UTM CAREER CENTRE

INDUSTRY PROFILE:

Urban Planning



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What Do Urban Planners Do?

Want to tackle the big challenges of today and **shape the places we live** for future generations? Consider a career in urban planning.

What is Urban Planning?

Urban planning is concerned with shaping the built, natural, and social environment in communities large and small for the public good. Professionals who work in this field typically develop plans and recommend policies for managing land use, physical facilities, and services for urban and rural areas. Fields of planning may include residential, social, environmental, transportation, and others.

Urban planners work in the public service and the private sector, in areas such as land use planning, environmental resource management, land development, heritage conservation, social planning, transportation planning, and economic development. Whether working in the public or the private sector— a planner's work always touches on public policy, balancing private interests with the public interest.

Urban design and urban planning are related but different. Urban planning is concerned with planning the structures of a city, including its policies, infrastructure, neighborhoods, building codes, and regulations. The focus is more technical and political, and is on the strategy, structure, and policy level.

On the other hand, urban design is the creation of city features based on plans. It includes everything from public space to infrastructure, as well as transportation, landscapes, and community accommodations. It is focused on design and user experience and operates at the features and systems level.

What do urban planners do?

Urban Planners, also called Regional or City

Planners, help communities decide how best to use their land and resources with an eye toward future growth and revitalization. They may recommend locations for roads, schools, and other infrastructure in order to help local officials solve social, economic, and environmental problems. This involves overseeing all aspects of planning, including reviewing research on economic and environmental impacts.

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What Do Urban Planners Do? (cont.)

In the course of their work, urban planners prepare plans and studies, create and interpret maps and diagrams, conduct inspections and prepare site approval documents. They often coordinate with other local governments, meet with public officials and community members regarding development plans and land use and recommend approval or denial of proposals.

Junior Planner

A Junior Planner assists senior planners by preparing and presenting detailed reports on development proposals to government bodies, collecting a variety of statistical data, reports and maps on census information, land use, transportation tax base data and occupancy rates. The junior planner may also coordinate community review of public and private development projects and help to resolve citizen and customer issues. For an entry-level planner, depending on the organization, the minimum requirements are a Bachelor's degree or diploma in planning, communications, public relations, or business. Familiarity with the Ontario and the Canadian Environmental Assessment Acts would be considered an asset.

Land Use Planners

Land Use Planners are responsible for creating plans that meet the needs of people and communities, while still preserving the natural environment. Duties vary significantly from job to job, but typical tasks could include preparing plans for environmental protection such as wildlife preserves, national and provincial parks, and watershed protection. Land use plans are also required for housing, transportation systems, farms, and parks. Land use planners study the physical land and an area's people to make sure that the proposed land use is appropriate, and hold public meetings to present plans, proposals, and studies to the general public and special interest groups for feedback. Land use planners may also process applications for land development permits and supervise and co-ordinate the work of urban planning technicians and technologists.

Transportation Planners

Transportation Planners plan the transport systems of tomorrow. Depending on where they work (public or private sector), that could be planning the next generation of roads or light rail routes. They could be involved in carrying out a feasibility study or engaged in government policy, or planning the fine details before construction begins.

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What Do Urban Planners Do? (cont.)

In the public sector, transportation planners may work for government bodies or contractors, examining current traffic and population trends and determining the feasibility of proposed roads. They work with other professionals such as transport engineers, developers and environmental planners, to ensure that new residential developments, or commercial or industrial zones, have the correct transport infrastructure and adhere to environmental legislation. In the private sector, transportation planners may work for public transport companies, analyzing the effectiveness of schedules, and volume of transport services to ensure they are working efficiently and recommend improvements.

Land Surveyors

Land Surveyors determine legal property boundaries. They provide data and compile legal documents—called surveys—for building, mapmaking, and real estate projects. Those who work in this discipline might be called land, site, or property surveyors. Surveyors may work in different fields. For instance, homeowners or business owners might hire a surveyor when there's a need to ascertain property lines. Establishing legal property boundaries in this way can help prevent or settle disputes having to do with land usage and property ownership. Government agencies also use surveyors when building roadways and other infrastructure to ensure proper construction and location.

These professionals conduct physical site surveys using a variety of equipment and tools, prepare sketches and notes, and perform electronic data collection. They coordinate field staff and process field data and work with civil engineers, landscape architects, cartographers, or urban planners. Land surveyors verify the accuracy of survey data, including measurements and calculations conducted at survey sites, calculate areas of land parcels and easements using mathematics and computer software and research previous survey evidence, including maps, deeds, physical evidence, and other records to obtain data needed for surveys. Finally, they prepare site survey documents and present findings to clients.

Landscape Architects

Landscape Architects design residential areas, parks, shopping centers, golf courses, and school campuses to make them both beautiful and functional. They must also ensure that these facilities are compatible with the natural environment. A landscape architect might work with other professionals, including civil engineers, hydrologists, and architects to outline possible solutions to problems and determine their needs. They must consider environmental factors, such as draining and energy availability, prepare site plans and graphic representations of plans using computer-aided design and drafting (CADD) software, prepare cost estimates and oversee the project's budget. Landscape architects can be hands-on, periodically visiting job sites to check on the progress of projects and to make sure they're meeting specifications.

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What Do Urban Planners Do? (cont.)

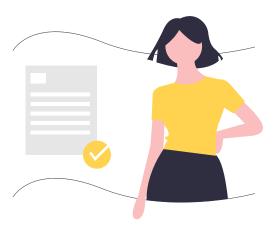
Urban Designer

As an Urban Designer, you'll create practical and visually pleasing places, including buildings, open spaces and landscapes. You'll help to bring viable developments to life, ensuring that the environments you create are both useful and enjoyable. As a Junior Urban Designer, you will work on a variety of projects from urban infill to master plans to policy documents and analysis reports. You will typically work within a team of urban designers, architects and planners, providing research, design and illustration support. Junior urban designers must have the ability to produce conceptual and detailed design packages, with supporting graphics and analysis. Knowledge and experience with various technology such as MicroStation, AutoCAD, Sketchup, Adobe InDesign, Illustrator and Photoshop.

Becoming Certified as a Professional Planner

Currently, the urban and land use planners' profession is not regulated, but only members of the Ontario Professional Planners Institute (OPPI) can use the title 'Registered Professional Planner (RPP).'

For more information about the path to RPP certification, visit the OPPI website.





By 2050, 68%...

Of the world's population is projected to life in cities.



People living in Toronto...

Over the age of 65 will grow by +59% (or 700,000 people) by 2030

Toronto house prices...

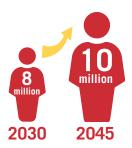
Are expected to reach 10.5% over 2019 prices to an average of \$949,000 by the end of 2021 (predicted by Canada Mortgage and Houosing Corporation [CMHC]).

Over 500,000 people in Toronto...

Will live in **low-income households** by 2030. The waitlist for social housing will grow to approoximately 120,000 households.

In the GTA...

(Greater Toronto Area) the population is projected to hit:



GTA residents spend 8 hours...

On average commuting each week, which is more than L.A., NYC, and most other big cities (C.D. Howe Institute).

Congestion costs the economy...

\$11 billion each year, more than Ontario spends on transit and highways.

There are about 10,200...

Planning professionals in Canada, (Canadian Institute of Planners [CIP]).

About 3,000 people...

Work as urban and land use planners in Ontario; 92% of which work full-time and 8% working part-time.



Smart cities and car alternatives are two proposed solutions to urban issues

Universal Issues for Cities

Communities and cities around the world are facing the same challenges – how to address the impacts of climate change and reduce carbon emissions, a growing and aging population, technological change, the rapidly evolving global economy and work, providing infrastructure, public services, affordable housing, transit, employment and recreation opportunities.

Planning professionals are at the forefront of these complex and interrelated challenges, working to help define the issues and propose solutions.

"Climate change and a lack of affordable housing are two of the most pressing emergencies in contemporary times," says James Brasuell, managing editor of <u>Planetizen</u>.

Certainly, these are two wicked problems that Ontario and the GTA are grappling with.

We know that transportation fueled by gasoline and diesel (read cars and trucks), is Ontario's biggest source of greenhouse gas emissions (GHG). And people in the GTA spend an average of eight hours per week commuting, more than Los Angeles or New York City, according to the C.D. Howe Institute.

In a <u>Feb. 2020 blog</u>, Ontario's last environmental commissioner, Dr. Dianne Saxe, lays the blame on decades of policies that have encouraged urban sprawl, forcing most Ontarians to live far from where they work. In March, 2019, the Ford government shut down the Office of the Environmental Commissioner, a non-partisan, independent watchdog agency, amidst much criticism.

In Saxe's opinion, "policies of the provincial government, and of many municipalities, are actively increasing sprawl, directing hundreds of thousands of people to new distant suburbs with high fossil fuel use, high servicing costs, few employment opportunities, and densities too low to support public transit."

A solution Saxe proposes is to "add the housing that people need in compact, complete communities while revitalizing the inner suburbs and other built-up areas that today are stagnant or losing population."

She says that it is imperative for government planners and politicians to put a climate lens on all of their decisions.



Industry Trends (cont.)

"Smart Cities"

With a view to vastly reducing GHGs and increasing affordable housing, one of the most controversial trends to emerge in urban planning is the concept of "smart cities." In 2019, Google sister company, Sidewalk Labs, in partnership with Waterfront Toronto, presented a draft master plan to develop Quayside, a section of Toronto's waterfront. According to Sidewalk Labs, the proposed development would generate revenue for the government, create jobs, affordable housing, promote transit, walking or cycling, reduce greenhouse gas emissions and waste, all facilitated by the innovative use of technology.

Although the development has the potential to deliver a number of benefits to the city, the proposal met with strong opposition from some quarters. A citizen's group, #BlockSidewalk, raised multiple concerns, among them data privacy and ownership, surveillance and the viability of technologies.

After evaluating Sidewalk Labs' plan, which went far beyond the terms of the original request for proposals, the City of Toronto and Waterfront Toronto dramatically reduced the size of the project. The deadline for a decision on whether to move forward was extended to May, 2020, to allow for more public consultation.

As one commentator said, "What role will planners have left in the development process once large tech companies turn machine learning and advanced sensors loose on the planning process?"

While the utopian promise of smart cities remains a question mark, whether living in the city or the suburbs, people need to get around.

Transit (in the GTA)

Transit has been a perennial problem in the GTA, with politicians at odds over what should be built, subways or light rapid transit. After decades of slow progress, the Ontario Government announced in 2019 it would fund the Ontario Line and other rapid transit around the city and out to the suburbs. In October 2019, the City of Toronto approved the transit deal, estimated to cost a total of \$28 B. Experts say it's a 'win-win' and a good deal for riders. The plans include connecting the Ontario Science Centre to Exhibition Place, a Yonge-North subway extension to Richmond Hill, an Eglinton LRT west extension to Pearson Airport and a Scarborough subway extension.

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This is good news for frustrated transit riders, although the plan to build new lines by 2027 to 2030 is ambitious. Research shows that it takes 30 years for transit projects to be built in Toronto, according to Matti Siemiatycki, interim director of U of T's School for Cities.

To encourage more people to take transit rather than drive, in 2017, the City of Toronto implemented the King Street Pilot, which blocked cars and gave priority to streetcars on a stretch of King Street, the city's busiest surface transit route. This resulted in a 16 per cent increase in ridership and the pilot was made permanent in 2019.

Alternative Options

Aside from mass transit, cities are also experimenting with other options for getting people around. Ride-hailing services like Uber and Lyft are now a fixture, although they come with regulatory and other issues. Services such as bike-sharing and car-sharing have been around for a while.

The latest in alternatives to cars are electric bikes and scooters. After Montreal piloted dockless electric scooters in 2019, the city declared the experiment a failure, citing safety issues for pedestrians and non-compliance with the city's rules. Moreover, e-scooter sharing is relatively expensive, so it isn't accessible for many. The city will still allow electric bike sharing.

Housing Affordability

Despite the problems inherent in urban sprawl, housing affordability in the GTA remains a persistent issue. By the end of 2021, Toronto region housing prices are expected to increase more than 10 per cent over 2019 prices to an average of \$949,400, according to Canada Mortgage and Housing Corporation (CMHC).

What's more, the City of Toronto's HousingTO 2020-2030 report states that "high rental and ownership costs have left over 194,000 households (or 17.5% of all private households) paying more that 50% of their income on housing. Toronto's population is estimated to grow by up to one million new residents by 2030 and the rental housing vacancy rate is currently at 1%."

To address the housing needs of this vulnerable population, the report calls on all levels of government to invest \$23.4 billion over 10 years to provide supportive housing, rent relief, and access to new, affordable housing.

In response, in December, 2019, after years of vowing not to increase property taxes in the city, Mayor John Tory announced an increase of eight per cent in property taxes over the next six years to be dedicated to transit and building 40,000 new affordable homes. The City of Toronto currently has among the lowest residential property taxes in the GTA.



Industry Trends (cont.)

Mixed-Use Development

One creative way to address the issue of providing housing and services in cities is mixed-use developments and it's an area where Toronto is a world leader. Mixed-use developments are "buildings that integrate multiple functions so that residents can live, work and play in the same space."

Over the next decade, mixed-use buildings are set to rise in popularity. Examples are a condo developer partnering with a church or a women's shelter to locate in its building. In a recent <u>University of Toronto Magazine article</u>, U of T's Siemiatycki says these are "the way of the future, since they enable the city to offer an array of public and social services in spite of its density and high cost of living."



The Suburbs

Although cities are where most of the world's population now lives, the suburbs are still an important concern for urban planners.

In May, 2018, the University of Toronto launched the <u>School of Cities</u>. Its mission is to "convene urban-focused researchers, educators, students, practitioners and the general public to explore and address complex urban challenges, with the aim of making cities and urban regions more sustainable, prosperous, inclusive and just."

In a Globe and Mail interview, U of T President, Dr. Meric Gertler, un urban geographer by profession, spoke about the importance of the suburbs. "Car-oriented suburban neighbourhoods are where most Canadians live and where many of the most difficult policy challenges now lie. Given that such a large proportion of new Canadians end up settling in such places and that these places are where a disproportionate number of disadvantaged people are living, I think it's important to have a focus on the success of suburbs."

At a time when so many critical issues are threatening not only the places where people live, but the planet itself, the role of urban planning professionals has never been more important.



Employment Outlook for Professionals in Urban Planning

According to the Ontario Government's most recent outlook report, the employment outlook for Dietitians (NOC 3132) in Ontario is above average up to 2021, with job growth of 110% across Canada between 2008 and 2017.

Urban and Land Use Planners

The employment outlook will be **good for Urban and Land Use Planners** (NOC 2153) in the Toronto region up to 2021, according to the most recent Ontario government labour market report.

Many areas of the Toronto region are experiencing fast business and population growth, including the downtown core of the City of Toronto and generally across the GTA. These trends are spurring robust residential and non-residential investments and developments. Job prospects for urban and land use planners should also be supported by infrastructure investments in flood protection projects at the Toronto waterfront, and across other areas as well as investments in transit and related developments.

Nearly half of Ontario's urban and land use planners are employed in public administration, mainly at the municipal and regional levels of government. Within the private sector, architectural, engineering and related services firms are key employers.

Demand for these professionals is supported by government and community needs to achieve sustainable development, given changing demographic and economic trends.

Many areas of the province are seeing rapid business and population growth, resulting in high levels of new residential construction, especially of multi-unit and mixed-use condominium developments, which include commercial facilities.

There is an increase in government investments or commitments to redevelop or construct transit facilities, hospitals, creative hubs, and cultural spaces, including heritage institutions. Further, several initiatives are focused on improving stormwater management systems and other infrastructure to reduce the risks of flooding caused by climate change. During the forecast period, job openings should arise for urban and land use planners to provide expertise, including environmental assessments, municipal approvals, and to ensure compliance with zoning bylaws for these developments.

The construction-related field is integrating more advanced technology into its processes.

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Employment Outlook for Professionals in Urban Planning (cont'd)

Urban and land use planners are expected to take advantage of the growing popularity of virtual reality (VR) and augmented reality (AR) tools to aid in the design and communication about building projects. The knowledge requirements for these professionals will also be affected by designs for 'smart city" developments.



Employers tend to seek individuals who are members of, or eligible for membership in the Ontario Professional Planners Institute (OPPI) and the Canadian Institute of Planners (CIP). In addition, positions usually require formal education in a related field such as urban, rural or regional planning, environmental studies or geography. A master's degree in a related planning field is considered an asset.

Landscape Architects

The employment outlook will be **good for Landscape Architects** (NOC 2152) in Ontario up to 2021.

In Ontario, landscape architects are mainly employed by architectural, engineering and related services firms. Other key employers include local and municipal governments, and companies providing services to buildings and dwellings.

Demand for these professionals is largely driven by investments in public infrastructure, residential expansion, land development and revitalization.

A significant number of public construction projects and initiatives are being undertaken and planned. These include developments focused on extending green outdoor spaces, and strengthening storm water management systems to reduce the risks of flooding. Other institutional expansions such as in schools, hospitals and transit facilities should also generate a number of job openings for landscape architects.

Architectural firms and companies providing landscape services to buildings and dwellings should also benefit from changes to the environmental, climate and energy regulations in Ontario.

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Employment Outlook for Professionals in Urban Planning (cont'd)

Similar to the City of Toronto's Green Roof Bylaw (2009), municipalities across Ontario can now require these roofs be built on certain residential and non-residential buildings as part of their Building Codes under 'Bill 68, Modernizing Ontario's Municipal Legislation Act, 2017.' The vegetation will cover a substantial portion of the roof areas.

Further, alongside the increase in urbanisation and high-density developments, is the growing need for recreational amenities such as bike lanes, parklands, and trails, which bode well for landscape architects.

Yet, regulatory changes such as the Non-Resident Speculation Tax and the federal mortgage stress test could soften the potential level of investments in the housing market and mitigate some of the possible job opportunities for these professionals.

Currently, the practice of landscape architecture is not regulated in Ontario, but only members of the Ontario Association of Landscape Architects (OALA) can use the title 'landscape architect.' In most instances, applicants seeking full membership in the OALA are required to complete a period as an 'associate' or 'landscape architectural intern.' The number of years of internship depends on the applicant's level of education and experience.

Employers often recruit individuals who are members of, or are eligible to be registered with the OALA. Other common requirements for this field include experience using drawing software such as AutoCAD and SketchUp, and publishing software including Photoshop, Illustrator and InDesign.

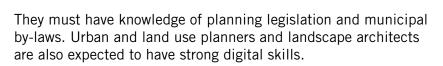
New entrants to the profession mainly include graduates of bachelor's and master's degree programs in landscape architecture. Since there is a limited number of educational institutions in Ontario offering training at the Bachelor's and Master's degree levels, this could somewhat constrain the potential size of the workforce in this occupation.





What You Need To Succeed

Urban planning professionals should have strong analytical and critical thinking skills and be adept at data analysis, measurement and calculation, budgeting and project management. Well developed written communication, public speaking and facilitation skills are also key. Urban planners are leaders and problem solvers who need to be flexible and adaptable.







In-Demand Jobs and Salary Ranges

Job Title	Salary Range
Landscape Architect	\$34,384 - \$110,370
Land Surveyor	\$36,075 - \$112,340
Land Use Planner	\$66,788 - \$112,515
Transportation Planner	\$49,750 - \$103,370
Urban Designer	\$67,072 - \$115,545
Junior Urban Designer	\$55,565 - \$74,208
Urban Planner	\$59,097 - \$117,060
Junior Planner	\$42,202 - \$80,197



Where the Jobs Are

These industries show the strongest demand for public health professionals:

- Colleges and universities
- Federal, provincial and municipal governments
- Engineering and other consulting companies
- Land and economic development companies
- Transport agencies
- Private consultancy





Industry Associations

Industry Associations	Website Link
Canadian Institute of Planners	http://www.cip-icu.ca/
Ontario Association of Landscape Architects	https://www.oala.ca/
Ontario Professional Planners Institute	https://ontarioplanners.ca/home
Professional Standards Board for the Planning Profession in Canada	https://psb-planningcanada.ca/



Where to Find More Information

Sources:

- Canadian Institute of Planners
- Government of Canada Job Bank
- Ontario Professional Planners Institute
- Planetizen
- School of Cities
- Sidewalk Toronto
- The Balance

Stay connected with the UTM Career Centre:

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- utm.utoronto.ca/careers
- clnx.utoronto.ca