use of natural ventilation, etc. [8].

One of the key factors in the selection of sports venues is sustainable mobility. The sports facilities were located close to public transport stops, accessible by bicycle, and there was a 418 km long network of bicycle paths, 88 km of which were newly constructed [9].

Thanks to the 2024 Summer Olympics in Paris, several new neighbourhoods have also been created, especially in the Seine-Saint-Denis transformation area, where the Olympic Village and new sports venues have been built. In addition to new and upgraded residential and commercial spaces, the Saint--Denis – Pleyel district is also becoming an important transport hub. A media cluster has been built on the edge of the Parc de la Courneuve for approximately 1,500 journalists, which is also set to become a residential area with 1,400 houses, modelled on the "garden city of the 21st century". The new neighbourhoods have modern infrastructure and public spaces that contribute to better environmental management. They are expected to serve as a lasting legacy for the people of Paris after the Games.



Preparations for the Olympic Games under the Eiffel Tower [author's archive]

# **Olympic Village**

The Olympic Village is built on the site of brownfields – a former industrial area located between Saint-Denis, Saint-Ouen-sur-Seine and Île-Saint-Denis, covering an area of 52 hectares. The entire complex includes 2,800 new housing units for 6,000 inhabitants [10]. It incorporates the best environmental standards in order to reduce the impact of its construction and adapt to climatic conditions. By using low-carbon materials such as concrete or wood it has been able to reduce CO<sub>2</sub> emissions associated with the construction by 30% compared to standard constructions [8].

A number of plans have been developed for the purpose of reducing the carbon footprint, including a local bioclimatic urban plan (PLU), a climate plan, an environmental health plan, and a biodiversity plan [11].

In the Olympic Village, the buildings were designed with bioclimatic design principles in mind, for example, the buildings are oriented perpendicular to the flow of the Seine River, which ensures airflow, there are plans to recycle wastewater and urine using separate toilets that will be transformed into agricultural fertiliser. Thermal comfort inside the buildings is ensured not only by the design of the timber-framed façades, but also by solar panels located outside the façades. The buildings are heated by geothermal energy and therefore also capable of cooling. Paris is prepared for the temperature increases expected by 2050, when the temperature will be the same as today is in Seville [12]. Through photovoltaic installations, power will be provided for 700 households. New inner-city greenery has been added, such as new parks and climate gardens, as well as new urban forests, some of which allow for gravity water treatment. Green-blue measures support local biodiversity. The roofs of buildings are adapted for bird migration and bird nests are integrated into the facades [12]. Protection of the 2 800 wild animal and plant species in the city, which are essential for the city's ecosystem, has been ensured. Urban gardens have also been expanded and renovated [11].



Olympic Village [author's archive]

In Saint Denis, a district was not only created for athletes. It is a transformation project for a lagging neighbourhood that will later become a fully-fledged residential neighbourhood integrating new and old residents [12]. The projects also focus on inclusion. As the buildings will also be used for the Paralympic Games, all housing units must be adapted for wheelchair access. [12] The Village should be accessible for families, students, the elderly and people with reduced mobility for controlled prices, below the normal market. The new neighbourhood includes two nursery schools, a primary school and two local sports facilities [13].

The Seine-Saint-Denis area has hosted major Olympic competitions such as athletics at the Stade de France and swimming events at the new aquatic centre. According to the Mayor of Paris, Ann Hidalgo, the Olympics are intended to help improve living standards and make the whole neighbourhood safer after the Games [14]. At the same time, she wants to motivate people to take up sport, which will be supported by outreach programmes. Within the Seine-Saint-Denis district, 24 public sports venues have been made available and activities are offered free of charge [15]. The Aquatics Center in Saint-Denis is the only competition venue built as a new construction. In a department where one in two children cannot swim by the time they enter high school; the Paris 2024 project will bring a special sporting heritage to Seine-Saint-Denis and its community.

#### **Negative Aspects**

Critical voices suggest that rising property sale prices as well as rising rents are causing the growth of a property bubble that is already costing thousands of residents their homes, especially the poorer and more vulnerable. The growing attractiveness of newly built neighbourhoods is causing a wave of gentrification as property prices climb inexorably upwards, especially in popular neighbourhoods close to the metro and the railway station RER (Réseau Express Régional). The shortage of social housing persists despite the planned increase in social housing. It should be noted that 67 housing units in the village are involved in the replacement of 500 destroyed social housing units [13].

#### **Conclusions**

Olympic Games are a significant opportunity for cities to influence the infrastructure and urban development of host cities as a long-term impact. Several key conclusions can be drawn from the preceding findings:

#### **Infrastructure Development**

Paris 2024 Olympics are a driver for large-scale investment in transport infrastructure in the form of new highways, roads, stations, including improvements to public transport which contributes to more efficient mobility. Expansion of bicycle routes enhances sustainable urban mobility.

#### **Urban Development**

The Olympic Games also become an accelerator for the urban transformation of the city and the region. Building transport infrastructure stimulates development activities. It is an opportunity for improving the quality of life not only in terms of building residential and commercial developments, but also improving public amenities for citywide and local needs. Building transport infrastructure makes neglected areas more attractive and intensifies development within the city. Public spaces are being improved, and leisure spaces are being added in the form of new parks, green spaces and sports grounds with improved accessibility that can attract new residents.

#### **Environmental Responsibility**

The values and philosophy of the Olympic Games are closely linked to ecology. Over the years, with the onset of climate change we are facing, ecological considerations have increased significantly. The main elements of this approach are efforts to reduce carbon footprint, sustainable construction including green certification of buildings, eco-innovations such as photovoltaics, regeneration of brownfields, protection of biodiversity, use of low-emission transport, offsetting of emissions as reforestation, promotion of renewable energy sources, implementation of green programmes, etc.

#### **Tourism**

Increased tourist inflows stimulate the local economy, and new job opportuni-

ties can be created. There has been some selection of tourists during the Olympic Games. Due to slightly increased prices in the city, some "non-sporting" tourists avoided Paris. However, the prediction of several times higher Airbnb prices for accommodation during the duration of the Olympic Games did not come true. In general, the organisation of the Olympic Games may see an increase in accommodation prices with an impact on tourism. In short, it will limit the number of travellers who would like to go to the Olympic city but do not do so to avoid the confusion and increasing prices during this period [17].

#### **Social and Economic Impacts**

Olympic games can be used to progressive development but can equally cause negative social impacts. Entire city districts have the opportunity to become more attractive and competitive, creating job opportunities, attracting investors, benefiting local businesses, hotels, shops and restaurants, which are seeing increased interest. Transformation can bring significant positive benefits and quality of life improvements for local communities and encourage active and healthier lifestyles. However, gentrification and rising real estate prices can cause negative social impacts. In countries that lack well-developed democratic structures and civil society, human rights may be suppressed [2]. The real estate bubble and the lack of affordable housing can lead to social exclusion of vulnerable residents' groups.

# Olympic Games Legacy and Long-Term Use

The main goal is to prepare for what will happen after the Olympics, which means in particular avoiding the construction of gigantic "white elephant" facilities that are oversized and after the Games abandoned [19]. While the Games bring various opportunities for cities, it is important that the infrastructure acquired in the form of transport, amenities, public spaces including sports venues are accessible to all residents indiscriminately in the long term, even after the Games are over. Therefore, long-term monitoring of the

environmental, social, sporting, cultural and economic aspects of improving the quality of life should take place.

#### Použité zdroje:

- [1] ŠOSV. 2020. Paríž 2024 zjednotí svet v mierovej súťaži a zanechá trvalý sociálny odkaz. [on-line]. Slovenský olympijský a športový výbor. Available at: https://www.olympic.sk/clanok/den-sport-rozvoj-mier-2024.
- [2] TREND REALITY. 2013. Čo zostane po olympiáde. [on-line]. Available at: https://reality.trend.sk/realitny-biznis/co-zostane-olympiade.
- [3] ŠOSV. 2020. Šport a cestovný ruch sa môžu vzájomne podporovať a pomáhať si. [on-line]. Slovenský olympijský a športový výbor. Available at: https://www.olympic.sk/clanok/sport-cestovny-ruch-sa-mozu-vzajomne-podporovat-pomahat-si.
- [4] AKTUALITY.SK. 2024. Namiesto pamiatok štadióny. Športová turistika sa stáva novým fenoménom cestovného ruchu. [on-line]. Available at: https://www.aktuality.sk/clanok/uHUBN8y/namiesto-pamiatok-stadiony-sportova-turistika-sa-stava-novym-fenomenom-cestovneho-ruchu/.
- [5] ŠPORTKY.SK. 2024. Bolo potrebných viac financií: Rozpočet OH 2024 v Paríži sa zvýšil o 10 percent. [on-line]. Available at: https://sportky.zoznam. sk/c/315831/bolo-potrebnych-viac-financii-rozpocet-oh-2024-v-parizi-sa-zvysil-o-10-percent.
- [6] FRANCE. 2023. Greenest in history: How Paris aims to halve the Olympics' carbon footprint. [on-line]. Available at: https://www.france24.com/en/france/20230725-greenest-in-history-how-paris-aims-to-halve-the-olympics-carbon-footprint.
- [7] ŠPORT24.SK. 2022. Medzinárodný olympijský výbor s novými pravidlami: Príprava na covidovú éru! [on-line]. Available at: https://sport24.pluska.sk/ostatne/medzinarodny-olympijsky-vybor-no-vymi-pravidlami-priprava-covidovu-eru.
- [8] PARIS. 2024. Building less, better and usefully. [on-line]. Available at: https://olympics.com/en/paris-2024/our-commitments/the-environment/infrastructures.
- [9] ŠOSV. 2023. Olympijské hry v Paríži budú šetrné ku klíme a životnému prostrediu. [on-line]. Slovenský olympijský a športový výbor. Available at: https://www.olympic.sk/clanok/oh-2024-udrzatelnost-kroky.
- [10] PARIS. 2023. Ces grands projets qui vont changer Paris en 2024. [on-line]. Available at: https://www.paris.fr/pages/ces-grands-projets-qui-vont-changer-paris-en-2024-25988.
- [11] APUR. 2017. Les Jeux olympiques et paralympiques de 2024, un levier pour la construction du Grand Paris Contributions de l'Atelier parisien d'urbanisme. [on-line]. Available at: https://www.apur.org/fr/nos-travaux/jeux-olympiques-paralympiques-2024-un-levier-construction-grand-paris-contributions-atelier-parisien-urbanisme.

[12] ACTU. 2022. À Saint-Ouen, l'approche des Jeux olympiques confirme une inévitable gentrification. [on-line]. actu Seine-Saint-Denis. Available at: https://actu.fr/ile-de-france/saint-ouen-sur-seine\_93070/a-saint-ouen-l-approche-des-jeux-olympiques-confirme-une-inevitable-gentrification\_52771244.html.

[13] INGALLINA, P. 2023. JO 2024, le pari de la sobriété. [on-line]. In: *Sorbonne Université*. Available at: https://www.sorbonne-universite.fr/actualites/jo-2024-le-pari-de-la-sobriete.

[14] ČT24. 2019. Z drogového ráje olympijský svět. Pařížská čtvrť Saint-Denis změní tvář. [on-line]. Available at: https://ct24.ceskatelevize.cz/clanek/ svet/z-drogoveho-raje-olympijsky-svet-parizska--ctvrt-saint-denis-zmeni-tvar-60990.

[15] SEINE SAINT DENIS. 2024. 24 sites pour 2024, du sport au coeur de votre ville. [on-line]. Available at: https://seinesaintdenis.fr/Jeux-olympiques-et-paralympiques-de-Paris-2024/24sitespour 2024.

[16] EMPTAZ, E. et al. 2023. Périls en la demeure, Crise du logement, In: *Les dossiers du Canard enchâiné*. SAS Les Editions Maréchal Le Canard enchâiné, 2023.

[17] VRT. Anne-Mie Depuydt, l'architecte-urbaniste belge qui a conçu une partie du village olympique des Jeux de Paris. [on-line]. Available at: https://www.vrt.be/vrtnws/fr/2024/03/10/annemie-depuydt-larchitecte-urbaniste-belge-qui-aconcu-une-pa/.

Ing. arch. Monika Šmiralová, PhD. doc. Ing. arch. Jarmila Husenicová, PhD. Department of Architecture Faculty of Civil Engineering Slovak University of Technology in Bratislava

#### SLOVENSKÝ ABSTRAKT

## Vplyv Letných olympijských hier (LOH) 2024 na urbanizmus Paríža, Monika Šmiralová, Jarmila Husenicová

Olympijské a paralympijské hry pôsobia ako multiplikátor pre celkovú premenu veľkých metropolitných oblastí, pričom sa stále viac kladie dôraz na potrebu udržateľného a inkluzívneho rozvoja. Prípravy na Letné olympijské hry 2024 v Paríži vyvolali značné investície do rozvoja dopravnej siete, rekonštrukciu verejných priestranstiev a výstavbu nových športových zariadení. Tieto zmeny ovplyvnili nielen fyzickú podobu mesta, ale aj jeho spoločenskú štruktúru a ekonomický rozvoj. Článok analyzuje vplyv Letných olympijských hier 2024 na výstavbu a premenu Paríža. Kladie si za cieľ zhodnotiť dopady olympijských hier najmä na urbanizmus, infraštruktúru a sociálno-ekonomickú dynamiku mesta.