

Labor Market Information

House Commerce & Economic
Development
January 29, 2014

*Vermont Department of Labor
Economic & Labor Market Information*

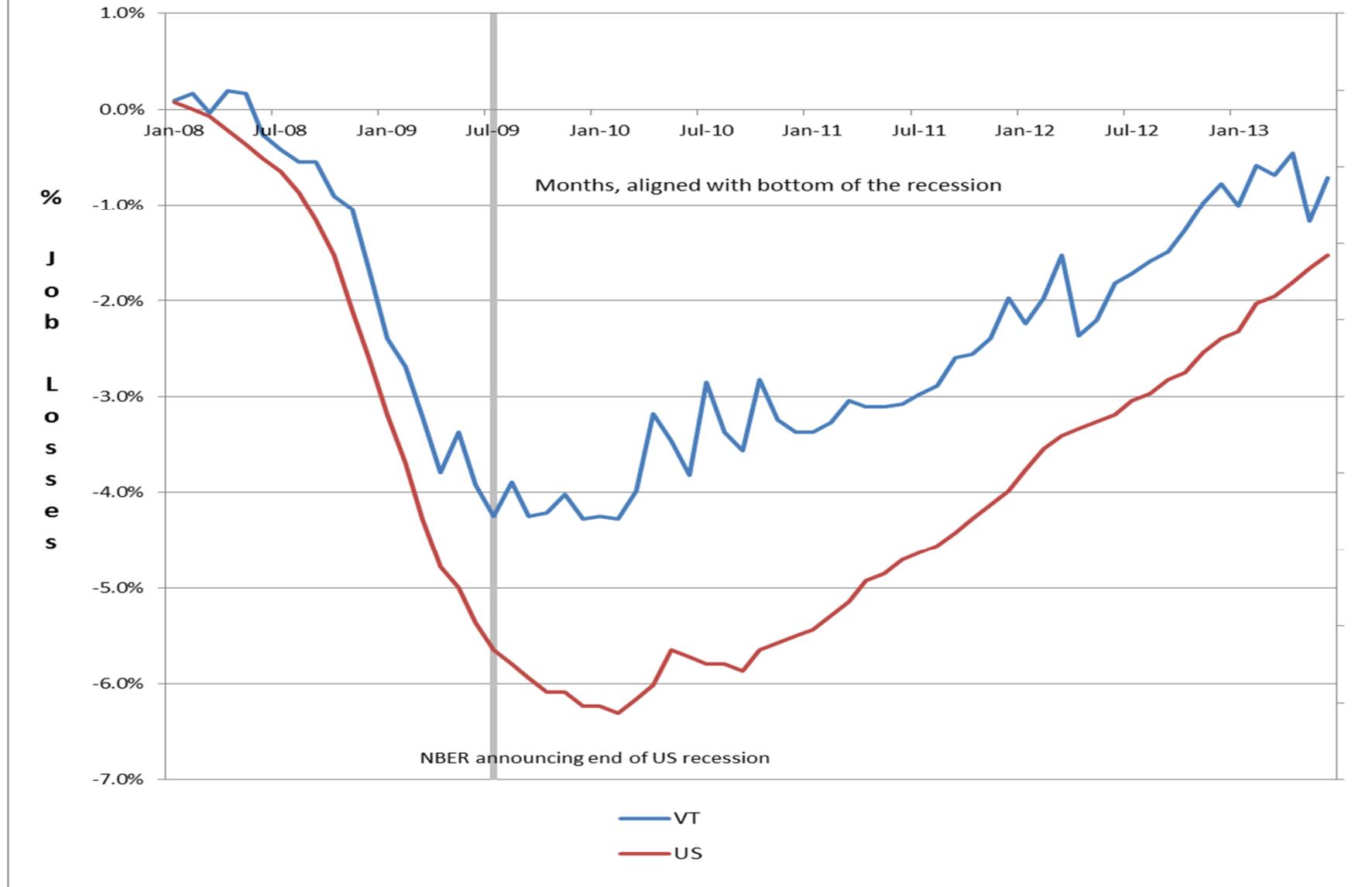
Labor Market Information online at: www.VTLMI.info

Summary: VDOL Employment and Jobs measurement programs

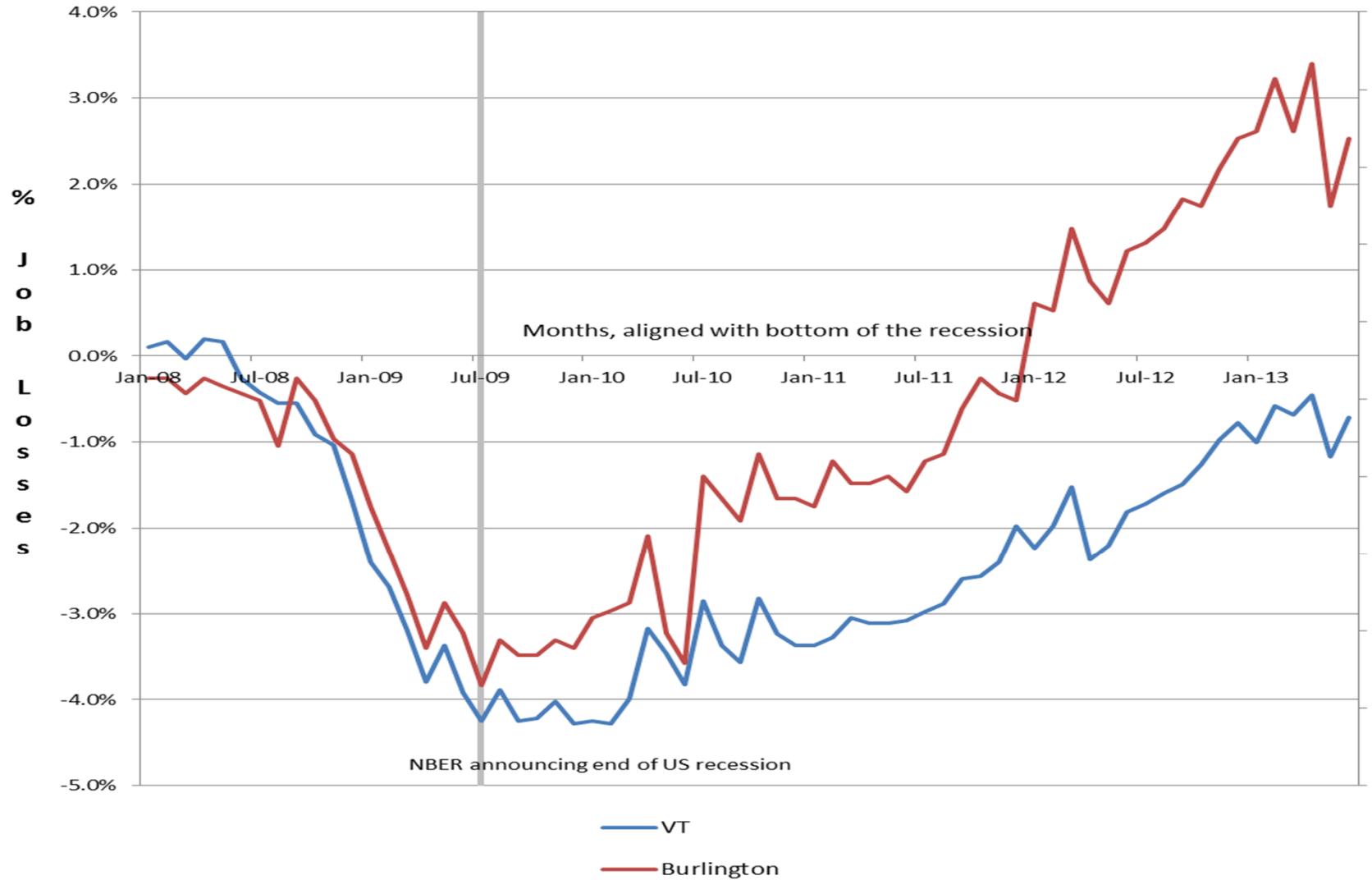
Program	Type of measurement	What is measured?	How often?
CES: Current Employment Survey	Survey & Model	Jobs by industry (business survey)	Monthly: Usually report 3 rd week of following month
QCEW: Quarterly Census of Employment and Wages	Census: Mandatory Reporting	UI covered jobs & wages by industry (business based)	Quarterly: Usually 5 – 6 months from close of quarter (used to benchmark CES)
LAUS: Local Area Unemployment Statistics	Survey & Model	Employed / Unemployed Persons (Household Survey)	Monthly: Usually report 3 rd week of following month
OES: Occupational Employment Survey	Survey	Jobs & wages by Occupation (business based)	Survey Semi Annual / Report annual

CES
CURRENT
EMPLOYMENT
SURVEY

2007 Recession % Change in Jobs & Duration in Months: United States and Vermont



2007 Recession % Change in Jobs & Duration in Months: Burlington and Vermont



Job Growth During the 'Recovery'

August 2010 – August 2013

	Vermont	US
Total Private	3.9%	6.3%
Construction	3.0%	5.2%
Manufacturing	4.9%	3.6%
Durable	0.5%	6.2%
Non-Durable	15.6%	-0.5%

Goods Producing Sectors

- Construction: heavily impacted by the recession & recovering slowly
- Manufacturing in the US versus VT = different stories

Job Growth During the 'Recovery'

August 2010 – August 2013

	Vermont	US
Total Private	3.9%	6.3%
Prof. & Business Services	16.1%	11.1%
Private Education	4.0%	6.7%
Health & Social Assistance	5.4%	5.8%
Leisure & Hospitality	4.7%	8.7%

Service Providing Sectors:

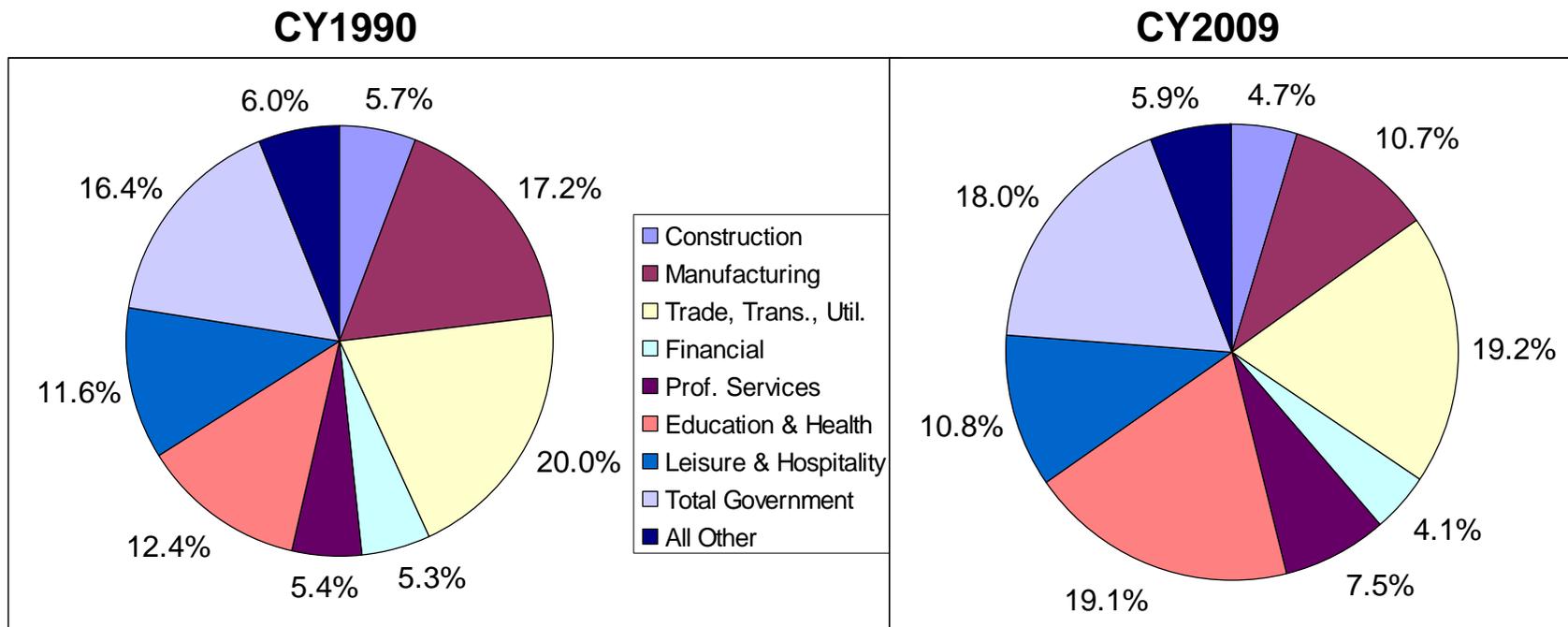
- Professional, Scientific & Technical --- still room to grow vs. national concentration of total private (6% in VT vs. 7% in US)
- Private Education --- a strength in VT; but competition is increasing

QCEW

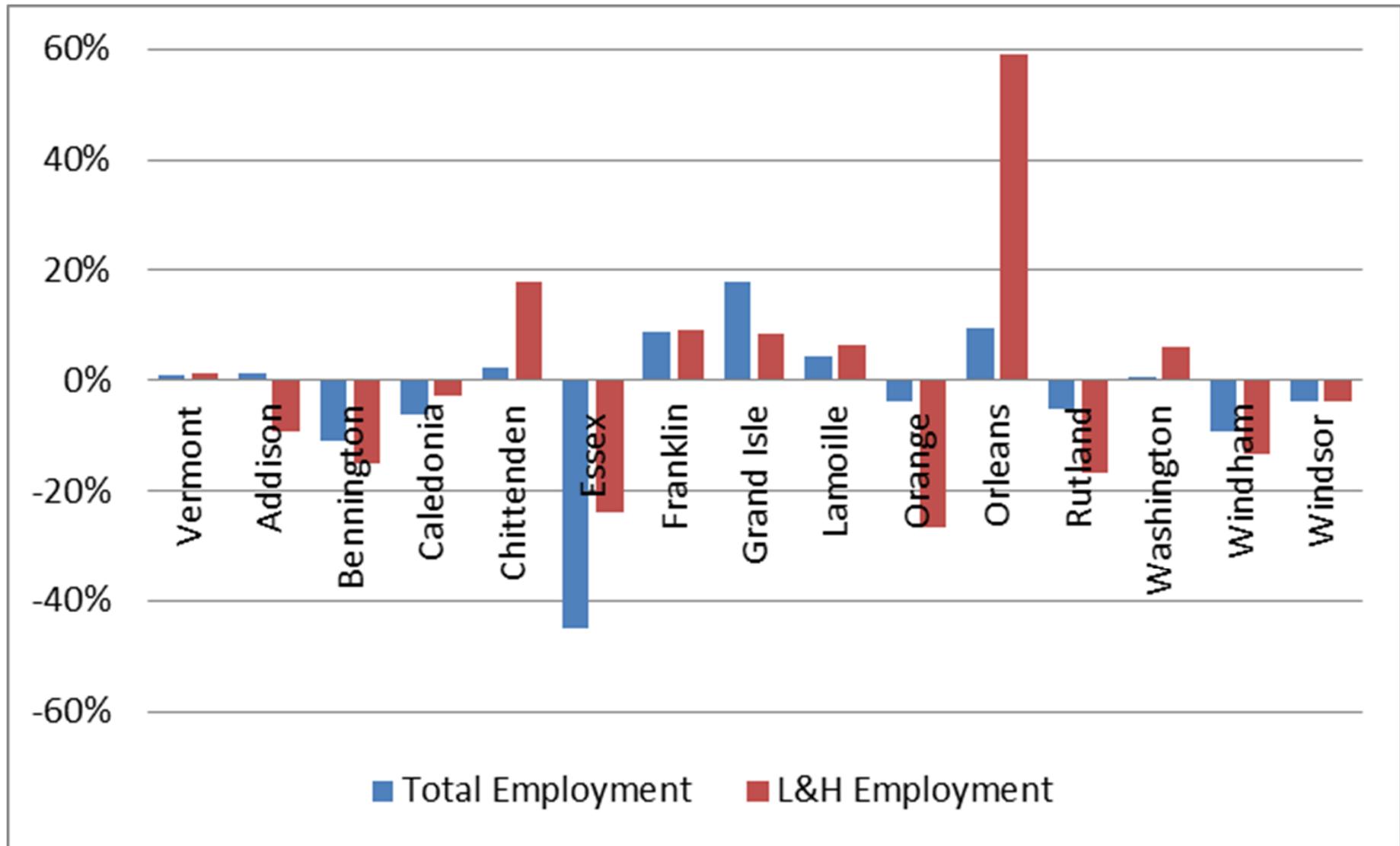
QUARTERLY
CENSUS OF
EMPLOYMENT
& WAGES

Employment by Industry Comparison

- *A lot of relative stability over time by industry; except:*
 - *Manufacturing and Private Education & Health Services*



% Change: Employment 2000 v. 2012



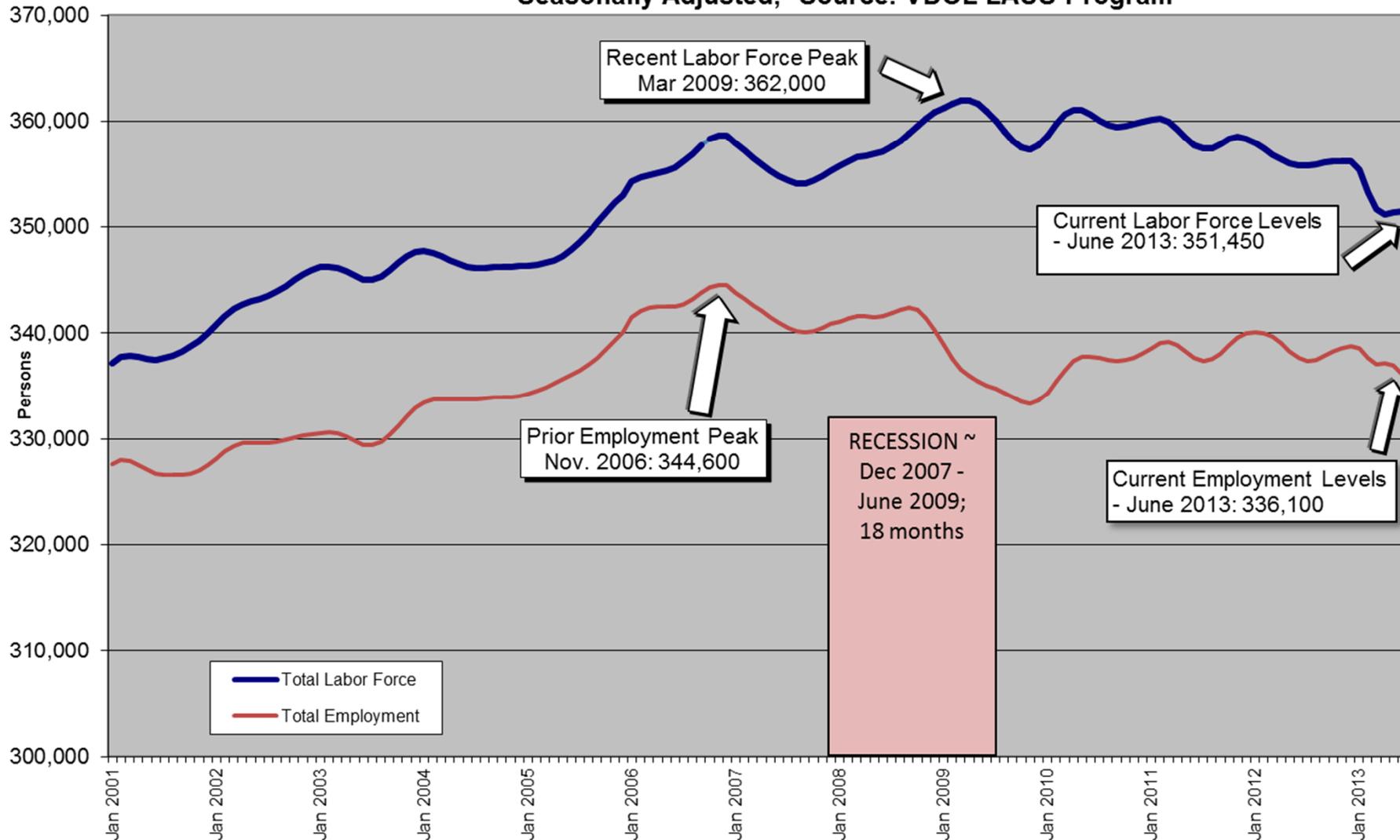
LAUS

LOCAL AREA
UNEMPLOYMENT
STATISTICS

Vermont Labor Force & Employment

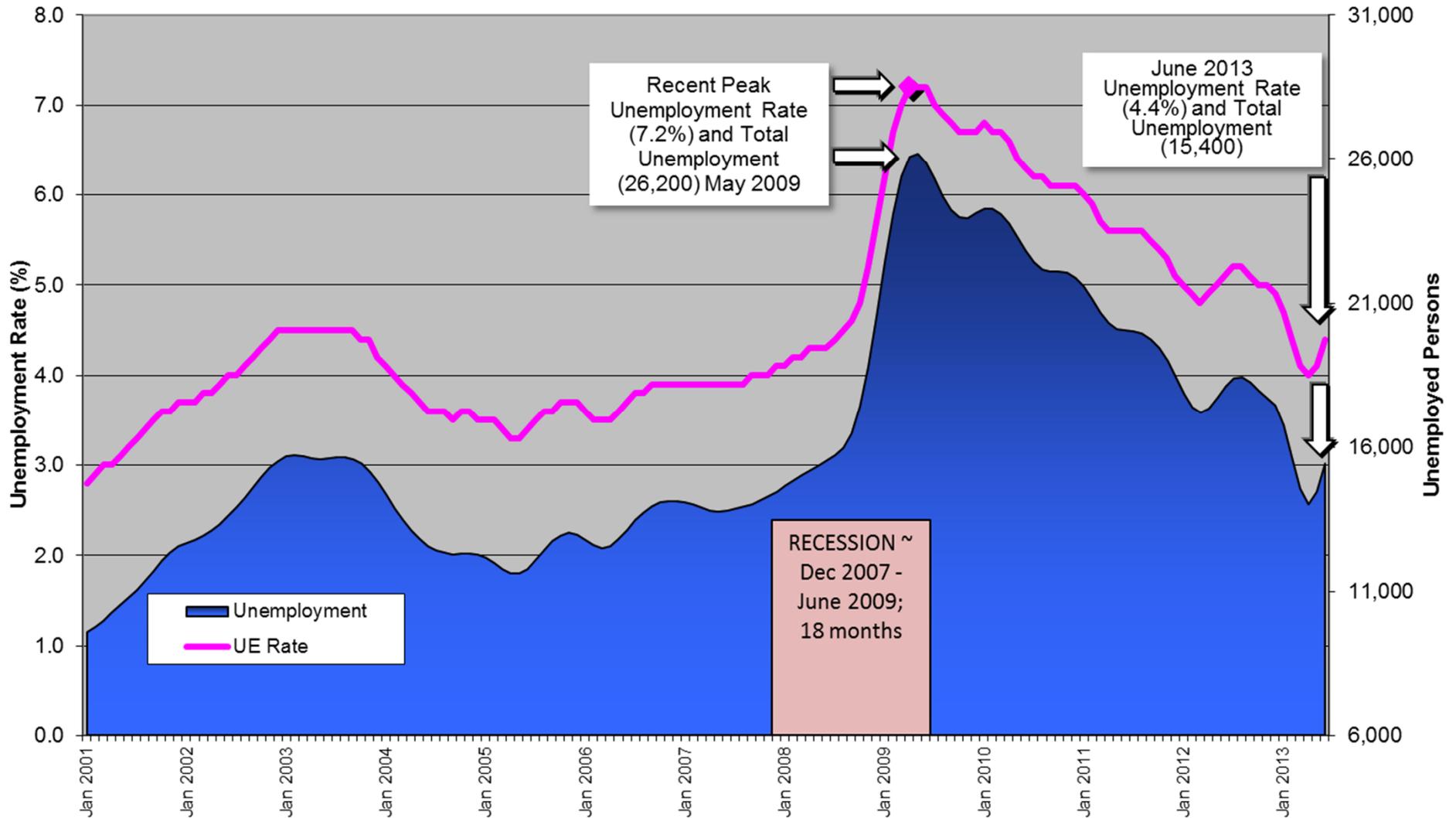
January 2001 - Present

Seasonally Adjusted; Source: VDOL LAUS Program



Source: VT Dept. of Labor, www.VTLMI.info

Vermont Unemployment & Unemployment Rate January 2001 - Present; Seasonally Adjusted



Source: VT Dept. of Labor, www.VTLMI.info

Data within LAUS: Digging Deeper

Statewide Labor force contracted by ~6%

- people 16-24 yo who reported 'not in labor force' increased by 2.5x the overall trend

So WHY?

- "Do not want a job now" increased 3.7x the statewide trend among 16-24 yo

Data within LAUS (cont.)

So who “Does want a job now”?

- workers 55+ yo (3x overall rate of change)
- men increasing at a faster rate than women

With a low unemployment rate, shouldn't it be easy to find work? Yes, but you have to be looking...

“Did not search for work in previous year”

- workers 55+ = 4x
- men = 2x

Alternative Measures of Labor Utilization

Time Period	Measures					
	U-1	U-2	U-3 ²	U-4	U-5	U-6
2nd Quarter 2012 - 1st Quarter 2013	2.0	2.5	4.8	5.1	6.0	10.5
2012 annual averages	2.1	2.9	5.1	5.4	6.3	11.0
2011 annual averages	2.5	3.6	5.8	6.1	6.8	11.6
2010 annual averages	2.8	3.9	6.2	6.6	7.3	12.5
2009 annual averages	2.9	4.1	6.5	6.8	7.5	11.8
2008 annual averages	1.5	2.6	4.9	5.1	5.8	9.1
2007 annual averages	1.2	1.8	4.0	4.2	4.8	6.9
2006 annual averages	1.0	1.9	3.6	3.8	4.2	6.4

For full definitions: please visit vtLMI.info/unempaltrate.cfm

BLS National Data

Labor force characteristics

This page contains information on the labor force data on characteristics of [employed](#) and [unemployed](#) persons and persons [not in the labor force](#). Data on [hours of work](#), [earnings](#), and [demographic characteristics](#) also are available.

Labor force information for States, counties, and cities are available separately from the [Local Area Unemployment Statistics \(LAUS\)](#) program. Contact LAUS by [e-mail](#) or call (202) 691-6392.

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OES

OCCUPATIONAL
EMPLOYMENT
SURVEY

Occupational Data

- Occupational Employment Statistics (OES) Program
- Standard Occupation Classification (SOC) Manual

- OES Collects:
 1. Prevalence (or count) of a particular occupation in a region
 - Region defined as nation, state, metropolitan areas and other sub-state regions like 'northern balance of state'

 2. Wage data by occupation
 - Mean, median, 'entry-level', 'experienced', etc.

 3. Staffing pattern information or occupational distribution by industry
 - Very interesting data; unsure of temporal uses

Occupational Data (cont.)

Illustrative Example: OES Data Collection Schedule for 2012 Estimates					
2010		2011		2012	
May Panel	Nov Panel	May Panel	Nov Panel	May Panel	Nov Panel



6 panels of data collected over 3 years
 produce one year's estimates of wages and employment.
 As two new panels are collected, they are added
 to the estimates and the oldest two panels drop off.

May 2012 Occupational Employment and Wage Estimates - Vermont State

SOC ¹	Occupation Title ¹	Employment ²	Percent of Total Employment	Hourly Wages ³	
				Mean	Median
00-0000	All Occupations	294,090	100.0%	21.00	16.61
11-0000	Management Occupations	13,180	4.5%	45.30	39.10
13-0000	Business and Financial Operations Occupations	13,470	4.6%	29.39	27.12
15-0000	Computer and Mathematical Occupations	6,790	2.3%	33.00	30.41
17-0000	Architecture and Engineering Occupations	5,310	1.8%	33.99	31.91
19-0000	Life, Physical, and Social Science Occupations	3,200	1.1%	29.11	24.92
21-0000	Community and Social Service Occupations	7,660	2.6%	19.16	17.47
23-0000	Legal Occupations	2,130	0.7%	33.85	26.36
25-0000	Education, Training, and Library Occupations	26,310	8.9%	23.71	19.78
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	5,130	1.7%	20.32	17.79
29-0000	Healthcare Practitioners and Technical Occupations	19,190	6.5%	35.84	28.55
31-0000	Healthcare Support Occupations	6,330	2.2%	14.51	13.35
33-0000	Protective Service Occupations	5,120	1.7%	18.72	17.06
35-0000	Food Preparation and Serving Related Occupations	23,230	7.9%	12.14	10.55
37-0000	Building and Grounds Cleaning and Maintenance Occupations	10,570	3.6%	12.90	11.81
39-0000	Personal Care and Service Occupations	13,260	4.5%	12.20	10.91
41-0000	Sales and Related Occupations	28,430	9.7%	17.04	12.00
43-0000	Office and Administrative Support Occupations	42,170	14.3%	16.29	15.24
45-0000	Farming, Fishing, and Forestry Occupations	850	0.3%	13.04	11.35
47-0000	Construction and Extraction Occupations	14,270	4.9%	19.18	17.93
49-0000	Installation, Maintenance, and Repair Occupations	11,570	3.9%	20.31	18.70
51-0000	Production Occupations	20,160	6.9%	16.67	14.73
53-0000	Transportation and Material Moving Occupations	15,760	5.4%	16.01	14.46

Occupation code	Occupation title (click on the occupation title to view its profile)	Level	Employment	Employment RSE	Employment per 1,000 jobs	Location quotient	Median hourly wage	Mean hourly wage
	Occupations							
17-1011	Architects, Except Landscape and Naval	detail	240	24.7%	0.831	1.31	\$29.31	\$30.46
17-1012	Landscape Architects	detail	(8)	(8)	(8)	(8)	\$26.58	\$27.36
17-1022	Surveyors	detail	140	32.7%	0.489	1.59	\$20.77	\$24.36
17-2051	Civil Engineers	detail	420	9.7%	1.417	0.72	\$31.97	\$33.49
17-2061	Computer Hardware Engineers	detail	(8)	(8)	(8)	(8)	\$43.86	\$46.32
17-2071	Electrical Engineers	detail	470	18.0%	1.601	1.30	\$37.66	\$39.55
17-2072	Electronics Engineers, Except Computer	detail	190	27.7%	0.639	0.62	\$41.83	\$45.20
17-2081	Environmental Engineers	detail	220	16.5%	0.732	1.88	\$36.51	\$42.23
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	detail	60	11.3%	0.193	1.07	\$34.66	\$35.54
17-2112	Industrial Engineers	detail	420	14.7%	1.443	0.85	\$33.47	\$34.90
17-2131	Materials Engineers	detail	40	33.3%	0.122	0.70	\$35.70	\$36.14
17-2141	Mechanical Engineers	detail	380	10.4%	1.302	0.67	\$34.60	\$37.16
17-2199	Engineers, All Other	detail	60	9.5%	0.221	0.23	\$37.22	\$37.08

Occupation code	Occupation title (click on the occupation title to view its profile)	Level	Employment	Employment RSE	Employment per 1,000 jobs	Location quotient	Median hourly wage	Mean hourly wage
17-2199	Engineers, All Other	detail	60	9.5%	0.221	0.23	\$37.22	\$37.08
17-3011	Architectural and Civil Drafters	detail	150	20.6%	0.527	0.82	\$19.74	\$20.07
17-3013	Mechanical Drafters	detail	130	3.8%	0.433	0.89	\$22.51	\$23.76
17-3022	Civil Engineering Technicians	detail	280	9.0%	0.965	1.78	\$23.28	\$23.20
17-3023	Electrical and Electronics Engineering Technicians	detail	(8)	(8)	(8)	(8)	\$32.17	\$30.64
17-3024	Electro-Mechanical Technicians	detail	50	14.0%	0.173	1.33	\$34.73	\$35.54
17-3025	Environmental Engineering Technicians	detail	70	14.8%	0.240	1.68	\$18.57	\$19.18
17-3026	Industrial Engineering Technicians	detail	110	18.2%	0.367	0.71	\$21.82	\$22.73
17-3027	Mechanical Engineering Technicians	detail	70	23.7%	0.233	0.65	\$21.24	\$21.52
17-3029	Engineering Technicians, Except Drafters, All Other	detail	50	24.1%	0.160	0.32	\$24.86	\$24.50
17-3031	Surveying and Mapping Technicians	detail	90	29.8%	0.311	0.86	\$18.06	\$19.23

OES Data – Wage Ranges

Wages

for Data Entry Keyers

Location	Pay Period	2012			
		Percentile Wages			
		<u>10%</u>	<u>25%</u>	<u>50% Median</u>	<u>75%</u>
Vermont	Hourly	\$ 10.24	\$ 12.39	\$ 15.30	\$ 18.11
	Yearly	\$ 21,290	\$ 25,760	\$ 31,830	\$ 37,680
Burlington-South Burlington, VT Metropolitan NECTA	Hourly	\$ 10.33	\$ 12.63	\$ 15.66	\$ 18.19
	Yearly	\$ 21,480	\$ 26,280	\$ 32,570	\$ 37,840

Short Term (2 yr.)
& Long Term (10 yr.)
OCCUPATIONAL
PROJECTIONS

NEW US PROJECTIONS

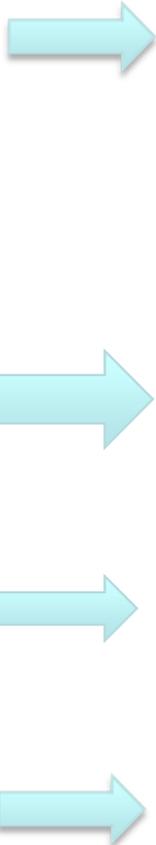


Table 1. Employment by occupational group, 2012 and projected 2022 (employment in thousands)

Occupational group	2012	Projected change, 2012–2022	
		Number	Percent
Management occupations	8,861.5	636.6	7.2
Business and financial operations occupations	7,167.6	898.1	12.5
Computer and mathematical occupations	3,814.7	685.8	18.0
Architecture and engineering occupations	2,474.5	179.6	7.3
Life, physical, and social science occupations	1,249.1	125.7	10.1
Community and social service occupations	2,374.7	408.8	17.2
Legal occupations	1,247.0	132.9	10.7
Education, training, and library occupations	9,115.9	1,015.8	11.1
Arts, design, entertainment, sports, and media occupations	2,570.9	180.6	7.0
Healthcare practitioners and technical occupations	8,049.7	1,732.9	21.5
Healthcare support occupations	4,110.2	1,155.8	28.1
Protective service occupations	3,325.3	263.0	7.9
Food preparation and serving related occupations	11,780.1	1,101.8	9.4
Building and grounds cleaning and maintenance occupations	5,522.3	691.0	12.5
Personal care and service occupations	5,375.6	1,122.9	20.9
Sales and related occupations	15,105.0	1,095.5	7.3
Office and administrative support occupations	22,470.1	1,534.0	6.8
Farming, fishing, and forestry occupations	947.2	-32.2	-3.4
Construction and extraction occupations	6,092.2	1,301.9	21.4
Installation, maintenance, and repair occupations	5,514.8	531.2	9.6
Production occupations	8,941.9	75.6	0.8
Transportation and material moving occupations	9,245.7	790.6	8.6

Source: U.S. Bureau of Labor Statistics.

NEW US PROJECTIONS (cont)

Table 2. Employment by educational requirement, 2012 and projected 2022 (employment in thousands)

Education level	Employment		Projected change, 2012–2022	
	2012	2022	Number	Percent
Doctoral or professional degree	4,002.4	4,640.8	638.4	16.0
Master's degree	2,432.2	2,880.7	448.5	18.4
Bachelor's degree	26,033.0	29,176.7	3,143.6	12.1
Associate's degree	5,954.9	7,000.9	1,046.0	17.6
Postsecondary nondegree award	8,554.2	9,891.2	1,337.1	15.6
Some college, no degree	1,987.2	2,212.2	225.0	11.3
High school diploma or equivalent	58,264.4	62,895.2	4,630.8	7.9
Less than high school	38,127.6	42,286.0	4,158.4	10.9

Source: U.S. Bureau of Labor Statistics.

NEW US PROJECTIONS (cont)

Table 6. Architecture and engineering occupations employment by educational requirement, 2012 and projected 2022 (employment in thousands)

Education level	Employment		Projected change, 2012–2022	
	2012	2022	Number	Percent
Bachelor's degree	1,771.6	1,936.4	164.7	9.3
Associate's degree	648.8	656.4	7.5	1.2
High school diploma or equivalent	54.0	61.3	7.3	13.5

Source: U.S. Bureau of Labor Statistics.

Vermont's 2010-2020 Occupational Projections

Fastest Growing Occupations by Education; 2010-2020 Projections	Growth Rate	Wage (per/hr)	STEM?
Less than high school			
Helpers--Carpenters	4.4%	\$13.07	
Personal Care Aides	3.8%	\$10.74	
Helpers--Brick & Stone Masons	3.8%	\$14.58	
Home Health Aides	3.4%	\$13.02	
Nonfarm Animal Caretakers	2.1%	\$12.01	
Septic Tank & Sewer Pipe Servicers	2.0%	\$15.37	
Refuse and Recyclable Material Collectors	1.5%	\$13.18	
Drywall and Ceiling Tile Installers	1.5%	\$20.92	
Hand Packers and Packagers	1.5%	\$11.13	
Cleaners of Vehicles and Equipment	1.4%	\$11.69	

Vermont's 2010-2020 Occupational Projections

Fastest Growing Occupations by Education; 2010-2020 Projections	Growth Rate	Wage (per/hr)	STEM?
High school diploma or equivalent			
Helpers--Plumbers and Pipefitters	3.1%	\$13.97	
Welding Machine Operators	2.6%	\$13.75	
Glaziers	2.5%	\$15.54	
Brickmasons and Blockmasons	2.4%	\$22.58	
Pharmacy Technicians	2.4%	\$14.32	Σ
Stonemasons	2.3%	\$21.80	
Industrial Machinery Mechanics	2.2%	\$22.09	
Cargo and Freight Agents	2.2%	\$15.03	
Dental Laboratory Technicians	2.2%	\$18.53	
Security and Fire Alarm Systems Installers	2.1%	\$23.03	

Vermont's 2010-2020 Occupational Projections

Fastest Growing Occupations by Education; 2010-2020 Projections	Growth Rate	Wage (per/hr)	STEM?
Associate's degree			
Veterinary Technologists and Technicians	3.2%	\$14.64	Σ
Diagnostic Medical Sonographers	2.7%	\$34.54	Σ
Respiratory Therapists	1.9%	\$27.05	Σ
Physical Therapist Assistants	1.6%	\$22.32	
Medical Equipment Repairers	1.5%	\$24.87	
Radiologic Technologists and Technicians	1.4%	\$25.36	Σ
Registered Nurses	1.3%	\$31.35	Σ
Funeral Service Managers	1.2%	\$28.07	
Construction Managers	1.1%	\$39.25	
Environmental Engineering Technicians	1.0%	\$18.25	Σ

Vermont's 2010-2020 Occupational Projections

Fastest Growing Occupations by Education; 2010-2020 Projections	Growth Rate	Wage (per/hr)	STEM?
Bachelor's degree			
Market Research Analysts	2.9%	\$26.76	
Interpreters and Translators	2.8%	\$17.96	
Convention, and Event Planners	2.6%	\$20.09	
Personal Financial Advisors	2.3%	\$41.24	
Cost Estimators	2.3%	\$27.04	
Health Educators	2.0%	\$23.93	
Software Developers, Apps	1.9%	\$38.72	Σ
Software Systems Developers	1.9%	\$43.51	Σ
Network & Computer Systems Administrators	1.9%	\$31.79	Σ
Database Administrators	1.9%	\$30.63	Σ

2010-20 National Conclusions

Industries Leading the Way:

- Health Care
- Personal Care & Social Assistance
- Professional & Business Services
- Construction
 - not regaining all it has lost

By education category – fastest growth found in Master's degree (21.7%)

By training category – fastest growth found in apprenticeship is the typical on the job training (22.5%)

2010-20 Nat'l Conclusions (cont.)

- In 4 out of 5 occupations, openings due to replacement needs exceed the number due to growth. Replacement needs are expected in every occupation, even in those that are declining.
- Of the 30 detailed occupations projected to have the fastest employment growth, 17 typically need some type of postsecondary education for entry into the occupation.
- More than two-thirds of all job openings are expected to be in occupations that typically do not need postsecondary education for entry

Questions?

Thank you!

Contact Information:

Mathew J. Barewicz
Vermont Department of Labor
5 Green Mountain Dr.
Montpelier, VT 05601-0488
Phone- (802)-828-4153
Mathew.Barewicz@state.vt.us
Website: www.vtlmi.info