Greater Montréal: Welcome to a World-Leading Video Game Hub

Content

Greater Montréal:
The 5th largest video game development hub in the world

A leading edge ecosystem

- **140+ studios**
- A complete and diversified ecosystem with key players in tool development and service providers, such as audio services, quality assurance, publishing, localization, etc.
- Ubisoft, EA, Eidos, Epic, Gameloft and many more international studios chose the region to develop globally successful games

A very creative & specialized workforce

- **15,000 video game professionals**
- Close to **14,000 university students enrolled in IT related programs** and close to **1,300 in Arts related programs**
- **4,000+ college students** enrolled in technical programs related to **video game**

Competitive costs & tailor-made incentives

- **28% cost advantage** compared to the average of the 20 largest metropolitan areas in Canada and the U.S. for video game
- **Competitive employee salaries** paired with an affordable cost of living
- **Up to 37.5% tax credit** for video game

A great quality of life

- **Best city in Canada** and **6th in the world** (TimeOut, 2019)
- **Most affordable major city** in Canada and the U.S. (UBS Prices and earnings, 2018)
- **Best Student City** in the Americas (QS Best Student Cities 2018)

01

A World-Leading Video Game hub

MTL INTL Montréal International

Montréal's video game industry
Key facts

5th

video game development hub in the world

140+ studios

15,000 experts

A complete and diversified ecosystem with key players in tool development and service providers, such as audio services, quality assurance, localization, etc.

Ubisoft, EA, Eidos, Epic, Gameloft and many more international studios chose the region to develop globally successful games, such as:

- Assassin's Creed Origins (from Ubisoft)
- Batman Origins (from Warner Bros Games)
- Deus Ex and Rise of the Tomb Raider (from Eidos)

Deus Ex – Mankind Divided © Eidos

Montréal's ecosystem:
some of the major players

Full-service industry made up of academia, tool developers, animation, sound, production and post-production studios, etc.

Source: Montreal Studio/Tech Mapping, CBRE, 2018; Montréal International, 2019.

Succesful tech, services and game developers to develop great games

Tech

Unity
The Montréal office is at the core of Unity's animation systems and emerging AI technology

EPIC GAMES
Game development teams and Unreal Engine tech team for industrial applications

AUTODESK
Software services for the architecture, engineering, construction, manufacturing, media, and entertainment industries

audiokinetic
Audio software for the video game industry

Services

Keywords STUDIOS — Support | Deliver | Evolve
Post production services like localization, quality assurance and live operations for games

GAMEON
Specialized in audio and motion capture services

GlobalStep — Passion for your Success
Quality assurance, localization, live operations support, data analytics, test automation and consulting services

KONGREGATE
Mobile, PC, Console publisher, and web gaming portal

Developers

UBISOFT
The world's biggest game development studio with a rich portfolio of internationally renowned brands

SQUARE ENIX.
2 studios in Montréal: Eidos Montréal and Square Enix known for *AAA* titles such as *Shadow of the Tomb Raider*

ludia
Creates and distributes cross-platform digital games with mass consumer appeal

bE HAVIOUR
Studio specializing in the production of 2D and 3D action/adventure games

COMPULSION GAMES
Developer known for Contrast and We Happy Few

… 140+ others!

A collaborative video game ecosystem

Montréal is known for its openness and collaborative nature. Some organizations exist to foster this spirit:

alliance numérique — Represents video game companies of all sizes in Québec. With nearly 100 active members, the organization works to support and promote the products and contributions of this sector among the media, government decision makers and the general public.

La GUILDE — Supports and ensures the sustainability of Québec's independent video game studios. With its 160 studio members, it represents the largest independent video game cooperative in the world.

GamePlay Space — Private initiatives such as GamePlay Space founded by Jason Della Rocca also contribute to the dynamism of Montréal's video game ecosystem.

A powerhouse IT industry

The video game ecosystem in Montréal is built on the legacy of strong digital arts, software development and AI industries:

- **107,500** qualified employees in IT, and **5,240** companies
- **A GDP of $11.6 B**
- **Lowest operating costs in North** America for software development, ahead of Toronto, Boston, New York and San Francisco
- **Broadly diversified industries related to video game:**

1st
concentration of deep learning researchers in the world (AI)

1st
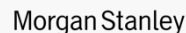in Canada and a world leader in VFX & animation

5th
highest tech jobs concentration among the largest metropolitan areas in Canada & U.S.

And at the leading edge of mobile technologies, VR/AR, data analytics, and fintech

Sample of major companies located in Greater Montréal

Google · Microsoft · IBM · 5th Wall · Morgan Stanley · SAP · AUTODESK · technicolor · DIGITAL DIMENSION · DASSAULT SYSTEMES · MATHEMATIC · REEL FX · Mobeewave · BUF · lightspeed · FELIX & PAUL STUDIOS · ELEMENT AI · FRAMESTORE VR STUDIO · CINESITE STUDIOS · RODEO Visual Effects Company · Facebook · FRAMESTORE

Birth and growth of the video game industry in Montréal

Over the past 25 years, Greater Montréal became Canada's most important video game hub and the 5th in the world.

Three waves of development

1 – Birth of the industry

- Before Ubisoft and Autodesk became influential players in Montréal's industry, locally owned **Behaviour Interactive** (BHVR) and **Kaydara** anchored the local development scene.

- Thanks to the implementation of the **Multimedia Titles tax credit**, in 1997, the first wave sweeping the landscape occurred when **Ubisoft** committed to Montréal and took the industry to the next level.

- As a result, **Ubisoft**, along with **EA**, **Eidos**, **Gameloft** and **WB Games** grew to create 500+ person studios.

2 – Emergence of Montréal content

- The second wave of handheld games once again created a paradigm shift in the development scene.

- Thanks to cheaper tools, a mature talent base and the opportunity to self-publish, along with the demand for smaller and more addictive games, the stage was set for the emergence of a local, independent development scene.

- Studios such as **Outerminds, Riposte Games, Compulsion Games, Red Barrels, Panache Digital Games** are at the vanguard of this trend.

3 – The future of the industry

- Following those previous successes, Montréal has emerged as a global leader in **new video game niches, such as VR/AR and gamification in fields such as health care and education.**

- Montréal is also making a name for itself as a world **AI and deep learning** hub, which will undoubtedly revolutionize the video game development.
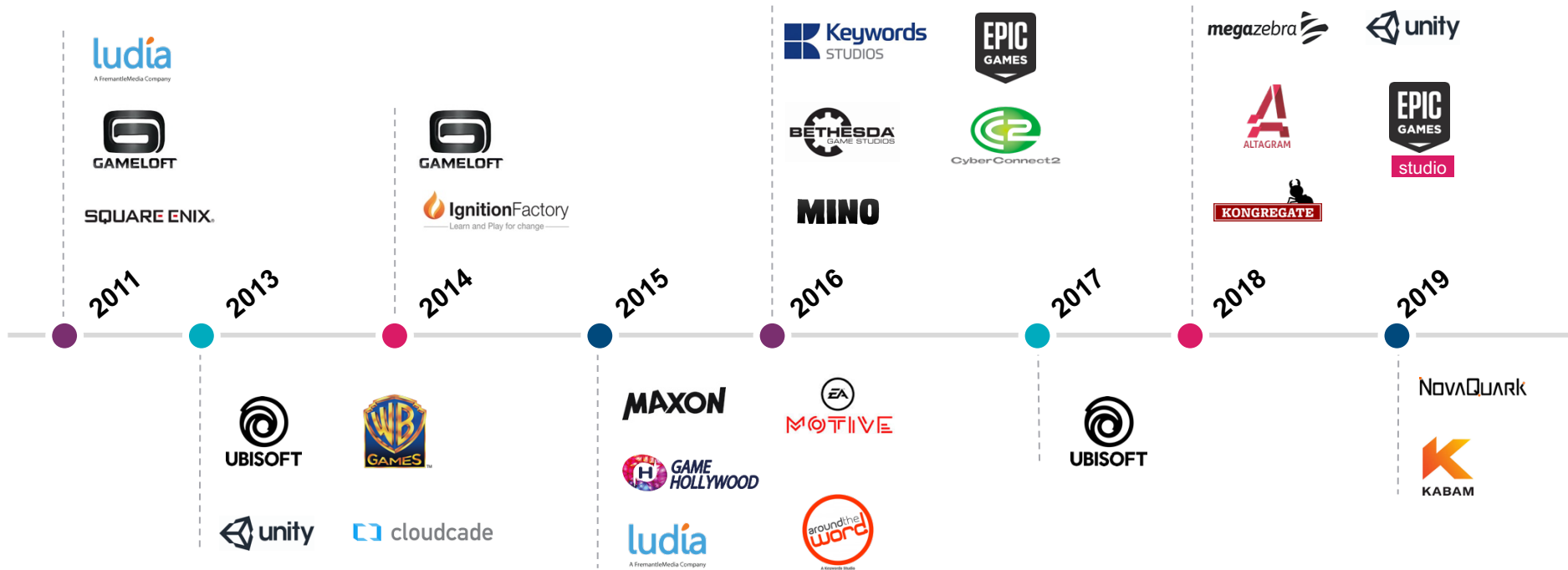
Some of the major successes developed in Greater Montréal

Major global players have recently chosen Montréal

Montréal's video game industry has experienced phenomenal growth in recent years, through the expansion and setting up of international subsidiaries of companies from around the world.

Timeline of companies by year:

2011: ludia (A FremantleMedia Company), GAMELOFT, SQUARE ENIX

2013: UBISOFT, WB GAMES, Unity, cloudcade

2014: GAMELOFT, IgnitionFactory — Learn and Play for change

2015: MAXON, GAME HOLLYWOOD, ludia (A FremantleMedia Company)

2016: Keywords STUDIOS, EPIC GAMES, BETHESDA GAME STUDIOS, CyberConnect2, MINO, EA MOTIVE, around the word (A Keywords Studio)

2017: UBISOFT

2018: mega zebra, ALTAGRAM, KONGREGATE, unity, EPIC GAMES studio

2019: NovaQuark, KABAM

In 2019, Montréal welcomes three international events focused on video game

MUTEK

August 2019

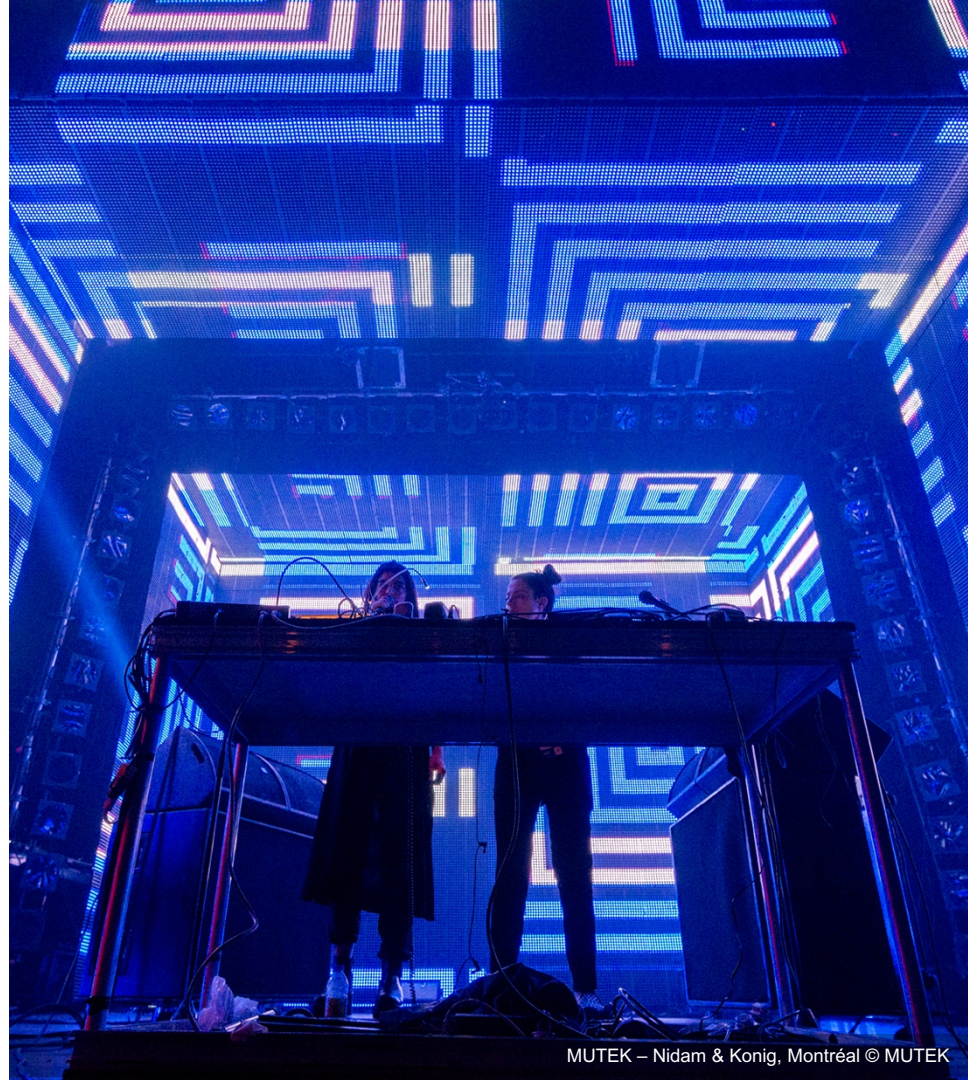Montréal-based festival dedicated to the promotion of electronic music and digital arts

---

DREAMHACK MONTREAL 2019

September 2019

Montréal's edition of the world's largest digital festival

MEGA MONTRÉAL EXPO GAMING ARCADE

MIGS MONTREAL INTERNATIONAL GAME SUMMIT

Novembre 2019

MEGA and MIGS join forces for the first B2B2C gaming event!

MUTEK – Nidam & Konig, Montréal © MUTEK

02

A Deep and Growing Pool of Highly Qualified Talent

© Ubisoft Montréal

Montréal, where creativity and technical expertise meet

Greater Montréal's video game industry counts close to 15,000 experts.

That number is increasing fast thanks to the large number of graduates the region's colleges and universities provide every year, combining expertise in the digital arts and tech.

Also, Montréal's Mile End neighborhood is known for hosting the greatest concentration of artists in Canada and is a major culture and arts hub in North America.

Mile End is also home to a growing number of video game studios and visual effects firms, including Ubisoft, Framestore, Behavior, Gameloft and Atelier Animation.

Source: LinkedIn, Talent Insights, March 13, 2019.

There are close to 15,000 video game experts in Montréal

The 41 key skills taken into account to define video game experts*

Cross-platformDevelopment
GameMechanics
Object-OrientedProgramming(OOP
GameBalance
VideoGameProduction   Unity   DStudioMax
InteractiveEntertainment
LevelDesign
PS   Houdini   MMO
MayaDynamics
UnrealEngine   ZBrush   MMORPG   Wii
Nuke   OnlineGaming
Maya   GameDesign   MARI
Console   CasualGames
GameDevelopment
GameTesting
SocialGames
UnrealEditor   CryEngine

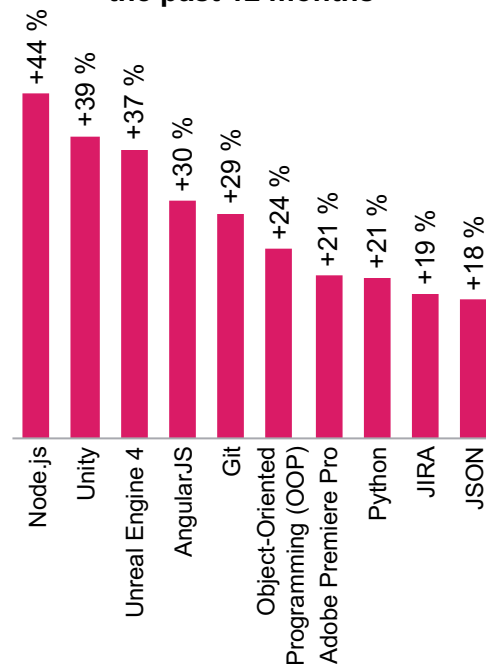- -

Number of LinkedIn profiles**
in Montréal with the identified skills:
14,824

Number of Montréal video game experts who have the skills below
(data as of March 13, 2019)

Skill	Count
Java	4 188
C++	4 181
C#	3 948
Object-Oriented Programming (OOP)	3 462
SQL	3 453
3D Studio Max	3 218
HTML	3 088
Maya	2 703
Cascading Style Sheets (CSS)	2 589
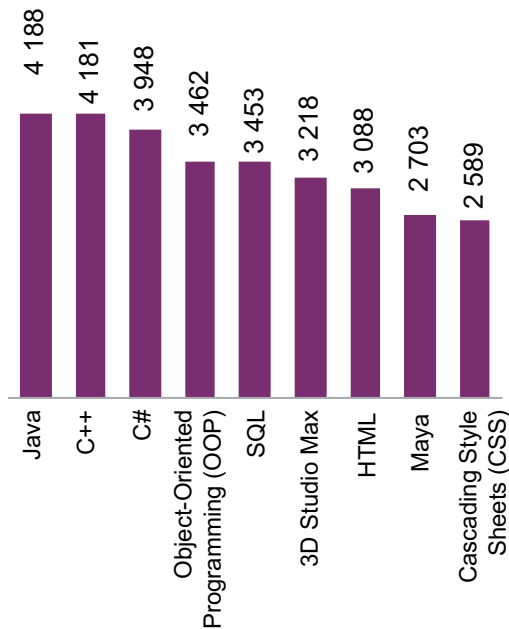
Fastest-growing skills among Montréal's video game experts over the past 12 months

| Skill	Growth
Node.js	+44 %
Unity	+39 %
Unreal Engine 4	+37 %
AngularJS	+30 %
Git	+29 %
Object-Oriented Programming (OOP)	+24 %
Adobe Premiere Pro	+21 %
Python	+21 %
JIRA	+19 %
JSON	+18 %

*Key skills identified using LinkedIn's Talent Insights tool are not cumulative or exclusive.
**Excluding profiles for the following titles: "founder", "co-founder", "CEO" and "president".
Source: LinkedIn, Talent Insights, March 13, 2019.

16

Diversity of backgrounds in the industry

Main fields of study chosen by Montréal's video game experts,
% of all listed fields
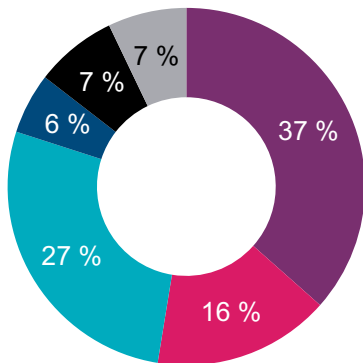
- Computer Science & Software Engineering
- Art & Design
- Film, Cinema, Multimedia & Video
- Business & Finance
- Science & Engineering, others
- Other

Main schools where Montréal's video game experts earned their degrees,
% of all listed schools
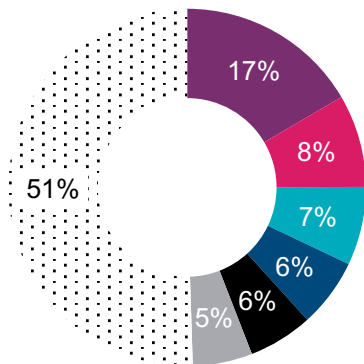
- Concordia University
- Université de Montréal
- McGill University
- Université du Québec à Montréal
- Dawson College
- École Polytechnique de Montréal
- Other

Examples of specialized programs in video game development

Graduate, undergraduate programs and postgraduate (BA to PhD)

Career/technical programs (DEP)

Professional training (AEC)

Source: LinkedIn, Talent Insights, March 13, 2019.

17

A rich pool of university students that combines creativity and technical knowledge

University programs related to arts	Students enrolled in 2016-2017
Graphic Arts	187
Fine Arts	727
Plastic Arts	260
Arts (pluridisciplinary)	113
Total	**1,287**

University programs related to IT	Students enrolled in 2016-2017
Computer Sciences	7,100
Electric and Electronic Engineering	3,279
Computer Engineering and Computer Science	1,866
Mathematics	1,411
Probabilities and Statistics	183
Applied Mathematics	134
Total	**13,973**

Greater Montréal is home to **11 university institutions**, including some of the most prestigious in the world, such as:

McGill · Université de Montréal · ÉTS Le génie pour l'industrie · POLYTECHNIQUE MONTRÉAL TECHNOLOGICAL UNIVERSITY · UQÀM · Concordia UNIVERSITY

Yearly, these universities enroll close to **14,000 university students enrolled in IT** related programs and close to **1,300 in Arts** related programs

A large contingent of new university graduates in arts and IT joins the video game workforce every year

Source: Ministère de l'Éducation et de l'Enseignement supérieur, 2017; compilation by Montréal International.

A rich pool of technical college students with specific expertise in video game

Technical college programs related to video game	Students enrolled in 2016-2017
Game Design and Animation 2D/3D	1,870
Visual Arts	1,111
Graphic Arts	1,056
Total	**4,037**

Greater Montréal boasts **4,000+ college students** enrolled in technical programs related to video game, animation and visual effects

The depth of Montréal's talent pool has allowed the region to remain at the avant-garde in the gaming industry, including in new trends such as virtual and augmented reality

Source: Ministère de l'Éducation et de l'Enseignement supérieur, 2017; compilation by Montréal International.

"Over 20 years, Ubisoft has created more than 3,600 jobs, invested more than $3.5 billion and developed some of the greatest brands in the industry here in Québec. Today, videogames are the most dynamic segment of the entertainment industry, and are at the heart of technological revolution. As a result, we have a unique opportunity to build tomorrow's Québec, together."

– Yves Guillemot, Co-Founder and CEO, Ubisoft

UBISOFT

"There are many very interesting aspects in Montreal: a multicultural aspect that is very very strong. Montreal is a city that is centered on art in various forms and there are also amazing universities. Finally, there is all this support for the creation of companies, especially in the technological field."

- David Anfossi, Studio Head, EIDOS-Montréal

eidos montréal

"Scaling up our Montréal facilities will give us a competitive edge in the fastest-growing segment of the gaming industry. Each year, we spend a significant share of our turnover on research and development and our Montréal team plays a key part in getting new projects off the ground."

– Mario Poulin, General Manager, Gameloft Montréal and Toronto

GAMELOFT

"It's easy to recruit talent here from various cultures who are both native speakers and passionate about gaming. This means we can offer the best translation and localization QA services for any type of game in a wide variety of languages. We're very excited about the opening of Altagram's studio in the heart of Montréal's Plateau-Mont-Royal."

- Christian Norton, CEO, Altagram Canada

ALTAGRAM

"We have tremendous growth potential in Québec, especially in Montréal, so we couldn't have chosen a better location for our business. Our clients and partners are video game industry giants, and some of them, like Electronic Arts, Square Enix, Ubisoft and Warner, have already opened internationally recognized studios in Québec. That's one of the things that prompted us to invest here. But we also chose Montréal because of its pool of highly creative talent and competitive business costs."

– Michel Golgevit, General Manager, Around the Word

around the word

"We also intend to draw on the new talent pool offered by Montréal to quickly extend our team of game designers to also include software developers, artists and business intelligence experts."

- Mark Gazecki, MegaZebra's Co-Founder

megazebra

Simple and fast immigration procedures in Canada

Canada's immigration policies are straight-forward, predictable and rapid, making it easy to bring in the best talent from around the world: the number of work permits are not capped and subject to a lottery.

Immigration program types	1 - Obtain a LMIA* and CAQ**	Processing time	2 – Submit work permit application	Processing time
Intra-company transfer	N/A.	N/A.	Have worked at least one year for the company before the transfer, be an executive or have exclusive knowledge.	0 to 2 weeks
NAFTA	N/A.	N/A. .	Belong to one of the 60 professions recognized under NAFTA	0 to 2 weeks
International Experience Canada	N/A.	N/A.	To be 18 to 35 years old (depending on country of citizenship) and coming from one of the 30 countries having an agreement with Canada. 3 types of permits according to country agreements: Working Holiday, Young Professional and International Co-op Internship	8 weeks
Global Talent Stream	Exemption from the requirement to demonstrate that efforts to hire locally were unsuccessful + belong to one of the 13 professions on the list	2 weeks	Same conditions as above	0 to 2 weeks
QC Simplified Process	Process offered exclusively to businesses in Quebec. Exemption from the requirement to demonstrate that efforts to hire locally were unsuccessful. About 60 professions on the facilitated process list	Approx. 15 weeks	Same conditions as above	0 to 10 weeks
Regular process	Demonstrate that reasonable efforts have been made to hire locally	Approx. 15 weeks	Must be done at the Canadian visa office outside Canada or at Canadian customs if the applicant is exempt from entry visa requirements	0 to 10 weeks

Note:
*LMIA: Labour Market Impact Assessment.
** CAQ: Québec Acceptance Certificate; The deadlines for obtaining a work permit vary according to the country of nationality of the applicant.

03
Attractive Operating Costs and Incentives

Mary Queen of the World Cathedral / Skyline of downtown © Tourisme Montréal

Most competitive operating costs for video game development

1st
rank

The most competitive operating costs compared to any other major metropolitan area in Canada and the U.S.
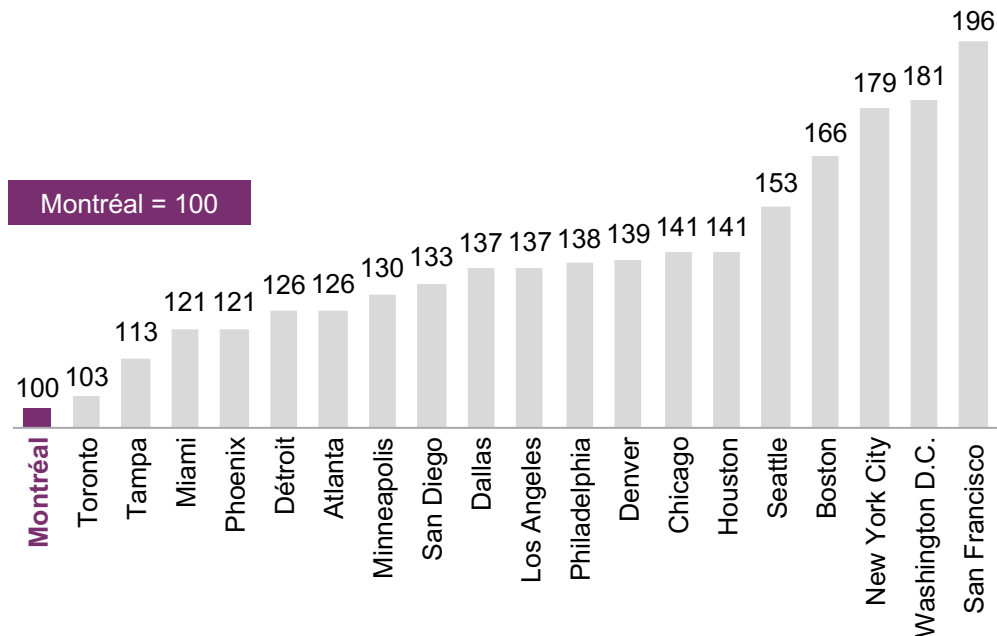
28%
cost advantage

compared to the average of the 20 largest metropolitan areas in Canada and the U.S. (2019)

When factoring in **Québec's video game tax credit,** that cost advantage is even greater

Total operating costs for a Video Game Design Centre
20 largest metropolitan areas in Canada and the U.S., 2019

Montréal = 100

City	Value
Montréal	100
Toronto	103
Tampa	113
Miami	121
Phoenix	121
Détroit	126
Atlanta	126
Minneapolis	130
San Diego	133
Dallas	137
Los Angeles	137
Philadelphia	138
Denver	139
Chicago	141
Houston	141
Seattle	153
Boston	166
New York City	179
Washington D.C.	181
San Francisco	196

Note: The annual operating cost calculations are based on labor and property costs in US$.
Source: fDi Benchmark, 2019.

23

Competitive salaries in video game

Even before factoring in the video game tax credit (up to 37.5%), salaries in Montréal are more competitive by 6% compared to Toronto and 5% to Vancouver.

Median annual salaries* (US$) for 5 typical profession

	Montréal	Montréal with tax credit	Toronto	Vancouver	Austin	San Francisco
Video Game Programmer	**$62,484**	**$43,738**	$66,228	$65,859	$86,453	$107,093
Programmer Analyst	**$65,242**	**$45,669**	$69,099	$68,641	$92,060	$113,458
3D Animator	**$56,125**	**$39,287**	$59,709	$59,201	$73,037	$70,459
Database Architect	**$65,920**	**$46,144**	$69,804	$69,324	$91,083	$112,350
Project Manager Systems	**$84,270**	**$58,989**	$89,759	$87,444	$126,184	$152,916

* Salaries based on 5 years of experience, Computer System Design and Related Services industry (NAICS 5415).

Currency exchange based on the last 3 months average rate: C$1.00 = US$0.75.

Source: Economic Research Institute Inc., March 13, 2019.

Video game tax credit: one of the most advantageous in the world

- The tax credit could cover **up to 37,5%** of your qualifying expenditures or eligible Multimedia titles intended for commercial markets and available in French, excluding vocational training titles. If it is not available in French, the tax credit rate is **up to 30%.**

- Expenditures must be incurred by the producer for eligible production work. **Eligible labour expenditures include** all of the following amounts:*

  - **Salaries and wages** paid to eligible employees (including bonus)

  - **The portion of amounts paid to a subcontractor** not dealing at arm's length with the multimedia producer for the execution of eligible production work by employees of the subcontractor in an establishment in Québec

  - **50% of amounts paid to a subcontractor** dealing at arm's length with the Multimedia producer for the execution of eligible production work in Québec

Note: * The corporation does not have to be Québec-controlled.
Source: Investissement Québec, 2019.

Shadow of the Tomb Raider © Eidos

Case Study 1

Studio fully operational for the whole year with 15 employees; Two mid-core games in production; No R&D activities

Payroll and tax credit

Positions	Average salary
Technical Director (1)	$100,000
Programmer (3)	$80,000
Junior Programmer (2)	$50,000
Technical Artist (2)	$35,000
Art Director (1)	$50,000
3D Artist (2)	$50,000
2D/3D Artist (2)	$45,000
Creative Director (1)	$100,000
Studio Manager (1)	$130,000
Total: 15 employees	$980,000
Total salaries + bonus @ 10%	**$1,078,000**
Multimedia Tax Credit @ 30%	**($323,400)**
Multimedia Tax Credit @ 37.5%	**($404,250)**

You can save up to $404,250 for a total expenditures of $1,567,500

Total expenditures and tax credit

Total expenditures	Year 1
Salaries + 10% bonus + 20% benefits*	$1,274,000
OpEx (rent, social, and admin)	$230,720
Initial CapEx	$50,000
Training 1% of salaries	$10,780
One off (expensed current year)	$2,000
Total before tax credit	$1,567,500
Total after tax credit @ 30%	**$1,244,100**
Total after tax credit @ 37.5%	**$1,163,250**

*Include mandatory benefits - 12-14% as well as other benefits usually provided by the employer in the video game industry. These benefits are not included in the total salaries admissible to the Multimedia Titles tax credit.

Case Study 2

Studio fully operational for the whole year with 125 employees; Two mid core games in production; No R&D activities

Positions	Avg salary	Positions	Avg salary
Technical Director (1)	$145,000	Creative/design Director (2)	$100,000
Producer (5)	$80,000	Community Manager (10)	$45,000
Mid Programmer (23)	$100,000	Live Developper (5)	$75,000
Junior Programmer (16)	$50,000	Network Architect (3)	$80,000
Technical Artist (13)	$35,000	BI Analyst (4)	$75,000
Art Director (4)	$50,000	User Acquisition Manager (2)	$75,000
2D/3D Artist (12)	$50,000	Admin/HR/Finance (3)	$40,000
2D/3D Junior Artist (21)	$45,000	Studio Manager (1)	$180,000
TOTAL: 125 employees			**$7,510,000**
Multimedia Tax Credit @ 30%			**($2,253,000)**
Multimedia Tax Credit @ 37.5%			**($2,816,250)**

You can save up to $2,816,250 for a total expenditures of $11,450,100

Total expenditures	Year 1
Salaries + 10% bonus + 20% benefits	$9,763,000
OpEx (rent, social, and admin)	$1,100,000
Initial CapEx investment	$500,000
Training 1% of salaries	$75,100
One off (expensed current year)	$12,000
Total before tax credit	**$11,450,100**
Total after tax credit @ 30%	**$9,197,100**
Total after tax credit @ 37.5%	**$8,633,850**

*Include mandatory benefits - 12-14% as well as other benefits usually provided by the employer in the video game industry. These benefits are not included in the total salaries admissible to the Multimedia Titles tax credit.

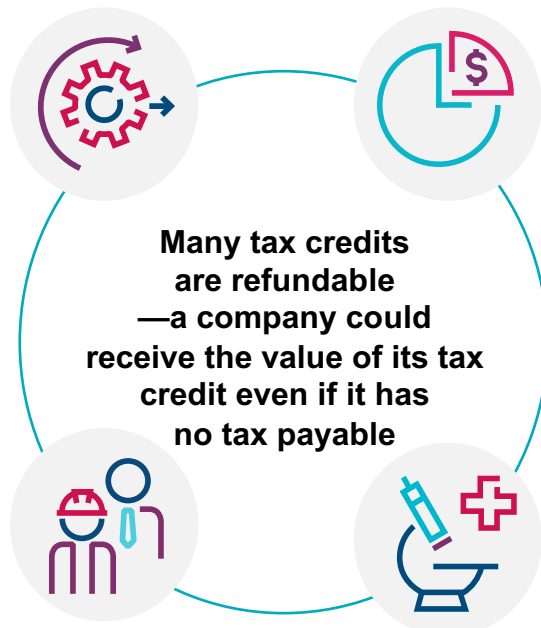# An easy access to highly advantageous incentives

Major projects and innovations

Grants and interest-free loans such as **ESSOR** and **Canada Economic Development** Programs

Sector tax credits

Such as:
- **Up to 30%** for software development
- **Up to 43%** for film production services

Many tax credits are refundable —a company could receive the value of its tax credit even if it has no tax payable

Labour development

Grants such as:
- **25% of costs** to implement training programs
- **50% of costs** to create a HR department

Research and development
- **Up to 30%** tax credit on R&D

04

Montréal International's Personalized, Free and Confidential Services

MTL INTL — Montréal International

Downtown Montréal © Montréal International

Montréal International, a single contact point for a series of personalized, free and confidential services
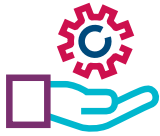
Long-term strategic support

Economic data and communications services

Government relations facilitation

Incentive programs assistance

Foreign workers immigration assistance

International recruiting missions

Contact us

Montréal International
380 Saint-Antoine Street West
Suite 8000
Montréal, Québec H2Y 3X7

t +1 514-987-8191
www.montrealinternational.com