



2018

KANATA NORTH ECONOMIC IMPACT ANALYSIS

Leader in Innovation, Talent, Technology, and Impact

**KANATA NORTH
IS AN ECONOMIC AND
INNOVATION POWERHOUSE,
EXCEEDING ALL EXPECTATIONS
AND GROWING AT AN
ACCELERATED RATE.**

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EXECUTIVE SUMMARY

This report, *Kanata North Economic Impact Analysis 2018*, is the second of two reports published by the Kanata North Business Association:

- to assess economic indicators in Canada's largest technology park
- to provide a tool for decision-makers in attracting investment and talent
- to understand the contributions of Kanata North to the economies of Ottawa, Ontario, and Canada
- to provide benchmark measurement data to enable community and business leaders to manage and maximize

This economic impact analysis shows **Kanata North continues to be an economic and innovation powerhouse, exceeding all expectations and growing at an accelerated rate.**

Given the excellent statistics from our 2015 report, we were excited to discover that our growth trajectory has continued unabated and, in fact, it has increased. Whether it's jobs, net revenues, productivity, or net returns to government at municipal, provincial, and federal levels, Kanata North continues to live up to its moniker: Canada's Largest Technology Park.

We have some of the best homegrown tech talent in the world right here in the area. And, at the same time, we are attracting some of the best tech talent and businesses in the world to do business here.

We look forward to continuing this tradition in the years to come, creating jobs and innovation to benefit Canada and the world.

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The results from the 2018 report are clear: Kanata North is a growing economic and innovation powerhouse.

The contributions to government at the municipal, provincial, and federal levels are stronger than ever in our 50-year history. Kanata North continues to go from strength to strength in innovation, market-leading product developments, and in attracting investment and world-class talent.

*- Amy MacLeod
Chair of the Board of Directors,
Kanata North Business Association*



UNDERSTANDING KANATA NORTH'S ECONOMIC IMPACT

The Kanata North Business Association (KNBA) undertook an exhaustive review of its economy in 2015 which indicated positive economic impact at the municipal, provincial, and federal levels.

In 2018, KNBA updated the research and its findings are exceptionally positive: In three years, Kanata North has grown the number of high tech companies and increased both its revenues and employment. The increases in this three-year period far exceed the previous six-year period. The growth curve's upward trend is verging on exponential.

OBJECTIVES

Working again with respected technology research firm Doyletech Corporation, KNBA articulated three major objectives:

- 1 Update the economic impact of Kanata North in 2018, using the 2015 data as a baseline
- 2 Analyze the results to guide investment, outreach/ promotion, and talent attraction decisions
- 3 Understand the contributions of Kanata North to the economies of Ottawa, Ontario, and Canada



Our 2018 report demonstrates Kanata North continues to grow and deliver value at an accelerated rate. The Kanata North Business Association is fulfilling its mission to advocate for business success by fostering an environment where the best talent in Canada can innovate, create connections, and make an impact.

*- Jamie Petten
Executive Director,
Kanata North Business Association*

METHODOLOGY & APPROACH

METHODOLOGY



It was imperative that the same methodology used in 2015 was employed for 2018 to ensure the results are comparable. The research team used three key elements:

- **Database:** They built an exhaustive database of local firms by visiting every commercial building, conducting email and telephone inquiries, interviews, and web-based research, and literature reviews.
- **Primary research:** The team interviewed 40 people in 34 separate interviews, covering all nine export sectors in Kanata North, including large, medium, and small enterprises.
- **Econometric impact modeling:** Using the proprietary Doyletech EconWin computer model, the research team projected the total impact of Kanata North including direct, indirect, and induced effects.

CRITICAL ECONOMIC INDICATORS



The indicators researched and assessed by sector and subsector include the following:

- Total revenues
- Employment
- Export ratio: revenues derived from outside Kanata North or Ottawa : within Kanata North or Ottawa
- Productivity: sales per employee minus the proportion of inputs from outside the region (also known as “leakages”)
- Local/regional spending: Earnings, interest, depreciation and amortization, and general and administrative funding

DEFINITIONS



- **Export:** “Export” refers to the companies (usually referred to as the high tech sector) which contribute to the economic base of Kanata North, i.e., they supply goods and services that earn income from outside the local area.
- **Local:** “Local” refers to companies within Kanata North that provide *professional* services such as legal, finance/accounting, and marketing and *other* services such as restaurants, retail, hospitality, and construction/ renovation.

**KANATA NORTH IS A VITAL
AND INTEGRAL PART OF THE
ECONOMIC GROWTH AND
INNOVATION AGENDA OF
OTTAWA, ONTARIO, CANADA
AND THE WORLD.**

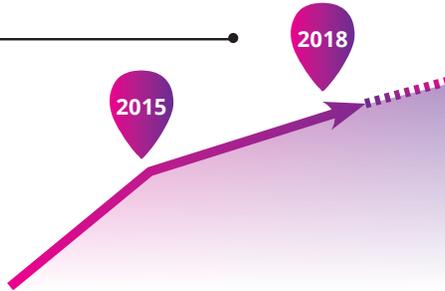


THE BIG PICTURE - 2018

ECONOMIC IMPACT

\$13 BILLION

Net value-add of Kanata North to Canada's GDP



+66%
increase over \$7.8 billion in 2015

PRODUCTIVITY

\$391,000

Average net contribution per employee in Kanata North

Note: \$90,000 is the average contribution per employee in Canada



+53%
since 2015

4x
NATIONAL AVERAGE

EMPLOYMENT IMPACT

19,477



+18%
compared with 16,513 in 2015

TECH/EXPORT SECTOR
(INCLUDES JOBS IN KANATA NORTH ONLY)

29,376



+12%
compared with 26,325 in 2015

Note:
10,000+ indirect and induced jobs have been generated in Ottawa/Eastern Ontario region due to the Kanata North success.

TOTAL TECH/EXPORT SECTOR
(INCLUDES JOBS IN KANATA NORTH AND ACROSS THE REGION)

33,236



= 29,376 Total Tech/Export Sector
+ 3,860 Total Local Sector

+9%
compared with 30,679 in 2015

TOTAL JOBS



THE BIG PICTURE - 2018 (CONTINUED)

GOVERNMENT RETURNS

\$170.5 MILLION

Returns for Ottawa
municipal government



\$1.96 BILLION

Returns for Ontario
provincial government



\$1.99 BILLION

Returns for Canada
federal government





COMPARISON: 2015 TO 2018

KANATA NORTH TOTAL

(Direct Impact)

2018
2015



TECH/EXPORT SECTOR

(Direct Impacts Only)

2018
2015





OPPORTUNITIES

INNOVATION

Kanata North continues to attract innovators and entrepreneurs enthusiastic to identify opportunities and create new ventures. Kanata North is also a magnet for world-class workers at all levels. This powerful combination is one of the major reasons Kanata North has grown into an economic and innovation powerhouse, exceeding all expectations and growing at an accelerated rate.

TECHNOLOGY ECOSYSTEM

Kanata North is focused on nurturing a thriving technology community through thought leadership and collaborative, strategic partnerships leading to future growth and sustainability. One example of such partnerships includes strengthening the connection between academia and industry. The recent announcement that the University of Ottawa will build a campus in Kanata North is a step in working with post-secondary Institutions to foster a thriving tech ecosystem.

TALENT

The research indicates that the requirement to expand the talent pool has grown over the past three years. The need for highly qualified STEM professionals is on a steady, upward trend. **Kanata North will continue to create strong community involvement and engagement that will attract, nurture and retain talent.**

IMPACT AND GLOBAL LEADERSHIP

Kanata North is a leader in the pace of strategic innovation globally, allowing Kanata to retain its status as a world-class innovation and technology cluster. Kanata North companies are driving disruption and contributing to emerging fields such as artificial intelligence, machine learning, connected and autonomous vehicles, cybersecurity, the Internet of Things, and 5G.



OPPORTUNITIES

HALO EFFECT

Kanata North's bustling and growing economy is having a "halo effect" on surrounding areas of the city. On one hand, this has led to issues with public transportation, traffic congestion, and the cost of rental space - all of which are being addressed and solutions worked on within future planning. On the other hand, it means that the indirect economic benefits to neighbouring communities such as Kanata South, Kanata West, Bells Corners, and Carleton Place are strong and could be included in future research.

Kanata North is a powerful economic engine specializing in high impact technology which makes it a great place to learn, to work, and do business.

It is also a great place to live with beautiful green space, excellent schools and recreation facilities, and a rich ecosystem of retail and business services.

Kanata North looks forward to continuing its work with all stakeholders – current members, partners and allies, and all levels of government – to capitalize on Kanata North's strengths, to leverage their collective impact, and to continue to generate economic opportunities.

In addition, Kanata North welcomes the opportunity to build new partnerships and alliances. We invite all interested parties to be in touch and experience firsthand why Kanata North continues to thrive and be the economic and innovation powerhouse that it is.

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SUBSECTORS OF THE TECH INDUSTRY IN KANATA NORTH

TELECOMMUNICATIONS, WIRELESS AND PHOTONICS



This subsector, the largest in Kanata North, by both employment and revenues, is represented by a great many of the most illustrious global firms in the sector, the main function is R&D, tapping into Kanata's legendary innovation.

SOFTWARE, DATA AND CLOUD SERVICES



The second largest by employment and third in revenues, this subsector is filled with skilled, smart and creative people, of which Kanata North has many.

OTHER TECHNOLOGIES



This category includes companies such as consumer electronics, vehicles/driving and investment strategy research.

DEFENCE, SECURITY AND AEROSPACE



Represented by a number of large, national firms, this is the third-largest subsector in Kanata North by total employment and fifth largest by revenues.

LIFE SCIENCES



One of the largest subsectors, in revenues and employment, has a considerable range of functions; R&D, manufacturing, services, and sales and support teams.

MANUFACTURING, ENGINEERING, INDUSTRIAL AND SYSTEM DESIGN



This subsector consists of outsource manufacturing firms as well as those firms involved in manufacturing, engineering, industrial and system design and verification services.

SEMICONDUCTORS



Comparatively small and almost entirely foreign-owned, this subsector employs a number of designers and many of the other subsectors are clients of semiconductor companies.

CLEANTECH



A small but growing subsector with strengths in water analytics, decontamination systems, and high tech applications for R&D and monitoring.

VALUE-ADDED RESELLERS (VARs) & PARTS SUPPLIERS



This subsector, characterized by inputs from outside Canada and then resold to Canadian (and sometimes global) markets, is second smallest by revenues and smallest by employment.

Note:

The only change to the subsectors from the 2015 study is combining Software with Data and Cloud Services into one. Otherwise, classifications and methodology in 2018 are identical to those established in 2015.

TELECOMMUNICATIONS, WIRELESS AND PHOTONICS



This is by far the largest subsector in Kanata North, both in terms of revenues and employment. Taking all the elements available together, Kanata North has a total capability in telecommunications, wireless, and photonics, a competitive advantage it shares with only one of a handful of locations in the world.

Research and development is the key function in this subsector in Kanata North. Traditionally, R&D is a function carried out at headquarters. However, many global companies based here place their trust in the R&D skills and capabilities in Kanata North talent.

EXPORT RATIO

The export ratio at 85% is the highest of all subsectors with the overwhelming majority of revenues coming from outside Canada.

PRODUCTIVITY

Productivity is estimated at \$299,000 annual sales per employee with \$2.5 billion in revenues and 8,345 workers.

EMPLOYMENT

Wages and salaries are at 60% of revenues with 90% of labour professional and 10% technical.

LOCAL/REGIONAL SPENDING

EBITDA is estimated at 10%.

2018

2015

Change
since 2015

REVENUES

\$2.49 BILLION

\$1.86 BILLION

+95%

REVENUE/EMPLOYEE

\$298,968

\$230,861

+30%

OF EMPLOYEES

8,345

8,061

+3%

OF FIRMS

46

42

+10%

EXPORT RATIO

85%

SOFTWARE, DATA AND CLOUD SERVICES



This is the second-largest subsector in Kanata North by employment and by revenues and it is growing.

Many companies in Kanata North are involved in software development to support their primary “product” or “service”. However, this subsector represents companies whose main product or service is actually software (as opposed to embedded software).

This work does not require large-scale capital investment. Rather, it requires skilled, smart, and creative people.

With total revenues from foreign-based companies at 40%, this subsector has one of the lowest proportions of foreign ownership in Kanata North’s export sector.

EXPORT RATIO

The export ratio of this subsector is quite high, estimated at 80%, with few sales to other Kanata North companies as the market is global in scope.

PRODUCTIVITY

Productivity by sales-per-employee is \$259,000 based on \$990.8 million total revenues to the sector with 3,821 workers. By far, the highest cost is labour.

EMPLOYMENT

Wages and salaries are equivalent to 70% of revenues in 2018 with close to 100% of the staff at professional level. Wages and salaries are surprisingly low in this high-growth, high tech subsector as a result of the offer of stock options to staff.

LOCAL/REGIONAL SPENDING

EBITDA is at about 15% with wide variance based on the maturity of the company and other factors. Most of the software subsector is Canadian-owned, though some of the largest firms are foreign-owned.

2018

2015

Change
since 2015

REVENUES

\$990 MILLION

\$632 MILLION

+57%

REVENUE/EMPLOYEE

\$259,313

\$207,768

+25%

OF EMPLOYEES

3,821

3,046

+25%

OF FIRMS

69

57

+21%

EXPORT RATIO

80%

OTHER TECHNOLOGIES



The Other Technology Sector, designed to capture firms not readily classifiable among other sectors, includes: consumer electronics; high-tech applied to vehicles and driving; and a high-tech, quantitative, investment strategy research house.

EXPORT RATIO

This export ratio for this sector is estimated at 50% as it serves both local and international markets.

PRODUCTIVITY

Annual sales per employee is \$468,000 based on \$936.2 million in revenues with 2,000 workers.

EMPLOYMENT

Labour costs are 50% of total revenues with 90% professional and 10% technical.

LOCAL/REGIONAL SPENDING

EBITDA is at 20% with 30% for purchased inputs. Please note this figure takes into account two companies that cause some variance: a very large firm based on a “utility model” of funding and a private investment house.

2018

2015

Change since 2015

REVENUES

\$936 MILLION

\$480 MILLION

+95%

REVENUE/EMPLOYEE

\$468,098

\$371,802

+26%

OF EMPLOYEES

2,000

1,291

+55%

OF FIRMS

45

30

+50%

EXPORT RATIO

50%

DEFENCE, SECURITY & AEROSPACE



Defence, Security and Aerospace is the fifth-largest subsector in Kanata North by employment. The subsector typically provides specialized products and systems. However, those in Kanata are large by the standards of the global market, with well-known Canadian and international multinational companies represented in this subsector. It has a significant proportion of foreign-owned firms, representing 68% of total sector revenues.

EXPORT RATIO

The export ratio of this subsector is conservatively estimated at 50%. With the federal government, located in Ottawa, as a primary customer, the true export ratio is likely much higher. However, the estimate of 50% is more truly representative of the economic impact as these sales dollars stay in the region.

PRODUCTIVITY

Productivity by sales-per-employee is \$410,000 based on \$569.8 million total revenues to the sector with 1,391 workers. This is larger than average reflecting the number of comparatively larger firms in this sector.

EMPLOYMENT

Wages and salaries are equivalent to 50% of revenues in 2018. There is a high proportion of software and research and development, which is not capital intensive. About 80% of the jobs are at the professional level.

LOCAL/REGIONAL SPENDING

EBITDA is at about 20% and cost of materials (and other expenses) at 30%. The majority of the purchased inputs come from outside Canada.

2018
2015

Change
since 2015

REVENUES

\$569 MILLION
\$566 MILLION



REVENUE/EMPLOYEE

\$409,609
\$397,517



OF EMPLOYEES

1,391
1,425



OF FIRMS

23
23



EXPORT RATIO

50%

LIFE SCIENCES



Life sciences is a growing sector in Kanata due, in part, to the legalization of recreational marijuana in 2018. The sector consists of a considerable range of functions including research and development, manufacturing, and services as well as sales and support for offshore firms. Many firms make or provide medical devices and others are involved in therapeutics. Approximately 87% of total sector revenues are derived from foreign-headquartered firms.

EXPORT RATIO

The export ratio of this subsector is estimated at 80%, reflecting the sales of medical devices, therapeutics, and pharmaceuticals to global or national markets.

PRODUCTIVITY

Productivity by sales-per-employee is \$415,000 based on \$544.6 million total revenues to the sector with 1,313 workers which is higher than average for Kanata North.

EMPLOYMENT

Wages and salaries are equivalent to 40% of revenues in 2018. This is comparatively low due to the unusually high proportion of input purchases. About 75% of the jobs are at the professional level and 25% at the technical levels.

LOCAL/REGIONAL SPENDING

EBITDA is at about 25% with another 35% as input purchases, primarily for materials such as medical isotopes, purchases of successive generations of lab equipment, and input of drugs and specialized parts. We estimate half of the inputs are provided from the region.

2018

2015

Change since 2015

REVENUES

\$544 MILLION

\$432 MILLION

+26%

REVENUE/EMPLOYEE

\$414,748

\$485,329

-15%

OF EMPLOYEES

1,313

891

+47%

OF FIRMS

20

16

+25%

EXPORT RATIO

80%

MANUFACTURING, ENGINEERING, INDUSTRIAL AND SYSTEM DESIGN



This sector is sixth largest of the nine export subsectors in Kanata North by revenues with many high value jobs. This sector has embraced agile production which enables it to respond quickly to changes in the market while controlling costs and quality.

EXPORT RATIO

The export ratio of this subsector is estimated at 50%, in keeping with the Agile Production outsource model.

PRODUCTIVITY

Productivity by sales-per-employee is \$274,000 based on \$464.5 million total revenues to the sector with 1,695 workers. Input costs are relatively low.

EMPLOYMENT

Wages and salaries are equivalent to 50% of revenues in 2018 with 75% of the staff at professional level and 25% technical.

LOCAL/REGIONAL SPENDING

EBITDA is at about 15% within Kanata North and purchase of materials and selected components at 35%. Most of the larger firms are foreign-owned.

2018

2015

Change
since 2015

REVENUES

\$464 MILLION

\$343 MILLION

+35%

REVENUE/EMPLOYEE

\$274,018

\$306,179

-11%

OF EMPLOYEES

1,695

1,122

+51%

OF FIRMS

27

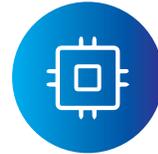
18

+50%

EXPORT RATIO

50%

SEMICONDUCTORS



The semiconductor subsector is relatively small in Kanata North and is almost entirely foreign owned with no fabrication facilities but with a high amount of design work taking place here.

EXPORT RATIO

The export ratio is relatively low at 35%.

PRODUCTIVITY

Productivity is estimated at \$436,000 annual sales per employee with \$270.1 million in revenues and 619 workers.

EMPLOYMENT

Labour costs are estimated at 40% of total revenues with 75% of positions at the professional level 25% technical.

LOCAL/REGIONAL SPENDING

EBITDA is estimated at 20%.

2018

2015

Change since 2015

REVENUES

\$270 MILLION

\$229 MILLION

+18%

REVENUE/EMPLOYEE

\$436,374

\$464,541

-7%

OF EMPLOYEES

619

493

+26%

OF FIRMS

14

12

+17%

EXPORT RATIO

35%

CLEANTECH



Though it is the second smallest subsector in Kanata North based on the number of firms in each subsector, it has a strong economic impact with employee numbers doubling since 2015. Cleantech also saw a significant increase in revenues of 146%. There are two firms in the cleantech subsector new to Kanata since 2015.

Particular strengths include:

- Water analytics and de-contamination systems
- High tech applications for research and development and monitoring
- Clean energy

EXPORT RATIO

The cleantech subsector is approximately 70% export-oriented. This is compared to 60% in 2015 which indicates the growing maturity of the subsector. The balance represents sales locally and regionally.

PRODUCTIVITY

Productivity by sales-per-employee is \$217,000 based on \$46.0 million total revenues to the subsector with 211 workers.

EMPLOYMENT

Wages and salaries are equivalent to 50% of revenues in 2018 compared to 60% in 2015. Of this sum, a majority of the employees are professional level, at approximately 75%. The balance of 25% are technical-level qualified.

LOCAL/REGIONAL SPENDING

EBITDA is at about 20% after wages and salaries.

The firms in this subsector are predominantly Canadian which indicates local and regional benefits. Operating materials and/or relevant procurement expenses are equivalent to 30% and much of this would be supplied from outside.

2018

2015

Change since 2015

REVENUES

\$45.9 MILLION

\$18.6 MILLION

+146%

REVENUE/EMPLOYEE

\$217,355

\$193,698

+12%

OF EMPLOYEES

211

96

+119%

OF FIRMS

9

8

+29%

EXPORT RATIO

70%

VALUE-ADDED RESELLERS (VARs) AND PARTS SUPPLIERS



This subsector is characterized by inputs from outside Canada and then re-sold, often in upgraded format, to local, national, or international markets. The firms are mostly Canadian. This subsector is smallest in revenues and employment.

EXPORT RATIO

The export ratio is estimated at 50%.

PRODUCTIVITY

The productivity of this subsector is estimated at \$297,000 per employee based on revenues of \$24.3 million and 82 workers.

EMPLOYMENT

Labour costs represent 20-25% of revenues with professional workers staffing 25% of the positions, 20% technical, and 55% in "other".

LOCAL/REGIONAL SPENDING

EBITDA is estimated at 20% and 55% is input purchases.

2018

2015

Change
since 2015

REVENUES

\$24.3 MILLION

\$29.7 MILLION

-18%

REVENUE/EMPLOYEE

\$296,900

\$337,216

-12%

OF EMPLOYEES

82

88

-7%

OF FIRMS

8

9

-12%

EXPORT RATIO

50%

LOCAL ECONOMY: KANATA NORTH

The “local economy” is divided into two main subsectors:

- Professional services
- Other services

PROFESSIONAL SERVICES

Professional services includes real estate, legal services, finance and accounting, health and wellness, government, and other professional services.

PRODUCTIVITY

Annual sales-per-employee is \$289,000 based on revenues of \$683 million with 2,365 workers.

EMPLOYMENT

Approximately 70% of all revenues are labour costs with 90% professional.

OTHER SERVICES

Other services include construction, renovation, and other home services, education and daycare, dining, and retail and hospitality.

PRODUCTIVITY

Annual sales-per-employee is \$161,000 based on revenues of \$214.7 million with 1,330 workers.

EMPLOYMENT

Approximately 40% of all revenues are labour costs with 20% professional, 20% technical, and 60% “other”.

LOCAL Direct impacts

2018
2015





ACKNOWLEDGEMENTS

The Kanata North Business Association would like to express their gratitude to Doyletech Corporation for their diligence, analysis, and attention to detail in undertaking this research.

We are also grateful to the more than 40 executives across almost every sector in Kanata North who participated in our process. Each interview was at least one hour long, and frequently more. We appreciate the time they took from their inevitably busy schedules to participate in the study. Without their engagement and information, this study would not have been possible.

Thank you to Communicarium for their work to present the highlights of the report.





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