

Hosting the Olympic and Paralympic Games is a unique opportunity to welcome the biggest event on the planet and become the centre of attention for the world. But in the end, it lasts less than a month. For the Host City it is much more than simply setting the stage for the greatest sports festival in the world - the Games represent a chance to make changes that will last for much longer than 17 days of Olympic competitions and 11 days of Paralympics. And this is how Rio de Janeiro is organizing the first ever edition of the Olympics in South America; the event has helped to bring long overdue projects to life in order to benefit the major players of the 2016 Rio Games, the local population.

The preparations for the Games are being used by Rio City Hall to accelerate changes that will improve the quality of life for residents and help integrate the entire city. Since Rio began the bid as Olympic Host, the quiding principle has been that the Games should serve the city and boost its development.

Therefore, the Rio 2016 Olympics will be the ultimate Legacy Games. For every 1 Brazilian real invested in Olympic developments, another 5 reais are being used to invest in legacy projects, designed to improve the daily lives of those who live in the city.

The tangible and intangible benefits of this transformation for the city and the locals are already becoming a reality, with a variety of projects being delivered well before the event, thus anticipating and extending the Olympic legacy.

The financial strategy follows one model: to help relieve the public purse through partnerships with the private sector. In other words, governments - in particular Rio City Hall - have transferred the costs of more than half of what is being built by 2016 to the private sector.

With this frugal perspective, the Rio 2016 Olympic Games is prioritizing simple and sustainable facilities - while retaining the Olympic quality standards.

The Legacy Games - economising on public funds and standing against white elephants - that's the medal that Rio has been tirelessly training to win in 2016.











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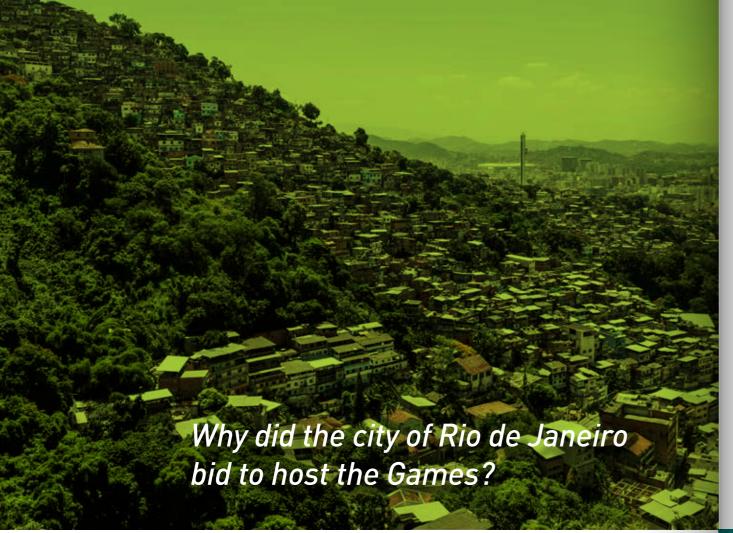
# THE MEANING OF THE OLYMPIC GAMES

The Olympic Games brings together four billion spectators and sells 7.7 million tickets. More than 100,000 people are directly involved in holding the event.

However, the importance of staging the Games goes beyond the figures that make them the biggest event on the planet. Being an Olympic Host City means being open to opportunities for transformation. Following this path to Olympic success – success measured by the legacy left behind rather than the medals won – is the greatest challenge.

Barcelona, which hosted the 1992 Games, is still considered a model to follow to this day, given the enormous legacy left for the city, which experienced a profound transformation. The city's port area, previously occupied by a derelict industrial park and a railroad that cut the people off from the sea, was completely revitalized. The historic city center was restored, new roads were created to integrate the different regions, and the subway system was extended. These results were only possible because the public administration understood that the Barcelona Olympic Games should serve the city, rather than the city serving the Games.

It is this concept, expressing the real meaning of hosting the event, which inspires Rio de Janeiro's municipal government in preparing the city for the 2016 Olympic and Paralympic Games.



Based on this vision, Rio developed its bid plan, establishing close relations between the sports competitions and the legacy for the city's infrastructure. For example, one of the proposals in the Candidature File, to divide the event into four regions (Barra, Copacabana, Maracanã and Deodoro), was motivated by the opportunity to build express corridors, interconnecting the whole city and leaving the people a legacy of mobility, social and geographical integration, urban transformation and environmental improvements along their routes.

As a result, Rio de Janeiro entered the race, giving the International Olympic Committee (IOC) a bid with a clear proposal aimed at the Olympic legacy, which would also extend beyond borders, given that a South American city had never before hosted the event.

The bid's motive was the main message contained in the proposal: to make the 2016 Olympic and Paralympic Games, if held here, represent a turning point for Rio, entering world sporting history as the Olympic Games of Transformation.

The city's decision to bid to host the 2016 Games was made based on a long-term vision: to grasp the opportunity that a successful bid would offer to transform Rio into a better city in which to live, work and visit. The 2016 Games could boost growing and sustained urban and social developments in the city.

A unique opportunity was spotted to implement some important infrastructure projects, promised decades ago but never executed, bringing about comprehensive urban renewal.

Challenges such as improving urban mobility, revitalizing neglected areas such as the port region, controlling floods and expanding the sanitation infrastructure are examples of public policies that could benefit from Rio being elected. The Games could help to reduce geographic and social divisions and help better integrate the city and all its different regions.





# Why did Rio win?

On October 2, 2009, in Copenhagen, Denmark, the members of the International Olympic Committee (IOC) chose the city of Rio de Janeiro to host the 2016 Olympic and Paralympic Games. By beating the competing cities of Madrid, Tokyo and Chicago, Rio became the first city in South America to receive the event.

Out of all the candidates, Rio was the city that could most use the Games to boost its development. The other three enjoyed the advantage of having superior infrastructure to host the event. However, it was precisely the challenges that existed in the Brazilian city that became the biggest reasons for its victory. The transformational impact that the Games would have on the lives of Cariocas (Rio's people) was a decisive factor in choosing Rio.





Rio de Janeiro presented the IOC with a very strong technical bid, built on the vision that the Games would be a celebration of athletes and sport, while also offering the city, region and country the opportunity to meet their broadest long-term aspirations for the future

JACQUES ROGGE, former President of the IOC

For the first time the Olympics will be held in South America. See map for the distribution of other Games

The IOC members recognized that the proposals for the city's development and social inclusion meant the start of a new era for Rio, focused on dealing with urban issues, especially infrastructure, security and the environment. The Games' Master Plan was therefore the city's Master Plan.

Each of the proposals in Rio's Candidature File featured the concepts of transformation and permanent legacies, and this was one of the city's main distinctive factors. The winning idea was based on the principle of "organizing weeks of the best possible competitions while also generating many years of inspiration, social progress and sports development."

The biggest reason for choosing Rio as Host City was summed up in a single phrase in its own Candidature File: the event in Rio would be "the Games of celebration of transformation."







The proposal to leave a transformational legacy for the city goes far beyond the sphere of sport. The Games are driving improvements in residents' quality of life via the implementation of projects promised for decades but never executed until now.

In addition, the Olympic legacy has been implemented earlier and/ or expanded on in some of the projects proposed in the Candidature File. One example is the Transoeste Bus Rapid Transit (BRT) express corridor, that passes through Barra da Tijuca, Recreio, Santa Cruz and Campo Grande, and which came into service four years before the Games. The Grota Funda Tunnel, which is part of Transoeste, was a 30-year-old promise to the city's people. The express corridor's original route was expanded, increasing its reach and the benefits to the people.

Another case of a legacy delivered early is the Rio Operations Center. Since 2010 (six years before the Games), the Rio Operations Center has monitored and optimized the city's daily routine, especially during big events.

The Games' legacy is not restricted to infrastructure and mobility projects. With regard to sports venues, the goal is to have sustainable arenas that can be reused after the event. For example, the Handball Arena will be transformed into four municipal schools after the competitions, based on the new concept of nomadic architecture.

## EXAMPLES OF PROJECTS ALREADY DELIVERED BEFORE THE GAMES AND/OR EXPANDED TOWARDS WHAT WAS PROMISED IN THE BID BOOK

	OLD PROMISES	ANTICIPATED LEGACY	EXTENDED LEGACY
BRT TRANSOESTE	V	V	<b>V</b>
BRT TRANSCARIOCA	V	<b>V</b>	V
BRT TRANSOLÍMPICA	V		V
METRO LINE 4	V		<b>V</b>
<u> </u>		<b>V</b>	V
CICC		V	✓
MARVELOUS PORT	V	<b>V</b>	V
EXTENSION OF THE SAMBADROME	<b>V</b>	<b>V</b>	
(TR SEROPÉDICA	<b>V</b>	<b>V</b>	
FLOOD CONTROL	<b>V</b>	<b>V</b>	
HOTEL NETWORK		<b>V</b>	<b>V</b>

It will be an opportunity to accelerate
Rio de Janeiro's transformation into
a truly international city

CANDIDATURE FILE

# The projects

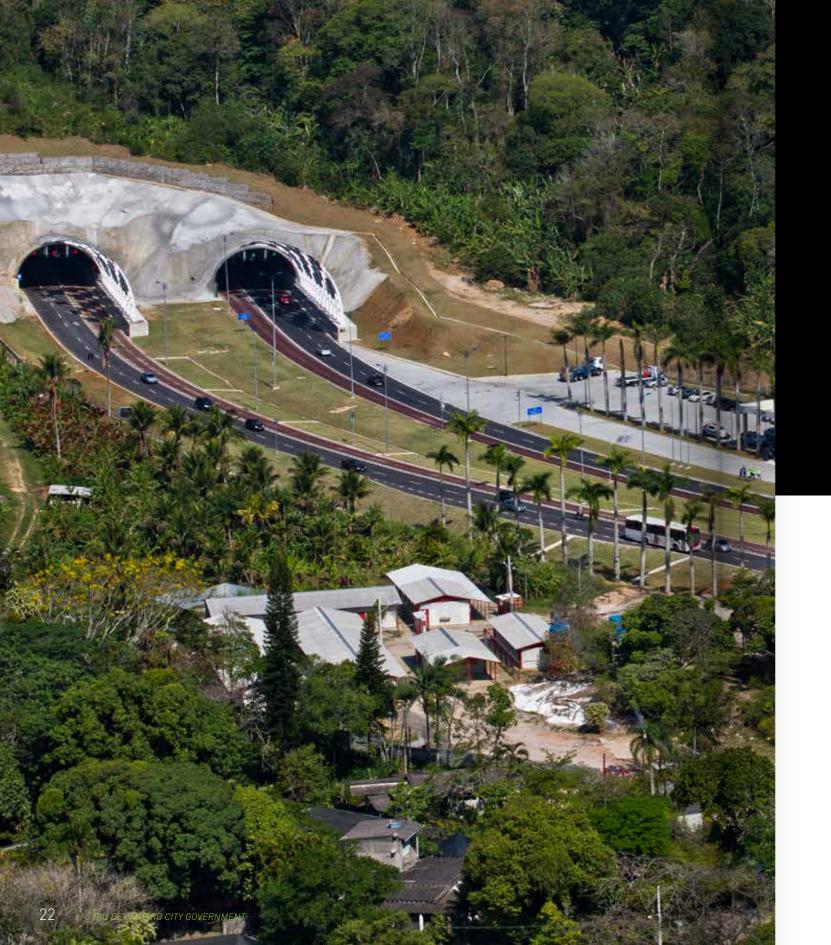
Like athletes striving to give their best, the city of Rio has been using the Olympics to accelerate changes capable of improving its residents' quality of life. Seeking to overcome challenges in the run-up to 2016, Rio has been working to enhance mobility, restore degraded areas, combat flooding and expand sewage facilities. These are projects made feasible by the event, but they will serve Cariocas rather than athletes and delegations.

A large share of the so-called Rio 2016 Olympic legacies are listed in the Public Policies Plan. These are infrastructure, mobility and urban renovation projects that are not exclusively related to organizing and holding the Olympic event, but they are important to the population and they are being implemented thanks to the staging of the Games.

On the other hand, the Responsibilities Matrix lists the projects exclusively associated with organizing and staging the Rio 2016 Games, in other words, the facilities that will host the competitions and athletes, which will leave a significant sports legacy.

Since 2009, when the Candidature File was presented, the projects have been altered in many ways. Some modifications were requested by the International Olympic Committee (the inclusion of golf and rugby), while others were requested by the Rio 2016 Committee or governmental entities, such as venue changes for some sports (water polo and fencing). Other changes have taken place to expand the benefits for the city and its residents.

All this transformation is already becoming a reality, with projects completed and in place before the event, providing the Olympic legacy early. With two years to go until the Games, Cariocas already have two BRTs – Transoeste and Transcarioca – which together extend for 100 km and will be able to transport more than half a million passengers per day. By 2016, the Transolímpica BRT, the downtown VLT (light rail system) and Metrô Line 4 will also be in place. The proportion of Rio's residents using high-capacity transport will more than triple – a leap worthy of an Olympic record.



# Public Policies Plan - Legacy

These projects are not directly related to the Olympic Games. They are infrastructure construction projects resulting from public policies, particularly mobility and urban enhancement policies, which were either made feasible or accelerated due to Rio's selection as Host City of the Games.

Almost half (43 per cent) of the total investment involved in executing the Public Policies Plan is being funded by private resources. The majority of the projects are at an advanced stage, with contracts signed and building work under way, with two years still left until the event.

One of the most profound transformations arising from these infrastructure projects involves mobility. The interventions include the implementation of a modern integrated high-capacity transport system, the widening of avenues, the building of viaducts and the execution of road other road improvements. Rio city government's efforts are focused on a new road network to make the city completely interconnected, facilitating and speeding up movement around it, and removing traditional geographical and social barriers.

In 2011, before the first BRT corridor began operating (Transoeste), just 18 per cent of journeys in Rio used a high-capacity transport system. By 2016, with all the new BRT corridors and the expanded subway system in place, it is estimated that this figure will have risen to 63 per cent.

Some infrastructure projects (the majority of which the city government is responsible for) that are helping to transform everyday life in Rio are described below. Most of them are contained in the Public Policies Plan, announced in the first half of 2014, while others such as the Transcarioca BRT, the new Waste Treatment Center in Seropédica and the Rio Operations Center – were delivered before this plan was launched.





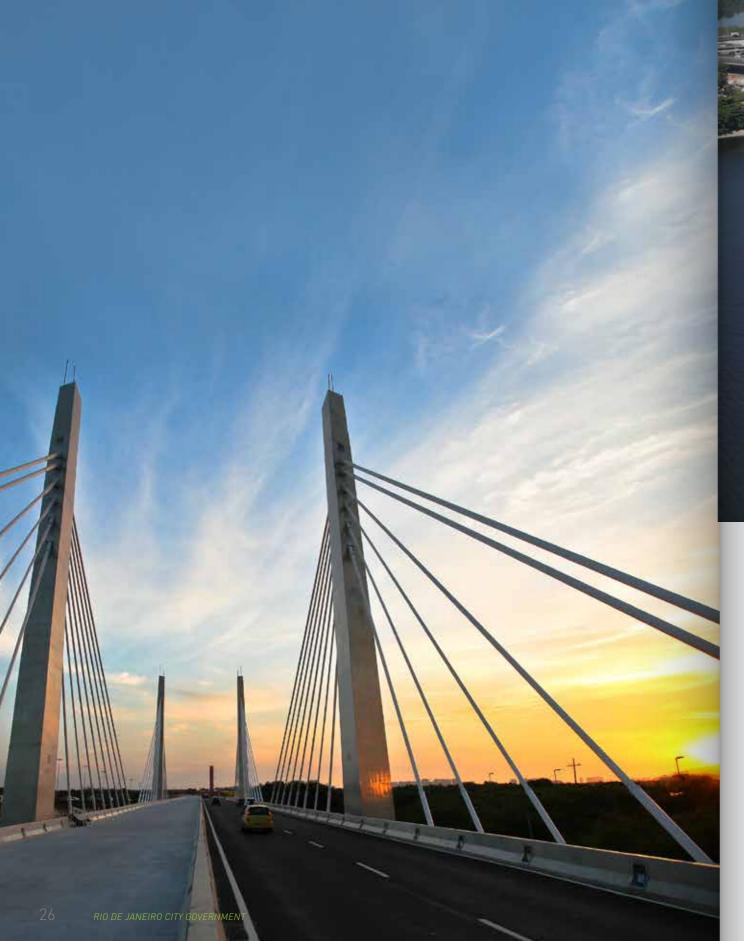
### Transoeste BRT

A longstanding promise, the Transoeste BRT has provided an early legacy of increased mobility tion had been promised to Rio's arising from the Rio 2016 Games. people for 30 years, and which It was the first major Gamesrelated project to improve the city's mobility. Delivered in 2012, this express corridor, exclusively used by modern articulated buses with air-conditioning, connects Santa Cruz and Campo Oceânico, connecting with Metrô Grande with Barra da Tijuca.

It passes through the Grota Funda Tunnel, whose construchas removed a bottleneck along the route between the Barra de Guaratiba and Recreio areas. A new stretch of the BRT, currently under construction, will link the Alvorada terminal to Jardim Line 4 (subway).

The plan was expanded in relation to that proposed in the Candidature File, which did not include the section between the Alvorada terminal and Jardim Oceânico, nor the link with the neighborhood of Campo Grande.

- $\rightarrow$  59 km long
- $\rightarrow$  68 station
- $\rightarrow$  230,000 passengers per day
- → 50 per cent reduction in journey times





### Transcarioca BRT

the Transcarioca BRT is one more augmented and early legacy of the Rio 2016 Games. Delivered in 2014, this express corridor is the most important has been greatly expanded in urban mobility project in Rio, and the first high-capacity transport system in Brazil to connect a city with an airport.

Another longstanding promise, Tom Jobim International Airport, passing through 27 neigh- more than half a million people borhoods, interconnecting with with just these two corridors, various transport modes and integrating the city. The project Its construction has also rerelation to the route presented throughout its route. in the Candidature File, which would merely connect Barra to Penha. By adding in the Tran-First promised almost 50 years soeste BRT users, the legacy of ago, it links Barra da Tijuca to a modern high-capacity trans-

port system will have reached two years before the Games. sulted in urban improvements

- $\rightarrow$  39 km long
- $\rightarrow$  46 stations
- $\rightarrow$  320,000 people benefited
- → 60 per cent reduction in journey times

### Transolímpica BRT

The Transolímpica BRT will connect the city's two main Olympic clusters: Barra da Tijuca, home to the Olympic Park, and Deodoro, location of the tion was started in July 2012 and, once more comfort. completed, local people will enjoy one of the main mobility legacies: a highcapacity transport network, completely interconnected in Deodoro with the Transcarioca and Transoeste BRTs (already delivered) as well as with the

railroad network. In addition, via the Transolímpica BRT, residents of the Baixada Fluminense region and areas near Avenida Brasil will now have an alternative to the Deodoro Sports Complex. Its construc- Linha Amarela freeway, with less traffic and

- $\rightarrow$  24.7 km long
- $\rightarrow$  18 stations
- → 70,000 passengers per day
- → 54 per cent reduction in journey times





A longstanding promise, Line 4 of Rio's Metrô (subway) is another expanded legacy. The proposal in the Candidature File was to connect the South Zone and Barra da Tijuca with a BRT corridor. However, the partnership with the state government to meet the Olympic commitments expanded the legacy, exchanging the BRT along that stretch with a new subway line. This project was first proposed a long time ago and it is only being implemented thanks to the Games. The public tender for the construction work was held in 1998 but building work only began in 2010.

- $\rightarrow$  16 km long
- → Six stations
- $\rightarrow$  300,000 passengers per day
- → Will take 2,000 cars off the streets





### Widening of the Joá Highway

Presented to the International
Olympic Committee in 2012 as
a road legacy of the Rio 2016
Games, this project will expand Rio's road capacity and improve traffic flows along the
Joá Highway, an important road connecting the South and West zones. Two new lanes and two new tunnels parallel to the existing ones are being built, as well as a bike path on the ocean side of the highway, offering cyclists



→ 35 per cent increase in road capacity

a privileged view of São Conrado Beach. In addition to the traffic flow legacy, the project will also

result in the longest bike path in the city, linking bike paths in Barra and the South Zone.



# Environmental rehabilitation of Baixada de Jacarepaguá region

The environmental rehabilitation of the Baixada de Jacarepaguá region has been increasing rainwater flow capacity, significantly reducing flooding in the area. In 2013, Rio city government delivered part of this environmental legacy, completing macro-drainage works on eight rivers and providing the restoration of 15 watercourses, the revitalization of riverbanks and the reforestation of slopes.

- → 350,000 residents benefited
- → 12 km of watercourses restored
- → 1,220 m of the São Francisco
  - River revitalized
- → 2 km of the Itanhangá
  - River restored
- → 850 m of the Papagaio
  - River revitalized

#### "Viário da Barra" Road

The surroundings of the Olympic Park, in Barra da Tijuca, the so-called "Passeio Olímpico" (Olympic Promenade), will undergo works that, once completed, will leave a legacy of urban enhancement to the local residents. The works includes the adoption of accessibility standards, the use of efficient lighting, the widening of

the Abelardo Bueno and Salvador Allende avenues, the implementation of a new BRT corridor and the construction of a bike path. The mobility legacy will be expanded through the building of the Olympic bus terminal (connecting with the Transolímpica and Transcarioca BRT lines) and the Recreio bus terminal (connecting with the

Transoeste and Transolímpica BRTs). The Olympic Promenade will encompass the Olympic Park, Athletes' Village, Athletes' Park and Riocentro venue.

 $\rightarrow$  360,000 sq m area

 $\rightarrow$  7 km of bike paths





# Sanitation in West Zone

By August 2016, the bulk of the first phase of the West Zone sanitation project will be completed, benefiting residents around the Deodoro Sports Complex.

Sewage collection and treatment services are being provided

through the implementation of a network of sewage pipes and pumping stations. The environmental legacy also includes constant monitoring of water quality and environmental education work with local residents.

- → 20 million sq m area will have
- treated sewage
- → 232,000 residents benefited
- → 200 km network of sewage pipes being installed

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## Light Rail Vehicle system (known by the Portuguese acronym VLT)

Considered one of the world's most advanced means of transport, a light rail system is being implemented in downtown Rio, helping to upgrade the area's infrastructure. VLT trams will integrate with other forms of transport, improving the region's traffic. This is another example of Rio's mobility and urban improvement legacy.



- $\rightarrow$  28 km long
- → Six lines
- $\rightarrow$  56 stops
- ightarrow 300,000 passengers benefited per day

#### Porto Maravilha

A longstanding promise, the "Porto Maravilha" (Marvelous Port) is an accelerated and extended legacy project.

Construction projects in Rio's port region are leading to a profound transformation in an area of great historic importance that was abandoned for decades. Through the largest public-private partnership in the country, the Porto Maravilha project will have revitalized an area of 5 million sq m by 2016, which is becoming a strategic residential, cultural, business and tourism hub. The project includes constructing and restor-

ing 70 km of streets and laying 700 km of new water, sewage, gas and drainage networks.
The residential impact will be huge: the number of residents in this area, in downtown Rio, is expected to rise from 22,000 in 2009 to 100,000 by 2019.

The project has been designed in line with a new, more sustainable concept of mobility, which favors pedestrians, cyclists and integrated public transport, most notably a new Light Rail Vehicle system (known by the Portuguese acronym VLT). The Perimetral overhead highway is being

demolished and replaced by tunnels and a public promenade. Some of the port area's building works have already been delivered, changing the region's appearance. This is the case with the restoration of the Hanging Gardens of Valongo, the Valongo Quay and the Empress' Quay – archeological treasures now returned to the city.

In 2013, three years before the Games, the doors opened to the Rio Museum of Art (known by the Portuguese acronym MAR), a space dedicated to art and culture, and the winner of an Architizer A+ Award – the biggest

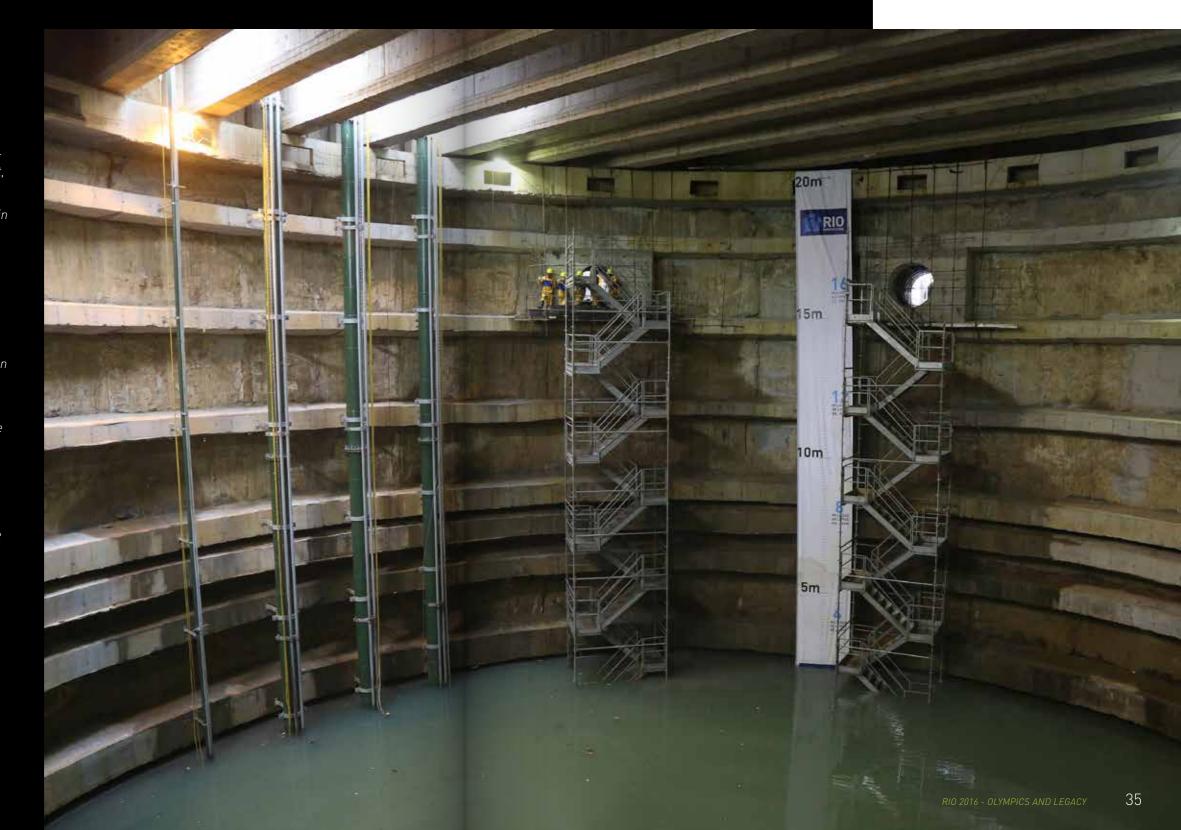


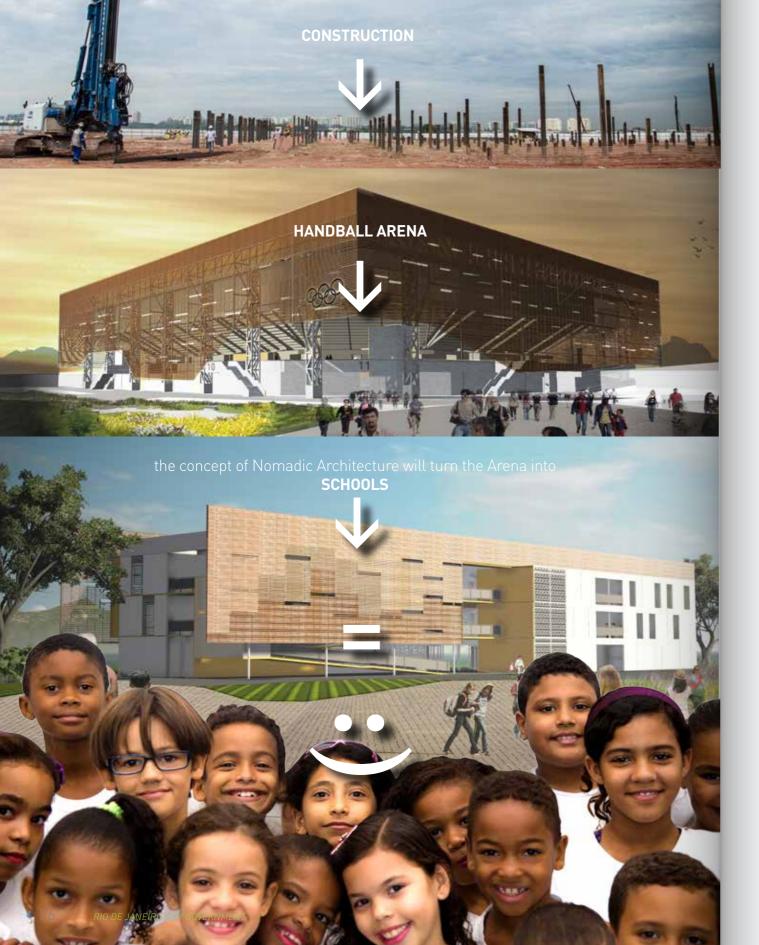
international architecture prize. By 2015, the port area will also have the Museum of Tomorrow, featuring sustainable futuristic architecture and dedicated to Sciences.

- → 5 million sq m of revitalized and modernized space
- → 70 km of enhanced streets and roads
- → Four tunnels, including the longest urban road tunnel in the city, the 2.7 km Via Expressa Tunnel

# Flood control in Greater Tijuca

The "Piscinão da Praça da Bandeira" reservoir is yet another old plan that has finally left the drawing board. Delivered in 2013, the project, promised 40 years ago, is designed to control flooding in Greater Tijuca and Praça da Bandeira, the main road link between the Olympic venues of the Maracanã Region (Maracanã Stadium, João Havelange Olympic Stadium and Sambadrome). In addition to the buffer water tank that is already operating, another four are being built to receive excess flows from the Trapicheiros, Joana, Maracanã and Jacó rivers. After the system has been completely installed, Rio's people will be free from the disruption caused by heavy rain in the region.





### Educational legacy

After the Games, the Handball Arena, located within Barra Olympic Park, will be dismantled and transformed into four municipal schools, becoming an educational legacy. Three of the schools will be located in the Barra-Jacarepaguá region, while the fourth will be installed in São Cristóvão. Rio City Hall has created the concept of nomadic architecture, used for the first time within the Olympic Games. Nomadic architecture reinforces the principle adopted by the city government that the Games should serve the city, avoiding the construction of permanent sports venues that are then underused after the Games, and boosting the event's legacy.

- → Four new municipal schools
- → 500 students in each school

## Urban renewal of the João Havelange Olympic Stadium's surroundings

The "Bairro Maravilha" (Marvelous Neighborhood) program is under way in Engenho de Dentro, in the streets to the north of the

train station and around the João Havelange Olympic Stadium (also known as Engenhão), which will host the Olympic athletics competitions. This work, designed to improve accessibility in the neighborhood, includes street enhancements, an extended network of bike paths and a review of tree cover and public lighting. A review of surface drainage, rainwater collection, drinking water distribution and sewage collection networks will also take place. The legacy of urban improvements will include a new leisure area, Praça do Trem ("Train Square").

→ New 43,000 sq m leisure

area, Praça do Trem

("Train Square")

### Urban renewal of the surroundings of the Maracanã Stadium

The area surrounding the Maracanã Stadium has undergone urban improvement and landscaping work, and the people have gained the Passeio Olímpico do Maracanã ("Maracanã Olympic Promenade"). Widening of avenues, paving of sidewalks, tree planting and the construction of a skateboard ramp are

part of the area's urban revitalization legacy.

- → 50,000 sq m of sidewalks upgraded
- → 404 trees planted, including
  - 13 Zagallo palm trees
  - (named for the Brazilian who won four World Cups
- as player and coach)
- $\rightarrow$  2,4 km of bike paths

### Closure of Gramacho Landfill

A longstanding promise, the closure of the Gramacho Landfill is an accelerated Games legacy. With the implementation of the Seropédica Waste Treatment Center in 2012 the present administration closed the Gramacho Sanitary Landfill, after 36 years in operation (10 years beyond the designed lifespan). This put an end to years of environmental degradation on the banks of Guanabara Bay. Once the landfill had been closed, Rio's city government began work on restoring a mangrove ecosystem there.

→100 hectares of native vegetation replanted



### Seropédica Waste Treatment Center

Another longstanding promise, the construction of the Seropédica Waste Treatment Center is another accelerated legacy. Delivered in 2011, to replace the Gramacho landfill, it is the most advanced waste treatment center in Latin America. It has already brought about a significant improvement in environmental quality for all the residents of the metropolitan region of Rio de Janeiro. The center is also capable of generating power from trash.



→ Every day, 10,000 metric tonnes of garbage are treated without harming the environment

# Integrated management of the city

The Rio Operations Center and the Integrated Command and Control Center are accelerated and expanded Games legacies. Rio's Candidature File for the 2016 Olympic and Paralympic Games provided for a control center to operate only during the 2013, the state government's In-Games. Now, the city has two control centers with different areas of focus, both of a permanent nature and fully operating well before the event. Delivered in 2010, the municipal govern-

ment's Rio Operations Center monitors the city continuously, interconnecting essential bodies for managing the metropolis in real time, anticipating occurrences and intervening with integrated solutions. Opened in tegrated Command and Control Center is based on an integrated public security model, monitoring both everyday demands and the special needs of the major events that the city hosts.

#### Rio Operations Center

- → 30 interconnected entities
- $\rightarrow$  920 cameras (owned or shared) installed throughout the city

#### Integrated Command and Control Center

- → 668 jobs created
- → 460 cameras installed across the city and metropolitan region

38 39



# Matrix of Responsibilities

This matrix presents the set of projects run by the three levels of government, exclusively associated with organizing and holding the Rio 2016 Games. The Olympic venues are divided into four regions of the city, promoting integration between them and their sustainable development, and delivering benefits before, during and after the staging of the event.

Besides Barra da Tijuca, home to the Athletes' Village and the Olympic Park (the heart of the Rio 2016 Games), and which has been growing quickly in recent decades, the regions of Deodoro, Maracanã and Copacabana also host Olympic competition venues and other facilities.

### Hotel network

The growth of the hotel network is another extended and accelerated Games legacy. Via its Candidature File, Rio de Janeiro made a commitment to the IOC to expand the city's hotel network to a total of 27,000 hotel rooms. However, the city government now estimates that this number will reach 39,000 by 2016. The Urban and Tax Incentive Law for investments in new hotels, created and approved by the current city administration in 2010, attracted various major hotel groups to Rio.

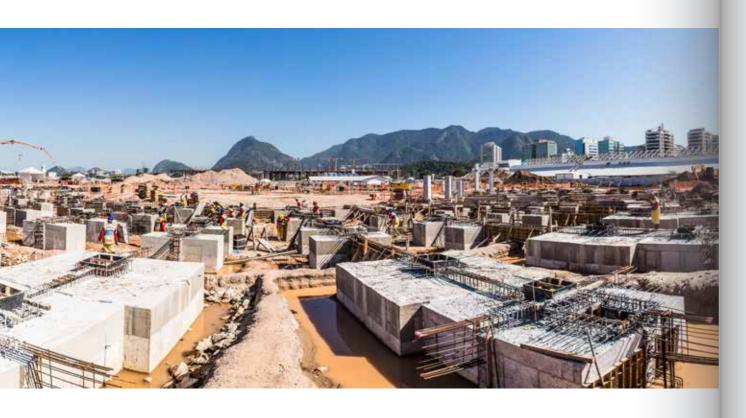
- $\rightarrow$  13,000 direct jobs
- $\rightarrow$  40,000 indirect jobs
- $\rightarrow$  75 new hotels

2010 19,8 thousand hotel rooms

2016 37 thousand hotel rooms (PROJECTION)









In the Barra region, Games-related projects include the construction of the Olympic Park, Athletes' Village, Golf Course and Athletes' Park. Within the Olympic Park, the city government is building new facilities in partnership with the private sector and the Federal Government, in addition to adapting some existing ones. The Olympic Park's main legacy will be a permanent facility for Brazilian and South American sport: the Olympic Training Center.

The three sports pavilions under construction, which will host a

Maria Lenk Aquatics Center, will together make up the Olympic Training Center after the Games. Designed to train future generations of elite athletes and to host international competitions, it will be the most modern training center in Latin America and the first of its kind in Brazil.

In addition to the sports legacy, the city will benefit from road, urban and housing improvements, a mobility legacy, and the educational legacy resulting from the transformation of the variety of competitions, as well as Handball Arena into four munici-

the Velodrome, Tennis Center and pal schools, as provided for in the Public Policies Plan.

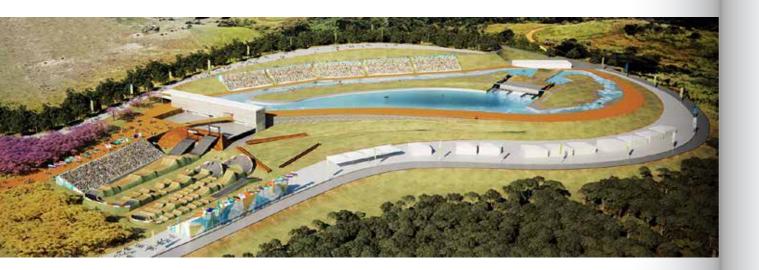
> The following Olympic venues and facilities are located in the Barra region: the Tennis Center, Velodrome, Handball Arena, Aquatics Center, Maria Lenk Aguatics Center, Rio Arena, three sports pavilions, the International Broadcast Center, Main Press Center and a hotel, as well as the golf course.



### Athletes' Park



42 43



### Deodoro Region

This area will be home to the following Olympic venues:
Canoe Slalom Circuit, BMX
Track, Deodoro Arena, Field
Hockey Center, Mountain Bike
Track, Rugby and Modern
Pentathlon Arena, National
Equestrian Center and Modern
Pentathlon Swimming Pool.

The construction of venues for the Rio 2007 Pan American Games left a legacy of sports infrastructure in the region. With the Rio 2016 Games, the existing sports legacy will be expanded, encouraging young people from the deprived parts of the neighborhood to participate in sporting activities even more. The creation of the X-Park, to be located

inside Deodoro Sports Complex, will reinforce local youngsters' prospects for social and sporting development. Covering an area of 500,000 sq m, this will be the city's second largest park, behind Flamengo Park. In Deodoro, the benefits will reach the greatest concentration of young people in the metropolitan area of Rio de Janeiro.

### Maracanã Region

The Maracanã Region contains five sports venues, taking the Games to the city's North Zone: the Maracanã, Maracanãzinho, Julio de Lamare Aquatic Park, João Havelange Olympic Stadium and Sambadrome (Rio's samba parade ground). The region's legacies include an expansion of the Sambadrome, completed in February 2012 (more than four years before the Games). The improvements around the Maracanã Stadium and João Havelange Olympic Stadium were described above.







#### Expansion

#### of Sambódromo

A longstanding promise, the expansion of the Sambadrome is an accelerated Games legacy. The stage for the sambas school parade during Rio's carnival, the largest popular festival in the world, the Sambadrome was renovated and delivered in 2012, restoring the original design by architect Oscar Niemeyer nearly 30 years after it was built. Retaining symmetry between the sets of stands either side of the Avenue, the facility's capacity was increased from 60,000 to 72,500 seats through a partnership with the private sector. During the Rio 2016 Games, the Sambadrome will host the start and finish of the marathon as

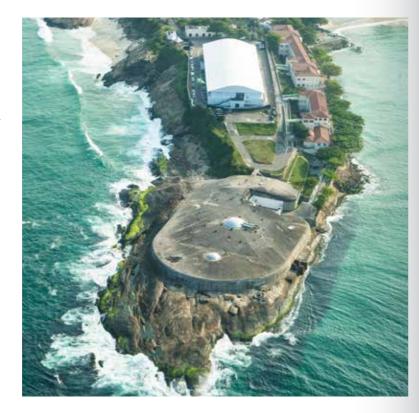


→ 12,500 extra seats

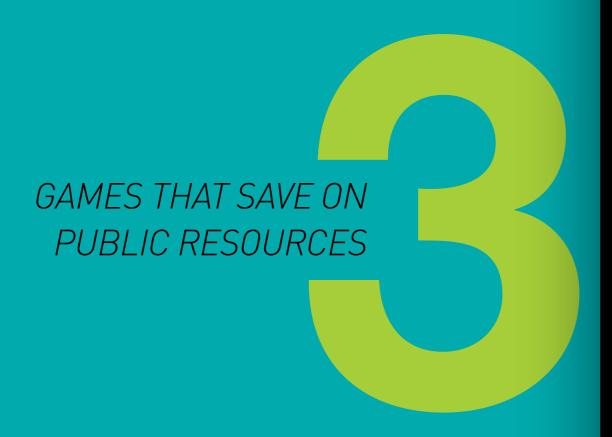


# Copacabana Region

For Copacabana, the most internationally well known of the four regions, the Games will leave an environmental legacy. The Rio 2016 project provides for implementing existing initiatives to clean up the water around the neighborhood and protect other local environmental resources. The Glória Marina, the surroundings of Copacabana Fort, Rodrigo de Freitas Lagoon and Flamengo Park will be competition venues. Copacabana Beach will also receive a temporary stadium during the Games, for the beach volleyball competition.

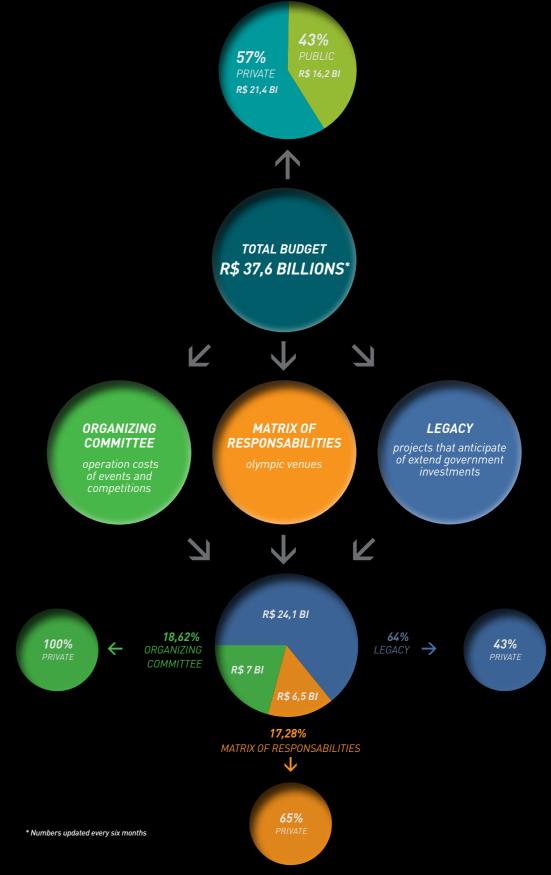






For the first time in the history of the Olympics, more than half of the investment will come from the private sector, relieving taxpayers' wallets. The city of Rio will use the Games to develop itself, but without hampering public investment in other areas. Of the total planned amount of R\$ 37.6 billion (as of the second half of 2014), just 43 per cent will be provided for by the public sector – the city, state and federal governments – and the remaining 57 per cent will come from the private sector. This has been possible through intelligent means of saving money, such as public-private partnerships. The Olympic Park, Athletes' Village, Golf Course, expansion of the Sambadrome, sanitation improvements in the West Zone, the revitalization of the Port area and the implementation of the VLT system are examples of projects largely funded by the private sector.

The city government's philosophy to avoid white elephants, to think about what will remain for the city beyond 2016, is reflected in the budget breakdown. In all, R\$24.1 billion (64 per cent of the investment) is accounted for by legacy projects. These projects were made possible by the opportunity of the Olympics, but they will serve Cariocas rather than athletes and delegations. They are projects







contained in the Public Policies Plan, such as BRTs, Subway Line 4 and the revitalization of the Port area. Of those, 43 per cent are being provided directly by the private sector.

The R\$7 billion spent by the local organizing committee on Games operations (100 per cent private money). This covers the event's operating costs, including meals, uniforms and transportation for the Olympic family.

Two main areas make up the total budget, alongside the legacy budget:

The figures contained in the Matrix of Responsibilities, which lists all the Olympic facilities to be built. According to data from the second half of 2014, the Matrix's total bill is R\$6.5 billion, although these numbers are updated every six months.

**LEGACY** R\$ 24,1 BI

projects that anticipate of extend government investments

64% OF THE TOTAL BUDGET FOR THE GAMES 43% FROM THE PRIVATE

18,62% OF THE TOTAL BUDGET FOR THE GAMES

100% SECTOR

> ects designed to directly enable the Games in Rio, i.e. projects that would not necessarily be executed if it were not for the Olympics, such as the Olympic Park, the Athletes' Village and Deodoro Complex. Of the R\$6.5 billion planned for the Matrix of Responsibilities as of the first half of 2014, just 35 per cent represents public money. This means that three quarters of the total spending is not provided by government funds.

> > 51

The Matrix encompasses proj-

MATRIX OF RESPONSABILITIES R\$ 6,5 BI

**ORGANIZING** 

COMMITTEE

operation costs of events and competitions

R\$ 7 BI

olympic venues

17,28% FOR THE GAMES 65%

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# GAMES ON TIME

The schedule for meeting all the commitments taken on by Rio in the Rio 2016 Games' Candidature File is being adhered to. One of the advantages of the city's Olympic project is that 16 of the 30 competition venues – 55 per cent – already exist or only need to be adapted. For example, two years before the Games, Rio already has two stadiums: the Maracanã, to host the opening and closing ceremonies and the soccer finals, which is ready; and João Havelange Olympic Stadium, to host the athletics competitions, which is being renovated.

With regards to the new venues built for the event, the main construction projects are under way. The Olympic Park, the heart of the Games, extending over an area of 1.18 million sq m, has been under construction since 2012. Work on the Athletes' Village began before this, in late 2010, when the foundation stone was laid for the set of buildings that will accommodate the delegations. Building works in Deodoro Sports Complex started in July 2014, but some of the facilities there already exist: 60 per cent of the permanent competition areas were used during the 2007 Pan American Games and 2011 World Military Games.



Another characteristic of the Rio 2016 Games is the simplicity of the venues, while also complying with Olympic quality standards. To avoid having underused white elephants after the event, the city of Rio has prioritized lean and sustainable facilities, capable of leaving both an important contribution to the sports world and an effective legacy for the population. As well as using many temporary structures and the concept of nomadic architecture – capable of transforming the handball arena into four municipal schools – the venues have been planned to be no larger than necessary. João Havelange Olympic Stadium, for example, will have the capacity for 60,000 spectators (including 15,000 temporary seats), the same as Barcelona's Olympic Stadium in 1992, which had a smaller capacity than the stadiums used at all of the five preceding and five subsequent editions of the Games.

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# 16 out of the 30 competition sites already exist or will only go through adaptation - representing 55 per cent of the total:

Olympic stadium João Havelange

Maracanã

Maracanãzinho

Julio De Lamare Water Park

Sambódromo

Maria Lenk Water Park

Arena Rio

Lagoa Rowing Stadium

Riocentro

Copacabana Fort

Marina da Glória

Flamengo Park

Olympic Centre for Hockey

National Shooting Center

National Horse Riding Center

National Centre of Modern Pentathlon









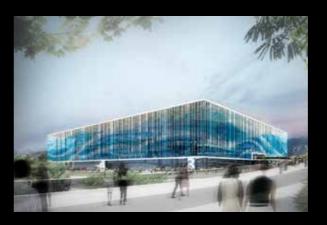
# Olympic Park

The Olympic Park, an area of 1.18 million sq m in Barra da Tijuca, is the heart of the Rio Olympics. The site will have a set of nine sports venues, including seven new ones: the Tennis Center, Velodrome and three sports pavilions, which will be permanent; and the temporary Handball Arena and Aquatics Center.

The construction of the Olympic Park, which will host 16 Olympic and 10 Paralympic sports, will leave the city with a series of benefits. The permanent sports legacy will be delivered after the Games, when the three sports pavilions, along with the Velodrome, Tennis Center and Maria Lenk Aquatics Center, will make up the Olympic Training Center. The rest of the area will be restructured and transformed into a new neighborhood the size of Leme (an existing Rio neighborhood near Copacabana). The new residential area will set the benchmark for the city in terms of energy efficiency, sustainability and accessibility, and it will be served by two BRT lines.











#### **SPORTS PAVILION 1**

COMPETITIONS: basketball, wheelchair basketball and wheelchair rugby

#### **SPORTS PAVILION 2**

COMPETITIONS: judo, wrestling, Greco-Roman wrestling, boccia and Paralympic judo

#### **SPORTS PAVILION 3**

COMPETITIONS: fencing, taekwondo and sitting volleyball

#### **VELODROME**

COMPETITIONS: track cycling and track para-cycling

#### **AQUATICS CENTER**

COMPETITIONS: Olympic and Paralympic swimming and water polo

#### **TENNIS CENTER**

COMPETITIONS: tennis, 5-a-side soccer and wheelchair tennis

#### HANDBALL ARENA

COMPETITIONS: handball and goalball

#### **ARENA RIO**

COMPETITIONS: artistic gymnastics, rhythmic gymnastics, trampoline gymnastics, and wheelchair basketball

#### MARIA LENK AQUATICS CENTER

COMPETITIONS: diving and synchronized swimming

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# Riocentro

Riocentro hosts major international events in Rio de Janeiro, receiving around 90 events per year. It hosted the "Rio+20" United Nations Conference on Sustainable Development in 2012. The 2014 World Cup's International Broadcast Center (IBC) was housed there in a temporary structure. For the Olympics, Riocentro will be used for four sports: weightlifting and powerlifting, Olympic and Paralympic table tennis, badminton and boxing.

#### **PAVILION 2**

COMPETITIONS: weightlifting and powerlifting

#### **PAVILION 3**

COMPETITIONS: Olympic and Paralympic table tennis

#### **PAVILION 4**

COMPETITION: badminton

#### **PAVILION 6**

**COMPETITION:** boxing

# Athletes' Village

The Athletes' Village will cover an area of 800,000 sq m, including a built area of 206,000 sq m, with 31 buildings, each at 17 stories high. It will receive around 10,500 Olympic athletes and 4,500 Paralympic athletes. The buildings are being constructed by the private sector. The infrastructure (street paving, basic sanitation and electric power), which was the city government's responsibility, was included in the package of responsibilities of the consortium that won the Olympic Park's public-private partnership, thereby relieving the public wallet.

# Golf course

COMPETITION: golf
SIZE: 1 million sq m



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# Deodoro Sports Complex

Deodoro Sports Complex will host 11 Olympic and four Paralympic sports. Three permanent and two temporary facilities will be built. Another four existing ones will be remodeled. The Complex already hosted competitions as part of the 2007 Pan American Games and the 2011 World Military Games. As a result, approximately 60 per cent of the permanent venues needed for the Rio 2016 Games already exist.

The Field Hockey Center, National Shooting Center, Equestrian Center and Modern Pentathlon Swimming Pool are already in place and will undergo some simple adaptation. Just 40 per cent of the permanent venues are yet to be built: the BMX Track, Canoe Slalom Circuit, and Deodoro Arena.

The Mountain Bike Track and Rugby and Modern Pentathlon Arena will be temporary venues, built only for the Games.

After the Games, Cariocas will gain the second largest public park in the city. The X-Park, a major sports legacy covering around 500,000 sq m, will feature the Canoe Slalom Circuit and BMX Track, maintained for the use of athletes and the general public.





# FIELD HOCKEY CENTER

COMPETITION: field hockey

# NATIONAL SHOOTING CENTER

COMPETITION: Olympic and Paralympic shooting

#### **NATIONAL EQUESTRIAN CENTER**

COMPETITIONS: jumping, dressage, and eventing

#### **DEODORO ARENA**

COMPETITIONS: women's basketball preliminary games, modern pentathlon fencing, and wheelchair fencing

#### **MODERN PENTATHLON AQUATICS CENTER**

COMPETITION: modern pentathlon swimming

#### **OLYMPIC BMX CENTER**

COMPETITION: cycling - BMX

#### **OLYMPIC CANOE SLALOM STADIUM**

COMPETITION: canoe slalom

#### **MOUNTAIN BIKE CIRCUIT**

COMPETITION: mountain bike

#### **RUGBY & MODERN PENTATHLON ARENA**

COMPETITIONS: rugby, modern pentathlon equestrian competitions, modern pentathlon race, modern pentathlon shooting, and 7-a-side soccer









# Copacabana Cluster

#### COPACABANA STADIUM

COMPETITION: beach volleyball

#### COPACABANA FORT

COMPETITIONS: support for road competitions and aquatic marathon

#### **RODRIGO DE FREITAS LAGOON**

COMPETITIONS: rowing and canoe sprint

#### MARINA DA GLÓRIA

COMPETITION: sailing

#### FLAMENGO PARK

COMPETITIONS: some athletics and road cycling competitions

# Maracanã Cluster

#### MARACANÃ STADIUM

COMPETITION: soccer finals

#### **MARACANÃZINHO**

COMPETITION: volleyball



### JÚLIO DE LAMARE AQUATIC PARK

COMPETITION: water polo group stage

# JOÃO HAVELANGE OLYMPIC STADIUM (ENGENHÃO)

COMPETITIONS: athletics

#### **SAMBÓDROMO**

COMPETITIONS: archery, and start and finish of marathon