

APPENDIX 1: Supporting data tables

Table 1: Race

Race of Householder	2010				2000			
	Chittenden County		Vermont		Chittenden County		Vermont	
Total:	61,827	100.0%	256,442	100.0%	56,452	100.0%	238,383	100.0%
White alone	58,566	94.7%	248,163	96.8%	54,280	96.2%	234,766	98.5%
Black or African American alone	885	1.4%	1,594	0.6%	432	0.8%	867	0.4%
American Indian and Alaska Native alone	179	0.3%	912	0.4%	167	0.3%	960	0.4%
Asian alone	1,228	2.0%	2,077	0.8%	852	1.5%	1,366	0.6%
Native Hawaiian and Other Pacific Islander alone	14	0.0%	48	0.0%	8	0.0%	37	0.0%
Some Other Race alone	180	0.3%	554	0.2%	157	0.3%	387	0.2%
Two or More Races	775	1.3%	3,094	1.2%	556	1.0%	2,251	0.9%

Census 2010 and 2000, SF1

Table 2: Number of households, by household income

Characteristic of Household Head	Total number of HHs	Margin of error (+/-)	Number of HHs at <\$20,000	Margin of error (+/-)	Number of HHs at <\$50,000	Margin of error (+/-)
	59,479	+/- 536	8,424	+/- 592	24,446	+/- 1,032
White	55,084	+/- 545	7,765	+/- 579	22,650	+/- 976
African-American	802	+/- 146	116	+/- 88	499	+/- 188
Asian	1,176	+/- 176	193	+/- 85	543	+/- 158
Two or more races	702	+/- 138	135	+/- 73	301	+/- 146
Other	382	+/- 137	95	+/- 117	180	+/- 282
Hispanic	944	+/- 154	202	+/- 103	416	+/- 171
Non-Hispanic	55,084	+/- 545	7,765	+/- 579	22,650	+/- 976
Renter	19,459	+/- 638	5,835	+/- 513	14,147	+/- 821
Owner	40,020	+/- 561	2,589	+/- 333	10,299	+/-571
<65 yrs old	49,993	+/- 745	2,161	+/- 298	7,033	+/- 529
>=65 yrs old	9,486	+/- 404	2,509	+/- 294	5,750	+/-438
With disability	4,545	+/- 550				

Source: U.S. Census Bureau, American Community Survey, 2005-2009.

Table 3: Percentage of households in lower income groups

Characteristic of Household Head	% of HHs at <\$20,000	Margin of error (+/-)	% of HHs at <\$50,000	Margin of error (+/-)
All households	14%	+/- .99%	41%	+/- 1.67%
White	13.9%	+/- 1%	40%	+/- 1.7%
African-American	14.5%	+/- 10.6%	62.2%	+/- 20.5%
Asian	16.4%	+/- 7%	46.2%	+/- 12.6%
Two or more races	19.2%	+/- 9.7%	42.8%	+/- 16.3%
Other	24.8%	+/- 29%	47.1%	+/- 71.9%
Hispanic	21.4%	+/- 10.3%	44%	+/- 16.7%
Non-Hispanic	13.9%	+/- .99%	40%	+/- 1.7%
Renter	30%	+/- 2.4%	73%	+/- 3.4%
Owner	6.5%	+/- .83%	26%	+/- 1.4%
<65 yrs old	11.8%	+/- 1.7%	37.4%	+/- 1.8%
>=65 yrs old	26.4%	+/- 2.9%	60.6%	+/- 3.8%

Source: U.S. Census Bureau, American Community Survey, 2005-2009.

Table 4: Household type

Household Type	Total number of HHs	Margin of error (+/-)	Number of HHs in poverty	Margin of error (+/-)	% in poverty	Margin of error (+/-)
Single individuals	16,405	+/- 618	2,264	+/- 289	13.8%	+/- 1.7%
Non-family groups	7,355	+/- 535	1,809	+/- 254	24.6%	+/- 3%
Families without children	17,670	+/- 604	489	+/- 153	2.8%	+/- .86%
Single parent families with children	5,502	+/- 481	1,524	+/- 268	27.7%	+/- 4.2%
Married parent families with children	12,547	+/- 498	384	+/- 145	3.1%	+/- 1.1%

Source: U.S. Census Bureau, American Community Survey, 2005-2009.

Table 5: Household income, by household type

Household Type	Total number of HHs	Margin of error (+/-)	Number of HHs at <\$20,000	Margin of error (+/-)	Number of HHs at <\$50,000	Margin of error (+/-)
Non-family groups	23,760	+/- 671	2,718	+/- 333	+/- 9,587	+/- 644
All Families	35,719	+/- 696	6,048	+/- 484	15,507	+/- 821

Source: U.S. Census Bureau, American Community Survey, 2005-2009.

Table 6: Incidence of poverty, by race

Racial Group	Total number of HHs	Margin of error (+/-)	Number of HHs in poverty	Margin of error (+/-)	% in poverty	Margin of error (+/-)
White	132,244	+/- 793	13,065	+/- 1,023	9.9%	+/- .77%
African-American	2,073	+/- 205	583	+/- 297	28%	+/- 14%
Asian	3,629	+/- 170	486	+/- 223	13%	+/- 6.1%
Two or more races	2,393	+/- 303	701	+/- 265	29%	+/- 10.4%
Other	961	+/- 121	313	+/- 99	32.6%	+/- 9.5%
Nonwhite	9,056	+/- 499	2,083	+/- 497	23%	+/- 5.4%

Source: U.S. Census Bureau, American Community Survey, 2005-2009.

Table 7: Race, by town

	2000			2010			Change		
	Total Households	White Alone	All Others	Total Households	White Alone	All Others	Total Households	White Alone	All Others
Bolton	368	358	10	487	474	13	32%	32%	30%
Buels Gore	6	6	0	12	11	1	100%	83%	100%
Burlington	15,885	14,896	989	16,119	14,842	1,277	1%	0%	29%
Charlotte	1,287	1,268	19	1,419	1,392	27	10%	10%	42%
Colchester	6,144	5,966	178	6,314	6,060	254	3%	2%	43%
Essex	7,013	6,771	242	7,887	7,502	385	12%	11%	59%
Hinesburg	1,596	1,573	23	1,737	1,704	33	9%	8%	43%
Huntington	692	674	18	753	735	18	9%	9%	0%
Jericho	1,751	1,726	25	1,881	1,856	25	7%	8%	0%
Milton	3,333	3,284	49	3,889	3,796	93	17%	16%	90%
Richmond	1,504	1,484	20	1,586	1,555	31	5%	5%	55%
St. George	264	261	3	275	269	6	4%	3%	100%
Shelburne	2,632	2,596	36	2,880	2,819	61	9%	9%	69%
South Burlington	6,332	6,042	290	7,987	7,435	552	26%	23%	90%
Underhill	1,055	1,043	12	1,133	1,115	18	7%	7%	50%
Westford	725	716	9	757	742	15	4%	4%	67%
Williston	2,921	2,869	52	3,514	3,408	106	20%	19%	104%
Winooski	2,944	2,747	197	3,197	2,851	346	9%	4%	76%
Chittenden County	56,452	54,280	2,172	61,827	58,566	3,261	10%	8%	50%

Source: Census 2010, Summary File 1.

Table 8: Age of householder, by town

	Number of Households				Percentage of Households			Percentage of all Aged		
	Total:	15-64	65-84	85+	15-64	65-84	85+	15-64	65-84	85+
Chittenden County	61,827	50,339	9,852	1,636	81%	16%	3%			
Bolton	487	440	45	2	90%	9%	0%	1%	0%	0%
Buels Gore	12	10	2	0	83%	17%	0%	0%	0%	0%
Burlington	16,119	13,517	2,172	430	84%	13%	3%	27%	22%	26%
Charlotte	1,419	1,140	256	23	80%	18%	2%	2%	3%	1%
Colchester	6,314	5,308	935	71	84%	15%	1%	11%	9%	4%
Essex	7,887	6,460	1,301	126	82%	16%	2%	13%	13%	8%
Hinesburg	1,737	1,481	232	24	85%	13%	1%	3%	2%	1%
Huntington	753	671	71	11	89%	9%	1%	1%	1%	1%
Jericho	1,881	1,552	304	25	83%	16%	1%	3%	3%	2%
Milton	3,889	3,312	523	54	85%	13%	1%	7%	5%	3%
Richmond	1,586	1,348	217	21	85%	14%	1%	3%	2%	1%
St. George	275	229	43	3	83%	16%	1%	0%	0%	0%
Shelburne	2,880	1,971	695	214	68%	24%	7%	4%	7%	13%
South Burlington	7,987	6,036	1,531	420	76%	19%	5%	12%	16%	26%
Underhill	1,133	961	159	13	85%	14%	1%	2%	2%	1%
Westford	757	645	106	6	85%	14%	1%	1%	1%	0%
Williston	3,514	2,598	801	115	74%	23%	3%	5%	8%	7%
Winooski	3,197	2,660	459	78	83%	14%	2%	5%	5%	5%

Source: Census 2010, Summary File 1, Table H17

Table 9: Household growth, by town, 2000-2015

	Number of households			Annual rate of change		Estimated additional households (2010-2015)
	2000	2010	2015	2000-2010	2010-2015 (est.)	
Chittenden County	56,452	61,827	63,223	0.9%	0.5%	1,600
Bolton	368	487	504	2.8%	0.8%	19
Buels Gore	6	12	12	6.7%	0.0%	-
Burlington City	15,885	16,119	16,221	0.1%	0.1%	117
Charlotte	1,287	1,419	1,464	1.0%	0.7%	51
Colchester	6,144	6,314	6,437	0.3%	0.4%	141
Essex	7,013	7,887	8,097	1.2%	0.6%	241
Hinesburg	1,596	1,737	1,779	0.8%	0.5%	48
Huntington	692	753	777	0.8%	0.7%	27
Jericho	1,751	1,881	1,932	0.7%	0.6%	59
Milton	3,333	3,889	4,025	1.5%	0.8%	156
Richmond	1,504	1,586	1,627	0.5%	0.6%	47
St. George	264	275	275	0.4%	0.0%	-
Shelburne	2,632	2,880	2,949	0.9%	0.5%	79
South Burlington	6,332	7,987	8,339	2.3%	1.0%	404
Underhill	1,055	1,133	1,169	0.7%	0.7%	41
Westford	725	757	778	0.4%	0.6%	24
Williston	2,921	3,514	3,627	1.8%	0.7%	129
Winooski	2,944	3,197	3,212	0.8%	0.1%	17

Source: Census 2000 and 2010 summary file 1, VHFA forecast for 2015 based on projections from ESRI and Allen & Cable's Residential Report March 2011

Table 10: Tenure in 2000 and 2010, by town

	2000		2010		% change owners	% change renters
	Owners	Renters	Owners	Renters		
Chittenden County	37,291	19,161	40,310	21,517	8%	12%
Bolton	317	51	422	65	33%	27%
Buels Gore	6	0	7	5	17%	500%
Burlington	6,590	9,295	6,553	9,566	-1%	3%
Charlotte	1,085	202	1,189	230	10%	14%
Colchester	4,354	1,790	4,509	1,805	4%	1%
Essex	5,418	1,595	5,955	1,932	10%	21%
Hinesburg	1,302	294	1,468	269	13%	-9%
Huntington	617	75	668	85	8%	13%
Jericho	1,551	200	1,677	204	8%	2%
Milton	2,897	436	3,237	652	12%	50%
Richmond	1,209	295	1,298	288	7%	-2%
St. George	226	38	222	53	-2%	39%
Shelburne	2,107	525	2,225	655	6%	25%
South Burlington	4,351	1,981	5,186	2,801	19%	41%
Underhill	974	81	1,031	102	6%	26%
Westford	657	68	682	75	4%	10%
Williston	2,475	446	2,837	677	15%	52%
Winooski	1,156	1,788	1,144	2,053	-1%	15%

Source: Census 2010, Summary File 1.

Table 11: Year built, by tenure

Year Built	Owner	Renter	Grand Total
1939-	5,880	4,770	10,650
1940 to 1959	4,820	2,905	7,725
1960 to 1979	12,290	4,555	16,845
1980 to 1999	14,550	4,270	18,820
2000+	3,550	1,580	5,130
Grand Total	41,090	18,080	59,170

Source: U.S. Census Bureau, American Community Survey, 2005-2009.

Table 12: Kitchen and plumbing conditions

	Households	Margin of error (+/-)	Lacking Kitchen	Margin of error (+/-)	Lacking Plumbing	Margin of error (+/-)
Owner	40,020	+/- 561	46	+/- 31	110	+/- 59
Renter	19,459	+/- 638	185	+/- 104	81	+/- 59
Total	59,479	+/- 536	231	+/- 112	191	+/- 83

Source: U.S. Census Bureau, American Community Survey, 2005-2009.

Table 13: Number of housing units, by structure type and town

	Total	SF	MH	MF2-4	MF5+
Chittenden County	64,807	43,367	1,547	9,370	10,523
Bolton	529	405	24	33	67
Buel's Gore	14	14	-	-	-
Burlington	17,221	7,683	119	5,123	4,296
Charlotte	1,653	1,537	25	60	31
Colchester	7,049	4,876	251	1,088	834
Essex	4,273	3,300	15	355	603
Essex Junction	4,054	2,625	1	512	916
Hinesburg	1,825	1,381	224	123	97
Huntington	838	749	53	31	5
Jericho	1,888	1,794	5	63	26
Milton	3,934	3,233	339	225	137
Richmond	1,410	1,311	20	39	40
Shelburne	2,778	2,408	109	108	153
South Burlington	8,176	5,716	-	404	2,056
St. George	292	160	132	-	-
Underhill	1,227	1,096	9	122	-
Westford	786	725	34	27	-
Williston	3,649	3,202	185	35	227
Winooski	3,211	1,152	2	1,022	1,035

Source: CCRPC Draft 2010-2-11 housing points data.

Notes: Figures shown represent 92%-100% of all housing units in the town. Excludes group quarters (such as dorms and some nursing homes). Burlington, Colchester, and Winooski have sizeable group quarters populations. Also excludes some resort condominium units.

Legend:

SF = Single Family. Some duplex structures listed as 2 SF homes. Includes most townhouses.

MH = Mobile Home. A small number of mobile homes may be categorized as SF.

MF2-4 = Multifamily, 2-4 units in structure

MF5+ = Multifamily, 5 or more units in structure

Table 14: Median year built, by tenure and town

	All units		Owner		Renter	
	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)	Estimate	Margin of Error (+/-)
Chittenden County	1974	2	1977	1	1968	3
Bolton	1983	2	1983	3	1983	2
Buels Gore	not available					
Burlington	1953	2	1957	2	1949	3
Charlotte	1974	4	1977	3	not available	
Colchester	1977	2	1980	2	1977	3
Essex	1977	1	1978	2	1974	4
Hinesburg	1980	3	1980	3	not available	
Huntington	1980	3	1980	3	1976	8
Jericho	1975	3	1975	3	1972	6
Milton	1983	2	1982	3	1984	5
Richmond	1979	3	1977	3	1985	7
St. George	1977	5	1977	4	1973	6
Shelburne	1980	3	1978	3	1988	6
South Burlington	1982	1	1981	1	1985	3
Underhill	1974	3	1976	3	1939	
Westford	1977	2	1977	2	1982	5
Williston	1991	1	1990	2	1995	2
Winooski	1949	6	1952	6	1947	9

Source: U.S. Census Bureau, American Community Survey 2005-2009, Tables B25035 and B25037

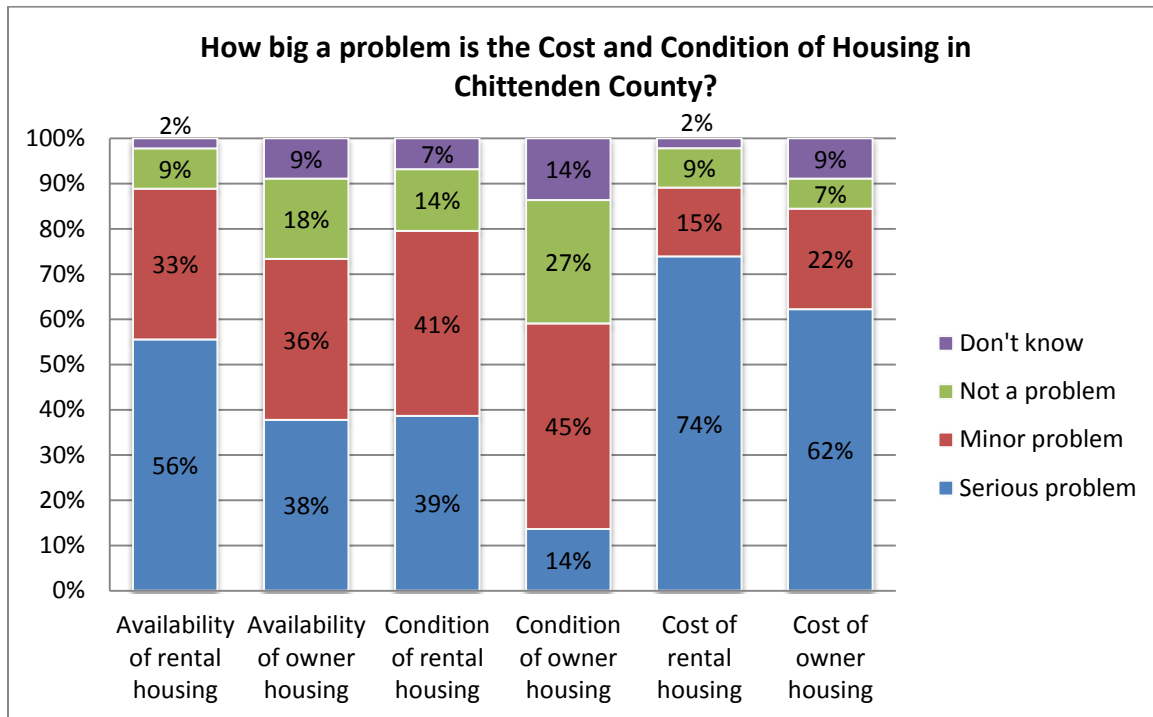
Appendix 2: Survey on Employer Views of Housing Issues in Chittenden County

Several agencies interested in local housing markets (Vermont Association of Realtors; Vermont Department of Economic, Housing, and Community Development; and Vermont Housing Finance Agency) partnered to create a survey of human resource professionals at Vermont-based businesses as part of the ECOS project's housing needs assessment. The objective of the survey was to measure the perceived need, cost, and condition of housing and its impact on employers' ability to attract and retain workers.

VHFA collected surveys from 47 Chittenden County employers asking their opinions about housing availability, cost, and location -- and about the impact of those factors on their businesses. The survey results show significant concern with the cost and availability of both homeownership and rentals and with the distances that employees must travel to get to work. These housing problems have considerable negative impact on their businesses.

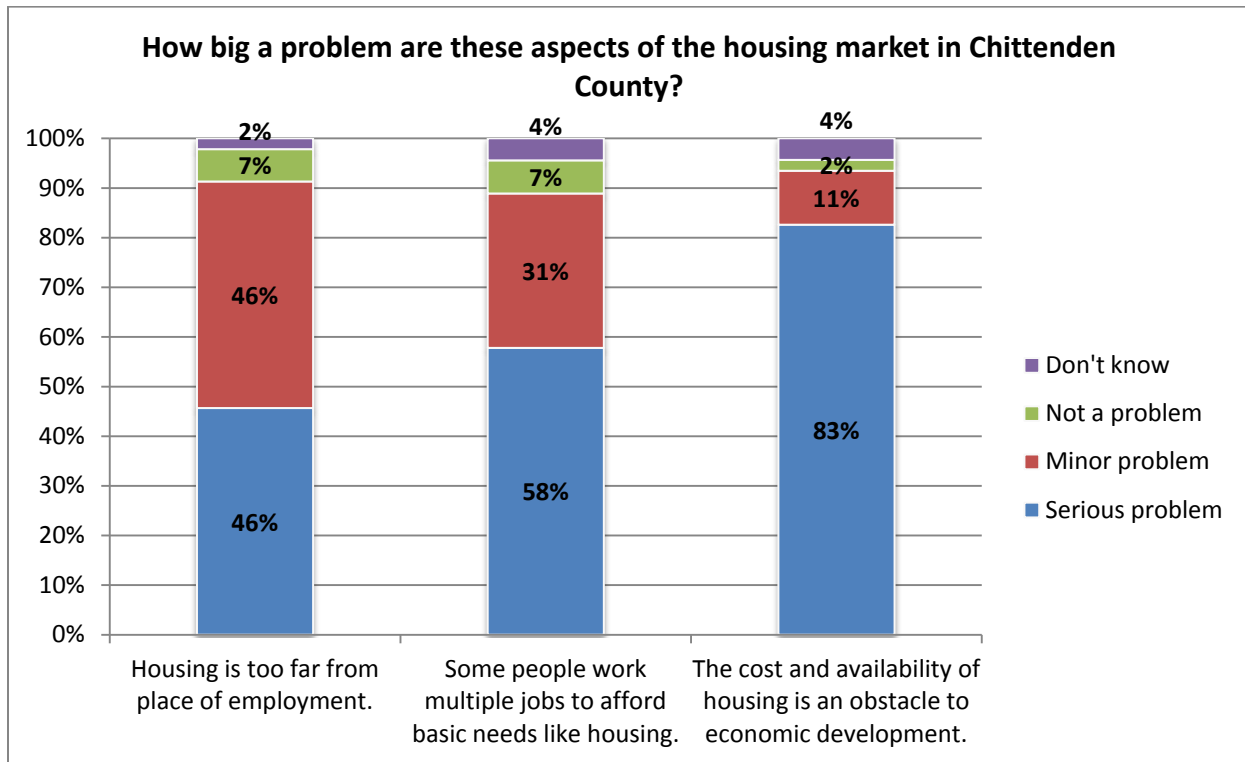
Although the employers surveyed ranged from small businesses with fewer than 25 employees to large companies employing more than 500 workers, the majority of employers (60%) were small businesses (25 or fewer employees). The survey respondents represented 13 industry sectors. The majority came from Other Services (14), Professional and Business Services (11), Manufacturing (4), and Education and Health Services (4) and Financial Activities (4). The surveys were conducted online, using Survey Monkey, between August 4, 2011 and September 12, 2011. The surveys represent the opinions of those businesses that responded. They are not necessarily representative of the opinions of all Chittenden County businesses.

The cost of housing was regarded as a serious problem by 74% of employers for rental housing and 62% of employers for owner housing. The condition of housing was regarded as a serious problem by 80% of employers for rental housing and by 59% of employers for owner housing.



The following chart shows several aspects of the housing market are of particular concern:

- Employees often live far from the worksite:** Affordable housing can often be found only at some distance from the work site. Housing too far from the place of employment was identified as a serious problem by 46% of employers while an additional 46% said it was a minor problem.
- Employees work multiple jobs:** Employers explained that some employees work multiple jobs to afford basic needs like housing. Fifty-eight percent of employers said this is a serious problem while an additional 31% said it is a minor problem.
- Lack of housing impacts economic development:** Employers viewed the cost and availability of housing as an obstacle to economic development. Eighty-three percent of employers said it is a serious problem while an additional 11% said it is a minor problem.



Eighty-one percent of employers said that there are benefits to having employees live close to employment; sixty-eight percent said that they experienced negative aspects of having employees living far from the place of employment.

Benefits cited by employers for employees living close to the work site include:

- Happier, relaxed, healthier, and have a better work/life balance
- Less likely to look for a job closer to home
- Have more income
- Less likely to be late
- Easier to get to work in the winter; less likely to call in sick
- Able to get to work at unscheduled times to respond to emergencies
- Helps limit crowding on roads and more environmentally sustainable
- Lower turnover

Employee turnover (i.e., the cost of lost productivity, advertising, and the time and expense of interviewing and training candidates) costs on average, \$13,754 per employee. In the past three years, employers lost an average of 2.46 recruits due to housing costs, availability, or other limitations. Employers commented that they have lost recruits and have had to spend greater sums of money in sign on bonuses and relocation expense reimbursement or temporary housing because there are such

limited rental homes and affordable housing relative to the options candidates observed in other parts of the country.

Employers also said that high housing costs affect their company's ability to remain competitive. Their comments include:

- Hard to attract really good talent with lower Vermont wages and with really high taxes and housing prices
- Have to pay higher salaries to remain competitive
- Pressure to increase wages because of high housing and travel costs
- Wages offered have to reflect higher housing prices
- Best people can't afford to stay here
- Employees consider other opportunities due to salary and cost of living

In response to problems that employees have in finding or affording housing, employers explained that they have helped employees in the following ways:

- Flexibility in work arrangements including alternate schedules and the ability to work from home
- Beds available on site for employees on call in the winter
- Loans to help with housing deposits or vehicle expenses
- Paying more and hiring fewer people
- Providing bus passes for employees

Other comments that employers made on housing include:

- Difficult to find good, reasonable, rental properties for entry level professionals.
- Not enough affordable housing; must have at least 2 incomes to pay for most 2+ bedroom rentals
- Housing is not energy efficient and thus is very expensive to heat
- Lack of availability of natural gas which is an affordable fuel
- Government regulations and required inspections which raise the cost of building housing and increase the price of rentals

Housing survey findings consistent with economic competitiveness survey

In addition to the employer survey on housing issues conducted by VHFA, the Greater Burlington Industrial Corporation (GBIC) and a team of economic development consultants conducted an employer survey. This second survey focused on economic competitiveness issues, but asked respondents one question related to housing.¹

In this survey, employers were asked to indicate how housing affects relocating or recruiting workers from outside the area. The average rating among responding employers was 2.7 on a five point scale where 1=poor and 5=Excellent. Housing was the lowest rated quality of life factor in this economic

competitiveness survey. It was also the most commonly observed weakness of the region in interviews with employers. This was a notable difference compared to the high ratings for the region in offering virtually all other quality of life factors. One survey respondent categorized the “Chittenden County discount” as “pay scales are lower but housing prices are not.”²

¹ Electronic surveys were sent to nearly 220 County employers of a wide range of sizes, types and locations throughout the County. Seventy-five (75) responses were obtained for a response rate of 34.2%.

² Draft #1, Chittenden County, VT Competitive Assessment, p. 20. See <http://ecosproject.com/sites/default/files/documents/ECOS%20Draft%20%231%20Competitive%20Assessment%20W%20appendices%2010-18-11.pdf>