

Key Research Findings

This analysis was based on the pre-determined criteria listed below:

Section	Description	Measures
Student Demand	<p>Includes an assessment of OCAS (2007 - 2011) enrolment data at other colleges in terms of mean growth rate with a specific focus on Fleming's direct competitors where appropriate (Georgian, Sheridan, Seneca and Durham)</p> <p>Trends in certificate, diploma, degree, apprenticeship and continuing education (where available).</p> <p>Click Below to Access Full Source Document: Fall Enrollment Trend</p>	<ul style="list-style-type: none"> ● Strong = Fleming enrolment growth is outpacing system and is equal to or greater than 3% ● Moderate = Fleming enrolment growth is equivalent to system demand and is between 1.0 to 2.9% ● Weak = Fleming enrolment growth is less than the system demand and is less than 1%
Labour Market	<p>Includes projected employment rate growth based on a consolidation of various Ontario, Canadian, and US sources including HRSDC, Sector Council Reports US Bureau of Labour Statistics, and the MTCU Employment Profile.</p>	<ul style="list-style-type: none"> ● Strong = Between 5-6 positive labour market indicators ● Moderate = Between 3-5 positive labour market indicators ● Weak = Between 1-2 or no positive labour market indicators
Competitive Analysis	<p>Includes the number of actual colleges offering the program as well as the ratio of applications to acceptances at Fleming compared to other colleges and specific comment about Fleming's direct competitors where appropriate (Georgian, Sheridan, Seneca and Durham)</p> <p>Click Below to Access Full Source Document: Fall Conversion Report</p>	<ul style="list-style-type: none"> ● Strong = Fleming conversion ratio is greater than 2 below the system ● Moderate = Fleming conversion ratio is 1 above, below or equal to the system ● Weak = Fleming conversion ratio is greater than 2 above than the system
Financial Analysis	<p>Includes a review of Contribution to Overhead (CTO) for existing programs (2010-11)</p> <p>Click Below to Access Full Source Document: Costing Analysis</p>	<ul style="list-style-type: none"> ● Strong = CTO is greater than 35% ● Moderate = CTO is between 30 - 34% ● Weak = CTO is between 20 – 30% <p>No Contribution = 19% or less</p>

Key Research Findings

Key Performance Indicators	<p>Includes KPI trends from the Key Performance Indicator Summary 5 Year Historical Overview KPI Data from Reporting Years 2008-2012.</p> <p>Click Below to Access Full Source Document: Key Performance Indicators</p>	<ul style="list-style-type: none"> ● Strong = Above system average in 6-7 indicators ● Moderate = Above system average in 3-5 indicators ● Weak = Above system average in 0-2 indicators.
Resource Analysis	<p>Requires school level assessment regarding space, technology, capital equipment and human resources. Recommendations from recent Program Review Reports included here</p>	

Key Research Findings

Sustainable Building Design and Construction (48205)

Student Demand¹

• **MODERATE**

The following information consists of yearly student spring registration data as well as a mean growth rate and average student registration for each program under these categories, provided by the program's coordinator:

Certificate

- Fleming is the only school to offer this program, which has experienced a mean growth of **-5%** and an average registration of **25 students**

Certificate

Program: 48205 – Sustainable Building Design and Construction

	2007	2008	% Change (07-08)	2008	2009	% Change (08-09)	2009	2010	% Change (09-10)	2010	2011	% Change (10-11)	% Mean Growth Rate (07-11)	5 Year Average Reg. Students
→ Fleming	26	26	0	26	26	0	26	26	0	26	21	-19	-5	25
Total	26	26	0	26	26	0	26	26	0	26	21	-19	-5	25

Labour Market

• **MODERATE**

Employment Ontario²

Residential Home Builders and Renovators (NOC -0712)

- Employment Ontario Rating (2009-2013):
 - Average**
- Education and Training
 - "Extensive knowledge and experience in the home construction industry is required for residential home builders and renovators. Depending on the specialty, a trade certification and/or license may be required. Managers must have knowledge of building codes and other government regulations. They must be aware of emerging trends within the housing industry, and new construction methods and materials."
 - "Residential home builders and renovators must have good organizational skills and project management skills. They must be familiar with general business administration and marketing."

¹ Registration data obtained from the Program Counts by Applicant Type Report (RPT0050P) in the OCAS Reporting and Analytics Cube December 7, 2011. Some programs/colleges may not be included because they were missing MCU codes in the OCAS dataset. Prepared by Fleming Data Research (07-2012)

² "0712 Residential Home Builders and Renovators." *Employment Ontario*. N.p., n.d. Web. 14 Aug. 2012. <http://www.tcu.gov.on.ca/eng/labourmarket/ojf/pdf/0712_e.pdf>.

Key Research Findings

- Demand
 - “Opportunities for employment in this occupation are expected to be average over the period from 2009 to 2013. Job opportunities for residential home builders and renovators depend on the volume of house construction and renovation, which, in turn, is largely dependent on the state of the economy. In times of economic downturns construction activity typically declines. However, the renovation sector will continue to benefit from an ageing stock of housing and trends towards home improvement.”
 - “Concerns about energy conservation and retrofitting, advances in building materials, the development of electronically operated “smart” buildings and the proliferation of new building standards will make the work of residential home builders and renovators more complex.”

HRSDC³

Residential Home Builders and Renovators (NOC -0712)

- Job Openings (2011/2020): **96,934**
- Job Seekers(2011/2020): **102,568**
- Post Secondary Education Graduates: **33,257**
- “Based on projections and considering that labour demand exceeded supply in this occupation, the number of job seekers will continue to be insufficient to fill job openings over the 2011-2020 period. The majority of job openings will arise from retirements. The retirement rate for this occupation will be slightly above the average for all occupations, as workers are generally older than those in other occupations. The number of job openings resulting from economic growth will be much lower over the projection period than over the 2001-2010 period. Construction has been a major driving force in the creation of jobs nationally since the start of the decade. Growth was stimulated by the building of new housing units and numerous home renovation projects, as well as the substantial increase in non-residential construction spending, particularly in the energy sector. Over the projection period, new positions in this occupation will be fewer in number, mainly as a result of the aging population, which will result in decreased demand for new housing units. However, non-residential construction will continue to support this industry, with major investments in the energy sector in Quebec (hydro-electric dams), in Ontario (nuclear power plants), and in Alberta (oil sands and pipelines). Therefore, non-residential investments will be the driving force behind job creation in the construction industry. However, non-residential construction accounts for a much smaller portion of the workforce than residential construction, particularly in this occupation. With regard to labour supply, job seekers will come from the school system and from other occupations. A large number of new managers in construction and transportation will come from related occupations, as is the case in all management occupations, given that labour market experience is often required to obtain a management position. However, mobility toward this occupation will be weaker than over the 2001-2010 period, due to the slowdown of activities in the construction industry, which will result in less demand for labour. Job seekers coming directly from the school system will essentially be those who have completed a program in construction and have decided to start their own business as builders and renovators in the housing sector.”

³ "Managers In Construction And Transportation (071)." *Human Resources and Skills Development Canada* . N.p., n.d. Web. 14 Aug. 2012. <<http://www23.hrsdc.gc.ca/occupationsummarydetail.jsp?&tid=14>>.

Key Research Findings

US Bureau of Labour

Construction Managers (SOC –11-9021)

- Employment Growth (2010/2020): **17%**
 - **523,100** (2010) to **609,600** (2020)
- “Construction managers will be needed as the level and variety of construction projects expands. Population and business growth will result in new construction of residential dwellings, office buildings, retail outlets, hospitals, schools, restaurants, and other structures.”
- “In addition to new construction projects, a growing emphasis on retrofitting buildings to make them more energy efficient should create additional jobs for construction managers. The need to address portions of the national infrastructure will also spur employment growth, as roads, bridges, and sewer pipe systems are upgraded or replaced.”
- “As building construction companies’ budgets remain tight, firms increasingly will focus on hiring specialized construction managers to ensure that projects are completed on time and within budget. In addition, construction processes and building technology are becoming more complex, requiring greater oversight and spurring demand for specialized management personnel. Sophisticated technology, worker safety, environmental protection, and new laws setting standards for building and construction material also will drive employment growth.”
- “Job opportunities for qualified jobseekers are expected to be good. Those with a bachelor’s degree in construction science, construction management, or civil engineering, coupled with construction experience, will have the best job prospects.”
- “Employment growth will provide many new job openings. A substantial number of construction managers are expected to retire over the next decade, resulting in additional job opportunities.”
- “Employment of construction managers, like that of many other construction workers, is sensitive to fluctuations in the economy. On the one hand, workers in these trades may experience periods of unemployment when the overall level of construction falls. On the other hand, peak periods of building activity may produce abundant job opportunities for construction managers.”

Sector Councils and Reports

A report from the Construction Sector Council is available to be downloaded titled:

[Construction Looking Forward: An Assessment of Construction Labour Markets from 2012 to 2020. Ontario.](#)

- [Canada Green Building Council](#)
- [Canadian Home Builders' Association](#)
- [Ontario Building Officials Association \(OBOA\)](#)
- [Ontario Building Envelope Council \(OBEC\)](#)
- [Ontario Construction Secretariat](#)
- [Ontario General Contractors Association](#)
- [Ontario Home Builders' Association](#)

Key Research Findings

Employment Profile⁴

In 2010-2011, **43.8%** of graduates were employed in a full time position which related to this program of study provincially

Civil

Programs in Civil (cont.)

Programs	Duration	Total Grads	Total in Survey	Total in Labour Force	Colleges
Masonry – Heritage And Traditional	2 Years	23	15	14	Algonquin, George Brown
Masonry Techniques	1 Year	5	2	1	Conestoga
Renovation Techniques	1 Year	159	115	97	Canadore, Georgian, Lambton, Loyalist, Niagara, Sir Sandford Fleming
Survey Technician	2 Years	6	5	3	Loyalist
Sustainable Building Design And Construction	1 Year	25	16	14	Sir Sandford Fleming

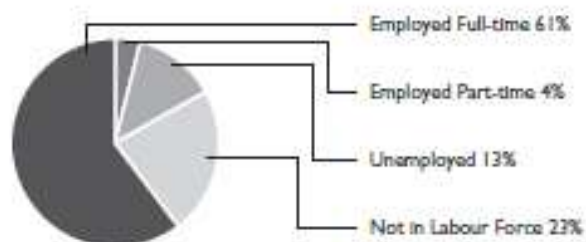
Summary of Survey Data

	Program Cluster	All Programs
Survey Population	1,241	50,622
Labour Force Participation	78%	74%
Employment Rate ^a	84%	83%
Employed Part-time ^a	5%	18%
Employed Full-time ^a	79%	65%
Average Annual Earnings – Total	\$39,800	\$33,199
Average Annual Earnings – Female	\$38,213	\$31,897
Average Annual Earnings – Male	\$40,067	\$34,607
Graduate Satisfaction	78%	79%
Employer Satisfaction	91%	93%

a. As a percentage of graduates in the labour force.

⁴ "Employment Profile." Ontario. N.p., 2011. Web. 19 July 2012.
<<http://www.tcu.gov.on.ca/pepg/audiences/colleges/serials/eprofile09-10/profile10.pdf>>.

Civil

Graduate Outcomes for Program Cluster (as a percentage of all respondents)**Top Five Industries of Employment**

	#	%
Construction of Buildings	193	24.5%
Professional, Scientific and Technical Services	176	22.3%
Specialty Trade Contractors	113	14.3%
Heavy and Civil Engineering Construction	47	6.0%
Local, Municipal and Regional Public Administration	29	3.7%

Top Five Occupational Categories

	#	%
Construction Managers	80	10.1%
Civil Engineering Technologists and Technicians	72	9.1%
Carpenters	67	8.5%
Drafting Technologists and Technicians	42	5.3%
Construction Estimators	41	5.2%

Key Research Findings

Civil

Summary of Graduate Outcomes by Program

	Full-time Employed, Program Related		Full-time Employed, Program Unrelated		Part-time Employed, Program Related		Part-time Employed, Program Unrelated		Unemployed		Not in Labour Force	
	#	%	#	%	#	%	#	%	#	%	#	%
Alternative (Sustainable) Energy Engineering Technology	4	33.3	—	—	—	—	1	8.3	2	16.7	5	41.7
Architecture – Project And Facility Management – Bachelor Of Applied Technology	20	80.0	—	—	—	—	—	—	5	20.0	—	—
Building Construction Technician	24	52.2	8	17.4	1	2.2	—	—	7	15.2	6	13.0
Civil Engineering Technician	33	45.8	9	12.5	—	—	3	4.2	7	9.7	20	27.8
Civil Engineering Technology	195	58.7	25	7.5	2	0.6	4	1.2	41	12.3	65	19.6
Construction Craft Worker Foundations	1	20.0	1	20.0	—	—	1	20.0	2	40.0	—	—
Construction Engineering Technician	77	43.5	21	11.9	2	1.1	3	1.7	15	8.5	59	33.3
Construction Engineering Technology	106	63.1	15	8.9	1	0.6	3	1.8	18	10.7	25	14.9
Construction Management	7	41.2	1	5.9	—	—	1	5.9	6	35.3	2	11.8
Construction Science And Management – Bachelor Of Applied Technology	16	76.2	2	9.5	—	—	—	—	1	4.8	2	9.5
Construction Techniques	30	28.6	14	13.3	—	—	1	1.0	8	7.6	52	49.5
Geographic Information System	8	50.0	1	6.3	1	6.3	2	12.5	2	12.5	2	12.5
Geographic Information Systems	1	14.3	3	42.9	—	—	1	14.3	2	28.6	—	—
Geographic Information Systems – Cartographic Specialist	22	52.4	2	4.8	—	—	1	2.4	9	21.4	8	19.0
Geographic Information Systems Technician	6	66.7	1	11.1	—	—	—	—	—	—	2	22.2
Geomatics Technician	7	46.7	3	20.0	1	6.7	—	—	1	6.7	3	20.0
Green Architecture	3	33.3	4	44.4	—	—	—	—	2	22.2	—	—
Masonry – Heritage And Traditional	7	46.7	1	6.7	—	—	2	13.3	4	26.7	1	6.7
Renovation Techniques	49	42.6	19	16.5	4	3.5	8	7.0	17	14.8	18	15.7
Sustainable Building Design And Construction	7	43.8	—	—	—	—	2	12.5	5	31.3	2	12.5
All Programs in Cluster*	623	50.9	130	10.6	12	1.0	33	2.7	154	12.6	272	22.2

* Does not include 4 programs with fewer than 5 graduates in the labour force.

Key Research Findings

Civil

Earnings of Full-time Employed Participants

Program	Average – Females	Average – Males	Median – Females	Median – Males	Average for Program	Median for Program
Alternative (Sustainable) Energy Engineering Technology	–	–	–	–	–	–
Architecture – Project And Facility Management – Bachelor Of Applied Technology	–	\$41,555	–	\$42,000	\$42,059	\$42,000
Building Construction Technician	–	\$29,180	–	\$28,679	\$29,163	\$28,679
Civil Engineering Technician	–	\$41,885	–	\$37,771	\$41,064	\$37,271
Civil Engineering Technology	\$40,903	\$43,119	\$40,857	\$41,714	\$42,899	\$41,714
Construction Craft Worker Foundations	–	–	–	–	–	–
Construction Engineering Technician	–	\$39,219	–	\$36,292	\$38,956	\$35,770
Construction Engineering Technology	\$36,618	\$43,000	\$36,271	\$41,149	\$42,536	\$40,679
Construction Management	–	\$58,464	–	\$60,000	\$58,464	\$60,000
Construction Science And Management – Bachelor Of Applied Technology	–	\$44,106	–	\$46,500	\$44,165	\$46,000
Construction Techniques	–	\$31,985	–	\$28,157	\$31,587	\$28,157
Geographic Information System	–	\$39,081	–	\$43,000	\$44,926	\$48,142
Geographic Information Systems	–	–	–	–	–	–
Geographic Information Systems – Cartographic Specialist	\$44,659	\$46,311	\$46,929	\$47,000	\$45,733	\$46,964
Geographic Information Systems Technician	–	\$35,960	–	\$31,286	\$34,967	\$31,286
Geomatics Technician	–	\$36,879	–	\$35,457	\$36,879	\$35,457
Green Architecture	–	\$48,041	–	\$45,000	\$45,867	\$43,000
Masonry – Heritage And Traditional	–	\$37,081	–	\$34,414	\$37,081	\$34,414
Renovation Techniques	\$28,072	\$30,790	\$25,029	\$29,600	\$30,560	\$29,200
Sustainable Building Design And Construction	–	–	–	–	\$33,295	\$31,286
All Programs in Cluster*	\$38,122	\$40,099	\$39,629	\$40,000	\$39,913	\$40,000

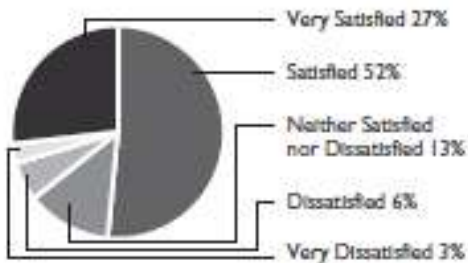
* Does not include 4 programs with fewer than 5 graduates in the labour force.

Key Research Findings

Civil

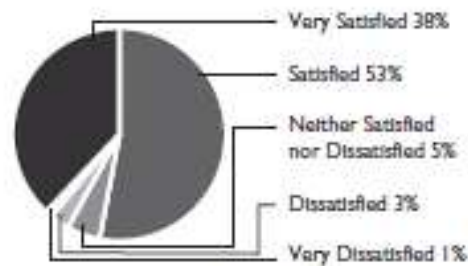
Program Cluster Satisfaction

Graduate Satisfaction with the usefulness of his/her college education in achieving his/her goals after graduation.*



* 1,187 graduates participated in this question.

Employer Satisfaction with employee overall college preparation for the type of work he/she was doing.*



* 203 employers participated in this survey.

Program Cluster Historical Data

	00-01 Grads	01-02 Grads	02-03 Grads	03-04 Grads	04-05 Grads	05-06 Grads	06-07 Grads	07-08 Grads	08-09 Grads	09-10 Grads
Percentage Employed	89.2%	87.8%	89.2%	89.7%	89.2%	91.9%	92.5%	92.0%	85.8%	83.8%
Percentage Employed Full-time	85.8%	84.1%	85.4%	86.5%	85.2%	88.3%	88.8%	87.3%	78.2%	78.9%
Percentage Employed Full-time Related Jobs	75.0%	71.5%	74.0%	72.7%	74.2%	75.3%	78.2%	76.9%	65.5%	65.1%
Average Annual Salary Full-time Related Jobs	\$33,600	\$33,675	\$35,107	\$37,379	\$36,165	\$37,915	\$38,792	\$40,824	\$40,676	\$41,303

Key Research Findings

Working in Canada

Residential Home Builders and Renovators (NOC -0712)⁵

- Ontario Rating: **Not Available**

- **Wage Range by Region:**

Location	Wage (\$/hr)		
	Low	Median	High
Ontario	13.00	16.13	24.75
Hamilton--Niagara Peninsula Region	13.00	16.13	24.75
Kingston - Pembroke Region	13.00	16.13	24.75
Kitchener--Waterloo--Barrie Region	13.00	16.13	24.75
London Region	N/A	N/A	N/A
Muskoka-Kawartha Region	13.00	16.13	24.75
Northeast Region	13.00	16.13	24.75
Northwest Region	12.50	14.56	18.36
Ottawa Region	N/A	N/A	N/A
Stratford--Bruce Peninsula Region	N/A	N/A	N/A
Toronto Region	13.27	18.90	26.00
Windsor-Sarnia Region	N/A	N/A	N/A

Competitive Analysis⁶

- **MODERATE**

The following information consists of yearly spring application and registration data as well as a conversion ratio for each program under this category, provided by the program's coordinator:

Certificate

- In 2011, Fleming had a **4:1** conversion ratio, which is approximately the same as the past 5 years

Certificate

Program: 48205 – Sustainable Building Design and Construction															
	App. 2007	Reg. 2007	Conv. Ratio	App. 2008	Reg. 2008	Conv. Ratio	App. 2009	Reg. 2009	Conv. Ratio	App. 2010	Reg. 2010	Conv. Ratio	App. 2011	Reg. 2011	Conv. Ratio
→ Fleming	106	26	4:1	92	26	4:1	87	26	3:1	92	26	4:1	81	21	4:1
Total	106	26	4:1	92	26	4:1	87	26	3:1	92	26	4:1	81	21	4:1

⁵ "Residential Home Builders and Renovators (NOC 0712)." *Working In Canada*. N.p., n.d. Web. 14 Aug. 2012.

<<http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=0712&action=final&ln=p@ionKeyword=Peterborough%2C+Ontario&s=2&source=0&titleKeyword=home+renovator#outlook>>.

⁶ Application data obtained from OCAS College Count Cube October 19, 2011 Registration data obtained from the Program Counts by Applicant Type Report (RPT0050P) in the OCAS Reporting and Analytics Cube December 7, 2011. Some programs/colleges may not be included because they were missing MCU codes in the OCAS dataset Prepared by Fleming Data Research (07-2012)

Key Research Findings

Financial Analysis

- **NO CONTRIBUTION**

Source: Program Costing Analysis 2010/2011

- Contribution to Overhead: 19.5%
- Program Weight: 1.40
- Funding Unit: 1.30

Key Performance Indicators

- **MODERATE**

Source: Key Performance Indicator Summary 5 Year Historical Overview KPI Data from Reporting Years 2008-2012

KPI1-Graduation Rate	+14% above system
KPI2-Working	-8% below system
KPI3-Working Related	-8% below system
KPI4-Grad. Satisfaction	+2% above system
KPI8-Student Satisfaction-Learning	-
KPI9-Student Satisfaction- Teachers	-
KPI11-Grad. Satisfaction-Program	+4% above system

Resource Analysis

Equipment

Staffing

Space

Key Research Findings

Appendix

The following is the original environmental scan conducted by the Library Researchers to form the basis of the previous summary of Key Research Findings Report.

Sustainable Building Design & Construction

Overview of the Profession:

NOC 0712: Residential Home Builders & Renovators

<http://www.workingincanada.gc.ca/report-eng.do?lang=eng&noc=0712&area=8792&titleKeyword=home+builder®ionKeyword=Peterborough,+Ontario&source=0&action=final>

Residential home builders and renovators perform some or all of the following duties:

- Plan, organize, direct, control and evaluate the activities of a residential home building or renovating company
- Prepare bids for home construction or renovation projects
- Consult with customers, architects and engineers regarding plans and specifications
- Select, employ and supervise trade subcontractors to do specialized work, such as plumbing, heating and electrical work
- Plan and prepare work schedules and co-ordinate the activities of subcontractors
- Inspect work performed by subcontractors to ensure quality and conformity with plans and specifications
- Prepare and maintain a directory of suppliers and trade subcontractors
- Develop and implement marketing and advertising strategies to promote company's products and services
- May perform carpentry or other trade work during home construction or renovation activities.

Common Job Titles

- Contractor
- home renovation
- contractor
- residential homes
- home builder
- home renovator
- renovation contractor
- residential home builder

Typical Employers

Residential home builders own, operate and manage companies engaged in the construction of new residential homes. Residential home renovators own, operate and manage companies engaged in the renovation of existing residential homes.

Key Research Findings

Labour Market

Working in Canada

1. Employment potential for the Kawartha Region is Not Available (Working in Canada).

[http://www.workingincanada.gc.ca/report-](http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=0712&action=final&ln=p®ionKeyword=Peterborough%2C+Ontario&s=2&source=0&titleKeyword=home+builder#outlook)

[eng.do?area=8792&lang=eng&noc=0712&action=final&ln=p®ionKeyword=Peterborough%2C+Ontario&s=2&source=0&titleKeyword=home+builder#outlook](http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=0712&action=final&ln=p®ionKeyword=Peterborough%2C+Ontario&s=2&source=0&titleKeyword=home+builder#outlook)

HRDSC

2. National Outlook 10 Year Projection (2011-2020)

Occupations in this group	Construction Managers (0711), Residential Home Builders and Renovators (0712), Transportation Managers (0713)
Employment (non-student) in 2010	200,470
Median Age of Workers in 2010	45
Average Retirement Age in 2010	60

3. For **Managers In Construction And Transportation**, over the 2011-2020 period, job openings (arising from expansion demand and replacement demand) are expected to total **96,900** and **102,568** job seekers (arising from school leavers, immigration and mobility) are expected to be available to fill the job openings.
4. Over the 2008-2010 period, this occupation experienced strong employment growth. Nevertheless, the unemployment rate increased slightly although it remained very low in 2010 (2.9%). The average hourly wage increased much more quickly than the average for all occupations. According to key labour market indicators, the number of job seekers was insufficient to fill the job openings in this occupation.
5. According to Employment Ontario the Opportunities for employment in this occupation are expected to be average over the period from 2009 to 2013.
6. According to Employment Ontario (estimates 2006), 67% of workers in this group were self employed, and 87% Full time.
7. Local wage for the Kawartha/Muskoka Region 2010:

Low: \$13.00 Average: \$16.13 High: \$24.75

[http://www.workingincanada.gc.ca/report-](http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=0712&action=final®ionKeyword=Peterborough%2C+Ontario&s=1&source=0&titleKeyword=home+builder#report_tabs_container2)

[eng.do?area=8792&lang=eng&noc=0712&action=final®ionKeyword=Peterborough%2C+Ontario&s=1&source=0&titleKeyword=home+builder#report_tabs_container2](http://www.workingincanada.gc.ca/report-eng.do?area=8792&lang=eng&noc=0712&action=final®ionKeyword=Peterborough%2C+Ontario&s=1&source=0&titleKeyword=home+builder#report_tabs_container2)

US Bureau of Labour

[Http://www.bls.gov/oco/ocos211.htm#outlook](http://www.bls.gov/oco/ocos211.htm#outlook)

Job Outlook

Employment Change. Construction Managers: Employment of construction managers is expected to grow 17 percent from 2010 to 2020, about as fast as the average for all occupations.

Key Research Findings

Construction managers will be needed as the level and variety of construction projects expands. Population and business growth will result in new construction of residential dwellings, office buildings, retail outlets, hospitals, schools, restaurants, and other structures.

In addition to new construction projects, a growing emphasis on retrofitting buildings to make them more energy efficient should create additional jobs for construction managers. The need to address portions of the national infrastructure will also spur employment growth, as roads, bridges, and sewer pipe systems are upgraded or replaced.

As building construction companies' budgets remain tight, firms increasingly will focus on hiring specialized construction managers to ensure that projects are completed on time and within budget. In addition, construction processes and building technology are becoming more complex, requiring greater oversight and spurring demand for specialized management personnel. Sophisticated technology, worker safety, environmental protection, and new laws setting standards for building and construction material also will drive employment growth.

Job Prospects. Job opportunities for qualified jobseekers are expected to be good. Those with a bachelor's degree in construction science, construction management, or civil engineering, coupled with construction experience, will have the best job prospects.

Employment growth will provide many new job openings. A substantial number of construction managers are expected to retire over the next decade, resulting in additional job opportunities.

Employment of construction managers, like that of many other construction workers, is sensitive to fluctuations in the economy. On the one hand, workers in these trades may experience periods of unemployment when the overall level of construction falls. On the other hand, peak periods of building activity may produce abundant job opportunities for construction managers.

Sector Council Reports:

[Construction Looking Forward: An Assessment of Construction Labour Markets from 2012 to 2020. Ontario.](#)

Industry Standards:

This occupation does **not** require certification in **Ontario**. It is not regulated in any Canadian province or territory.

Professional Associations:

[Canada Green Building Council](#)

[Canadian Home Builders' Association](#)

[Ontario Building Officials Association \(OBOA\)](#)

[Ontario Building Envelope Council \(OBEC\)](#)

[Ontario Construction Secretariat](#)

[Ontario General Contractors Association](#)

[Ontario Home Builders' Association](#)

Employment Requirements

Employment requirements are prerequisites generally needed to enter an occupation.

Key Research Findings

- Extensive experience in the home construction industry, including experience as a general supervisor, is usually required for self-employment as a home builder or a home renovator.
- Progression to senior management positions is possible with experience.

[Source: [National Occupational Classification 2006 - HRSDC](#)]

Canadian employers place a strong emphasis on Essential Skills in the workplace. These skills are used in nearly every occupation, in many different ways, and at different levels of complexity.

The Essential Skills include: Reading, Document Use, Writing, Numeracy, Oral Communication, Thinking Skills, Working with Others, Computer Use, and Continuous Learning.

Educational Programs Leading to this Occupation

Extensive knowledge and experience in the home construction industry is required for residential home builders and renovators. Depending on the specialty, a trade certification and/or license may be required.

Managers must have knowledge of building codes and other government regulations. They must be aware of emerging trends within the housing industry, and new construction methods and materials. Residential home builders and renovators must have good organizational skills and project management skills. They must be familiar with general business administration and marketing.

Source: http://www.tcu.gov.on.ca/eng/labourmarket/ojf/pdf/0712_e.pdf

Educational Competitors

Individual Community College/Institute Information

(Click on Program Title to view college program page)

2 Colleges (including Fleming) are offering Certificate programs. Others are offering graduate certificate programs, diploma programs and advance diploma programs.

Algonquin

[Green Architecture](#) – Graduate Certificate

- Mobile Learning Program

Cambrian

[Sustainable Residential Design](#) – Graduate Certificate

- Starts Fall 2013

Durham

[Construction Carpentry – Sustainable](#) – Diploma

[Energy Management & Sustainable Building Technology](#) – Advanced Diploma

- NEW program

Fleming

[Sustainable Building Design & Construction](#) – Certificate

Georgian

[Sustainable Systems](#) – Graduate Certificate

Key Research Findings

Humber

[Sustainable Energy & Building Technology](#) – Advanced Diploma

- Co-op

Sault

[Renewable Energy & Green Construction Techniques](#) – Certificate

- NEW program

St. Clair

[Sustainable Energy Technician](#) – Diploma

Institution	APS #	Approved Program Name	MTCU Code	Program Weight	Funding Unit	Degree Factor
SSFL	1213	Sustainable Building Design And Construction	48205	1.40	1.30	1.50
St. CLAIR	1217	Sustainable Energy Technician	55507	1.20	1.90	2.00
SSFL	1242	Sustainable Renovations	48206	1.20	1.00	1.00
GEORGIAN	1219	Sustainable Systems	75503	1.30	0.80	1.00
DURHAM	1196	Construction Carpentry - Sustainable	58100	1.20	2.30	2.00
DURHAM	1195	Energy Management & Sustainable Building Technology	65503	1.30	3.30	3.00
HUMBER	1309	Sustainable Energy And Building Technology	65503	1.30	3.30	3.00
ALGONQUIN	1387	Green Architecture	78205	1.20	1.10	1.00
CAMBRIAN	1288	Sustainable Residential Design	78205	1.20	1.10	1.00
SAULT	1191	Renewable Energy and Green Construction Techniques	47600	1.30	1.10	1.00

Employment Postings:

On June 28, 2012, there were few job postings anywhere in Canada. 5 positions showed up in Ontario, 10 in Canada for home builder and renovator searches. I also searched the keywords green, sustainable, renewable, renovation, construction and builder at sites such as workcabin.ca and Good Work Canada. No applicable jobs were found. I've pasted the postings from the jobbank.gc.ca below.

Job Number: 6500006

Title: Home renovator ([NOC: 0712](#))

Terms of Employment: Permanent, Full Time

Salary: \$13.00 to \$16.00 Hourly for 40 hours per week, Medical Benefits, Dental Benefits

Anticipated Start Date: As soon as possible

Location: Cambridge, Ontario (1 vacancy)

Skill Requirements:

Education: Completion of high school

Key Research Findings

Credentials (certificates, licences, memberships, courses, etc.): Driver's License

Experience: 3 years to less than 5 years

Languages: Speak English, Read English, Write English

Major Work Area: Trade work

Type of Establishment/Work Setting Experience: Residential renovation

Staff Responsibility: Not required

Budgetary Responsibility: 0 - \$100,000

Specific Skills: Plan, organize, direct and control daily operations, Plan and prepare work schedules, Perform trade work during home construction, renovation or restoration, Work with customers, architects and engineers regarding plans and specifications

Work Conditions and Physical Capabilities: Fast-paced environment

Transportation/Travel Information: Valid driver's licence, Own vehicle

Work Location Information: Various locations

Essential Skills: Reading text, Document use, Numeracy, Writing, Working with others, Decision making, Job task planning and organizing, Finding information

Employer: Beta Die Casting Equipment

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By E-mail: vito@beta-online.com

Advertised until: 2012/07/15

Job Number: 6495848

Title: Home renovator ([NOC: 0712](#))

Terms of Employment: Permanent, Full Time, On Call, Weekend, Day, Evening

Salary: \$12.00 Hourly for 40 hours per week

Anticipated Start Date: As soon as possible

Location: London , Ontario (1 vacancy)

Skill Requirements:

Education: Completion of high school

Credentials (certificates, licences, memberships, courses, etc.): Driver's License

Key Research Findings

Experience: 2 years to less than 3 years

Languages: Speak English, Read English, Write English

Type of Establishment/Work Setting Experience: Residential renovation

Staff Responsibility: Not required

Budgetary Responsibility: 0 - \$100,000

Specific Skills: Perform trade work during home construction, renovation or restoration, Work with customers, architects and engineers regarding plans and specifications

Work Conditions and Physical Capabilities: Fast-paced environment, Work under pressure, Tight deadlines, Attention to detail, Large workload

Work Site Environment: Outdoors

Transportation/Travel Information: Valid driver's licence, Own transportation, Own vehicle

Work Location Information: Various locations

Essential Skills: Reading text, Document use, Numeracy, Writing, Oral communication, Working with others, Problem solving, Decision making, Critical thinking, Job task planning and organizing, Significant use of memory, Finding information, Computer use, Continuous learning

Employer: Derby Staffing solutions (Placement Agency)

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By E-mail: cbaker@hirestaff.ca

Web Site: <http://www.derbystaffing.com>

Advertised until: 2012/07/05

Job Number: 6465179

Title: Builder (Apprentice Shed Builder) ([NOC: 0712](#))

Terms of Employment: Seasonal, Full Time, Day, Evening

Salary: \$14.00 to \$25.00 Hourly for 44 hours per week

Anticipated Start Date: As soon as possible

Location: Guelph, Ontario (2 vacancies)

Skill Requirements:

Education: Not applicable

Credentials (certificates, licences, memberships, courses, etc.): Driver's License

Experience: Experience an asset

Key Research Findings

Languages: Speak English, Read English, Write English

Major Work Area: Trade work

Staff Responsibility: Not required

Budgetary Responsibility: 0 - \$100,000

Work Conditions and Physical Capabilities: Fast-paced environment, Attention to detail

Work Site Environment: Outdoors

Transportation/Travel Information: Valid driver's licence

Work Location Information: Various locations

Essential Skills: Oral communication, Working with others, Problem solving

Employer: Kevcol Sales Inc.

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By Fax: (519) 855-6772

Advertised until: 2012/06/28

Job Number: 6497208

Title: Home renovator ([NOC: 0712](#))

Terms of Employment: Permanent, Full Time

Salary: \$15.00 to \$20.00 Hourly for 40 hours per week

Anticipated Start Date: As soon as possible

Location: York-Weston / Dufferin-St.Clair, Ontario (1 vacancy)

Skill Requirements:

Education: Some high school

Credentials (certificates, licences, memberships, courses, etc.): Driver's License

Experience: 5 years or more

Languages: Speak English, Read English, Write English

Major Work Area: Trade work

Type of Establishment/Work Setting Experience: Residential renovation

Staff Responsibility: 1 - 20

Budgetary Responsibility: 0 - \$100,000

Key Research Findings

Specific Skills: Perform trade work during home construction, renovation or restoration

Work Conditions and Physical Capabilities: Attention to detail

Work Site Environment: Outdoors

Transportation/Travel Information: Valid driver's licence, Own transportation

Ability to Supervise: 1 to 2 people

Essential Skills: Working with others

Employer: A & V Building Contractors Ltd.

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By Phone: between 9:00 and 17:00: (416) 862-8453

By E-mail: bennykuriakose@rogers.com

Advertised until: 2012/07/15

Job Number: 6483620

Title: Contractor, residential homes (Contracted Support Home Operator - Paid Roommate) ([NOC: 0712](#))

Terms of Employment: Permanent, Full Time

Salary: \$1,000.00 to \$2,400.00 Hourly for 35 hours per week

Anticipated Start Date: As soon as possible

Location: Grand Prairie, Alberta, Alberta (1 vacancy)

Skill Requirements:

Education: Not applicable

Credentials (certificates, licences, memberships, courses, etc.): First Aid Certificate, CPR Certificate

Experience: Experience an asset

Languages: Speak English, Read English, Write English

Staff Responsibility: 1 - 20

Budgetary Responsibility: 0 - \$100,000

Ability to Supervise: 1 to 2 people

Essential Skills: Oral communication, Problem solving, Decision making

Other Information: Provide a supportive home environment for an adult with developmental disability. Assist the roommate with daily living, community access, companionship and ensure roommate's overall health and safety

Key Research Findings

Employer: Independent Counselling Ent. Inc.

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By Mail:

11402-100 Street, suite 202 Grand Prairie, Alberta T8V 2N5

In Person between 9:00 and 17:00:

11402 - 100 Street, suite 202

Grand Prairie, Alberta

T8V ,2N5

By Fax: (780) 402-3969

By E-mail: jmacgillivray@icenterprises.com

Web Site: <http://www.icenterprises.com>

Advertised until: 2012/07/06

Job Number: 6512052

Title: Carpenter, renovation (Interior & Exterior Renovator) ([NOC: 7271](#))

Terms of Employment: Permanent, Full Time, Overtime, Day

Salary: \$45,000.00 to \$65,000.00 Yearly for 40 hours per week, Gratuities, Commission, Medical Benefits, Dental Benefits, Pension Plan Benefits

Anticipated Start Date: As soon as possible

Location: General Toronto Area, , Ontario (2 vacancies)

Skill Requirements:

Education: Completion of high school, Some college/CEGEP/vocational or technical training, Some university

Credentials (certificates, licences, memberships, courses, etc.): Carpenter Trade Certification, Carpenter Red Seal Endorsement, Occupational Health and Safety Certificate, CPR Certificate, WHMIS Certificate

Experience: 5 years or more

Languages: Speak English, Read English, Write English

Major Work Area: Construction, Maintenance/repair, Renovation, Historical restoration

Type of Establishment/Work Setting Experience: Commercial, Institutional, Industrial, Residential, Millwork/pre-fab shopwork

Area of Specialization: General carpentry, Rough carpentry, Finish carpentry, Framing, Hardwood flooring, Form work, Custom stairs, Exterior siding, wood, Exterior siding, vinyl, Exterior siding, aluminum, Exterior siding, steel, Specialty millwork/panel systems installation, Custom cabinets

Specific Skills: Determine specifications and calculate requirements, Prepare layouts, Measure, cut, shape, assemble and join mouldings, wood materials, drywall and plastics materials, Build foundations, Fit and install windows, doors, stairs, mouldings and hardware, Build floor beams and subflooring, Build walls and install partitions, Build and install framing for dropped ceilings, counters, indirect lighting,

Key Research Findings

display cases, etc., Erect prefabricated roof trusses, bracing and sheathing, Build built-in-place pitched roof systems, Build roof trusses, Build built-in-place flat roofs, Install roof flashing, Install fire doors, Install shoring, Install floor tiles or rolled flooring, Install drywall, Install insulation, Install pre-fab chimneys and wood stoves, Build porches and verandas, Build decks and fences, Build and install platforms, scaffolding, ramps and ladders, Operate basic cutting and welding equipment, Operate power tools

Additional Skills: Read and interpret blueprints, drawings and specifications, Estimate labour and material costs, Prepare tenders and quotations, Operate CADD systems, Schedule and co-ordinate work on sites, Survey building locations and levels, Instruct apprentices, Supervise other workers

Security and Safety: Criminal record check

Own Tools/Equipment: Tools, Safety equipment/gear, Steel-toed safety boots, Hard hat

Work Site Environment: At heights, Confined spaces, Noisy, Dusty

Transportation/Travel Information: Own transportation, Willing to travel, Willing to travel regularly, Valid driver's licence

Work Location Information: Various locations

Essential Skills: Reading text, Document use, Numeracy, Writing, Oral communication, Working with others, Problem solving, Decision making, Critical thinking, Job task planning and organizing, Significant use of memory, Finding information, Computer use, Continuous learning

Employer: ACCL Group -- Andy Crown Company Limited

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By E-mail: henry@acclgroup.com

Web Site: <http://www.acclgroup.com>

Advertised until: 2012/07/23

Job Number: 6507324

Title: Renovation carpenter (Bathroom Renovations) ([NOC: 7271](#))

Terms of Employment: Permanent, Full Time

Salary: \$1.00 to \$1.01 Hourly for 40 hours per week, Piece Work

Anticipated Start Date: As soon as possible

Location: Sudbury/North Bay, Ontario (1 vacancy)

Skill Requirements:

Education: Completion of high school, Completion of college/CEGEP/vocational or technical training

Credentials (certificates, licences, memberships, courses, etc.): WHMIS Certificate

Experience: Will train

Key Research Findings

Languages: Speak English, Read English, Write English

Major Work Area: Renovation

Type of Establishment/Work Setting Experience: Residential

Area of Specialization: General carpentry, Finish carpentry

Specific Skills: Determine specifications and calculate requirements, Measure, cut, shape, assemble and join mouldings, wood materials, drywall and plastics materials, Build walls and install partitions, Install drywall, Operate power tools

Security and Safety: Bondable

Own Tools/Equipment: Tools

Transportation/Travel Information: Own transportation, Valid driver's licence

Work Location Information: Various locations

Essential Skills: Reading text, Oral communication, Problem solving, Decision making, Critical thinking

Other Information: Plumbing and bathroom renovation experience an asset. May require some travel to cover work locations from Sudbury to North Bay. Company vehicle supplied.

Employer: 1022928 Ontario Inc.

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By Fax: (705) 522-1989

By E-mail: tcenterprise@eastlink.ca

Advertised until: 2012/07/12

Job Number: 6237309

Title: Carpenter, renovation (Carpenter/renovator) ([NOC: 7271](#))

Terms of Employment: Permanent, Full Time, Day

Salary: \$15.00 to \$25.00 Hourly for 44 hours per week

Anticipated Start Date: As soon as possible

Location: Oakville/Burlington, Ontario (3 vacancies)

Skill Requirements:

Education: Some college/CEGEP/vocational or technical training

Credentials (certificates, licences, memberships, courses, etc.): 2nd Period Apprenticeship, 3rd Period Apprenticeship, 4th Period Apprenticeship

Experience: No experience

Key Research Findings

Languages: Speak English, Read English, Write English

Major Work Area: Construction, Renovation, Historical restoration

Type of Establishment/Work Setting Experience: Residential

Area of Specialization: General carpentry, Rough carpentry, Finish carpentry, Framing, Hardwood flooring, Exterior siding, wood

Specific Skills: Determine specifications and calculate requirements, Measure, cut, shape, assemble and join mouldings, wood materials, drywall and plastics materials, Fit and install windows, doors, stairs, mouldings and hardware, Build floor beams and subflooring, Build walls and install partitions, Install suspended ceilings, Build and install framing for dropped ceilings, counters, indirect lighting, display cases, etc., Erect prefabricated roof trusses, bracing and sheathing, Build built-in-place pitched roof systems, Build roof trusses, Build built-in-place flat roofs, Install fire doors, Install shoring, Install floor tiles or rolled flooring, Install insulation, Build porches and verandas, Build decks and fences, Build and install platforms, scaffolding, ramps and ladders, Operate power tools

Additional Skills: Read and interpret blueprints, drawings and specifications, Schedule and co-ordinate work on sites

Security and Safety: Bondable, Criminal record check

Own Tools/Equipment: Tools, Safety equipment/gear, Steel-toed safety boots, Hard hat

Work Site Environment: At heights, Noisy, Dusty

Transportation/Travel Information: Own transportation, Valid driver's licence

Work Location Information: Various locations

Essential Skills: Reading text, Numeracy, Writing, Oral communication, Working with others, Continuous learning

Employer: Bespoke Home Solutions Inc

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By E-mail: tony@bespokehomesolutions.com

Advertised until: 2012/07/12

Job Number: 6503367

Title: Carpenter, renovation (SUPERVISOR) ([NOC: 7271](#))

Terms of Employment: Permanent, Full Time, Weekend, Day, Evening

Salary: \$26.00 to \$30.00 Hourly for 40 hours per week, Bonus

Anticipated Start Date: As soon as possible

Location: toronto, Ontario (1 vacancy)

Key Research Findings

Skill Requirements:

Education: Completion of high school, Some college/CEGEP/vocational or technical training

Credentials (certificates, licences, memberships, courses, etc.): WHMIS Certificate

Experience: 5 years or more

Languages: Speak English, Read English, Write English

Major Work Area: Construction, Renovation

Type of Establishment/Work Setting Experience: Commercial, Institutional, Residential

Area of Specialization: General carpentry, Rough carpentry, Finish carpentry, Framing, Form work, Custom stairs, Specialty millwork/panel systems installation, Custom cabinets

Specific Skills: Determine specifications and calculate requirements, Prepare layouts, Measure, cut, shape, assemble and join mouldings, wood materials, drywall and plastics materials, Build foundations, Fit and install windows, doors, stairs, mouldings and hardware, Build floor beams and subflooring, Build walls and install partitions, Build and install framing for dropped ceilings, counters, indirect lighting, display cases, etc., Build built-in-place pitched roof systems, Build built-in-place flat roofs, Install roof flashing, Install fire doors, Install shoring, Install drywall, Install insulation, Build porches and verandas, Build decks and fences, Build and install platforms, scaffolding, ramps and ladders, Operate power tools

Additional Skills: Read and interpret blueprints, drawings and specifications, Schedule and co-ordinate work on sites, Instruct apprentices, Supervise other workers

Security and Safety: Criminal record check

Own Tools/Equipment: Tools, Safety equipment/gear, Steel-toed safety boots, Hard hat

Work Site Environment: At heights, Noisy, Dusty

Transportation/Travel Information: Own vehicle, Willing to travel, Willing to travel regularly, Valid driver's licence

Work Location Information: Various locations

Essential Skills: Reading text, Document use, Numeracy, Writing, Oral communication, Working with others, Problem solving, Finding information, Continuous learning

Employer: duffy & associates design build limited

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By E-mail: duffyandassociates.ca@gmail.com

Advertised until: 2012/07/10

Key Research Findings

Job Number: 6500010

Title: Home renovator (Experienced Home Renovator) ([NOC: 0712](#))

Terms of Employment: Permanent, Full Time, Day

Salary: \$15.00 to \$22.00 Hourly for 40 hours per week

Anticipated Start Date: As soon as possible

Location: Windsor, Ontario (1 vacancy)

Skill Requirements:

Education: Completion of high school

Credentials (certificates, licences, memberships, courses, etc.): Driver's License

Experience: 5 years or more

Languages: Speak English, Read English, Write English

Major Work Area: Trade work

Type of Establishment/Work Setting Experience: Residential renovation

Staff Responsibility: Not required

Budgetary Responsibility: \$100,001 - \$500,000

Specific Skills: Perform trade work during home construction, renovation or restoration

Work Conditions and Physical Capabilities: Attention to detail

Transportation/Travel Information: Valid driver's licence, Own vehicle

Work Location Information: Various locations

Essential Skills: Reading text, Oral communication, Working with others, Problem solving, Decision making

Other Information: Work to include full Bathroom Renovation and major home renovation/repairs - doors/window replacement-drywall/paint- trim installation-tile floor/walls etc.

Employer: Luxwell Construction Limited

How to Apply:

Please apply for this job only in the manner specified by the employer. Failure to do so may result in your application not being properly considered for the position.

By E-mail: ericlutzmann@gmail.com

Advertised until: 2012/07/09