



Ontario Home Inspectors Data Project: – Methods and Results

December 21, 2013

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Purpose of the Report and Overview

This report was commissioned by the Ministry of Consumer Services to support policy development on qualifications for home inspectors in Ontario. The purpose of this report is to provide data on the home inspection industry in Ontario. The report describes the Ontario home inspection industry by reporting findings on:

- 1) Home inspectors
 - Number of home inspectors
 - Location of home inspectors
 - Employment status
 - Association alignment
 - Training and education
 - Insurance coverage
- 2) Home inspection businesses
 - Business type
 - Franchises
- 3) Home inspections
 - Number of home inspections
 - Charge per home inspection

Technical Appendix

Detailed methods on the following calculations can be found in Appendix A: Technical appendix to this report:

- Number of home inspectors
- Location of home inspectors
- Number of home inspections
- Charge per home inspection

Home Inspectors

Methodology

We estimated the number of home inspectors in Ontario from two sources:

- Home inspection association member lists
- A list of unaligned home inspectors that we generated by a region-by-region internet search.

By appending information from these two sources we estimated population of home inspectors in Ontario.

We collected primary data by sending the Ontario Home Inspectors Survey to all members of this population via email. A copy of the survey is attached as Appendix B. The home inspector survey provided information related to home inspectors on:

- Location of home inspectors
- Employment status of home inspectors
- Association alignment of home inspectors
- Training and education of home inspectors
- Insurance coverage

There were 745 respondents to the home inspector survey, which is around half of the estimated home inspectors in Ontario. We have no way of knowing whether the characteristics of the respondents are similar to the characteristics of the non-respondents, so any extrapolations from the data to the full population of home inspectors should be used cautiously.

Results

Most of the results reported in this section of the report are based on information from the respondents in the home inspector survey. Any extrapolations from the reported data should be used cautiously.

Number of Home Inspectors

Based on the two sources described in the methodology, there are approximately 1400 to 1700 home inspectors in Ontario.

Location of Home Inspectors

Home inspector respondents operate in all regions across the province, with 33.0% percent individual home inspectors operating in multiple regions.

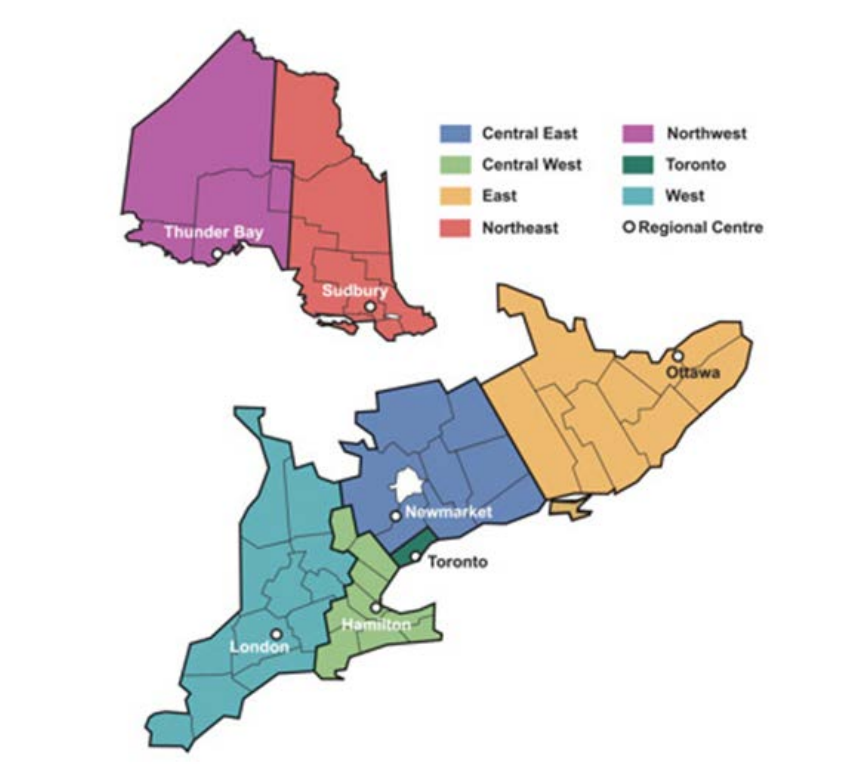


Figure 1: Ontario Regions

Table 1 allows responses in multiple regions, and home inspectors indicated most operation in Toronto (36.5%), central east (36.4%), and central west (35.4%). Table 2 reports main region of operation. Respondents are located predominantly in Toronto (28.4%), followed by central west (17.0%), central east (16.7%), west (16.3%), and east (16.0%) in approximately equal numbers. About 5% of Ontario home inspector who responded to the survey has a main region of operation in the north.

Table 1: Region of Operation (Non-mutually Exclusive)

Region	Proportion	Frequency
Central East	0.364	271
Central West	0.354	264
East	0.192	143
North	0.069	51
Toronto	0.365	272
West	0.216	161

Table 2. Principle Region of Operation (Mutually Exclusive)

Region	Proportion	Frequency
Central east	0.1671	124
Central west	0.1698	126
East	0.1604	119
North	0.0553	41
Toronto	0.2844	211
West	0.1631	121
Total	1	742
Missing		3

Employment Status

More than twice the number of respondents worked full-time (63.8%) than part-time (26.7%), as seen in Table 3. Among those not currently operating or retired, 62.3% reported that they would return to business in home inspection and 29.5% indicated that they unsure if they would. Table 4 shows that among part-time respondents most indicated other work in construction/renovation/trades-related industries. Table 5 shows that most (56.57%) have been working as home inspectors from between 1 and 9 years. For the vast majority (93.6%), home inspection was not their first career.

Table 3. Current Employment Status as a Home Inspector

Employment Status	Proportion	Frequency.
Full-time	0.646	475
Part-time	0.271	199
Retired	0.018	13
Not currently performing home inspections	0.065	48
Total	1	735
Missing		10

Table 4. Other Occupations of Part-time Home Inspectors

Other occupation	Proportion	Frequency
Construction/renovation/trades-related	0.643	128
Realty-related	0.045	9
Other	0.387	77
Answered question	1	199

Table 5. Years Spent Working as a Home Inspector

Duration	Proportion	Frequency
Less than 1 year	0.142	96
1 to 4 years	0.285	193
5 to 9 years	0.281	190
10 to 14 years	0.137	93
15 years or more	0.155	105
Answered question	1	677
Missing		68

Association Alignment

Almost all respondents (96.6%) are aligned with at least one home inspection association. Half (50.0%) of respondents are aligned with OAH/CAHPI and over two-fifths (42.28%) are aligned with InterNACHI, as seen in Table 6. Only 4.4% of respondents were not aligned with any home inspection association. Table 7 shows that of those that are aligned, over half (55.0%) were aligned with a single association and 40.5% were aligned with more than one.

Table 6. Aligned Home Inspection Associations (non-mutually exclusive)

Home Inspection Associations	Proportion	Frequency
Alliance for Canadian Home Inspectors (ACHI)	0.01	7
Canadian National Association of Certified Home Inspectors, Inc. (CanNACHI)	0.083	62
International Association of Certified Home Inspectors (InterNACHI)	0.409	305
National Home Inspector Certification Council (NHICC)	0.090	67
Ontario Association of Certified Home Inspectors (OntarioACHI)	0.081	60
Ontario Association of Home Inspectors (OAH)/Canadian Association of Home and Property Inspectors (CAHPI)	0.481	358
Professional Home and Property Inspectors of Canada, Ontario Chapter (PHPIC)	0.083	62
American Society of Home Inspectors (ASHI) (Ontario Chapter)	0.091	68
L'Association des Inspecteurs en bâtiments du Québec (AIBQ)	0.004	3
Master Inspector Certification Board (MICB)	0.055	41
Other	0.114	83
None		33

Table 7. Alignment with Multiple Home Inspection Associations

Number of Aligned Associations	Proportion	Frequency
0	0.044	33
1	0.550	410
>1	0.405	302
Total	1	745

Training and Education

The five most common certifications held by respondents are Registered Home Inspector (38.3%), Certified Home Inspector (34.6%), other (26.5%), National Certificate Holder (13.9%), and ASHI Certified Home Inspector (10.7%) as seen in Table 8. The other category included the following certifications: Certified Professional Inspector, Professional Home and Property Inspector, engineering designations, and college certificates. Table 9 shows that 20% of respondents held no certifications, where 36.8% held one, and 43.3% held more than one. Among those who held other related certifications, Certified Indoor Air Consultant (general, mould, and radon) were common, as were Wood Energy Technology Transfer certifications (Table 10).

Respondents took courses or received training from both home inspection associations and many community colleges, seen in Table 11 and Table 12. OAHI training was most popular (52.6%), followed by InterNACHI online courses (40.6%), Carson Dunlop (direct 26.9%) and Carson Dunlop (through other means 38.1%). Of those who indicated other, training from the Professional Home Inspection Institute and Pillar to Post was popular. The most popular community college for taking home inspection courses was Humber College (23.9%). Lastly in Table 13, approximately half of respondents hold a college degree/diploma (48.7%), a quarter hold a university degree (26.4%), and the remainder hold a high school diploma or less (24.8%).

Table 8. Certifications Held by Home Inspectors (non-mutually exclusive)

Certifications	Proportion	Frequency
ASHI Certified Home Inspector (ASHICHI)	0.107	64
Certified Canadian Home Inspector (CCHI)	0.045	27
Certified Home Inspector (CHI)	0.346	206
Certified Master Home Inspector (CMHI)	0.017	10
Certified Master Inspector (CMI)	0.094	56
Certified Property Inspector (CHI)	0.025	15
National Certificate Holder (NCH)	0.139	83
National Home Inspector (NHI)	0.091	54
New Construction Inspector (NCI)	0.06	36
Registered Home Inspector (RHI)	0.383	228
Other	0.265	158
None		149

Table 9. Multiple Certifications

Number of Certifications	Proportion	Frequency
0	0.200	149
1	0.368	274
2	0.281	209
>2	0.152	113
Total	1	745

Table 10. Other Related Certifications Held by Home Inspectors

Certifications	Proportion	Frequency
Certified Indoor Air Consultant (IAC2)	0.298	93
Certified Indoor Air Mold Consultant (IAC2-Mold)	0.285	89
Certified Indoor Air Radon Consultant (IAC2-RADON)	0.157	49
Wood Energy Transfer Technology (WETT)	0.324	101
Other	0.497	155
Total with Other Related Certifications		312
None		433

Table 11. Courses Taken or Training Received from Home Inspection Providers

Providers	Proportion	Frequency
ASHI home study	0.068	45
Academy of Learning	0.032	21
American Home Inspectors Training Institute (AHIT)	0.058	38
Carson-Dunlop (direct)	0.269	177
Carson Dunlop (via other means)	0.381	251
Home Inspectors Institute	0.029	19
Inspect4U	0.084	55
InterNACHI (online)	0.406	267
L'Association des Inspecteurs en bâtiments du Québec (AIBQ)	0	0
National Institute of Building Inspectors (NIBI)	0.026	17
OAHI training	0.526	346
Ontario ACHI (online)	0.043	28
Other	0.343	226
Total with Courses or Training		658
None		87

Table 12. Courses Taken or Training Received from Community Colleges

Community Colleges	Proportion	Frequency
Algonquin College	0.15	69
Ashton College	0.004	2
Bow Valley College	0	0
Cambrian College	0.013	6
Canadore College	0.002	1
Centennial College	0.03	14
Conestoga College	0.095	44
Confederation College	0.011	5
Douglas College	0	0
Durham College	0.05	23
Fanshawe College	0.033	15
Fleming College	0.007	3
George Brown College	0.121	56
Georgian College	0.052	24
Humber College	0.239	110
Lambton College	0	0
Loyalist College	0.02	9
Medicine Hat College	0.002	1
Mohawk College	0.048	22
Niagara College	0.015	7
NorQuest College	0	0
North Island College	0	0
Northern College	0.004	2

Table 12. Courses Taken or Training Received from Community Colleges

Community Colleges	Proportion	Frequency
Sault College	0.011	5
Seneca College	0.148	68
S.E. Regional College	0	0
Sheridan College	0.022	10
Southern Alberta I.T.	0	0
St. Clair College	0.02	9
St. Lawrence College	0	0
York University	0.002	1
Other	0.208	96
Total with Community College Courses		461
None		284

Table 13. Highest Level of Education Completed

Education levels	Proportion	Frequency
Some high school	0.041	28
High school diploma	0.207	140
College degree/diploma	0.487	330
University degree	0.264	179
Total	1	677
Missing		68

Insurance Coverage

Insurance information about respondents is shown in Tables 14 through 19. Three quarters (75.1%) of respondents carry errors and omission insurance and pay, on average, an annual premium of \$2,762 (SD=\$567). Per occurrence, the average errors and omissions coverage is \$1,332,150 (SD=\$648,126) and the average aggregate coverage is \$1,569,378 (SD=\$635,176). Over half (57.3%) of respondents carry general liability insurance, for which the average annual premium is \$1,152 (SD=\$950). Per occurrence, the average general liability coverage is \$1,484,747 (SD=\$770,915) and the average aggregate coverage is \$1,631,826 (SD=\$748,040). Figures 2 to 7 show cost and coverage categories for errors and omissions insurance and for general liability insurance and the bars represent the proportion of respondents per category.

Full-time respondents are more likely to carry errors and omissions insurance than part-time inspectors. 88.4% of full-time respondents carry this coverage compared to 56.8% of part-time respondents (chi-square=84.85, p<0.001). Average aggregate errors and omissions coverage differed by full-time part-time employment status. Full time inspectors aggregate errors and omissions coverage is \$291,781 greater than that of part-time inspectors (p=0.0001). Similarly, full-time inspectors are more likely to carry commercial general liability insurance. 67.0% of full-

time respondents carry this coverage compared to 44.7% of part-time respondents (chi-square=31.45, p<0.001). Errors and omissions annual premiums, coverage per occurrence, and aggregate coverage did not differ by full-time part-time status.

Table 14. Errors and Omissions Insurance Coverage

Insured	Proportion	Frequency
Yes	0.751	552
No	0.227	167
Don't know	0.022	16
Total	1	735
Missing		10

Table 15: Errors and Omissions Coverage by Employment Status

	Part-time	%	Full-time	%	Total	%
Yes	113	56.78	420	88.42	533	79.08
No	78	39.2	50	10.53	128	18.99
Don't know	8	4.02	5	1.05	13	1.93
Total	199	100	475	100	674	100

Pearson chi2(2) = 84.8526 Pr = 0.000

Table 16: Errors and Omissions Insurance Coverage Details

	Mean	Std. dev.	Median
Annual Premium	2762	567	2750
Coverage per Occurrence	1,332,150	648,126	1,250,000
Aggregate Coverage	1,569,378	635,176	1,750,000

Table 17. General Liability Insurance Coverage

Insured	Proportion	Frequency
Yes	0.573	417
No	0.371	270
Don't know	0.056	41
Total	1	728
Missing		17

Table 18: General Liability Coverage by Employment Status

	Part-time	%	Full-time	%	Total	%
Yes	89	44.72	315	67.02	404	60.39
No	99	49.75	130	27.66	229	34.23
Don't know	11	5.53	25	5.32	36	5.38

Total	199	100	470	100	669	100
Pearson chi2(2) = 31.4501 Pr = 0.000						

Table 19: General Liability Insurance Coverage Details

	Mean	Std. dev.	Median
Annual Premium	1152.402	949.9177	750
Coverage per Occurrence	1484747	770914.8	1250000
Aggregate Coverage	1631826	748039.9	2250000

Figure 2: Annual Cost of Errors and Omissions Premium

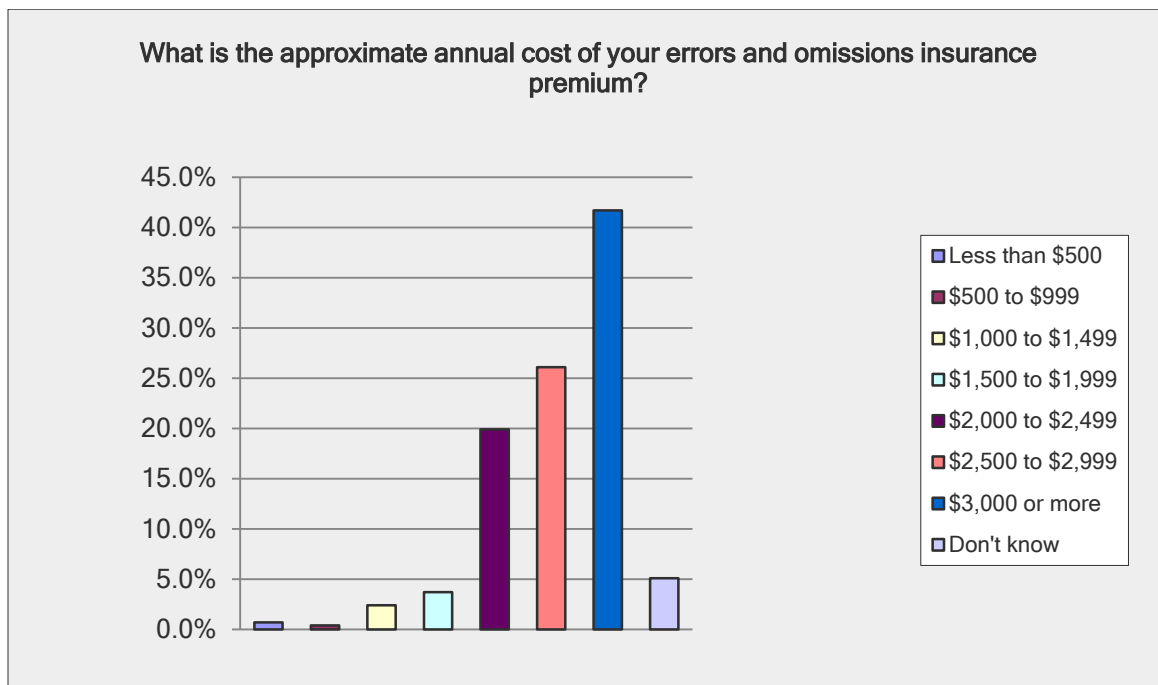


Figure 3. Errors and Omissions Liability Coverage per Occurrence

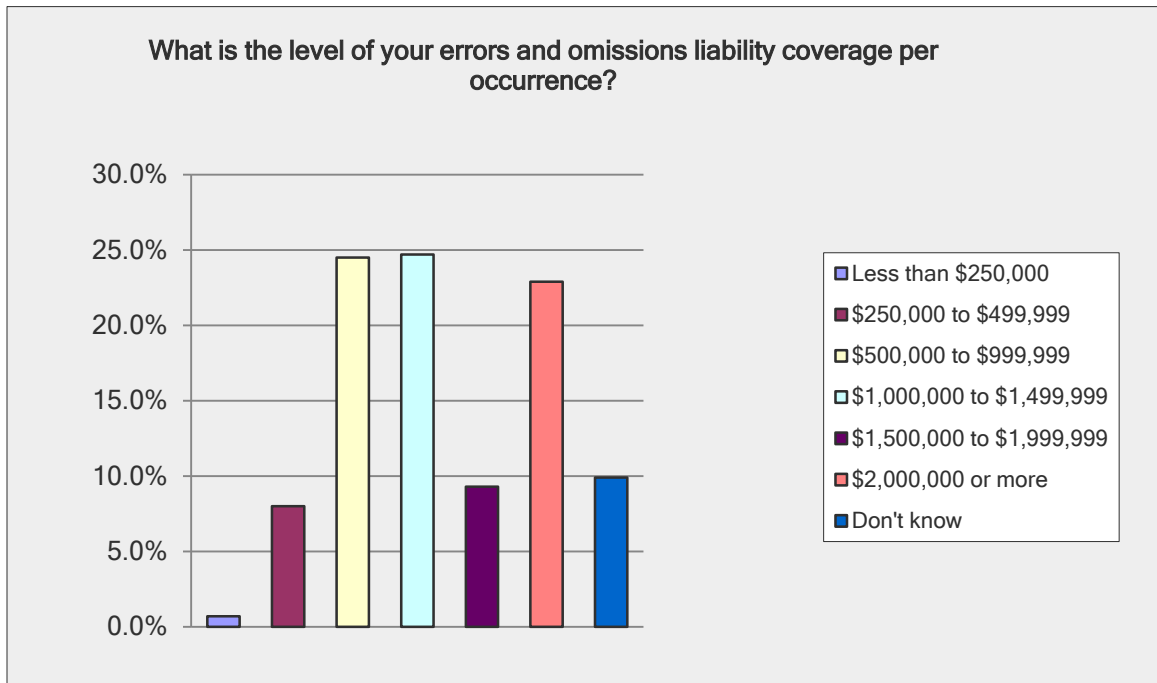


Figure 4. Errors and Omissions Liability Aggregate Coverage

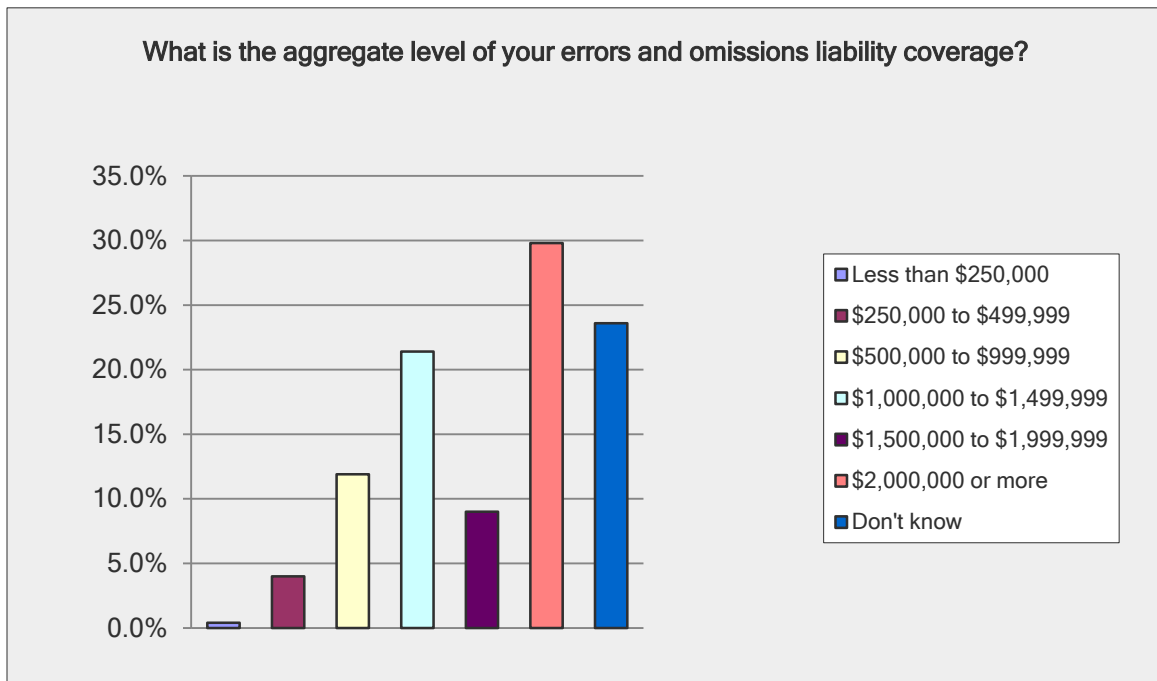


Figure 5. Annual Cost of Commercial General Liability Premium

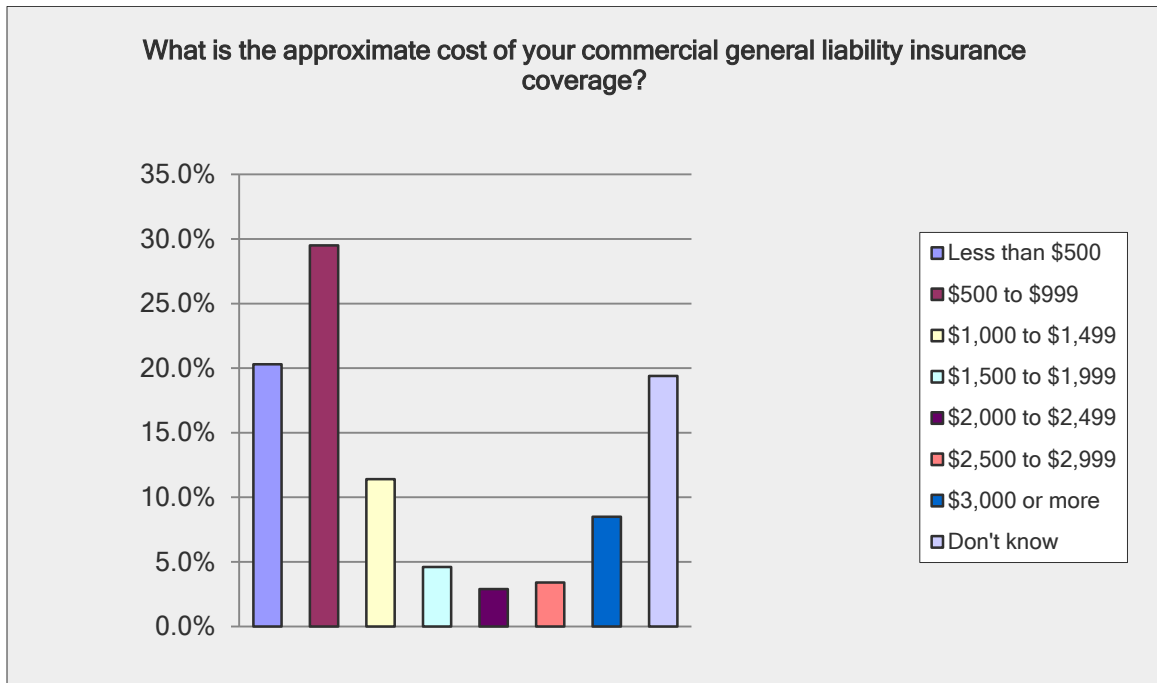


Figure 6. Commercial General Liability Coverage per Occurrence

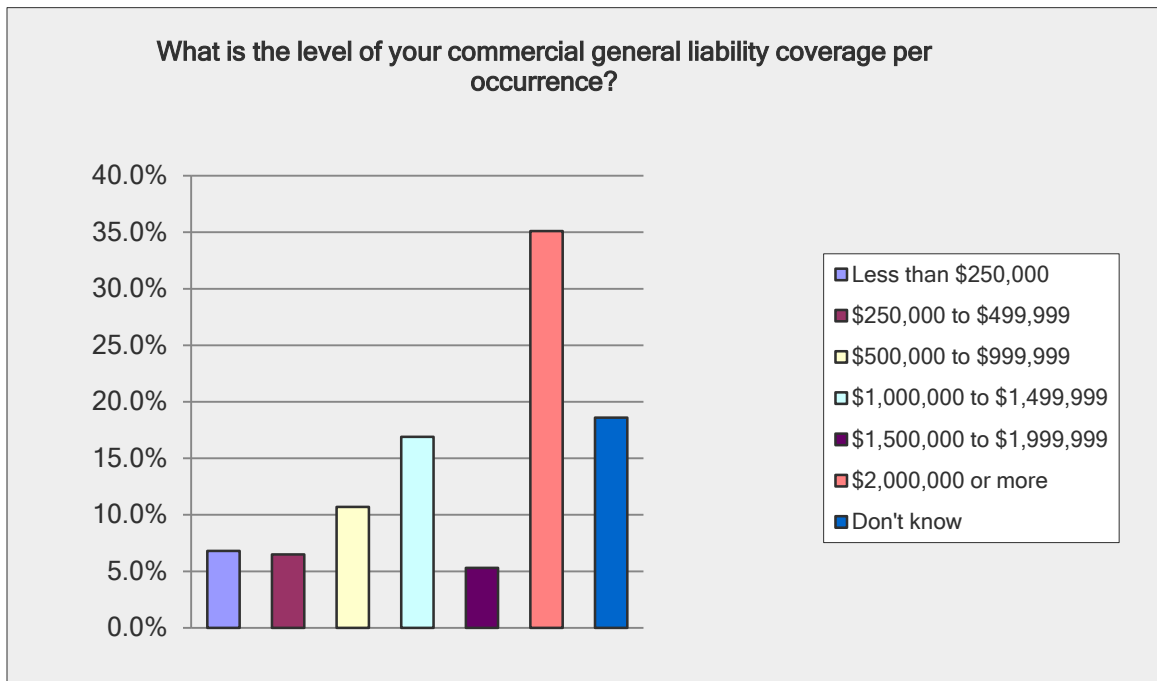
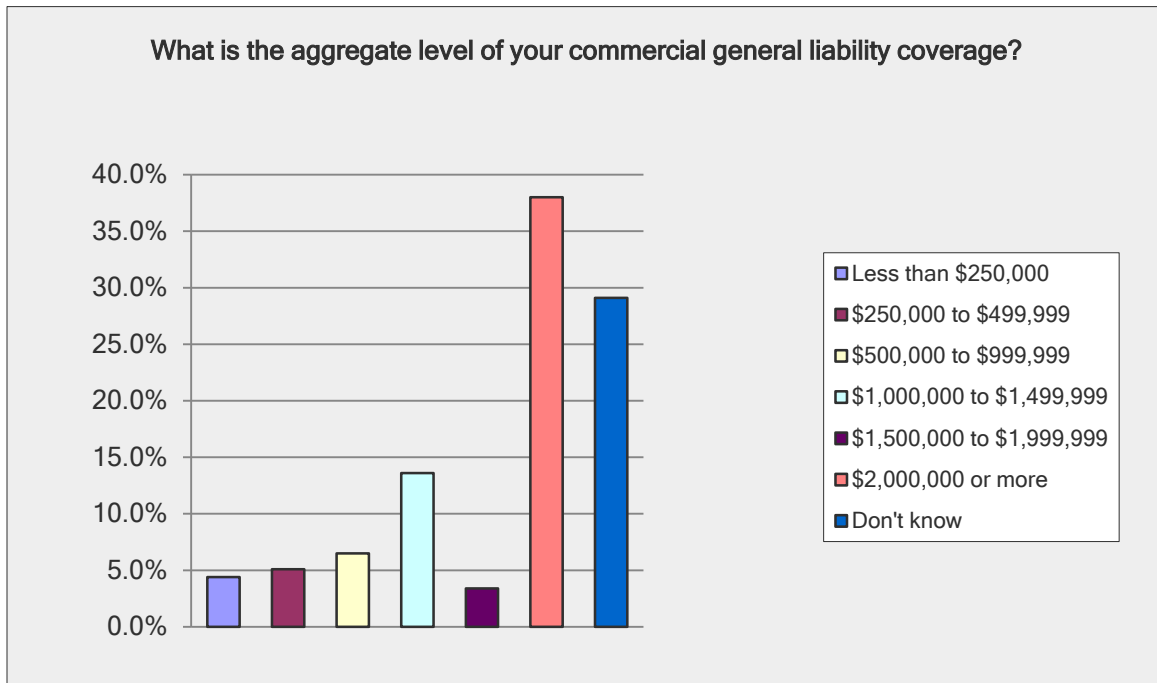


Figure 7. Commercial General Liability Aggregate Coverage



Home Inspection Businesses

Methodology

The primary source of data about home inspection businesses is also the home inspector survey. The survey provided information on:

- Business type
- Franchises

Results

Types of Businesses

The majority of respondents operate as single person businesses (84.5%), with 49.4% operating as sole proprietorships and 35.1% operating as single inspector corporations (Table 20). Less than 10% work in multi-inspector corporations. 11.7% of respondents work as part of a franchise (Table 21), most of whom work with A Buyer’s Choice, Pillar to Post, and AmeriSpec (Table 22).

Table 20. Home Inspection Business Type

Business Type	Proportion	Frequency
Sole proprietorship	0.494	366
Partnership	0.02	15
Single inspector corporation	0.351	260
Multi-inspector corporation	0.086	64
I'm a student	0.026	19
Other	0.023	17
Total	1	741
Missing		4

Franchises

Table 21. Home Inspector as Part of a Franchise

Franchise	Proportion	Frequency
Yes	0.117	87
No	0.883	655
Total	1	742
Missing		3

Table 22. Home Inspection Franchises

Franchises	Proportion	Frequency
Pillar to Post	0.207	18
AmeriSpec	0.172	15
Lighthouse	0.069	6
A Buyer's Choice	0.218	19
Global Property Inspections	0.138	12
Canadian Home Inspection Services	0.011	1
Home-Alyze	0	0
Canadian Residential Inspections	0.023	2
Grassroots Home Inspections	0.034	3
Pro-Sight Property Inspections	0	0
All Season Inspection Inc.	0	0
Other	0.149	13
Total		87

Home Inspections

Methodology

There is no definitive data on the number of home inspections in Ontario, so we used multiple methods to estimate a range of the possible number of home inspections that take place over the course of 1 year.

We used two approaches to estimate the number of home inspections and we corroborated the findings with additional information from members of the home inspector expert panel.

The first approach is to determine the number of home inspections based on a percentage of home sales that involve home inspections.

The primary source of information on the percentage of home sales was the survey of real estate agents. The survey is attached as Appendix B. The survey data suggested that about 70% of resale homes have home inspections. This number was confirmed by panel members as being reasonable, with panel members indicating a range of 60% - 70%.

For the number of resale homes in Ontario, we used a CMHC report called Housing Market Outlook Ontario Region Highlights which reports on data from Q1 of 2013. On page 6, MLS sales 2013 point forecast is 191,300. Here is the link to the report: http://www.cmhc-schl.gc.ca/odpub/esub/65434/65434_2013_Q01.pdf

The second approach to calculating the number of home inspections is based on the information from the home inspector survey. We had responses from 745 home inspectors which is approximately 50% of the home inspectors in Ontario. We don't know whether the home inspectors who didn't respond have similar or different characteristics than those who did respond, so extrapolating or making population inference from these sample data should be done with caution.

We used the median number of home inspections rather than the mean in calculating the number of home inspections performed. The median is the data value above and below which half of the sample reports, as opposed to the mean which is the average. In the data we collected, there were a number of very high estimates of the number of home inspections done in a year, which we do not think are credible. These outlying values pull the average number of home inspections up, which when multiplied by the number of home inspectors results in a total number of home inspections that is unreasonably high. Using the median, however, diminishes the impact of the outlying values, so this provides a more realistic view of the number of home inspections performed by each home inspector (median=85). This number of home inspections per inspector was corroborated by a panel member who estimated the average number to be 78.

The other term used for calculating and extrapolating the number of home inspections is the number of home inspectors. We had 1491 home inspector e-mails, plus we received additional responses from people using the web link to the survey. If we assume that the people that responded through web link did not receive an individual e-mail, then the number of home inspectors would be 1684. An average of these two numbers is 1587.

This section of the report also provides information on how much is charged for home inspections based on information from the home inspector survey respondents

Results

Number of Home Inspections

Estimates from the RECO Survey

Given 191,300 MLS sales in Ontario in 2013 (projected) and information from the RECO survey that 70% of resale homes having home inspections, this would lead to 133,910 home inspections in Ontario.

Using the lower percentage (60%) estimated by an expert panel member, the number of home inspections in Ontario would be 114,780

Estimates from the Home Inspector Survey

Using the median number of home inspections times the number of home inspectors to calculate the number of home inspections, we arrive at the following:

$$85 \times 1491 = 126,735$$

$$85 \times 1587 = 134,937$$

$$85 \times 1684 = 143,140$$

Using the lower number of inspections per year by each inspector provided by an expert panel member, the number of home inspections would be:

$$78 \times 1491 = 116,298$$

$$78 \times 1587 = 123,786$$

$$78 \times 1684 = 131,352$$

Based on this information, the number of home inspections performed in Ontario in the last year ranges from approximately 115,000 to 135,000.

Charge per Home Inspection

Respondents reported that their average charge for home inspections was \$379.56, as shown in Table 23. On average, full-time inspectors charged \$35.95 more per inspection than part-time inspectors ($p < 0.05$). Average charge per inspections was not equivalent across regions ($p < 0.05$), with inspectors charging most in Northern Ontario and least in Western Ontario (Table 24). Lastly, Table 31 shows the mean charge across 6 types of dwellings. The average charge for home inspections of condominiums was the lowest at \$303.76 (SD=\$76.60) and it was the highest for detached homes over 2,500 square feet at \$462.91 (SD=\$109.39).

Table 23. Mean Charge per Home Inspection by Work Status

Status	Respondents	Mean	Std. Dev.	Median
Part-time	177	353.97	65.04	350.00
Full-time	437	389.92	70.09	366.67
All active inspectors	614	379.56	70.53	366.67

*Mean difference of 35.95 between part-time and full-time is statistically significant at $p < 0.05$

Table 24. Mean Charge per Home Inspection by Region

Region	Respondents	Mean	Std. Dev.	Median
Central East	105	382.54	57.81	366.67
Central West	110	366.77	63.65	350.00
East	114	397.75	61.52	405.00
North	36	413.61	84.97	400.00
Toronto	171	376.28	84.19	350.00
West	117	363.55	63.14	350.00
Total	653	379.21	70.79	366.67

*Mean charges are not equivalent across regions at $p < 0.05$

Table 25. Mean Charge per Home Inspection for Types of Dwellings (Non-mutually Exclusive)

Type of dwelling	Respondents	Mean	Std. Dev.	Median
Townhouse	638	349.2163	76.10626	350
Semi-detached	639	365.3365	71.14935	350
Condo unit	599	303.7563	76.6027	350
Detached <1600 sq. ft.	647	377.0479	72.72517	350
Detached 1600-2500 sq. ft.	648	408.0247	84.85164	350
Detached >2500 sq. ft.	643	462.9082	109.3941	450

Appendices

Appendix A: Technical Appendix

Number of Home Inspectors

We created a list of e-mail addresses from 3 sources that represents the “universe” of home inspectors in Ontario. First, we obtained member name/email lists 8 home inspection associations in Ontario. Secondly, we undertook an internet search for inspectors not aligned with any of the 9 associations that operate in Ontario and created a name/email list. We are aware of inspectors being aligned with multiple associations and advertising independently of associations, so after appending these two lists we accounted for duplicate entries by counting unique first name or first initial/last name combinations. Lastly, our internet search found some e-mail addresses for home inspection businesses rather than individual inspectors.

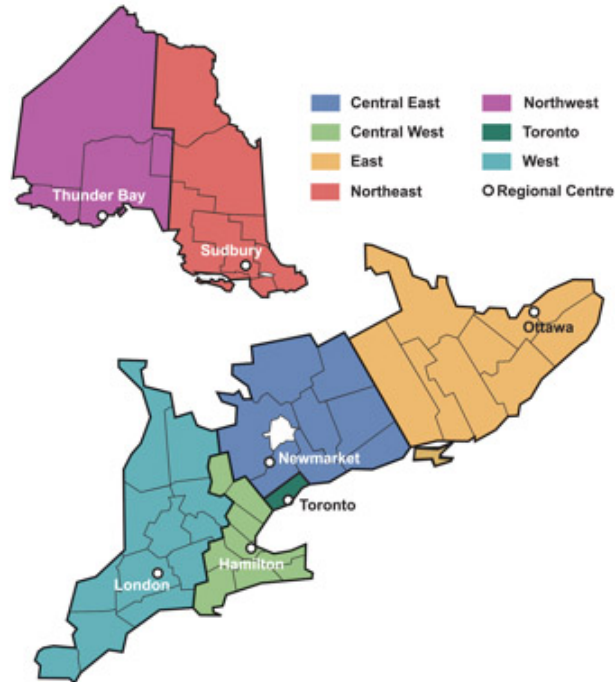
The number unique individual names/e-mail addresses we received from the associations and from our Internet search formed the low-end estimate of the number of home inspectors in Ontario. Individuals on this list were sent personally addressed email link to our survey to which a proportion responded.

Next, we sent a non-personalized web-link to all the home inspection business email addresses, presuming that multiple home inspectors may be employed at the business and that multiple surveys could be administered through the single email. Additionally, the home inspection associations posted the non-personalized web-link survey to their message boards and disseminated through their list-serve e-mail lists. Via web-link emails, a certain number of home inspectors responded to the survey. If we assume that the web-link respondents are among the same people who received the survey via personalized email but did not respond, then the number of home inspectors in Ontario is equal to the number of names/valid emails from the associations and found through our internet search, which is 1491. On the other hand, it is also plausible that the home inspectors that responded via web-link were not the same people who received personalized emails but did not respond to the survey. There is no reason to believe that those who responded to the survey via web-link would not have been similarly motivated to respond via personalized emails, had they received the personalized email. By this assumption, the number of home inspectors in Ontario equals the number of unique names/emails derived from the associations’ email lists plus the number of people that responded to the survey through the web-link, which is 1684.

Location of Home Inspectors

We asked home inspectors to indicate all Ontario regions where they performed home inspections. This item allowed for multiple responses for individual home inspections. We generated a main inspection region for each home inspector by assigning the region that best

matched the home inspectors primary business telephone number. The map of Ontario regions we used is below..



Insurance Premium, Coverage per Occurrence, and Aggregate Coverage

We followed the same methodology for errors and omissions insurance and for commercial general liability insurance. Annual cost of inspectors' insurance premium was collected as a categorical variable at the following levels: less than \$500, \$500-\$999, \$1,000-\$1,499, \$1,500-\$1,999, \$2,000-\$2,499, \$2,500-\$2,999, \$3,000 or more, and don't know.

To generate average costs, we generated a recoded variable that took for the midpoint for each category selection (e.g. \$750 for \$500-\$999) and plus/minus \$250 for the upper and lower categories (e.g. \$250 for less than \$500). We treated these approximations in the recoded variable as continuous to generate mean values and make group mean comparisons.

Categories for coverage per occurrence and aggregate level of liability coverage were the following: less than \$250,000, \$250,000-\$499,999, \$500,000-\$999,999, \$1,000,000-\$1,499,999, \$1,500,000-\$1,999,999, \$2,000,000 or more, and don't know. Similarly, we took the midpoint values for each group for creating continuous variables. Where respondent's reported that they don't know their premiums or coverage they were assigned a missing value.

We used two methods for testing insurance differences between full-time and part-time inspectors. To compare only these groups, we excluded retired respondents and those who were not currently performing home inspections from these analyses. First, we used Pearson's

chi-square test of independence for determining whether carrying errors and omissions insurance and carrying general liability insurance differ by employment status. Second, we used Student’s t-test to compare mean insurance cost and coverage between full-time and part-time respondents. In both tests we set our independence criteria at the $p=0.05$ level.

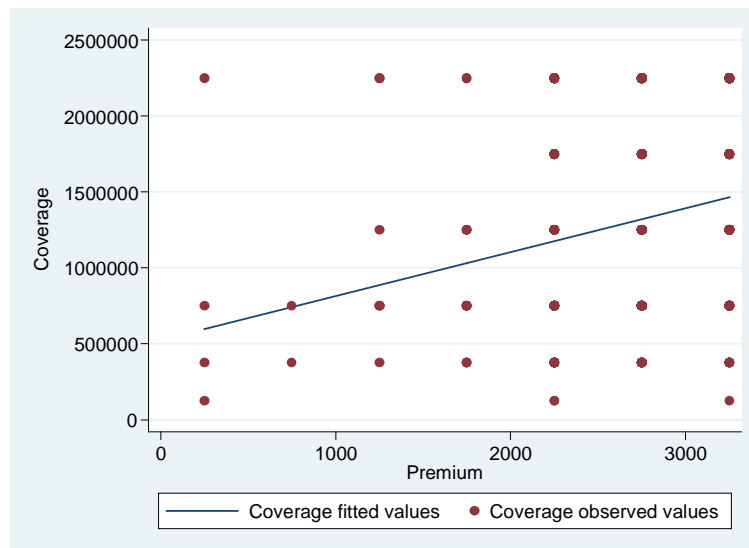
Errors and Omissions Premium Cost by Aggregate Coverage

Table 1. Errors and Omissions Premium by Coverage Categories

Premium cost		Aggregate coverage						Total
		125000	375000	750000	1250000	1750000	2250000	
250	n	1	1	1	0	0	1	4
	col. %	25	2.27	0.75	0	0	0.81	0.82
750	n	0	1	1	0	0	0	2
	col. %	0	2.27	0.75	0	0	0	0.41
1250	n	0	1	3	1	0	2	7
	col. %	0	2.27	2.24	0.75	0	1.63	1.43
1750	n	0	4	9	5	0	2	20
	col. %	0	9.09	6.72	3.73	0	1.63	4.08
2250	n	2	17	33	22	11	19	104
	col. %	50	38.64	24.63	16.42	21.57	15.45	21.22
2750	n	0	12	47	31	16	30	136
	col. %	0	27.27	35.07	23.13	31.37	24.39	27.76
3250	n	1	8	40	75	24	69	217
	col. %	25	18.18	29.85	55.97	47.06	56.1	44.29
Total	n	4	44	134	134	51	123	490
	col. %	100	100	100	100	100	100	100

Table 2. Errors and Omissions Aggregate Coverage as a function of Premium Cost

Parameter	Coefficient	Standard Error	t	P>t	95% CI	
Premium Cost	289.9655	51.50023	5.63	0	188.7759	391.1551
Constant	524065.2	145676.3	3.6	0	237835	810295.3



The tables and graph show a simple, positive linear relationship between premium cost and level of coverage. The model results in Table 2 show that for each additional dollar spend on errors and omissions premiums, home inspectors receive an additional \$290 of errors and omissions aggregate coverage. Note these data were collected categorically, so this linear model that treats the variables as continuous is an approximation.

Number of Home Inspections

We report 2 estimates on the number of home inspections performed in Ontario in a year. The first method estimate is based on information from the Real Estate Council of Ontario survey and the Canada Mortgage and Housing Corporation. The second method is based on data we collected, i.e. the number of home inspections as reported by the respondents only. In this method we report the number of home inspections as reported by the respondents and the extrapolated estimate for the province. **The assumption on which our extrapolation methods are based is that non-respondent home inspectors performed the same number of home inspections as did those inspectors who responded. This is unlikely and to make this assumption likely introduces bias into our provincial estimates.** For the method where we used the survey data we collected, we provide estimates by provincial region as well.

First, we report an estimate on the number of home inspections during one year as the product of the projected number of home sales in Ontario during 2013 and the average proportion homes inspected as reported by Ontario real estate agents. Data on the average proportion of home sales that have included home sales were collected using the following question:

“In what percentage of COMPLETED residential real estate transactions where you represented the buyer in the last year (November 1st, 2012 to October 31st, 2013), did the buyer have the home inspected before closing? Please enter a whole number between 0 and 100.”

The second method was based on data from the Home Inspectors Survey. We multiplied the number of home inspectors by the median number of home inspections performed by home inspectors over a one-year interval. The term for number of inspectors in this equation is an estimate that varies depending on the assumptions made during measurement. We report this calculation using 3 estimates on the number of Ontario home inspectors and present a range of results. To arrive at the median number of homes inspected per individual per year in Ontario, home inspectors that we were able to contact were posed the following question:

“How many standard home inspections did you perform in the last year? (November 1st, 2012 to October 31st, 2013)”

This survey item required inspectors to enter an integer number greater than or equal to zero.

We used 2 additional methods to estimate the number of home inspections in Ontario, but we were not confident in their accuracy so we did not report the results. Similarly to the second method above, we multiplied the mean value of home inspections per home inspector in one

year by the number of respondents. We anticipated that outlier values would be reported, that is, arguably impossible numbers of home inspections. For this reason, we took two approaches to calculating the average response. First, we assumed that all values were accurate and calculated the simple mean. Secondly, we assumed that all values above a certain threshold were inflated, so we truncated those values to the threshold. Because threshold values represent what we somewhat arbitrarily assume to be the maximum number of home inspections that can possibly be performed in a year, we used two threshold values at 400 and 200 produce two averages of yearly home inspections performed in one year. This method generated 3 average values for number of home inspections performed per year per home inspector. To extrapolate to total the number of home inspections in Ontario, we would multiply the mean, derived from the respondents, by the estimated number of inspectors in Ontario.

Our other unreported estimate was a simple count of the number of home inspections each respondent entered. To extrapolate the simple count of home inspections, we would multiply the count by the inverse of the survey response rate, i.e. $1/(\# \text{ respondents}/\# \text{ of home inspectors})$. The result would depend on the number, between 1400 and 1700, that is used as the denominator of the response rate.

Charge per Home Inspection

We asked home inspectors what they charged for home inspections townhouses, semi-detached homes, condominium units, detached homes under 1,600 square feet, detached homes between 1,600 square feet and 2,500 square feet, and detached homes over 2,500 square feet. For each type of residential property, respondents selected one of the following answer choices: I don't inspect this type of property, less than \$200, \$200-\$299, \$300-\$399, \$400-\$499, \$500-\$599, \$600-\$699, \$700-\$799, \$800-\$899, \$900-\$999, and \$1,000 or more. To generate the average charge for each property type, we created a new variable by taking the midpoint of each group (e.g. \$350 for \$300-\$399) and plus/minus \$50 from the upper and lower categories (e.g. \$1,050 for \$1,000 or more). We treated these approximations in the recoded variable as continuous to generate average charge per property type. Next, we took the average of the averages to generate a single average charge per home inspection. This method treats each property type with equal weight, i.e. it assumes that respondents inspect the same number of each type of property, which is unlikely to be true. For this reason, the average charge per home inspection is likely an overestimate. We report average and median charges for each property type and averaged across all property types.

Statistical Tests

Chi-square

A chi-square test determines whether two categorical variables are statistically independent. Each cell in a contingency table has an expected value based on the sample size and the marginal proportions of the table. But contingency table cell values do not always necessary match the expected values. The chi-square statistic is the sum of the normalized

squared deviations of the observed values from the expected values in all the cells. Comparing this value against the critical value of the chi-square distribution with the same degrees of freedom determines if the variables of interest are independent.

In this report, full time inspectors are more likely to carry errors and omissions insurance (Table 15) and general liability insurance (Table 16) than part time inspectors.

T-test

A t-test determines whether the mean difference of a continuous variable between 2 groups is statistically different from 0. For example, is the average height difference between 10 year old boys and girls zero? Or is it greater than zero (i.e. boys are taller)? Or is it less than zero (i.e. girls are taller)? The t statistic is the groups' mean difference divided by the product of the common standard deviation and the square root of the inverse sample size. Comparing the t statistic against the critical value at n-1 degrees of freedom determines if the mean difference between groups significantly differs from zero.

For this report, we tested whether the difference in mean charges per home inspection were significantly different than zero between full and part time inspectors. We found that they were. Full time mean (389.92) minus part time mean (353.97) = 35.95 and that the confidence interval around this difference value does not cross zero. The confidence interval is determined using standard errors, another measure of "spread".

Standard Deviation

Standard deviation is a measure of the "spread" of data points in a sample of a continuous variable. This example often helps understand how standard deviation is used. There are 10 people who each rate something on a scale of 0 to 100. If all 10 of them give ratings of 50, then the mean is 50 but there is no variability; everybody rated the same. But if 5 of them rated 0 and 5 of them rated 100, then the mean is still 50, but now you have variability (SD=53). But if 5 of them rate 25 and 5 of them rate 75, the mean is still 50 and you have variability, but less than then previous example (SD=26). The mean and standard deviation are two parameters commonly used to describe a sample distribution.

Recommendations for Future Surveys

This data project was undertaken with significant time constraints. For future surveys, the following is recommended to achieve more reliable results:

Home Inspectors Survey:

- Pilot testing. Pilot testing the survey would have allowed us to improve on the following items:

- In addition to asking home inspectors to indicate all Ontario regions where they perform home inspections, we would have also asked them to indicate the single region where they perform the majority of their work.
- Greater variability in responses to the approximate annual cost of errors and omissions insurance and aggregate level of errors and omissions liability coverage. We would have determined that the majority of home inspectors pay over \$3,000 per year for this premium, which was the highest response category we provided. A future survey might include \$3,000 to \$3,500 as the middle response category for this item. Similarly to the premiums item, the majority of responses were for the highest category, \$2,000,000 or more. A future survey might make this a middle category.
- Greater variability in responses to cost of commercial general liability coverage, the level of commercial general liability coverage per occurrence, and aggregate level of commercial general liability coverage. Responses to these items were concentrated in the lowest or highest categories. A future survey might make these categories the middle category.
- We would not have asked how many home inspections are performed during an average week. Because of variation in how often home inspectors work, a true range of a responses ranges from fractions less than 1 to upwards of 10.

Real Estate Council of Ontario (RECO) Survey

- Pilot testing. Pilot testing would have allowed us to improve on the following items:
 - We would have improved the wording of the final ranking question that sought to determine how many home inspections buyers purchase over the course of buying a house. The question wording and ranking responses were unclear. A future survey might phrase the question as follows: “ How many home inspections does one buyer have performed over the course of viewing one or more properties when purchasing a home?”. Answer responses could be 0, 1, 2, or 2+.
- A future survey might include an item that asks real estate professionals how many residential transactions were completed in one year where they represented the buyer. The follow up question, which we did ask, then asks in what percentage of these residential transactions did the buyer have the home inspected.

Appendix B: Home Inspector Survey

Ontario Home Inspectors Survey

Introduction:

As you may know, the Ministry of Consumer Services is consulting on home inspector qualifications. The ministry has assembled an expert panel and hired SEG Management Consultants Inc. to facilitate meetings and draft the panel's report of findings and recommendations to submit to the government. The ministry will share the expert panel's report for public comment and will email survey respondents a copy of the report for review and comment.

To support the work of the expert panel, SEG Management Consultants Inc. has been contracted to collect and study data on the home inspection industry. The purpose is to assemble better information and profile of home inspectors and the home inspection industry in Ontario.

The following survey is being sent to a list of home inspectors that was compiled with assistance of industry associations and business in Ontario. The survey is intended for all full-time, part-time, and dormant inspectors.

Please complete the survey by November 4, 2013. We strongly encourage you to complete the survey. The results of this survey will provide important information about the industry and will assist the expert panel and government to develop an approach to home inspector qualifications that meets the needs of both consumers and the industry.

All participants of this survey will receive a report on the home inspection industry. Only aggregate, non-identifying information will be included in the report.

Sincerely,

Mary Tate

Vice-President
SEG Management Consultants Inc.

1. What is your:

First name

Last name

2. What is your primary business email address?

3. What is your primary business telephone number?

4. Do you work in a franchise?

Yes

No

5. Select the name of the franchise you work with. Check all that apply.

Pillar to Post

AmeriSpec

Lighthouse

A Buyer's Choice

Global Property Inspections

Canadian Home Inspection Services

Home-Alyze

Canadian Residential Inspections

Grassroots Home Inspections

Pro-Sight Property Inspections

All Season Inspection Inc.

Other (please specify)

6. Which of the following best describes the home inspection business you own or work with?

Sole proprietorship

Partnership

Single inspector corporation

Multi-inspector corporation

I'm a student

Other (please specify)

7. Enter the name of the corporation that you work for.

8. Select the name(s) of the association(s), if any, that you are aligned with. Check all that apply.

Alliance for Canadian Home Inspectors (ACHI)

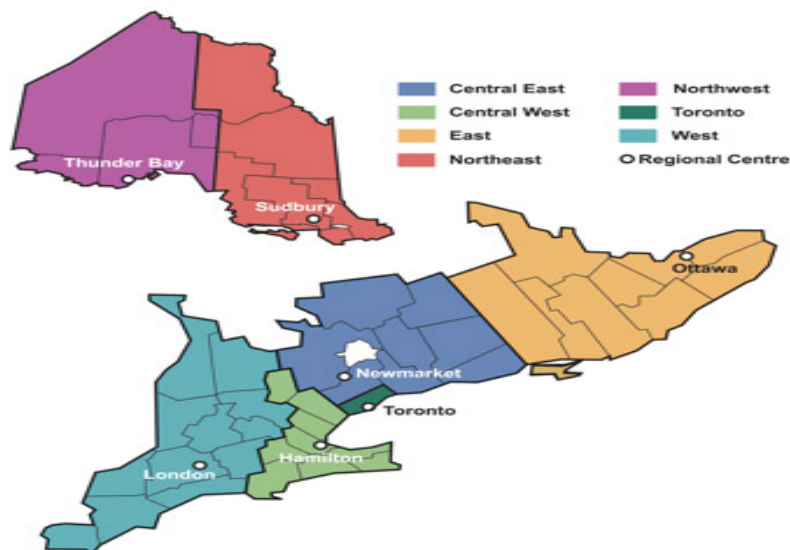
- Canadian National Association of Certified Home Inspectors, Inc. (CanNACHI)
- International Association of Certified Home Inspectors (InterNACHI)
- National Home Inspector Certification Council (NHICC)
- Ontario Association of Certified Home Inspectors (OntarioACHI)
- Ontario Association of Home Inspectors (OAHI)/Canadian Association of Home and Property Inspectors (CAHPI)
- Professional Home and Property Inspectors of Canada, Ontario Chapter (PHPIC)
- American Society of Home Inspectors (ASHI) (Ontario Chapter)
- L'Association des Inspecteurs en bâtiments du Québec (AIBQ)
- Master Inspector Certification Board (MICB)

Other (please specify)

9. Select the Ontario region(s) where you conduct home inspections. Check all that apply.

Northwest

- Northeast
- East
- Central East
- Central West
- West
- Toronto



10. Which of the following categories best describes your current work status as a home inspector?

Full-time

- Part-time
 Retired
 Not currently performing home inspections

11. Do you see yourself returning to the home inspection business at some point in the future?

Yes

- No
 Don't know

12. In addition to part-time home inspection or if you're not currently performing home inspections, what best describes your other occupation(s)?

Construction/renovation/trades-related

- Realty-related
 Other (please specify)

13. Do you carry errors and omissions insurance for your home inspection business?

Yes

- No
 Don't know

14. Do you carry commercial general liability insurance for your home inspection business?

Yes

- No
 Don't know

15. What is the approximate annual cost of your errors and omissions insurance premium?

Less than \$500

- \$500 to \$999
- \$1,000 to \$1,499
- \$1,500 to \$1,999
- \$2,000 to \$2,499
- \$2,500 to \$2,999
- \$3,000 or more
- Don't know

16. What is the level of your errors and omissions liability coverage per occurrence?

Less than \$250,000

- \$250,000 to \$499,999
- \$500,000 to \$999,999
- \$1,000,000 to \$1,499,999
- \$1,500,000 to \$1,999,999
- \$2,000,000 or more
- Don't know

17. What is the aggregate level of your errors and omissions liability coverage?

Less than \$250,000

- \$250,000 to \$499,999
- \$500,000 to \$999,999
- \$1,000,000 to \$1,499,999
- \$1,500,000 to \$1,999,999
- \$2,000,000 or more
- Don't know

18. What is the approximate cost of your commercial general liability insurance coverage?

Less than \$250,000

- \$250,000 to \$499,999
- \$500,000 to \$999,999
- \$1,000,000 to \$1,499,999
- \$1,500,000 to \$1,999,999
- \$2,000,000 or more
- Don't know

19. What is the level of your commercial general liability coverage per occurrence?

Less than \$250,000

- \$250,000 to \$499,999
- \$500,000 to \$999,999
- \$1,000,000 to \$1,499,999
- \$1,500,000 to \$1,999,999
- \$2,000,000 or more
- Don't know

20. What is the aggregate level of your commercial general liability coverage?

Less than \$250,000

- \$250,000 to \$499,999
- \$500,000 to \$999,999
- \$1,000,000 to \$1,499,999
- \$1,500,000 to \$1,999,999
- \$2,000,000 or more
- Don't know

21. What are the main types of home inspections you perform?

Check all that apply

Standard home inspection

- Multi-residential inspection
- Commercial inspection
- Pre-listing
- New construction
- Tarion Warranty Inspections (30 days, 1 year etc..)
- Home energy audits

Other (please specify)

22. For home inspections you perform related to real estate transactions, what proportion of them are done on behalf of the buyer? Assume the rest are done on behalf of the seller.

0%

- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%
- Don't know

23. From whom do you receive the most referrals for home inspection services? Please rank the following.

Other clients

Other home inspectors

Real estate professionals

Attornies/legal professionals

No referral (e.g. contacted by client directly via website, advertising, etc.)

24. How many standard home inspections do you perform during an average week?

25. How many standard home inspections did you perform in the last year? (November 1st, 2012 to October 31st, 2013)

26. How many of the standard home inspections that you performed last year, if any, included additional services? (November 1st, 2012 to October 31st, 2013)

27. What additional services did you provide in the last year, if any? Check all that apply. (November 1st, 2012 to October 31st, 2013)

Lead

- Mold
- Radon
- Asbestos
- Pools/spas
- Stucco/EIFS
- Water quality
- Thermal imaging/infrared
- Log homes
- Methamphetamine
- Sewer line
- Septic
- WDO/insects
- WETT

Fire extinguishers

- Chimneys
- Energy loss
- Green certification
- Well testing (flow)
- Window wise inspection
- Litigation inspections
- Landlord tenant disputes
- Property condition surveys to document existing condition prior to construction or blasting
- Maintenance inspections
- Pre-renovation inspections
- Indoor air quality
- Barns/outbuildings
- General consulting

Other (please specify)

28. On average, how much money do you charge for a home inspection of the following types of homes?

	I don't inspect this type of property	Less than \$200	\$200 to \$299	\$300 to \$399	\$400 to \$499	\$500 to \$599	\$600 to \$699	\$700 to \$799	\$800 to \$899	\$900 to \$999	\$1,000 or more
Townhouse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Semi-detached	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Condominium unit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detached home under 1600 square feet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detached home from 1600 square feet to 2500 square feet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detached home over 2500 square feet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. For how many years have you worked as a home inspector, either full-time or part-time?

- Less than 1 year
- 1 to 4 years
 - 5 to 9 years
 - 10 to 14 years
 - 15 years or more

30. What is the highest level of education you have completed?

- Some high school
- High school diploma
 - College degree/diploma
 - University degree

31. Select the home inspection certifications you hold, if any? Check all that apply. Please also include certifications for which you are a candidate or associate.

ASHI Certified Home Inspector (ASHICHI)

- Certified Canadian Home Inspector (CCHI)
- Certified Home Inspector (CHI)
- Certified Master Home Inspector (CMHI)
- Certified Master Inspector (CMI)
- Certified Property Inspector (CHI)
- National Certificate Holder (NCH)
- National Home Inspector (NHI)
- New Construction Inspector (NCI)
- Registered Home Inspector (RHI)

Other (please specify)

32. Select the other home inspection-related certifications you hold, if any. Check all that apply.

Certified Indoor Air Consultant (IAC2)

- Certified Indoor Air Mold Consultant (IAC2-Mold)
- Certified Indoor Air Radon Consultant (IAC2-RADON)
- Wood Energy Transfer Technology (WETT)

Other (please specify)

33. Select the providers, if any, from which you have taken home inspection courses or received home inspection training. Check all that apply.

ASHI home study

- Academy of Learning
- American Home Inspectors Training Institute (AHIT)
- Carson-Dunlop (direct)
- Carson Dunlop (via other means)
- Home Inspectors Institute
- Inspect4U
- InterNACHI (online)
- L'Association des Inspecteurs en bâtiments du Québec (AIBQ)
- National Institute of Building Inspectors (NIBI)
- OAHI training
- Ontario ACHI (online)

Other (please specify)

34. Select the community college where you have taken home inspection courses or received home inspection training. Check all that apply.

Algonquin College

- Ashton College
- Bow Valley College
- Cambrian College
- Canadore College
- Centennial College
- Conestoga College
- Confederation College
- Douglas College
- Durham College
- Fanshawe College
- Fleming College
- George Brown College
- Georgian College
- Humber College
- Lambton College

Loyalist College

- Medicine Hat College
- Mohawk College
- Niagara College
- NorQuest College
- North Island College
- Northern College
- Sault College
- Seneca College
- S.E. Regional College
- Sheridan College
- Southern Alberta I.T.
- St. Clair College
- St. Lawrence College
- York University

Other (please specify)

35. Was/is home inspection your first career?

Yes

No

Thank you very much for participating in this survey!

Appendix C: Real Estate Agent Survey

This survey is intended for real estate professionals whose work includes residential transactions. If your work is only with commercial listings, this survey is not intended for you.

Introduction:

As you may know, the Ministry of Consumer Services is consulting on home inspector qualifications. The ministry has assembled an expert panel and hired SEG Management Consultants Inc. to facilitate meetings and draft the panel's report of findings and recommendations to submit to the government. The ministry will share the expert panel's report for public comment.

To support the work of the expert panel, SEG Management Consultants Inc. has been contracted to collect and study data on the home inspection industry. The purpose is to assemble better information on the home inspection industry in Ontario.

The following survey is designed to gather information from real estate agents on home inspections.

Your contribution to the report on this industry will be very valuable. The survey will take less than 5 minutes to complete. Please return your survey by November 11, 2013.

Sincerely,

Mary Tate

Vice-President
SEG Management Consultants Inc.

1. Please enter your:

First name

Last name

2. Please enter your primary business email address.

3. Select the Ontario region(s) where you conduct your real estate business. Check all that apply.

Northwest

Northeast

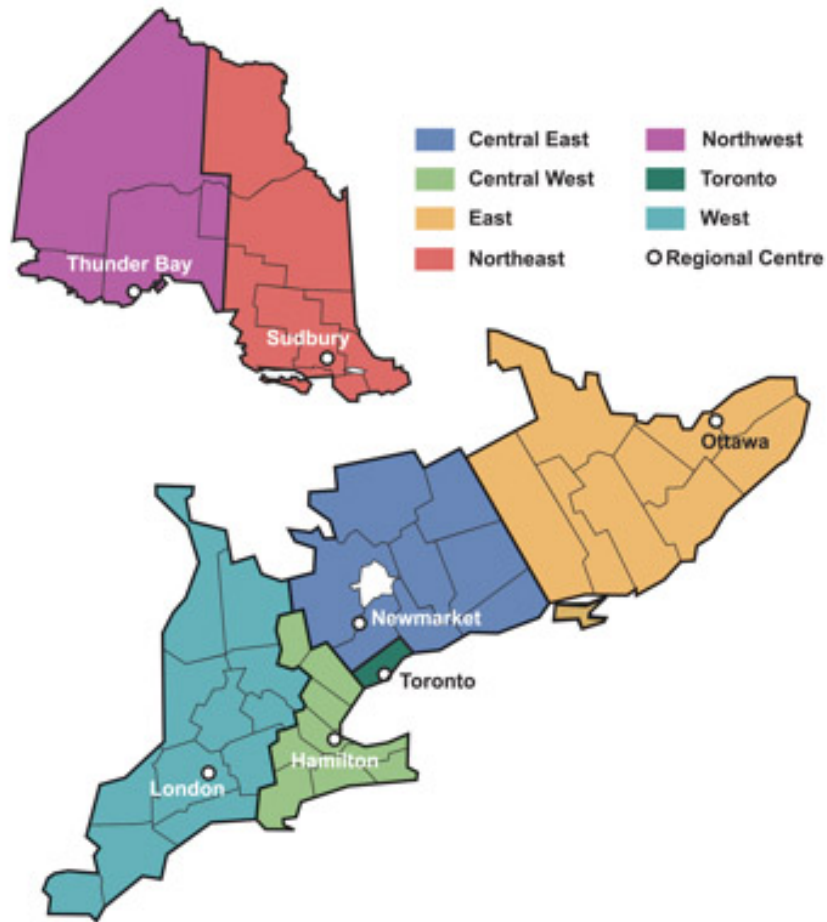
East

Central East

Central West

West

Toronto



4. What percentage of your residential listings had pre-listing home inspections in the last year (November 1st, 2012 to October 31st, 2013)? Please enter a whole number between 0 and 100.

5. In what percentage of COMPLETED residential real estate transactions where you represented the buyer in the last year (November 1st, 2012 to October 31st, 2013), did the buyer have the home inspected before closing? Please enter a whole number between 0 and 100.

6. Over the course of viewing one or more properties, how many home inspections does a buyer that you are representing usually have done before making a purchase? Please rank the number of home inspections usually performed.

0 home inspections

- 1 home inspection
- 2 home inspections
- 3 home inspections
- 4 home inspections
- 5 home inspections
- 5+ home inspections

Thank you for taking our survey!