

Economic & Labor Market Information Division of the Vermont Department of  
Labor

## Analysis of June, 2013 Survey Results Regarding Construction and Green Practices

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**6/28/2013**

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## Introduction & Methods

This report details the results of a survey commissioned by the Vermont Department of Labor's Economic and Labor Market Information Division and conducted by The Center for Rural Studies at the University of Vermont as part of the 2013 Vermonter Poll. The survey focused on three questions related to residential construction and the respondent's emphasis on green building practices. The specific questions are detailed below.

This survey was conducted as part of a Memorandum of Understanding (MoU) between the Vermont Department of Labor and Vermont Technical College in support of the Vermont Business Sector Analysis Project. The goal of that project is to develop strategies and tactics to align the state's workforce education and training resources to meet the needs of critical economic sectors for skilled workers. VDoL's research builds on the previous success of an analysis of O\*NET green sectors. This report satisfies VDoL deliverable #1 of the MoU signed by both parties on or before May 14<sup>th</sup>, 2013.

The survey was conducted between the hours of 9:00 a.m. and 9:00 p.m. beginning on May 1, 2013 and ending on May 17, 2013. The telephone polling was conducted from the University of Vermont using computer-aided telephone interviewing (CATI). A random sample for the poll was drawn from a list of Vermont telephone numbers, which is updated quarterly and included listed and unlisted telephone numbers. Cellular phone numbers were not included in the sampling frame. Only Vermont residents over the age of eighteen were interviewed. The poll included questions on a variety of issues related to the state of Vermont. In total, 2,528 households were successfully contacted, yielding 777 complete responses; therefore, 30.7 percent of these calls resulted in a completed survey. Based on a group of this size, the results have a margin of error of plus or minus 4 percent with a confidence interval of 95 percent.

Because our questions focused on residential construction and remodeling, this report focuses on the 622 valid responses from home owners. Unless otherwise noted, all data in this report refers to home owners only. For information on the demographics of these two samples and how they differ, please see *Appendix 1*. Crosstabs of the results by age cohort, income cohort, county, gender and education level can be found in *Appendices 2-4*.

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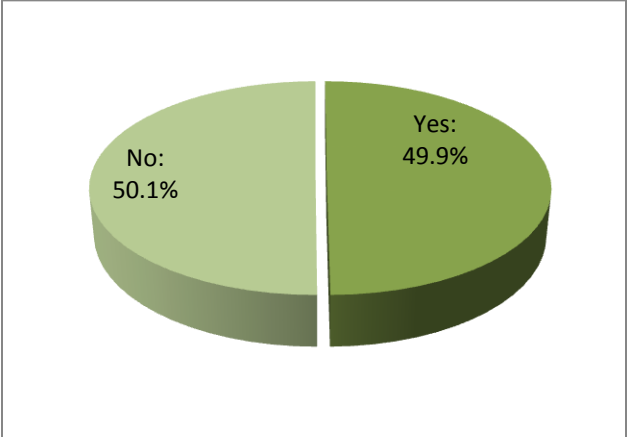
[www.vtlmi.info](http://www.vtlmi.info)

### Results

#### Question #1

Our first question asked, *“In the past four years, have you put off any construction or remodeling projects to your primary residence for economic reasons?”* The inquiry received 621 valid responses. 49.9% of those polled stated that they had put off a construction or remodeling project, while 50.1% stated they had not (see table 1 below)

Table 1: Percent who put off construction for economic reasons (n = 621)



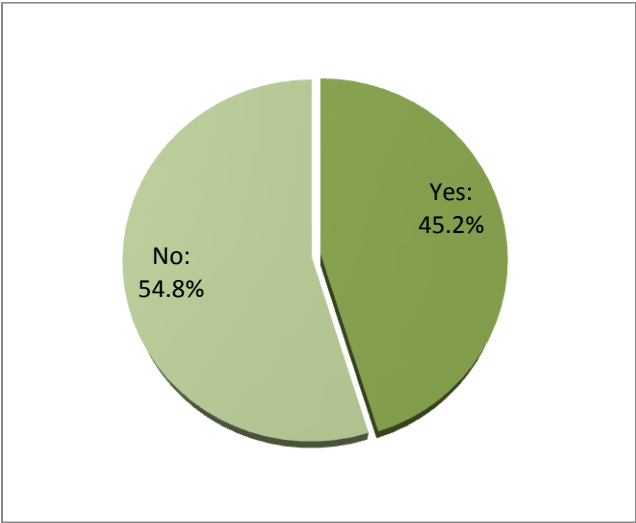
As might be expected, the percent of respondents who put off construction or remodeling is inversely proportional to total household income. In households with total income of less than \$25,000, 64% had put off such projects. This percentage falls to 43.6% for households with income greater than \$75,000. The age group most likely to respond that they have put off such projects in the past four years are people between 30 and 50 years old. Among that age cohort, 65% had put off work while younger and older cohorts were both below 50%. Sorted by county or region, no discernible or relevant differences appear.

#### Question #2

Our second question asked, *“In the next twelve months, do you expect to undertake any construction, remodeling or energy efficiency improvements on your primary residence?”* This inquiry received 608 valid responses. 45.2% of those polled stated that they expect to undertake a construction or remodeling project, while 54.8% stated they did not (see table 2 below)

Respondents with higher household incomes tend to be more likely to expect to undertake such a project. Among households earning less than \$25,000, 31% report they expect to do a construction or remodeling project, while among those with incomes above \$100,000 that figure increases to 56%.

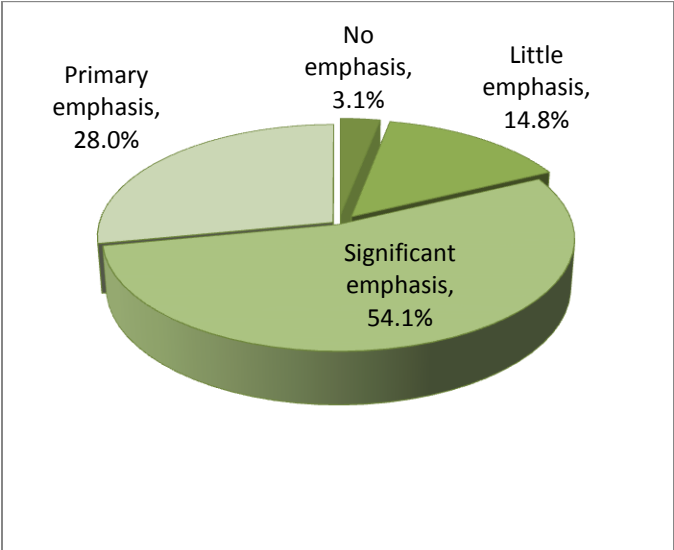
Table 2: Percent who plan to undertake construction, remodeling or energy efficiency improvements in the next 12 months (n = 608)



**Question #3**

Our third question asked, “The next time you undertake a major appliance replacement, interior renovation or remodeling project, how much emphasis will you place on energy efficiency and green building techniques?” This inquiry received 610 valid responses. 82.1% of respondents reported that they would place significant or primary emphasis on energy efficiency while only 17.9% reported that they would place little or no emphasis.

Table 3: Emphasis on energy efficiency (n = 610)



The likelihood of placing an emphasis on energy efficiency increases with income levels. Among households with total income under \$25,000, 39.7% expect to place a significant emphasis on efficiency

during their next major appliance replacement, renovation or remodeling project. An additional 29.3% expect to make efficiency the primary emphasis. Among households with income above \$75,000, 56.5% expect to place a significant emphasis on efficiency and an additional 26.7% expect to make efficiency the primary emphasis. Viewing emphasis on energy efficiency by age cohort produces minor variations. Among those under forty, 55% plan to significantly emphasize energy efficiency and an additional 28% plan to make energy efficiency their primary emphasis. In the cohort of people over 40, those figures are 54% and 29% respectively.

### **Discussion**

The Vermonter Poll findings demonstrate that a significant amount of interior construction and remodeling had been postponed for economic reasons during the most recent recession and tepid recovery. 50% of Vermonters report putting off a project. With the housing market recovery finally seeming to take hold across the country, it appears that many Vermonters are interested in once again taking on construction, remodeling and appliance replacement projects. This is evidenced by the fact that 45% of Vermonters plan to take on such an endeavor in the next twelve months.

Among those who put off construction or remodeling for economic reasons, 53% expect to undertake a construction, remodeling or energy efficiency project in the next twelve months. Among people who did not put off a project, that figure is 37%.

Energy efficiency is clearly an important factor for most Vermonters. Among Vermonters who expect to purchase a major appliance or complete a remodeling / interior construction project in the next twelve months, 84.6% will place a significant or primary emphasis on energy efficiency (58.2% and 26.4% respectively).

**APPENDIX 1: Demographic Data**

<i>Topic</i>	<b>Home owners in Vermont Poll<sup>i</sup></b>	<b>Complete Vermont Poll sample<sup>i</sup></b>
<i>Age</i>		
19-29	2%	3%
30-39	8%	9%
40-49	14%	14%
50-59	26%	24%
60-69	28%	27%
70-79	15%	14%
80+	6%	5%
<i>Income</i>		
<\$25,000	11%	18%
\$25,000 - \$49,999	24%	26%
\$50,000 - \$74,999	21%	19%
\$75,000 - \$99,999	19%	16%
>\$100,000	25%	21%
<i>Education</i>		
< High School Diploma	3%	4%
High School Diploma	20%	21%
Some college	13%	16%
Associates degree	10%	10%
Bachelors degree	26%	24%
Post-graduate degree	28%	26%

<sup>i</sup>Totals may not add up to 100% due to rounding.

**APPENDIX 2: Crosstabs for Question #1**

*PUTOFF: Yes = People who put off an interior construction or remodeling project for economic reasons in the past four years*

**County Crosstabs**

		PUTOFF		Total
		Yes	No	
COUNTY	Addison	22	25	47
	Bennington	21	17	38
	Caledonia	13	12	25
	Chittenden	51	88	139
	Essex	3	5	8
	Franklin	30	15	45
	Grand Isle	2	2	4
	Lamoille	12	6	18
	Orange	23	14	37
	Orleans	19	17	36
	Rutland	38	34	72
	Washington	20	30	50
	Windham	22	24	46
	Windsor	32	20	52
	Total	308	309	617

**Income Crosstabs**

		PUTOFF		Total
		Yes	No	
Income	0-25	39	22	61
	25-50	74	59	133
	50-75	62	55	117
	75-100	41	63	104
	100+	64	74	138
	Total	280	273	553



**Gender Crosstabs**

		PUTOFF		Total
		Yes	No	
GENDER	Male	143	162	305
	Female	167	149	316
Total		310	311	621

**Education Crosstabs**

		PUTOFF		Total
		Yes	No	
EDUCA	< 9th grade	2	1	3
	9-12th grade (no diploma)	8	7	15
	HS Grad (or GED)	62	61	123
	Some college	46	35	81
	Associates / Technical degree	37	26	63
	Bachelor	78	83	161
	Post graduate / professional	76	98	174
Total		309	311	620

**Age cohort crosstabs**

		PUTOFF		Total
		Yes	No	
Age Label		7	2	9
	19 - 29	5	6	11
	30 - 39	35	17	52
	40 - 49	53	31	84
	50-59	88	72	160
	60 - 69	82	93	175
	70 - 79	32	63	95
	80+	8	27	35
Total		310	311	621

**APPENDIX 3: Crosstabs for Question #2**

*PLANCX12: Yes = People who expect to undertake any construction, remodeling or energy efficiency improvements on their primary residence in the next 12 months*

**County Crosstabs**

		PLANCX12		Total
		Yes	No	
COUNTY	Addison	21	25	46
	Bennington	16	22	38
	Caledonia	11	14	25
	Chittenden	68	69	137
	Essex	2	6	8
	Franklin	21	24	45
	Grand Isle	2	2	4
	Lamoille	8	10	18
	Orange	14	21	35
	Orleans	15	21	36
	Rutland	33	34	67
	Washington	21	27	48
	Windham	21	25	46
	Windsor	21	30	51
Total	274	330	604	

**Income Crosstabs**

		PLANCX12		Total
		Yes	No	
Income	0-25	19	42	61
	25-50	46	81	127
	50-75	57	56	113
	75-100	51	52	103
	100+	78	59	137
Total	251	290	541	

**Gender Crosstabs**

		PLANCX12		Total
		Yes	No	
GENDER	Male	138	161	299
	Female	137	172	309
Total		275	333	608

**Education Crosstabs**

		PLANCX12		Total
		Yes	No	
EDUCA	< 9th grade	0	3	3
	9-12th grade (no diploma)	2	13	15
	HS Grad (or GED)	45	73	118
	Some college	38	42	80
	Associates / Technical degree	25	38	63
	Bachelor	80	79	159
	Post graduate / professional	84	85	169
Total		274	333	607

**Age Cohort crosstabs**

		PLANCX12		Total
		Yes	No	
Age Label		5	4	9
	19 - 29	6	5	11
	30 - 39	23	28	51
	40 - 49	43	40	83
	50-59	70	88	158
	60 - 69	82	88	170
	70 - 79	33	59	92
	80+	13	21	34
Total		275	333	608

**APPENDIX 4: Crosstabs for Question #3**

*GREENEMP: How much emphasis respondents expect to place on energy efficiency or green building techniques during their next major appliance replacement, interior renovation or remodeling project.*

**County Crosstabs**

	GREENEMP				Total
	No emphasis	Little emphasis	Significant emphasis	Primary emphasis	
Addison	2	2	28	15	47
Bennington	4	2	19	13	38
Caledonia	0	4	13	8	25
Chittenden	1	24	84	29	138
Essex	0	2	3	3	8
Franklin	2	10	19	14	45
Grand Isle	0	0	3	0	3
Lamoille	2	3	9	4	18
Orange	1	7	11	14	33
Orleans	1	4	19	12	36
Rutland	2	12	38	18	70
Washington	1	8	28	14	51
Windham	3	5	25	13	46
Windsor	0	7	29	13	49
<b>Total</b>	19	90	328	170	607

**Income Crosstabs**

	GREENEMP				Total
	No emphasis	Little emphasis	Significant emphasis	Primary emphasis	
0-25	7	11	23	17	58
25-50	4	19	68	42	133
50-75	1	11	70	30	112
75-100	2	14	63	25	104
100+	4	21	73	39	137
<b>Total</b>	18	76	297	153	544

**Gender Crosstabs**

		GREENEMP				Total
		No emphasis	Little emphasis	Significant emphasis	Primary emphasis	
GENDER	Male	11	52	161	79	303
	Female	8	38	169	92	307
Total		19	90	330	171	610

**Education Crosstabs**

		GREENEMP				Total
		No emphasis	Little emphasis	Significant emphasis	Primary emphasis	
EDUCA	< 9th grade	0	0	1	2	3
	9-12th grade (no diploma)	2	1	9	2	14
	HS Grad (or GED)	4	20	60	34	118
	Some college	5	18	40	17	80
	Associates / Technical degree	1	11	32	19	63
	Bachelor	3	25	83	48	159
	Post graduate / professional	4	15	104	49	172
	Total	19	90	329	171	609

**Age Cohort Crosstabs**

		GREENEMP				Total
		No emphasis	Little emphasis	Significant emphasis	Primary emphasis	
Age Label	19 - 29	0	1	5	2	8
	30 - 39	0	3	7	1	11
	40 - 49	2	7	27	15	51
	50-59	4	7	47	25	83
	60 - 69	2	32	77	48	159
	70 - 79	4	21	100	48	173
	80+	4	13	55	22	94
	Total	3	6	12	10	31
Total		19	90	330	171	610