The Olympic Winter Games in numbers – September 2017

Vancouver 2010, Sochi 2014 and PyeongChang 2018

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1 Introduction

Successful Olympic Games start with a vision focused on how the Games could advance local and regional development goals. Developing the right vision requires creative thinking, consensus building and big ideas. Reliable information can help transform those ideas into action that delivers desired outcomes. This document is intended to contribute to that process.

The information presented here has been compiled from previous Olympic Winter Games to help cities make informed decisions about the costs and benefits of hosting future Games. It offers data on key cost and revenue drivers at the two most recent Olympic Games (Vancouver 2010, Sochi 2014) and the forthcoming Games in PyeongChang 2018, as well as information on the number of venues and other factors that offer insights on Games requirements.

The data can be used to complement feasibility studies and to support the development of realistic Games operations budgets. However, it is important to bear in mind the local context in considering past experiences in other cities. There is no one-size-fits-all template for the Olympic Games. Cities should view the Games through their own unique context and develop plans that address local and regional needs. The International Olympic Committee (IOC) offers assistance at every stage to assist the organisation of Games that benefit local communities.

This document provides a snapshot of three very different cities that delivered Games that reflected their starting points and their goals.

Vancouver started its Olympic Games planning with several existing venues and a well-established ski resort in nearby Whistler. Sochi pursued a vision to transform a summer resort city into a year-round tourist destination with new world-class winter sports facilities. PyeongChang, now in the final stages of preparation, is also creating a new winter sport destination in its own unique context.

Other important factors that all cities should consider in the local context include labour and construction costs; the availability of winter sports expertise; and the vibrancy of the domestic commercial sports market.

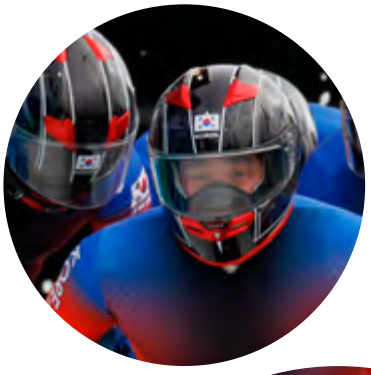
Changes in society and within the Olympic Movement will also have an impact on costs and revenue for future Games.

By almost any measure, the Olympic Winter Games are more popular than ever, reaching record global audiences via traditional television, digital platforms and social media. Exciting new events are helping to attract new audiences and new commercial partners.

The expansion of the sports programme — from 86 events in Vancouver, to 96 events in Sochi and the possibility of more events in the future — not only increases the appeal of the Games, it also increases the number of competition venues.

At the same time, sports organisations, including Organising Committees for the Olympic Games (OCOG), have responded to societal expectation for more accountability, more transparency, more social responsibility and more sustainability.

The IOC welcomes these changes and took action to address them with the implementation of Olympic Agenda 2020, the IOC's strategic roadmap for the future of the Olympic Movement. Reducing the cost and complexity of the Games and the Candidature Process are among the primary objectives of Olympic Agenda 2020.



As a result of the reforms, the Candidature Process has become an ongoing dialogue between the IOC and the cities, with expertise and support provided at every step to ensure that Games proposals align with local and regional long-term goals. This document is part of that ongoing dialogue and will be followed by additional information to assist cities considering a possible candidature to host the Olympic Winter Games.

Olympic Agenda 2020 also puts an even stronger emphasis on the importance of placing legacy and sustainability considerations at the core of every aspect of Games planning and delivery.

Cities have more flexibility to develop Games proposals that serve local needs and are strongly encouraged to make maximum use of existing, temporary and demountable venues, with new venues allowed only if they have a clear operational plan for legacy after the Games. The new flexibility includes the option of using venues outside the host city or even outside the host country.

Other changes directly benefit Candidate Cities. The IOC has assumed costs previously borne by the cities and continues to increase its collaboration with cities throughout the entire Candidature Process, starting well before cities make any commitment. The process provides numerous opportunities for the IOC, the International Federations (IFs) and other Olympic stakeholders to offer advice, support and feedback to help cities optimise their Games proposals.

Although the candidates seeking to host the Olympic Games 2024 were the first to receive the full benefits of Olympic Agenda 2020, other cities felt its positive impact almost as soon as it was adopted in December 2014. For example, the new flexibility and closer collaboration between the OCOG and the IOC helped achieve more than USD 2 billion in savings for the Olympic Games Tokyo 2020.

This process of reform and cost reduction continues through other initiatives that grew out of Olympic Agenda 2020. There are more significant changes to come.

In July 2017, the IOC approved a new Candidature Process for the Olympic Winter Games 2026 that will further reduce costs, simplify procedures and provide more assistance to NOCs and Cities at every stage.

The changes expanded the Invitation Phase to a full year. This period is now referred to as the Dialogue Stage and will give NOCs and Cities more time and more help to develop their proposals. The changes also shortened the Candidature Stage from two years to one, significantly reducing the cost of a candidature. Cities will not be required to submit any formal proposals or make any presentations during the Dialogue Stage. Under the new approach, the IOC will take a more proactive role in assisting and supporting cities considering a candidature well before any commitment. The IOC will customise its approach to the needs of the cities to help them develop the best value proposition for their city and region.

The changes to the candidature process builds on the IOC's approval in 2016 of a series of recommendations developed by a 26-member Olympic Winter Games Strategic Review Working Group. The working group was established to consider the application of Olympic Agenda 2020 in the unique context of the Olympic Winter Games. The result is even more flexibility for winter sport venues outside the host city/region and country, a stronger emphasis on the use of temporary and demountable venues and more support from the IOC and the IFs earlier in the Olympic Winter Games Candidature Process. The final objective of the recommendations is to reduce costs and complexity for candidate cities while celebrating the special attributes of the Olympic Winter Games, and their links to the natural environment and youth-focused events.

Another initiative, Games Management 2020, is examining ways to further reduce costs and optimise services by systematically reviewing technical requirements and service levels for Games preparations. The changes include eliminating minimum capacity requirements for competition venues, and providing more flexibility for venue master plans, the Olympic Village and the International Broadcast Centre (IBC).

Other Games Management 2020 initiatives are focused on increasing support to OCOGs from the IOC and the IFs. Changes in this regard include the provision of turnkey solutions in areas where sourcing from the IOC reduces risks and costs for OCOGs.

As a result of all these changes, and others that will emerge in the ongoing reform process, cost drivers for future Games may differ from those of previous Games.

Every host city infuses the Olympic Winter Games with its own unique character. That is part of the magic of the Games. The data provided offers a baseline for anyone considering whether to showcase their city's unique character to a vast global audience by hosting the Olympic Winter Games. We trust you will find it useful.

Please do not hesitate to contact Olympic Games Candidature Coordination (candidate.cities@olympic.org) if you have questions about this document or any other matter related to the Candidature Process or hosting the Olympic Games.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2.1 Stakeholders

The number of athletes, team officials, International Federations (IFs) and National Olympic Committees (NOCs) reflects the evolution of the sport programme and the increase in universality of the Olympic Winter Games.

Initiatives are underway to optimise the number of broadcasters for future Games.

The number of participants impacts the scope of many OCOG Functional Areas (FAs) in that it represents the size (or part) of the population to which they provide services.

For example, for the Accreditation FA, it impacts the amount of accreditation card material stock, the size of accreditation centres, the quantity of technical equipment and the number of workforce. For the Food & Beverage FA, it impacts the size of kitchen and dining facilities and the amount of food and beverages to be prepared and served.

2.1.1 Olympic Games

HCC – Operational Requirements

- ACR Annex I – Accreditation at the Olympic Games – Detailed specifications

Historical data

Stakeholder type	Vancouver 2010	Sochi 2014*
Accredited		
Athletes	2,616	2,839
Team officials (incl. Chef de Mission, Deputy Chef de Mission, Olympic Attaché, administrative personnel, technical and coaching personnel, medical personnel and additional officials, etc.)	2,715	3,213
Broadcasters (incl. Rights-Holding Broadcasters (RHBs), host broadcaster and IBC personnel)	9,715	10,971
Future and former Organising Committees (incl. Presidents, directors general of last preceding and future OCOGs and Youth Olympic Games Organising Committees (YOGOCs), Mayors of next host cities, executive members, observers, etc.)	371	436
Host Organising Committee (incl. President and Secretary General, Mayor of the host city, Heads of State and Government, guests and entourage, dignitaries, workforce, etc.)	57,526	150,536**
International Federations (incl. Presidents and Secretaries General, Board members, IF delegates, staff, technical officials, judges and jury members, equipment technicians, etc.)	1,365	1,727
International Olympic Committee (incl. members, guests, senior executives, RHBs'senior executives and guests, Court of Arbitration for Sport (CAS), staff, advisors, etc.)	1,942	1,744
National Olympic Committees (incl. Presidents and Secretaries General, governmental delegation, Candidate Cities' executives, etc.)	853	1,178
National Partners (incl. Chairman, Chief Executive Officer (CEO), senior executives, guests, staff)	3,416	5,803
TOP Partners (incl. Chairman, CEO, senior executives, guests, staff)	2,563	3,579
Security	10,538	Not documented
Press and photographers (incl. journalists, photographers, technicians, Main Press Centre (MPC) staff and non-rights-holding media)	2,803	2,732
Sub-total	96,423	184,758
Non-accredited		
Ticketed spectators* **	500,000	340,000
Grand total	**596,423**	**524,758**

* As at 24 March 2014
** Russian security personnel are included in the Host Organising Committee category
*** Estimated number of ticketed spectators = number of tickets sold divided by three

2.1.2 Paralympic Games

HCC – Operational Requirements

- ACR Annex II – Accreditation at the Paralympic Games – Detailed specifications

Historical data

Stakeholder type	Vancouver 2010	Sochi 2014
Accredited		
Athletes	502	542
Athlete competition partners	72	62
Team officials (incl. Chef de Mission, Deputy Chef de Mission, Chief Team Physician, Paralympic Attaché, Press Attachés, administrative personnel, technical and coaching personnel, medical personnel and additional officials, etc.)	632	745
Broadcasters (incl. Rights Holding Broadcasters, host broadcaster and IBC personnel)	1,136	1,944
Future Organising Committees (incl. Presidents, Directors General of future OCOGs, Mayors of next host cities, executive members, observers, etc.)	185	228
Host Organising Committee (incl. President and Secretary General, Mayor of the host city, Heads of State and Government, guests and entourage, dignitaries, workforce, etc.)	21,738	91,247*
International Federations (incl. Presidents and Secretaries General, Executive Board members, Committee members, IF delegates, staff, technical officials, judges and jury members, equipment technicians, etc.)	95	88
International Paralympic Committee (incl. President, Vice-President, Governing Board, Standing Committee members, guests, senior executives, staff, advisors, etc.)	550	371
National Paralympic Committees (incl. Presidents and Secretaries General, governmental delegation, official Candidate City executives and observers, etc.	318	298
Domestic Partners (incl. Chairman, CEO, senior executives, guests, staff)	Not documented	2,130
Paralympic Partners (incl. Chairman, CEO, senior executives, guests, staff)	207	411
Security	1,557	Not documented
Press and photographers (incl. journalists, photographers, technicians, Main Press Centre staff and non-rights-holding media)	485	549
Sub-total	27,477	98,615
Non-accredited		
Ticketed spectators	230,000	Not documented
Grand total	**257,477**	**414,815**

* Russian security personnel are included in the Host Organising Committee category
** Total number of tickets sold can be found in section 3.2 Ticketing

2.2 Sport programme

2.2.1 Olympic Games

Requirements

Olympic Charter, Bye-laws 1.4.1 and 3.2 to Rule 45

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Dates of the Olympic Games	12 – 28 February 2010	07 – 23 February 2014	09 – 25 February 2018
Sports	7	7	7
Disciplines	15	15	15
Events*	86	98	102
Ticketed sessions	171	189	203

* Unless agreed otherwise with the relevant OCOG, the number of events shall be approximately 100

2.2.2. Paralympic Games

Requirements

IPC Handbook, Chapter 3 – Paralympic Games Principles

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Dates of the Paralympic Games	12 – 21 March 2010	07 – 16 March 2014	09 – 18 March 2018
Sports	5	5	6
Events	64	72	68
Ticketed sessions	64	66	58

2.3 Competition venues

2.3.1 Olympic Games

Several significant steps have been taken within the framework of Games Management 2020 to maximise the use of existing venues and to ensure that any new venue has a well-defined legacy plan.

Since the 2024 Candidature Process, there has no longer been a minimum requirement for Olympic Games venue capacities; rather, venue capacity is to be adapted to local needs and context. When determining venue capacities, the following considerations are important:

- Capacity of any existing venue to be used;
- Capacity of any new or renovated venue for legacy use post-Games;
- Popularity of the sport in the host city, region and/or country;
- Ability to sell tickets and fill seats/full stadiums;
- Ability to increase capacity on a temporary basis for Games use;
- Single or multiple sessions per day;
- Terrain, venue footprint and layout (outdoor venues);
- Loading and unloading at peak capacity;
- Transport capacity – inbound and outbound; and
- Precincts, clusters or stand-alone venues.

Historical data

		Vancouver 2010			Sochi 2014			PyeongChang 2018		
Sport	Discipline	Competition days	Competition venue	Gross capacity (seating and standing)	Competition days	Competition venue	Gross capacity (seating and standing)	Competition days	Competition venue	Gross capacity (seating and standing)
Biathlon	–	7	Whistler Olympic Park – Biathlon Stadium	12,000	11	Laura Cross-Country Ski & Biathlon Centre	7,500	10	Alpensia Biathlon Centre	7,500
Bobsleigh and skeleton	Bobsleigh	6	Whistler Sliding Centre	12,000	6	Sanki Sliding Centre	5,000	6	Alpensia Sliding Centre	7,000
	Skeleton	2	Whistler Sliding Centre	12,000	3	Sanki Sliding Centre	5,000	3	Alpensia Sliding Centre	7,000
Curling	–	12	Vancouver Olympic Centre	5,600	12	Ice Cube Curling Centre	3,000	18	Gangneung Curling Centre	2,982
Ice hockey	–	14	Canada Hockey Place	19,300	11	Bolshoy Ice Dome	12,000	12	Gangneung Hockey Centre	9,310
		10	UBC Thunderbird Arena	6,800	12	Shayba Arena	7,000	11	Kwandong Hockey Centre	5,636
Luge	–	5	Whistler Sliding Centre	12,000	6	Sanki Sliding Centre	5,000	6	Alpensia Sliding Centre	7,000
Skating	Figure skating*	9	Pacific Coliseum	14,200	12	Iceberg Skating Palace	12,000	11	Gangneung Ice Arena	12,020
	Short track speed skating	5	Pacific Coliseum	14,200	5	Iceberg Skating Palace	12,000	5	Gangneung Ice Arena	12,020
	Speed skating	12	Richmond Olympic Oval	7,600	12	Adler Arena	8,000	12	Gangneung Oval	7,630

* Number of competition days excludes the gala

Historical data

		Vancouver 2010			Sochi 2014			PyeongChang 2018		
Sport	Discipline	Competition days	Competition venue	Gross capacity (seating and standing)	Competition days	Competition venue	Gross capacity (seating and standing)	Competition days	Competition venue	Gross capacity (seating and standing)
Skiing	Alpine	10	Whistler Creekside	7,500	10	Roza Khutor Alpine Centre	7,500	5	Yongpyong Alpine Centre (technical events)***	6,000
								6	Jeongseon Alpine Centre (speed events)****	6,500
	Cross-country	9	Whistler Olympic Park – Cross-Country Stadium	12,000	10	Laura Cross-Country Ski & Biathlon Centre	7,500	10	Alpensia Cross-Country Skiing Centre	7,500
	Freestyle	8	Cypress Mountain	12,000*	10	Rosa Khutor Extreme Park	4,000 (HAM stadium) 6,250 (PSX stadium)	14	Bokwang Snow Park	6,000 (slopestyle) 6,000 (moguls & aerials) 6,000 (halfpipe & cross)
	Nordic combined – ski jump	3	Whistler Olympic Park – Ski Jumping Stadium	12,000	3	RusSki Gorki Jumping Centre	7,500	3	Alpensia Ski Jumping Centre	10,994
	Nordic combined – cross-country	3	Whistler Olympic Park – Cross-Country Stadium	12,000	3	RusSki Gorki Jumping Centre	7,500	3	Alpensia Cross-Country Skiing Centre	7,500
	Ski jumping	5	Whistler Olympic Park – Ski Jumping Stadium	12,000	6	RusSki Gorki Jumping Centre	7,500	6	Alpensia Ski Jumping Centre	10,994
	Snowboard	6	Cypress Mountain	12,000**	9	Rosa Khutor Extreme Park	4,000 (HAM stadium) 6,250 (PSX stadium)	4	Alpensia Ski Jumping Centre (big air)	8,638
								10	Bokwang Snow Park	6,000 (parallel giant slalom & slopestyle) 6,000 (halfpipe & cross)

** During the Olympic Winter Games Vancouver 2010, the venue capacity for the snowboard and freestyle events in Cypress Mountain was reduced from 12,000 to 4,000 as it was not possible to build the planned standing areas due to lack of snow
*** Technical events are giant slalom, slalom and team event
**** Speed events are downhill, super-G and alpine combined

2.3.2 Paralympic Games

HCC – Operational Requirements

None

Historical data

		Vancouver 2010			Sochi 2014			PyeongChang 2018		
Sport	**Discipline**	**Competition days**	**Competition venue**	**Gross capacity (seating and standing)**	**Competition days**	**Competition venue**	**Gross capacity (seating and standing)**	**Competition days**	**Competition venue**	**Gross capacity (seating and standing)**
Para biathlon	–	2	Whistler Paralympic Park – Biathlon Stadium*	3,600	3	Laura Cross-Country Ski & Biathlon Centre	7,500	3	Alpensia Biathlon Centre	7,500
Wheelchair curling	–	8	Vancouver Paralympic Centre*	5,600	8	Ice Cube Curling Centre	3,000	8	Gangneug Curling Centre	2,982
Para ice hockey	–	7	UBC Thunderbird Arena**	6,700	7	Shayba Arena	7,000	7	Gangneung ockey Centre	9,310
Skiing	Para alpine	8	Whistler Creekside*	5,000	8	Rosa Khutor Alpine Centre – Alpine Skiing	7,500	7	Jeongseon Alpine Centre	6,500
	Para cross-country	5	Whistler Paralympic Park – Cross-Country Stadium*	3,600	5	Laura Cross-Country Ski & Biathlon Centre	7,500	5	Alpensia Biathlon Centre	7,500
	Para snowboard	–	–	–	1	Rosa Khutor	7,500	2	Jeongseon Alpine Centre	6,500

* Same as Olympic venue, but with reduced capacity
** Same as Olympic venue, but with reduced capacity (temporary seating removed)

2.4 Training venues (in addition to the competition field of play)

In the Olympic Winter Games, most training takes place on the competition field of play however, for some sports, additional training areas are needed. These are either stand-alone venues or additional training areas in competition venues.

2.4.1 Olympic Games

HCC – Operational Requirements

- SPT 10 – Games-time training

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Sport/Discipline			
Short track speed skating	Killarney Centre	Skating Training Venue (Ice rink #2)	Gangneung Yeongdong Short Track Training Venue
Figure skating	Trout Lake Centre	Skating Training Venue (Ice rink #1)	Gangneung Ice Arena (Ice rink #2)
Ice hockey	Britannia Centre UBC Thunderbird Arena (Ice rink #2)	Hockey Training Venue Bolshoy Ice Dome (Ice rink #2)	Gangneung Hockey Centre (Ice rink #2) Kwandong Hockey Centre (Ice rink #2)

2.4.2 Paralympic Games

HCC – Operational Requirements

- SPT 11 – Paralympic training schedule projects

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Sport/Discipline			
Para ice hockey	Not applicable; all training took place on the competition field of play	Hockey Training Venue	Gangneung Hockey Centre (Ice rink #2)

2.5 Key non-competition venues

2.5.1 Olympic Villages

Since the Vancouver and Sochi Games, the IOC has been working to reduce Games-related costs and optimise space needs through re-engineered and optimsed technical requirements and stricter requirements for additional permanent new venues. This includes more flexible operational requirements for the Olympic Village, allowing for more than one Olympic Village to reflect the local real estate demands and optimise legacy.

HCC – Operational Requirements

- VIL 01 – Number of Olympic Villages
- VIL 02 – Olympic Village accommodation and capacity requirements
- VIL 03 – Services to residents within the Olympic Village
- VIL 04 – Olympic Village period of operations
- VIL 05 – Olympic Village measurements
- VIL 10 – NOC office space, meeting rooms, doctor's room and other spaces
- VIL 17 – Commercial services in the Olympic Village Plaza
- VEN 17 – Accessibility for all stakeholders with impairment

Historical data

	Vancouver 2010		Sochi 2014			PyeongChang 2018*	
	Coastal	Mountain	Coastal	Mountain	Endurance	Coastal	Mountain
Size (hectares)	32	40	72	32	27	11	11
Planned number of residents	2,730	2,850	2,000	2,900	1,100	2,174	3,524
Exclusive use period	01/11/2009 – 06/04/2010	01/11/2009 – 31/05/2010	01/06/2013 – 01/06/2014	01/09/2013 – 01/06/2014	01/11/2013 – 15/05/2014	01/10/2017 – 30/04/2018	01/10/2017 – 10/04/2018

* Estimates at the time of publication; the OCOG will determine its own planning numbers according to the quotas

2.5.2 Paralympic Villages

HCC – Operational Requirements

- VIL 35 – Paralympic Village
- VIL 36 – Paralympic Village transition
- VIL 37 – IF Games officials
- VIL 38 – Paralympic Village resident quota
- VIL 39 – Paralympic Village layout
- VIL 42 – Equitable service levels in the Paralympic Village
- VEN 17 – Accessibility for all stakeholders with impairment
- SPT 50 – Classification Coordination Centre for the Paralympic Games
- SPT 51 – Orthotic, prosthetic and wheelchair repair services
- PRS 08 – Media services at Paralympic venues

Historical data

	Vancouver 2010		Sochi 2014		PyeongChang 2018
	Coastal	Mountain	Coastal	Mountain	Mountain
Size (hectares)	20	40	45	32	Not yet available
Number of residents*	350	1,200	350	700	1,476
Number of residents using a wheelchair	123	131	121	61	290*
Exclusive use periods	01/11/2009 – 06/04/2010	01/11/2009 – 31/05/2010	01/06/2013 – 01/06/2014	01/09/2013 – 01/06/2014	01/10/2017 – 10/04/2018

* Planned

For Sochi 2014, additional housing was available in the mountain area for Nordic skiing athletes (total number of residents: 400, including 53 using wheelchairs).

2.5.3 Olympic Games Media Centres

The IOC and the OCOGs have introduced a number of significant initiatives over recent Olympic Games and Olympic Winter Games that have helped OCOGs and host cities to reduce the size and complexity of running the media operations. This includes using entirely temporary venues for media centres where relevant.

HCC – Operational Requirements

- PRS 02 – Main Press Centre (MPC)
- BRS 02 – Games Operations phase facilities and services – International Broadcast Centre (IBC) / Mountain Broadcast Centre (MBC)
- BRS Annex I – Operational Specifications for Broadcasting Services and Facilities

In Vancouver, a Main Media Centre (MMC) housed the MPC and the IBC in downtown Vancouver. This allowed the OCOG, Vancouver Organising Committee for the Olympic Games (VANOC), to provide shared services for press and broadcasters, as in previous Olympic Games. A Mountain Media Centre for press and broadcasters (or secondary facility) was located in Whistler.

In Sochi, the IBC and MPC were combined in an MMC which was a newly-built facility sharing all common services including the media transport mall. A mountain sub-centre was provided for press and broadcasters.

In PyeongChang, the MPC and the IBC will be located in the Alpensia resort, 800 metres apart. The MPC will be housed in the existing Convention Centre, while the IBC will be established in a temporary purpose-built facility. Olympic Broadcasting Services (OBS) and the OCOG determined that a Coastal Broadcast Centre in Gangneung's Coastal Cluster was not required however, OBS and the OCOG agreed to provide a secondary broadcast telecommunication hub and equipment dispatch area, using a small part of the building that was initially intended to be the Coastal Broadcast Centre.

Historical data

Broadcast centres

	Vancouver 2010		Sochi 2014		PyeongChang 2018
	International Broadcast Centre	**Mountain Media Centre** (shared with press)	**International Broadcast Centre**	**Mountain sub-centre** (shared with press)	**International Broadcast Centre**
Functional net broadcast space (m^2)	31,400	4,600	31,000	5,000	34,000
Fit-out and dismantling schedule	17/08/2009 – 31/03/2010	28/12/2009 – 31/03/2010	15/07/2013 – 15/05/2014	15/09/2013 – 18/04/2014	05/06/2017 – 31/05/2018

In some past Games, following a detailed review of the particular Games context, OBS and the OCOG have agreed to reduce the fit-out and dismantling period where conditions allowed (e.g. type of building, effectiveness of bump-in/bump-out logistics).

In Vancouver, the dismantling of the IBC was shorter than stated in the operational requirements due to the conditions of the particular building used for the IBC (easy access, existing operational logistics support, convenient building layout, etc.).

Similarly, the installation time for the MBC was shorter than stated due to the use of an external tent where nearly half the required equipment and facilities were installed. The tent supplemented an existing structure that was used as the base of the MBC. Using two independent but adjacent buildings simplified the overall installation and thus allowed this phase to be much shorter than usual.

In Sochi, the handover of the IBC to OBS was delayed two months while infrastructure issues were rectified. This forced OBS to employ additional resources to complete the fit-out on time and increased the costs for the OCOG.

In PyeongChang, the handover of the IBC to OBS was nearly on time. As OBS now uses new, modular pre-fabricated panels for the fit-out, OBS believes dismantling will finish earlier than planned.

Press centres

	Vancouver 2010		Sochi 2014		PyeongChang 2018
	Main Press Centre	Mountain Media Centre (shared with broadcasters)	Main Press Centre	Mountain sub-centre (shared with broadcasters)	Main Press Centre*
Size (m^2)	21,400	4,600	20,000	10,000	19,550
Fit-out and dismantling schedule	30/10/2009 – 30/03/2010	28/12/2009 – 31/03/2010	20/07/2013 – 15/05/2014	20/07/2013 – 15/05/2014	Not documented

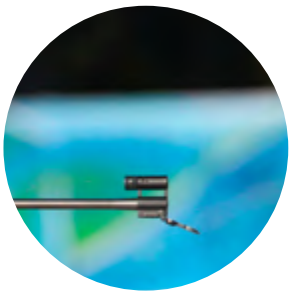
* As the PyeongChang 2018 Main Press Centre is located in the alpine cluster, there is no need for an additional Mountain Media Centre

The use of established exhibition centres for the MPCs, rather than new buildings, has meant that the occupation dates can be reduced significantly. Vancouver 2010 was able to reduce occupation from three months to six weeks (prior to the Opening Ceremony).

Venue Media Centres (VMCs)

Temporary infrastructure has been used significantly for VMCs since Vancouver 2010. This has been an important initiative as it reduces the need for permanent infrastructure and thus ensures the legacy left in the host city for the venues is aligned with future needs.

The introduction of "hybrid VMCs", which combine both a media workroom and a press conference room into one space, has also saved significantly on overlay requirements. While Vancouver had one "hybrid VMC", at the Olympic Games Rio 2016, there were 20. They cannot be used for all venues, but it is expected they will account for more than half the VMCs at future Olympic Games.



2.5.4 Paralympic Games Media Centres

HCC – Operational Requirements

- PRS 07 – Paralympic MPC
- BRS 06 – General media facilities and services for the Paralympic Games

Press centres

In Vancouver, the MPC was not kept operational for the Paralympic Games. Instead, the VMCs at UBC Thunderbird Arena and Whistler Creekside were slightly enlarged; these were open four days prior to the start of the Paralympic Games.

In Sochi, the MPC was kept operational with reduced capacity scaled to the need of the Paralympic Games (reduction of approx. 50 per cent of the space used for the Olympic Games).

Broadcast centres

For the Paralympic Games in Vancouver, the IBC and the MBC were located in the same facilities as for the Olympic Games, with reduced operational space, scaled to needs of the Paralympic Games (25 per cent of the Olympic Games space requirements).

In Sochi, the IBC was also located in the same facilities as for the Olympic Games, with reduced operational space scaled to the need of the Paralympic Games. It was agreed not to keep a Mountain Broadcast Centre for the Paralympic Games.

In PyeongChang, broadcasters will operate from the same facilities as for the Olympic Games, with reduced operational space scaled to the need of the Paralympic Games.

Using the same building for both the Olympic and Paralympic Games has several advantages (e.g. cost savings related to overlay for one venue instead of two) and some challenges (e.g. longer dismantling period for the IBC due to the ongoing use for the Paralympic Games). Should the same building be used for both Games, the fit-out and dismantling schedule incorporates both Games.

2.5.5 Olympic opening and closing ceremonies venues

HCC – Operational Requirements

- CER 01 – Organisation and scope of Ceremonies

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
	Opening and Closing Ceremonies	Opening and Closing Ceremonies	Opening and Closing Ceremonies
Venue	BC Place	Fisht Olympic Stadium	Olympic Stadium
Gross capacity	60,000	40,000	35,000
Exclusive use period	07/11/2009 – 19/03/2010	07/01/2014 – 01/05/2014	01/10/2017 – 31/03/2018

2.5.6 Paralympic opening and closing ceremonies venues

HCC – Operational Requirements

- CER 20 – Paralympic Opening and Closing Ceremonies

Historical data

	Vancouver 2010		Sochi 2014	PyeongChang 2018
	Opening Ceremony	Closing Ceremony	Opening and Closing Ceremonies	Opening and Closing Ceremonies
Venue	BC Place	Whistler Celebration Site	Fisht Olympic Stadium	Olympic Stadium
Gross capacity	60,000	5,000	40,000	35,000
Exclusive use period	07/11/2009 – 19/03/2010	Not documented	07/01/2014 – 01/05/2014	01/10/2017 – 31/03/2018


T1
RUDY
Salomon
aircore

3 Commercial revenues

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3 Commercial revenues

Data below refers to both Olympic and Paralympic Winter Games. Revenues are shown in values of the year of each Games.

3.1 Domestic sponsorship

The domestic sponsorship revenues are dependent on the local market, including the size and growth of the local economy.

	Vancouver 2010		Sochi 2014	
	Number of partners	Revenue	Number of partners	Revenue
Games sponsorship *	57	CAD 697 million	46	RUB 38.8 billion
Torch Relay sponsorship	4 (incl. 2 presenting partners)	CAD 32 million	7 (incl. 3 presenting partners)	RUB 1.6 billion

* Domestic OCOG sponsorship programmes usually include several tiers of partnership, which may include sponsors, suppliers and providers. The figures in this row represent the total number of marketing partners from all tiers of the domestic programme

3.2 Ticketing

	Vancouver 2010		Sochi 2014	
	Olympic Games	Paralympic Games	Olympic Games	Paralympic Games
Number of tickets available	1.54 million	274,300	1.14 million	330,400
Number of tickets sold	1.49 million (97%)	230,000 (84%)	1.02 million (90%)	316,200 (96%)
Ticket sales revenue	CAD 276 million		RUB 7.1 billion	

Note: the figures above exclude tickets sold for cultural events and test events.

3.3 Licensing (including merchandise, coins and philately)

	Vancouver 2010	Sochi 2014
Number of official licensees	48	49
Number of Olympic stores	8	5
Number of product categories	20	45
Licensing products revenue	CAD 76 million	RUB 1.8 billion

Note: revenues were also raised from other sources, such as lotteries (where applicable), donations, asset disposal, test events income, sponsor hospitality centre, food and beverage commission, etc., These revenues could represent 5-10% of the total.

4 Cost drivers

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4 Cost drivers

Introduction

This chapter focuses on key cost drivers that impact the OCOG's operational budget; it does not address cost drivers such as law enforcement and capital works that impact the non-OCOG budget.

Data is provided for the two most recent Olympic Winter Games – Vancouver 2010 and Sochi 2014 – and also for PyeongChang 2018 where it is already available. Each Games has its own unique context and specificities and, at times, its own way of presenting data. Such differences are apparent in the data offered in this document, for example in the Host Organising Committee accreditation numbers (see section 2.1.1 Olympic Games) where Sochi's total includes Russian security personnel.

As part of Olympic Agenda 2020, the IOC has been working to reduce the cost and complexity of the Games.

Games Management 2020 explores the development of various turnkey solutions to decrease the risk of the Games, to ensure cost efficiency for the OCOGs and the IOC, and to ensure flexibility in the delivery. Currently, turnkey solutions are being considered in the following areas:

- Technology;
- Venues;
- Ticketing;
- Hospitality;
- Digital; and
- Games services.

The first turnkey solution to be delivered at a Games by the IOC is the Olympic Information Service (OIS) at PyeongChang 2018. The OIS is a professional sports reporting and information service designed to keep the accredited media informed and to help them achieve the best possible coverage of the Games. To provide the OIS, the IOC will set up and run a professional editorial team that will produce Games news content to be published in the Info system.

Listed below are the delivery models that the IOC is exploring, all of which would be further studied considering the marketing, commercial, financial context of cities:

- Scoping and/or documentation in the planning phase;
- Assisting in the planning and delivery of solutions; and
- Contracting a provider to deliver in part or full a service or product.

Further initiatives include optimisation of space needs through re-engineered and optimised technical requirements, stricter requirements for additional permanent new venues and optimised concepts and service levels for key Games services.

As a result of all these changes, and others that will emerge in the ongoing reform process, cost drivers for future Games may differ from those of previous Games.

4.1 Accommodation

Accommodation costs for future Games may be impacted by the various Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction to this chapter.

4.1.1 Accommodation for workforce (mainly volunteers and temporary staff)

Accommodation needs for an OCOG workforce can vary greatly from Games to Games, depending on factors such as:

- availability of the local population to participate in the organisation of the Games;
- need for specialised skills not available within acceptable geographical boundaries; and
- the location of Games venues in relation to the accommodation capacity in those areas.

In addition, the OCOG is required to provide 23,885 rooms for the stakeholder groups who hold various official roles at the Games. Most of these rooms are managed and paid for by the respective stakeholder groups.

Applicable section of current budget template (2024)

- 2.1 – Accommodation

HCC – Operational Requirements

- ACM 05 – Stakeholder group accommodation requirements table

Historical data

	Vancouver 2010*	Sochi 2014**	PyeongChang 2018***
Number of paid staff accommodated	2,486	Approx. 5,000	13,400
Number of contractors accommodated**	Included in number of paid staff above	22,268 (90% were from outside Sochi and needed accommodation; not managed/paid by the OCOG)	11,500 (not managed/paid by the OCOG)
Number of volunteers accommodated	2,461	13,934 (housed in 4 villages)	13,500

* Mainly mountain rooms as the demand in the city was relatively low
** Both mountain and city rooms
*** Expected
**** Contractor accommodation is not typically paid by the OCOG

4.2 Ceremonies

The scope and costs of the opening ceremony depend mainly on the creative concept and the venue chosen by the OCOG. In line with the recommendations of the Olympic Winter Games Strategic Review Working Group, existing sports or other venues shall be used to host both the opening and closing ceremonies.

The use of an existing venue (stadium or other venue type) helps to reduce the need for temporary overlay (especially seating).

Finally, the choice of venue for the opening ceremony (and partly also the closing ceremony) is influenced by some key operational aspects, such as security (greatest level of any Olympic venue).

The key for ceremonies is the concept (not the technical means). This was demonstrated by Rio 2016's highly creative but low-cost ceremony, which avoided costly technology – one of the main costs of previous ceremonies.

4.2.1 Opening ceremony creative element

Applicable section of current budget template (2024)

- 5.1 – Opening and Closing Ceremonies/Ceremonies creative and production

HCC – Operational Requirements

- CER 01 – Organisation and scope of Ceremonies

Historical data

	Vancouver 2010	Sochi 2014
Parade participants	3,040	3,521
Ceremony performers	3,125	3,405
Ceremony volunteers	665	1,000
Production staff	190	650

4.3 Energy

Energy costs for future Games may be impacted by the various Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction to this chapter.

4.3.1 Energy supply for the venues

Applicable section of current budget template (2024)

- 1.4 – Energy

HCC – Operational Requirements

- NRG 03 – Host City and energy agencies
- NRG 07 – Supply resilience and reliability at Olympic sites
- NRG 08 – Event continuation

Historical data

The data refers to the High Voltage (HV) and Medium Voltage (MV) supply requirements of the venues.

The load requirements are estimates of the respective OCOGs, not the actual peak demand registered during the respective Winter Games. The actual registered peak loads were considerably lower than the estimates, principally due to extreme warm weather experienced in both Vancouver and Sochi.

This data must be read in conjunction with the Energy Supply TOK Reports for Vancouver and Sochi, which include detailed data and explanations for the in-venue power supply.

The temporary power provider data is also Games-specific and does not apply as such for future Games. Where temporary data is given, these refer to the total temporary MV load estimated to be supplied by the network.

Olympic Winter Games additional demand impact on the overall city/regional load or capacity: 100 — 150 Mega Volt Amp (MVA) (including accommodation and transport)

Mountain venues

	Vancouver 2010							
Venue	Substation		Distribution line type		Capacity (MVA)			
	Running	Standby	Running	Standby	Existing	New	Temporary	Total
Luge/Bobsleigh/ Skeleton	Sub1	Sub1	1 OHL* (Dedicated)	1 OHL (Shared)	n/a	n/a	n/a	5.5
Ski Jumping	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12.4
Biathlon/ Cross-Country	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12.4
Alpine (technical and speed events)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3.7
Snowboard/ Freestyle	Sub 1	GEN***	1 Underground (Shared)	n/a	n/a	n/a	n/a	10.9
Mountain Olympic Village	Sub1	Sub1	n/a	n/a	n/a	n/a	n/a	6.7
Media Village	**	**	**	**	**	**	**	**
IBC/MPC**	Sub 2	Sub 1	1 (Dedicated)	1 (Shared)	n/a	n/a	1.0	3.9
Olympic Stadium	**	**	**	**	**	**	**	**
Medals Plaza	Sub 2	Sub 1	1 Underground (Shared)	1 Underground (Shared)	n/a	n/a	n/a	3.5

n/a Data has not been documented
* Overhead line
** Not applicable
*** Temporary generation
**** The data for UPSs in the Energy Supply TOK Reports for Vancouver and Sochi must be considered Games-specific. The trend is to use more UPS with less capacity

Mountain venues

	Sochi 2014							
Venue	Substation		Distribution line type		Capacity (MVA)			
	Running	Standby	Running	Standby	Existing	New	Temporary	Total
Luge/Bobsleigh/ Skeleton	Laura	Roza Khutor	Underground (Dedicated)	Underground (Dedicated)	0.0	5.6	3.0	8.6
Ski Jumping	Laura	Poselk-ovaya	Underground (Dedicated)	Underground (Dedicated)	0.0	3.17	3.46	6.6
Biathlon/ Cross-Country	Psehako	Laura	Underground (Dedicated)	Underground (Dedicated)	0.0	27.0	5.0	32.0
Alpine (technical and speed events)	Roza Khutor	Mzymta	Underground (Dedicated)	Underground (Dedicated)	0.0	12.4	8.4	20.8
Snowboard/ Freestyle	Roza Khutor	Mzymta	Underground (Dedicated)	Underground (Dedicated)	0.0	4.0	5.0	9.0
Mountain Olympic Village	Psehako	Laura	Underground (Dedicated)	Underground (Detected)	n/a	n/a	n/a	n/a
Media Village	Laura	Poselk-ovaya	Underground (Dedicated)	Underground (Dedicated)	n/a	n/a	n/a	n/a
IBC/MPC****	**	**	**	**	**	**	**	**
Olympic Stadium	**	**	**	**	**	**	**	**
Medals Plaza	**	**	**	**	**	**	**	**

n/a Data has not been documented
** Not applicable
**** The data for UPSs in the Energy Supply TOK Reports for Vancouver and Sochi must be considered Games-specific. The trend is to use more UPS with less capacity

Mountain venues

	PyeongChang 2018							
Venue	Substation		Distribution line type		Capacity (MVA)			
	Running	Standby	Running	Standby	Existing	New	Temporary	Total
Luge/Bobsleigh/ Skeleton	Temporary	Hoenggye	Underground (Dedicated)	Mixed (Shared)	0.0	4.6	2.8	7.4
Ski Jumping/ Biathlon/ Cross-Country	Hoenggye	Temporary	Underground (Dedicated)	Overhead (Dedicated)	5.5	7.5	10.0	23.0
Alpine/ Technical	Hoenggye	GEN***	Underground (Dedicated)	GEN LV	20.0	2.0	4.0	26.0
Alpine/Speed	GEN	PyeongChang	GEN MV	Mixed (Dedicated)	0.0	12.0	4.3	16.3
Snowboard/ Freestyle	GEN	PyeongChang	GEN MV	Mixed (Dedicated)	18.0	0.0	3.0	21.0
Mountain Olympic Village	Hoenggye	GEN	Underground (Dedicated)	GEN LV	0.0	2.5	4.0	6.5
Media Village	Hoenggye	Temporary	Underground (Dedicated)	Overhead (Dedicated)	13.0	0.0	2.1	15.1
IBC/MPC**	Hoenggye	Temporary	Underground (Dedicated)	Underground (Dedicated)	0.0	16.7	1.7	17.6
Olympic Stadium	GEN & Hoengye	GEN	GEN & Underground (Dedicated)	GEN	0.0	2.0	7.4	12.4
Medals Plaza	**	**	**	**	**	**	**	**

n/a Data has not been documented
** Not applicable
*** Temporary generation
**** The data for UPSs in the Energy Supply TOK Reports for Vancouver and Sochi must be considered Games-specific. The trend is to use more UPS with less capacity

City venues

	Vancouver 2010							
Venue	Substation		Distribution line type		Capacity (MVA)			
	Running	Standby	Running	Standby	Existing	New	Temporary	Total
Ice Hockey 1	Sub1	Sub2	1 Underground (Dedicated)	1 Underground (Dedicated)	n/a	n/a	n/a	10.8
Ice Hockey 2	Sub1	n/a	1 Temporary Underground (Dedicated)	1 Underground (Shared)	n/a	n/a	n/a	n/a
Curling	Sub1	n/a	1 Running (Dedicated)	1 Standby (Dedicated)	n/a	n/a	n/a	3.9
Coastal Olympic Village	Sub1	Sub 2	1 Underground (Dedicated)	1 Underground (Shared)	n/a	n/a	n/a	11.6
Speed skating	Sub1	Sub2	1 Standby (Dedicated)	1 Running (Dedicated)	n/a	n/a	n/a	5.6
Figure Skating	Sub1	n/a	2 Underground (Dedicated)	1 Underground (Shared)	n/a	n/a	n/a	7.2
Olympic Stadium	Sub1	Sub2	2 Underground (Dedicated)	1 Underground (Dedicated)	n/a	n/a	GEN*** 11,250	9.3
IBC	n/a	n/a	2 Underground (Dedicated)	2 Underground (Dedicated)	n/a	n/a	n/a	14.0
MPC	Sub1	Sub 2	1 Underground (Dedicated)	1 Underground (Dedicated)	n/a	n/a	n/a	7.0
Olympic Media Village	**	**	**	**	**	**	**	**

n/a Data has not been documented
*** Temporary generation
** Not applicable

City venues

	Sochi 2014							
Venue	Substation		Distribution line type		Capacity (MVA)			
	Running	Standby	Running	Standby	Existing	New	Temporary	Total
Ice Hockey 1	Immeretinskaya	Ice palace	Underground (Dedicated)	Underground (Dedicated)	0.0	7.4	2.3	9.7
Ice Hockey 2	Immeretinskaya	Ice palace	Underground (Dedicated)	Underground (Dedicated)	n/a	n/a	n/a	n/a
Curling	Immeretinskaya	Ice palace	Underground (Dedicated)	Underground (Dedicated)	0.0	2.8	2.3	5.1
Coastal Olympic Village	Immeretinskaya	Ice palace	Underground (Dedicated)	Underground (Dedicated)	n/a	n/a	n/a	n/a
Speed Skating	Immeretinskaya	Ice palace	Underground (Dedicated)	Underground (Dedicated)	0.0	7.9	3.0	10.9
Figure Skating	Immeretinskaya	Ice palace	Underground (Dedicated)	Underground (Dedicated)	0.0	6.8	2.1	8.9
Olympic Stadium	Immeretinskaya	Ice palace	Underground (Dedicated)	Underground (Dedicated)	0.0	7.7	10.8	18.5
IBC/MPC	Immeretinskaya	Vremennaya	Underground (Dedicated)	Underground (Dedicated)	0.0	10.1	18.9	29.0
Olympic Media Village	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

n/a Data has not been documented

City venues

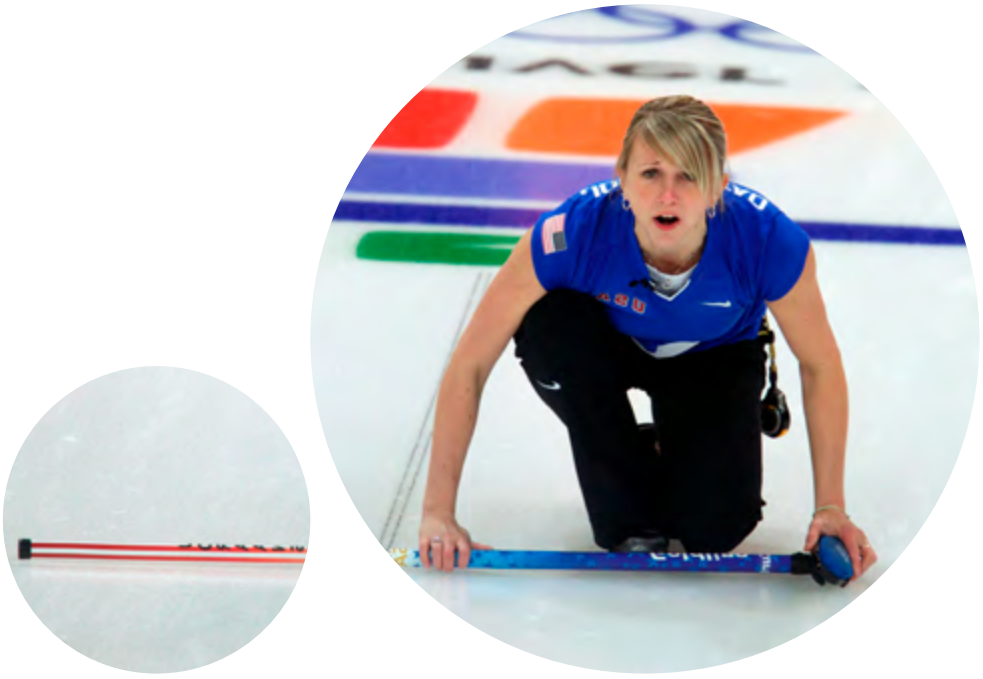
	PyeongChang 2018							
Venue	Substation		Distribution line type		Capacity (MVA)			
	Running	Standby	Running	Running	Standby	Running	Running	Standby
Ice Hockey 1	Buk Gangneung	Gangneung	Underground (Dedicated)	Underground (Dedicated)	0.0	5.0	2.6	7.6
Ice Hockey 2	Gangneung	Yongdong	Overhead (Dedicated)	Mixed (Shared)	0.0	4.5	2.0	6.5
Curling	Buk Gangneung	Gangneung	Underground (Dedicated)	Mixed (Shared)	0.0	4.5	2.3	6.8
Coastal Olympic Village	Gangneung	GEN***	Mixed (Dedicated)	GEN LV	0.0	10.4	8.1	18.5
Speed Skating	Buk Gangneung	Gangneung	Underground (Dedicated)	Underground (Dedicated)	0.0	6.3	1.4	7.7
Figure Skating	Buk Gangneung	Gangneung	Underground (Dedicated)	Underground (Dedicated)	0.0	6.3	2.4	8.7
Olympic Stadium	**	**	**	**	**	**	**	**
IBC	**	**	**	**	**	**	**	**
MPC	**	**	**	**	**	**	**	**
Olympic Media Village	Gangneung	GEN	Mixed (Dedicated)	GEN LV	0.0	10.0	0.0	10.0

n/a Data has not been documented
** Not applicable
*** Temporary generation

Feeding stations

Sochi 2014	PyeongChang 2018
Laura SS 110/10 KV 2 X 40 MVA TRS new	Honggye SS 154/22.9 KV 2 x 45/60 MVA TRS + 1 X 45/60 MVA TRS new
Rosa Khutor SS 110/10 KV 2 X 40 MVA TRS new	Temporary SS 154/22.9 KV 2 X 45/60 MVA new
Mzymta SS 110/10 KV 2 X 40 MVA TRS new	Buk Gangneung SS 154/22.9 KV 2 X 45/60 MVA TRS + 1 X 45/60 MVA TRS new
Psehako SS 110/10 KV 2 X 25 MVA TRS new	Gangneung SS 154/22.9 KV 3 X 45/60 MVA TRS + 1 45/60 MVA TRS new
Poselkovaya SS 220/110/10 KV 2 X 140 MVA + 2 X 25 MVA TRS new	PyeongChang SS 154/22.9 KV 2 X 45/60 MVA TRS + 1 X 40 MVA TRS
Immeretiskaya SS 110/10 KV 2 X 80 MVA new	Jeongsun SS 154/22.9 KV 3 X 45/60 MVA TRS
Ledovy Dvorets (Ice Palace) SS 2 X 80 MVA new	Yondong SS 154/22.9 KV 2 X 45/60 MVA TRS
Vremennaya SS 1 X 40 MVA new	
Sportisnkaya (back-up substation for Roza Khutor and Mzymta) SS 110/10 KV 2 X 40 MVA	

Note: Vancouver 2010 data has not been documented.



4.4 Finance

4.4.1 Financial services

Applicable section of current budget template (2024)

- 7.1 – Administration and Governance
- 7.3 – Other Corporate Administration expenses

Financial services may vary widely depending on the OCOG's strategy, circumstance and legal structure. They may include interest, insurance, hedging, foreign exchange losses, audits, professional advice (i.e. taxation), bad debts and others.

Foreign exchange

IOC revenues are primarily denominated in USD.

The OCOG's approach to managing the foreign exchange risk could involve:

a) eliminating the risk of disadvantageous changes in exchange rates through the use of options;
b) managing the risk through the use of forward exchange contracts;
c) accepting the risk; or
d) using alternate forms of financial tools to transfer risk to others.

Following alternative a) requires an upfront cost that should be budgeted.

Alternatives b) and c) have little or no upfront cost to be budgeted, but leave some risk with the OCOG. A budget provision to reflect the possibility of losses would be prudent for any non-US OCOG. Although an OCOG might benefit from favourable exchange rate fluctuations, in the absence of a partner such as a government that is willing to accept currency risk, the OCOG should expect a cost for currency management.

A second factor impacting foreign currency gains/losses involves the OCOG deciding whether fluctuations are absorbed at the functional level by recognising gains or losses within functional budgets or whether a central function such as Finance absorbs all gains and losses.

Interest

Interest costs are dependent on managing cash flows, especially in the early years. Costs depend on whether a need for borrowing is anticipated (depends on the timing of spending and the timing of sponsorship and other cash receipts). One solution that can reduce interest costs is to seek any government contributions early in the planning phase, before commercial revenues are available.

Insurance

Insurance costs are highly dependent on the extent of the proposed risk management strategy, especially as it relates to cancellation and other revenue protection coverage. The higher degree of risk aversion results in higher insurance costs. An OCOG closely tied to government may be able to take advantage of government insurance or self-insurance while OCOGs operating on a private model are left to address requirements on their own.

Financial services

Financial services costs are generally more related to organisational and governance matters than operational requirements.

4.5 Food and beverage

Food and beverage costs for future Games may be impacted by the various Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction to this chapter.

4.5.1 Workforce food and beverage

Applicable section of current budget template (2024)

- 2.2 – Food and beverage

HCC – Operational Requirements

- FNB 01 – Service principles for stakeholder groups

Historical data

	Vancouver 2010	Sochi 2014
Number of venues served and related type of meal	• 10 competition venues (with full services, i.e. breakfast, lunch, dinner and late night dinner, where needed): – 7 city venues – 3 mountain venues • 3 training venues (with full services, i.e. breakfast, lunch, dinner and overnight meal, where needed). • 2 Olympic Villages* • Other sites, including: – Main Media Centre – Whistler Media Centre – Main Distribution Centre – Uniform and Accreditation Centre – Whistler Games Centre – Vancouver 2010 headquarters (Vancouver and Whistler) – Whistler Celebration Plaza – Olympic Family Hotels – Squamish Volunteer Centre – Transport facilities – Vancouver International Airport	• 10 competition venues (with full services, i.e. breakfast, lunch, dinner and late night dinner, where needed): – 5 city venues: – 5 mountain venues • 3 Olympic villages* • Other sites, including: – Olympic Park – Main Media Centre – Mountain Media Centre – Fisht Olympic Stadium – Transport Hubs, Transport Depot – Main Distribution Centre
Number of obligatory workforce meals**	688,019 (ordered)	1,617,000*** (delivered)

* See cost driver 4.5.2 Olympic Village food and beverage for details
** Obligatory workforce meals exclude meals for contractors
*** Includes workforce at villages, competition venues, Olympic Park and transport hubs. Note that the Sochi 2014 OCOG provided three meals/day to workforce (rather than 1-2 meals/shift as for previous Games) due to the lack of other sources of food around the venues, particularly in the mountains and to the fact that most of the volunteers came from other regions

4.5.2 Olympic Village food and beverage

Applicable section of current budget template (2024)

- 2.2 – Food and beverage

HCC – Operational Requirements

- FNB 01 – Service principles for stakeholder groups
- VIL 05 – Olympic Village measurements
- VIL 11 – Dining hall(s) services and menus

Historical data

	Vancouver 2010		Sochi 2014		
	Coastal	Mountain	Coastal	Mountain	Endurance
Number of athletes and officials' meals*	137,000	162,000	120,000	180,000	80,000
Number of workforce meals*	59,000	125,000	170,000	130,000	70,000
Size of main dining hall (m^2)	3,800	4,275	6,000	5,250	3,000
Number of seats for residents	850	900	720	960	360
Number of seats for workforce	300	300	Not documented	Not documented	Not documented

* These figures do not include McDonald's meals served in the dining hall

In addition to the data shown above, another cost related to this service is the Olympic Villages' kitchen equipment.

4.6 Medical services

Medical services costs for future Games may be impacted by the various Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction to this chapter.

The level of equipment and services is impacted by factors such as local medical teams and facilities, and the localisation of venues (mainly villages and competition venues).

4.6.1 Polyclinics (equipment and services)

Applicable section of current budget template (2024)

- 2.3.1 – Medical Services (incl. anti-doping) – Medical

HCC – Operational Requirements

- MED 06 – Olympic Village Polyclinic

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018*
Number of polyclinics	2 (Whistler and Vancouver)	3 (Coastal Olympic Village, Mountain Olympic Village, Endurance Olympic Village)	2 (PyeongChang Olympic/ Paralympic Village and Gangneung Olympic Village
Size of polyclinic (m^2)	Not documented	Coastal – 2,400 Mountain – 2,300 Endurance – 800	PyeongChang – 1,500 Gangneung – 1,000
Medical services and disciplines available in polyclinics	• Emergency medical and trauma • Ambulance transfer • Primary care/sports medicine • Diagnostic imaging: – x-ray – MRI – CT scan – Ultrasound • Diagnostic medical laboratories • Pharmacy • Isolation beds • Language services • Rehabilitation and recovery centre • Regular clinics: – Dental – Eye – ENT • Whistler Village was equipped to manage life support; limb surgery and organ salvage • Cardiology • Dermatology • Gastroenterology • Internal medicine (infectious diseases, urology, nephrology) • Surgery (general, hand and plastics, orthopaedics, vascular, neurosurgery) • Obstetrics and gynaecology • Psychiatry • Public health nurses • Nutrition and sports psychology • Podiatry • Orthotics and bracing • Physiotherapy • Massage therapy • Chiropractic • Athletic therapy • Acupuncture	• Emergency care • Primary care (GP) • Basic diagnostics (x-ray, USG, ECG) • House calls • EMS (1 ambulance) • Consultants (surgery, ENT, ophthalmology, gynaecology, urology, etc.) • Advanced diagnostics (laboratory; CT, MRI – for the Mountain Olympic Village) • Dentistry • Physiotherapy • Pharmacy • Scheduled visits (pulmonology, endocrinology, etc.) • Laboratory services • Trauma care, orthotics and bracing • Chiropractic, massage therapy • Podiatry • Epidemiology • Cardiology • Gastroenterology • Neurology • Allergies • Dermatology • Nutrition • Psychiatry	• Emergency care • Primary care (GP) • Basic diagnostics (x-ray, USG, ECG) • House calls • EMS (1 ambulance) • Consultants (surgery, ENT, ophthalmology, gynaecology, urology, etc.) • Advanced diagnostics (laboratory; MRI – for the Mountain Olympic Village) • Dentistry • Physiotherapy • Pharmacy • Scheduled visits (pulmonology, endocrinology, etc.) • Laboratory services • Trauma care, orthotics and bracing • Chiropractic, massage therapy • Podiatry • Epidemiology • Cardiology • Gastroenterology • Neurology • Allergies • Dermatology • Nutrition • Psychiatry
Leased dedicated ambulances for the operational period of the venues	44	52	Not yet available
Leased dedicated critical care transport helicopters	2	3	Not yet available

* Expected medical services and disciplines

4.7 Olympic Torch Relay (OTR)

The scope and cost of the Olympic Torch Relay (OTR) can vary greatly from Games to Games depending on factors including:

- the OCOG's engagement strategy (national and international);
- the geographical size of the host territory;
- the population dispersion in the host territory; and
- the design and manufacture of the torches (sometimes up to 30 per cent of the total OTR budget).

Most OCOGs can secure all or the majority of the costs back in rights revenue from OTR Presenting Partners.

4.7.1 Olympic Torch Relay (OTR) operations

Applicable section of current budget template (2024)

- 5.2 – Torch Relay

HCC – Operational Requirements

- OTR 01 – Approval of OTR vision, scope and plans

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Total distance (km)	45,000	65,000	Not yet available
Number of days	106*	120**	101
Number of communities visited	1,036	129	152
Number of torch bearers	>12,000	14,000	7,500
Dedicated staff	140 OCOG paid and contractors*** 100 presenting partner staff 20,000 volunteers	303 (13 paid and 290 contractors incl. presenting partner) 90 security staff 30,000 volunteers	Not yet available
Number of presenting partners	2	3	3
Number of community celebrations**	189	129	87
Sets of uniforms	14,000	14,000	Not yet available
Convoy vehicles (full-scale operations)	108	110	Not yet available
Hotels	>300	132	Not yet available
Bed nights	26,000	27,000	Not yet available

* 90 days with full-scale operations + 16 days remote with reduced crew
** 60 days with full-scale operations + 30 days remote on plane and 30 days remote on train
*** The OCOG paid staff and contractors for the Olympic Torch Relay Functional Area are included in the OCOG workforce numbers that can be found in sections 4.8.1 Long-term OCOG staff and 4.8.2 Games-time workforce
**** Where the day's final torchbearer runs into the celebration site and lights a cauldron

4.8 People Management

4.8.1 Long-term OCOG staff

The rate at which an OCOG evolves in terms of organisational structures and staff varies from Games to Games and is impacted by factors such as cultural norms, arrangements (if any) with host city/nation governments as a source of staff, outsourcing decisions, skills and event experience available in the labour market, test event plans and timing, the planning lifecycle and the OCOG's budget. Costs are also affected by organisational hierarchy, compensation philosophy, statutory costs (e.g. taxes and social contributions) and other employment-related conditions in the host city.

For future Games, it is anticipated that a range of IOC initiatives under Olympic Agenda 2020 and Games Management 2020, including turnkey solutions and streamlining of planning processes, may allow for some later staff recruitment dates by the OCOG in impacted areas.

Applicable section of current budget template (2024)

- 4.1 – Salaries and benefits

HCC – Operational Requirements

- PEM 03 – OCOG organisation evolution

Historical data

Lifetime headcount evolution (OCOG employees and other full-time staff, e.g. secondees)

Games – x months	Vancouver 2010	Sochi 2014	PyeongChang 2018
72	25	130	50
60	51	230	118
48	158	365	240
36	340	450	341
24	758	645	509
18	1,078	1,000	876
12	1,320	1,378	1,100
6	1,537	1,708	*

* Not known at the time of publication

4.8.2 Games-time workforce

The size of an OCOG's Games-time workforce – comprising short-term staff, volunteers and contractors (in addition to the long-term OCOG staff covered in item 4.8.1 above) – varies from Games to Games, impacted by factors such as the venue masterplan, competition schedule and events, service levels, outsourcing decisions, labour laws, host nation labour market capability and cultural attitudes regarding roles appropriate for volunteers versus other types of paid workforce.

Applicable section of current budget template (2024)

- 4.1 – Salaries and benefits

HCC – Operational Requirements

None

Historical data

Workforce type	Vancouver 2010	Sochi 2014	PyeongChang 2018**
Paid staff	8,138	10,025	14,601
Volunteers	17,273	19,213	13,503
Contractors	32,239*	24,742	23,026
Total	**57,650**	**53,980**	**51,130**

* Vancouver 2010 accredited large numbers of security workforce and ceremonies team members in the contractor category compared to other recent Olympic Winter Games
** Planned

4.8.3 Uniforms

An OCOG provides uniforms for Games-time staff and volunteers as an important work tool, assisting with easy workforce identification and supporting appropriate health and safety in extreme weather conditions. It is also a valuable keepsake of the Games, particularly for volunteers. The OCOG sets guidelines for uniforming the contractor workforce, but typically does not provide uniforms directly.

Applicable section of current budget template (2024)

- 4.2 – Workforce uniforms

HCC – Operational Requirements

- PEM 07 – Workforce uniforms programme

Historical data

The data does not include speciality uniforms, such as those needed in various sports/disciplines or for medical care providers.

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Number of staff and volunteer uniforms initially planned	30,000	33,000	34,408
Games workforce uniform components	• Jacket • Vest/gilet • Long-sleeved tee (x2) • Pants/trousers • Toque (beanie)	• Jacket • Pants/trousers • Fleece jacket or hoodie (according to role) • Long-sleeved polo (x3) • Cap (beanie) • Hat • Gloves • Shoes • Thermo suit (for some roles) • Backpack • Bag • Belt bag (hip bag) • Raincoat (for some roles)	• Jacket • Pants/Trousers • Mid-weight jacket • Long-sleeved tee • Toque (beanie) • Gloves • Boots • Backpack

4.8.4 Headquarters office space (peak – G-6 months)

Office space needs are driven by the size of the OCOG, workforce numbers and evolution, local market practices and whether or not contractors and partners are embedded within the OCOG offices. There can be significant other space needs in the lead up to Games (such as for the ceremonies production team, etc.), but those are not typically included in headquarters office space planning.

The government partners (delivery authorities and dedicated government offices), except for secondees who were embedded in the OCOG, are excluded from the historical data provided below.

Applicable section of current budget template (2024)

- 7.1.1 Administration and governance costs – Office administration costs

HCC – Operational Requirements

None

Historical data

Headquarters office space needs reflect the lifetime headcount evolution (see section 4.8.1 Long-term OCOG staff), reaching a peak six months before the Games.

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Metres squared	16,722	26,400*	12,403**

* The Sochi 2014 headquarters included 18,400m2 in offices and 8,000m2 in other spaces (cafeteria, coordination centres, etc.) in Sochi
** At June 2017

4.9 Technology

Historically, technology has represented a significant proportion of the OCOG's operational budget (around 20 per cent).

To manage complexity and cost, as well as to deliver proven solutions to support pre-Games and Games-time operations, the IOC has established some long-term partnerships through The Olympic Partner (TOP) Programme.

At the time of publication, there are five TOP Partners providing products and services related to technology solutions for the Games.

Services	% of technology budget (average*)	Note
Telecom services (network backbone, Local Area Network [LAN], local data centre, certain cloud services, Wi-Fi, etc.)	27%	Usually largely offset by local marketing agreement. Cloud services will be provided by Alibaba (TOP) in the future. See 4.9.1 below.
Integration services, system management services, Olympic Management System (OMS), Olympic diffusion systems and information systems	22%	Delivered by Atos as a turnkey solution under a long-term services agreement with the IOC (currently in force until 2024), based on a pre-agreed baseline and traditionally partly offset by the TOP marketing agreement with Atos (currently in force until 2020). Changes to the baseline or additional services requested by the OCOG may give rise to additional costs for the OCOG. The scope covers both the Olympic and Paralympic Games. The OCOG is to provide certain infrastructure and logistic assistance needed for Atos to deliver the above-mentioned services. See 4.9.2 below.
Timing and scoring systems and services, On-Venue Results (OVR) **systems and services, sport presentation systems and services, associated integration services, media graphics systems and services and project management.**	16%	100% offset by TOP marketing agreement with Omega (within certain parameters and based on a pre-agreed baseline). The partnership has been renewed for the 2021 – 2032 period. The services and related equipment are made available to the OCOG as an IOC turnkey solution (i.e. price of services are offset by marketing fees within certain parameters. Changes to the baseline or additional services requested by the OCOG may give rise to additional costs for the OCOG). The OCOG has to provide some infrastructure and logistic assistance needed for Omega to deliver the above-mentioned services, i.e. space, rooms, power, etc. The scope covers both the Olympic and Paralympic Games.
Hardware (Personal Computers [PC], laptops, printers) **and associated services and mobile phones**	7%	Usually partly offset by local and/or TOP marketing agreement with Samsung (currently in force until 2024). See 4.9.3 below.

* Average from three recent Games

Services	% of technology budget (average*)	Note
Audio-visual equipment, professional displays and video boards systems, public announcement systems, television units, projectors, cameras, video surveillance equipment, car navigation, some multi-media products and associated services	5%	Traditionally partly offset by TOP marketing agreement with Panasonic (at the date of publication,currently in place until 2024). See 4.9.4 below.
Design and development of OCOG website	5%	Usually partly offset by local marketing agreement.
IT security	3%	Usually partly offset by local marketing agreement.
Miscellaneous (internal IT, Games Management Systems [GMS], radios, software licenses, etc.)	15%	Many different projects each representing 2% or less of the overall Technology budget.

* Average from three recent Games

The OCOG paid staff costs are not considered in the above table as they are typically included in a centralised OCOG People Management budget.

The data below reflects the situation at the times of each Games. As technology evolves so rapidly and new ways of using technology constantly emerge, this data should be considered in the context of these times.

Additionally, technology costs for future Games may be impacted by the various Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction to this chapter.

4.9.1 Telecom services (network backbone, Local Area Network [LAN], local data centre, cloud services, Wi-Fi, etc.)

Costs are driven by operational and broadcast requirements. The total cost is impacted by venue configuration (especially outdoor/mountain venues) and the current state of telecommunications infrastructure in the host country.

Applicable section of current budget template (2024)

- 3.2 – Telecom and other technologies

HCC – Operational Requirements

- TEC 02 – Telecommunications
- TEC 03 – Internet infrastructure
- TEC 04 – Telecommunications infrastructure
- TEC 06 – Deployment of the telecommunications solution

Historical data

It should be noted that staffing and services represent a major part of this cost driver.

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Spectrum management			
Spectrum licences requests	Not documented	5,000	9,481*
Spectrum frequencies assigned	2,768	12,500	Not yet available
Wireless devices			
Devices (usage subject to specific OCOG authorisation)	56,300	Not documented	Not yet available
Including personal mobile radios	7,650	10,234	Not yet available
Fixed and wireless telecommunications			
Access switches	800	1,500	2,111**
Routers (core and distribution)	55	84	240**
Wi-Fi access points	Not documented	>1,100	6,000
Telephones	7,000	4,246	7,000**
Ethernet ports active	31,464	54,270	29,308**
Kilometres of overlay cabling placed	700	Not documented	Optical fibre: 487** UTP: 395**
Route kilometres of optical fibre cable required	285	260	363**
Fibre-based venues	21	31	75**
Mobile phones			
	9,454	18,166	12,000**
Data centres			
Primary Data Centre	1	1	2
Secondary Data Centre	1	1	2

* In progress at the time of publication
** Planned

4.9.2 Integration services and information systems

Under the current agreements with Atos, Atos services for the Olympic and the Paralympic Winter Games acquired by the OCOG are partially covered by marketing rights until 2020. The net remaining balance to be paid in euros by the OCOG to Atos is ultimately covered by the IOC contribution (a portion of which is paid in euros to naturally hedge the next expenditure). Beyond 2020, the above is subject to further discussions with Atos and IOC's internal consideration, The IOC will communicate further information in due course.

Staffing represents the main cost of the integration services.

Applicable section of current budget template (2024)

- 3.1 – Information technology

HCC – Operational Requirements

None

Historical data

Games technology systems

The data below represents the current information systems model that has been recently defined.

Systems	Applications
Olympic Management System (OMS*)	• Accreditation • Competition schedule • Sports Entries and Qualification (SEQ) • Workforce management
Business systems	• Computer-aided Design (CAD) • Contracts management • Finance • Information and documentation management • Intranet • People management/payroll • Procurement • Etc.
Games Management Systems (GMS) (collection of applications and tools needed by the OCOG FAs to manage planning, delivery and operations for the Games, as well as test events, the Olympic Torch Relay and other pre-Games activities)	• Arrivals and departures • Accommodation • Logistics • Protocol • Rate card management • Space management • Ticketing • Transport • Etc.

* Provided by Atos

Olympic Diffusion Systems (ODS) (provided by Atos)

The Olympic Diffusion Systems (ODS) are a complete solution for the distribution of results and Games-related information to accredited stakeholders. ODS includes the following services: Info, myInfo, Commentator Information System (CIS), results pages of the official website, results mobile application, web-ready component, Print Distribution System (PRD), INFO Content Management System (ICMS) and ODS data feeds.

	Vancouver 2010	Sochi 2014	PyeongChang 2018
myInfo+ kiosks	624	510	435*
myInfo+ user accounts active	1,959	4,746	10,000*
Commentator Information System (CIS)	878	809	902*

* Planned

4.9.3 Information Technology (IT) operations

Applicable section of current budget template (2024)

- 3.1 – Information technology

HCC – Operational Requirements

None

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Technology Operations Centre (TOC)*			
Footprint (m^2) (including viewing area)	470	525	572
Positions (seats)	140	162	104
IT equipment			
Servers	502	593	74**
Standard desktop/laptop PCs	7,394	8,100	7,946**
Printers/multi-function devices	2,310	1 648	2,295**

* In addition to the main Technology Operations Centre, service desks are set up in every competition venue and in the main non-competition venues, such as the IBC, MPC, Olympic Villages, Accreditation Centre, etc.
** Planned

4.9.4 Audio-visual (AV) equipment

The scope of AV equipment depends on the venue concept and existing facilities. It is impacted by equipment provided by the TOP Partner.

Applicable section of current budget template (2024)

- 3.2 – Telecoms and other technologies

HCC – Operational Requirements

None

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Televisions	4,200	2,610	6,500*
Light-emitting Diodes (LEDs) (large screen display system)	12 venues, 25 screens, 805m2	28 screens	15 venues, 22 screens, 858m2*
Monitoring and surveillance cameras	1,300	11,909	810*
Professional audio system	17 venues, 91 systems	96	16 venues, 89 systems*
Digital Light Processing (DLP) **projectors**	17	202	150*

* Planned

The above data does not include broadcasting deck equipment, cameras or monitors.

4.10 Test events management

Since the Vancouver and Sochi Olympic Winter Games, the IOC and IFs have been working together to make requirements related to test events even more flexible, which could lead to significant savings in the test event programme. Organising Committees are encouraged, based on each OCOG's specific context, to assess the number and level of test events needed. This includes hosting invitational events, maximising use of existing events and/or observing events to fulfil testing needs and carefully assessing the scope of each test event the OCOG will stage.

4.10.1 Test events

Applicable section of current budget template (2024)

- 2.12 – Test events

HCC – Operational Requirements

- GAM 05 – Test events

Historical data

	Vancouver 2010	Sochi 2014
Number of test events organised	14	14
Number of participating athletes*	2,213	3,034

* Planned

	Vancouver 2010			Sochi 2014		
Sport/Discipline	Name	Test event type	Number of athletes*	Name	Test event type	Number of athletes
Biathlon	Biathlon World Cup Test Event	International	200	IBU World Cup Biathlon	International	230
Bobsleigh/ Bobsleigh and Skeleton	FIBT Bobsleigh and Skeleton World Cup Tour	International	225	FIBT Bobsleigh and Skeleton World Cup Final	International	200
Curling	World Junior Curling Championships Tournament	International	100	World Junior Curling Championships	International	100
Ice Hockey	Women's Four Nations and Men's Four Team Tournament	International	88	Junior World Championships	International	220
Luge	Luge World Cup	International	125	Luge World Cup Final Stage	International	130
Skating/ Figure Skating	ISU Four Continents Figure Skating Championships	International	110	ISU Grand Prix of Figure Skating Final	International	72
Skating/ Speed Skating	ISU World Single Distances Speed Skating Championships	International	170	ISU World Single Distances Speed Skating Championships	International	134
Skating/ Short Track Speed Skating	ISU Short Track Speed Skating World Cup	International	170	ISU World Cup Short Track	International	179
Skiing/ Alpine Skiing	FIS Alpine World Cup	International	350	FIS Alpine Skiing European Cup Finals	International	120
Skiing/ Cross-Country	FIS Cross-Country World Cup	International	Not documented	FIS Cross-Country World Cup	International	277
Skiing/ Freestyle Skiing	FIS Freestyle World Cup	International	250	FIS Snowboard and Freestyle Skiing World Cup stages	International	700
Skiing/ Nordic Combined	FIS Nordic Combined World Cup	International	55	FIS Nordic Combined World Cup	International	65
Skiing/ Ski Jumping	FIS Ski Jump World Cup	International	70	FIS Ski Jumping World Cup stages	International	116
Skiing/ Snowboard	FIS Snowboard World Cup	International	300	FIS Snowboard and Freestyle Skiing World Cup stages	International	700

* Planned

4.11 Transport

Each Games' transport strategy has a cost impact. For example:

- The Vancouver 2010 transport strategy was to focus on (i) bussing spectators from Vancouver by establishing city park and ride services, and (ii) allowing cars within close proximity to Whistler (at Squamish) to provide mountain park and ride services; and
- The Sochi 2014 transport strategy was to construct a combined road and rail transport connection which required significant infrastructure.

The Winter Games are often confronted with the challenge of moving large numbers of stakeholders to/from mountain venues, using separated systems where road capacity is limited, public transport is limited or non-existent, venue space is limited and there are often difficult weather conditions.

The distance between the mountains and the city/coastal venues and the dispersed accommodation locations affects the numbers of people that need to be moved and the distances they need to travel.

It is important to ensure that venue capacity can be supported by the transport capacity of existing and/or temporary services.

Transport costs for future Games may be impacted by the various Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction to this chapter.

4.11.1 Rolling stock (buses and fleet vehicles)

The total number of buses (and their drivers) and fleet vehicles needed to deliver agreed services is determined by a range of factors including:

- agreed detailed service levels, with accommodation locations as a key input into service requirements;
- travel times;
- vehicle capacity (some mountain roads will not accommodate high capacity buses thus requiring a larger quantity of smaller vehicles is required);
- venue population model; and
- indirect costs that can include the need to increase existing public transport operations (buses) with more fleet needed to provide an adequate level of public transport.

Applicable section of current budget template (2024)

- 2.8 – Transport

HCC – Operational Requirements

- TRA 06 – Transport provisions and priorities
- TRA 10 – Other Olympic cities
- TRA 11 – Ceremonies services
- TRA 12 – Road event vehicles
- TRA 13 – Athletes' and team officials' transport system
- TRA 15 – Team sport vehicles
- TRA 17 – Victory Ceremony transport for medallists
- TRA 18 – NOC dedicated vehicles
- TRA 20 – NOC/NPC equipment vehicles
- TRA 22 – Car pool of accessible vehicles
- TRA 26 – IF Transport System
- TRA 27 – IF allocated vehicles
- TRA 28 – Media Transport System
- TRA 29 – OBS transport services
- TRA 30 – Accommodation and IBC/MPC transport service
- TRA 32 – Photo pool allocated vehicles
- TRA 36 – Marketing partner transport services
- TRA 39 – Marketing partner allocated vehicles and drivers
- TRA 46 – Observer programme
- TRA 47 – Medical Commission allocated vehicles
- TRA 48 – Court of Arbitration for Sport (CAS) allocated vehicles
- TRA 49 – World Anti-Doping Agency (WADA) allocated vehicles
- TRA 50 – IOC administration allocated vehicles and VAPPs
- TRA 58 – Fleet operations – fuel

Historical data

	Vancouver 2010	Sochi 2014	Pyeongchang 2018
Number of buses	1,672	998	1,199
Number of vans	700	264	770
Number of fleet vehicles*	4,629	3,700	3,189
Fuel used by OCOG Transport-operated buses (litres)	6,238,242 (from 2005-2010)	1,986,800 (estimate for Games-time period based on 100 litres per day/bus)	2,550,000 (estimate for Games-time operational period based on 100 litres per day/bus)
Fuel used by OCOG Transport-operated fleet vehicles (litres)	3,466,295 (2005-2010)	185,200 diesel 371,453 unleaded gasoline (Games-time period)	306,700 diesel 460,100 gasoline (estimate for Games-time period based on 60 litre fuel tanks and a 40% diesel/60% gasoline split filled every third day over Games-time period)

*The number of fleet vehicles is impacted by the sponsorship contract structure

4.11.2 Space needs (bus depots, fleet depots, venue transport and parking spaces)

The amount of space needed will depend on a range of factors generally associated with the final service level agreements, the final venue population model, the road network and associated travel times (longer travel times can increase bus and fleet requirements).

Finding existing sites large enough to park and operate large numbers of buses and fleet vehicles is often challenging; in many instances the OCOG has to find and acquire land and carry out earth (civil engineering) works.

Parking, operational and access requirements and stakeholder expectations are key drivers of venue transport space needs.

Applicable section of current budget template (2024)

- 2.8 – Transport

HCC – Operational Requirements

None

Historical data

	Vancouver 2010	Sochi 2014	PyeongChang 2018
Number of bus depots	3	4	4
Bus depots' total bus capacity	1,122	998	1,043
Bus depots' total area (hectares)	31	18	19
Number of fleet depots	3	4	5
Fleet depots' total fleet vehicle capacity	2,944	3,058	1,352
Fleet depots' total area (hectares)	18	17	18
Total number of venue parking spaces – fleet	11,500 (for 20 competition and non-competition venues)	9,426 (for 29 competition and non-competition venues)	4,182 (for 24 comp and non-comp venues)
Number of park and ride lots	6	4	10*
Park and ride lots' vehicle capacity	9,400	Not documented	11,165*

* Estimate

Note: the number of buses and fleet vehicles is shown in 4.11.1 Rolling stock.

4.12 Venue development and general infrastructure

4.12.1 Land acquisition, temporary venues, tents and trailers, site adaptation, temporary seating and temporary lighting

Cost related to venue development and general infrastructure, including temporary venues, are very contextual and thus vary greatly from Games to Games.

Contextual differences for Vancouver and Sochi are reflected in the table below. The main varying factors related to these differences are:

- Land acquisition costs: the degree to which land needed is included in Venue Use Agreements and the contractual arrangements between the land owners and the OCOG. For example, for some Games, publicly-owned land has been made available to an OCOG for minimal or even zero cost, whereas privately-owned land typically has a rental cost and/or business loss compensation fees;
- Tents and cabins/trailers/prefabricated buildings' costs: the extent to which existing or newly-built venues can accommodate Games spatial needs, the extent to which the legacy needs of newly-built venues aligns with Games needs and the number of temporary venues;
- Site adaptation costs: the use of the land prior to it being used for the Games, the type of temporary installation needed for the Games, the split of responsibilities between the OCOG and venue owners for site adaptation and remote locations of mountain venues;
- Temporary seating structure costs: the extent to which existing or newly-built venues can accommodate the Games' seating capacity needs;
- Temporary lighting costs: the extent to which the lighting in existing or newly-built venues meets Games' needs for both competition and broadcast purposes.

Venue development and general infrastructure costs may be impacted by the various Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction of this chapter. These initiatives include:

- A requirement that there be no new permanent venues unless there is a clear post-Games need substantiated by a financially viable legacy plan;
- More flexibility for the venue master plan, allowing maximum use of existing venues, including those outside the host city/country;
- No minimum venue capacity requirements for competition venues; rather, venue capacity is to be adapted to local needs and context;
- Optimised Games-specific venue requirements such as roofing, ceiling heights, vertical drop or other technical aspects.

To assist cities with alternative venue proposals according to their context, the IOC is developing generic Olympic Venue Briefs, which will provide cities with clear, comprehensive and ratified definition of all IF and FA requirements and key elements needed in venues.

The various types of turnkey solutions currently being explored by the IOC related to venues are:

- Assisting in venue planning, design, scoping and operational planning;
- Assisting in venue integrated planning and schedules; and/or
- Assisting in venue infrastructure cost planning.

Applicable section of current budget template (2024)

- 1.3.1 – Temporary infrastructure – overlay – competition venues
- 1.3.2 – Olympic/Paralympic Village
- 1.3.3 – IBC/MPC
- 1.3.4 – Other Key Olympic Venues
- 1.3.5 – Other venues/sites
- 2.8 – Transport (as site adaptation and land acquisition include Transport sites)
- 2.10 – Venue operations management

HCC – Operational Requirements

- VEN 02 – Sites and Master List of Sites
- VEN 05 – Division of responsibilities for venue development
- VEN 12 – Construction typology (permanent vs. temporary)
- BRS 03 – Games Operations Phase – facilities and services – Venues
- BRS Annex 1 – Operational Specifications for Broadcasting Services and Facilities
- BRS Annex 3 – Specifications on Broadcast Lighting

Percentage of OCOG Venues and Infrastructure budget

	Vancouver 2010	Sochi 2014**
Land acquisition (beyond land covered by Venue Use Agreements)	27*	Not documented
Tents/trailers	26	30***
Site adaptation (major site works at all venues to prepare venues for temporary installations)	19****	1
Temporary seating	8	1
Temporary lighting	5	2

* Vancouver 2010's costs for land acquisition were primarily caused by the cost of renting one area of land that was essential to the Games
** The Sochi 2014 Venues and Infrastructure budget included costs for temporary power (bas 0.4 kV and 10 kV) and percentages were calculated accordingly
*** Excludes temporary toilets
**** Includes transport sites

4.13 Venue management

4.13.1 Venue Use Agreements (VUA)

Venue Use Agreements (VUA) are the contracts agreed between the OCOG and venue owners/ operators for the OCOG's use of competition, non-competition venues and support facilities for the Games and test events. The cost of VUAs can vary widely depending on the nature of the agreements, the duration of OCOG non-exclusive and exclusive use of the different areas of the venue (use areas and time periods), the extent of what is provided by the venue owner (e.g. existing staff, existing equipment, provision of services, …), the usual use of the venue (e.g. commercial rental) and who owns the venue.

Venue management costs for future Games may be impacted by a number of Olympic Agenda 2020 initiatives to reduce cost and complexity, as described in the introduction to this chapter. Initiatives include adjustment of venue use periods to optimise the fit-out phase (the period of temporary installations) and subsequently to reduce rental costs.

Applicable section of current budget template (2024)

- 2.1.10 – Venue Operations Management

HCC – Operational Requirements

- VEN 14 – Venue Use Agreements (VUA)

Historical data

	Vancouver 2010			Sochi 2014			PyeongChang 2018	
Sport	Venue name	Games-time venue owner	Games exclusive use period	Venue name	Games-time venue owner	Games exclusive use period	Venue name	Games exclusive use period*
Biathlon	Whistler Olympic Park	VANOC	01/09/2009 – 30/04/2010	Laura Cross-Country Ski & Biathlon Centre	Gazprom	01/12/2013 – 31/04/2013	Alpensia Biathlon Centre	01/11/2017 – 31/03/2018
Bobsleigh/ Skeleton and Luge	Whistler Sliding Centre	VANOC	01/09/2009 – 31/03/2010	Sanki Sliding Centre	SC Olympstroy	07/01/2013– 24/03/2014	Alpensia Sliding Centre	01/01/2018 – 30/04/2018
Curling	Vancouver Olympic Centre	Vancouver Board of Parks and Recreation	01/12/2009 – 01/04/2010	Ice Cube Curling Centre	OOO Mostovik	07/01/2014 – 07/04/2014	Gangneung Curling Centre	01/09/2017 – 31/03/2018
Ice hockey 1	Canada Hockey Place	Aquilini Investment Group	28/01/2010 – 04/03/2010	Bolshoy Ice Dome	SC Olympstroy	01/07/2013 – 15/05/2014	Gangneung Hockey Centre	20/03/2017 – 30/04/2018
Ice hockey 2	UBC Thunderbird Arena	University of British Columbia	13/12/2009 – 30/04/2010	Shayba Arena	UGMK – Holding	07/01/2014 – 24/03/2014	Kwandong Hockey Centre	02/03/2017 – 30/06/2018
Skating (figure skating and short track speed skating)	Pacific Coliseum	Provincial Government entity	04/01/2010 – 31/03/2010	Iceberg Skating Palace	SC Olympstroy	07/01/2014 – 23/02/2014	Gangneung Ice Arena	01/09/2017 – 31/03/2018
Skating (speed skating)	Richmond Olympic Oval	City of Richmond	01/12/2009 – 31/03/2010	Adler Arena Skating Centre	Centre Omega OJSC	07/01/2014 – 06/03/2014	Gangneung Oval	01/09/2017 – 31/03/2018
Skiing (alpine skiing)	Whistler Creekside	Intrawest	01/02/2010 – 22/03/2010	Rosa Khutor Alpine Centre	Rosa Khutor LLC	07/01/2014 – 01/05/2014	Yongpyong Alpine Centre (for technical events)**	01/11/2017 – 01/03/2018
							Jeongseon Alpine Centre (for speed events)***	01/11/2017 – 31/05/2018
Skiing (cross-country and nordic combined)	Whistler Olympic Park – Cross-Country Stadium	VANOC	01/09/2009 – 30/04/2010	Laura Cross-Country Ski & Biathlon Centre	Gazprom	01/12/2013 – 31/04/2013	Alpensia Cross-Country Skiing Centre	01/11/2017 – 31/03/2018
	Whistler Olympic Park – Ski Jumping Stadium	VANOC	01/09/2009 – 30/04/2010	RusSki Gorki Jumping Centre	Krasnaya Polyana	07/01/2014 – 20/03/2014	Alpensia Ski Jumping Centre	01/11/2017 – 31/03/2018
Snowboard and Freestyle	Cypress Mountain	Boyne Resorts	01/02/2010 – 08/03/2010	Rosa Khutor Extreme Park	Rosa Khutor LLC	07/01/2014 – 31/03/2014	Bokwang Snow Park	01/12/2017 – 01/05/2018
							Alpensia Ski Jumping Centre (for snowboard big air)	01/11/2017 – 31/03/2018

* Unconfirmed


OMEGA
57:30
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2014
SOCHI 2014

Annexes

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Annex I: Vancouver 2010 budget

Vancouver 2010 Lifetime Budget for Olympic and Paralympic Games in 2010/2017 values

Summary budget (rounded)***

Revenues (in millions)	2010 CAD	2010 USD*	2017 USD**	%
1 IOC Contribution	**426**	**347**	**390**	**20%**
2 TOP Programme (gross)	**175**	**143**	**160**	**8%**
3 Domestic Sponsorship (gross)	**729**	**594**	**668**	**35%**
4 Ticket Sales	**282**	**230**	**258**	**14%**
4.1 Ticket Sales Revenue	272	222	250	
4.2 Additional Ticketing products (incl. Hospitality)	10	8	9	
5 Licensing & Merchandising	**77**	**62**	**70**	**4%**
5.1 Licensing products	77	62	70	
5.2 Philatelic	–	–	–	
5.3 Coins	–	–	–	
6 Government contribution	**190**	**155**	**174**	**9%**
6.1 Olympic Games	138	112	126	
6.1.1 National Government	48	39	44	
6.1.2 Regional Government	82	67	75	
6.1.3 Local Government	8	7	7	
6.2 Paralympic Games	52	42	48	
6.2.1 National Government	32	26	29	
6.2.2 Regional Government	20	16	18	
6.2.3 Local Government	–	–	–	
7 Lotteries	**–**	**–**	**–**	
8 Other Revenues	**203**	**166**	**186**	**10%**
8.1 Donations	8	6	7	0
8.2 Asset Disposal	15	12	14	
8.3 Other Revenues	180	147	165	
9 Total Revenues	**2,082**	**1,695**	**1,908**	**100%**

* 2010 CAD to USD: Purchasing-Power-Parities (PPP) adjusted International Monetary Fund (IMF) data
** USA Gross Domestic Product (GDP) deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Summary budget (rounded)***

Expenditures (in millions)	2010 CAD	2010 USD*	2017 USD**	%
1 Venue Infrastructure	**215**	**175**	**197**	**10%**
1.1 Capital Investment	–	–	–	
1.2 Temporary-Demountable Infrastructure	–	–	–	
1.2.1 Competition venues	–	–	–	
1.2.2 Non-Competition venues	–	–	–	
1.3 Temporary Infrastructure (incl. maintenance costs)	129	105	118	
1.3.1 Competition venues	112	91	102	
1.3.2 Olympic/Paralympic Village	12	10	11	
1.3.3 IBC/MPC	–	–	–	
1.3.4 Other Key Olympic Venues	–	–	–	
1.3.5 Other venues/sites	5	4	5	
1.4 Energy	83	67	76	
1.5 Other Venue Infrastructure expenses	4	3	4	
2 Sport, Games Services & Operations	**631**	**513**	**578**	**30%**
2.1 Accommodation	52	42	47	
2.2 Food and Beverage	47	38	43	
2.3 Medical Services (incl. Anti-Doping)	31	25	28	
2.4 Logistics	35	29	32	
2.5 Stakeholder Services	13	11	12	
2.6 Security	10	8	9	
2.7 Sports	57	47	53	
2.8 Transport	161	131	147	
2.9 Events Services	15	12	14	
2.10 Venue Operations Management	147	120	135	
2.11 Villages Operations	10	8	10	
2.11.1 Olympic/Paralympic Village Operations	10	8	10	
2.11.2 Media Village(s) Operations	–	–	–	
2.11.3 Other Villages operations	–	–	–	
2.12 Test Events	20	17	19	
2.13 Other Games Services & Operations expenses	31	25	29	

Expenditures (in millions)	2010 CAD	2010 USD*	2017 USD**	%
3 Technology	**345**	**281**	**316**	**17%**
3.1 Information Technology	236	192	216	
3.2 Telecoms	100	81	91	
3.3 Internet Infrastructure	9	8	9	
3.4 Other Technology expenses	–	–	–	
4 People Management	**339**	**276**	**311**	**16%**
5 Ceremonies & Culture	**130**	**106**	**119**	**6%**
5.1 Opening & Closing Ceremonies	78	63	71	
5.2 Torch Relay	29	23	26	
5.3 Culture and Education	24	20	22	
5.4 Other Ceremonies & Culture expenses	–	–	–	
6 Communications, Marketing and Look	**107**	**87**	**98**	**5%**
6.1 Communication, Community Relations & PR	15	12	13	
6.2 Look of the Games	22	18	20	
6.3 Marketing and Commercial Programme	70	57	64	
6.4 Other Comms, Marketing and Look expenses	–	–	–	
7 Corporate Administration and Legacy	**127**	**104**	**117**	**6%**
7.1 Administration and Governance	123	100	113	
7.2 Environment, Sustainability and Legacy	4	3	4	
7.3 Other Corporate Administration expenses	–	–	–	
8 Other Expenses (incl. Marketing right)	**187**	**152**	**171**	**9%**
9 Contingency	–	–	–	
10 Total Expenditures	**2,081**	**1,694**	**1,907**	**100%**

Net Financial Result (in millions)	2010 CAD	2010 USD*	2017 USD**
Surplus/Shortfall (Rev – Exp)	0	0	0

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Revenues (in millions)	2010 CAD	2010 USD*	2017 USD**
1 IOC Contribution	**426**	**347**	**390**
2 TOP Programme (gross)	**175**	**143**	**160**
3 Domestic Sponsorship (gross)	**729**	**594**	**668**
3.1 Olympic Games Sponsorship	697	567	638
3.1.1 Tier 1	453	369	415
3.1.2 Tier 2	131	107	120
3.1.3 Tier 3	113	92	103
3.2 Torch Relay Sponsorship	32	26	29
Sponsorship	32	26	29
3.3 Paralympic Games Sponsorship	–	–	–
4 Ticket Sales	**282**	**230**	**258**
4.1 Ticket Sales Revenue	272	222	250
4.1.1 Olympic Games	252	205	231
4.1.2 Paralympic Games	5	4	5
4.1.3 Test Events	6	5	6
4.1.4 Ceremonies and Cultural events	–	–	–
4.1.5 Other – Ticketing service recoveries	9	8	8
4.2 Additional Ticketing products (inc. Hospitality, packages, etc.)	10	8	9
CLUB 2010 – premium ticket packages	10	8	9
5 Licensing & Merchandising	**77**	**62**	**70**
5.1 Licensing products	77	62	70
2010 Store	14	12	13
Advertising fund	1	1	1
Licensing program	61	50	56
5.2 Philatelic	–	–	–
5.3 Coins	–	–	–

Revenues (in millions)	2010 CAD	2010 USD*	2017 USD**
6 Government contribution	**190**	**155**	**174**
6.1 Olympic Games	127	103	116
6.1.1 National Government	37	30	34
Medical services contribution	1	1	1
Official languages contribution	1	1	1
Ceremonies contribution	20	16	18
Torch relay	15	12	14
6.1.2 Regional Government	82	67	75
Medical services contribution	13	11	12
Sustainability programs	–	–	–
Olympic programs	69	56	63
6.1.3 Local Government	8	7	7
Whistler celebration plaza	3	2	3
Traffic management contribution	5	4	5
6.2 Paralympic Games	52	42	48
6.2.1 National Government	32	26	29
6.2.2 Regional Government	20	16	18
6.2.3 Local Government	–	–	–
6.3 Other Gov't contributions	11	9	10
Cultural Programs	11	9	10
7 Lotteries	**–**	**–**	**–**
8 Other Revenues	**203**	**166**	**186**
8.1 Donations	8	6	7
Donations	1	1	1
Friends of the Games	6	5	6
8.2 Asset Disposal	15	12	14
8.3 Other Revenues	180	147	165
Totals	**2,082**	**1,695**	**1,908**

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
1 Venue Infrastructure	**215**	**175**	**197**
1.1 Capital Investment	**–**	**–**	**–**
1.1.1 Competition Venues	**–**	**–**	–
1.1.2 Non-Competition Venues	–	–	–
1.2 Temporary-Demountable Infrastructure	–	–	–
1.2.1 Competition Venues	–	–	–
1.2.2 Non-Competition Venues	–	–	–
1.3 Temporary Infrastructure – Overlay – (incl. set-up, maintenance and disposal costs)	**129**	**105**	**118**
1.3.1 Competition Venues (please list all competition venues)	112	91	102
Planning and coordination	2	1	2
Design and Engineering	4	3	4
Permits and Fees	1	1	1
Containers	2	2	2
Temporary Lighting	9	7	8
Temporary Seating	13	11	12
Tents	28	23	26
Trailers	12	10	11
Fencing	4	3	4
Cable Management	2	2	2
Rigging	2	2	2
Scafhold Structures	5	4	5
Site adaptation	26	21	24
1.3.2 Olympic/Paralympic Village(s)	12	10	11
Site adaptation	12	10	11
1.3.3 IBC/MPC	–	–	–
1.3.4 Other Key Olympic Venues	–	–	–
Training Venues	–	–	–
Ceremony Venues	**–**	**–**	**–**
Olympic Family Hotel(s)	–	–	–
Media Village(s) (where applicable)	–	–	–
Olympic Park(s) and major Common Domain(s)	–	–	–
Airport(s) and other Port(s) of Entry when relevant	–	–	–
1.3.5 Other venues/sites	5	4	5
Transportation Facilities (Overlay)	5	4	5
Other non-competition Venues (warehouses, accreditation center, depos, bus hubs, etc.)	–	–	–
1.4 Energy	**83**	**67**	**76**
Temporary Power and distribution (incl. cabling)	46	37	42
Power from the Grid	19	15	17
Venue utilities	6	5	5
Site works	12	10	11
Air Conditioning and heating	–	–	–
Sports Lighting	–	–	–
1.5 Other Venue Infrastructure expenses	**4**	**3**	**4**
1.5.1 Signage and Wayfinding	3	3	3
1.5.2 Others	–	–	–
Construction Project Management (if applicable)	–	–	–
Venue engineering, design and studies	–	–	–
Permits	–	–	–
Travel etc.	1	1	1

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
2 Sport, Games Services & Operations	**631**	**513**	**578**
2.1 Accommodation	**52**	**42**	**47**
Clients Accommodation (media, sponsors, IFs, NOCs, Head of States, IOC/IPC, etc.)	6	5	5
OCOG's Workforce Accommodation (incl. volunteers & drivers)	34	27	31
Contractors	–	–	–
Accommodation subsidies to constituent groups/Cancelled rooms	–	–	–
Homestay/Private housing programme	1	1	1
Cruise Ship costs (where applicable)	11	9	10
Planning and coordination	1	1	1
2.2 Food and Beverage	**47**	**38**	**43**
OLV(s)/PLV(s) Kitchen outfit	5	4	5
OLV(s)/PLV(s) F&B Services	13	10	12
MEV(s) F&B Services	–	–	–
MEV(s) Kitchen outfit	–	–	–
IBC/MPC or MMC F&B Service	–	–	–
IBC/MPC or MMC Kitchen outfit	–	–	–
Rest Venues (comp venues, common domains, warehouses, depots, ports of entry, etc.)	29	23	26
Others	–	–	–
2.3 Medical Services (incl. Anti-Doping)	**31**	**25**	**28**
2.3.1 Medical	17	14	15
Polyclinic equipment and operations	–	–	–
Medical services & equipment (all rest venues)	14	11	13
Medical supplies & consumables (all venues)	–	–	–
Other medical services (eg. Ambulance services, First Aid, Veterinary services, etc.)	3	3	3
2.3.2 Anti-Doping	14	12	13
Doping laboratory	5	4	5
Doping laboratory operations	7	6	6
ADP games time operations	1	1	1
Planning and coordination	2	1	2
Doping technical/scientific staff (contractors)	–	–	–
Doping supplies & consumables	–	–	–
2.4 Logistics	**35**	**29**	**32**
Warehousing (rentals, operations)	17	14	15
Traffic, Distribution	1	1	1
Venue Logistics (incl. Villages Logistics)	1	1	1
Warehouse equipment (forklifts, racking, etc.)	–	–	–
Logistics vehicles and drivers	1	1	1
Customs & Freight Forwarding Services	1	1	1
Furniture, Fixtures & Equipment (all competition, training, non-competition venues and other sites)	14	11	12
- Villages FFE & supplies	7	6	7
- Venues FFE	6	5	6
2.5 Stakeholder services	**13**	**11**	**12**
2.5.1 International Relations & Meetings	7	6	6
Organization of Meetings & Events	5	4	5
Protocol	2	1	1
Dignitary Programmes	–	–	–
IOC/IPC hotels operations	–	–	–

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
2.5.2 NOC/NPC Services	5	4	5
Support Grant	5	4	4
NOCs/NPCs meetings and seminars	1	–	–
2.5.3 Press Operations	1	1	1
Olympic News Service (ONS) incl. Biographies	1	1	1
Planning and coordination	1	1	1
Shops & Services in MPC / MMC	–	–	–
2.6 Security	**10**	**8**	**9**
Security Equipment	–	–	–
Private Security / Asset protection (contractors)	10	8	9
Planning, coordination and training	–	–	–
2.7 Sports	**57**	**47**	**53**
Sports Competition, Management and Relations with IF	35	28	32
Expert Workforce (per diems, benefits, etc.)	–	–	–
Sport Equipment	7	6	6
Meteorology Services	3	2	3
Sports Presentation (incl. sport galas if applicable)	12	10	11
Paralympic planning	1	1	1
2.8 Transport	**161**	**131**	**147**
Automobile Fleet System & Operations vehicles incl. maintenance	36	30	33
Bus System & Operations (incl. Coaches)	87	71	80
All fuel needs (incl. registered and non-registered vehicles and energy generators)	13	11	12
Public Transport for accredited people where required	12	10	11
Spectators transport (if applicable)	–	–	–

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
Transportation Facilities rentals & operations (eg. Depots, parking lots)	12	10	11
Transport vehicles support services (maintenance, equipment, tolls, road assistance, etc.)	–	–	–
Drivers support costs (accommodation, per-diems, uniforms, training, etc.) if applicable	–	–	–
Departures & Arrivals specific costs	–	–	–
2.9 Events Services	**15**	**12**	**14**
Events Services	–	–	–
Crowd management (contractors and operations)	15	12	14
2.10 Venue Operations Management	**147**	**120**	**135**
2.10.1 Venue use (rent) agreements	135	110	124
Pre Games Operations	17	14	16
Test Event Delivery	–	–	–
Games Time Delivery	81	66	75
Property and land rental	36	29	33
2.10.2 Facility Management & Maintenance (excl. Temporary that is in 1.3)	–	–	–
Pre games Operations	–	–	–
Test event Delivery	–	–	–
Games time Delivery	–	–	–

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
2.10.4 Other Venue Operations Management	10	8	9
Rest non-competition venues rentals and operations	–	–	–
IBC/MPC or MMC	–	–	–
Celebration Plazza(s)	4	3	4
Other sites/facilities (eg. Airport, UAC, etc.)	2	2	2
C3 Operations	–	–	–
Planning and coordination	1	1	1
City services and planning	3	2	2
2.10.5 Venue remediation	3	2	2
2.11 Villages Operation	**10**	**8**	**10**
2.11.1 Olympic/Paralympic Village Operation	10	8	10
OLV(s)/PLV(s) Rentals, additional land leasing	–	–	–
Site adaptation/conversion	–	–	–
Village Services/Retail Services (dry cleaning, post office, etc.)	3	3	3
House keeping/Laundry services	7	5	6
Furnishings, supplies	–	–	–
Site Management/Key Management/ Consumables & Utilities	–	–	–
Co-host cities Village(s) rentals & operations	–	–	–
2.11.2 Media Villages Operations	–	–	–
MEV(s) Rentals/additional land leasing	–	–	–
MEV(s) Services/Retail services (if applicable)	–	–	–
MEV(s) site management/ consumables	–	–	–
2.11.3 Other Villages operations	–	–	–
Grooms Villages, TOs, OF hotels, etc.	–	–	–
2.12 Test Events	**20**	**17**	**19**
2.13 Other Games Services & Operations expenses	**31**	**25**	**29**
2.13.1 Accreditation	1	1	1
Printing Material (badges, lanyards, etc.)	1	1	1
Supplementary means of accreditations (armbands, wristbands, stickers, etc.)	–	–	–
2.13.2 Language Service	–	–	–
Specific technology solutions and infrastructure (if not under Technology)	–	–	–
Interpretation	–	–	–
Translation	–	–	–
2.13.3 Cleaning & Waste Management, Snow Removal	30	25	28
CWM Services (including Snow Removal & anti-icing)	–	–	–
Competition Venues & Training sites	13	11	12
OLV(s) & PLV(s)	4	3	3
MEV(s)	–	–	–
Other non-competition Venues	4	3	3
Specialized snow management	4	3	4
Waste Pumping & containers	5	4	5
Planning and coordination	–	–	–
2.13.4 Others	–	–	–
If needed please clarify the nature of any other expenses	–	–	–

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
3 Technology	**345**	**281**	**316**
3.1 Information Technology	**236**	**192**	**216**
Timing & Scoring, Results	67	55	62
Core Games Management System (ATOS)	103	84	95
Other OCOG Games Management Systems (e.g. transportation, accommodation, rate card, etc.)	2	1	1
Back-office and administration systems (e.g. Enterprise Resources Planning (ERP) system, Project Management, etc.)	1	1	1
System hardware	45	37	41
TOC, Data centers expenses	–	–	–
Photocopying & Printing Services	14	12	13
Network Cabling	–	–	–
Office technology	3	2	3
3.2 Telecoms and other technologies	**100**	**81**	**91**
Fixed Telephony infrastructure & System	14	11	13
Mobile Telecoms (equipment & services)	–	–	–
Wired/wireless communications/ intercom systems (incl. cabling & equipment)	34	27	31
Radio frequency communications	21	17	20
A/V Equipment, network & Services (incl Venue A/V)	20	16	18
Rate card services	9	7	8
Other telecom	2	1	2
3.3 Internet Infrastructure	**9**	**8**	**9**
Technical infrastructure and management	4	3	4
Internet hosting	5	4	5
3.4 Other Technology expenses	**–**	**–**	**–**
3.4.1 Other	–	–	–
Technology design, studies, etc.	–	–	–
If needed please clarify the nature of any other expenses	–	–	–
4 People Management	**339**	**276**	**311**
4.1 Salaries and benefits (paid + temporary staff)	**284**	**231**	**260**
4.2 Games Workforce Uniform (staff, volunteers, torch bearers, etc.)	**20**	**16**	**18**
4.3 Games Workforce Training (staff, volunteers, contractors)	**–**	**–**	**–**
4.4 Other People Management Costs	**35**	**29**	**32**
4.4.1 Other	–	–	–
Staff Recruitment & Selection (paid/temp/volunteers)	10	8	9
Staff Development and Training	2	2	2
Secondment programmes	–	–	–
Staff retention plans	22	18	20
Volunteer centre	2	1	1
5 Ceremonies & Culture	**130**	**106**	**119**
5.1 Opening & Closing Ceremonies	**78**	**63**	**71**
Ceremonies Creative & Production	76	62	70
Handover Ceremonies	2	1	2

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
5.2 Torch Relay	**29**	**23**	**26**
TR Communications (website, presentations, films, promotion, etc.)	–	–	–
Advertising Campaigns (if not in Communications)	19	15	17
Stadium cauldron (design, production, installation, fuel, etc.)	–	–	–
Design & production (torch, cauldrons, etc.) & Testing – if not included in Look of the Games	–	–	–
Torch Relay logistics (transport, fuel, support expenses to torchbearers, TR staff, etc.)	10	8	9
5.3 Culture and Education	**24**	**20**	**22**
Cultural Programme Activities	20	16	18
Education Programmes (national/international)	–	–	–
Other Events/Youth Programmes (if applicable)	–	–	–
Performer services	4	3	3
5.4 Other Ceremonies & Culture expenses	**–**	**–**	**–**
5.4.1 Various Ceremonies & Culture Events	–	–	–
Medal Ceremonies	–	–	–
Medals Plaza (preparation & operations)	–	–	–
Live Sites	–	–	–
Team Welcome Ceremonies	–	–	–
5.4.2 Other	–	–	–
If needed please clarify the nature of any other expenses	–	–	–

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
6 Communications, Promotion, Look and Marketing	**107**	**87**	**98**
6.1 Communication, Community Relations & Public Relations	**15**	**12**	**13**
Research, polls	–	–	–
Community Engagement programmes (site tours, roadshows, etc.)	7	6	6
Public Relations / Corporate Events Management	4	3	4
Film & Video Production	2	2	2
6.1.1 Media Relations	1	1	1
Agencies, conferences, meetings, events	1	1	1
6.1.2 Editorial Services and Publications	–	–	–
6.1.3 Internet Management (content management)	–	–	–
Pre-games internet site	–	–	–
Games time internet site	–	–	–
6.2 Image & Look of the Games	**22**	**18**	**20**
Brand / Market research	9	7	8
Look programme (creative development/design)	–	–	–
Look programme Production, installation & management (banners, fence, fabric, decals, grandstands, etc.)	13	11	12
Other Look elements designs (sport equipment, etc.)	–	–	–

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
6.3 Marketing and Commercial Programme	**70**	**57**	**64**
6.3.1 Sponsorship Marketing & Services	51	41	46
TOP Programme management	–	–	–
Sponsors recognition & marketing	8	7	7
Brand Management/commercial Right Management	43	35	39
6.3.2 Licensing & Merchandise	6	5	6
Licensing & Merchandise Marketing	6	5	6
Olympic Store(s)	–	–	–
6.3.3 Ticketing Marketing & Operations	13	11	12
Ticketing sales, Fulfillment & Distribution	12	10	11
Ticket Printing, Packaging	–	–	–
Ticketing Marketing / Advertising	1	1	1
6.4 Other Communications, Promotion and Marketing expenses	**–**	**–**	**–**
6.4.1 Other	–	–	–
If needed please clarify the nature of any other expenses	–	–	–
7 Corporate Administration and Legacy	**–**	**–**	**–**
7.1 Administration and Governance Costs	**127**	**104**	**117**
7.1.1 Office administration costs	34	28	31
Office Rentals/fit out/special FFE	22	18	20
Management costs (maintenance, utilities, courier service, supplies, consumables, etc.)	11	9	10
Executive Office (salaries in People Management)	1	1	1
7.1.2 Finance (incl. Rate Card)	46	38	42
Other FNC costs	6	5	6
Interest & Banking Fees/expenses	8	6	7
Hedging/Foreign exchange losses	11	9	10
External auditors/tax advisors/ consultants etc.	4	3	3
CFO Contingency	9	8	9
Financial IT Systems (if not included in Technology)	–	–	–
Dissolution & Post Games Financial Report	8	6	7
Rate Card	–	–	–
7.1.3 Risk Management (incl. Insurance)	12	9	11
Insurance premiums	12	9	11
Insurance brokers/advisors	–	–	–
Health & Safety	–	–	–
7.1.4 Procurement	–	–	–
7.1.5 Legal Services	8	7	7
Legal services	7	6	6
Board governance	1	1	1
7.1.6 Programme Planning & Project Management	3	2	3
Information Management Services & System	3	2	3
Official report/TOK/Observer Programme/debrief	–	–	–
7.1.7 Government Relations, Services & Coordination	14	12	13
City Operations & Permits	–	–	–
City-Municipal Service Agreements/ Traffic control	6	5	5
First Nations relations	7	6	7
Official languages requirements	1	1	1
Other communities relations & participation	–	–	–
7.1.8 Broadcast Integration	6	5	5
Others (briefings, kits, etc.)	–	–	–
IBC Operations	1	1	1
Paralympic Host Broadcast	4	4	4

* 2010 CAD to USD: PPP adjusted (IMF data)
** USA GDP deflator (IMF indicators)
*** Numbers might not sum up due to rounding

Detailed budget (rounded)***

Expenditures (in millions)	2010 CAD as spent	2010 USD*	2017 USD**
7.2 Environment, Sustainability and Legacy	**4**	**3**	**4**
Environmental Studies / Consulting	2	2	2
Environment awareness programmes/ events	–	–	–
Venue restoration/remediation costs	–	–	–
Legacy activities	2	2	2
7.3 Other Corporate Administration expenses	**–**	**–**	**–**
7.3.1 Other	–	–	–
Misc	–	–	–
8 Other Expenses (eg. Marketing rights, payments to IOC/IPC/NOC, etc.)	**187**	**152**	**171**
JMPA	110	90	101
Marketing rights to IOC	74	60	67
IPC Revenue guarantee	3	3	3
Please clearly list the nature of any other expenses	–	–	–
9 Contingency			
Totals:	**2,081**	**1,695**	**1,908**

Annex II: 2024 budget template

2024 Lifetime Budget for Olympic and Paralympic Games in 2014 values

Revenues (000s)	Local	USD	%
1 IOC Contribution			
2 TOP Programme (gross)			
3 Domestic Sponsorship (gross)			
4 Ticket Sales			
4.1 Ticket Sales Revenue			
4.2 Additional Ticketing products (incl. Hospitality)			
5 Licensing & Merchandising			
5.1 Licensing products			
5.2 Philatelic			
5.3 Coins			
6 Government contribution			
6.1 Olympic Games			
6.1.1 National Government			
6.1.2 Regional Government			
6.1.3 Local Government			
6.2 Paralympic Games			
6.2.1 National Government			
6.2.2 Regional Government			
6.2.3 Local Government			
7 Lotteries			
8 Other Revenues			
8.1 Donations			
8.2 Asset Disposal			
8.3 Other Revenues			
9 Total Revenues			

2024 Lifetime Budget for Olympic and Paralympic Games

Expenditures (000s)	Local	USD	%
1 Venue Infrastructure			
1.1 Capital Investment			
1.2 Temporary-Demountable Infrastructure			
1.2.1 Competition venues			
1.2.2 Non-Competition venues			
1.3 Temporary Infrastructure (incl. maintenance costs)			
1.3.1 Competition venues			
1.3.2 Olympic/Paralympic Village			
1.3.3 IBC/MPC			
1.3.4 Other Key Olympic Venues			
1.3.5 Other venues/sites			
1.4 Energy			
1.5 Other Venue Infrastructure expenses			
2 Sport, Games Services & Operations			
2.1 Accommodation			
2.2 Food and Beverage			
2.3 Medical Services (incl. Anti-Doping)			
2.4 Logistics			
2.5 Stakeholder Services			
2.6 Security			
2.7 Sports			
2.8 Transport			
2.9 Events Services			
2.10 Venue Operations Management			
2.11 Villages Operations			
2.11.1 Olympic/Paralympic Village Operations			
2.11.2 Media Village(s) Operations			
2.11.3 Other Villages operations			
2.12 Test Events			
2.13 Other Games Services & Operations expenses			

Expenditures (000s)	Local	USD	%
3 Technology			
3.1 Information Technology			
3.2 Telecoms			
3.3 Internet Infrastructure			
3.4 Other Technology expenses			
4 People Management			
5 Ceremonies & Culture			
5.1 Opening & Closing Ceremonies			
5.2 Torch Relay			
5.3 Culture and Education			
5.4 Other Ceremonies & Culture expenses			
6 Communications, Marketing and Look			
6.1 Communication, Community Relations & PR			
6.2 Look of the Games			
6.3 Marketing and Commercial Programme			
6.4 Other Comms, Marketing and Look expenses			
7 Corporate Administration and Legacy			
7.1 Administration and Governance			
7.2 Environment, Sustainability and Legacy			
7.3 Other Corporate Administration expenses			
8 Other Expenses (incl. Marketing right)			
9 Contingency			
10 Total Expenditures			

Net Financial Result	Local	USD	%
Surplus / Shortfall (Rev – Exp)			
Accumulated inflation until 2024			
Exchange rate used 1 USD =			

Annex III: Sources

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Annex IV: Acronyms

Acronym	Term
AV	Audio-visual
CAD	Computer-aided Design
CAS	Court of Arbitration for Sport
CEO	Chief Executive Officer
CIS	Commentator Information System
DLP	Digital Light Processing
FA	Functional Area
GDP	Gross Domestic Product
GMS	Games Management System
HV	High Voltage
IBC	International Broadcast Centre
ICMS	INFO Content Management System
IF	International Federation
IMF	International Monetary Fund
IOC	International Olympic Committee
IPC	International Paralympic Committee
IT	Information Technology
LAN	Local Area Network
LED	Light-emitting Diode
MBC	Mountain Broadcast Centre
MMC	Main Media Centre
MPC	Main Press Centre
MV	Medium Voltage

Acronym	Term
MVA	Mega Volt Amp
NOC	National Olympic Comittee
OBS	Olympic Broadcasting Services
OCOG	Organising Committee for the Olympic Games
ODS	Olympic Diffusion System
OIS	Olympic Information Service
OMS	Olympic Management System
OTR	Olympic Torch Relay
OVR	On-Venue Results
PC	Personal Computer
PPP	Purchasing-Power-Parities
PRD	Print Distribution System
RHB	Rights-Holding Broadcaster
SEQ	Sports Entries and Qualification
TOC	Technology Operations Centre
TOP	The Olympic Programme
VANOC	Vancouver Organising Committee for the Olympic Games
VAPP	Venue Access and/or Parking Permit
VMC	Venue Media Centre
VUA	Venue Use Agreement
WADA	World Anti-Doping Agency
YOGOC	Youth Olympic Games Organising Committee


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Commercial Revenues

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