

Canadian Society of Landscape Architects (CSLA)

State of the Profession of Landscape Architecture in Canada



InterGroup
CONSULTANTS



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Section 1.0

Introduction and Overview

Section 1.1: Introduction

Study Overview

InterGroup was retained by the Canadian Society of Landscape Architects (CSLA) to prepare a study that tells the full story of how landscape architects contribute to a thriving and sustainable society.

The study relies on several sources including:

- Quantitative indicators from Statistics Canada and other publicly available databases
- Interviews with practicing landscape architects at all career stages, major client groups and training institutions from across Canada
- A June 2023 survey of CSLA members
- Other publicly available information

The report summarizes the key findings of the research in the following sections:

- Employment, income and demographics
- Business performance
- Economic, environmental and social impacts
- Education and training

About the CSLA

The CSLA is composed of the members of nine provincial, territorial, and regional component associations that represent the landscape architecture profession across Canada.

The CSLA advocates on behalf of its membership to the public and private sector, promotes the value of professional design expertise, and communicates the social, economic, and environmental contributions that landscape architects bring to an ever-modernizing world.

Section 1.2: Key Findings

Landscape architecture is a growing profession

Since 2011 employment in landscape architecture has grown by an estimated 400 workers. The majority of this growth has been in full-time positions. Employment income grew at a faster rate for landscape architects (33%) than other occupations in the natural and applied sciences (18%) and the rate for all occupations (16%) between 2011 and 2021.

Graduates from university-level programs has also increased, from 131 in 2014/15 to 161 in 2018/19.

Strong current and projected future employment demand

In 2021 landscape architects had a very low unemployment rate (1.4%). Interview and survey participants were optimistic about future employment prospects in the industry. Forecasts prepared by the Canadian Occupational Projection System indicate retirements are anticipated to generate a number of job openings over the next ten years. Interview participants commented that strong labour demand is expected to put upward pressure on salaries over the next several years.

Progress has been made on diversity and inclusion but more work remains

Landscape architecture is a gender balanced profession, with a roughly equal number of men and women. The income gap between men and woman has narrowed over the last ten years. Some interview respondents noted the profession would benefit from increased representation of women in senior positions.

The proportion of people who identify as visible minorities in the profession increased from 10% in 2016 to 14% in 2021. This still trails the proportion in other natural and applied science occupations and the total population. About 1% of landscape architects identified as Indigenous in 2016 compared to 4% of the population of Canada.

Interview participants noted a number of efforts to recruit and support people from diverse backgrounds to the profession but acknowledged continued efforts are required.

Section 1.2: Key Findings

Business revenues and profits have increased

Operating revenues for landscape architecture firms increased from \$380 million in 2013 to \$746 million in 2021. Operating profits increased over the same period from \$51 million to \$147 million.

Housing and infrastructure spending are key drivers of new business

Interview participants commented that investments in housing and public infrastructure are key sources of work. Urban development and intensification projects have become more prominent. As an example, the number of apartment unit housing starts increased from 96,000 in 2012 to 148,000 in 2022 (54% increase).

Public and private sector infrastructure spending has also been increasing, from a total of \$72 billion in 2012 to \$112 billion in 2022.

Landscape architecture improves community health and well-being

Well-designed public spaces create opportunities for social interaction and physical activity leading to better physical and mental health for people and communities.

Public gathering places promote interconnectedness and can reduce feelings of social isolation.

Landscape architecture helps drive climate change adaptation and protects ecological system functions

Interviews and case studies highlighted the ways landscape architecture helps communities respond to a changing climate. From protecting and enhancing natural environments to improving flood protection and storm water management, landscape architects are at the forefront of climate change adaptation.

Landscape architecture helps revitalize cities

Interview and survey respondents provided many examples of how their work helps drive urban renewal. Memorable, functional public spaces become key attractions for both local residents and visitors and catalysts for larger community investment and public realm revitalization.

Reconciliation with Indigenous peoples is a key focus for landscape architects

Understanding Indigenous history and incorporation of Indigenous perspectives into landscape design is a key principle in the practice. During interviews, landscape architects talked about how they incorporate principles of reconciliation into their work.

Section 1.3: Why Hire Landscape Architects?

Landscape architects play an important role in stimulating the Canadian economy

For every \$1 million in GDP generated by landscape architecture businesses an additional \$1 million is generated through related industries such as manufacturing and information and cultural industries as well as through induced economic benefits as people employed as landscape architects generate household spending.

Improving community life and public spaces

Landscape architects help design the public realm. By creating beautiful and functional spaces, they encourage community engagement and promote a sense of pride and belonging among residents.

Ability to lead multidisciplinary projects with a holistic view of how people interact with the environment and landscapes

Landscape architects can effectively communicate and collaborate with professionals from diverse fields, such as planners, architects, ecologists, engineers, and environmental experts. They deal with a wide range of scales, from small details to massive sites, and incorporate time as a dimension in their designs. Their ability to look broadly at issues and work with diverse technical and community-based groups allows them to identify and reframe problems effectively, which contributes to more comprehensive solutions for communities.

Enhancing environments and quality of life

Landscape architecture involves planning, designing, constructing, and managing open spaces, both public and private, in urban and rural areas. These spaces can significantly impact the quality of life for the communities they serve. Preserving ecological services of landscapes improves air and water quality. Shade and shelter can make public spaces more inviting through all seasons. Time in nature and socializing in outdoor spaces can improve mental health and wellbeing for community members.

Promoting social equity in public spaces

Landscape architects help ensure equitable access to green spaces for all communities, including under-represented populations. Addressing issues of social housing, disparities in public space distribution, and attracting people from diverse backgrounds to the profession are essential to achieving social equity in designed spaces.

Landscape architects are the “glue people” in helping Canada address climate change

Landscape architects understand the need for a long-term view in marrying technical, environmental, and social needs in design. This skill positions landscape architects as the “glue people” who work across disciplines to design projects that address community needs, synthesize complex variables and prioritize sustainability.

Section 2.0

Employment, Income and Demographics

Section 2.1: Introduction to Employment, Income and Demographics

Employment, Income, and Demographics Overview

To describe the value that landscape architecture provides to Canadians it is important to understand who landscape architects are and how the practice has changed over time.

This section looks at the people who make up the landscape architecture profession and describes trends in employment, income, and demographics. The section includes information on:

- Membership distribution
- Full & part time employment
- Job projections
- Unemployment rate
- Employment income
- Educational attainment
- Gender distribution
- Age distribution
- Indigenous identity
- Visible minorities

Summary of Key Findings for Employment, Income, and Demographics

- Since 2011, employment in landscape architecture has increased by 400 positions or over 20%. Most of this increase represents increases in full-time employment.
- In 2021, the unemployment rate for landscape architects was very low (1.4%). This was lower than the average for natural and applied sciences professions (3.6%) and the average for the Canadian workforce (10.3%).
- The proportion of landscape architects 65 years of age and older has increased over the past 10 years. Retirements are expected to drive a number of job openings over the next 10 years.
- Interview participants and survey respondents reported generally positive outlooks for employment prospects.
- There has been a substantial increase in women's representation in landscape architecture over the last 10 years with the current gender balance being roughly equal. The gender wage gap for landscape architecture has also decreased since 2011.
- Landscape architecture has a small but increasing number of individuals who identify as a visible minority or as Indigenous.

Section 2.2: Landscape Architecture

Demographics and Employment Data Limitations

Demographics

In 2021, Statistics Canada made changes to the Census of Population to transition to reporting on gender identity (i.e., Men+, Women+) instead of sex assigned at birth (i.e., males, females). Although sex and gender refer to two different concepts, the introduction of the two-category gender variable is not expected to have a significant impact on data trend analysis, given the small size of the transgender and non-binary populations.

Indigenous identity refers to people who identify as First Nation (North American Indian), Métis, Inuit, and/or those who reported as Treaty Indian or Registered Indian and/or have membership in a First Nation or Indian Band.

Visible minority status refers to people other than Indigenous peoples who identify as non-Caucasian in race or non-white in colour and includes: Chinese, South Asian, Black, Filipino, Latin American, Southeast Asian, Arab, West Asian, Korean, Japanese, and others. Indigenous identity and visible minority status are reported based on self-identification.

Employment and Income

Landscape architects work in a variety of ways. People with landscape architecture degrees can work in a number of different roles so defining who is employed as a landscape architect can be challenging.

In the Statistics Canada long-form census, National Occupational Classification (NOC) codes are assigned to respondents based on self-reported descriptions of their job title and main duties and responsibilities. As people provide their own descriptions of their job, there is the potential for the number of landscape architects to be overcounted or undercounted if job descriptions are vague or difficult to categorize.

This section relies primarily on Statistics Canada information to analyze demographics, employment and income for landscape architects. Other sources are used to verify the reasonableness of quantitative estimates and provide additional context.

Section 2.3: Landscape Architects in Canada

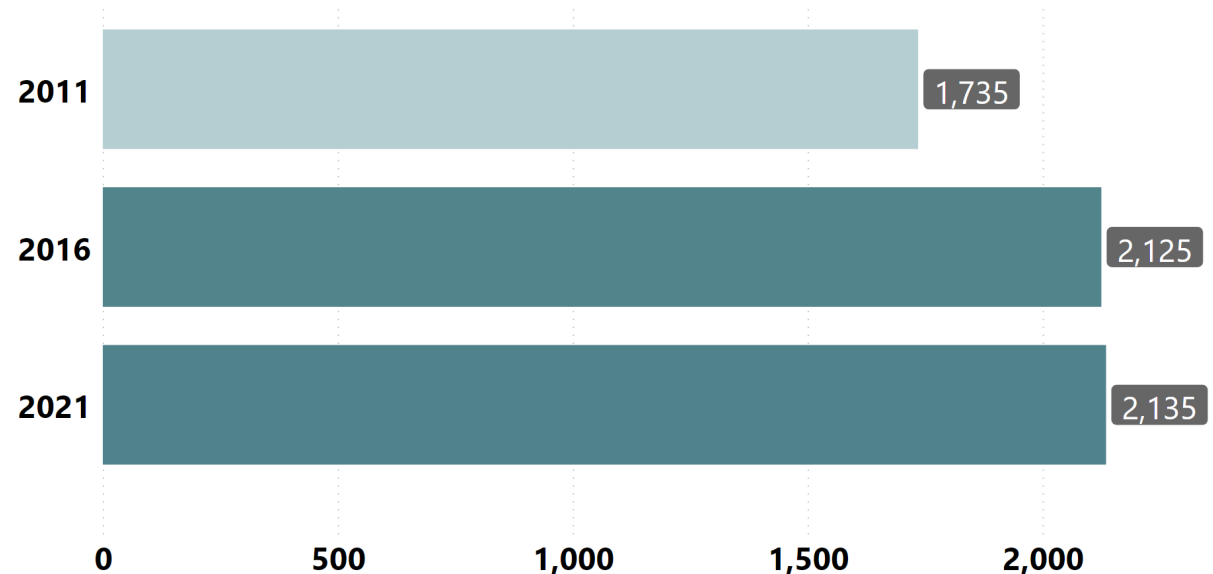
The number of landscape architects in Canada has increased since 2011

Between the 2011 and 2021 Census, the number of landscape architects in Canada grew from 1,735 to 2,135. The largest portion of the increase occurred between 2011 and 2016.

CSLA membership data confirms the profession is growing with the number of full members, which includes life members and retired members, growing from 2,251 in 2016 to 2,541 in 2021. The number of associate or intern members increased from 717 in 2016 to 807 in 2021 (**Appendix A**).

An increasing number of landscape architects are at or near retirement while the number of people entering the profession remains relatively stable. The number of landscape architects in the 35 and under age category increased by 25 from 2011 to 2021, while the number aged 65 and over increased by 185. A breakdown of the age distribution of landscape architects can be found in **Section 2.12**.

Figure 2.3-1: Landscape Architects in Canada (2011-2021)

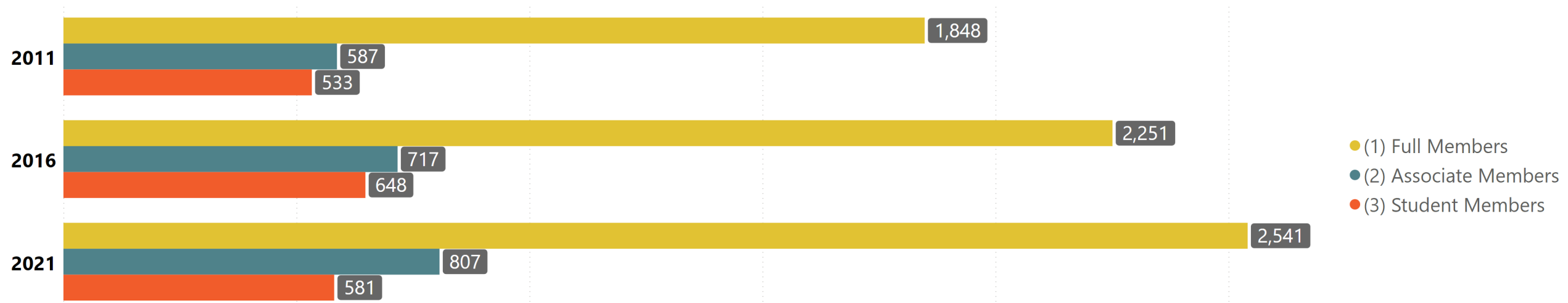


Includes employed individuals in the labour force 15 years of age and older. The labour force status of individuals is measured during a specific week of the census period.

Source: Statistics Canada 2013, 2017, and 2022.

Section 2.4: Membership Distribution

Figure 2.4-1: Component Membership (2021)



In cases where data is missing, membership numbers of imputed from the average of prior and following years.

Source: CSLA 2023

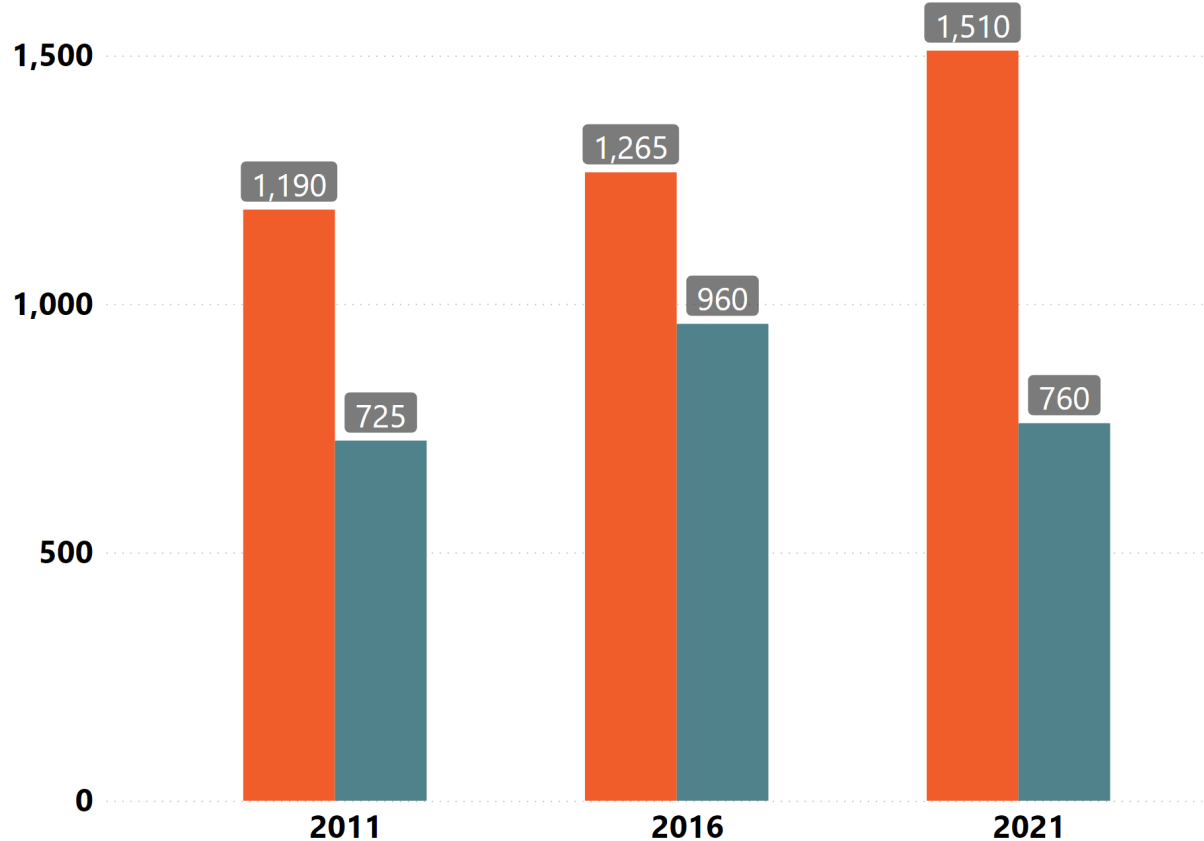
CSLA membership continues to grow

The number of full and associate members both increased materially between 2011 and 2021. The number of student members increased between 2011 and 2016, before decreasing by 2021.

In 2021, the Ontario component (OALA) accounted for 49% of members, followed by the British Columbia (18%) and Quebec (16%) components. Over 90% of members were a part of the Ontario, Quebec, British Columbia, or Alberta components in 2021.

Section 2.5: Work Activity

Figure 2.5-1: Landscape Architect Work Activity (2011-2021)



● Worked full year, full time ● Worked part year and/or part time or did not work

Includes individuals 15 years of age and older. The work activity status of individuals is measured across an entire census year.

Source: Statistics Canada 2013, 2018, and 2022.

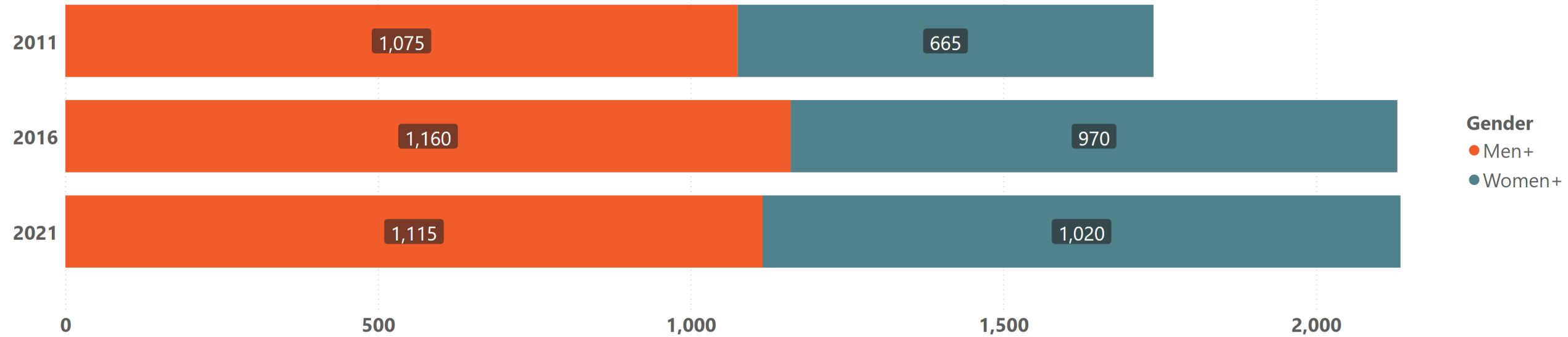
Landscape architecture has seen strong increases in full-time employment since 2011

In addition to overall employment growth, landscape architecture has seen a strong increase in full-time employment since 2011. The decrease in part-time employment since 2016 may be due to people moving from part-time to full-time employment. Landscape architects who responded to the membership survey indicated strong full-time employment across all age and gender categories with 91% of those in the labour force reporting to be working full-time.

Many interviewees noted strong job growth but a tight labour market. This can vary by region throughout Canada as some are more saturated than others. Interviewees noted there is strong competition for new employees. One interviewee at a major university noted many firms are hiring students for full-time employment. Some interview participants noted challenges with retaining employees as labour supply is limited.

Section 2.6: Gender Distribution

Figure 2.6-1: Gender Distribution (2011-2021)



Includes employed individuals in the labour force 15 years of age and older. The labour force status of individuals is measured during a specific week of the census period.

Source: Statistics Canada 2013, 2017, and 2022.

Women are driving the increase in the number of landscape architects

There was a substantial increase in the number of women working in landscape architecture, increasing from 665 in 2011 to 1,020 in 2021 (53%). The number of men working in landscape architecture remained fairly constant from 2011 to 2021. In 2021 the gender balance was relatively equal between men and women.

Section 2.7: Job Projection

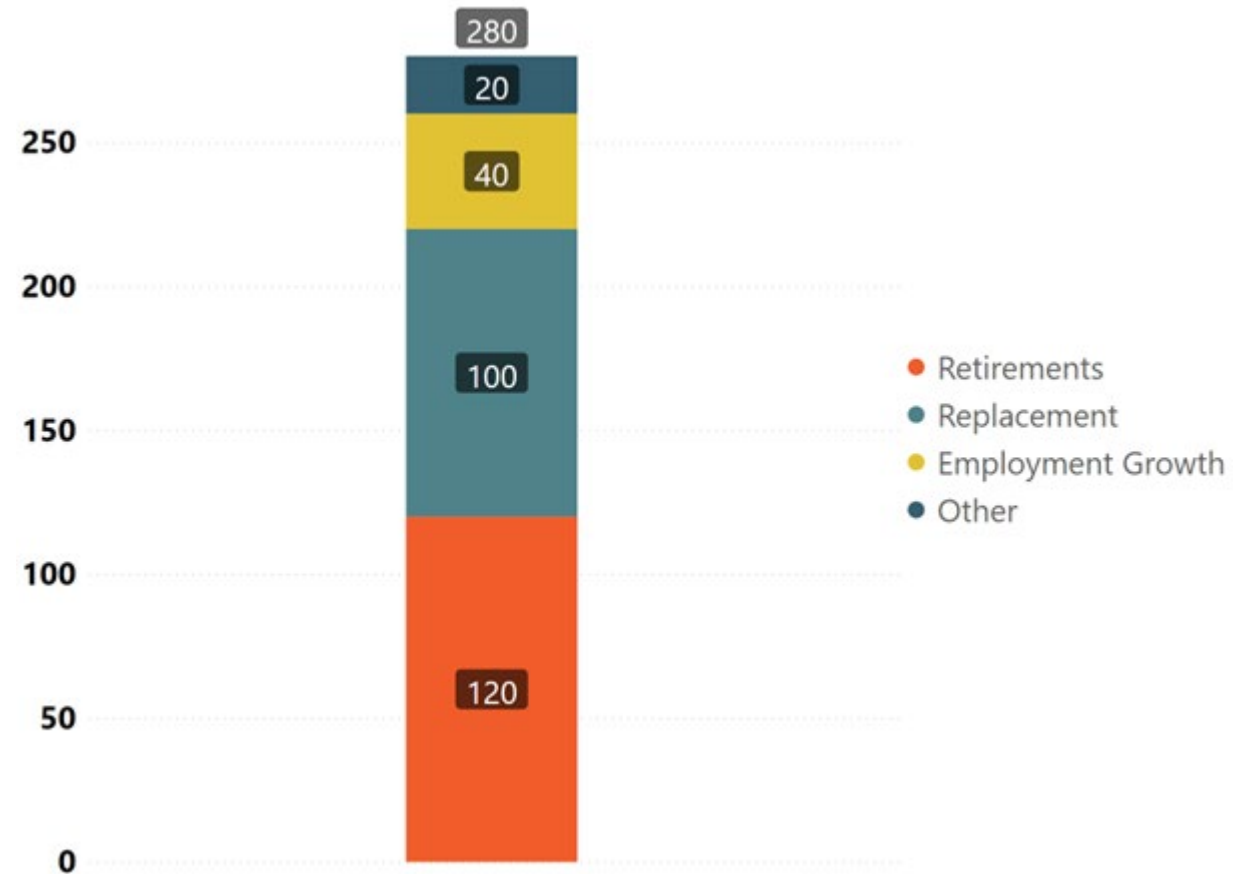
Retirements are projected to exceed employment growth for landscape architecture, urban and land use planners, and land surveyors

The Canadian Occupational Projection System (COPS) estimates there will be an average of 280 job openings over the next ten years for the broad category of workers that includes landscape architects as well as urban and land use planners and land surveyors.

COPS forecasts that 120 job openings will occur each year due to retirements and 100 job openings will be necessary to replace workers who leave their role. New job growth is projected to support approximately 40 new workers each year.

Job postings on the CSLA website have seen an increase from an average of 46 job postings per year between 2015 and 2021 to 91 job postings in 2022. Membership survey results showed that only 38.5% of respondents aged 65 years and older (25 people) have retired. The estimated median age of retirement for landscape architects is 69 years of age. Interviewees indicated there are a number of landscape architects who have delayed retirement but will begin retiring in the next decade.

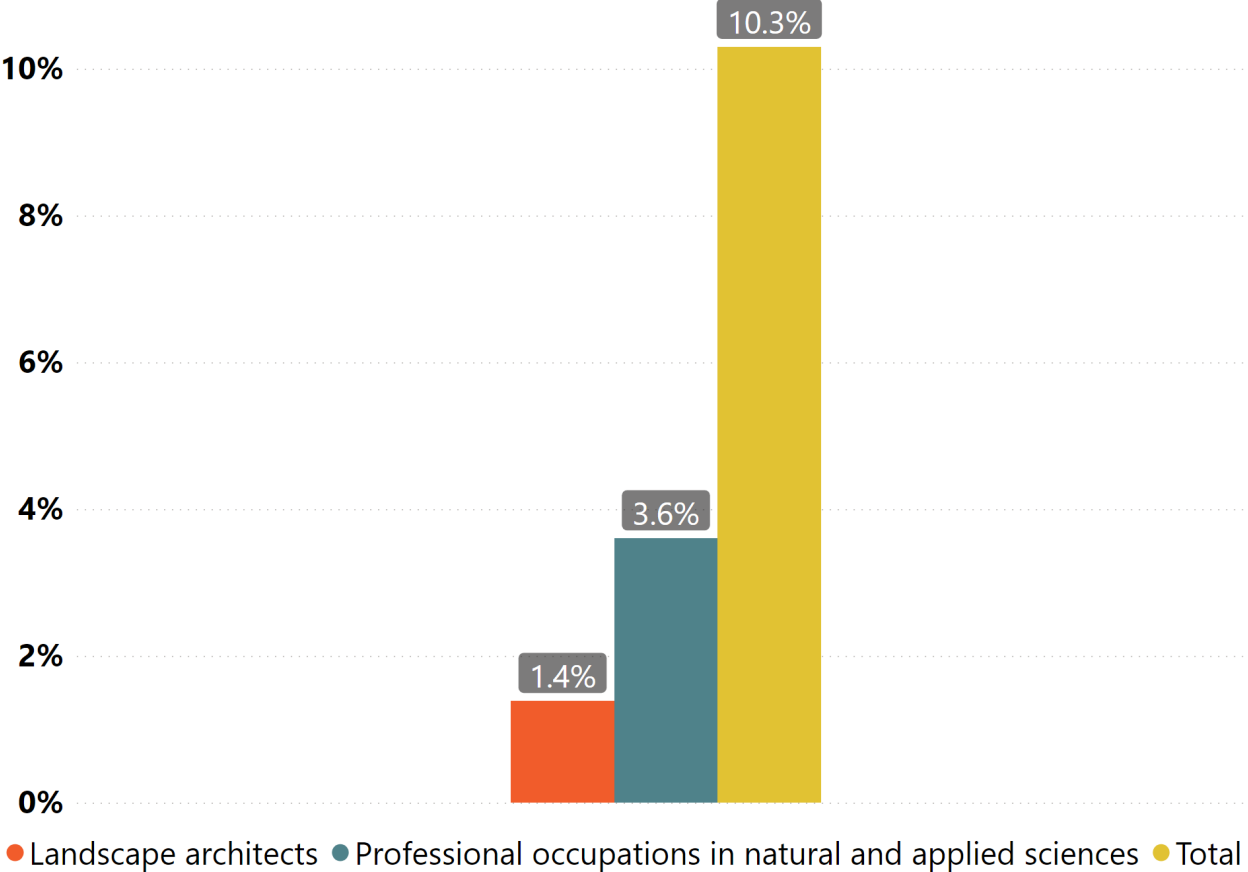
Figure 2.7-1: Projected Annual Job Openings for Landscape Architects, Urban and Land Use Planners, and Land Surveyors (2022-2031)



Source: Canadian Occupational Projection System (COPS) – 2022 to 2031 projections. Employment and Social Development Canada.

Section 2.8: Unemployment Rate

Figure 2.8-1: Landscape Architecture Unemployment Rate (2021)



Includes individuals in the labour force 15 years of age and older. The labour force status of individuals is measured during a specific week of the census period.

Source: Statistics Canada 2022.

Landscape architecture has a low unemployment rate

In 2021, landscape architecture had a lower unemployment rate than other occupations in the natural and applied sciences (1.4% compared to 3.6%) and much lower than the average across all occupations in Canada (10.3%). Respondents to the CSLA membership survey also reported a low unemployment rate.

Most landscape architects feel there is strong demand for their services, with 46.5% of those surveyed indicating they believe their workload will increase. Only 4.7% of those surveyed believe their workload will decrease.

During interviews, respondents noted landscape architects are expanding their influence and playing a larger role in complex, multidisciplinary projects. Landscape architects are natural collaborators and this was frequently cited as a reason for the strong demand for landscape architecture services. Some respondents noted these skills could be leveraged even more to further expand the profession.

Section 2.9: Employment Income

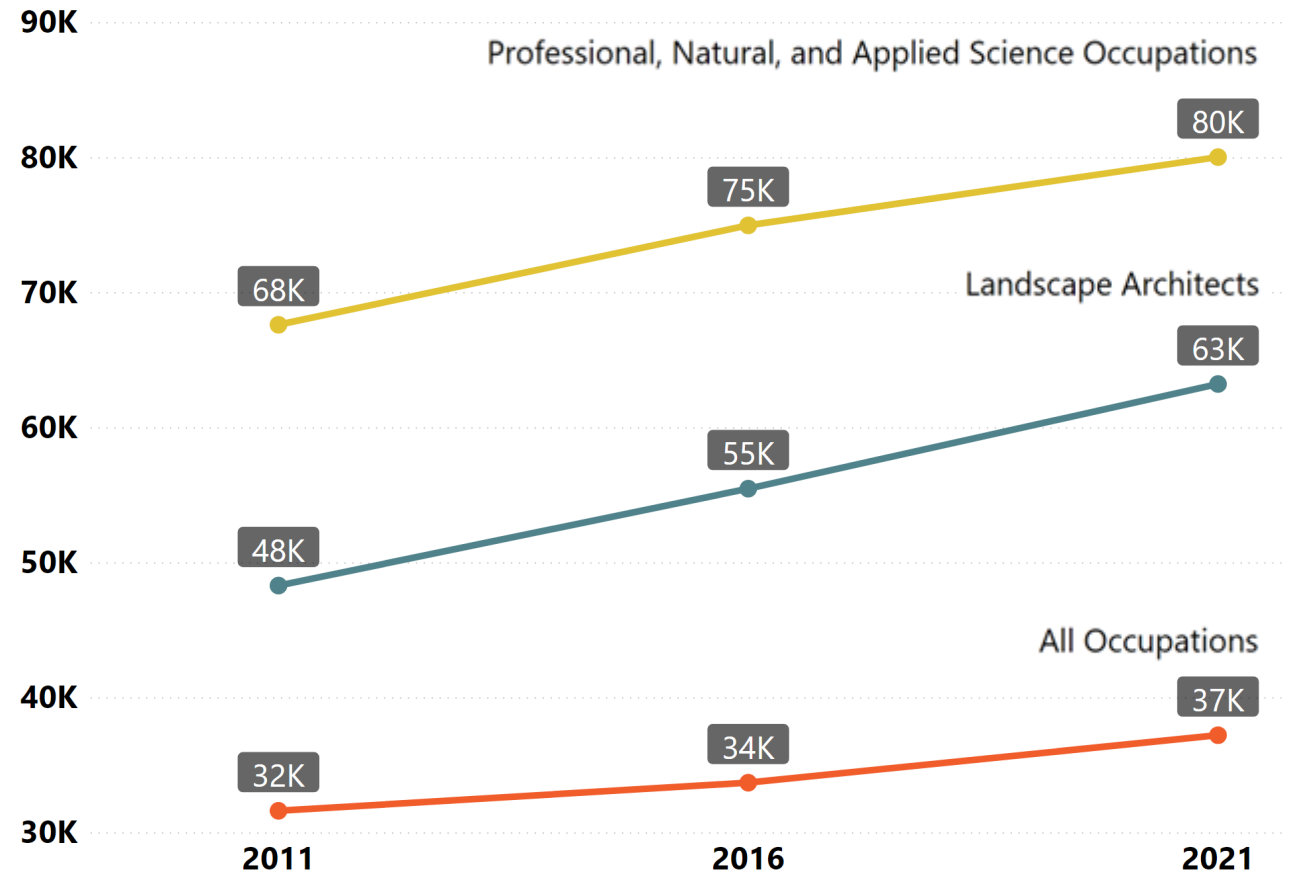
Landscape architecture salaries are increasing at a faster rate than other professions

Landscape architect salaries increased at a faster rate than other occupations in the natural and applied sciences from 2011 to 2021. Landscape architect professionals interviewed for the study indicated there has been strong salary growth recently, including during the COVID-19 pandemic. Some interviewees noted increasing salary expectations are making it difficult to attract and retain employees.

The 2019 Canadian Landscape Architect Compensation Study noted mixed results in terms of salary increases between 2015 and 2019, with some levels of employees experiencing wage growth, while others experiencing declines.

Strong salary growth could be attributed in part to the low unemployment rate and strong demand for landscape architecture services. The Compensation & Benefits survey, as well as some interview participants noted there are substantial increases in income associated within increased experience in the field. Some respondents indicated entry level salaries could be improved.

Figure 2.9-1: Landscape Architecture Median Employment Income (2021)

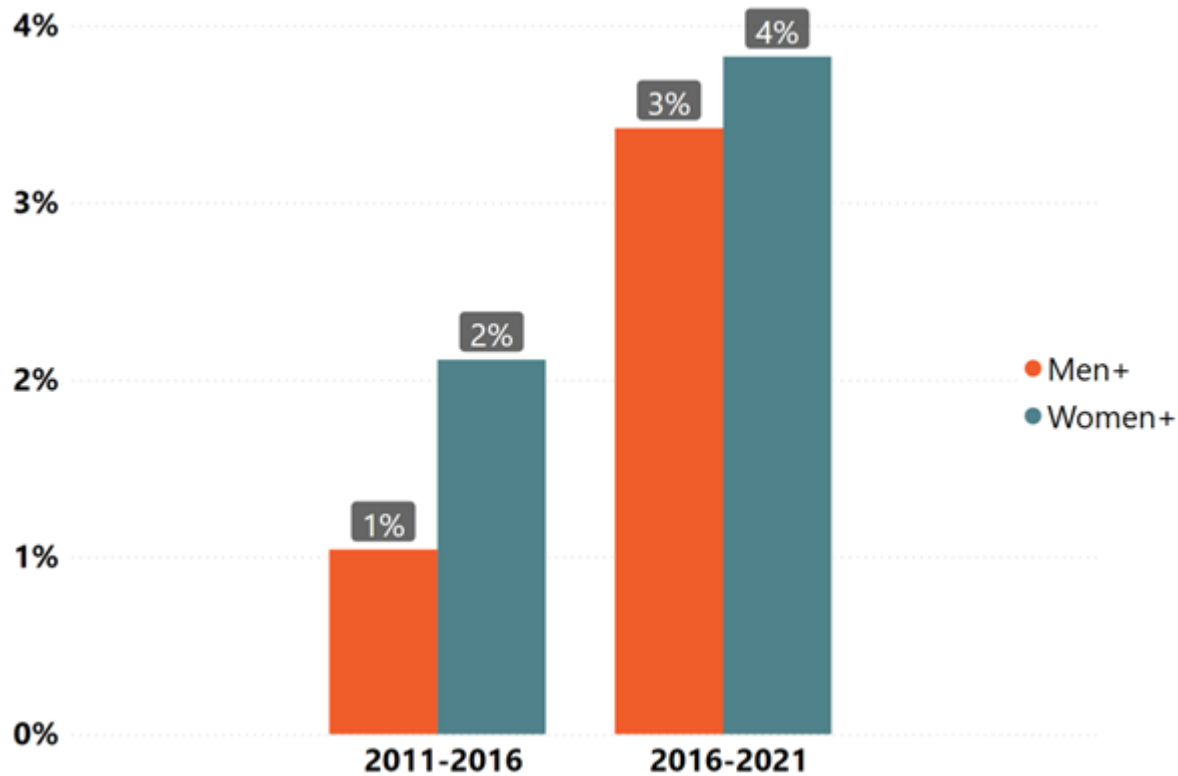


Includes individuals 15 years of age and older.

Source: Statistics Canada 2013, 2018, and 2022.

Section 2.10: Gender Wage Gap

Figure 2.10-1: Average Annual Increase in Median Landscape Architecture Employment Income by Gender (2021)



Includes individuals 15 years of age and older.

Source: Statistics Canada 2013, 2018, and 2022.

The wage gap between men and women has become proportionally smaller since 2011

Between 2011 and 2021 women experienced a higher rate of increase in employment income compared to men. Men averaged a 3% annual increase in median employment income between 2016 and 2021 while women averaged a 4% increase. The income gap decreased from 38.1% in 2011 to 28.6% in 2021.

The 2019 Canadian Landscape Architect Compensation & Benefits Study noted that when taking into account experience and level of career, male landscape architects earn between 2% and 22% more than their female counterparts.

Survey results indicate the average age and level of experience of women landscape architects is lower than that of men, which could contribute to the income gap. Fewer women reported being owners of landscape architecture firms, with 64.6% of firms owned by men. Some individuals interviewed also noted there is a lack of women in leadership roles in the profession.

Section 2.11: Educational Attainment

Landscape architecture is a highly educated profession

In the 2021 Census, 95% of landscape architects reported they have a university education (advanced degree or Bachelor's degree) compared to 76% of people working in professional science occupations and 50% of the total population.

The number of landscape architects with advanced degrees increased by 31% from 2011 to 2021 while those with Bachelor's degrees increased by 33% between 2011 and 2021. The number of landscape architects without a university degree has been decreasing (**Appendix A**).

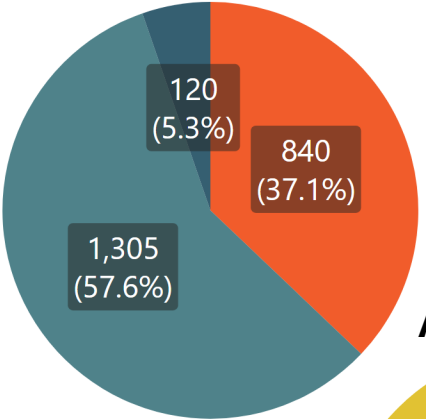
In the 2021 Census, 37% of landscape architects reported having a Master's degree or higher and 58% have a Bachelor's degree. The CSLA membership survey identified that 51% of respondents had a Master's degree or higher and 39% had a Bachelor's degree. Differences between the 2021 Census and the CSLA membership survey may reflect sample sizes (limitations are described in further detail in **Appendix B**).

The CSLA membership survey identified that a slightly higher proportion of CSLA members 44 years of age and under have a Master's degree compared to those aged 45 and older (**Appendix B**).

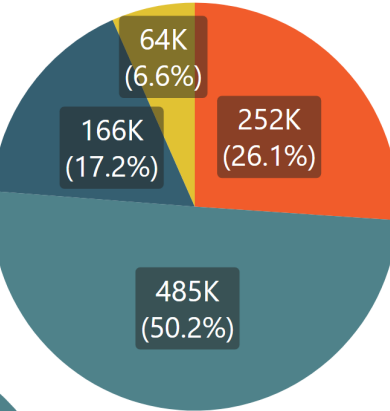
According to the CSLA membership survey, most landscape architects (83%) obtained their education in Canada. Those aged 65 years and older were more likely to have completed their education outside of Canada than any other age group, with 66% having a Canadian education (**Appendix B**).

Figure 2.11-1: Educational Attainment for the Population Aged 15 Years and Older, 2021

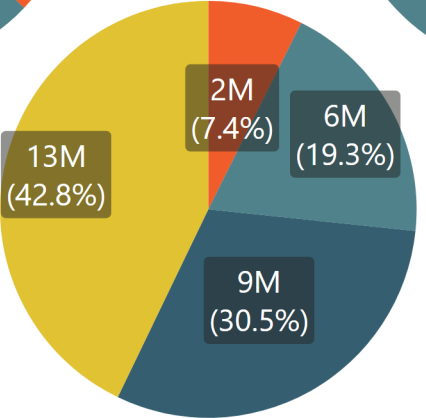
Landscape Architecture



Professional, Natural, and Applied Science Occupations



All Individuals



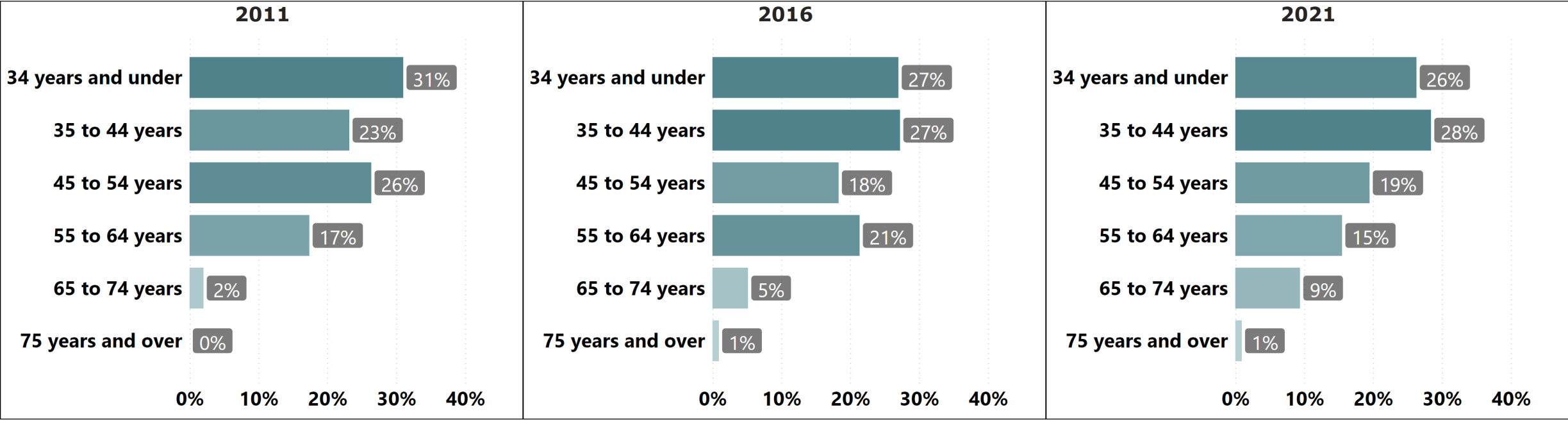
● Advanced Degree ● Bachelors Degree ● Postsecondary Certificate or Diploma ● Other

Includes individuals 15 years of age and older.

Source: Statistics Canada 2013, 2018, and 2022.

Section 2.12: Age Distribution

Figure 2.12-1: Age Distribution (2011-2021)



Includes employed individuals in the labour force 15 years of age and older. The labour force status of individuals is measured during a specific week of the census period.

Source: Statistics Canada 2013, 2017, and 2022.

The landscape architecture profession is aging, but a stable cohort of younger professionals provides as positive outlook

The proportion of people 55 years and older increased from about 19% in 2011 to 25% in 2021, pointing towards an aging profession. However, the proportion of people 44 years and younger has remained constant at 54% of the profession over the same timeframe.

A concern was raised by interview participants that some people delaying retirement are preventing the younger generation from advancing to senior roles. With about 10% of people who were 65 years and older in 2021, there are anticipated to be a number of vacancies due to retirement over the next ten years, permitting younger people to enter the profession and those in the profession to fill more senior roles.

Section 2.13: Indigenous Identity

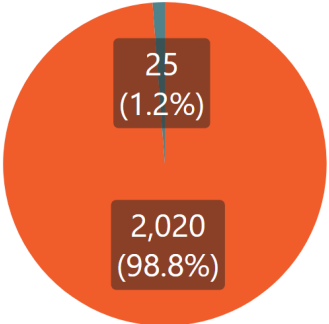
More work is needed to improve representation of Indigenous people in the profession

In 2016, about 25 landscape architects (or 1.2%) identified as Indigenous which is lower than the average across the total employed population (3.9%). Interview respondents noted significant efforts have been made over the past ten years to recruit more Indigenous people into the profession, including scholarships to try and attract Indigenous students. Some noted that there had been success, with an increase in Indigenous representation. Respondents suggested that continuing to promote the profession to Indigenous youth and expanding support to Indigenous communities could help attract more Indigenous people to the profession.

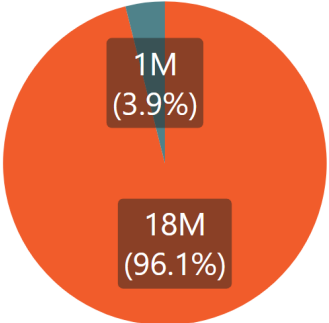
Interview respondents noted landscape architecture has a natural connection to land and the environment and that these qualities should provide opportunities to increase Indigenous representation and collaboration. A number of respondents noted collaboration and knowledge transfer between landscape architecture professionals and Indigenous communities has resulted in more innovative and inclusive projects.

Figure 2.13-1: Indigenous Identity (2016)

Landscape Architecture



All Individuals With Employment Income



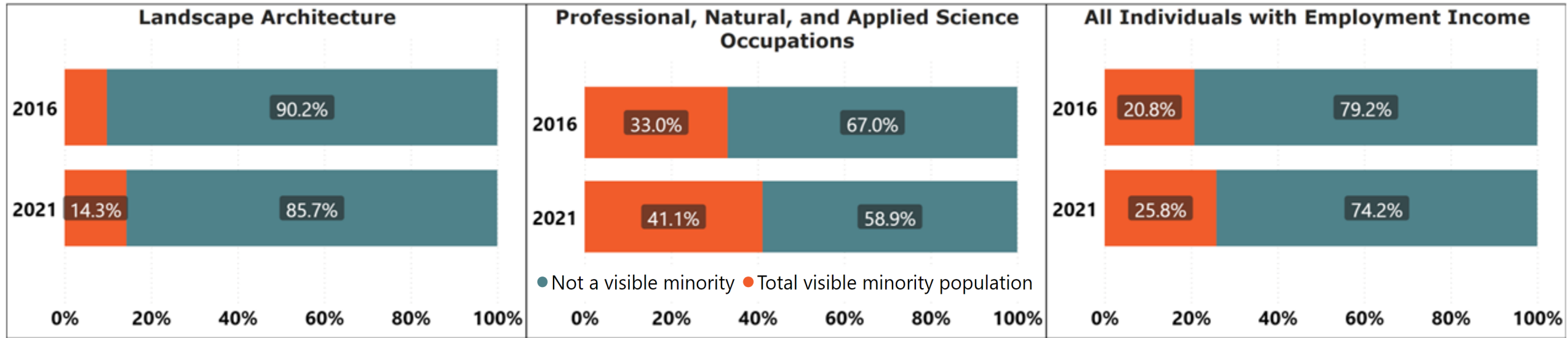
● Non-Indigenous identity ● Indigenous identity

Includes all individuals who worked and reported employment income in the reference year 15 years of age and older.

Source: Statistics Canada 2017.

Section 2.14: Visible Minorities

Figure 2.14-1: Visible Minorities (2016-2021)



Includes all individuals who worked (weeks) and reported employment income in the reference year 15 years of age and older.

Source: Statistics Canada 2017 and 2022.

The landscape architecture profession is becoming more diverse, but more diversity is desired

Landscape architecture has a lower proportion of people who identify as a visible minority than other occupations, including professional science occupations. However, the number of visible minorities has increased since 2016.

Interview participants recognized growth in the number of visible minorities but would like to see more growth. People feel there is a need for more mentorship in smaller groups and communities to help support the growth and development of visible minorities in the profession.

Section 3.0:

Business Performance

Section 3.1: Landscape Architecture Business Performance Overview

Business Performance Overview

Business performance can be a key indicator of the economic health of a sector or profession. Analyzing business performance can help gain insights into the trends and conditions that are driving market changes in the sector. Understanding these factors can help professionals in the sector make informed decisions about education and training needs, capital investments, and legislation and policy changes.

This section reviews indicators related to:

- Business counts
- Operating revenues, expenses and net income
- Sources of work and business drivers
- Opportunities and challenges facing landscape architecture businesses

Summary of Key Findings for Business Performance

- The number of landscape architect businesses has remained stable at 785 firms since 2016 but the number of firm with more than 10 employees has increased.
- From 2013 to 2021 operating revenues increased by 96%, and profit margins increased from 13% to 20%. The largest annual increase occurred from 2020 to 2021.
- Housing starts, in particular new apartments have increased by 50% from 2012 to 2022. The need for more investment in housing was identified as a key driver of new business for landscape architecture over the next several years.
- Interview respondents noted many firms have faced challenges with recruiting and retaining employees due to a tight labour market since COVID-19.
- There is a need for regulation across all provinces and territories to establish common qualification and practice standards. This will improve awareness of the valuable skillsets landscape architects provide.

Section 3.2: Landscape Architecture Businesses

Data Limitations

Landscape architectural services are defined by Statistics Canada and the North American Industry Classification System (NAICS) as establishments whose work primarily involves, planning, designing, and administering the development of land areas for projects such as parks and recreational areas, institutional, land subdivisions, transportation and residential areas by applying knowledge of land characteristics, location of buildings and structures, use of land areas, and design of landscape projects.

In the Statistics Canada long-form census, industry codes (NAICS) are matched to individuals based on self-reported “write-in responses describing the respondents’ employer name and type of business”. There is a higher risk for the landscape architecture industry to experience quality issues as they exist at the most detailed level of NAICS classifiers. Errors due to poorly written responses as well as a high level of variability between samples may affect the data.

Statistics Canada categorizes businesses by industry according to the principal activity of the firm. If a firm has a landscape architecture and urban planning practice and the urban planning team generates more operating revenue, the firm would be classified as an urban planning business, not a landscape architecture business.

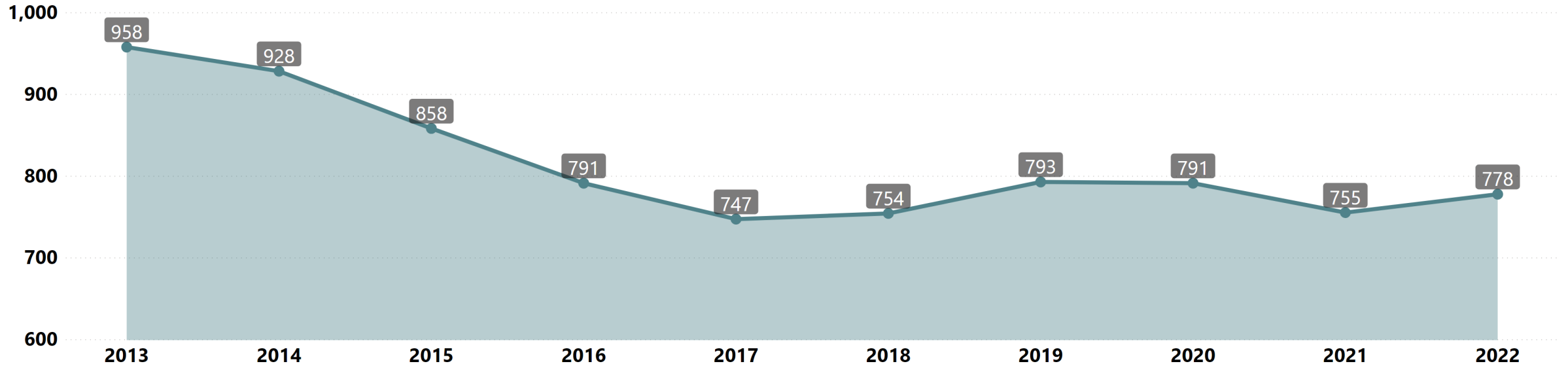
As a result, business counts provided by Statistics Canada understate the number of firms with a landscape architecture practice.

In the survey conducted for this report, 62% of respondents indicated they were employed by multi-disciplinary firms, governments, academia, industrial sectors, non-governmental organizations, or other employers. These landscape architects would likely not be represented in Statistics Canada data for landscape architecture businesses.

Businesses are counted by Statistics Canada according to “statistical locations”. A statistical location is an operating entity that conducts economic activity from one or more physical locations in a small geographical area that is able to provide employment data to Statistics Canada. This means that a business with 10 locations and a head office would be counted as having 11 statistical locations.

Section 3.3: Landscape Architecture Business Counts

Figure 3.3-1: Business Counts (2013-2022)



Fluctuations from one reference period to another may be the result of methodological changes (for example, changes to the method for identifying inactive units).

Source: Statistics Canada 2023.

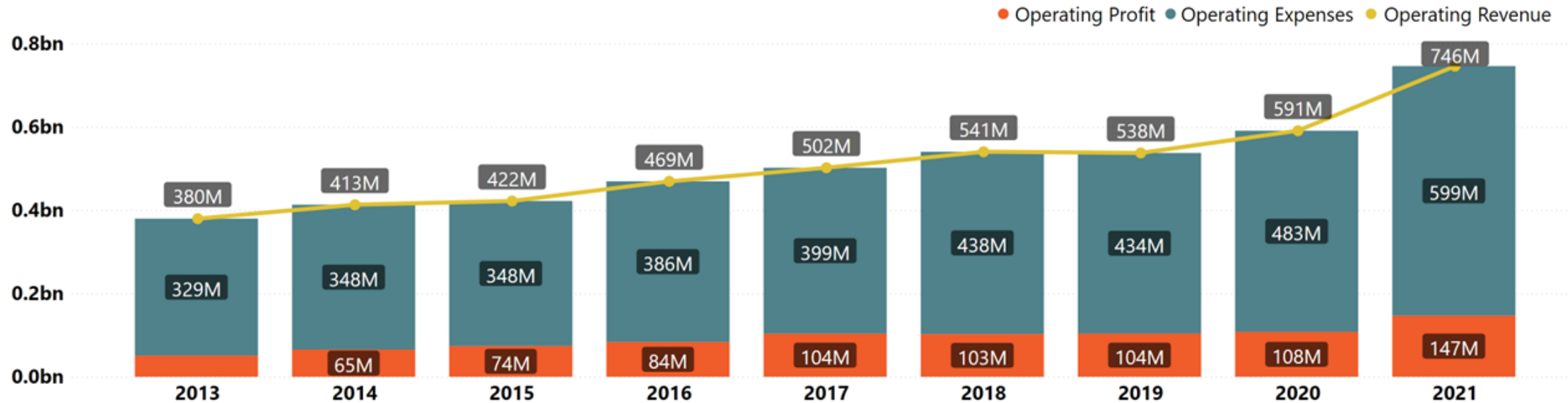
The number of landscape architecture businesses is declining which may be driven by the merging and acquisition of firms

The number of businesses primarily providing landscape architecture services decreased from 2013 through 2016 but has remained stable since. The number of businesses with 10 or more employees increased from 99 in 2013 to 114 in 2022 (see **Appendix A**). This could reflect a trend of firms consolidating. Some interviewees noted a trend of multidisciplinary firms acquiring smaller firms.

Over 30% of CSLA membership survey respondents noted that their business or employer employs over 100 people. Only a small number of landscape architecture firms are noted by Statistics Canada to employ over 100 people. This may suggest that landscape architecture firms included in Statistics Canada data are smaller on average than multi-disciplinary firms.

Section 3.4: Business Performance

Figure 3.4-1: Landscape Architecture Operating Profits, Expenses, and Revenues (2013-2021)



Statistics Canada estimates for the most recent year are preliminary.

Source: Statistics Canada 2023.

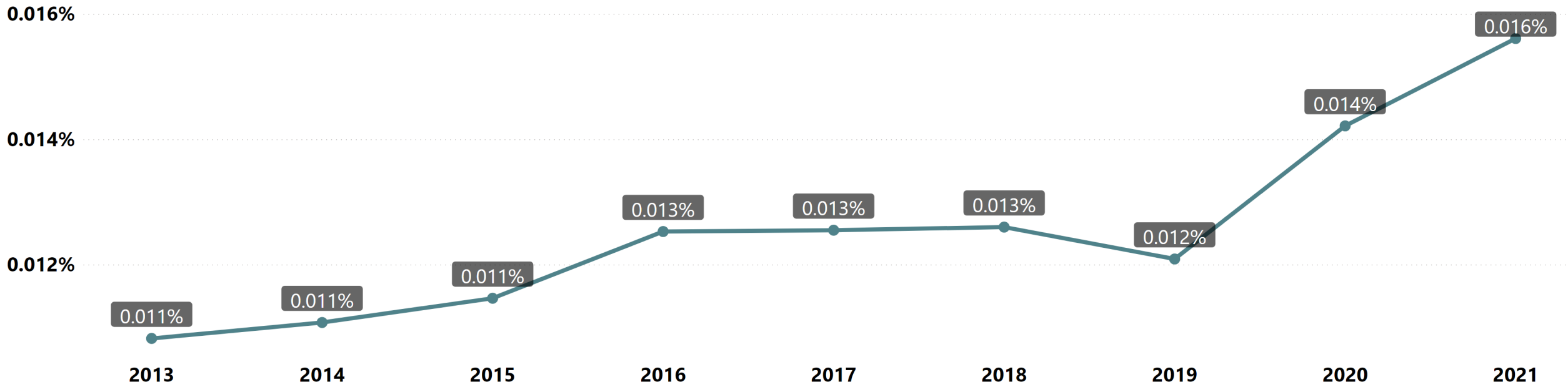
Landscape architecture firms are realizing increased revenues

The operating revenue of landscape architecture firms increased from \$380 million in 2013 to \$746 million in 2021 (96%), compared to an increase in expenses over the same period from \$329 million to \$599 million. This resulted in the profit margin increasing from 13% in 2013 to 20% in 2021. Interview participants confirmed an increase in workloads and billing rates over the last ten years. An increasing demand for more comprehensive public engagement has led to increases in scope and budget.

Interviewees identified a recent increase in wages and billing rates since the COVID-19 pandemic which is reflected by an approximately 25% increase in both operating revenues and expenses between 2020 and 2021. Despite the increasing trend in profit margins, people noted increases in expenses might be reflected in lower profit margins over the next several years.

Section 3.5: Landscape Architecture Operating Revenues

Figure 3.5-1: Operating Revenues (% of Total Across All Industries) (2013-2021)



Statistics Canada estimates for the most recent year are preliminary.

Source: Statistics Canada 2023.

Landscape architecture share of operating revenues relative to all industries has increased materially

Operating revenue for landscape architecture businesses as a share of revenues across all industries increased from 2013 to 2018, dipping slightly in 2019 with a rapid increase in subsequent years. The increasing share of revenues across all industries reflects the findings from the membership survey. Interview participants noted that there is an increased demand for services and work on larger projects.

Section 3.6: Source of Work

Landscape architects are providing services to a wide variety of clients

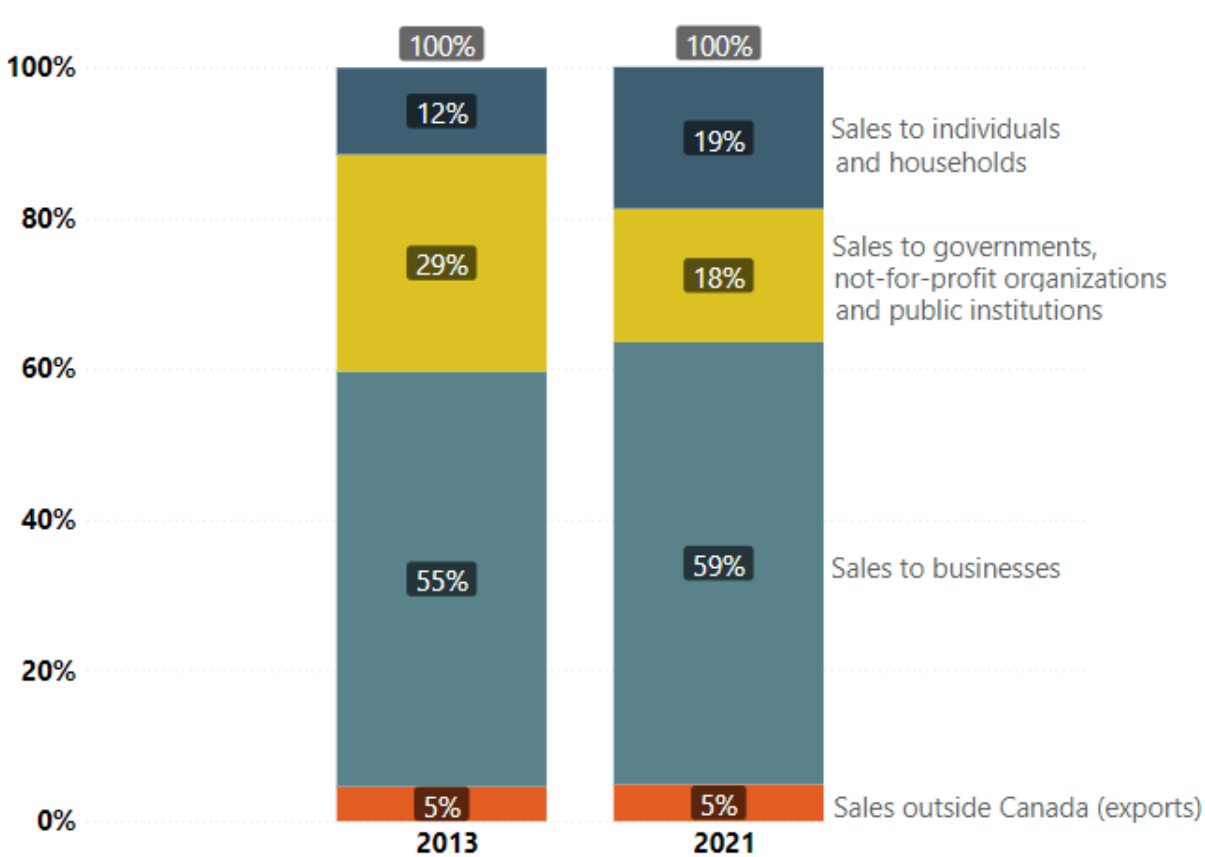
In 2021, over half of sales were to businesses; about 18% to the public sector, not-for-profit organizations, and institutions; and 19% to individuals.

Interview participants noted they provide services to a wide variety of clients and estimated between 40%-80% of their work was driven by public or institutional clients and the remainder for businesses, not-for-profit organizations, and individuals. The difference between the two sources could be attributed to the small sample size and the distribution of work for standalone landscape architecture firms compared to multi-disciplinary firms.

Landscape architects are completing work across Canada but primarily operate in their home province/territory

Interview responses indicated most firms work in multiple provinces. While respondents reported work is primarily contracted to firms with a local presence, some contracts are to firms in other jurisdictions in Canada and occasionally from the United States. This is supported through the membership survey where respondents reported completing a large portion of work in their home province and only a small portion outside of Canada.

Figure 3.6-1: Source of Work (2013 and 2021)

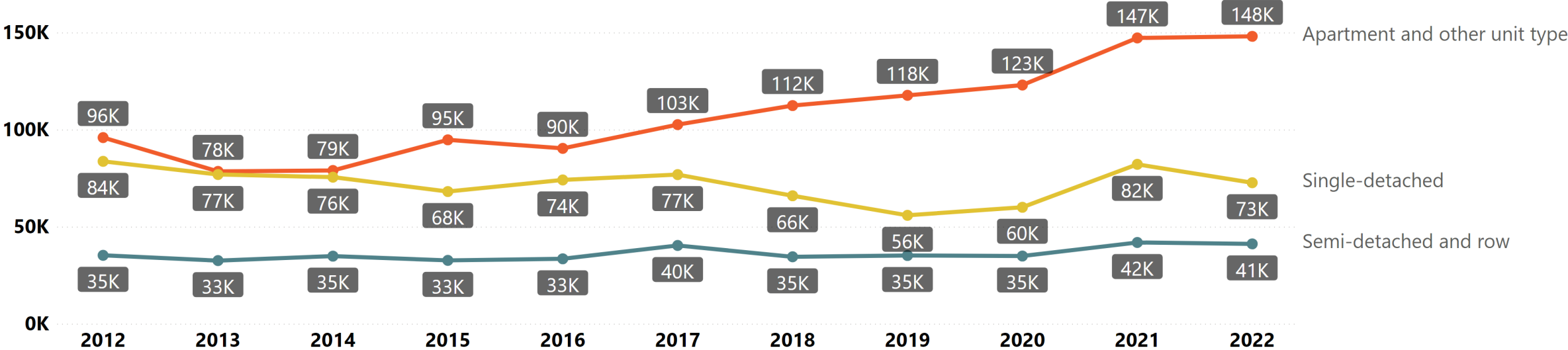


Source: Statistics Canada 2023.

Note: Statistics Canada only publishes this data in percentages. The total dollar values in each year will change.

Section 3.7: Business Drivers: Housing

Figure 3.7-1: Housing Starts (2012-2022)



Dwellings do not include trailers or any other movable dwelling (the larger often referred to as a mobile home) with no permanent foundation; renovations and/or alterations within an existing structure; seasonal dwellings, such as: summer cottages, hunting and ski cabins, trailers and boat houses; hostel accommodations, such as: hospitals, nursing homes, penal institutions, convents, monasteries, military and industrial camps; and collective types of accommodation such as: hotels, clubs, and lodging homes.

Source: Statistics Canada 2023.

Urbanization and high-density planning are creating more opportunities for landscape architecture businesses

Between 2012 and 2022, there was a material increase in housing starts, with apartments being the primary driver from 96,000 starts in 2012 to 148,000 in 2022 (a 54% increase). The increasing trend in apartment development coincides with observations by interview participants on increased urbanization and high-density planning throughout cities.

Interview participants noted urban design, waterfront development, downtown revitalization, and streetscapes are leading to a larger demand for landscape architecture services. Expansion of work is also being driven by an increased appreciation for beautiful outdoor spaces. Increased recognition of the expertise landscape architects offer is leading to more opportunities on larger projects. However, there is a lack of recognition in the public realm and procurement processes which do not explicitly request a landscape architect to provide landscape architecture services.

Section 3.8: Business Drivers: Infrastructure Investment

Figure 3.8-1: Infrastructure Investments (2012-2022)



Source: Statistics Canada 2023.

Growing infrastructure investments by private and public sectors are contributing to high demand for landscape architecture services

Infrastructure investment increased by \$40 billion (or 56%) between 2012 and 2022. Interview participants noted that landscape architecture requires an interdisciplinary approach and collaboration with other disciplines. These skills are in demand and make landscape architects well positioned to be involved in complex projects. Results from the membership survey indicate that over 30% of landscape architects feel their workload and scale of projects have increased over the last several years. Most respondents feel the demand for their services will continue to grow over the next year.

Interview participants feel the profession is growing with ample opportunities, but landscape architecture services need to be a higher priority particularly in publicly funded projects. On more complex projects there is a demand for addressing environmental challenges and sustainable land management in designed landscapes and buildings through collaboration with other disciplines like architecture, engineering, and ecology.

Section 3.9: Challenges and Opportunities

Increasing trends in equity, diversity, and inclusion within the profession

Interview respondents noted the profession has been making strides in being more diverse. Involving more people from diverse backgrounds can improve the design process and make sure projects are developed in a way that reflects the needs and preferences of different people.

Some respondents suggested there is still a need to recruit and support people who identify as Indigenous or members of visible minorities to the profession. Some interview respondents also noted there could be better representation of women in senior positions.

Implementation of climate change adaptations in design still lagging theory

Interview participants noted the integration of climate change adaptation techniques including using more climate resistant materials, promoting green infrastructure, stormwater management, and incorporating native plants have been taught for many years but are not always prioritized in designs by clients. Costs were noted to be a limiting factor for some clients. Some respondents felt a barrier to more robust implementation of climate change adaptations is the lack of an evaluation framework such as the sustainable SITES framework.

Mixed perspectives on procurement processes

Interview respondents noted larger public sector projects require a tendering process, but some clients have preferences for certain firms when awarding projects. Tender calls may be written for certain sized firms or be invite-only which creates a barrier for entry for new firms.

Tenders can be onerous and difficult to respond to with design work included in the proposal which firms are not paid for. Some tenders are vague or unclear which also makes responding difficult.

Public sector tenders often allow bidders to request a debrief which improves and transparency and provides useful feedback to guide future proposals. However, scoring is often ultimately decided on price.

Support for regulation of landscape architecture

In some provinces and territories, landscape architecture is not a regulated profession which can create uncertainty about the qualifications and credentials of people practicing as landscape architects. Some interview respondents advocated for regulation in all provinces and territories to establish common qualification and practice standards.

Section 3.9: Challenges and Opportunities

The need for advocacy to highlight contributions of the profession

Landscape architects feel there is a lack of awareness and understanding about the broad scope of their work and contributions to the public. This can make it difficult to gain influence in political discussions, secure funding, and be fully appreciated for their skillset.

Interview participants noted landscape architects are not currently recognized as a key resource for addressing climate change. There are a handful of leaders in the profession that talk to government and people in other disciplines but there is still more work needed across the profession in promoting the expertise of the profession. Landscape architects approach problems through a long-term holistic approach, with considerations of the technical, environmental, and design factors relative to human social needs. By considering the interactions between landscapes, people, and the environment over a long timeframe, landscape architects are natural leaders for leading conversation in addressing climate change.

Coordination among project teams needs to be improved

Some interview participants noted that project teams tend to work in a vacuum with little consideration of the work others are completing. Landscape architects are well positioned to lead projects and should take accountability in the coordination among the various disciplines working on a project.

Firms dealing with tight labour supply

Interview respondents noted lots of opportunity for jobs, however, there is a lack of labour supply. Retention of staff has also been challenging, with many people moving between firms and the increasing price of job matching since COVID-19. People have noticed many job postings, indicating a tight labour supply. This could suggest difficulties in resourcing due to lack of qualified people, compensation, or other factors.

Integrating Artificial Intelligence (AI) needs to be standardized throughout the industry

AI can perform many repetitive tasks that improve efficiency and productivity, including indexing and analyzing large data sets quickly. Many interview participants noted concerns with how AI will be integrated and standardized throughout the industry, including the need to understand how to evaluate AI generated landscapes.

Other professions are starting to develop practice guidance on the appropriate use and disclosure of AI generated work. Similar considerations may be appropriate for the landscape architecture profession.

Section 4.0:

Economic, Social, and Environmental Impacts

Section 4.1: Economic, Social, and Environmental Impacts Overview

Economic, Social, and Environmental Impacts Overview

Landscape architecture makes important contributions to the economic, social and environmental well-being of people and communities. From helping to mitigate the impacts of climate change to fostering public engagement to ensure public spaces serve the needs of all community members, landscape architects help shape a more resilient and interconnected world.

This section documents the range of contributions the landscape architecture profession makes to Canadians, including:

- Driving urban renewal
- Promoting sustainability
- Making public spaces more inclusive
- Reducing environmental impacts and adapting to climate change
- Enhancing and sustaining heritage and cultural landscapes
- Advancing reconciliation with Indigenous Peoples

Summary of Key Findings for Economic, Social, and Environmental Impacts

- Between 2013 and 2019, landscape architecture's contribution to GDP increased by \$105 million (44.7%), well above the total inflation rate of 11.1% during the same period.
- For every \$1 million of GDP generated by the landscape architecture industry, an additional \$1 million of value-added is generated for the Canadian economy.
- Landscape architects promote social inclusion by designing projects that ensure equitable access to public spaces.
- Sustainability is a key priority of landscape architects because landscapes must be designed to last for generations.
- Landscape architects play an important role in making high density urban environments more hospitable in the face of climate change.
- Landscape architects are well positioned to help ensure new projects are developed with appropriate engagement and representation of Indigenous Peoples.

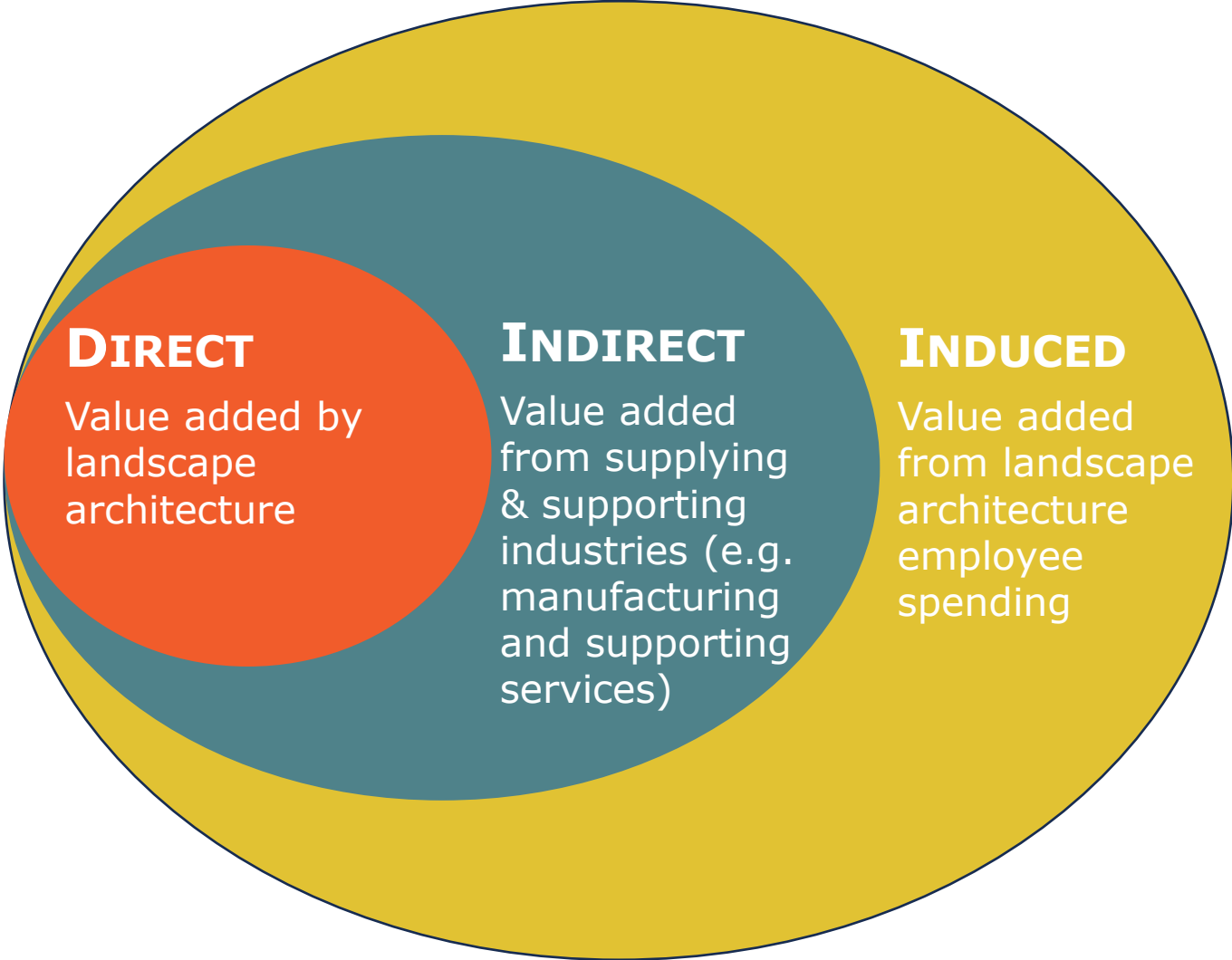
Section 4.2: Gross Domestic Product (Value Added) Overview

Gross Domestic Product (GDP) Overview

Section 3 reviewed recent business performance for landscape architecture firms and noted operating revenue had been increasing recently. The GDP of an industry equals output (or revenue) minus the value of intermediate inputs that were purchased from other industries.

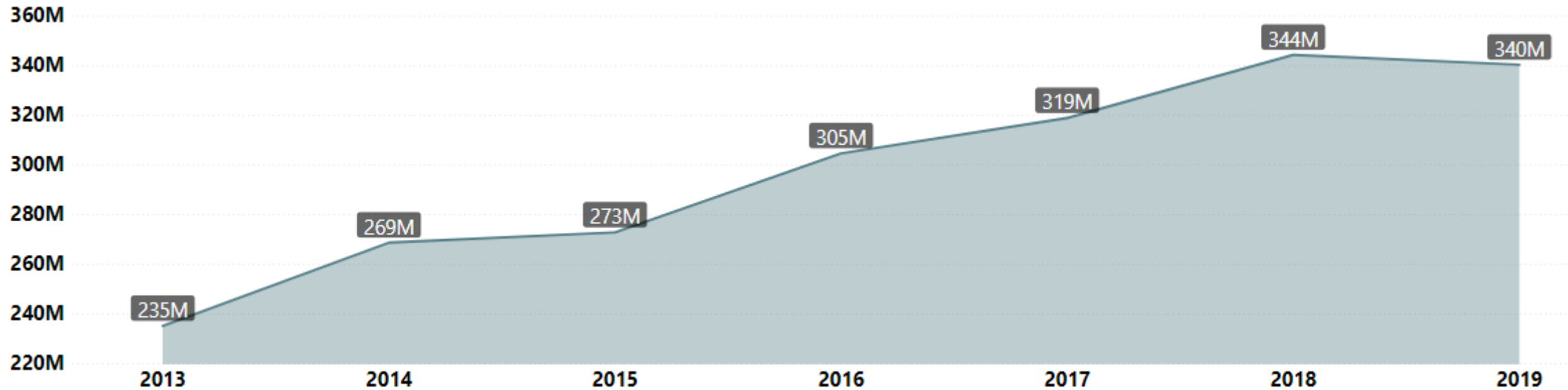
GDP contribution is generally lower than operating revenue, because operating revenue pays for intermediate expenses that have been incurred at market prices such as office costs, accounting and legal services, and other supplies and services. The largest contribution to GDP (or value added) for professional services like landscape architecture is the labour provided by these firms.

Landscape architecture's contribution to GDP is measured in three different ways. Direct effects measure value added by landscape architecture, indirect effects measure the value added by landscape architecture purchasing goods and services from other industries, and induced effects measure increases in consumer spending as a result of the income generated through landscape architecture.



Section 4.3: Contribution to GDP (Value-Added)

Figure 4.3-1: Estimated Landscape Architecture Contribution to GDP (2013-2019)



GDP is estimated by InterGroup using Statistics Canada's input-output multipliers for the architectural, engineering, and related services category (NAICS 5413) and total operating revenue for landscape architecture (54132).

Source: Statistics Canada 2023a and 2023b.

Landscape architecture's contribution to the GDP economy has been trending upwards, contributing \$340 million in 2019

Landscape architecture's estimated contribution to GDP increased by \$105 million (44.7%) from 2013 to 2019, well above the total inflation rate of 11.1% during the same period. As this estimate is based on operating revenue for landscape architecture firms it likely understates the full contribution of the profession to GDP.

Section 4.4: Value-Added Across Entire Economy

Landscape architecture adds value across multiple industries and contributes an estimated \$683 million to the economy annually when indirect and induced effects are considered

The GDP that landscape architecture contributes to the economy doubles when taking into account indirect and induced effects.

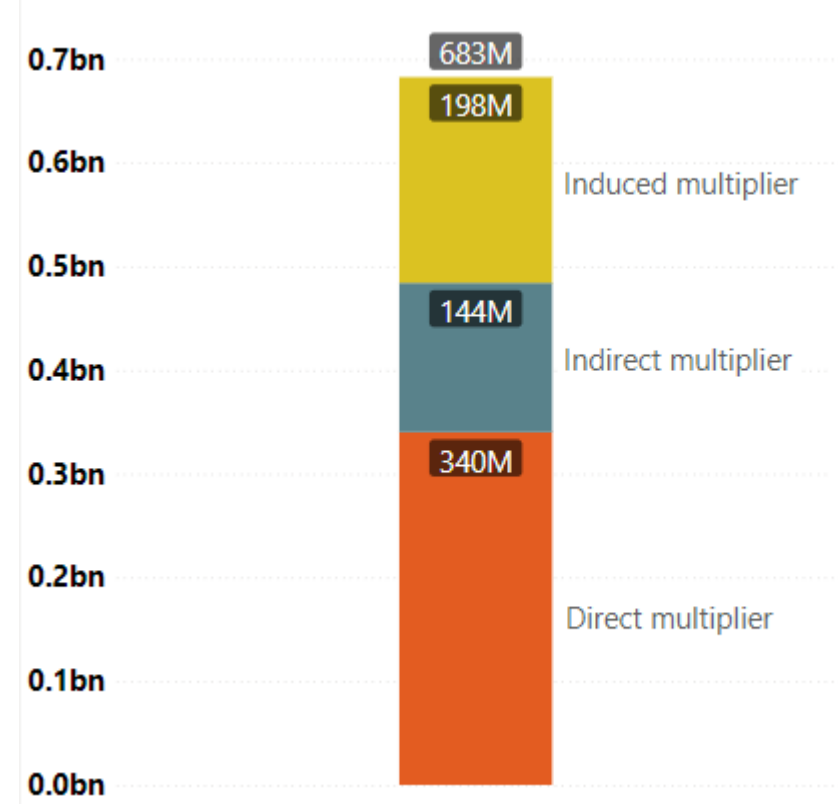
The indirect multiplier effect relates to the economic impact of industries that service landscape architecture firms. These impacts are estimated at \$144 million in added GDP related to the following industries among others:

- Professional, scientific and technical services,
- Manufacturing,
- Real estate rental and leasing,
- Administration and support, and
- Information and cultural industries.

Induced effects are generated from consumer spending resulting from the income earned by people working in landscape architecture. The estimated induced effects result in a further \$198 million contribution to GDP.

Altogether, landscape architecture contributed an estimated \$683 million to the economy in 2019.

Figure 4.4-1: Estimated Landscape Architecture GDP Including Direct and Induced Multiplier Effects (2019)



GDP, including direct, indirect, and induced effects, are estimated by InterGroup using Statistics Canada's input-output multipliers for the architectural, engineering, and related services category (NAICS 5413) and total operating revenue for landscape architecture (54132).

Source: Statistics Canada 2023a and 2023b.

Section 4.5: Urban Renewal

Landscape architects help to revitalize cities

Urban revitalization was a common area of expertise and interest reported through the membership survey. As investment flows into downtown cores, the need for denser urban housing continues to gain prominence.

Urban design is important in the connection and transition between public spaces and private property. Landscape architects play a vital role in making these spaces more livable and attractive.

Interview participants feel there has been a recent growth in services such as urban design and city planning. With cities prioritizing the development of their natural environment including urban forests, there is an opportunity for landscape architects to obtain important roles on these types of projects.

Landscape architects develop projects that become key attractions

Many landscape architects noted during interviews that their work plays a vital role in projects that make areas open, inviting and attractive. These projects are important in the development of new areas and the revitalization of older neighbourhoods. Participants noted the development of park spaces is a key area of work for them. These areas are a focal point of many communities and a key amenity for new developments. Those interviewed indicated that existing park lands are being adapted to current needs by increasing the number of accessible trails and picnic areas.

Southeast False Creek, British Columbia

In the 19th century False Creek was heavily industrialized by way of manufacturing, lumber mills, and two rail yards. This industrialization resulted in an economic boom, but with it came heavily polluted waters.

Over time the area has transitioned away from its industrial past through developments like Southeast False Creek, a mixed-use community with a focus on residential housing with the 2010 Olympic Village at its core. The development of Southeast False Creek included a park and open space system, and beautification around the False Creek waterfront. Southeast False Creek was designed to meet LEED (Leadership in Energy and Environmental Design) gold standard but surpassed this goal to become the second neighbourhood in the world to meet the platinum standard in 2011. Landscape architects contributed to the development of Southeast False Creek through the development of the Official Development Plan, designing the waterfront, streets, and the Hinge and Triangle parks.

Section 4.6: Equity, Diversity, and Inclusion

Landscape architects design landscapes that support social inclusion

Landscape architects can promote social inclusion in their work by ensuring equitable access to public spaces for all communities. Landscape architects understand different people and communities have diverse needs and interests and that public spaces need to work for all members of the community. Interview participants frequently spoke about the importance of equitable access to greenspace and how that principle influences their work.

Landscape architects support inclusive design through meaningful public engagement

Interview participants noted many clients are placing a larger emphasis on public engagement and consultation to ensure projects align with the needs of the people who will access the space. Landscape architects have expertise in listening to people who use public spaces and integrating their priorities into functional designs.

Pink Balls, Montreal

Montreal has a vibrant downtown community with street events that have animated the urban setting for decades. However, new ideas were needed to keep the events fresh, economically viable and meaningful for visitors and the local community.

Beginning in 2011, during the summer months a ribbon-like installation of 170,000+ pink balls were suspended over Sainte-Catherine Street East for Aires Libres. Aires Libres is an artistic, festive, and contemporary pedestrian zone in the 2SLGBTQIA+ Village. In 2017 the pink balls were replaced with a rainbow of colours and given the new name, "18 Shades of Gay". This project led by landscape architects helped reinvigorate the festival environ and create a joyful experience for the Village and visitors.

The media was captivated by this colourful spectacle of the street both during the day and evening, and the artistry of the designers. The public were drawn to this festive iconic place and its unique statement became a strong and positive symbol for Village businesses and residents.



Photo: Marc Cramer

Section 4.7: Heritage and Cultural Landscapes

Landscape architects create spaces that enhance and sustain heritage and cultural diversity

Landscape architects understand and appreciate the historical and cultural context of the places they work. They understand that landscapes both shape and are shaped by a community's culture and history. Landscape architects design spaces that help us understand and appreciate our heritage.

Interview respondents noted that the incorporation of heritage and cultural values into design is becoming more and more important to the landscape architecture practice.

Plains of Abraham, Québec City

In 1908, the federal government created the National Battlefields Commission which was responsible for redesigning the former military grounds spanning the Plains of Abraham into a large city park. In 1909, Montréal landscape architect Frederick Todd was commissioned to design the plans for the park. Initial work began in 1912 but was interrupted as the First World War broke out. A similar interruption happened during the Second World War which led to areas of the park being constructed into the 1950s. The park is an important public space, comparable to Central park in New York City and Hyde Park in London UK.

Today the park hosts many festivals and is a popular place for people to attend concerts, meet friends, play sports, or simply relax.



Section 4.8: Health and Well-being

Landscape architects develop spaces that improve the well-being of people and communities

Landscape architects develop and promote public spaces where people can connect and gather. The COVID-19 pandemic highlighted the need for accessible, outdoor public spaces where people can socialize. Social interaction reduces feelings of isolation and supports better community mental health. Spending time in nature has also been shown to help reduce stress and improve mental health.

Landscape architects also design spaces that support physical activity from walking and cycling to designated sports facilities. By providing landscapes and facilities which are inviting for people to walk or bike, landscape architects are supporting efforts to combat climate change through reduced vehicle emissions. Landscape architects also understand the importance of connections between public spaces, so that people can move freely and comfortably through and between public places.

Grand Concourse Walkway, St. John's

The Grand Concourse Walkway was designed to encourage public health and well-being through physical activity while also allowing people to travel or commute to every major park in the City of St. John's and the neighbouring City of Mount Pearl and Town of Paradise. Getting outdoors also promotes social interaction which can reduce feelings of isolation and supports better community mental health. Landscape architects were relied on for their expertise for all stages of planning and design. Through public participation, concept plans were presented to the public and refined before any construction began.

The Ground Concourse Walkways were designed to provide access for pedestrians and wheelchair users and ensure safe crossings with existing roads. Cycling is also permitted. Typical summer usage was estimated at about 38,000 people per day in 2012.

Section 4.9: Sustainability

Landscape architects develop projects that can be sustainable for generations

Sustainability is a key priority of landscape architects because landscapes must be designed to last for generations. Interview respondents noted the long time horizons landscape architects must design for gives them the skills to lead on large scale projects. Respondents to the membership survey noted sustainability considerations are foundational to their practice.

Sustainable designs are accomplished through green building standards, technologies, and materials

Landscape architects incorporate sustainability into their designs through the selection of materials that will last in light of inclement weather, flooding, and erosion. The holistic approach through considerations of technical, environmental, and design factors relative to human social needs permit landscape architects to work on and in some instances lead multidisciplinary projects which incorporate sustainable design practices.

Corktown Common, Toronto

The West Don Lands neighbourhood prior to 2003 was an abandoned and derelict site which was prone to flooding from extreme weather and stormwater run-off. The site, located at the southern end of the Don River regeneration corridor, is a model for integrated flood remediation engineering and parkland redevelopment. This reconstructed brownfield site was pivotal in creating a flood barrier landform that would reduce a major landbase of 290 hectares from historic flooding in this city area.

Although technically challenging to build with underground layers of water and peat, the project team were able to establish a sustainable development with nature-based innovations.

Today, the West Don Lands neighbourhood is home to Corktown Common which is a vibrant park sitting atop a flood protection landform, providing visitors an urban park integrated with valleyland ecology. The landform and its sustainable mitigation measures are estimated to have removed risk of more than \$160 million in flood damages in the event of a major storm. The park opens up a forgotten sector of Toronto's waterfront for public access, and regenerates new native habitats and activity areas at the heart of a rejuvenated West Don Lands neighbourhood boasting 6000 residential units at the park's edge.

Section 4.10: Climate Change Adaptation

Climate change adaptation and resilience is a key challenge landscape architecture is tackling

Interview respondents frequently said designing spaces that can withstand changing climates and extreme weather events is an important part of their work. Planning landscapes where the future environment is unknown adds another layer of difficulty to the design process but provides an opportunity for landscape architects to specialize and add value.

Some people commented during interviews that landscape architects have been ahead of the curve in addressing climate issues. Designing spaces that use environmentally sustainable materials (e.g., native plants, heat tolerant plants, composite materials with low carbon footprint), that protect individuals from inclement weather, and minimize the use of natural resources has long been applied to the work of landscape architects.

Landscape architects do much of their work in heavily populated urban environments. Landscape architects feel they play an important role in making high density urban environments more hospitable in the face of climate change. Tree canopies are important to increase shade in urban environments and help to adapt to climate change. Landscape Architects have been involved in many projects which prioritize climate change adaptations in design including urban forestry, flood management, parks and open space, and shoreline work. Urban forestry was frequently cited in survey responses as an important emerging area of practice.

Bow River Bioengineering Demonstration Project, Calgary

Climate change adaptation requires planning for more extreme weather events like the significant flood the City of Calgary experienced in 2013.

The Bow River Bioengineering Demonstration Project was designed to showcase different types of bank stabilization and soil bioengineering methods to provide more natural solutions to protect infrastructure and mitigate against future flooding.

Section 4.11: Ecological Services

Landscape architects help preserve ecological services by using nature-based solutions

Landscape architects help preserve and enhance the ecological services provided by natural environments. This can include the creation and enhancement of urban forests, naturalized approaches to stormwater management, and remediation and rehabilitation of wetlands, shorelines and riverbanks. Ecosystem restoration can contribute towards reducing air pollution and can promote immune health through enhanced exposure to diverse microbiota. The federal government in the 2023-24 budget is providing Parks Canada with \$33.8M for the urban park program, \$17.4M for ecological corridors, and \$50.8M for new park establishment work. Part of this work is to achieve the goal in advancing the protection of biodiversity and conserving 25 percent of land and inland water and 25 percent of marine and coastal areas by 2025.

The planting of forests and trees are nature-based solutions in providing shade from the heat, controlling soil erosion, providing habitat for many species, and improving water quality. Trees also serve as a nature-based climate solution through the absorption of greenhouse gases, regulating water levels and cooling cities. Interview respondents frequently talked about how they draw on expertise from other disciplines from forest ecologists to water resource engineers to design landscapes that preserve these natural amenities.

Don River Mouth Naturalization & Portlands Flood Protection Project, Toronto

The Don Mouth Naturalization Project constitutes the southern-most sector of the Don River corridor revitalization. The project carves a new valley corridor through a massive industrialized landscape that historically was the river delta but had been landfilled for harbour purposes years ago. These lands, highly prone to major flooding, have remained derelict in many cases for redevelopment due to major flood and soil contamination constraints.

The Don Mouth Naturalization and Portlands Flood Protection Project (DMNP) includes the building of a new river mouth, a reconstructed river valley geography that will establish ecological health for the area, and an island totalling \$1.25-billion, to create a functional river passage of water –all reducing about 290 hectares of flooded contaminated land. The consultant and agencies teams include landscape architects at the lead, hydrologists, ecologists, engineers and flood modellers.

In addition to improving the river flow functions, the community benefits with 12 ha. of new parkland, 4 ha. of land-based habitat and 13 ha. each of aquatic and wetland habitat. The new island will accommodate a new 22 hectare waterfront community by 2040. This new community is planned to house 10,700 people with full amenities and mixed-use buildings with more to come in future.

Based on the benefits that this new river corridor provides for city building, mega infrastructure renewal and community health, the municipal, provincial and federal governments are committed to shared funding for this innovative undertaking that unlocks past urbanization dilemmas. The project is the largest river/community redevelopment in the country.

Section 4.12: Reconciliation with Indigenous Peoples

Collaboration with Indigenous partners and communities is being embraced by landscape architects

Interview participants noted Indigenous perspectives are gaining prominence in landscape architecture projects. Indigenous communities have a strong connection to the land making them a natural fit for collaboration with landscape architects. Interview respondents commented on the importance of ensuring Indigenous cultures are reflected in landscape designs.

The Truth and Reconciliation Commission final report called upon the corporate sector to commit to meaningful consultation with Indigenous peoples prior to undertaking economic development projects. Given their key role in project development, landscape architects are positioned to help ensure new projects are developed with appropriate engagement and representation of Indigenous Peoples.

Interview respondents commented that there is much that can be learned from Indigenous peoples about respecting and protecting land to improve the practice.

The Forks, Winnipeg

The Forks has been a meeting place for Indigenous peoples for over 6,000 years. Public art and design elements throughout the Forks pay homage to past and present Indigenous peoples.

Examples include the Oodena Celebration Circle, an amphitheatre used for recreation and ceremonies; Niimaamaa a sculpture by Indigenous artists that depicts mother earth; and the "Path through time" sculpture that illustrates an Indigenous campsite from thousands of years ago.



Section 5.0:

Education and Training

Section 5.1: Introduction to Education and Training

Education and training overview

Landscape architects start their professional role through the completion of a landscape architecture program. Education and training is important as it develops the knowledge base and skills necessary for employment.

This section describes the current education programs providing training and identifies emerging challenges and opportunities, including:

- Enrollment in Canadian landscape architecture programs, including international enrollment
- Equity, diversity, and inclusion
- Environmental and social issues in programming
- Number of graduates and employment prospects
- Co-ops and internships

Summary of Key Findings for Education and Training

- Enrollment across programs has been stable, including through the COVID-19 pandemic.
- Programs have made efforts to promote diversity and inclusivity, but still face challenges to achieve better representation of students from diverse backgrounds.
- There is growing awareness of the need to adapt accreditation and curricula to respond to environmental and social issues, particularly reconciliation and climate change.
- International students are important in supporting enrollment in programs.
- Graduation from accredited programs has increased from 2014/15 (131 students) to 2018/19 (161 students). Graduate programs do not expect to expand in the short term.
- Recent graduates are successful at finding employment.
- Employment growth is not expected to exceed the rate of retirements over the next 10 years and the current unemployment rate for landscape architects is low. Graduate programming is not expected to expand, limiting graduation rates and resulting in an additional challenge to employment growth.
- Accreditation standards and curricula do not always align with employer expectations.
- All programs offer a formal or informal co-op or internship, which are important for student exposure to employers and gaining practical experience.

Section 5.2: Landscape Architecture Programs

The number of landscape architecture programs across Canada showcase the depth and breadth of available programming

There are six accredited graduate programs (Master of Landscape Architecture) and one undergraduate program (Bachelor of Landscape Architecture) in Canada.

Accredited programs meet the standards of the Landscape Architecture Accreditation Council and are accredited through the CSLA.

There are four unaccredited landscape architecture programs in Canada. Of those four, the University of Dalhousie Landscape Architecture Bachelor of Technology is an accreditation candidacy program and is in the process of aligning their program with accreditation standards.

Table 5.2-1: Landscape Architecture Programs (Accredited and Unaccredited) in Canada, as of 2023

Accredited Landscape Architecture Programs in Canada Master of Landscape Architecture (MLA) or Bachelor of Landscape Architecture (BLA)
University of British Columbia, School of Architecture and Landscape Architecture (MLA)
University of Calgary, School of Architecture, Planning, and Landscape (MLA)
University of Manitoba, Faculty of Architecture, Department of Landscape Architecture (MLA)
University of Guelph, School of Environmental Design and Rural Development (MLA and BLA)
University of Toronto, John H. Daniels, Faculty of Architecture, Landscape, and Design (MLA)
Université de Montréal, Faculté de l'aménagement (MLA)
Unaccredited Landscape Architecture Programs in Canada
Université de Montréal, Faculté de l'aménagement (BLA)
Dalhousie University, Faculty of Agriculture, Department of Plant, Food, and Environmental Sciences, Landscape Architecture, Bachelor of Technology (BTech)
Northern Alberta Institute of Technology (NAIT), Landscape Architectural Technology Diploma
Fanshawe College, Landscape Design Ontario College Advanced Diploma

Section 5.3: Enrollment in Canadian Programs

Enrollment across landscape architecture programs has been stable, including through the COVID-19 pandemic. Program expansion is dependent on studio size.

Enrollment at accredited graduate programs ranged from a total of 118 students to 149 students across Canada. Graduate programs are seeing more demand than spaces available. Graduate programs do not expect to expand program offerings in the short term, as available studio spaces are a limiting factor for enrollment. Studio expansion is limited by physical space, available instructors and resourcing, and program financing.

Enrollment at unaccredited programs in Canada over the past 5 years:

- NAIT indicated enrollment has been stable but saw a decline in the demand and total applicants due to the COVID-19 pandemic.
- Université de Montréal (BLA) accepts approximately 50 students out of 300 applicants, on average, each year.
- Fanshawe College’s Landscape Design Diploma had 35 students in the 2022/2023 school year. Interviews identified that enrollment has been stable but demand has been limited as prospective students may opt for the University of Guelph’s program instead.
- Dalhousie University Landscape Architecture (BTech) had approximately 40 students enrolled in the 2022/2023 school year.

Table 5.3-1: Enrollment at Accredited Landscape Architecture Programs in Canada Over the Past 5 Years (Average)

University	Number of Students Accepted Each Year
University of British Columbia	20 to 30 students (MLA)
University of Calgary	12 to 16 students (MLA)
University of Manitoba	20 students (MLA)
University of Guelph	65 students (BLA) and 16 to 18 (MLA)
University of Toronto	35 to 40 students (MLA)
Université de Montréal	15 to 25 students (MLA)
Total	118 to 149 students (MLA) 65 students (BLA)

Source: CSLA KPI Program 2023

Section 5.4: Equity, Diversity, and Inclusion in Programming

Landscape architecture programs have made efforts to promote diversity and inclusivity, but still face challenges to achieve better representation of students from diverse backgrounds

Landscape architecture programs reported a diverse student population representing a variety of backgrounds and nationalities. Program representatives noted objectives to increase representation from a diversity of cultural backgrounds

Interviews identified that there has generally been more women than men enrolled in programs.

Landscape architecture is a highly educated profession with over 95% of landscape architects reporting they have a university education (advanced degree or Bachelor's degree). Indigenous students often face barriers entering and completing post-secondary education programs (Nelson et al. 2018) which may contribute to lower representation of Indigenous people in the profession. Some universities reported incorporating Indigenous programming such as Indigenous design conferences and studios that include engagement with Indigenous communities.

International students represent a large proportion of the student base (**Section 5.6**) and come from diverse backgrounds, including China, Iran, and India.

Challenges to achieve better representation of a diversity of cultural backgrounds relate to messaging and the historical exclusivity of the field

To encourage better representation from different cultural backgrounds, training institutions have implemented measures including equity, diversity, and inclusion funds, advisory boards, and award programs.

According to Statistics Canada data, as of 2016 only 25 landscape architects identified as Indigenous. Progress towards increased Indigenous representation is slow and faces challenges related to attracting and supporting candidates, and the historical exclusivity of the field. Efforts are being made and universities have acknowledged that change may take time.

Section 5.5: Environmental and Social Issues in Programming

There is growing awareness of the need to adapt accreditation and curricula to respond to environmental and social issues, particularly reconciliation and climate change

Most programs consider environmental sustainability a fundamental core value. Programs have integrated climate change topics into multiple courses. Interviews identified the need to build these topics into accreditation and curricula as professionals are modifying their approach to design to adapt to the changing conditions.

Interviews identified the importance of teaching students about historical context and positive challenges associated with reconciliation. Of importance is working with Elders and First Nations in programming and ensuring students are better prepared on these topics heading into the workforce, which is seen as an attribute for employment. Interviews identified the potential harm associated to a lack of focus on reconciliation if it is not integrated into accreditation and curricula. This presents an opportunity to align with the CSLA's adoption of the United Nations Declaration of the Rights of Indigenous Peoples.

Specific courses and opportunities exist for students to learn about environmental and social issues and how to incorporate the themes into their work. Students are encouraged to integrate interests into their studio work as it helps students evolve their perspectives on the topics.

Opportunity exists for programs to build environmental and social issues, particularly reconciliation and climate change, into curricula and accreditation.

Landscape architecture programs showcase a variety of methods to bring environmental and social issues into programming

Examples include:

- Social justice themes, including reconciliation and Indigenous representation, have been approached through community design studios and public consultations.
- Encourage student interest, particularly in studio work.
- Growing course list representing environmental and social topics, such as courses on climate resilience.
- Guest speakers and affiliations with associations and agencies, including workshops with professionals discussing practical examples of addressing environmental and social issues.

Section 5.6: International Enrollment

International student are important in supporting enrollment in landscape architecture programs

International student enrollment has been stable over the last 10 years (with exceptions due to COVID-19 and travel restrictions) as demand for a North American degree remains high. International students tend to come from the USA, China, Iran, and India.

International students generally pay more tuition and make up a large proportion of the revenue for departments. International students pay approximately twice the tuition amount compared to domestic students, although this varies by program.

International students form a material amount of the student body in programs and are an important demographic to help sustain program growth. International students make up anywhere from 5% to 60% of the student cohort in accredited programs and 10% to 20% in unaccredited programs.

The University of Guelph landscape architecture department does not receive revenues from international tuition. Revenues go to the university as a whole. The University of Guelph landscape architecture department is working towards a Course Based Master's program that would see 50% of international tuition remain with the department, which would ultimately encourage and increase international student enrollment.

Table 5.6-1: Approximate Proportion of International Students in Landscape Architecture Programming

Accredited program	Approximate proportion of international students
University of British Columbia	20% (MLA)
University of Calgary	40% to 60% (MLA)
University of Manitoba	20% (MLA)
University of Guelph	10% (BLA); 5% (MLA)
University of Toronto	Not available
Université de Montréal	10% (MLA)
Unaccredited program	Approximate proportion of international students
Université de Montréal	10% (BLA)
Dalhousie University	Not available
NAIT	10% to 20%
Fanshawe College	10%

Source: CSLA KPI Program 2023

Section 5.7: Graduates

Graduates from accredited landscape architecture programs has increased since 2014/15

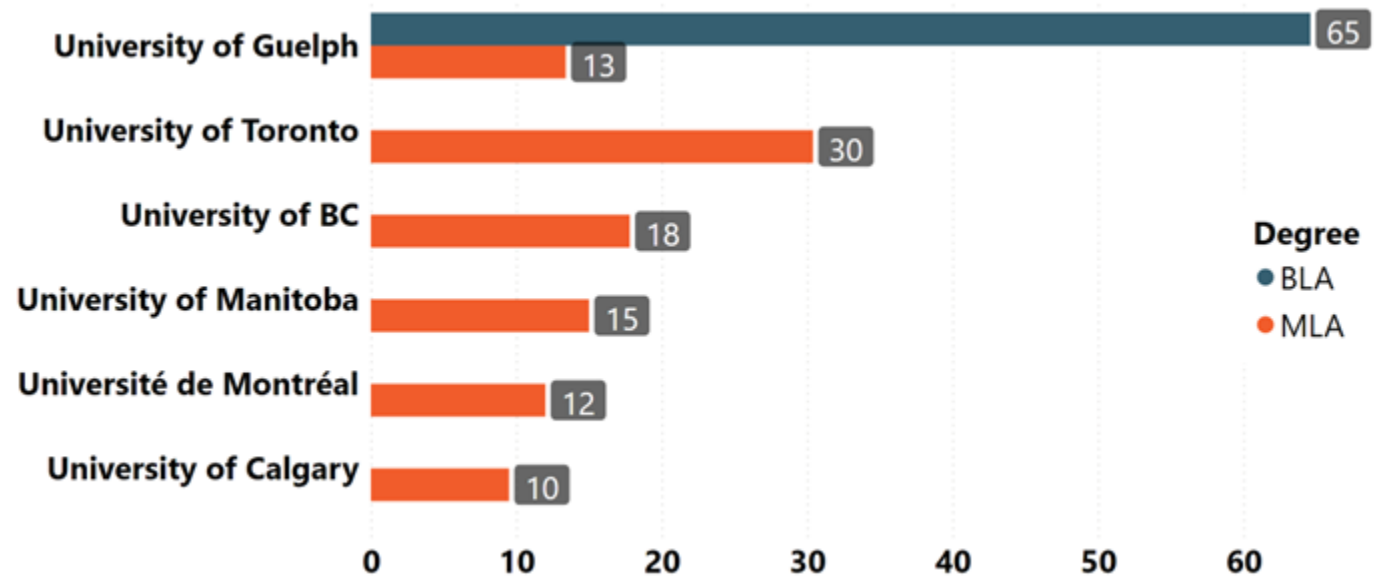
The number of students graduating from university-level landscape architecture programs has increased from 2014/15 to 2018/19 from 131 to 161, peaking in 2017/18 at 175. Graduate programs do not expect to expand program offerings in the short term. The 2023 CSLA membership survey identified that the majority of CSLA members obtained their education within Canada (83%).

The University of Guelph has the largest accredited landscape architecture program, averaging a total of 78 BLA and MLA graduates per year. The University of Toronto has the highest number of MLA graduates, averaging 30 per year. This aligns with findings from interviews.

Unaccredited programming ranges from approximately 15 to 30 graduates each year.

Interviews identified that there is opportunity for recent graduates to find employment and not many recent graduates are struggling to find jobs. Graduates and employment prospects are discussed in **Section 5.8** and unemployment rates in **Section 2.8**.

Figure 5.7-1: Average Annual Landscape Architecture University Graduates by Accredited Program, 2014/15 to 2018/19



Source: CSLA 2023.

Section 5.8: Graduates & Employment Prospects

Recent graduates are successful at finding employment

Interviews identified significant opportunity for recent graduates to find employment. The majority of recent graduates find employment at a traditional landscape architecture firm. Each university offers some connection with firms, through a formal or informal co-op or internship program, to help introduce current students to potential employers which may translate into employment for recent graduates.

For universities in British Columbia and Ontario, many graduates from out-of-province tend to stay in the province where they went to school. For universities in Manitoba and Alberta, graduates from out-of-province tend to return to their home province.

Most international graduates tend to stay in Canada to seek employment or as a path to citizenship/permanent residency. International graduates that return to their home country may do so because of visa issues, a desire to take knowledge back to their home country, job prospects in their home country, and family, among other reasons.

Although all universities and colleges qualitatively reported excellent employment prospects for those graduating from their landscape architect or landscape architect-related programs, quantitative data on graduate employment post-University or College is not publicly available from all institutions.

With a low unemployment rate and a large number of retirements taking place over the next 10 years, there will be a need for more landscape architects to enter the workforce.

Retirements are expected to be the largest driver of job openings in landscape architecture from 2022 to 2031, (**Section 2.7**) consistent with the increasing proportion of landscape architects over the age of 65 (**Section 2.12**). With a low unemployment rate (**Section 2.8**), there will be a need for more landscape architecture graduates. Studio size was identified as a key limitation on the ability to expand enrollment and there are currently no plans to expand accredited programming across Canada (**Section 5.3**), presenting an additional challenge to employment growth.

Accreditation standards and curricula do not always align with employer expectations

Some challenges with matching the skills learned in academic courses to the practical and technical needs of employers were noted during interviews. Employers want people who are technically adept and can use software programs upon hire, with little to no training. Many landscape architecture firms may use different software than what a university provides training on.

An opportunity exists to align employer needs with technical and software program exposure through course work and curriculum or co-ops.

Section 5.9: Co-op or Internship Programs

All landscape architecture programs offer a formal or informal co-op or internship. These opportunities are important for student exposure to employers and practical experience.

Interviews with academics and working professionals identified the importance of co-ops and internships for students receiving exposure to employers and building connections, including exposure and collaboration with other disciplines.

Interviews identified that co-ops and internships may lead to employment with a firm and the ability for students to gain relevant and practical work experience.

A theme identified in interviews is that demand for programming exceeds the availability of placement and there is desire among the student body to participate in co-ops and internships.

Available co-op or internship programs:

- University of British Columbia offers a co-op program. Students are tasked with lining up a firm for placement.
- University of Calgary has a work-integrated learning program in collaboration with firms.
- University of Manitoba offers a co-op program that is faculty wide with approximately 40 spots and at least 3 times the applicants. The majority of applicants are architecture students.
- University of Guelph offers an internship in its BLA program. There is no internship or co-op at the MLA level, but students are provided support with placement for employment at a firm.
- The University of Toronto does not have a formal co-op or internship program but receives internship notices from firms and distributes to students.
- Université de Montréal has internships available for the BLA and MLA programs.
- Dalhousie University does not have a co-op program as part of its curriculum, but students can earn credit by working for a firm.
- NAIT is launching a co-op program in collaboration with the Alberta Government. The program will begin in spring/summer 2025.
- Fanshawe College has a required co-op program.

Section 5.10: Key Challenges and Opportunities

Key challenges in education and training include:

- There are a number of landscape architecture programs across Canada that showcase the depth and breadth of available programming. The demand from applicants is greater than the availability of spots for enrollment. Graduate programming is dependent on studio size.
- Landscape architecture programs have made efforts to promote diversity and inclusivity, with challenges still in place to achieve better representation among cultural backgrounds. Challenges to achieve better representation of a diversity of cultural backgrounds relate to messaging and the historical exclusivity of the field.
- Accreditation standards and curricula do not always align with employer expectations.
- Employment growth is not expected to exceed the rate of retirements over the next 10 years and the current unemployment rate for landscape architects is low. Graduate programming is not expected to expand, limiting graduation rates and resulting in an additional challenge to employment growth.

Key opportunities in education and training include:

- An opportunity exists for programs to build in environmental and social issues, particularly reconciliation and climate change, into curriculums. This presents an opportunity to align with the CSLA's adoption of UNDRIP.
- Demand for international students to enroll in North American landscape architecture programs is high and program growth is influenced by international enrollment.
- Interviews identified that there is opportunity for recent graduates to find employment and not many recent graduates are struggling to find jobs.
- An opportunity exists to align employers needs with technical and software program exposure through course work and curriculums or co-ops.
- Co-ops and internships present an opportunity to expose students to employers and gain practical experience.

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