University Works uses empirical data to report on the outcomes of university graduates in terms of employment levels and earnings, as well as average debt upon graduation.

University graduates experienced the highest employment growth of any educational attainment group over the last decade.

Over a 40-year period, graduates from Ontario universities earn on average $1.1 million more than graduates from other Ontario postsecondary programs and $1.5 million more than the average Canadian high school graduate.

On average, graduates of Ontario universities earn 58 per cent more than graduates from other Ontario postsecondary programs.
UNIVERSITY GRADS GET JOBS
Three years after graduation, the employment rate for university graduates is 91 per cent.

Youth continue to choose university over other types of education and the labour market is producing jobs and showing demand for university graduates.

Three years after graduation, the median bachelor degree holder earns 33 per cent more than the median college graduate.
UNIVERSITY GRADS HAVE HIGHER EARNINGS
University graduates have the lowest unemployment rates, highest employment rates, and the highest lifetime earnings in Ontario.

Ontario university graduates have the third-lowest average debt from government sources among all provinces.

Aboriginal graduates of Ontario universities earn on average 49 per cent more per year than Aboriginal graduates from other Ontario postsecondary programs.

Graduates of Ontario universities who are immigrants to Canada earn on average 58 per cent more per year than immigrant graduates from other Ontario postsecondary programs. Over a 40-year period, this amounts to a $1-million premium.
Ontario university graduates have the third-lowest average debt from government sources among all provinces.
The future looks bright for university graduates and for all of Ontario in the economic outlook for 2015 and beyond.

After years of economic challenges, Ontario appears to be recovering and headed for growth, improving the outlook for both employment and earnings of university graduates.

Ontario’s economic recovery is being driven by lower oil prices, low interest rates, the growing economic strength of the United States —our major trading partner—and the lower Canadian dollar.¹

These factors are a recipe for growth in Ontario. They increase consumer spending and business profits, keep the cost of borrowing down, provide growing markets for our exports, make our products more competitive in national and international markets, and increase tourism.

TD Bank, for example, forecasts that Ontario’s economic growth will average 2.7 per cent between 2015 and 2016 and that the province’s employment growth will be among the highest in the country.²

RBC also forecasts strong economic growth: real GDP is expected to increase by 3.3 per cent in 2015 and 2.7 per cent in 2016.³

As of February 2015, Ontario’s overall unemployment rate was 6.9 per cent, down from 9.6 per cent at the height of the recession. In that month, employment increased by 13,800 jobs.⁴

The unemployment rate for university graduates in February was 4.2 per cent—the lowest among the population.⁵ We can expect that economic growth in Ontario will create jobs and improve the employment and earning prospects of university graduates. A university education remains a highly resilient investment.

Cecilia Brain, Economist and Senior Policy Analyst at the Council of Ontario Universities, and author of this report.

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¹ “Surging growth in the US will help revive Ontario exports, says EDC,” EDC News Release, November 12, 2014.
² Provincial Economic Forecast, TD Economics, December 17, 2014; and Michael Babad, “Changing of the guard”: TD now sees Ontario as the leading economy,” Globe and Mail, December 17, 2014.
⁵ Statistics Canada, Labour Force Survey. These data are for the 25+ age bracket. The unemployment rate for university graduates in the 15+ age bracket is only slightly higher, at 4.4 per cent.
This report is structured in two parts. The first provides an overview of employment indicators over individuals’ lifetimes using data for the population 25 years of age and over. The second part focuses on employment, earnings, skills match, and student debt of recent graduates.
Lifetime success of university graduates

The first part of this report focuses on the employment outcomes of people 25 years of age and older, which can change slightly depending on the data source. For Statistics Canada’s Labour Force Survey we examine the 25-and-over age group for the whole population; for the National Household Survey, we use the 25-to-64 age group.
Between 2004 and 2014, the number of university graduates who are employed increased by 38 per cent. This represents 552,700 net jobs. Employment growth among bachelor’s degree holders was 31 per cent. Master’s and PhD graduate employment increased by 54 per cent. In comparison, college graduate employment grew by 28 per cent and trades certificate and diploma graduates experienced a significant drop in employment.

**Employment growth highest for university grads**

*Figure 1: Employment growth in Ontario for those 25 years and over by educational attainment, indexed at 2004=100*

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6. Statistics Canada, Labour Force Survey. The Labour Force Survey has not updated its questionnaire or reporting to account for applied bachelor degrees offered by publicly-funded community colleges, so it is unclear where these students are counted. The number of graduates from applied degree programs, however, is statistically insignificant when compared to university graduates as a whole, representing less than one per cent for the 25-to-29 age bracket.
The share of total employment for university degree holders rose to 34 per cent in 2014, from 27 per cent in 2004. The share of total employment for college graduates showed a more moderate increase over the same period.

University grads have highest share of employment

Figure 2: Share of total employment, 25 years and over, 2014 (top)
Figure 3: Share of total employment, 25 years and over, 2004 (bottom)

Unemployment rates for bachelor degree holders, graduate degree holders, and college graduates are lower than for others in Ontario’s labour force. In 2014, the unemployment rates for these three groups were comparable at about five per cent. Graduates from trades programs and high school graduates had significantly higher unemployment rates at 6.1 per cent and 6.5 per cent respectively.

Unemployment rate lowest for university, college grads

Figure 4: Unemployment rate for Ontarians 25 years of age and over by educational attainment

The employment rate measures the total number of graduates in each educational attainment group who are employed as a percentage of the number of people in each educational attainment group. It tells a slightly different story than the unemployment rate, which measures the number of unemployed individuals as a percentage of the labour force.

University graduates have the highest employment rates among all educational attainment levels: 73.7 per cent for those with bachelor’s degrees and 75 per cent for those with advanced degrees. The employment rate for college graduates is very slightly below that of university graduates, at 72.4 per cent.

Graduates from high school and trades programs have the lowest employment rates in Ontario at 57.7 per cent and 58.9 per cent, respectively.

**Employment rate highest for university grads, lowest for high school and trades grads**

*Figure 5: Employment rate for Ontarians 25 years of age and over by educational attainment*  

The number of university graduates has increased by 45 per cent—or 837,200—since 2004, the highest growth for any educational level. This represents an increase of 38 per cent for bachelor degree-holders and 61 per cent for master’s and PhD degree-holders. Today, Ontario universities produce more graduates while maintaining the highest employment rates and lowest unemployment rates across the population. This shows that the labour force is able to accommodate this growth in graduates, and that university degrees continue to be in demand by employers.

Growth in demand for a university education

Figure 6: Percentage change in the population, 25 years of age and over, by education attainment, 2004-2014

The National Household Survey provides data on employment income by location of postsecondary education. This allows us to determine the value of an Ontario university degree for graduates working anywhere in Canada. The data show that graduates from Ontario universities have significantly higher average employment income than graduates from Ontario colleges and Canadians with only a high school diploma.

The average graduate of Ontario universities earns 58 per cent more than the average graduate from Ontario colleges and 94 per cent more than the average high school graduate. Over a 40-year period, graduates from Ontario universities earn $1.1 million more on average than graduates from other Ontario postsecondary programs and $1.5 million more than the average Canadian high school graduate. The employment income of Ontario university graduates is also 6.5 per cent higher than the Canadian average for university graduates.

### Earnings highest for university grads, lowest for high school grads

Figure 7: Average employment income, for graduates of Ontario postsecondary institutions, 25 to 64 year olds, by location of study, 2011

- **High School Diploma or equivalent**
  - Ontario: $38,808
  - Canada: $46,176
- **Postsecondary Cert./Dipl. below bachelor level**
  - Ontario: $47,706
  - Canada: $47,706
- **University Cert./Dipl. or degree at bachelor’s level or above**
  - Ontario: $70,779
  - Canada: $75,396

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The National Household Survey also provides employment information based on immigration status and aboriginal identity. Immigrant graduates of Ontario universities earn on average 58 per cent more than immigrant graduates who attended other types of postsecondary programs. Over a 40 year period, this constitutes a $1 million premium over other postsecondary graduates.\textsuperscript{13}

Immigrants who graduate from Ontario universities earn more

\textbf{Figure 8:} Average employment income of immigrant graduates from Ontario postsecondary institutions, 25 to 64 year olds, by location of study, 2011\textsuperscript{14}

13. The National Household Survey defines immigrant as: a person who is or has ever been a landed immigrant/permanent resident. This person has been granted the right to live in Canada permanently by immigration authorities.

Aboriginal graduates of Ontario universities earn on average 49 per cent more than their peers from other Ontario postsecondary institutions. Over a 40-year period, this amounts to an $800,000 premium.

Aboriginal students who graduate from Ontario universities earn more

Figure 9: Average employment income of Aboriginal graduates of Ontario postsecondary institutions, 25 to 64 year olds, by location of study, 2011

| Postsecondary Cert./Dipl. below bachelor level | Ontario | $41,100  | Canada | $40,694 |
| University Cert./Dipl. or degree at bachelor’s level or above | | | | $58,668 | $60,520 |

Success of recent graduates

Youth employment statistics often refer to the 15-to-24 age group. According to the National Graduate Survey, 23 is the median age of graduation from a bachelor’s degree program. As a result, university degree holders account for only eight per cent of the 15-to-24 age group. The standard 15-to-24 age bracket simply does not reflect the employment outcomes of university graduates.

This report focuses instead on the 25-to-29 age group to examine the outcomes of young university graduates, based on data from Statistics Canada’s Labour Force Survey. This age bracket, of which university graduates constitute 36 per cent, offers a more representative sample from which to draw conclusions about the employment outcomes of recent graduates.

Information from the Ontario University Graduates Survey published by the Ontario Ministry of Training, Colleges and Universities (MTCU), and Statistics Canada’s National Graduate Survey was also used to assess the employment outcomes of recent graduation.
Over the last ten years, employment growth for recent graduates from bachelor degree programs was 42 per cent. In comparison, employment growth among young college graduates was 15 per cent. Employment decreased for both high school graduates and graduates from trade programs.

Employment growth highest for university graduates aged 25-29

Figure 10: Employment growth in Ontario, 25-29 year olds, by educational attainment, indexed at 2004=100

Young university graduates saw their share of total employment increase to 37.8 per cent in 2014, an increase of more than eight per cent from 2004. University graduates are also the only group in this age range to see an increase in share of employment over the last ten years.

**Figure 11:** Share of total employment, 25-29 year olds, 2014

**Figure 12:** Share of total employment, 25-29 year olds, 2004

Young bachelor degree holders have the lowest unemployment rate among their peers, at six per cent. Unemployment among young college graduates is seven per cent. Young tradespeople and high school graduates have higher unemployment rates of 7.5 per cent and 10.3 per cent respectively.

Recent university graduates have lowest unemployment rate of any educational attainment group

Figure 13: Unemployment rate for Ontarians, 25-29 year olds, by educational attainment

Ontario’s youth are increasingly choosing university over other types of postsecondary education, and the market is producing jobs for the growing number of graduates. Over the last ten years, the number of bachelor degree graduates aged 25 to 29 increased by 41 per cent, while employment increased by 43 per cent. This is the only group for which employment grew at a faster pace than the population.

University grads only group with higher increase in jobs than population

Figure 14: Percentage change in population and employment, 25-29 year olds, 2004-2014

<table>
<thead>
<tr>
<th>Education Level</th>
<th>% Change in Population</th>
<th>% Change in Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Graduate</td>
<td>-26%</td>
<td>-30%</td>
</tr>
<tr>
<td>Some Postsecondary Education</td>
<td>-18%</td>
<td>-9%</td>
</tr>
<tr>
<td>Trades Cert./Dipl.</td>
<td>-15%</td>
<td>-5%</td>
</tr>
<tr>
<td>College, CEGEP</td>
<td>-14%</td>
<td>41%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>-26%</td>
<td>43%</td>
</tr>
</tbody>
</table>

The Ontario University Graduate Survey conducted by the Ontario government provides another way to measure employment outcomes. The survey showed that 86 per cent of graduates of Ontario universities report that their job, two years after graduation, is related to skills developed at university.\(^\text{23}\)

The survey also shows that employment rates are strong in all disciplines two years after graduation.

### All disciplines show strong employment rates

**Figure 15:** Employment rate of 2011 university graduates, two years after graduation, 2013\(^\text{23}\)

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterinary Medicine</td>
<td>100.0%</td>
</tr>
<tr>
<td>Therapy &amp; Rehabilitation</td>
<td>100.0%</td>
</tr>
<tr>
<td>Theology</td>
<td>100.0%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>89.8%</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>89.0%</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>100.0%</td>
</tr>
<tr>
<td>Other Arts &amp; Science</td>
<td>91.0%</td>
</tr>
<tr>
<td>Optometry</td>
<td>100.0%</td>
</tr>
<tr>
<td>Nursing</td>
<td>97.6%</td>
</tr>
<tr>
<td>Medicine</td>
<td>98.9%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>92.2%</td>
</tr>
<tr>
<td>Law</td>
<td>93.9%</td>
</tr>
<tr>
<td>Kinesiology, Recreation, Phys-Ed2</td>
<td>91.7%</td>
</tr>
<tr>
<td>Journalism</td>
<td>95.9%</td>
</tr>
<tr>
<td>Humanities</td>
<td>90.3%</td>
</tr>
<tr>
<td>Health Professions</td>
<td>91.4%</td>
</tr>
<tr>
<td>Forestry</td>
<td>100.0%</td>
</tr>
<tr>
<td>Food Science &amp; Nutrition</td>
<td>90.1%</td>
</tr>
<tr>
<td>Fine &amp; Applied Arts</td>
<td>91.0%</td>
</tr>
<tr>
<td>Engineering</td>
<td>93.8%</td>
</tr>
<tr>
<td>Education</td>
<td>92.8%</td>
</tr>
<tr>
<td>Dentistry</td>
<td>100.0%</td>
</tr>
<tr>
<td>Computer Science</td>
<td>95.3%</td>
</tr>
<tr>
<td>Business &amp; Commerce</td>
<td>94.8%</td>
</tr>
<tr>
<td>Architecture &amp; Landscape Arch.</td>
<td>92.6%</td>
</tr>
<tr>
<td>Agricultural &amp; Bio. Sciences</td>
<td>89.5%</td>
</tr>
</tbody>
</table>

\(^\text{23}\) MTCU, Ontario University Graduate Survey.

\(^\text{24}\) MTCU, Ontario University Graduate Survey.
The National Graduate Survey of 2009-2010 graduates shows that, three years after graduation, the employment rate for university graduates is 91 per cent. The college employment rate is comparable at 90 per cent.\textsuperscript{25}

Three years after graduation the median Ontario graduate earns $54,000 with a bachelor’s degree, $70,000 with a master’s degree and $80,000 with a PhD. The median graduate from a university bachelor program earns 33 per cent more than a college graduate.

Higher levels of education yield higher earnings

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Median gross annual earnings for 2010 Ontario graduates working full-time, three years after graduation\textsuperscript{26}}
\end{figure}

\begin{itemize}
\item College: $40,600
\item Bachelor’s: $54,000
\item Master’s: $70,000
\item Doctorate: $80,000
\end{itemize}

\textsuperscript{25} Statistics Canada, National Graduate Survey. The National Graduate Survey measures the employment rate as: number of employed as a percentage of the labour force.

\textsuperscript{26} Statistics Canada, National Graduate Survey.
Graduates from Ontario bachelor degree programs have the third lowest average debt upon graduation, at $22,400. Only Quebec and Manitoba have lower average debt. Ontario’s graduate debt is lower because of relatively higher support, in the form of grants and scholarships, provided to low-income students by the Ontario government and by universities.27

Grads from Ontario universities have one of the lowest average debt rates in country

Figure 17: Average government debt at graduation for 2010 graduates of bachelor programs, for students with debt, by province of study28

QC: $11,900
MB: $19,600
ON: $22,400
AB: $26,300
PEI: $27,000
NL: $27,300
SK: $27,700
BC: $29,000
NS: $30,400
NB: $35,200

27. See Higher Education Strategy Associates (HESA), The Many Prices of Knowledge: How tuition & subsidies interact in Canadian higher education, August 2014, for an interprovincial comparison of tuition costs once student aid is taken into account.
Ontario university graduates consistently outperform the rest of the population in employment and earning outcomes, including graduates from other postsecondary institutions. This is true for university graduates of all ages, and for youth and recent graduates.

Graduates from Ontario universities on average have significantly higher incomes than graduates from other postsecondary institutions and more than high school graduates. Graduates who are immigrants or aboriginal also have considerably higher average earnings than their peers who have achieved other educational attainment levels.

Recent university graduates are applying the skills they learned at university right at the start of their careers.

Projections for economic growth in Ontario are also encouraging. As the province grows, more jobs will become available and career prospects for university graduates will continue to improve. When lifetime earnings and employment rates are considered, a university education remains one of the most resilient investments a person can make.

University: It’s worth the investment.