



**Report of the Minimum Wage and Benefits Cliff Study Committee
December 2017**

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Senator Brian Collamore

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I. Executive Summary

During the summer and fall of 2017, the Minimum Wage and Benefits Cliff Study Committee (Committee) met five times to discuss various proposals for increasing the minimum wage in the State of Vermont and the impacts of such proposals on public benefits received by low-income families.¹ The Committee recommends the following for the 2018 adjourned session:

- The General Assembly should enact legislation to increase the minimum wage to \$15.00 within the parameters of the five policy proposals outlined in Section VI of this report.²
- The legislation should include a provision that, within available funding, will shift the point at which benefits provided through the Child Care Financial Assistance Program begin to decline by the same percentage as the increase in the minimum wage to ensure that affected families continue to receive the same child care subsidy.

II. Background

A. History of the Minimum Wage in Vermont

The federal minimum wage of \$0.25 per hour took effect on October 24, 1938. Since then it has periodically been increased to its current amount of \$7.25. Vermont enacted its own minimum wage statute in Act 32 of 1959, at a rate of \$1.00 per hour. Vermont's minimum wage was increased most recently by Act 176 of 2014; pursuant to that Act, the Vermont minimum wage is currently \$10.00 and will rise to \$10.50 on January 1, 2018 (see Figure 1).³ Under the current law, beginning on January 1, 2019, Vermont's minimum wage will annually increase by five percent or by the percentage increase in the Consumer Price Index, whichever is smaller.⁴

Service or tipped employees in Vermont must receive a basic wage equal to at least one-half the minimum wage, before tips.⁵ If the amount of a service or tipped employee's tips plus the basic tipped wage is less than the amount of the minimum wage, then his or her employer must make up the difference so that the service or tipped employee earns at least the minimum wage.

From January 1, 1959 through January 1, 2016, Vermont's nominal minimum wage increased at an average rate of 4.6 percent per year. When adjusted for inflation by the Consumer Price Index,⁶ the minimum wage increased at an average rate of 0.8 percent per year. By comparison,

¹ Information regarding the Committee's hearings and submitted documents are available at http://www.leg.state.vt.us/jfo/min_wage_notebook.aspx.

² The Committee voted 4-2 in favor of this proposal, with Senator Collamore and Representative Keefe voting against recommending a change to Vermont's existing minimum wage law.

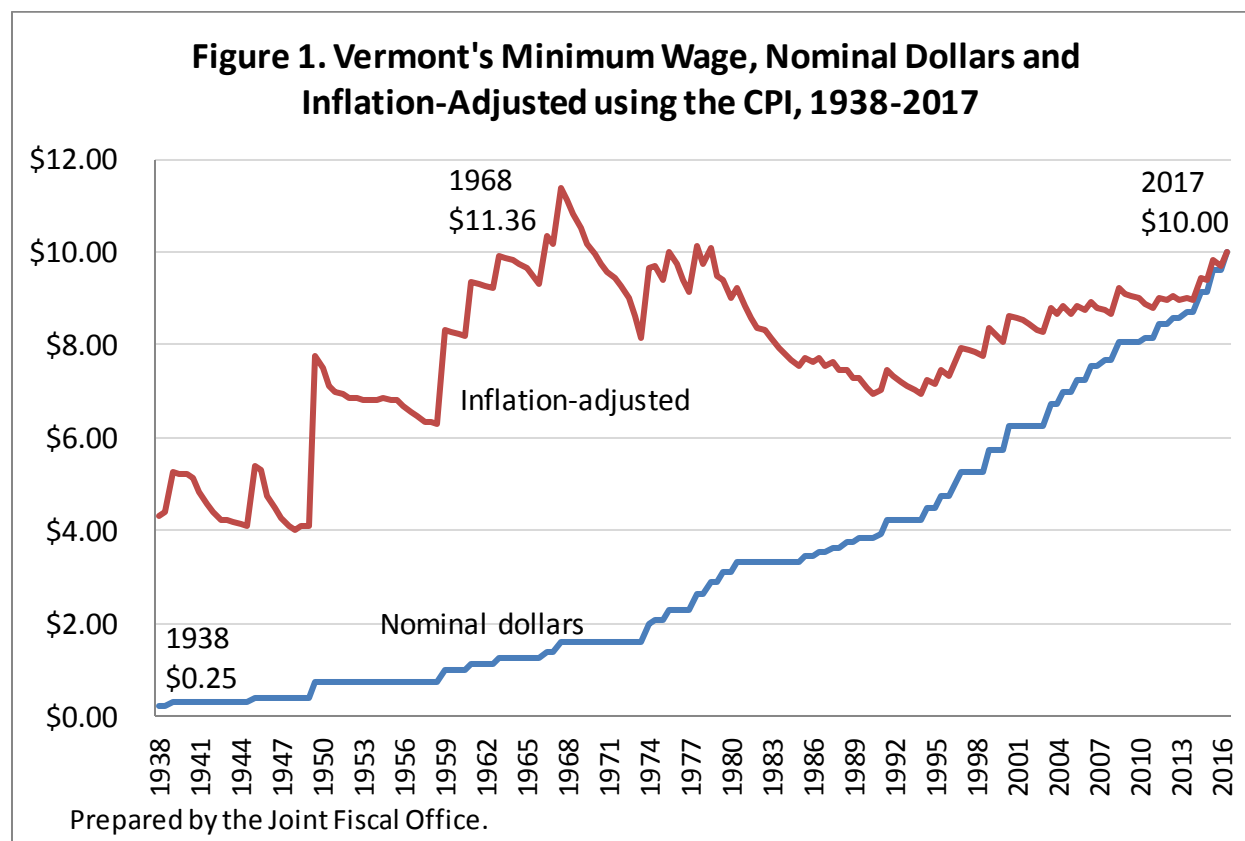
³ 21 V.S.A. § 384(a).

⁴ *Id.*

⁵ A service or tipped employee is defined as "an employee of a hotel, motel, tourist place, or restaurant who customarily and regularly receives more than \$120.00 per month in tips for direct and personal customer service." 21 V.S.A. § 384(a).

⁶ Various materials submitted to the Committee referred to either the Consumer Price Index or the PCE Deflator. The Consumer Price Index for All Urban Consumers (CPI-U) is a measure of the price of a basket of consumer goods and services purchased by households. In the past, the CPI has tended to overstate inflation because the market basket of goods and services did not keep up with changes in the purchasing decisions of consumers. Going forward, the bias is less pronounced because changes in methods over the last 30 years better reflect quality and consumer choice. The PCE Deflator is a price index produced by the Bureau of Economic Analysis that is used by the Federal Reserve to

when adjusted for inflation, both U.S. nonfarm business productivity and the U.S. GDP increased by an average of 1.5 percent per year over the same period, and Vermont's per capita personal income increased by 2.1 percent per year. In 1968, the minimum wage in Vermont was \$1.60 in 1968 dollars. If the minimum wage had kept pace with inflation as measured by the CPI since 1968, the minimum wage in 2017 would have been \$11.36 rather than \$10.00.



From 2004 through 2016, Vermont's minimum wage increased by an inflation-adjusted average of 0.9 percent per year, while the hourly wage at the 10th and 25th percentiles increased by 0.4 percent per year, and the hourly wage at the 90th percentile increased by 0.9 percent per year.⁷ The hourly wage at the 10th percentile, for example, is the hourly wage at which 10 percent of workers earn less than the given hourly wage.

measure consumer inflation. In addition to spending by households, the PCE measures spending on behalf of households, such as medical care paid for by employers or government programs. The PCE also includes estimated spending on some goods and services that do not have market prices, such as employer-funded medical care and insurance programs. In contrast, the CPI only measures out-of-pocket spending by urban consumers. In addition, the CPI is based on a basket of goods and services that adjusts slowly over time, while the PCE deflator automatically adjusts to account for substitution between goods when prices or preferences change. As a result of these differences, the rate of inflation as measured by the PCE tends to be a bit lower than the rate of inflation as measured by the CPI. For more information, see the JFO Issue Brief on different measures of inflation *available at*: http://www.leg.state.vt.us/jfo/issue_briefs_and_memos/Inflation_Measures_Issue_Brief.pdf.

⁷ Data on the distribution of wages in Vermont were first collected by Vermont DOL in 2004. For more information regarding the growth of the Vermont minimum wage in relation to other economic measures see Appendix 9: "Comparing the Vermont Minimum Wage to Other Measures, 1959–2016" (September 6, 2017).

B. Current Wage Conditions in Vermont

Distribution of Wages and Income:

Under Vermont's existing minimum wage law, it is estimated that about 25,500 jobs, or 8.5 percent of Vermont jobs, will be at the minimum wage of \$10.50 in 2018.⁸ The types of businesses with large shares of workers that would be affected by an increase in the minimum wage include: gasoline stations; general merchandise stores; food and beverage stores; warehousing and storage; clothing and clothing accessories stores; health and personal care stores; food services and drinking places; apparel manufacturing; miscellaneous store retailers; nonprofits and social services; child care; furniture and wood product manufacturing; textile and apparel manufacturing; and large food product manufacturing.⁹

In Vermont, roughly 90 percent of employers have 20 or fewer employees.¹⁰ Those small employers are responsible for one-third of private jobs in the State and pay 30 percent of private sector wages.

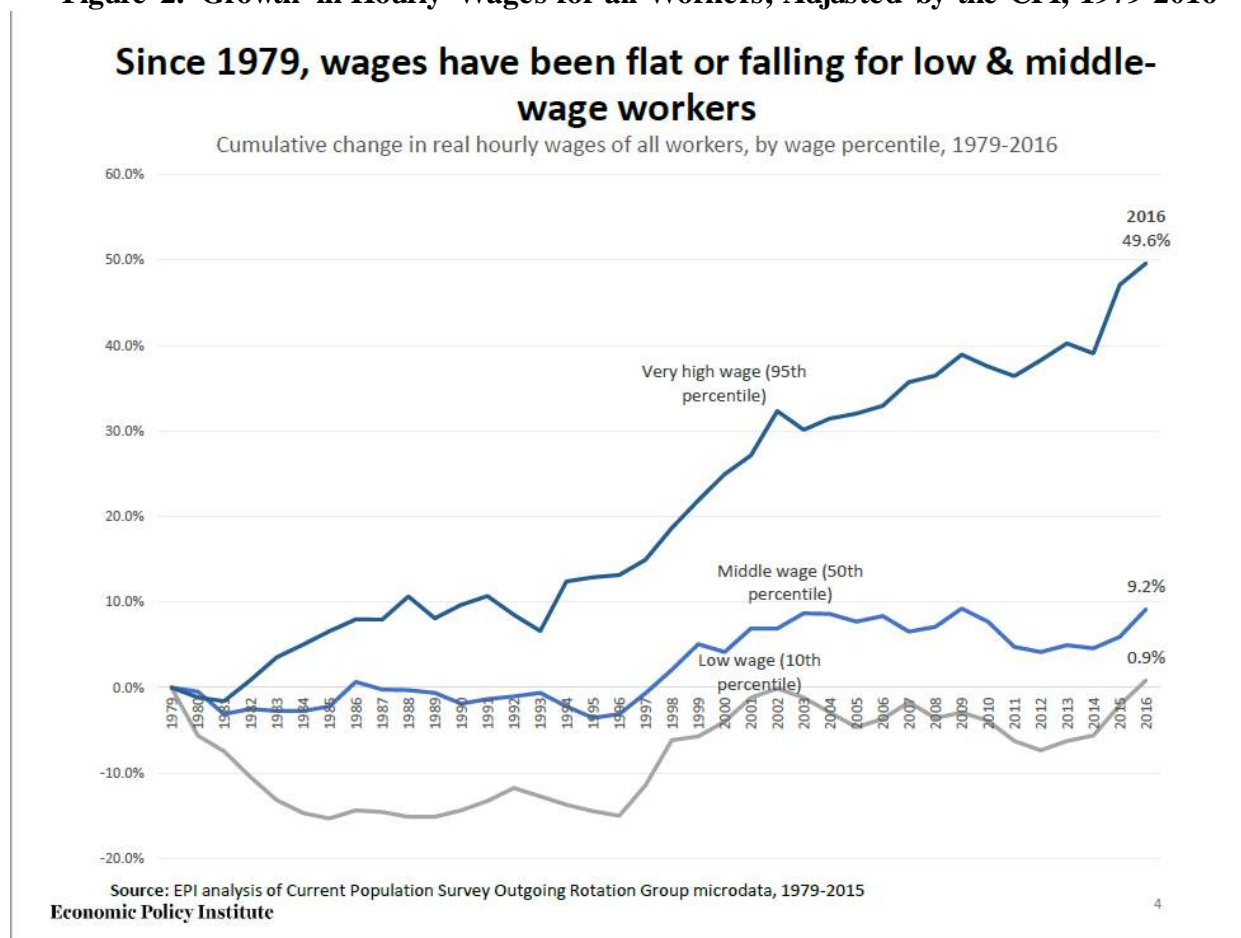
Over the last four decades, wages for low- and middle-wage workers have not grown as rapidly as wages for high-wage workers. The Economic Policy Institute (EPI) found that since 1979, hourly wages adjusted for inflation using the CPI increased 0.9 percent at the 10th percentile and 9.2 percent at the 50th percentile, but they increased 49.6 percent at the 95th percentile (see Figure 1).

⁸ The number of people with minimum wage jobs would be smaller than the number of minimum wage jobs because some jobs are part-time and some workers have more than one job.

⁹ See Appendix 5: Kavet, Rockler & Associates, LLC, "Economic Analysis of Three Minimum Wage Variants, as Requested by the Legislative Minimum Wage Study Committee" (October 2, 2017) (*hereinafter* Kavet, Rockler & Associates, LLC, Oct 2, 2017 memorandum), at 15-18.

¹⁰ See Appendix 3: Vermont Department of Labor, Division of Economic and Labor Market Information, "Size of Private Businesses in Vermont."

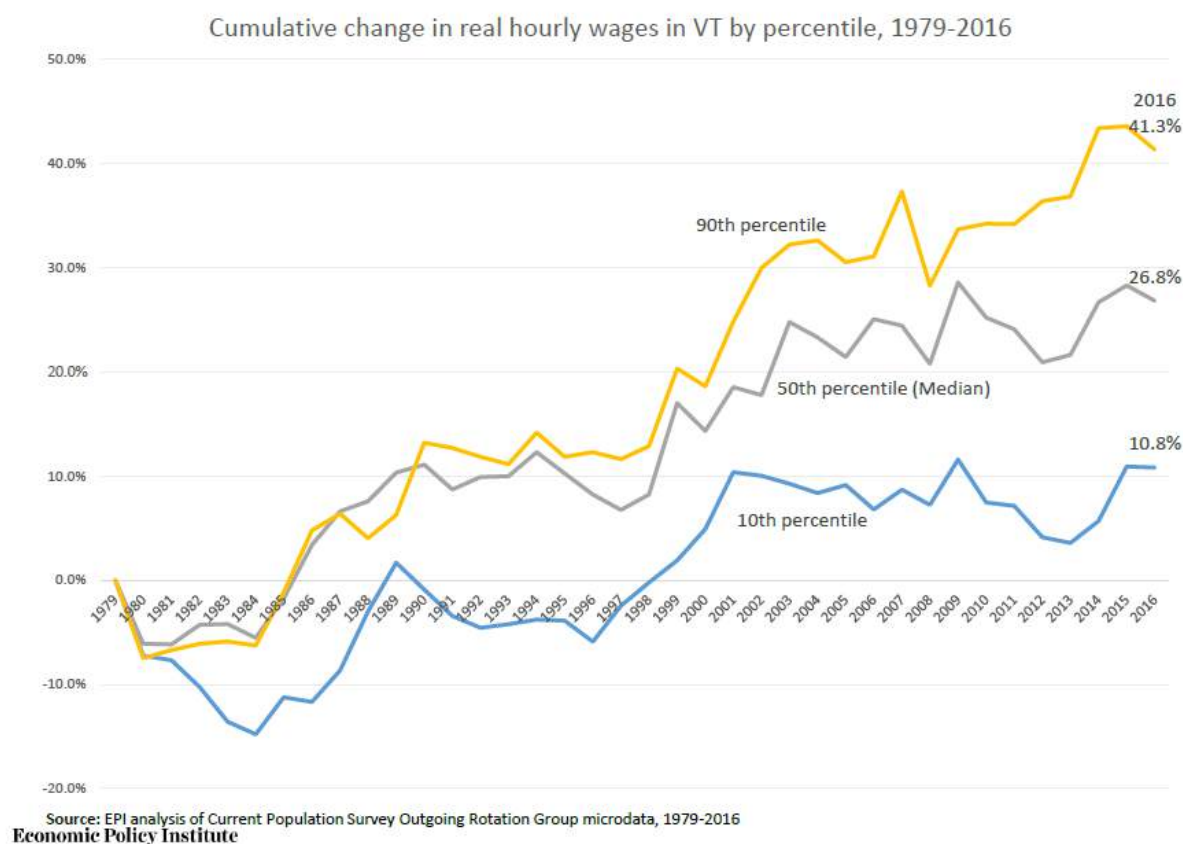
Figure 2. Growth in Hourly Wages for all Workers, Adjusted by the CPI, 1979-2016



EPI also found that inflation-adjusted hourly wages in Vermont have grown a bit faster than national wages from 1979 to 2016, but growth in wages at the low end and in the middle still lags that at the top end. In Vermont, real hourly wages at the 10th percentile increased 10.8 percent, those at the 50th percentile increased 26.8 percent, and those at the 90th percentile increase 41.3 percent.

Figure 3. Growth in Vermont Hourly Wages Adjusted for Inflation by the CPI, 1979-2016

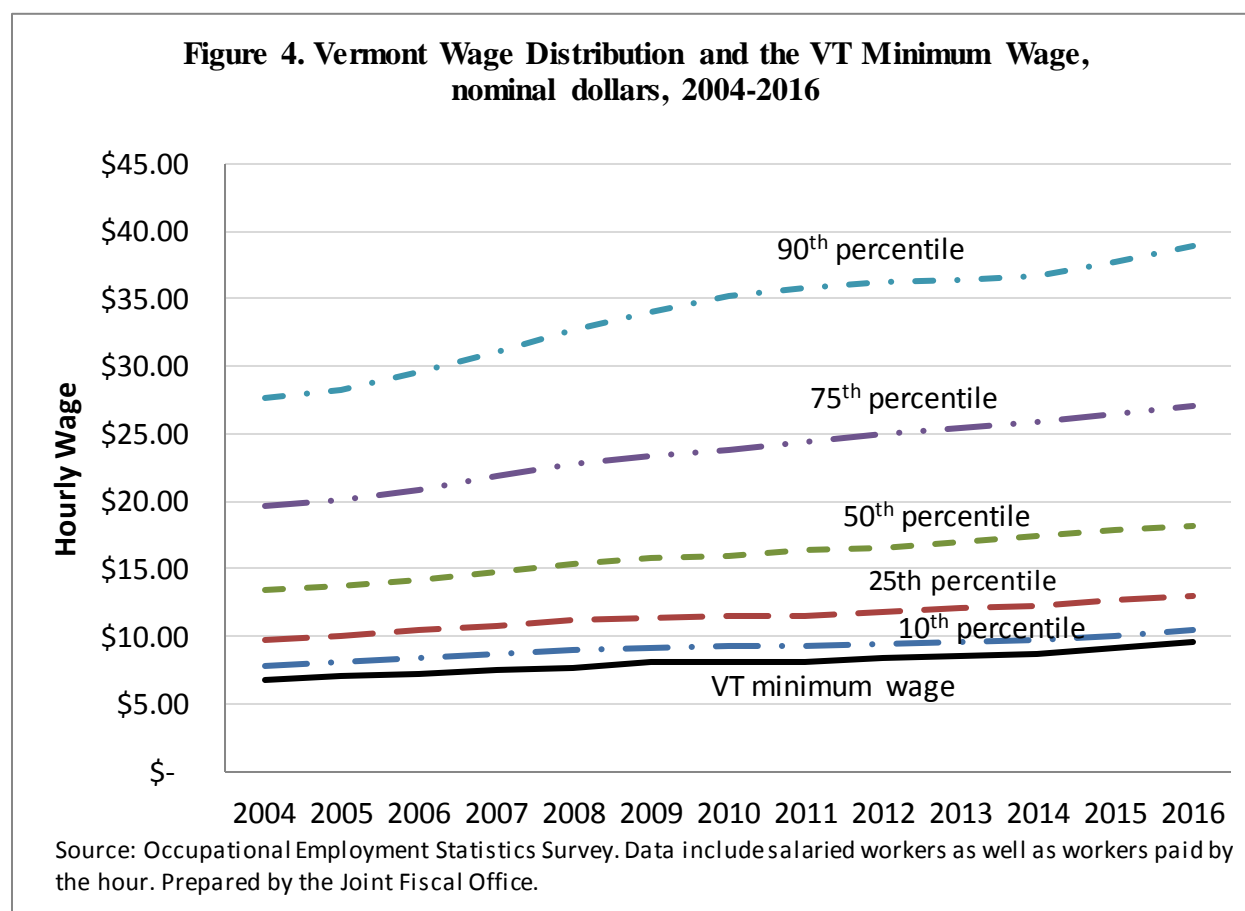
VT wage growth better than US; still flat at bottom since 2000



Data from the Occupational Employment Statistics Survey show the distribution of earnings in Vermont in recent years. The minimum wage in 2016 was \$9.60. Hourly wages at the 10th percentile, meaning that 10 percent of workers earn less than the given wage, was \$10.45 in 2016 (see Figure 3).¹¹ Hourly wages at the median, or 50th percentile, were \$18.23 in 2016; and at the 90th percentile, hourly wages were \$38.85.

Growth in hourly wages from 2004 to 2016 was larger at the top of the wage distribution than at the bottom. Nominal wages at the 10th percentile increased 2.4 percent, those at the 50th percentile increased 2.6 percent, and hourly wages at the 90th percentile increased 2.9 percent. Over the same period, Vermont's minimum wage rose 3.0 percent.

¹¹ See Appendix 9: "Comparing the Vermont Minimum Wage to Other Measures, 1959-2016", at slide 8. Source: Vermont Department of Labor, Division of Economic and Labor Market Information, "Vermont Wage Distribution 2004-2016, All Occupations", available at <http://www.vtlni.info/oessummary.htm>.



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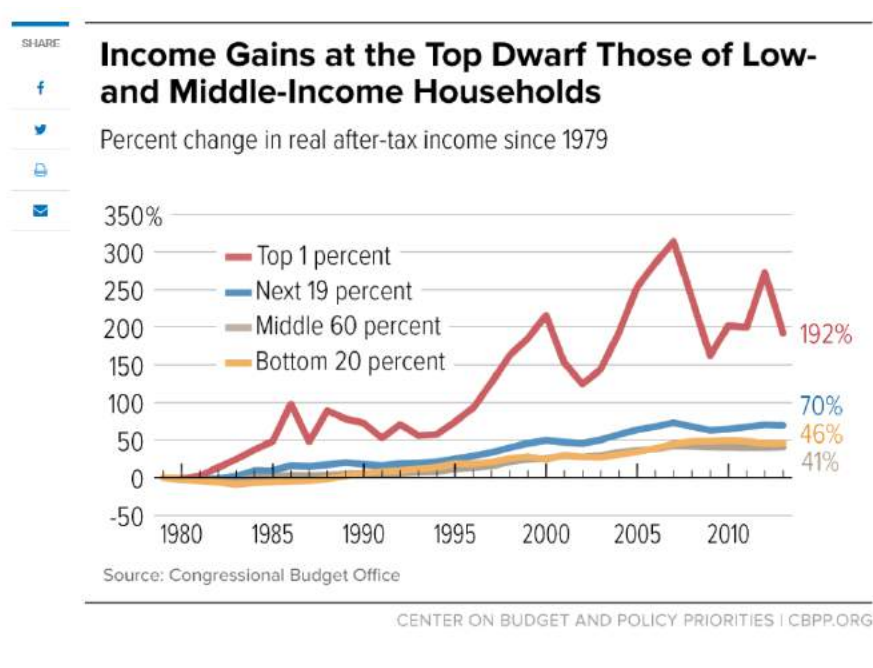
Beyond analysis of hourly wages, analysts also look at income disparity over time, comparing incomes at the top of the distribution to incomes at the bottom. Income includes not only earned income but also income from assets such as stocks or bonds or rental properties. Growing disparity in incomes in the United States, sometimes called income inequality, is a well-known problem. Beginning in the 1970s, economic growth slowed and the income gap widened. Income growth for households in the middle and lower parts of the distribution slowed sharply, while incomes at the top continued to grow strongly. One way to measure income disparity among U.S. households is to compare the ratio of the top five percent of average U.S. household income to the lowest 20 percent. That ratio has increased from about 17.6 in 1967 to about 29 in 2016, or roughly \$375,000.00 compared to \$12,900.00.¹³ Part of that increase comes from income derived from wealth accumulation, including assets in the stock market, among people with higher incomes. Although the trend paused during the Great Recession because of the larger wealth losses for those at the top of the distribution as stock market prices fell, it has since resumed partly because of slow labor market recovery and sluggish wage growth. Reasons behind the growing income disparity include limited job opportunities for people without a college degree; disparities in educational attainment, especially for postsecondary education;

¹² Includes the equivalent hourly wages of salaried workers.

¹³ See Appendix 5: Kavet, Rockler & Associates, LLC, October 2, 2017 memorandum, at 7.

growth in globalized trade; exposure to foreign competition in manufacturing; growth in the financial section and particularly financial sector compensation; declining unionization; and prolonged periods of high unemployment (see Figure 5).

Figure 5. Growing Income Disparity



Basic Needs Budget and Livable Wage:

A Basic Needs Budget is a market-based analysis that accounts for estimated monthly living expenses in Vermont. The basic needs budget includes the costs for essential items such as food, housing, transportation, child care, clothing and household expenses, telecommunications charges, health and dental care, renter's insurance, life insurance, and savings. The budget differs based on family size and whether the family lives in an urban or rural part of Vermont. The Vermont Livable Wage is defined in statute as the hourly wage required for a full-time worker to pay for one-half of the basic needs budget for a two-person household, with no children and with employer-sponsored health insurance, averaged for both urban and rural areas.¹⁴ The 2016 Vermont Livable Wage was \$13.03 per hour when the Vermont minimum wage was \$9.60.¹⁵

¹⁴ 2 V.S.A. § 505 defines a livable wage as “the hourly wage required for a full-time worker to pay for one-half of the basic needs budget for a two-person household with no children and employer-assisted health insurance averaged for both urban and rural areas” and requires JFO to calculate biennially the Vermont Livable Wage and “basic needs budgets of various representative household configurations.”

¹⁵ Vermont Legislative Joint Fiscal Office, “Basic Needs Budgets and the Livable Wage” (February 2017), available at http://www.leg.state.vt.us/jfo/reports/2017%20BNB%20Report%20Revision_Feb_1.pdf.

Vermont's Livable Wage was first estimated in 1998. Between 1998 and 2016, the Vermont Livable Wage in nominal terms increased by 2.6 percent per year. Over that same period, the Vermont minimum wage increased 3.4 percent per year.¹⁶

The Basic Needs Budget also shows wages required to pay for essential items for six other family configurations. For example, the estimated wage for a family of four with two wage earners is \$21.97 in urban areas and \$20.35 in rural areas. For a single person in shared housing, it is \$14.46 in urban areas and \$12.98 in rural areas (see Table 1).

Table 1. Basic Needs Budget Wages, from the Vermont Legislative Joint Fiscal Office, “Basic Needs Budgets and the Livable Wage,” February 2017.

2016 Basic Needs Budget Wages, Per Earner [2]		
Family Type	Urban	Rural
Single Person	\$17.64	\$15.76
Single Person, Shared Housing	\$14.46	\$12.98
Single Parent, One Child	\$29.50	\$25.11
Single Parent, Two Children	\$38.16	\$32.52
Two Adults, No Children	\$13.54	\$12.51
Two Adults, Two Children (one wage earner)	\$32.63	\$30.67
Two Adults, Two Children (two wage earners)	\$21.97	\$20.35

Characteristics of Minimum Wage Workers

Based on American Community Survey data developed for the JFO by Deb Brighton and reported in the April 2017 memorandum from Kavet, Rockler & Associates, LLC, 42 percent of all minimum wage workers are the head of a family (a couple or single parent family). Forty percent of these head-of-family minimum wage workers earn at least one-half of their family's income. Fifty-nine percent of all minimum wage workers are over age 30. While 48 percent of all female minimum wage workers are older than 40, only 32 percent of all male workers are older than 40. Conversely, 49 percent of all male minimum wage workers are under the age of 30, while only 36 percent of all female minimum wage workers are younger than 30.

In comparison to the rest of New England, Vermont has the largest share of workers earning less than \$15.00 per hour with a bachelor's degree or higher.¹⁷ Similarly, Vermont has the largest

¹⁶ See Appendix 9: “Comparing the Vermont Minimum Wage to Other Measures, 1959–2016” (September 6, 2017).

¹⁷ See Appendix 8: Cooper, David, “Understanding the Needs for Higher Wage Standards,” Economic Policy Institute, at 17-19 (citing Chaddha, Anmol, “A \$15 Minimum Wage in New England: Who would be affected?” Federal Reserve Bank of Boston (2016)), available at: <https://www.bostonfed.org/->

share of workers earning less than \$15.00 per hour who are working full time.¹⁸ Finally, in comparison to workers in the rest of New England, Vermont workers earning less than \$15.00 per hour contribute the largest portion of their family's income on average, approximately 63 percent.¹⁹

C. The Minimum Wage in Other States

Currently, Vermont has the third-highest minimum wage in New England, behind Massachusetts (\$11.00) and Connecticut (\$10.10). Among the remaining states in New England, Rhode Island's minimum wage is \$9.60, Maine's is \$9.00, and New Hampshire's is equal to the federal minimum wage of \$7.25.²⁰

Outside New England, Vermont is currently tied with Arizona for the sixth highest minimum wage in the country.²¹ However, the minimum wage in several states is scheduled to surpass Vermont's minimum wage in the next few years and other states are considering increases that would also surpass Vermont's minimum wage. More specifically, Arizona, Colorado, and Maine's minimum wages are in the process of increasing to \$12.00 by January 1, 2020 and will annually increase for inflation after that.²² In addition, Massachusetts has been considering several proposals to increase its minimum wage to \$15.00 by 2022, including a possible referendum that could be on the ballot for the next election.²³

In New York, the minimum wage currently varies depending on region and the size of the employer.²⁴ Beginning on January 1, 2019, New York's law provides the Division of Budget with the authority annually to "determine whether there should be a temporary suspension or delay in any scheduled increases" based on the economic conditions in the state.²⁵

</media/Documents/Community%20Development%20Issue%20Briefs/cdbrief42016.pdf>. The Boston Fed research relies on one year of data from the American Community Survey. Because the size of the sample each year in Vermont is small, one-year estimates have wide confidence bands, and researchers generally use a five-year average.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ See Appendix 10: "Minimum Wage Increases in Other States."

²¹ Vermont's minimum wage is less than the minimum wages for Washington, D.C., Massachusetts, Washington State, New York City, California's employers with 26 or more employees, parts of Oregon, and Connecticut. For more information see Appendix 10: "Minimum Wage Increases in Other States."

²² Rhode Island will also be increasing its minimum wage over the next few years to \$10.50 by 2019. However, Vermont's minimum wage will presumably remain ahead of Rhode Island's because under existing law it will reach \$10.50 in 2018 and will increase for inflation in 2019.

²³ See Appendix 11: "Massachusetts Ballot Initiative: Initiative Petition for a Law Raising the Minimum Wage."

²⁴ New York's minimum wage is \$11.00 for employers in New York City with 11 or more employees, \$10.50 for employers in New York City with 10 or fewer employees, \$10.00 in Nassau, Suffolk, and Westchester counties, and \$9.70 for upstate New York. Those wages will increase annually until they reach \$15.00 on December 31, 2018 for employers in New York City with 11 or more employees, 2019 for employers in New York City with 10 or fewer employees, and 2021 in Nassau, Suffolk, and Westchester counties. In upstate New York, the minimum wage will reach \$12.50 on December 31, 2020, and after that it will increase annually by a percentage determined by the Director of the Budget in consultation with the Commissioner of Labor until it reaches \$15.00. See also NY Labor Law § 652(1)(c); and Appendix 12: "Summary of New York State Wage Determination Procedures."

²⁵ NY Labor Law § 652(6); see also Appendix 12: "Summary of New York State Wage Determination Procedures."

Several other states have recently enacted laws that will increase their minimum wages to between \$12.00 and \$15.00 in the next several years. California's minimum wage will reach \$15.00 on January 1, 2022 for employers with 26 or more employees and on January 1, 2023 for employers with 25 or fewer employees and will annually increase by the lesser of 3.5 percent or the percentage increase in the CPI after 2023.²⁶ Washington, D.C.'s minimum wage will reach \$15.00 on July 1, 2020, and beginning on July 1, 2021 will annually increase by a percentage equal to the percentage increase in the CPI.²⁷ Oregon's minimum wage will reach \$13.50 on July 1, 2022 and beginning on July 1, 2023 will annually increase by an amount equal to the percentage increase in the CPI.²⁸ Washington State's minimum wage will reach \$13.50 on January 1, 2020 and beginning on January 1, 2021 will annually increase by an amount equal to the percentage increase in the CPI.²⁹ Arizona's, Colorado's, and Maine's minimum wages will reach \$12.00 on January 1, 2020 and beginning on January 1, 2021 will annually increase by an amount equal to the percentage increase in the CPI.³⁰

D. Studies of Effects of Raising the Minimum Wage

In March 2014, Kavet, Rockler & Associates, LLC provided an analysis of increases in the Vermont minimum wage to \$10.00 and \$12.50 by January 1, 2015. That report found that increasing the minimum wage to \$10.00 would likely "have negligible, if any, negative aggregate economic consequences and could be an important component in advancing some of the lowest income workers towards a livable income."³¹ In contrast, the report found that increasing the minimum wage to \$12.50 "has serious drawbacks that limit its efficacy in achieving the overall objective of improving the well-being of low-wage, working Vermonters and their families."³² In particular the report found that:

1. increases in earned income among low-wage workers could result in significant decreases in public benefits that would negate income gains from wage increases and eliminate incentive to work for many low-wage workers;
2. substitution of earned income for federal aid could reduce federal transfer payments, generating substantial negative economic impacts;
3. high marginal tax rates below livable income levels in combination with reductions in public benefits could reduce work incentives and delay the achievement of livable income for workers; and

²⁶ Cal. Labor Code § 1182.12(c)(1).

²⁷ DC ST § 32-1003(a)(6)(A).

²⁸ O.R.S. § 653.025. Oregon's law also provides for a higher minimum wage for employers located in the Portland metro area and a lower minimum wage for employers located in nonurban counties. Beginning on July 1, 2017, the wage in the Portland metro area was increased to \$1.00 above the standard minimum wage, and beginning on July 1, 2018, it will be \$1.25 above the standard minimum wage. The wage in nonurban counties will increase more slowly than the standard minimum wage, and beginning on July 1, 2022, it will be \$1.00 below the standard minimum wage.

²⁹ R.C.W.A. § 49.46.020.

³⁰ A.R.S. § 23-363; CO Const. Art. XVIII, § 15; and 26 M.R.S.A. § 664(1).

³¹ See Appendix 6: Kavet, Rockler & Associates, LLC, "Memorandum Regarding Preliminary Analysis of \$10.00 and \$12.50 Vermont Minimum Wage" (March 13, 2014) (Kavet, Rockler & Associates, LLC, March 13, 2014 Memorandum), at 14.

³² *Id.*

4. increasing the minimum wage to a level approaching a livable wage would result in reduced hours and jobs for low-wage workers.³³

In a February 8, 2017 memorandum to the General Assembly, Kavet, Rockler & Associates, LLC noted that the impact of increasing the minimum wage to \$15.00 by 2022 (roughly \$12.70 in 2015 dollars) would be similar to increasing it to \$12.50 in 2015.³⁴

More recently, a memorandum from Kavet, Rockler & Associates, LLC dated October 2, 2017 looked at the three minimum wage paths being considered by the Committee:³⁵

1. \$12.50 per hour, effective in 2021
2. \$13.25 per hour, effective in 2022
3. \$15.00 per hour, effective in 2022

A higher minimum wage could cause a variety of effects on employment and employees, businesses, and consumers. With respect to employment, a higher minimum wage could result in job losses, reduced employee hours, reduced employee benefits and training, or slower wage growth for employees above the minimum wage, or a combination of these effects. For businesses, increased labor costs from changes in the minimum wage could result in lower profit margins, which might lead some businesses to choose to relocate to another state or to invest in automation in an effort to reduce labor costs. On the other hand, higher wages could also result in reduced employee turnover, increased productivity, or increased disposable income, or a combination of these effects, leading to increased demand for goods and services as incomes rise. With respect to consumers, increased labor costs might lead to higher prices as employers compensate for increased labor costs.³⁶

The findings from the October 2 memorandum are summarized in Table 2. Disemployment effects refer to the net number of jobs lost relative to the baseline economy, where the number of jobs includes both full-time and part-time jobs. The number of people who lose jobs would be smaller than the number of minimum wage jobs lost because some jobs are part time and some workers have more than one job.

Table 2. Comparisons of Selected Measures for Proposed Minimum Wage Changes			
	\$12.50 by 2021	\$13.25 by 2022	\$15.00 by 2022
Effects in the Year of Full Implementation, 2021 or 2022			
Percent Change from 2018 Minimum Wage, Constant \$	10%	14%	29%

³³ *Id.* at 14-17.

³⁴ See Appendix 7: Kavet, Rockler & Associates, LLC, “Memorandum Regarding Proposed Five Year Minimum Wage Increase to \$15.00/Hour in 2022” (February 8, 2017) (Kavet, Rockler & Associates, LLC, February 8, 2017 Memorandum), at 1.

³⁵ See Appendix 5: Kavet, Rockler & Associates, LLC, October 2, 2017 memorandum, at 1.

³⁶ *Id.* at 10-11.

Share of Jobs below Proposed Minimum Wage	15%	17%	25%
Approximate Number of Jobs below Proposed Minimum Wage	43,900	51,100	76,500
Initial Wage Bill Change as a Share of Total Wages and Salaries	0.5%	0.8%	2.1%
Aggregate Initial Income Gains of Low-Wage Workers (2015 \$)	\$55 million	\$88 million	\$240 million
Effects in 2022 ³⁷			
Net fiscal gain to State from increased tax revenue and decreased benefit payments (2015 \$)	\$7 million (\$2.5 tax revenue, \$4.3 program savings)	\$8 million (\$3.9 tax revenue, \$4.2 program savings)	\$23 million (\$10 tax revenue, \$13.3 program savings)
Net reduction in federal funds to State economy from decreased federal benefits and increased federal taxes. ³⁸ (2015 \$)	\$17 million	\$27 million	\$69 million
Long-Term Effects per Year, Averaged over 2028–2040			
Net Annual Long-Term Disemployment (# Jobs)	903	1,237	2,830
Disemployment as % of Total Jobs	0.2%	0.3%	0.6%
Disemployment as Share of Minimum Wage Jobs	2.1%	2.4%	3.7%
Effect on Level of Vermont Gross Domestic Product	-0.1%	-0.2%	-0.4%

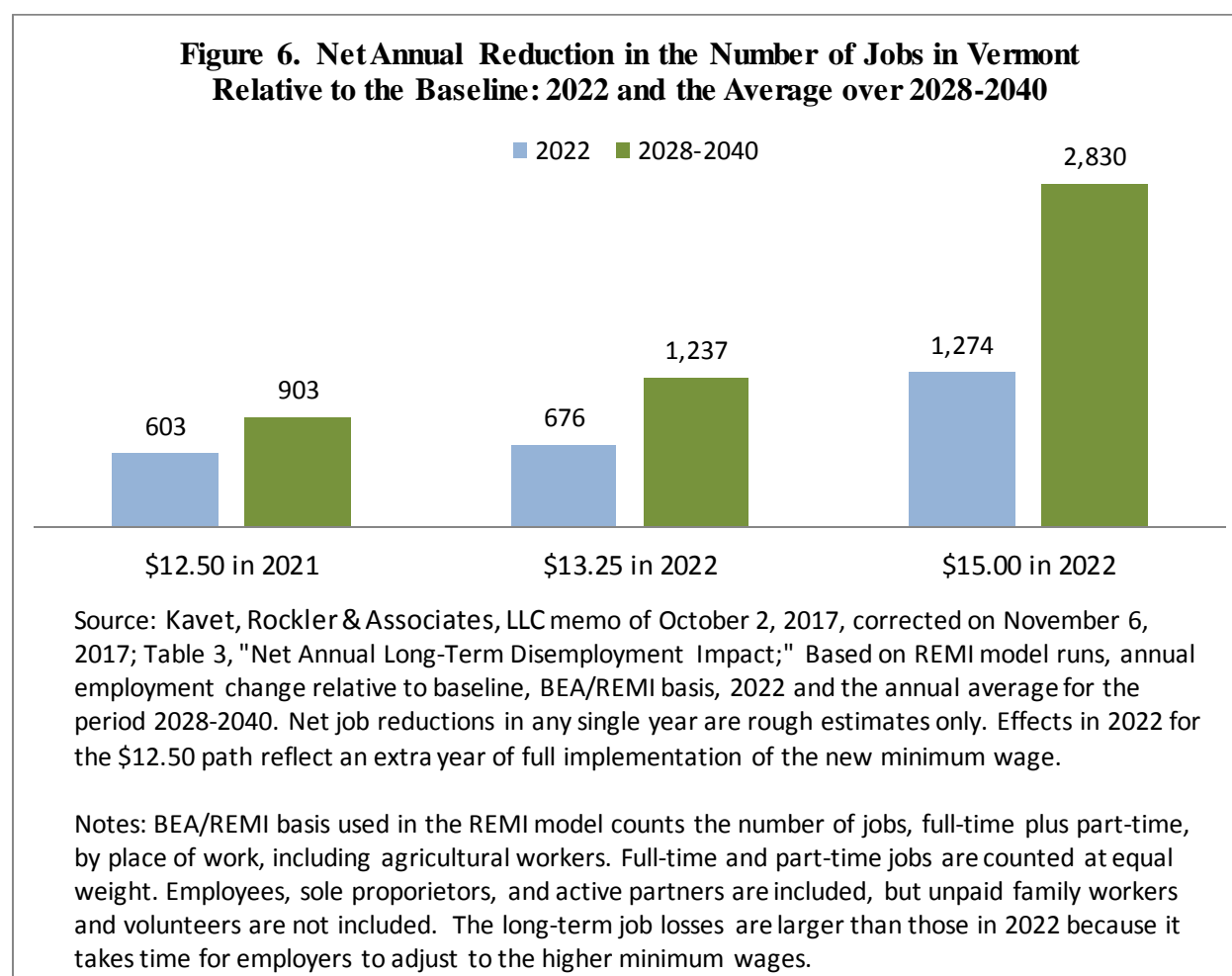
Disemployment effects or net job loss following an increase in the minimum wage, particularly among low-wage workers, is often a focus of policy analysis. According to the REMI model results, the net number of jobs lost per year in Vermont in the long term relative to the baseline under the \$15.00 in 2022 path is projected to be 2,830 per year on average over the period from 2028 to 2040 (see Figure 6). Net job losses in the near term would be smaller.

³⁷ Results for the \$12.50 path are not strictly comparable to results for the other two paths because full implementation of \$12.50 per hour would occur in 2021, one year earlier than full implementation for the other two paths.

³⁸ Payments into federal benefit programs such as Medicaid, SNAP, and SCHIP would be reduced as workers' incomes rose and they transitioned off benefits. In addition, the amount of aggregate federal EITC dollars received by Vermont taxpayers would be reduced as incomes increased. Finally, Vermont workers and employers would pay additional amounts of federal income and payroll taxes as incomes increased.

With respect to the unemployment effects, several things are important to note. The number of Vermonters impacted will likely be less than the net number of jobs lost shown above because some Vermonters work multiple minimum wage jobs. Some of the net jobs lost shown in Table 2 are not full time, meaning that the net number of FTE jobs impacted would be less. Finally, the net long-term number of job reductions is for a period of time more than 10 years in the future; smaller net job reductions would occur in the near-term during the proposed minimum wage increases.

The Committee urges the General Assembly to seek updated model results for all effects shown above to inform its ultimate decision.



A number of published economic studies have evaluated the effects of raising the minimum wage in many different settings and time periods. Traditional national-level studies use cross-state variation in minimum wages over time to estimate effects.³⁹ Traditional studies generally find

³⁹ See, e.g., Neumark, David and William Wascher, "Employment Effect of Minimum and Subminimum Wages: Panel Data on State Minimum Wage Laws", *Industrial and Labor Relations Review*, 1992, 46(1), at 55-81; and Neumark, David and William Wascher, "Minimum Wages and Employment", *Foundations and Trends in Microeconomics*, 2007, 3(1-2), at 1-182.

greater job loss than case studies, which typically compare adjoining local areas with different minimum wages around the time of a policy change.⁴⁰ Case studies have generally found small or no disemployment effects. For example, a 2010 study of the impact of differences in minimum wage policies in almost 300 contiguous county pairs along state borders over a 16-year period found no disemployment effects from a higher minimum wage.⁴¹

Two new studies were released in late June to analyze the effects of raising the minimum wage to \$13.00 in Seattle; both focus on data from January through September of 2016.⁴² That time period represents the second stage of a multi-stage increase in the minimum wage.⁴³

Several issues should be considered in assessing the results of the two studies. Seattle, the only jurisdiction where a minimum wage as high as \$13.00 per hour has been studied, may represent a unique, fast-growth economy. Neither study had been peer-reviewed as of the end of November 2017, but the UC Berkeley study follows other peer-reviewed, published papers by the same authors. With respect to the proposals before the Vermont General Assembly, the minimum wage increase in Seattle occurred relatively quickly. For employers with more than 500 employees, the wage increase occurred over a three- to four-year period, going from \$9.47 on January 1, 2015 to \$15.00 on January 1, of 2017 or 2018, depending on whether the employer makes payments toward its employees' medical benefits. In contrast, the minimum wage proposals for Vermont start from a higher existing minimum wage and increase the minimum wage over three to nine years; going from \$10.00 to \$15.00 by January 1 of 2020, 2022, or 2026.⁴⁴ The differences between Seattle's ordinance and the Vermont proposals in combination with the conflicting results of the studies suggest proceeding cautiously before drawing firm conclusions on the basis of the experience in Seattle, as does the general lack of studies of minimum wages as high as \$13.00 per hour.⁴⁵

The Minimum Wage Study Committee suggests that the General Assembly consider the pros, cons, and costs of collecting data on quarterly hours worked by individuals to permit analysis of the effect of any minimum wage increases on jobs, wages, and hours worked for low-wage workers.⁴⁶

⁴⁰ Examples of such case studies include comparisons of New Jersey and Pennsylvania (Card & Krueger, 1994, 2000) and San Francisco and neighboring areas (Dube, Naidu, & Reich, 2007).

⁴¹ See, Dube, Arindrajit, T. William Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties" (2010).

⁴² See Appendix 13: Manchester, Joyce, "Preliminary Summary Review: Two Studies on the Effects of Raising the Minimum Wage to \$13 per Hour in Seattle", Issue Brief, Vermont Legislative Joint Fiscal Office (July 13, 2017). The two new studies reached different conclusions about the effect of the increase in the minimum wage in Seattle. As in other case studies, the UC Berkeley study found no adverse effect on employment and positive effects on wages. In contrast, the University of Washington study found fewer hours worked by low-income workers large enough to cause reduced earnings of low-income workers of \$125.00 per month on average.

⁴³ For Seattle employers with more than 500 employees, the minimum wage reached \$15.00 on January 1, 2017 or will do so on January 1, 2018, depending on whether the employer makes payments toward its employees' medical benefits. Seattle's Minimum Wage Ordinance also provides that the minimum wage for employers with 500 or fewer employees will increase to \$15.00 on January 1, 2019 or on January 1, 2021 if the employees receive tips or the employer makes payments toward the employees' medical benefits, or both. See Table 3, on page 31.

⁴⁴ See Section II.F of the Committee's Report on page 19.

⁴⁵ Manchester, Joyce. *Id.*

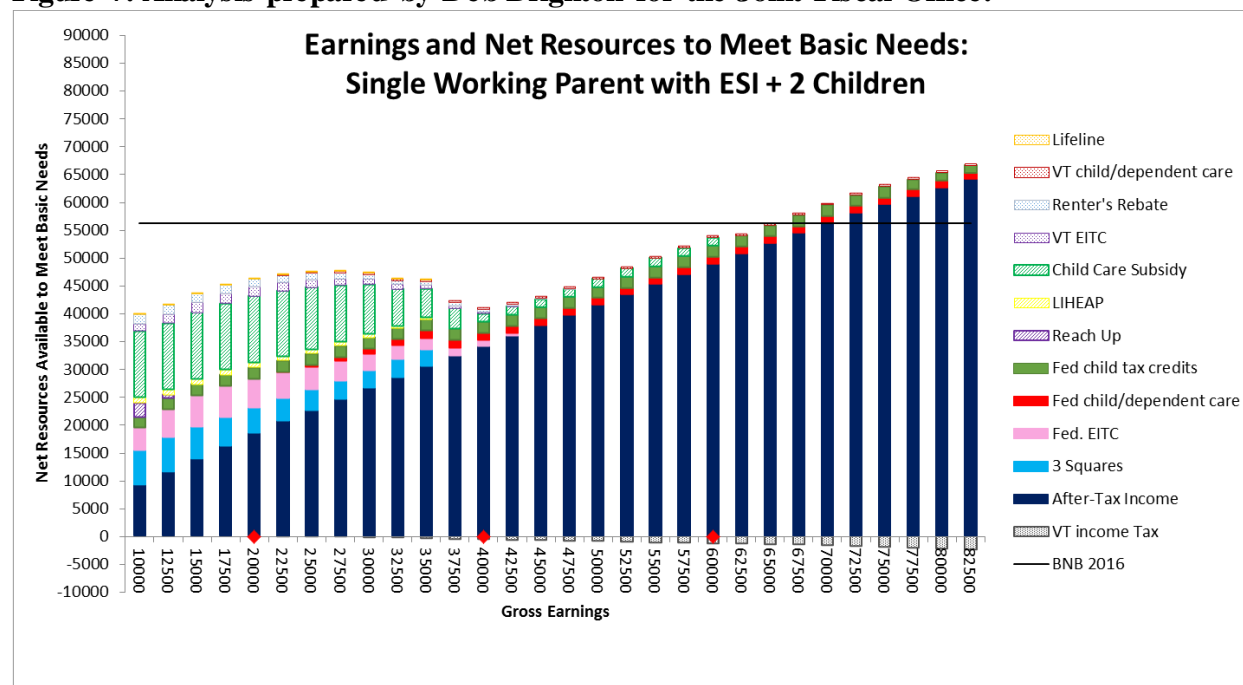
⁴⁶ Data on quarterly hours worked by individuals could be collected as part of the Quarterly Census of Employment and Wages. That Census currently collects data on quarterly wage data in Vermont.

E. Programs that Help Low-Income Households

Most public benefits that are designed to be a “safety net” decline as households move out of poverty and their need for financial assistance decreases. The benefit levels are generally at the maximum amount when household incomes are less than 100 percent of the Federal Poverty Level (FPL) and decline at higher incomes—generally between 100 percent and 200 percent of FPL.

A person working full time at Vermont’s minimum wage in 2017 would have an income of \$20,800.00. For a household of one, this would be 172 percent of FPL; for a household of two with one earner, it would be 128 percent of FPL; for a household of three with one earner, it would be 102 percent of FPL. If the minimum wage were increased, each of these households could see a cumulative loss in benefits (see Figure 7). Major programs that benefit low-income households are described below.

Figure 7. Analysis prepared by Deb Brighton for the Joint Fiscal Office.



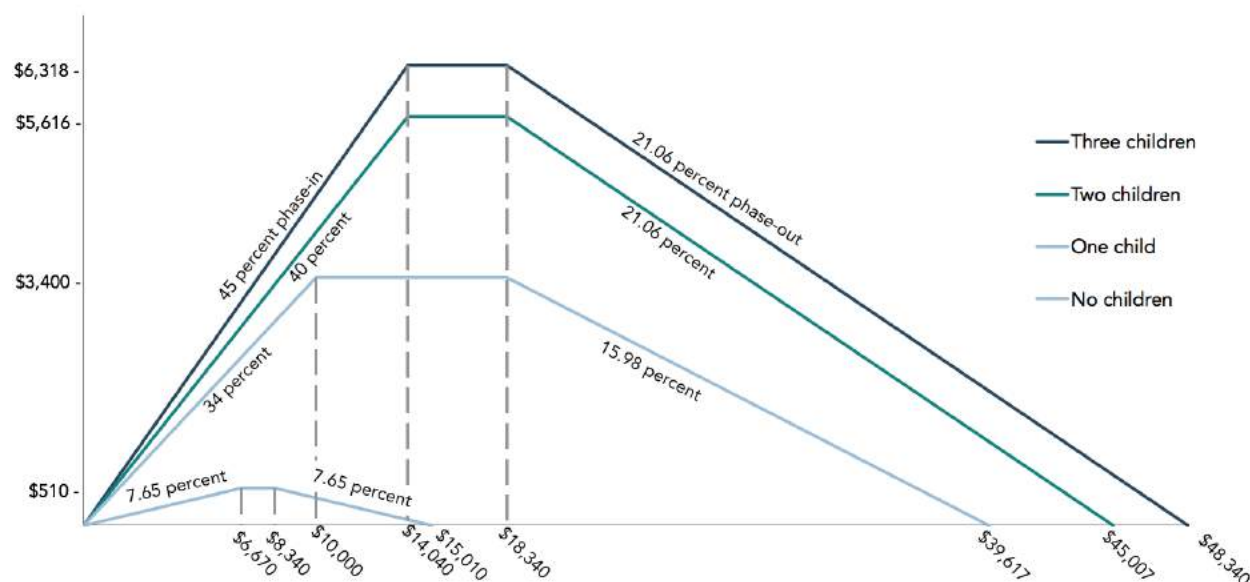
1. The Earned Income Tax Credit

The Earned Income Tax Credit (EITC) differs from other programs that benefit low-income households in two ways: it functions as a work incentive because the value of the credit increases as wages increase (at low wage levels), and the value of the credit does not reduce any other benefits the recipient would otherwise receive.

The amount of the federal EITC depends on the number of children and the earned income of the family. For each family type, the credit increases as wages increase, up to a maximum amount, and decreases at higher wage levels, as shown in the figure below from the Tax Policy Center.

Figure 8.**Earned Income Tax Credit
2017**

Credit amount



Source: Tax Policy Center, IRS Rev. Proc. 2016-55.

Note: Assumes all income comes from earnings. Amounts are for taxpayers filing a single or head-of-household tax return. For married couples filing a joint tax return, the credit begins to phase out at income \$5,590 higher than shown.

Vermont offers an Earned Income Tax Credit that is calculated as 32 percent of the federal credit. Since 2009, the number of Vermont filers receiving the federal and State EITCs has been between 44,000 and 45,000 annually. In 2015, the federal credit totaled \$85 million and the Vermont credit totaled \$27 million. The average combined credit per filer was \$3,157.00.

For a family with two children, the amount of the combined federal and Vermont credits would equal 52.8 cents for every dollar earned as the family's earnings increase—up to earnings of \$14,040.00. The credit would begin to decline when the family's earnings reach \$18,340.00 (or \$23,930.00 for married couples filing a joint return). At that point, the combined federal and Vermont credits would decrease by 28.8 cents for each additional dollar earned.

Both the federal and Vermont EITCs are refundable credits, so people who do not pay any income tax get the full credit if they file a tax return. In 2010, over one-half of the Vermont filers who received the credits paid no Vermont income tax, so the credit was fully paid out. Another 29 percent paid Vermont income tax, but the Vermont EITC was greater than the amount of tax they owed, so they received a refund.

The Committee considered a new tax credit for working parents with children under the age of 14, which would be paid out on a monthly basis over the course of the year instead of in a single lump sum as with the EITC. Testimony from the Department of Taxes indicated that the monthly payment of the credit would result in high administrative costs for the State and that the IRS

would likely treat the amounts paid out pursuant to such a credit as income, which could raise recipients' federal tax liability or diminish the amount of recipients' federal EITC. For these reasons, the Committee decided not to recommend the creation of such a credit.

2. The Child Care Financial Assistance Program

Vermont's Child Care Financial Assistance Program (CCFAP) subsidizes the cost of child care for eligible families in a manner that encourages employment. Subsidy payments are made directly from the State to a family's child care provider. The subsidy is administered on a sliding fee scale basis, the formula for which is determined by the Commissioner for Children and Families by rule and accounts for both family size and income level. According to statute, "[t]he lower limit of the fee scale shall include families whose gross income is up to and including 100 percent of the federal poverty guidelines...[t]he upper income limit of the fee scale shall be neither less than 200 percent of the federal poverty guidelines nor more than 100 percent of the State median income, adjusted for the size of the family."⁴⁷

It is estimated that there are roughly 7,000 families (about 10,800 children) with the following characteristics:

1. at least one child younger than 13 years of age who needs child care because all parents work;
2. a family income between 100% and 220% FPL; and
3. family income that would potentially increase if the minimum wage were to increase.

However, not all of these families currently receive assistance through the State program. Currently there are about 3,000 children from families in this income range receiving CCFAP—roughly 2,000 families—who would lose CCFAP if their incomes increased. Presumably not all of these families would be affected by an increase in the minimum wage.

Currently, families that are eligible to receive a 100 percent subsidy through CCFAP receive an amount based on the rate charged by 75 percent of all child care providers in 2008, as captured in a market rate survey of regulated child care providers conducted biennially by the Department for Children and Families. CCFAP is particularly relevant in the context of Vermont's policy discussion on minimum wage, due to the existence of a "benefit cliff" inherent in the program's structure. At certain points along the subsidy's sliding fee scale, an increase in wages would decrease the family's child care benefit more than the amount gained by the wage increase, resulting in a net financial loss for the family.

3. Other federal and State programs

3SquaresVT

The most common benefit is 3SquaresVT, which is a federally funded program that is also known as the Supplemental Nutrition Assistance Program (SNAP). In general, for each extra dollar a

⁴⁷ 33 V.S.A. chapter 35, subchapter 2.

recipient earns, the 3SquaresVT allotment decreases by 24 cents. In 2017 there were 77,366 3SquaresVT recipients.⁴⁸

Section 8 Housing Choice Vouchers

Section 8 Housing Choice Vouchers are initially limited to households with very low income. When receiving rental assistance, the participants typically pays about 30 percent of their income toward rent and utilities. Families can continue in the program as their incomes increase, but their portion of the rent also increases. In general, for each additional dollar a family earns, it will pay an additional 30 cents in rent as long as it is at or below the payment standard.⁴⁹

Only around 6,000 Section 8 Housing Choice Vouchers are available in Vermont. The Vermont State Housing Authority provides 3,478 of those roughly 6,000 vouchers, with the remainder being provided through other local housing authorities.⁵⁰ Of the 3,478 households that VSHA assists, 3,369 have income from other public benefits programs or wages, or both. Of those households, 218 only earn income from wages, with an average annual income of roughly \$21,100.00.

This is a federal program. However, if a family's income rises to a point where it is paying 100 percent of the rent, it will be considered over income for the program. After six months of being over income, the family's subsidy will be cancelled. At that point, depending on program funding, a new voucher may be issued to another eligible family at the top of the waiting list or the voucher may be shelved until funding becomes available.

LIHEAP

The Vermont Low Income Heating and Energy Assistance Program (LIHEAP) helps pay fuel bills for qualified families. The benefit amount decreases slowly as family income increases from 75 percent to 154 percent of FPL and then it drops substantially between 155 percent and 185 percent FPL. The amount that a family would lose for each additional dollar earned varies depending on the type of fuel, the family size, and the family's income. In State fiscal year 2017, roughly 21,200 families received LIHEAP assistance, and the average amount was \$709.00. LIHEAP is a federal block grant program with additional State funding.

Medicaid/VT Health Connect

Individuals and families with incomes up to 138 percent of FPL can receive Medicaid coverage, which is currently 54.46 percent federally funded and 45.54 percent State-funded. As income increases above that amount, a family must move off Medicaid. If they purchase health insurance through VT Health Connect, they are eligible for premium assistance and for cost-sharing

⁴⁸ AHS ESD State FY2017.

⁴⁹ The payment standard is the maximum gross rent of a unit, which equals the contract rent plus the utilities paid by the participant. Payment standards are set by each individual public housing authority and are between 90 and 110 percent of the HUD Fair Market Rent. When a unit's gross rent is at or below the payment standard, the participant will typically pay 30 percent of his or her adjusted monthly income toward rent and utilities.

⁵⁰ Of the 3,478 households that the VSHA assists, 2,062 are either elderly or disabled.

subsidies. Both types of assistance decline, and out-of-pocket costs increase, as family incomes moves from 138 percent to 400 percent of FPL. Although the federal share of the assistance declines as family income increases, the State share increases between 138 percent and 300 percent FPL. The amount that a family's out-of-pocket costs increase with each additional dollar of income varies, depending on the family size and use of medical services.

SSDI and SSI

Two programs available to working-age Vermonters with severe disabilities are the Social Security Disability Insurance (SSDI) program and the Supplemental Security Income (SSI) program. Earnings limits apply to disability beneficiaries under each program.⁵¹ Under the SSDI program, monthly benefits are stopped if beneficiaries earn too much per month over an extended period of time. Under the SSI program, if the beneficiary has no income other than SSI benefits and earnings, any earnings above \$85.00 per month lead to a reduction in benefits of \$1.00 for every \$2.00 of additional earnings. However, relatively few disability beneficiaries are close to the earnings limit at any particular point in time and would lose benefits as a result of an increase in the minimum wage.

Other Tax Provisions

In addition to the Earned Income Tax Credits, there are beneficiaries of other tax programs that would be affected by an increase in wages.

For homeowners, the Property Tax Adjustment would decrease as household income increased. On average, an additional dollar of income would reduce the Property Tax Adjustment by three cents. Roughly 120,000 households receive this adjustment.

Both renters and homeowners with incomes below \$47,000.00 are eligible for the rebate program. This caps the homeowner's property tax bill and the renter's rent payment based on income. As household income increases, the amount of the credit decreases. Roughly 32,000 homeowners and 13,000 renters receive this rebate. In general, participating renters and homeowners with incomes between \$25,000.00 and \$47,000.00 would see a rebate reduction of five cents for each additional dollar earned.

F. Recent Minimum Wage Bills in Vermont

During the 2017 session, five bills were introduced in the General Assembly that would increase the minimum wage beyond the levels currently provided by statute.⁵² H.64 would increase the minimum wage to \$15.00 by January 1, 2020. H.93 and S.40 would increase the minimum wage to \$15.00 by January 1, 2022. H.313 would increase the minimum wage and the tipped minimum wage to \$15.00 by 2022. H.302 would increase the minimum wage to \$15.00 by 2026. All five bills are still awaiting action in the committees to which they have been assigned.

⁵¹ SSI beneficiaries are also subject to asset limits; the Vermont General Assembly increased the asset limit for SSI beneficiaries in Vermont during the 2017 legislative session.

⁵² See Appendix 14: Vermont Minimum Wage Bills Introduced in 2017.

III. Statutory Authority and Responsibilities of the Committee

The General Assembly established the Minimum Wage and Benefits Cliff Study Committee in 2017 in recognition of the growing income disparity in the United States and among Vermonters. Specifically, the Committee is charged with studying or doing the following:

- 1) the minimum wage in Vermont and livable wage in Vermont in relation to the real cost of living;
- 2) the economic effects of small to large increases in the Vermont minimum wage, including in relation to the minimum wage in neighboring states;
- 3) how the potential for improving economic prosperity for Vermonters with low and middle incomes through the Vermont Earned Income Tax Credit might interact with raising the minimum wage;
- 4) working in direct collaboration with the Department for Children and Families and the Joint Fiscal Office, the State's public benefit structure and recommended methods for mitigating or eliminating the benefit cliffs experienced by working Vermonters receiving public assistance or earning below the livable wage, or both, to enhance work incentives;
- 5) the effects of potential reductions in federal transfer payments as the minimum wage increases, and impacts of possible reductions in federal benefits due to changes in federal law;
- 6) ways to offset losses in State and federal benefits through State benefit programs or State tax policy; and
- 7) further research to understand better the maximum beneficial minimum wage level in Vermont.⁵³

The Committee is composed of three senators, not all from the same political party, who were appointed by the Committee on Committees and three representatives, not all from the same political party, who were appointed by the Speaker of the House. Act 69, § F.1 requires the Committee to submit a written report to the Senate Committee on Economic Development, Housing and General Affairs and to the House Committee on General, Housing and Military Affairs by December 1, 2017.

IV. Summary of Committee Activities

While the General Assembly was adjourned, the Committee convened five times in 2017 to hear testimony from a diverse array of stakeholders on a number of issues within its jurisdiction.⁵⁴ The Committee took testimony on the following subjects:

- The history of the minimum wage in Vermont and at the federal level, including increases over time and the average increase adjusted for various measures of inflation and economic growth.
- Recent legislation to increase the minimum wage in other states and municipalities.

⁵³ See Appendix 1: 2017 Acts and Resolves No. 69, Sec. F.1.

⁵⁴ See Appendix 2: Witness List.

- New York State’s minimum wage law, including scheduled increases in the minimum wage across various regions and employer sizes, and provisions for potentially delaying wage increases based on certain economic factors.
- Current and recent minimum wage legislation in Massachusetts and New Hampshire.
- An ongoing \$15.00 minimum wage referendum effort in Massachusetts.
- “Off-ramp” provisions in California’s minimum wage law that would allow California’s governor to pause temporarily its scheduled minimum wage increases up to two times, in the event of certain economic or fiscal conditions signaling a downturn in the state’s economy.
- Current legislation in Vermont to increase the minimum wage to \$15.00.
- The impact on jobs and the number of workers at minimum wage if Vermont’s minimum wage increased to \$12.50 by 2021, \$13.25 by 2022, or \$15.00 by 2022.
- The potential effect of increasing Vermont’s minimum wage on Vermont businesses and workers and their potential responses to an increase.
- The potential effect of increasing Vermont’s minimum wage on Vermont nonprofits and their potential responses to an increase.
- The federal and Vermont Earned Income Tax Credits.
- The potential of creating a tax credit for working parents with children aged 13 and under to offset diminished public benefits as a result of increases in the minimum wage.
- The Vermont Basic Needs Budget and the Vermont Livable Wage.
- Public benefits provided in Vermont, including 3SquaresVT, LIHEAP, Reach Up cash grants, the Child Care Financial Assistance Program, public health insurance programs, federal and State tax credits, the Lifeline Telephone Service Credit, and Section 8 housing vouchers.
- The effect of potential minimum wage increases on affordable housing.
- The relationship between increases in the minimum wage or earnings and the amount of public benefits available to an individual or family.
- The “benefits cliff” and potential approaches to mitigate or eliminate it as wages increase.
- Studies of potential benefits cliffs and other impacts that were conducted for Oregon as it was considering legislation to raise its minimum wage.
- The effects of potential minimum wage increases on State employees’ wages, the State budget, and State contracts.
- The effect of potential minimum wage increases on the Vermont State Employees’ Retirement System.
- The impact of potential minimum wage increases on home health care workers, including visiting nurses.
- An exploratory response regarding the effects of potential minimum wage increases on school district budgets from the Vermont School Boards Association, the Vermont Superintendents Association, and the Vermont Association of School Business Officials.
- Wage stagnation in Vermont and across the United States.
- Income disparity in Vermont and across the United States.
- Studies of the minimum wage increase in Seattle.

V. Issues for Consideration in Crafting a Minimum Wage Policy

A. TIPPED EMPLOYEES

Federal minimum wage for tipped employees is \$2.13. It has remained at that level since 1991, despite several increases in the federal minimum wage during the intervening years. Because of this, a number of states have increased their tipped minimum wage to levels above the federal minimum wage. Seven states—Alaska, California, Minnesota, Montana, Nevada, Oregon, and Washington—have a single minimum wage that applies to both tipped and nontipped workers. Another 26 states, including Vermont and the District of Columbia, provide for a tipped minimum wage that is greater than the federal minimum wage. The remaining 17 states have a tipped minimum wage that is equal to the federal tipped minimum wage.

The states that exceed the federal tipped minimum wage do so through a variety of mechanisms. For example, in Vermont the tipped minimum wage is equal to one-half the minimum wage. Similarly, other states have a tipped minimum wage that is equal to a percentage of the minimum wage, including New Hampshire (45 percent of the minimum wage) and New York (two-thirds of the minimum wage or \$7.50, whichever is greater). In other states, the tipped minimum wage is equal to the minimum wage minus a fixed amount. The states include Arizona, where the tipped minimum wage is \$3.00 less than the minimum wage, and Colorado, where the tipped minimum wage is \$3.02 less than the minimum wage. Finally, some states set the tipped minimum wage at a specific dollar amount. These jurisdictions include Maine, in which the tipped minimum wage is \$5.00, and Washington, D.C., where the tipped minimum wage is \$3.33. It should be noted that in Maine, the tipped minimum wage is scheduled to increase by \$1.00 per year until it is equal to the minimum wage, while in Washington, D.C., the tipped minimum will annually increase until it reaches \$5.00 in 2020 and after that it will annually increase by a percentage equal to the increase in the CPI.⁵⁵

Due to time constraints, the Committee took virtually no testimony on the issue of the tipped minimum wage. Therefore, the Committee does not have a recommendation with respect to whether the General Assembly should amend the statutory language governing Vermont's tipped minimum wage.⁵⁶

B. COST TO STATE

It is anticipated that an increase in the minimum wage would cause costs to the State to rise from the need to pay some low-wage State workers, contractors, and other associated workers a higher wage and possible ripple effects on the State pension fund. In fact, however, not many State workers or contractors earn wages that are at or below the proposed minimum wage levels. The

⁵⁵ For further information, *see* the JFO Issue Brief, “The Relationship between Minimum Wages and Tipped Wages,” March 30, 2017, available at http://www.leg.state.vt.us/jfo/issue_briefs_and_memos/Issue_Brief_Minimum_Wages_and_Tipped_Wages.pdf.

⁵⁶ A number of scholarly articles have considered the effect of increasing the tipped minimum wage. *See, e.g.*, Even, William E., and David A. MacPherson, “The Effect of Tip Credits on Earnings and Employment in the U.S. Restaurant Industry” (2013); Allegretto, Sylvia and Carl Nadler, “Tipped Wage Effects on Earnings and Employment in Full-Service Restaurants” (2015); and Jones, Maggie R., “Measuring the Effects of the Tipped Minimum Wage Using W-2 Data” (2016).

discussion below refers to the increase to \$15.00 per hour in 2022 and includes impacts on State employees; State contracts, including temporary workers; employees of the Designated Agencies and Specialized Service Agencies; the University of Vermont; Vermont State Colleges; and the State employees' pension fund.

State employees

The yearly cost impact for the State employee workforce would be about \$1 million over the five years from 2018 through 2022. That estimate includes the impact on pay, State Social Security and Medicare contributions under the Federal Insurance Contributions Act (FICA), and where relevant, retirement. Most of the costs come from temporary workers.

Historically, roughly 40 percent of the cost of the State workforce has been covered by federal or other funding sources. It should be noted, however, that changes in federal policy could reduce funding available to the State, and some grants and federal funding streams may not increase if State personnel costs rise as a result of an increase in the minimum wage.

State contracts, including temporary workers

The \$15.00 minimum wage is expected to have a minor financial impact on existing State contracts. Little effect would accrue to the Agency of Transportation because most of their projects are fully or partially federally funded, meaning their wages are subject to the Davis-Bacon wage levels and already above \$15.00 per hour.

Designated Agencies, Specialized Service Agencies

Pursuant to Sec. E314.2 of Act 85 of 2017, the "Secretary of Human Services, in consultation with the Departments of Mental Health and of Disabilities, Aging, and Independent Living, shall estimate the levels of funding necessary to sustain the designated and specialized service agencies' workforce, including increases in the hourly wages of workers to \$15, and to increase the salaries for clinical employees and other personnel in a manner that advances the goal of achieving competitive compensation to regionally equivalent State, health care, or school-based positions of equal skills, credentials, and lengths of employment; enable the designated and specialized service agencies to meet their statutorily mandated responsibilities and required outcomes; identify the required outcomes; and establish recommended levels of increased funding for inclusion in the fiscal year 2019 budget." The report required pursuant to that section is due "on or before December 15, 2017 to the House Committees on Appropriations and on Health Care and to the Senate Committees on Appropriations and on Health and Welfare." Accordingly, the Committee was unable to obtain information on this issue prior to the December 1, 2017 deadline for submitting its report.

Home Health and Personal Care

The Committee received a written payroll report from ARIS Solutions, which processes payments for a substantial number of long-term-care programs overseen and partially funded by the State.⁵⁷

⁵⁷ See Appendix 4: ARIS Solutions Data on Payroll for Various Programs.

The Committee also heard testimony from Vermont's home health agencies. Although more details are needed from the home health agencies, it appears that starting wages for their lowest paid employees are approximately \$1.00 per hour higher than the current minimum wage and rise to \$2.00 per hour higher within a year. While there would be little pressure on these programs in the early years under the minimum wage proposals being considered by the Committee, the out years could prove problematic. The agencies expressed a strong desire to find a way to increase their wages for their lowest paid aides.

Public Education

The Committee received a joint written response from the Vermont School Boards Association, Vermont Superintendents' Association, and the Vermont Association of School Business Officials. Unfortunately, due to legitimate time constraints they were unable to provide any detailed wage data, other than to express concern that raising the minimum wage could potentially raise local school budgets in the future.

The Committee did receive a preliminary assessment from Addison Northwest Supervisory Union showing budgetary impacts from a proposal to raise the minimum wage to \$15.00.⁵⁸ However, absent similar information from a representative sample of other school districts and supervisory unions, at this time the Committee is unable to draw a conclusion as to the statewide impact of an increased minimum wage on public education. The Committee recommends that the Agency of Education, together with the Vermont National Education Association, the Vermont Superintendents Association, and the Joint Fiscal Office, begin the process of collecting more hourly wage details from a representative sample of business managers of school districts to ensure that the information will be available to the committees of jurisdiction before the General Assembly reconvenes in January 2018.

University of Vermont

The net impact of a \$15.00 minimum wage in FY22 is estimated to be \$125,000.00 annually in wages and benefits.

Vermont State Colleges

Employee wages and benefits would rise about \$100,000.00 through 2022 if the minimum wage increased to \$15.00 per hour in 2022. Pursuant to 21 V.S.A. § 383(2)(I), Vermont's minimum wage law does not apply to "students working during all or any part of the school year or regular vacation periods." However, it is important to note that the term "student" is not defined in Vermont's law and there is no case law to date regarding whether the term "student" refers to secondary school students only, or if it includes college students as well. If Vermont State College students' wages were determined to be affected by an increase in the minimum wage, the additional cost could be as much as about \$1 million through 2022, or an average of \$250,000.00 annually.

⁵⁸ See Appendix 16: Assessment of Budgetary Impact on Addison Northwest Supervisory Union from an Increase in the Minimum Wage to \$15.00 in 2018.

State Employees' Retirement System

The impact of an increase in the minimum wage on the Vermont's State Employees' Retirement System would be minimal because the majority of individuals who would be impacted are temporary employees who are not eligible to participate in Vermont State Employees' Retirement System Defined Benefit and Defined Contribution plans. Accordingly, there would be no additional retirement costs for this group.

Exempt State employees have the option of participating in either the Defined Benefit or Defined Contribution plan. Under the Defined Contribution plan, contributions are a flat percentage of an employee's pay; 2.85% for the employee and 7.0% for the employer. Any increase in pay would be multiplied by these percentages to determine additional contributions, but, according to the Treasurer's office, the increase appears to be minimal. For Defined Benefit participants, the increase in pay would marginally affect the average final compensation on which the participant's pension benefit is calculated. While it is impossible to quantify an individual's pension benefit without full service year data as well as wages, the impact appears minimal.

Classified employees, who would likely not be impacted by a minimum wage increase until calendar years 2021 and 2022, are eligible for the Defined Benefit plan. As with exempt employees, any calculation for increases in a classified employee's pension benefits based on the minimum wage increase would also include the use of the average final compensation and years of service factors. As with the exempt employees, the increase would be negligible.

C. CROSS-BORDER ISSUES

The decision regarding whether to increase Vermont's minimum wage could create potentially significant differences between Vermont and its neighbors. A higher minimum wage along one side of the border could lure workers in search of higher wages across the border, resulting in increased spending and increased traffic in local businesses. On the other hand, it could also increase labor costs, which might result in increased price disparities along the border. Another potential impact of a cross-border wage differential is that employers along the side of the border with a lower minimum wage may increase their wages in order to compete for labor. It is also important to note that an analysis of the impact of a cross-border wage differential must account for other factors that could influence workers' or employers' behavior, including tax rates, settlement patterns, differences in per capita income, availability of transportation, and land use regulations.

It should be noted that the Committee heard testimony regarding studies of cross-border wage variations that indicated that there was minimal impact due to cross border variations in the minimum wage.⁵⁹ In particular, the testimony cited a 2010 study that examined differences in minimum wage policies in contiguous counties located along state borders over a 16-year period and found no adverse impact on employment from a higher minimum wage.⁶⁰

⁵⁹ See Appendix 8: Cooper, David, "Understanding the Needs for Higher Wage Standards", Economic Policy Institute, at 20-21.

⁶⁰ See, Dube, Arindrajit, T. William Lester, and Michael Reich, "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties" (2010).

Under current law, Vermont's minimum wage will increase to \$10.50 in 2018 and will be indexed for inflation thereafter. The minimum wage for upstate New York along Vermont's border will increase to \$10.40 in 2018 and will reach \$12.50 in 2021, and will thereafter be indexed for inflation until it reaches \$15.00.⁶¹ Massachusetts' minimum wage is currently \$11.00, but several proposals to increase it to \$15.00 by 2022 are currently under consideration.⁶² New Hampshire's minimum wage is equal to the federal minimum wage of \$7.25, and recent proposals to increase it have been unsuccessful.⁶³

Thus, with respect to New York, if Vermont elects not to increase its minimum wage, the minimum wage in upstate New York will surpass Vermont's minimum wage and increase to roughly 12 percent more than the Vermont minimum wage by 2022.⁶⁴

In Massachusetts, however, if neither Massachusetts nor Vermont elects to change its current minimum wage laws, then Vermont's minimum wage will likely catch up to and surpass the Massachusetts minimum wage in about 2021.⁶⁵ On the other hand, if Massachusetts does elect to increase its minimum wage to \$15.00 by 2022 and Vermont does not increase its minimum wage, then the Massachusetts minimum wage in 2022 would be approximately 32 percent higher than the Vermont minimum wage.

By contrast to Massachusetts and New York, New Hampshire's minimum wage is already significantly lower than Vermont's and there are no indications that New Hampshire is likely to raise its wage in the foreseeable future. Currently, Vermont's minimum wage is 38 percent higher than New Hampshire's. Assuming New Hampshire's minimum wage does not change, if Vermont's minimum wage rose to \$12.50 by 2021, it would be 72 percent higher than New Hampshire's; if it rose to \$13.25 by 2022, it would be 83 percent higher. Most significantly, if New Hampshire's minimum wage did not change but the Vermont minimum wage rose to \$15.00 by 2022 as proposed in some of the legislation pending before the General Assembly, it would be more than double New Hampshire's minimum wage.⁶⁶

Any competitive impacts could become more pronounced as differentials grow between the minimum wage in Vermont and those in New Hampshire, Massachusetts and New York.⁶⁷

D. "PAUSE BUTTON"

Both New York and California's minimum wage laws include provisions that would permit the scheduled increases in each state's minimum wage to be paused temporarily in the event of an economic downturn or adverse economic impacts resulting from the increase in the minimum wage.

⁶¹ See Appendix 10: "Minimum Wage Increases in Other States."

⁶² See Appendix 11: "Massachusetts Ballot Initiative: Initiative Petition for a Law Raising the Minimum Wage."

⁶³ See Appendix 15: Leonard, Damien, "Memorandum Regarding Minimum Wage Initiatives in New Hampshire and Massachusetts, and the Fiscal Off-Ramp in California's Minimum Wage Law", at 1-2.

⁶⁴ See Appendix 10: "Minimum Wage Increases in Other States."

⁶⁵ *Id.*

⁶⁶ See Appendix 5: Kavet, Rockler & Associates, LLC, October 2, 2017 memorandum, at 5.

⁶⁷ See Appendix 7: Kavet, Rockler & Associates, LLC, February 8, 2017 memorandum.

Beginning January 1, 2019 and continuing until the minimum wage reaches \$15.00 in all regions of the state, New York's law requires the Division of Budget to analyze annually the economy in each region and the effect of the minimum wage increases to determine whether there should be a temporary suspension or delay in any of the scheduled increases.⁶⁸ California's law permits the Governor to delay the scheduled increase for one year if the Director of Finance certifies that either certain economic or certain budgetary conditions are met.⁶⁹ The Governor may pause the scheduled increases pursuant to the budgetary provisions no more than two times.

However, differences between Vermont and New York and California weigh against Vermont adopting a similar "pause button" framework. Vermont's economic and demographic makeup are significantly different from states such as California and New York, which both have significant metropolitan areas with populations and economies that are significantly larger than Vermont's. The Committee felt that, given Vermont's size, geography, economy, and demographics, combined with the limited data available to policy makers, it would be difficult to create a framework for accurately determining the degree to which an increase in the minimum wage was the primary factor causing a negative change in the State's economy or budget. Moreover, if the State were to be faced with a recession that made scheduled wage increases difficult for the economy to bear, the General Assembly can always pass legislation altering or delaying any future wage increases. A statutory requirement of an annual report to the General Assembly on the effects of a minimum wage increase might also be considered.

E. INFLATION ADJUSTMENTS

Under Vermont's current minimum wage law, after the minimum wage reaches \$10.50 in 2018, it will be annually increased "by five percent or the percentage increase of the Consumer Price Index . . . whichever is smaller."⁷⁰ Including Vermont, 17 states and Washington, D.C. have a minimum wage that will be annually adjusted for inflation.⁷¹ Most states, such as Vermont, use the CPI as the measure of inflation.⁷² However, only a few of those states—California, Michigan, Minnesota, Nevada, and Vermont—cap the cost of living increase at a specific percentage between 2.5 and five percent.

Indexing the minimum wage to inflation can ensure that the real value of the wage does not diminish over time. However, if the increase in the minimum wage is capped at a certain

⁶⁸ For more information on New York's Analysis, *see* Appendix 12: "Summary of New York State Wage Determination Procedures."

⁶⁹ The economic conditions are met if (1) seasonally adjusted statewide nonfarm job growth for either the past 3 or 6 months is negative and (2) retail sales tax receipts for the past 12 months are negative. The budgetary conditions are met if the state's General Fund would be in deficit in the current fiscal year or either of the two following fiscal years when taking into account the current minimum wage and the next scheduled increase. For more information *see* Appendix 15: Leonard, Damien, "Memorandum regarding Minimum Wage Initiatives in New Hampshire and Massachusetts, and the Fiscal Off-Ramp in California's Minimum Wage Law."

⁷⁰ 21 V.S.A. § 384(a).

⁷¹ *See* National Conference of State Legislatures, "2017 Minimum Wage by State", *available at*: <http://www.ncsl.org/research/labor-and-employment/state-minimum-wage-chart.aspx>.

⁷² *See* Appendix 10: "Minimum Wage Increases in Other States."

percentage, there is a chance that the real value of the minimum wage could decrease somewhat during periods of high inflation. Such periods, however, have been rare since 1981. Specifically, between 1981 and 2016, inflation as measured by the CPI has exceeded five percent in only three years: 1981, 1982, and 1990.

An alternative approach discussed by the Committee was the possibility of setting a specific minimum annual increase in the wage rate. In other words, rather than increasing by the lesser of the CPI or a specific percentage, the minimum wage would increase by the greater of the CPI or the specific percentage. That approach would likely cause the real value of the minimum wage to increase over time and specifically during periods of low inflation when the minimum percentage were greater than the rate of inflation.

Regarding the proposals in Section VI, the Committee took no position on future minimum wage increases, indexed for inflation or otherwise, after the minimum wage reaches \$15.00 per hour.

F. REGIONAL VARIATIONS

In both New York State and Oregon, the minimum wage varies across different regions of the state. In New York, the wages in the various regions are all increasing to \$15.00, but they are doing so at different rates.⁷³ In Oregon, by contrast, the regional variations in the minimum wage will remain fixed while the regional wages are increased based on the percentage increase in the CPI after 2022.⁷⁴ Both New York and Oregon have a major metropolitan area with a strong economy as well as significant rural areas with weaker economies. Although Vermont lacks a major metropolitan area, it too has regional variations across the State in wages and the cost of living.

Regional variations in the minimum wage can help account for differences in the economy of various regions of a state. However, identifying and distinguishing the various regions can be complicated by issues such as determining the level of economic variation needed to justify a different wage rate, establishing wage rates that will not disadvantage one region in relation to another, and accounting for potential impacts on communities located along the border between two regions. While the General Assembly may wish to consider amending Vermont's minimum wage so that it varies based on regional difference, the Committee would not recommend doing so at this time.

⁷³ The current minimum wage is highest in New York City, followed by Nassau, Suffolk, and Westchester counties, and finally upstate New York. New York City will reach \$15.00 on December 31 of 2018 or 2019 depending on the size of the employer, while Nassau, Suffolk, and Westchester counties will do so on December 31, 2021. In upstate New York, the minimum wage will reach \$12.50 on December 31, 2020, and after that it will increase annually for inflation until it reaches \$15.00. There is no provision for the minimum wage in any part of New York to exceed \$15.00 in the future.

⁷⁴ The standard minimum wage for the state will reach \$13.50 in 2022, at which point the minimum wage for metropolitan Portland will be \$14.75, or \$1.25 higher than the standard minimum wage, while the minimum wage for rural areas of the state will be \$12.50, or \$1.00 lower than the standard minimum wage.

G. BUSINESS SIZE

Establishing different wage rates based on employer size may be one way to mitigate the impact of an increased minimum wage rate on small employers. New York made such a differentiation between employers in New York City that had 11 or more employees or 10 or fewer employees. Likewise, California differentiated between employers throughout that had 25 or fewer employees or 26 or more employees.

In Vermont, such a differentiation may be complicated by the high concentration of small businesses in the State. In the first quarter of 2017, roughly 90 percent of Vermont's private employers had fewer than 20 employees and roughly 78 percent had fewer than 10 employees. Only 0.1 percent of Vermont's private employers had 500 employees or more. Employment in establishments with fewer than 20 employees accounted for one-third of private employment in the State, while employment in establishments with 500 employees or more accounted for almost 15 percent of private employment.⁷⁵

While the General Assembly may wish to consider amending Vermont's minimum wage so that it varies based on employer size, the Committee would not recommend doing so at this time.

H. TIMETABLE & AMOUNT

Variations in the amount that the minimum wage is increased to and how quickly it reaches that amount will affect its impact on employers, employees, and the State. Apart from the previously discussed effects of increasing the minimum wage to a higher or lower amount, changing the amount of time that it takes for the wage to reach that amount can affect the real value of the wage when it reaches that amount. Thus, if a wage increase is slowed down so that it reaches the ultimate amount two years later, the real value of that wage will be less because of inflation. That would, on the one hand decrease the value of the increased income earned by workers, but on the other hand it would also decrease the impact of the increased wage on employers.

I. BENEFITS CLIFF

Inherent in the structure of several public assistance programs in Vermont is a benefits cliff, in which an increase in a beneficiary's earnings ultimately results in a net loss in household resources, due to the corresponding decrease in the beneficiary's public assistance by some greater amount. While Vermont has made significant progress in reducing or eliminating the benefits cliff in certain programs, it still persists in others. Currently, some workers choose to turn down increased wages when higher earnings would ultimately reduce available net resources. This option would not be available if the existing minimum wage were statutorily increased, but could lead some individuals to decide to work fewer hours.

Some families may see reduced benefits from public assistance programs such as 3SquaresVT (Vermont's Supplemental Nutrition Assistance Program), the Earned Income Tax Credit, and the Child Care Financial Assistance Program (CCFAP) if Vermont's minimum wage were to increase. While there is no single public assistance program that would cause a family to lose

⁷⁵ For further details, see Appendix 3: Size of Private Businesses in Vermont.

ground, the cumulative impact of losses from multiple programs presents the most significant hardship for families.⁷⁶ Workers who experience a decrease in CCFAP in addition to decreases in other public assistance programs as a result of increased wages are likely to experience a total loss in benefits that is greater than their income gain.

Deb Brighton, a policy consultant retained by the Joint Fiscal Office to analyze the impacts of an increased minimum wage on public assistance, described the existing gap in CCFAP as a significant slope rather than a cliff. Her models demonstrate that increasing the minimum wage without enacting corresponding changes to CCFAP would intensify the existing slope. Brighton estimates that making the slope level would cost approximately \$66 million annually. She instead proposed a more affordable alternative to the Committee, which involves leveling the existing slope by the same percentage as the increase in the minimum wage to ensure that affected families continue to receive the same CCFAP subsidy. For example, increasing the minimum wage to \$15.00 would require a corresponding shift in the CCFAP slope by 29 percent, which would cost between \$4.8 and \$12.8 million annually. This expenditure would not prevent CCFAP beneficiaries from experiencing the cliff or slope effect at some point during their participation in the program, but rather ensures that no beneficiary is worse off than he or she is today, due to an increase in the minimum wage.

Brighton modeled her proposed CCFAP subsidy shift for various scenarios, including increasing the minimum wage to \$15.00 by 2022, \$13.25 by 2022, and \$12.50 by 2021. The cost of each of the scenarios is listed below:

	\$15.00 in 2022	\$13.25 in 2022	\$12.50 in 2021
100% subsidy in effect until:	129% FPL	114% FPL	110% FPL
Subsidy reaches 10% at:	230% FPL	220% FPL	210% FPL
Cost range (in millions):	\$4.8-\$12.8	\$3.0- \$8.8	\$2.2-\$6.2

The reason for the wide range in estimated costs for each of the above scenarios is twofold. First, it is uncertain how many new families will enroll in CCFAP if they can take advantage of the increased minimum wage without affecting their CCFAP subsidy rate. The Committee discussed and supported the possibility of capping enhanced CCFAP funds to limit the financial risk to the State.⁷⁷ Second, the estimated costs account not only for CCFAP's fee scale and more families applying for the benefit, but also for potential changes to the provider rate schedule, which is currently well behind the market rate. The low end of these estimated cost ranges incorporates the cost of inflation, while the high end assumes an increase in subsidy rates to reflect a higher market rate for all child care.⁷⁸

⁷⁶ See Figure 7.

⁷⁷ Any limitations imposed on an enhanced CCFAP subsidy should be drafted in a manner so as not to differentiate between groups of potential beneficiaries and run the risk of inadvertently violating Vermont's Common Benefit Clause. Distributing available CCFAP funds proportionately among applicants or on a first-come, first-served basis could potentially avoid such a violation.

⁷⁸ It is important to note that these scenarios do not address challenges from additional wage costs that would be experienced by child care centers that do not serve children receiving CCFAP.

J. BENEFIT OFFSET

Another approach discussed by the Committee is the option of providing a lower minimum wage rate for employers that provide health benefits to their employees. Such an approach would reduce the impact of an increased minimum wage on employers that already offer health benefits, and could prevent some employers from having to consider discontinuing benefits in order to afford the additional cost of higher wages. A reduced minimum wage for employers that offer their employees benefits not only recognizes that some employers of lower wage workers offer their employees valuable benefits, but also encourages other employers to do so. In addition, a reduced minimum wage for employers that offer their employees benefits will reduce the number of employers affected at each stage of a minimum wage increase.⁷⁹

Nevertheless, a \$1.00 reduction in the minimum wage for employers that offer health benefits would do little to offset the cost of providing those benefits to employees. In addition, compliance with the minimum wage could potentially be complicated if employers and State regulators also had to account for whether or not health benefits are provided to employees. There may also be other approaches outside minimum wage policy that would more effectively recognize and encourage the provision of benefits to employees, such as providing incentives or priority treatment for employers that provide benefits to workers under Vermont's economic development or worker training programs.⁸⁰

Seattle is one jurisdiction that has adopted a different minimum wage rate for employers that provide health benefits. Under Seattle's Minimum Wage Ordinance, the minimum wage differs based on the size of employer and whether the job offers benefits or involves tipping or neither. The Ordinance required the minimum wage to increase from \$9.47 per hour for all employees in the first quarter of 2015 to \$10.00 per hour beginning on April 1, 2015 for small employers with 500 or fewer employees at places with benefits or tips and to \$11.00 per hour for all other employees. As shown in the table below, further increases in the minimum wage effective on January 1, 2016 led to four different minimum wage levels throughout the city, depending on the size of employer and whether benefits or tipping was present.

Table 3. Minimum Wage Schedule under the Seattle Minimum Wage Ordinance

Large Employers (>500)	Small Employers (500 or fewer)
------------------------	--------------------------------

⁷⁹ For example, if the minimum wage increases from \$10.50 to \$11.50, but remains at \$10.50 for employers that provide their employees with health insurance benefits (i.e., a \$1.00 reduction from the minimum wage rate), then an employer that pays its employees \$11.00 and provides health insurance benefits will not need to raise its wages that year.

⁸⁰ Existing examples of such programs include the Vermont Training Program and grant programs under the Workforce Education and Training (WET) Fund. To be eligible for a grant under the Vermont Training Program, an employer must provide "its employees with at least three of the following: (A) health care benefits with 50 percent or more of the premium paid by the employer; (B) dental assistance; (C) paid vacation; (D) paid holidays; (E) child care; (F) other extraordinary employee benefits; (G) retirement benefits; or (H) other paid time off, excluding paid sick days." 10 V.S.A. § 531(b)(2). For a training program to be eligible for a WET Fund grant, it must "train workers for trades or occupations that are expected to lead to jobs paying at least 200 percent of the current minimum wage or at least 150 percent if benefits are included," although the requirement "may be waived when warranted based on regional or occupational wages or economic reality." 10 V.S.A. § 543(f)(1)(A)(i).

Effective Date	No benefits	With benefits	No benefits or tips	Benefits or tips
Before Seattle Ordinance				
Jan 1, 2015	\$9.47	\$9.47	\$9.47	\$9.47
After Ordinance				
Apr 1, 2015	\$11.00	\$11.00	\$11.00	\$10.00
Jan 1, 2016	\$13.00	\$12.50	\$12.00	\$10.50
Jan 1, 2017	\$15.00	\$13.50	\$13.00	\$11.00
Jan 1, 2018		\$15.00	\$14.00	\$11.50
Jan 1, 2019			\$15.00	\$12.00
Jan 1, 2020				\$13.50
Jan 1, 2021				\$15.00

VI. Minimum Wage Policy Proposals and Their Impacts

All five minimum wage policy proposals discussed below would have a number of impacts in common. The minimum wage proposals by themselves would result in reduced use of public benefits as income for minimum-wage workers rises. In addition, each proposal would see increased worker income flowing into the economy together with increased tax revenues and decreased expenses for the State, which would be balanced against a reduction in federal dollars to Vermont's overall economy as well as some decrease in employment. The increased wages from each proposal would also indirectly impact those with wages slightly above the minimum wage who could see their wages increase or who may experience wage compression if their employer is unable to afford to increase their wages. In some industries, these spillover effects would impact more than 10 percent of employees.⁸¹

A. \$12.50 by 2021

An increase in the Vermont minimum wage to \$12.50 by 2021 would be a 19 percent increase over the minimum wage in 2018, and would represent a 10 percent increase when adjusted for inflation. The increase would directly affect wages for almost 15 percent of Vermont's jobs and add roughly 0.5 percent to the total wage bill for Vermont.

In the long term, over the period 2028–2040, this increase is projected to result “in a long-term annual loss of about 900 jobs, about 2.1% of minimum wage jobs, and aggregate initial income gains to low wage workers of approximately \$55 million.”⁸² The transition of some of the affected workers off public benefits and increased income tax revenues are projected to result in a net fiscal gain to the State of approximately \$7 million.⁸³ The increased wages and net gain to the State would be balanced against a \$17 million net reduction in federal dollars in Vermont's

⁸¹ See Appendix 5: Kavet, Rockler & Associates, LLC, October 2, 2017 memorandum, at 16-18.

⁸² See Appendix 5: Kavet, Rockler & Associates, LLC, October 2, 2017 memorandum, at 14. To be more precise, the “long-term” job loss figures refer to the difference between the average annual number of jobs in Vermont from 2028 to 2040 under the proposed minimum wage scenario as compared to the baseline average annual number of jobs during that period if Vermont's current minimum wage law were not amended.

⁸³ *Id.*

economy, resulting from the combination of additional federal income and payroll tax payments with reductions in federal money for public benefit programs as workers earned more.⁸⁴

B. \$13.25 by 2022

An increase in the Vermont minimum wage to \$13.25 by 2022 would be a 26 percent increase over the minimum wage in 2018, and would represent a 14 percent increase when adjusted for inflation. The increase would directly affect 16.9 percent of Vermont's jobs and add roughly 0.8 percent to the total wage bill for Vermont.

In the long term, this increase is projected to result in the loss "of about 1,200 jobs, about 2.4% of minimum wage jobs" as well as "aggregate initial income gains to low wage workers of about \$88 million."⁸⁵ The transition of some of the affected workers off public benefits and increased income tax revenues are projected to result in a net fiscal gain to the State of approximately \$8 million.⁸⁶ The increased wages and net gain to the State would be balanced against a \$27 million net reduction in federal dollars in Vermont's economy resulting from additional federal income and payroll tax payments with reductions in federal money for public benefit programs as workers earned more.⁸⁷

C. \$15.00 by 2022

An increase in the Vermont minimum wage to \$15.00 by 2022 would be a 43 percent increase over the minimum wage in 2018, and would represent a 29 percent increase when adjusted for inflation. The increase would directly affect 25.3 percent of Vermont's jobs and add roughly 2.1 percent to the total wage bill for Vermont.

In the long term, this increase is projected to result in "long-term average annual job losses of approximately 2,830 jobs, about 3.7% of minimum wage jobs, and aggregate initial income gains to low wage workers of about \$240 million."⁸⁸ The transition of some of the affected workers off public benefits and increased income tax revenues are projected to result in a net fiscal gain to the State of approximately \$23 million.⁸⁹ The increased wages and net gain to the State would be balanced against a \$69 million net reduction in federal dollars in Vermont's economy resulting from the combination of additional federal income and payroll tax payments with reductions in federal money for public benefit programs as workers earned more.⁹⁰

⁸⁴ *Id.*

⁸⁵ *Id.* The "long-term" job loss figures refer to the difference between the average annual number of jobs in Vermont from 2028 to 2040 under the proposed minimum wage scenario as compared to the baseline average annual number of jobs during that period if Vermont's current minimum wage law were not amended.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.* The "long-term" job loss figures refer to the difference between the average annual number of jobs in Vermont from 2028 to 2040 under the proposed minimum wage scenario as compared to the baseline average annual number of jobs during that period if Vermont's current minimum wage law were not amended.

⁸⁹ *Id.*

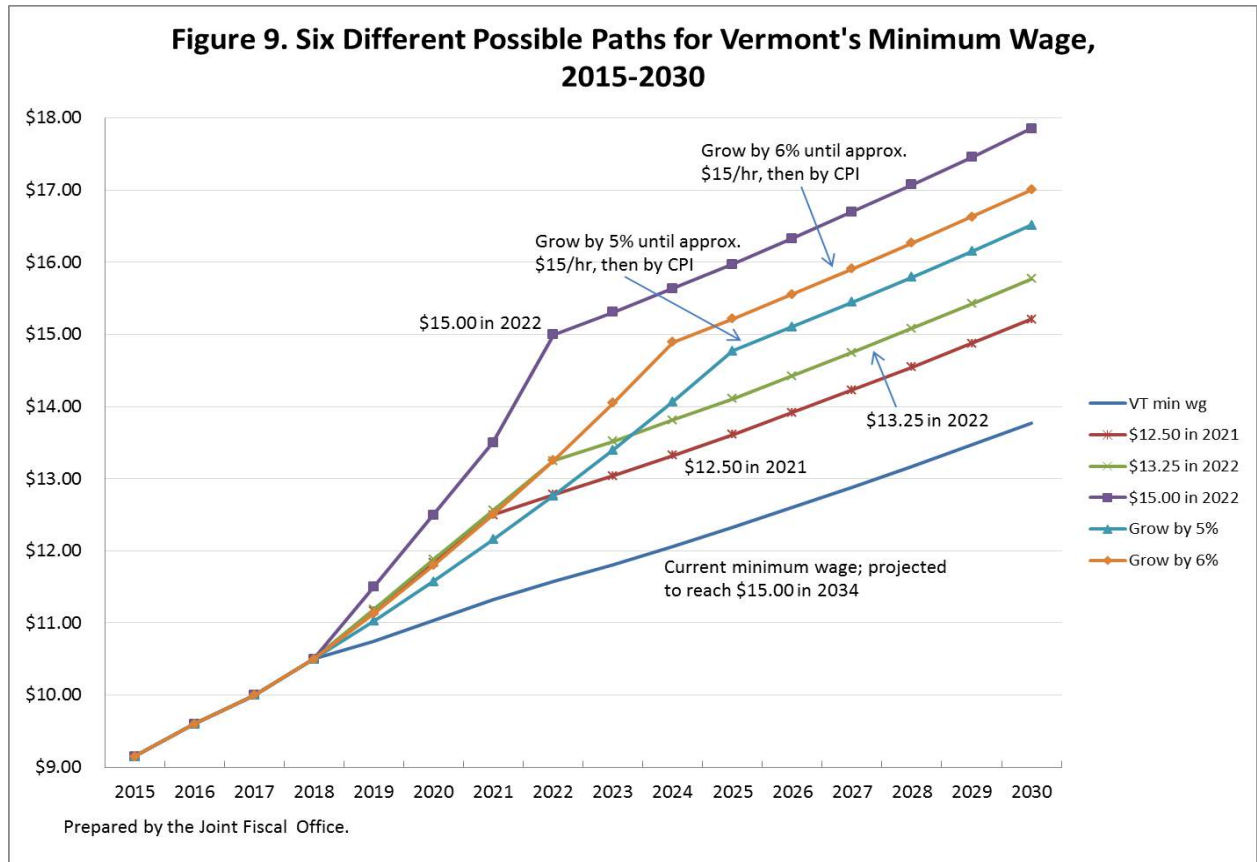
⁹⁰ *Id.*

D. Increasing the Minimum Wage Annually by the Greater of the CPI or five percent, or by the Greater of the CPI or six percent

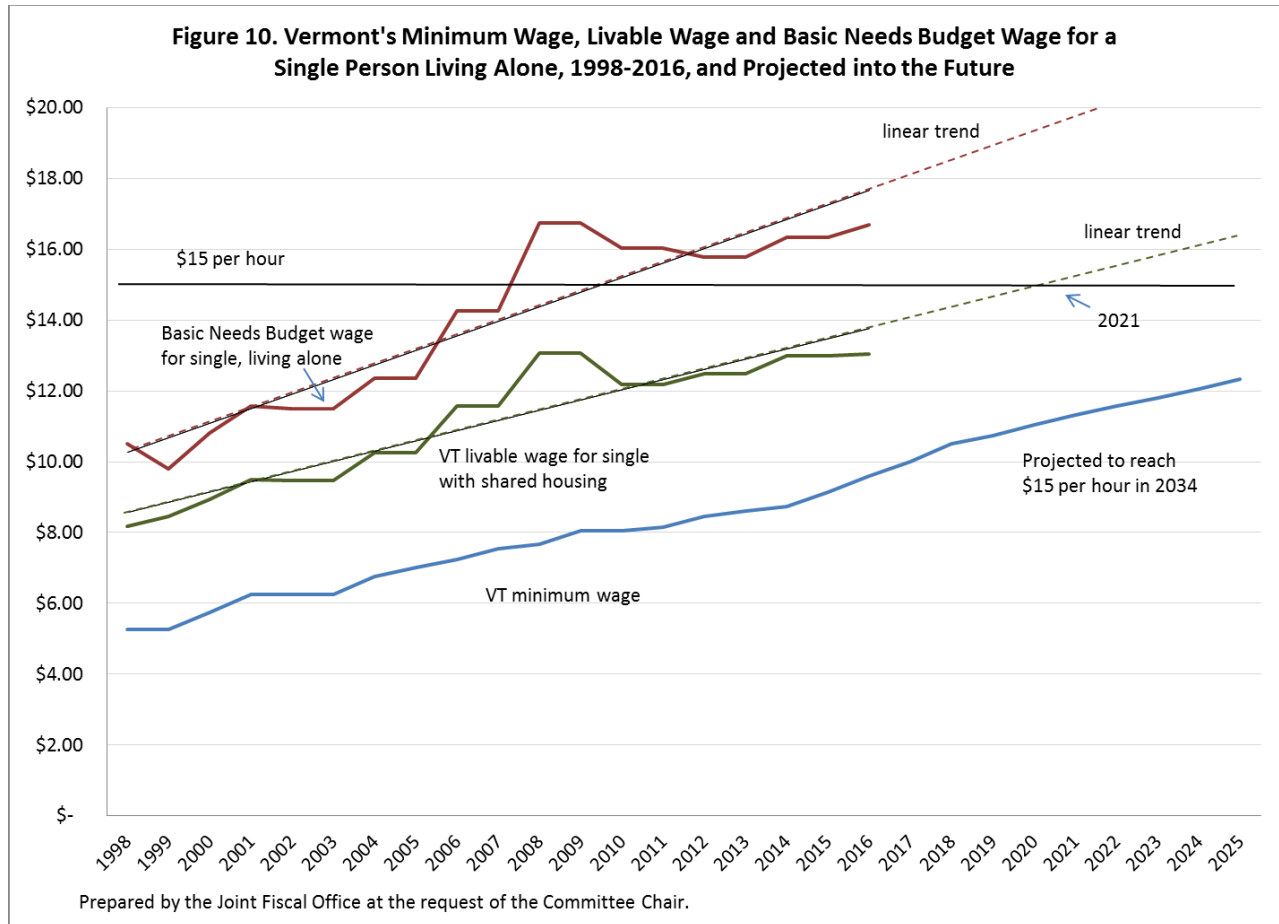
Two final proposals considered by the Committee would increase the minimum wage annually by the percent increase in the CPI or five percent or six percent, whichever is greater. This proposal would include a sunset to the accelerated inflation factor once \$15.00 was reached, with a return to the existing inflation provision providing that the minimum wage annually increases by the change in the CPI or five percent, whichever is less. While the minimum wage under this proposal would lag behind the other proposals initially, it would catch up to the other proposals in the long run. This is because in relatively recent history, the percent increase in the CPI has rarely equaled or exceeded five percent. Moreover, typically increases in the minimum wage have been indexed for inflation at a rate equal to the increase in the CPI or a fixed percentage that the increase cannot exceed. This proposal would instead set a rate that the increase could not go below. Therefore, assuming the other proposals would use a more traditional index for inflation, such as Vermont's current index of the lesser of the percent increase in the CPI or five percent, the increases under this proposal would eventually catch up to the other proposals.

Figure 9 below illustrates five possible paths for Vermont's minimum wage as considered by the Committee plus the path for the minimum wage under current law. Each path starts from \$10.50 in 2018, as currently specified in law. The five possible paths are as follows:

- Increase the minimum wage by five percent each year until it reaches approximately \$15.00 per hour, then index it to the CPI
- Increase the minimum wage by six percent each year until it reaches approximately \$15.00 per hour, then index it to the CPI
- Raise the minimum wage to \$12.50 per hour in 2021, then index it to the CPI
- Raise the minimum wage to \$13.25 per hour in 2022, then index it to the CPI
- Raise the minimum wage to \$15.00 per hour in 2022, then index it to the CPI



Finally, the Committee compared the projected path of Vermont's livable wage to the projected path of the current-law minimum wage. If inflation in the long term is 2.25 percent per year, the Vermont minimum wage would reach \$15.00 per hour in 2034. If Vermont's livable wage continues on the linear trend of the period 1998–2016, it would reach \$15.00 per hour in 2021 (see Figure 10). Vermont's livable wage is defined in statute as "the hourly wage required for a full-time worker to pay for one-half of the basic needs budget for a two-person household with no children and employer-assisted health insurance averaged for both urban and rural areas." As calculated by the Joint Fiscal Office for 2016, the livable wage was \$13.03. For comparison, Figure 10 also shows the wage associated with the Basic Needs Budget for a single person living alone, averaged for both urban and rural areas. That wage in 2016 was \$16.70.



VII. Policy Recommendations

The Committee voted 4–2 in favor of recommending that the General Assembly enact legislation that would increase the minimum wage to \$15.00 within the parameters of the five policy proposals outlined in Section VI of this report. Senator Collamore and Representative Keefe did not support raising the minimum wage as outlined in the policy proposals, but rather supported leaving Vermont's minimum wage law as it is currently.

If the General Assembly chooses to enact legislation that would increase Vermont's minimum wage, the Committee unanimously recommends that the legislation include a provision that would shift the CCFAP slope by the same percentage as the increase in the minimum wage, as outlined in the discussion of the benefits cliff in Section V of this report, to ensure that affected families continue to receive the same CCFAP subsidy.

Report of the Minimum Wage and Benefits Cliff Study Committee



Senator Michael Sirokin, Chair

Representative Helen Head, Vice Chair

Senator Brian Collamore

Representative Brian Keefe

Senator Ann Cummings

Representative Jean O'Sullivan

Report of the Minimum Wage and Benefits Cliff Study Committee

Senator Michael Sirotkin, Chair



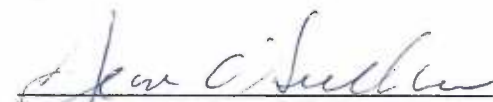
Representative Helen Head, Vice Chair

Senator Brian Collamore



Senator Ann Cummings

Representative Brian Keefe



Representative Jean O'Sullivan

Appendix 1: 2017 Acts and Resolves No. 69, Sec. F.1

Sec. F.1. MINIMUM WAGE AND BENEFITS CLIFF STUDY

(a) Creation. There is created a Minimum Wage Study Committee.

(b) Membership. The Committee shall be composed of the following members:

(1) three current members of the House of Representatives, not all from the same political party, who shall be appointed by the Speaker of the House; and

(2) three current members of the Senate, not all from the same political party, who shall be appointed by the Committee on Committees.

(c) Powers and duties. The Committee shall study the following issues:

(1) the minimum wage in Vermont and livable wage in Vermont in relation to real cost of living;

(2) the economic effects of small to large increases in the Vermont minimum wage, including in relation to the minimum wage in neighboring states;

(3) how the potential for improving economic prosperity for Vermonters with low and middle income through the Vermont Earned Income Tax Credit might interact with raising the minimum wage;

(4) working in direct collaboration with the Department for Children and Families and the Joint Fiscal Office, the State's public benefit structure and recommended methods for mitigating or eliminating the benefit cliffs experienced by working Vermonters receiving public assistance or earning below the livable wage, or both, to enhance work incentives;

(5) the effects of potential reductions in federal transfer payments as the minimum wage increases, and impacts of possible reductions in federal benefits due to changes in federal law;

(6) ways to offset losses in State and federal benefits through State benefit programs or State tax policy; and

(7) further research to better understand the maximum beneficial minimum wage level in Vermont.

(d) Assistance. The Committee shall have the administrative, technical, and legal assistance of the Joint Fiscal Office, the Office of Legislative Council, the Department of Labor, the Department of Taxes, and the Agency of Human Services.

(e) Report. On or before December 1, 2017, the Committee shall submit a written report with its findings and any recommendations for legislative action to the Senate Committee on Economic Development, Housing and General Affairs, and the House Committee on General, Housing and Military Affairs.

(f) Meetings.

(1) The Joint Fiscal Office shall convene the first meeting of the Committee on or before July 15, 2017.

(2) A majority of the membership shall constitute a quorum.

(3) The members of the Committee shall select a chair at its first meeting.

(4) The Committee shall cease to exist on December 1, 2017.

(g) Reimbursement. For attendance at meetings during adjournment of the General Assembly, legislative members of the Committee shall be entitled to per diem compensation and reimbursement of expenses pursuant to 2 V.S.A. § 406 for no more than five meetings.

Appendix 2: Witness List

- Abby Shepard, Tax Policy Analyst, Department of Taxes
- Ann Zimmerman, Bookstore Clerk, Brattleboro on behalf of Raise the Wage Coalition
- Ashley Romeo-Boles, Government Affairs Specialist, Vermont Chamber of Commerce
- Becca Schrader, Business Resource Manager, Vermont Community Loan Fund
- Beth Fastiggi, Commissioner, Department of Human Resources
- Dr. Beth Ann Maier, Vermont Chapter of American Academy of Pediatrics on behalf of Raise the Wage Coalition
- Beth Pearce, Vermont State Treasurer
- Carolyn Handy, Owner, The Vermonter Candy
- Catherine Benham, Associate Fiscal Officer, Joint Fiscal Office
- Catherine McLinn, Office of Legislative Council
- Damien Leonard, Office of Legislative Council
- Daniel Barlow, Public Policy Manager, Vermont Businesses for Social Responsibility
- Darlene Fury, Executive Director, National Assn. of Social Workers, Vermont Chapter, on behalf of Raise the Wage Coalition
- David Cooper, Economic Policy Institute
- Deb Brighton, Consultant, Joint Fiscal Office
- Rev. Earl Kooper Kamp, Clergy Member, Vermont Interfaith Action on behalf of Raise the Wage Coalition
- Erhard Mahnke, Vermont Affordable Housing Coalition
- Ellen Kahler, Executive Director, Vermont Sustainable Jobs Fund
- Erika Raff, Rostered Clinician, MSW, National Assn. of Social Workers on behalf of Raise the Wage Coalition
- Erin Sigrist, President, Vermont Retail and Grocers Association
- Harold Schwartz, Director of Operations, Department of Human Resources
- Isaac Grimm, Political Engagement Director, Rights & Democracy on behalf of Raise the Wage Coalition
- Jay Wisner, Human Resources Manager, Hunger Mountain Co-op on behalf of Vermont Businesses for Social Responsibility
- Jill Mazza Olson, Executive Director, Visiting Nurses Association of Vermont
- Joyce Manchester, Senior Economist, Joint Fiscal Office
- Judy Peterson, CEO, Visiting Nurses Association of Chittenden and Grand Isle Counties
- Lindsay DesLauriers, State Director, Main Street Alliance of Vermont
- Mark Frier, Owner, Reservoir Restaurant & Tap Room in Waterbury and The Bench in Stowe on behalf of Vermont Chamber of Commerce
- Mark Snyder, Owner, Priority Express in Williston on behalf of Main Street Alliance of Vermont
- Matt Levin, Executive Director, Vermont Early Childhood Alliance on behalf of the Early Childhood Alliance's Network
- Michelle Fay, Associate Director, Voices for Vermont's Children
- Paul Dragon, Director of Policy & Program Integration, Agency of Human Services

- Randy George, Owner, Red Hen Bakery in Middlesex on behalf of Main Street Alliance of Vermont
- Robyn Freedner-Maguire, Campaign Director, Let's Grow Kids
- Russ Bennett, Founder and Owner, Northland Design & Construction, Waitsfield on behalf of Vermont Businesses for Social Responsibility
- Sonja Raymond, Executive Director, Vermont Association for the Education of Young Children, and Owner, Appletree Learning Center on behalf of the Early Childhood Alliance's Network
- Stanley Borosky, Sam's Outdoor Outfitters, on behalf of Vermont Retail and Grocers Association
- Toby Ingmire, National Assn. of Social Workers—Vermont Intern, BSW student at Champlain College on behalf of Raise the Wage Coalition
- Tom Kavet, Kavet, Rockler & Associates, LLC, State Economist and Principal Economic Advisor to the Vermont General Assembly
- William Moore, President, Central Vermont Chamber of Commerce
- Yannet Lathrop, Research and Policy Analyst, National Employment Law Project on behalf of Raise the Wage Coalition

Staff for the Study Committee

- Damien Leonard, Office of Legislative Council
- Deb Brighton, Consultant, Joint Fiscal Office
- Joyce Manchester, Senior Economist, Joint Fiscal Office
- Katie McLinn, Office of Legislative Council

Appendix 3: Size of Private Businesses in Vermont

Vermont
Size of Establishment by Industry Sector
private industry establishments, employment and wages, first quarter 2017

Industry Sector	Total	Size of establishment ¹								
		4 or fewer workers ²	5 to 9 workers	10 to 19 workers	20 to 49 workers	50 to 99 workers	100 to 249 workers	250 to 499 workers	500 to 999 workers	1,000 plus workers
Total Private										
Establishments	23,872	14,814	3,981	2,653	1,638	488	218	45	24	11
Employment, March	251,580	21,694	26,464	35,616	48,525	33,707	32,751	15,582	16,884	20,357
Wages, quarterly (000)	2,840,617	278,809	248,404	333,081	493,938	383,663	401,911	233,388	237,659	229,763
% of private establishments.	100.0	62.1	16.7	11.1	6.9	2.0	0.9	0.2	0.1	0.0
% of private employment.....	100.0	8.6	10.5	14.2	19.3	13.4	13.0	6.2	6.7	8.1
% of private wages.....	100.0	9.8	8.7	11.7	17.4	13.5	14.1	8.2	8.4	8.1

Source: <http://www.vtlmi.info/indnaics.htm#industry>

Appendix 4: ARIS Solutions Data on Payroll for Various Programs

ARIS IDSW: Full payroll cycle for each program (Payroll checks from Oct 14th to Oct 28th)

Program total	Consumers	Employees	Wages	Ave Hourly Rate	Ave Daily Rate (respite)
CFC Adult Family Care Respite	24	40	\$21,523.59	\$13.85	\$188.30
ASP General Fund	50	75	\$52,734.55	\$11.58	
CFC (H/H PC/RC/CC)	749	1036	\$669,261.62	\$12.24	
CPCS	619	761	\$333,998.79	\$13.85	
DDS HCBS	1492	2063	\$1,230,118.29	\$14.25	\$187.12
DDS Family Managed Respite	80	84	\$24,284.45	\$13.23	\$165.33
Integrated Family Services Respite	10	8	\$2,225.72	\$11.02	
CFC Moderate Needs Group	76	67	\$11,009.04	\$14.84	
ASP Medicaid	60	73	\$43,219.94	\$12.02	
TBI program	5	7	\$2,864.00	\$10.85	\$179.20

Appendix 5: Kavet, Rockler & Associates, LLC, October 2, 2017 Memorandum



Kavet, Rockler & Associates, LLC

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Williamstown, Vermont 05679-9003 U.S.A.
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Memorandum

To: Steve Klein, Chief Fiscal Officer, Joint Fiscal Office
From: Tom Kavet, Nic Rockler
CC: Minimum Wage Study Committee
Date: October 2, 2017
Re: Economic Analysis of Three Minimum Wage Variants, as Requested by the Legislative Minimum Wage Study Committee

ANALYTIC SCOPE

As requested, this memo summarizes potential economic impacts associated with three requested minimum wage change variants:

- 1) \$15.00 per hour, effective in 2022;
- 2) \$13.25 per hour, effective in 2022; and
- 3) \$12.50 per hour, effective in 2021.

For each of these variants, we have assumed increases in accord with current law through calendar 2018, with straight-line phased increases in intervening years between 2018 and 2021 or 2022, with inflationary adjustments thereafter.

Table 1, on the following page, shows the annual nominal dollar values associated with these three variants. All three assume inflation growth, as measured by the U.S. Consumer Price Index (CPI-U), consistent with the official State January 2017 Consensus Forecast and the prior April 2017 analysis of a \$15 per hour minimum wage in 2022.¹

The values used for the current \$15.00 per hour in 2022 variant differ slightly from the prior April analysis, due both to the progression of the annual wage increases between 2018 and 2022 and more recent calculations regarding state and federal net fiscal savings from reduced transfer payments. All other assumptions, data and models, however, including the source Department of Labor (DOL) data, Census American Community Survey (ACS) data, state economic impact model from Regional Economic Models, Inc. (REMI), and other inputs remained constant with the April 2017 analysis so as to allow analysis within the timeframe required by the Committee and to facilitate comparison with the prior April output.

Constant 2017 dollar equivalents to nominal dollar wage levels are displayed in Table 2, on the following page. Note that the constant dollar minimum wage does not always remain exactly level, even when designed to be “adjusted for inflation,” due to the fact that the annual inflation adjustment in statute is based on the prior year change in the CPI, whereas the

¹ See: www.leg.state.vt.us/jfo/issue_briefs_and_memos/Memo%20-%20Minimum%20Wage%20Review%200417%20revised.pdf

constant dollar value of the minimum wage is deflated based on the coincident year change in the CPI.

TABLE 1 – Nominal Dollar Minimum Wage Changes Analyzed

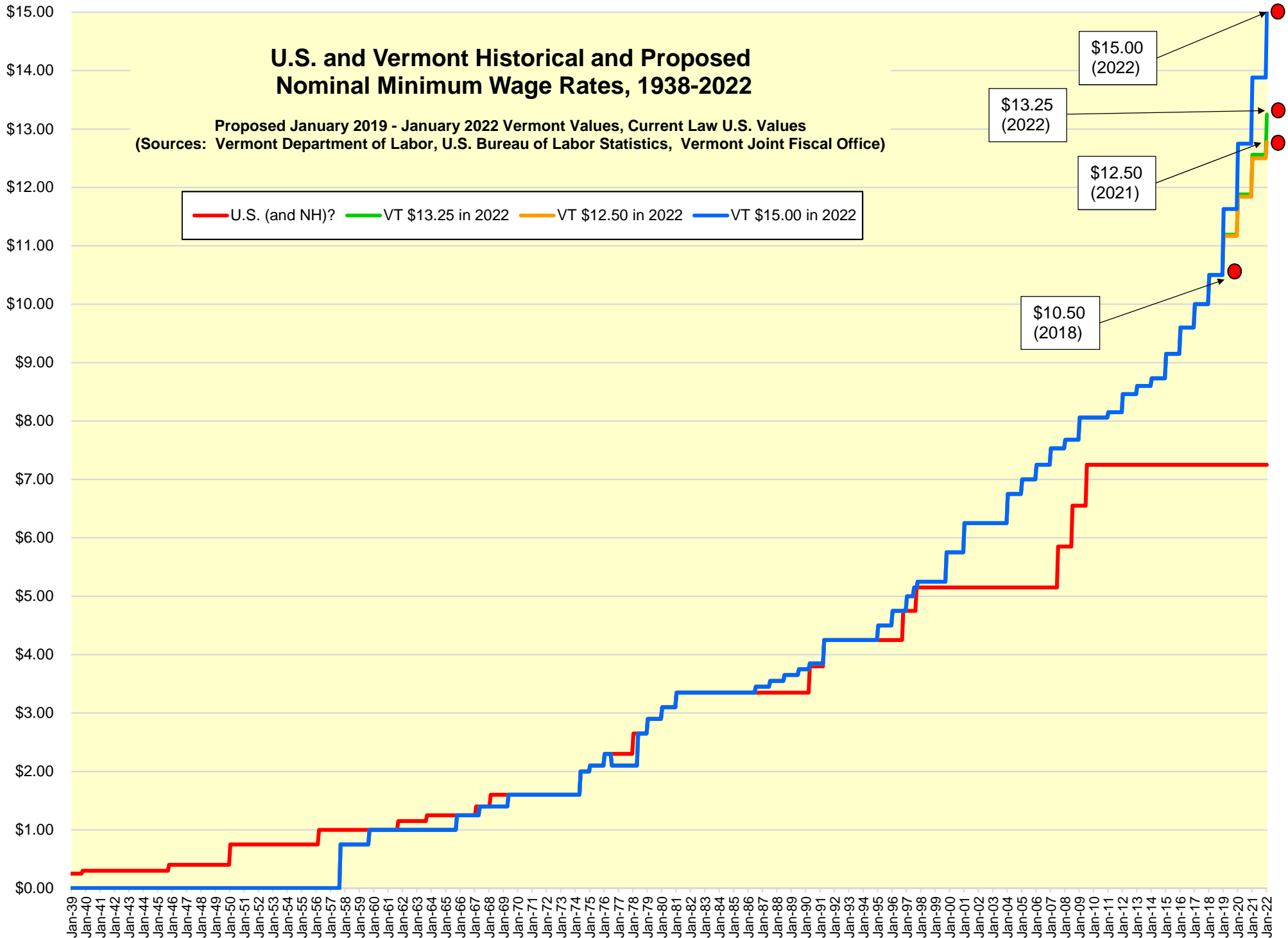
	Nominal \$ Current Law	\$12.50 in 2021	\$13.25 in 2022	\$15.00 in 2022
2015	\$ 9.15	\$ 9.15	\$ 9.15	\$ 9.15
2016	\$ 9.60	\$ 9.60	\$ 9.60	\$ 9.60
2017	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00
2018	\$ 10.50	\$ 10.50	\$ 10.50	\$ 10.50
2019	\$ 10.79	\$ 11.17	\$ 11.19	\$ 11.63
2020	\$ 11.13	\$ 11.84	\$ 11.88	\$ 12.75
2021	\$ 11.44	\$ 12.50	\$ 12.56	\$ 13.88
2022	\$ 11.70	\$ 12.78	\$ 13.25	\$ 15.00
2023	\$ 11.93	\$ 13.04	\$ 13.52	\$ 15.30
2024	\$ 12.20	\$ 13.32	\$ 13.82	\$ 15.64
2025	\$ 12.46	\$ 13.61	\$ 14.11	\$ 15.98
2026	\$ 12.74	\$ 13.92	\$ 14.43	\$ 16.33
2027	\$ 13.03	\$ 14.23	\$ 14.75	\$ 16.70
2028	\$ 13.32	\$ 14.56	\$ 15.09	\$ 17.08
2029	\$ 13.63	\$ 14.89	\$ 15.44	\$ 17.48
2030	\$ 13.95	\$ 15.24	\$ 15.80	\$ 17.88

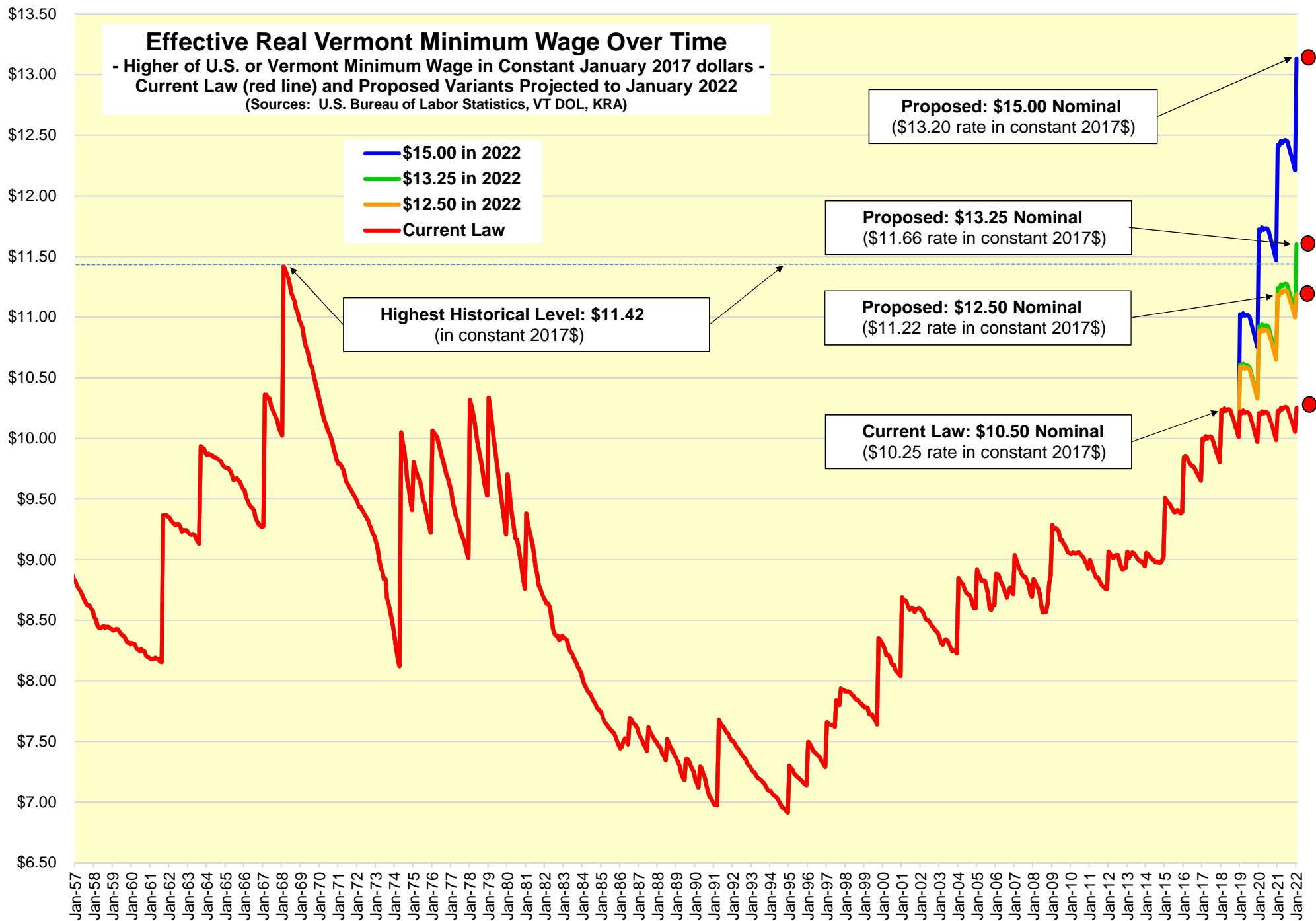
TABLE 2 – Constant Dollar Minimum Wage Changes Analyzed

	2017 \$ Current Law	\$12.50 in 2021	\$13.25 in 2022	\$15.00 in 2022
2015	\$ 9.50	\$ 9.50	\$ 9.50	\$ 9.50
2016	\$ 9.85	\$ 9.85	\$ 9.85	\$ 9.85
2017	\$ 10.00	\$ 10.00	\$ 10.00	\$ 10.00
2018	\$ 10.21	\$ 10.21	\$ 10.21	\$ 10.21
2019	\$ 10.18	\$ 10.54	\$ 10.55	\$ 10.97
2020	\$ 10.21	\$ 10.86	\$ 10.90	\$ 11.70
2021	\$ 10.27	\$ 11.22	\$ 11.28	\$ 12.46
2022	\$ 10.29	\$ 11.24	\$ 11.66	\$ 13.20
2023	\$ 10.27	\$ 11.22	\$ 11.63	\$ 13.17
2024	\$ 10.28	\$ 11.23	\$ 11.64	\$ 13.18
2025	\$ 10.27	\$ 11.22	\$ 11.63	\$ 13.17
2026	\$ 10.27	\$ 11.22	\$ 11.63	\$ 13.17
2027	\$ 10.26	\$ 11.21	\$ 11.63	\$ 13.16
2028	\$ 10.26	\$ 11.21	\$ 11.62	\$ 13.16
2029	\$ 10.26	\$ 11.21	\$ 11.62	\$ 13.16
2030	\$ 10.26	\$ 11.21	\$ 11.63	\$ 13.16

U.S. and Vermont Historical and Proposed Nominal Minimum Wage Rates, 1938-2022

Proposed January 2019 - January 2022 Vermont Values, Current Law U.S. Values
(Sources: Vermont Department of Labor, U.S. Bureau of Labor Statistics, Vermont Joint Fiscal Office)





As emphasized in the prior April analysis, it should be noted that analyses of events five-plus years into the future, utilizing data that is two to six years old, introduces greater uncertainty than analyses of more proximate events for which current data may be available. The methodological approach used in this analysis involves considerable adjustment of two core wage data sources (2015 DOL Occupational Employment Survey data organized by industry and occupation and 2015 basis ACS Census data constructed from surveys between 2011 and 2015),² expected future inflation rates,³ assumptions of constant labor market conditions, analysis of participation in federal and state transfer payment programs affecting many minimum wage earners, and adjustment of the economic impact model baseline to 2018.⁴

Adding to this variability, the highest proposed wage change level of \$15.00 in 2022 would be well above the historical experience of the minimum wage in Vermont or any other U.S. state or any nation.⁵ Although other states have enacted future wage changes of this magnitude and relative level, none are effective to date and none have been conclusively studied.⁶ As a result of this, impact estimates for this variant are based on projections that are accordingly uncertain. Although the percent change in the real minimum wage between 2018 and 2022 for this variant would be 29% (43% nominal), the growth between 2014, when a series of minimum wage changes exceeding inflation rates began, and 2022, would be more than 45% (72% nominal) - well above any prior comparable period studied.

The other two variants analyzed herein represent less aggressive minimum wage growth, but are still at the high end of enacted future minimum wage levels by other U.S. states. Even the lowest variant considered, at \$12.50 in 2021, would represent the fourth highest general minimum wage in the U.S., tied with upstate NY, close to parts of Oregon's non-urban wage (\$11.50 - \$12.75), and only below those enacted in Washington (\$13.50 + inflation), California (\$14.00 for smaller firms and \$15.00 for larger firms), and the District of Columbia (\$15.00). Future minimum wage changes enacted in these and other states are detailed in prior Committee testimony.⁷

The minimum wage increase to \$12.50 in 2021 represents a constant dollar 10% increase (19% nominal) over the 2018 level, and a 24% increase since 2014 (43% nominal). The percentage differential with the U.S., and most importantly, the New Hampshire, minimum wage, if unchanged over this period, would rise from 38% today to 72% in 2021. As shown on the chart on the following page, New Hampshire differentials with the \$13.25 minimum wage would reach 83% in 2022 and exceed 100% in the same year for the \$15.00 variant.

As illustrated in the chart on page 4, on a constant dollar basis, the proposed \$12.50 in 2021 change would be only 1.8% below the highest real minimum wage on record, reached in

² American Community Survey (ACS) data utilized by Deb Brighton in estimating State and Federal social assistance program impacts, which we used as inputs to this analysis, are based on pooled data from 2011 to 2015, the Occupational Employment Survey data used to estimate jobs by wage category are based on adjusted semi-annual panel data from 2012 to 2015.

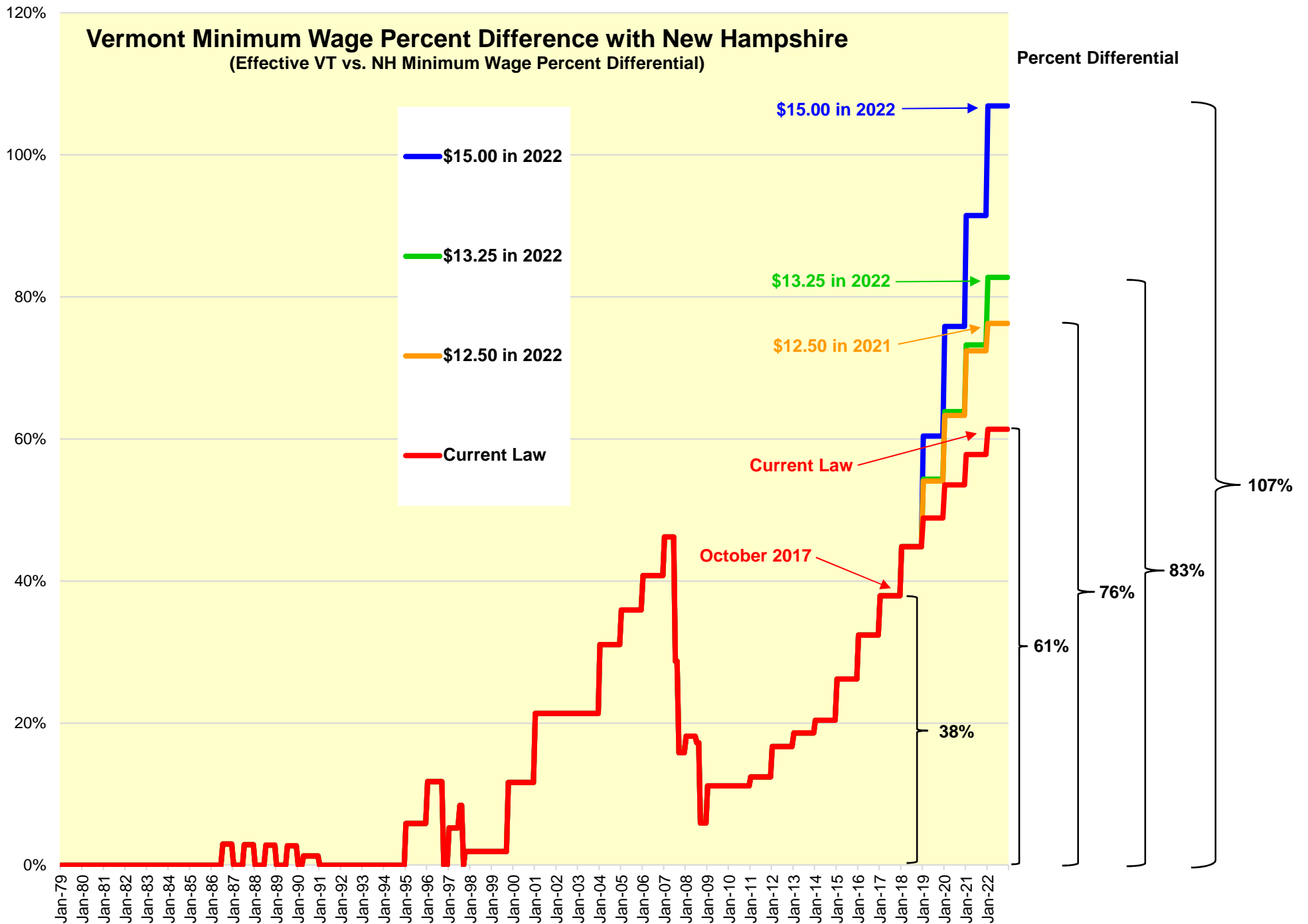
³ Based on JFO and Administration Consensus Economic Forecasts from December 2016.

⁴ The current Regional Economic Models, Inc. (REM) model used in this analysis utilizes actual data through 2014. Because Vermont enacted three minimum wage increases above rate of inflation between 2014 and 2018, we updated the model with actual 2015 employment data and adjusted the baseline model to reflect minimum wage changes between 2015 and 2018.

⁵ Based on Purchasing Power Parity basis in constant 2015 U.S. Dollars, as reported by the OECD as of 2016.

⁶ Initial studies of Seattle's \$13 minimum wage have been the highest analyzed to date. These studies have been presented separately to the Committee by the Joint Fiscal Office and have produced conflicting opinions on the impacts studied thus far. There are many differences between city-level wage mandates and state-level minimum wages, as well as differing prevailing wages in large urban areas vs. small rural states such as Vermont, and the availability of relevant data with which to measure economic and employment impacts.

⁷ See: "Supporting Documents," listed at: http://www.leg.state.vt.us/jfo/min_wage_study.aspx

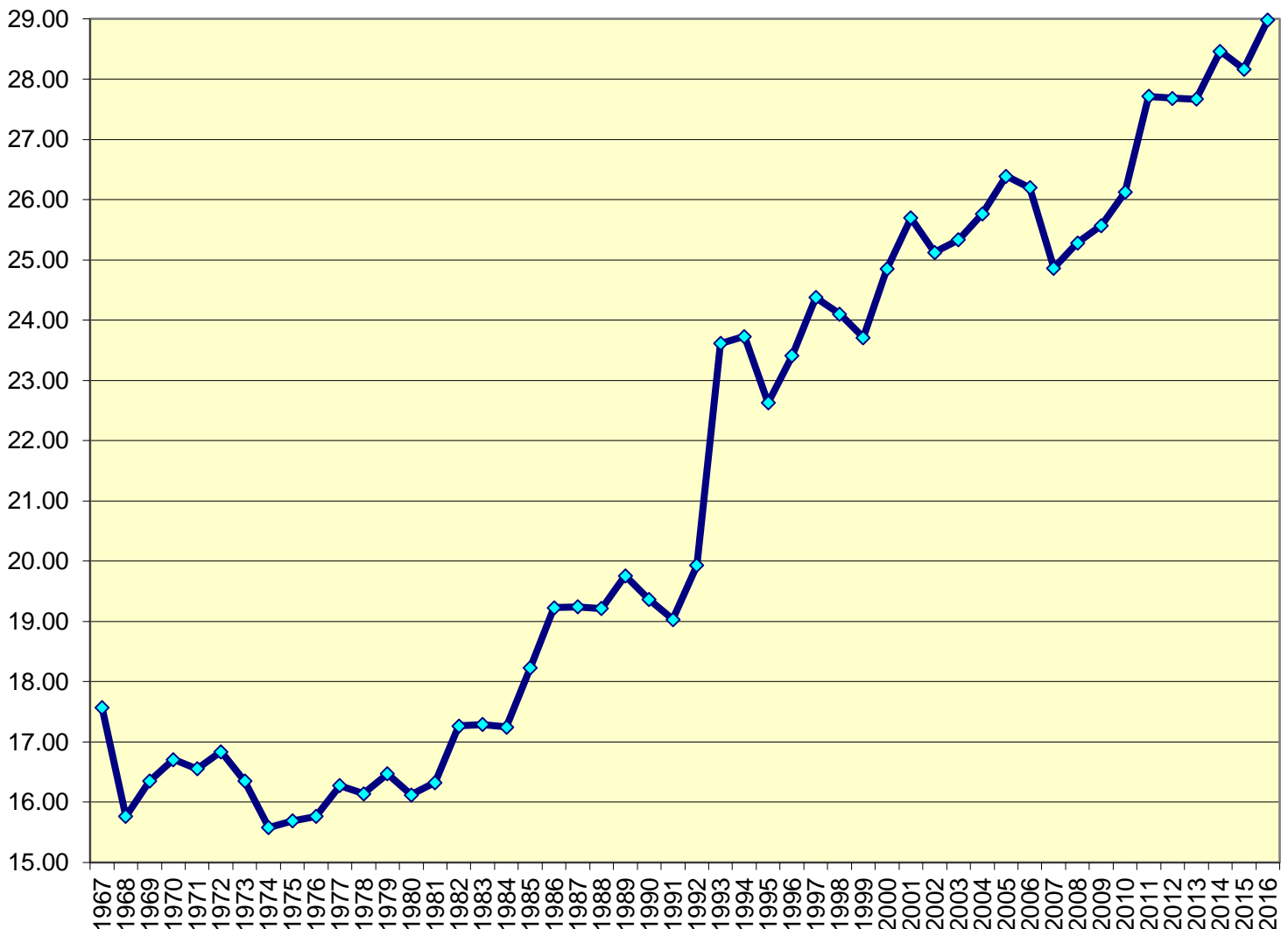


February of 1968. The \$13.25 wage would be about 2% above this, while the \$15.00 minimum would be 16% above the highest prior real historical rate.

BACKGROUND

Economic inequality in the U.S. and every state in the union has been worsening since the early 1980's by almost every relevant measure. The globalization of commerce, technological change and tax policy choices, have all contributed to a widening gap between the richest in our society and those with the least. The average annual household income of the poorest 20% of the population totaled only \$12,943 in 2016, less than that earned in 1989, some 27 years ago. Over this same period, those in the highest quintile experienced real income growth of 34%, while those in the top 5% saw 45% growth. In 2016, the average annual income of the top 5% of U.S. households reached a new high at \$375,088, a record 29 times that of the average income of the lowest 20% of households in 2016, continuing an ever-widening four decade trend.

Ratio of Average U.S. Household Income of Top 5% to Lowest 20%
(Source: U.S. Census Bureau)

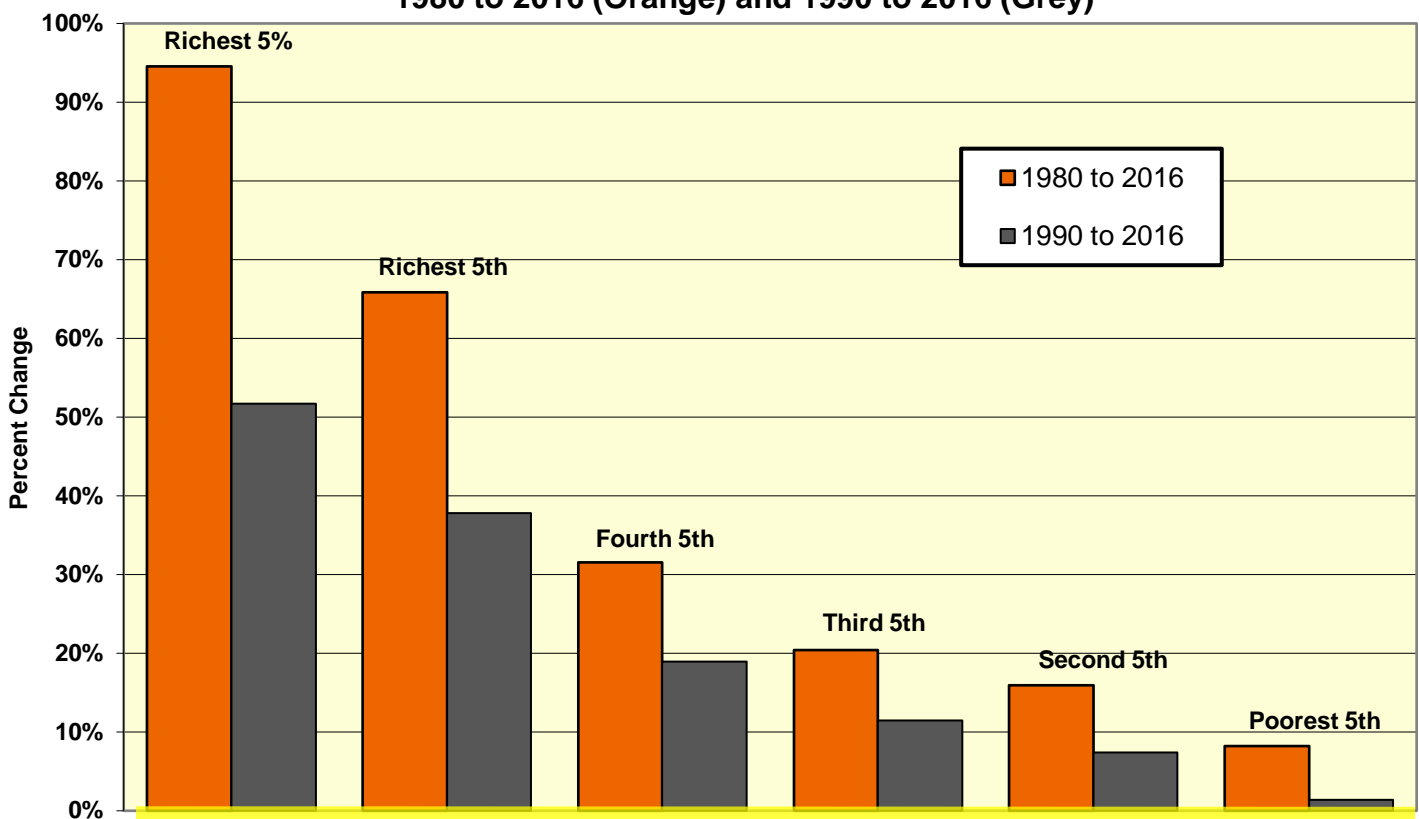


A recent state-level study found that, "in 24 states, the top 1 percent [by income] captured at least half of all income growth between 2009 and 2013, and in 15 of those states, the top 1

percent captured all income growth. In another 10 states, top 1 percent incomes grew in the double digits, while bottom 99 percent incomes fell.”⁸ According to the same study, in Vermont, the top 1% grew at a rate almost double that of the bottom 99%, but only captured about 23% of the total income growth during this period. For the United States overall, the top 1 percent captured 85.1 percent of total income growth between 2009 and 2013. In 2013, the top 1 percent of families nationally made 25.3 times as much as the bottom 99 percent. In Vermont, this ratio was 16.1, the ninth lowest in the country (see chart on following page).

The below chart shows the variation in real household income growth between 2016 and both 1980 and 1990. There is a consistent correlation between income level and real growth over the past 40 years, leading to some of the highest levels of inequality since the early 1900’s.

**Growth In Real U.S. Household Income, By Income Class
1980 to 2016 (Orange) and 1990 to 2016 (Grey)**



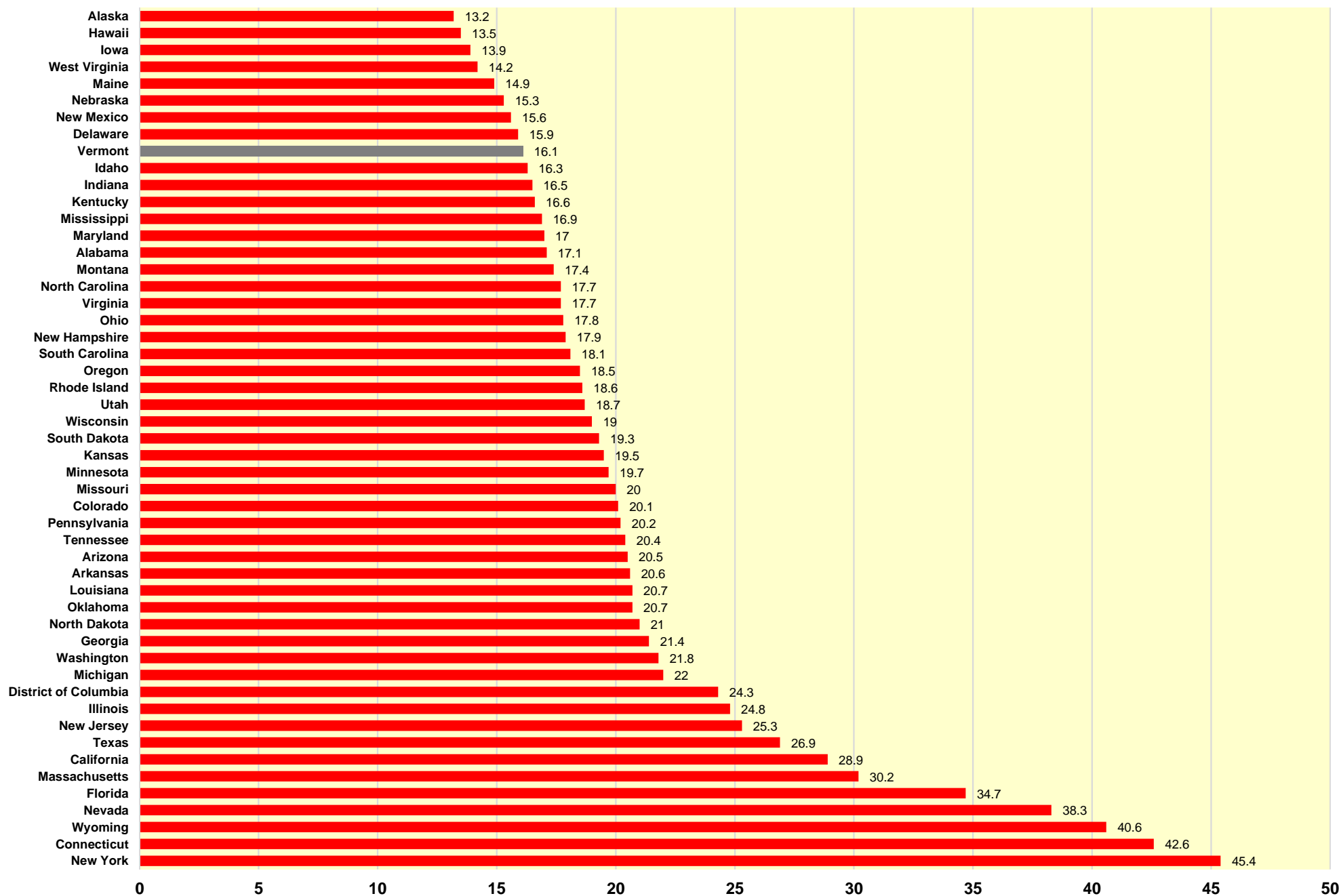
Source: U.S. Census Bureau

As disparate as income growth has been, wealth ownership, and growth in wealth, has been even more unequal. Analysis by the Congressional Budget Office⁹ showed that the wealth of families in the 90th percentile of the distribution grew 54% between 1989 and 2013, while that of the median grew 4% and that at the 25th percentile declined by 6%. The share of total wealth held by the top 10% increased from 67% to 76% during this same period, while the wealth owned by the bottom 50% dropped from 3% to 1%. The top 1% currently owns more than 35% of all U.S. wealth. On a global level, the richest eight men in the world, six of whom

⁸ See: <http://www.epi.org/publication/income-inequality-in-the-us/>

⁹ See: <https://www.cbo.gov/publication/51846>

Ratio of Annual Income of Top 1% to Bottom 99% by State - 2013



Top 1% Multiple of Bottom 99%

Source: Economic Policy Institute analysis of state-level tax data from Sommeiller (2006) extended to 2013 using state-level data from the Internal Revenue Service SOI Tax Stats (various years), and Piketty and Saez (2012)

are Americans, own as much wealth as the poorest 50% (comprising 3.6 billion people).¹⁰ New data from the triennial Federal Reserve Survey of Consumer Finance has just been released and will provide updated U.S. wealth, debt and income distribution data for 2016 when fully processed.

ECONOMIC IMPACTS OF RAISING THE MINIMUM WAGE

Few subjects in the economics profession have been more studied than minimum wage changes. Despite this, few generate as much divergence in professional opinion as expected impacts and policy efficacy associated with such changes.

While the theoretical economic principle underlying most minimum wage analysis is not contested – that raising the price of an input to production, such as labor, will reduce the demand for the input - observed “real world” impacts reveal complications to the theory that have yet to be fully measured and understood. In most of the minimum wage studies performed to date, the expected reduction in demand for labor has either been non-existent or of relatively small magnitude.¹¹ There are many possible reasons for this, including employer responses such as reducing employee hours, reducing benefits, reducing training, wage compression (paying new higher wage workers less), price increases and reduced profit margins – all of which could absorb increased labor costs without reducing job counts – as well as other effects, such as reduced employee turnover, efficiency wage responses from workers, increases in aggregate demand and changes in employment composition.

One of the most important reasons that studies to date have not found significant disemployment effects, however, is that virtually all of the minimum wage changes analyzed have been relatively “modest.” The real U.S. minimum wage declined more than 37% from 1968 to 1995 and has ranged from about \$6.00 to \$8.00 per hour in 2017 dollars for most of the period from 1984 to the present. For much of this period, it has been below 35% of the average hourly wage of all production and non-supervisory workers and has been below the federal poverty level for a family of two (assuming full-time, year-round work) for almost all of the past 35 years. Even the Vermont minimum wage had been below the federal poverty level for a family of three for the past 25 years, until exceeding it in January of this year. Despite large percentage changes in the minimum wage at times by the federal government and various states, the rates have generally lagged prevailing wage rates and productivity growth, and have affected relatively small shares of the workforce and total wages.

¹⁰ According to a study by Oxfam, at: <https://www.oxfam.org/en/research/economy-99>

¹¹ See, most prominently, Card, David and Alan Krueger. 1994. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *American Economic Review*, vol. 48, no. 4, pp. 772-793; Card, David and Alan Krueger. 1995. *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton, NJ: Princeton University Press; Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." *Review of Economics and Statistics*, vol. 92, no. 4, pp. 945-964; Dube, Arindrajit, T. William Lester, and Michael Reich. 2012. "Minimum Wage Shocks, Employment Flows and Labor Market Frictions." Berkeley, CA: Institute for Research on Labor and Employment. <http://escholarship.org/uc/item/76p927ks>; And, contesting these analyses, most prominently, Neumark, David and William Wascher. 2006. "Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research." National Bureau of Economic Research Working Paper 12663. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w12663>; Neumark, David and William Wascher. 2008. *Minimum Wages*. Cambridge, MA: The MIT Press; Sabia, Joseph J., Richard V. Burkhauser, and Benjamin Hansen. 2012. "Are the Effects of Minimum Wage Increases Always Small? New Evidence from a Case Study of New York State." *Industrial and Labor Relations Review*, vol. 65, no. 2, pp. 350-376; Hoffman, Saul D. and Diane M. Trace. 2009. "NJ and PA Once Again: What Happened to Employment When the PA-NJ Minimum Wage Differential Disappeared?" *Eastern Economic Journal* 35 (1): 115-128; and, Lordan and Neumark. August 2017, "People Versus Machines: The Impact of Minimum Wages on Automatable Jobs" NBER Working paper 23667, Cambridge, MA.

As a result of this, studies on minimum wage impacts have revealed correspondingly minor changes in employment, even among the groups most likely to be affected (poorly educated, younger, lowest wage and female workers). Most economists who point to the disconnect between minimum wage and employment changes are careful to limit their conclusions to “modest”¹² or “reasonable”¹³ changes in the minimum wage. Few, however, have attempted to define the level at which a minimum wage change would become “immodest.” Jared Bernstein, a senior fellow at the Center on Budget and Policy Priorities and chief economist to former Vice President Biden, has suggested that “moderate” minimum wage increases are those that include “not much more than 10 percent of the workforce in their sweep.” David Card, who was the first to demonstrate that small changes in a state’s minimum wage may have little or no employment effects, stated in a 2006 interview with Douglas Clement of the Minneapolis Fed, that his research “doesn’t mean that if we raised the minimum wage to \$20 an hour [about \$25/hour in 2017 dollars] we wouldn’t have massive problems.”¹⁴

As noted above, a Vermont minimum wage change to \$12.50 per hour in 2021 would represent an increase in the current 2017 minimum wage of about 12% in real dollars (25% in current dollars), affect about 15% of the labor force and add about 0.5% to the total wage bill. An increase to \$13.25 in 2021 would represent a real 17% increase above 2017 levels, affect 17% of the labor force and increase total wage payments by 0.8%.

A \$15.00 minimum wage in 2022 would represent a constant dollar increase of 32% above the 2017 wage rate and affect more than 25% of the labor force. None of the source studies that found little or no employment effects considered an increase of this level or magnitude. An increase to \$15.00 would thus be correspondingly uncertain in its impacts.

In order to help quantify ranges of possible economic impacts, we utilized a Vermont State model from Regional Economic Models, Inc. (REMI), as was done in several prior legislative studies. The REMI model represents a standard theoretical economic framework for estimating economic impacts.¹⁵ As such, it does not fully account for the recent observed effects of low level minimum wage changes. Working with REMI economists, we specified the model to account for these realities and other fiscal effects¹⁶, including:

- 1) The change in the wage bill by industry, based on DOL hourly wage data, hours worked and estimates of wage spillover effects
- 2) The change in production costs by industry

¹² For example, in a widely cited 2013 paper by John Schmitt of the Center on Economic and Policy Research, he states: “This is one of the most studied topics in economics, and the evidence is clear: modest minimum wage increases don’t have much impact on employment...” For the full report, see: <http://www.cepr.net/documents/publications/min-wage-2013-02.pdf>

¹³ Laura D’Andrea Tyson, former Chair of the Council of Economic Advisors under President Clinton and an economics professor at the Haas School of Business at the University of California, “finds no significant effects on employment when the minimum wage increases in reasonable increments.” See: <http://economix.blogs.nytimes.com/2013/12/13/raising-the-minimum-wage-old-shibboleths-new-evidence/>

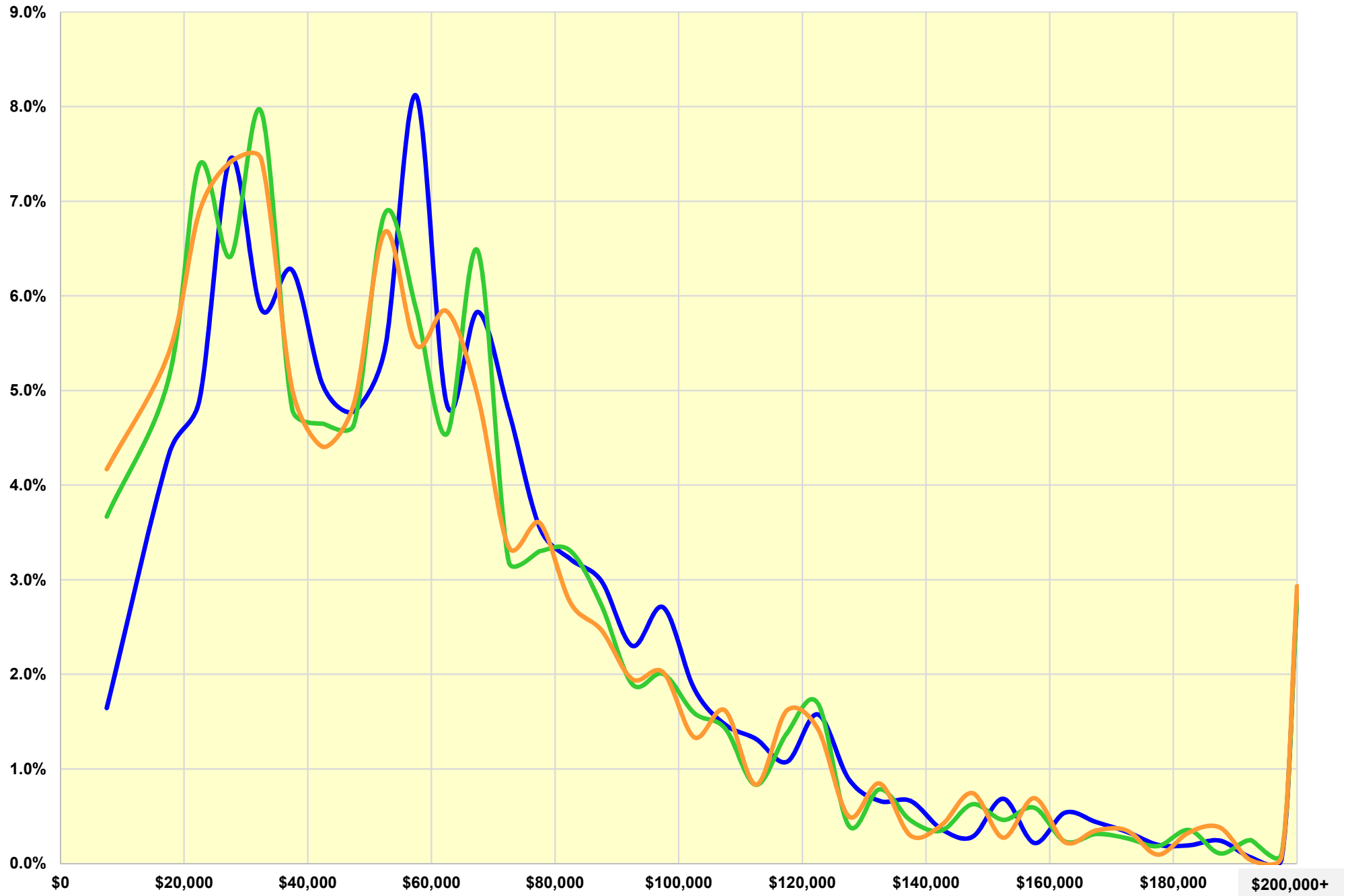
¹⁴ For the complete interview, see: http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3190&

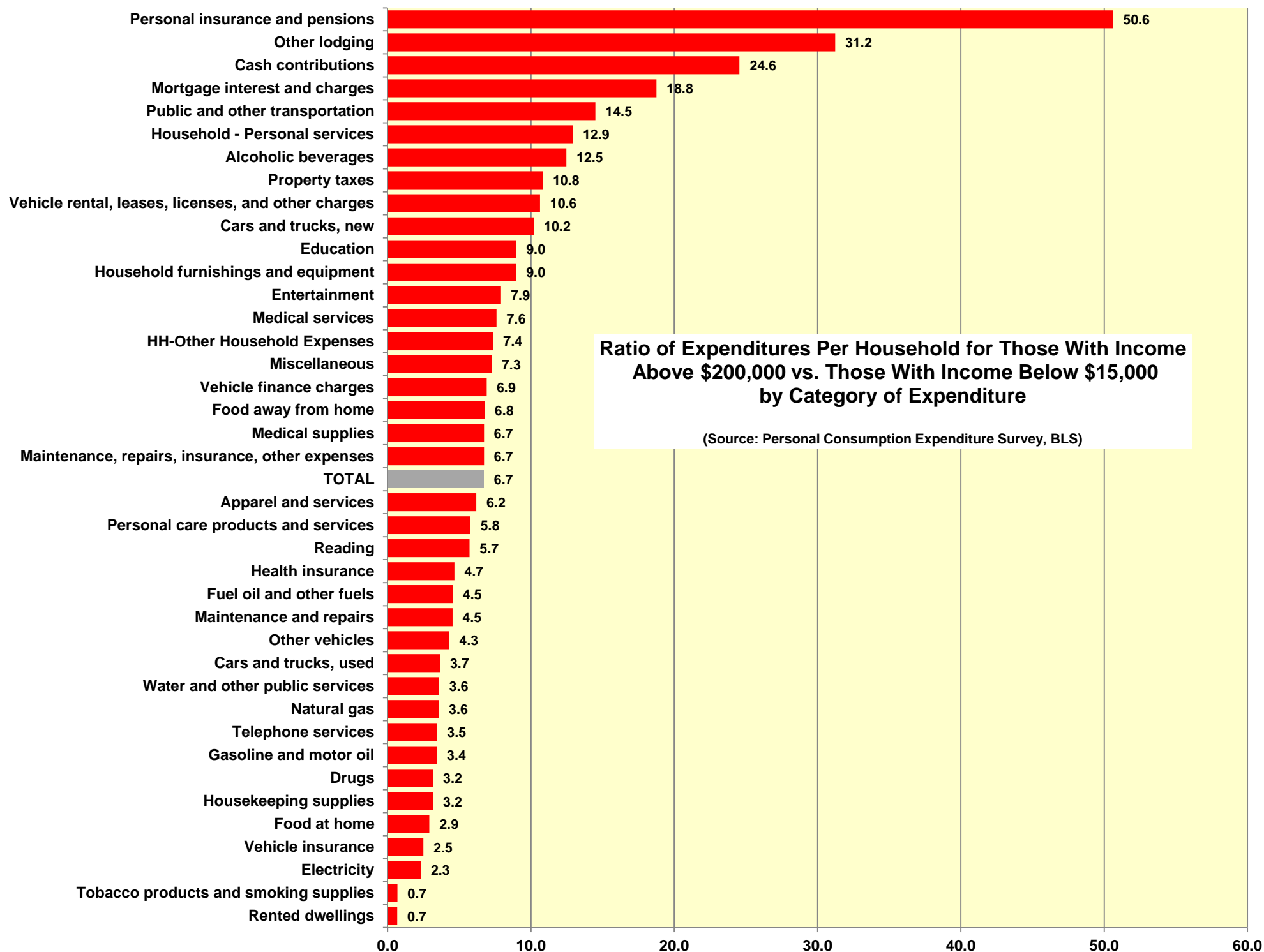
¹⁵ The REMI PI+ model v1.5 is more fully described at: <http://www.remi.com/resources/documentation> For further information regarding model equations, specifications and simulations, please contact the Vermont Joint Fiscal Office.

¹⁶ More detailed REMI model output, model constructs and model specification inputs are available from the Joint Fiscal Office upon request.

Percent of New Minimum Wage Income by Household Income Class

\$15.00 in 2022 \$13.25 in 2022 \$12.50 in 2021





- 3) Adjustments to wage income and production cost offsets, including efficiency wage responses, lower turnover rates, wage compression, reduced benefits and higher marginal consumption propensities, due to the distribution of income gains among lower income households¹⁷
- 4) Incorporation of changes in enrollment in state and federal aid programs associated with wage income changes, including program expenditures and transfer payment changes

The economic effects of these changes included:

- 1) An increase in aggregate earned income of low wage workers and their families
- 2) A reduction in the number of hours worked and/or the elimination of some low wage jobs
- 3) A reduction in state benefit payments as growing low wage income disqualifies some from program participation
- 4) An increase in State tax payments as taxable income rises
- 5) A reduction in federal transfer payments into the State as growing low wage income disqualifies some from program participation, and
- 6) Increased federal tax revenue as taxable income rises

SUMMARY OF FINDINGS

- This analysis indicates that a \$12.50 minimum wage in 2021 would result in a long-term annual loss of about 900 jobs (or an equivalent reduction in hours), about 2.1% of total payroll employment, and aggregate initial income gains to low wage workers of approximately \$55 million. As some of these workers transition away from State benefits and pay more in taxes, the net fiscal gain to the State will total about \$7 million. Additional federal income tax payments and the reduction in federal transfer payments in Medicaid, EITC, SNAP (3 Squares) and other payments to the State, however, could result in the loss of about \$17 million to the State in net federal fiscal changes.
- Impacts associated with a \$13.25 minimum wage in 2022 include job losses of about 1,240 jobs, about 2.4% of total payroll employment, and aggregate initial income gains to low wage workers of about \$88 million. As some of these workers transition away from State benefits and pay more in taxes, the net fiscal gain to the State should total about \$8 million. The State's federal fiscal loss through higher taxes paid and reduced transfer payments associated with this wage variant are expected to total approximately \$27 million.
- Impacts associated with a \$15.00 minimum wage in 2022 indicate long-term average annual job losses of approximately 2,830 jobs, about 3.7% of total payroll employment, and aggregate initial income gains to low wage workers of about \$240 million. As some of these workers transition away from State benefits and pay more in taxes, the net fiscal gain to the State should total about \$23 million. The State's federal fiscal loss through higher taxes paid and reduced transfer payments associated with this wage variant are expected to total approximately \$69 million.

¹⁷ It should be noted that limited empirical data exist with which to quantify all such effects, especially for proposed real minimum wage changes that are higher than those previously studied. In the absence of such data, we have used projections based on the low-end of ranges analyzed in the relevant literature.

TABLE 3 - Comparisons of Selected Metrics for Proposed Minimum Wage Changes

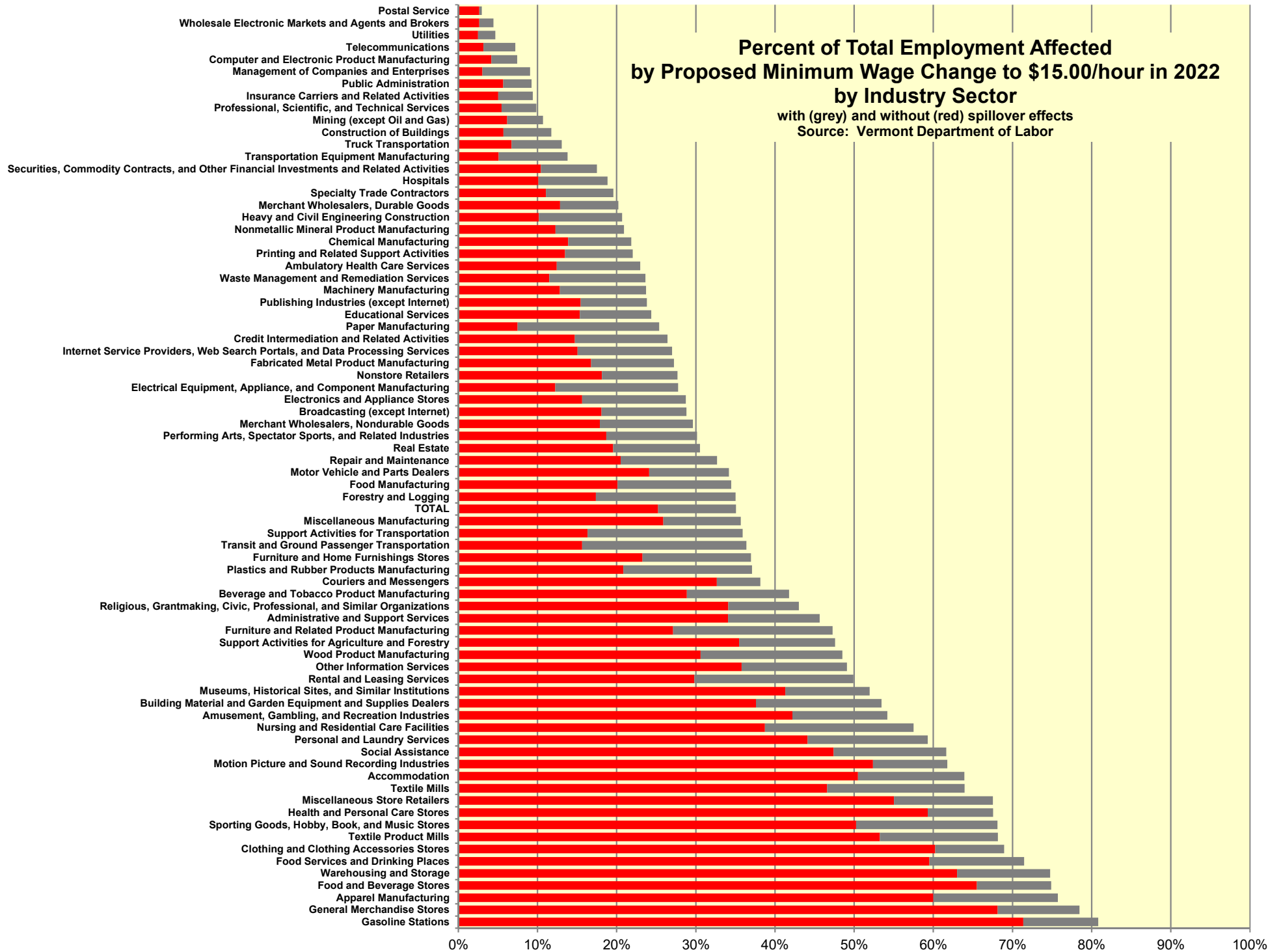
	\$15.00 in 2022 Variant 1	\$13.25 in 2022 Variant 2	\$12.50 in 2021 Variant 3
Number of Jobs Below Proposed Minimum Wage - DOL Basis	76,537	51,084	43,866
Share of Jobs Below Proposed Minimum Wage - DOL Basis	25.3%	16.9%	14.5%
Initial Wage Bill Change from 2018 Minimum to Proposed (\$2015M)*	\$240.6	\$87.6	\$55.0
Initial Wage Bill Change as a Share of Total Wages and Salaries	2.1%	0.8%	0.5%
Percent Change from 2018 Minimum - Nominal \$	43%	26%	19%
Percent Change from 2018 Minimum - Constant \$	29%	14%	10%
Percent Change from 2014 Minimum - Nominal \$	72%	52%	43%
Percent Change from 2014 Minimum - Constant \$	45%	28%	24%
Net Annual Long-Term Disemployment Impact**	2,830	1,237	903
Percent of Total Employment (REMI basis)	0.6%	0.3%	0.2%
Percent of Minimum Wage Jobs (DOL Basis)	3.7%	2.4%	2.1%
Net Fiscal Change - State Level	\$23.3	\$8.1	\$6.9
Net Fiscal Change - Federal Level (represents a net loss to VT)	\$68.9	\$26.5	\$17.4
Differential with U.S. and NH Minimum Wage, Assuming No Change***	107%	83%	72%
Proposed Real Minimum Wage Relative to Record High (Feb. 1968)	16%	2%	-2%

* In 2015 constant dollars, based on BLS data for the period 2019 to 2022 in Variants 1 and 2, and 2019 to 2021 in Variant 3; Including spillover effects; Excluding income changes from net job/hours-worked losses

** Based on REMI model runs, long-term annual average employment change relative to baseline, BEA/REMI basis, 2028-2040

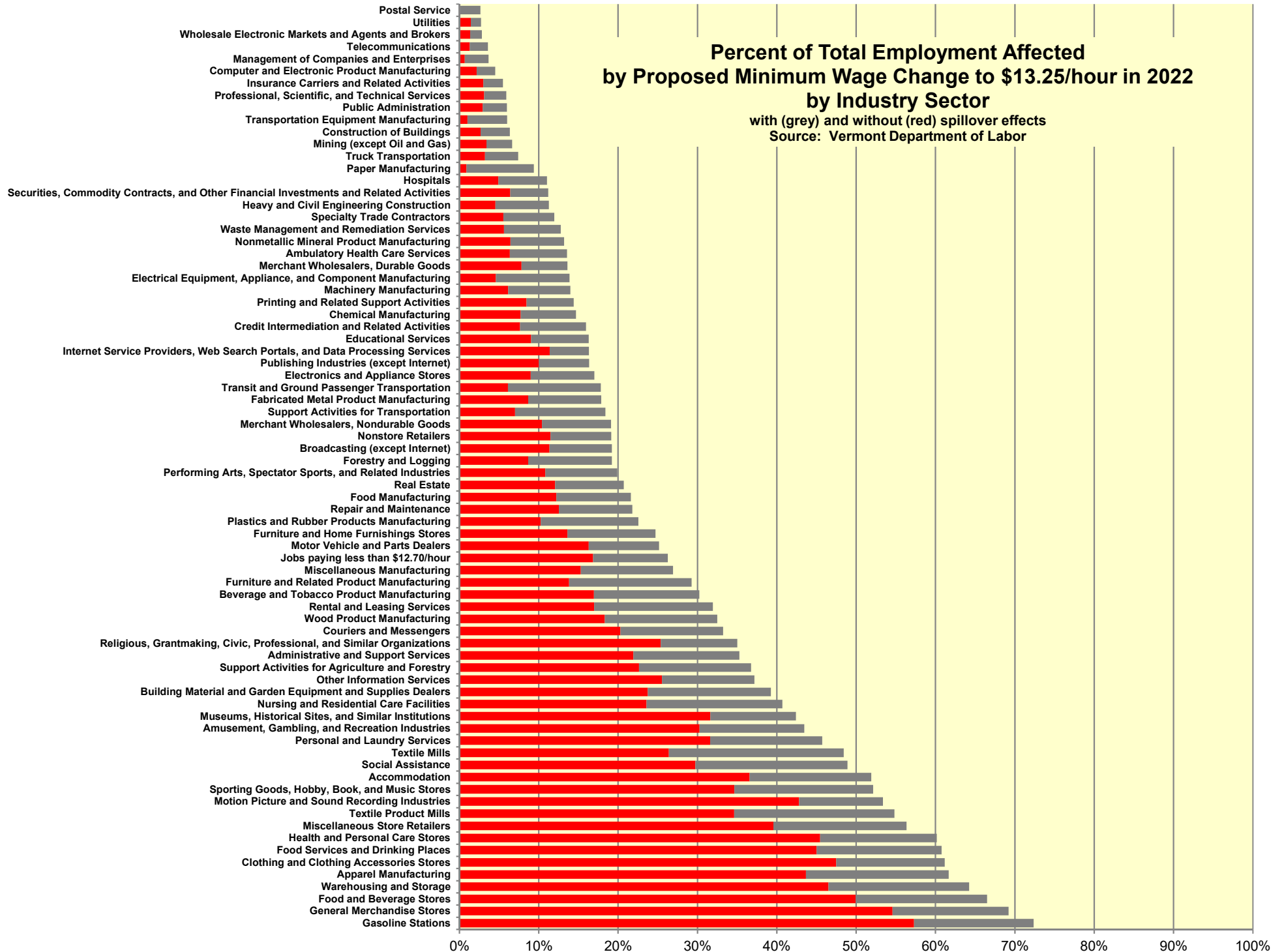
**** Based on a \$7.25 U.S. minimum wage and NH's current statutory link to the Federal minimum wage. The differential between VT and NH as of 2017 is 38%

- The industries most likely to be negatively affected are those with high out-of-state exports, high shares of affected workers (see charts on following pages), high absolute wage bill changes, and relatively high labor costs as a share of total production costs. Although firms with the highest export reliance are characterized by relatively highly paid workforces and capital intensive production processes, some still have 30% or more of their workforce that could be affected by the higher proposed minimum wage variants. In the manufacturing sector, these include furniture and wood product manufacturing, textile and apparel manufacturing and the large food product manufacturing sector.
- The largest employment losses, however, are likely to occur in the retail trade, food service and accommodation industries, where labor costs can account for 50% or more of total operating costs. These three sectors are expected to account for nearly half of the disemployment effects through reduced hours, labor substitution and job relocation or closure.
- It should be noted that even in some industries, typically considered to be less affected by external competition, such as retail sales, there would be effects associated with competition from both internet sales and border firms in New Hampshire, where the minimum wage differential with Vermont could grow to between 76% and 107% by 2022, the largest historical spread on record.



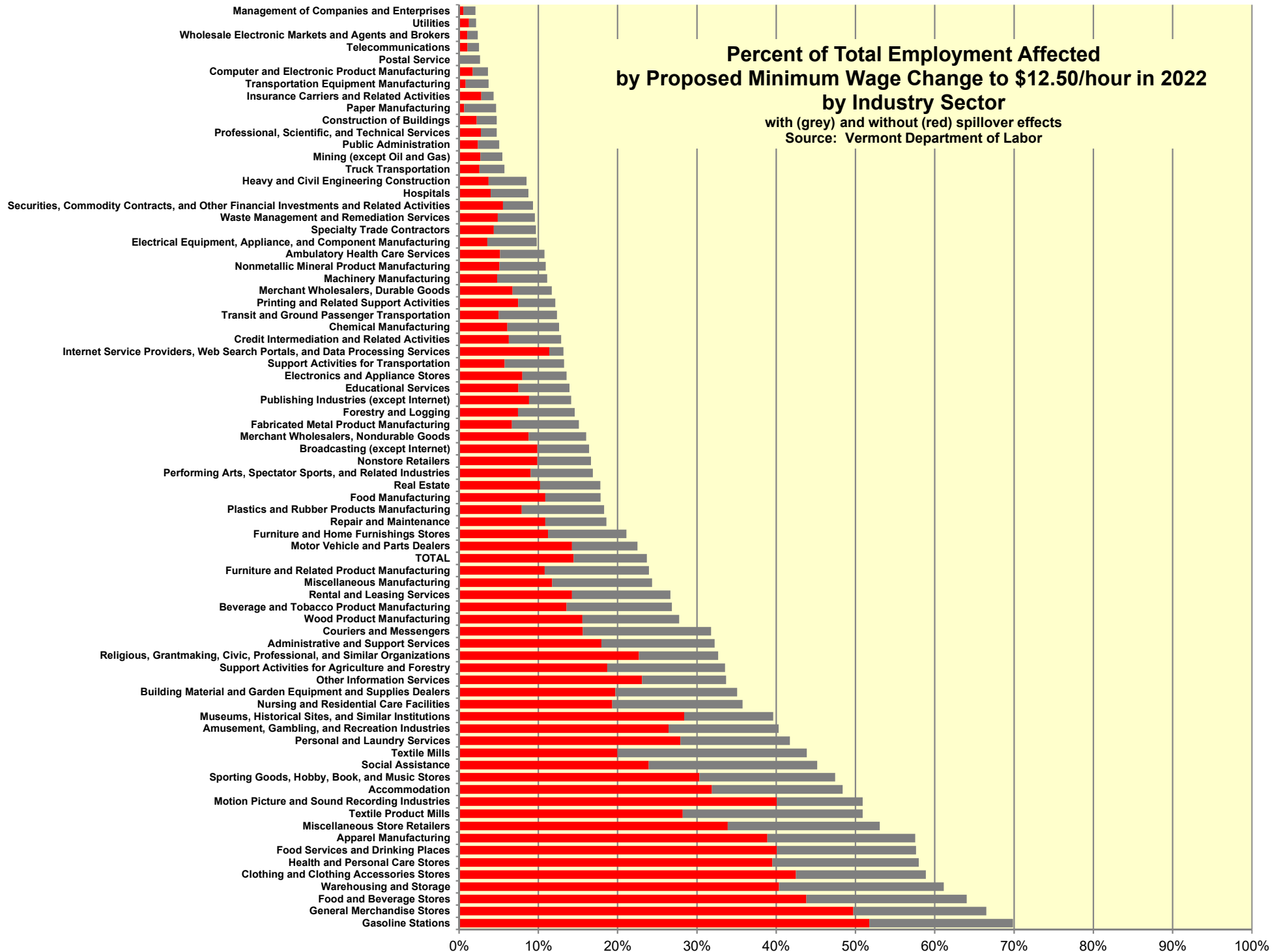
Percent of Total Employment Affected by Proposed Minimum Wage Change to \$13.25/hour in 2022 by Industry Sector

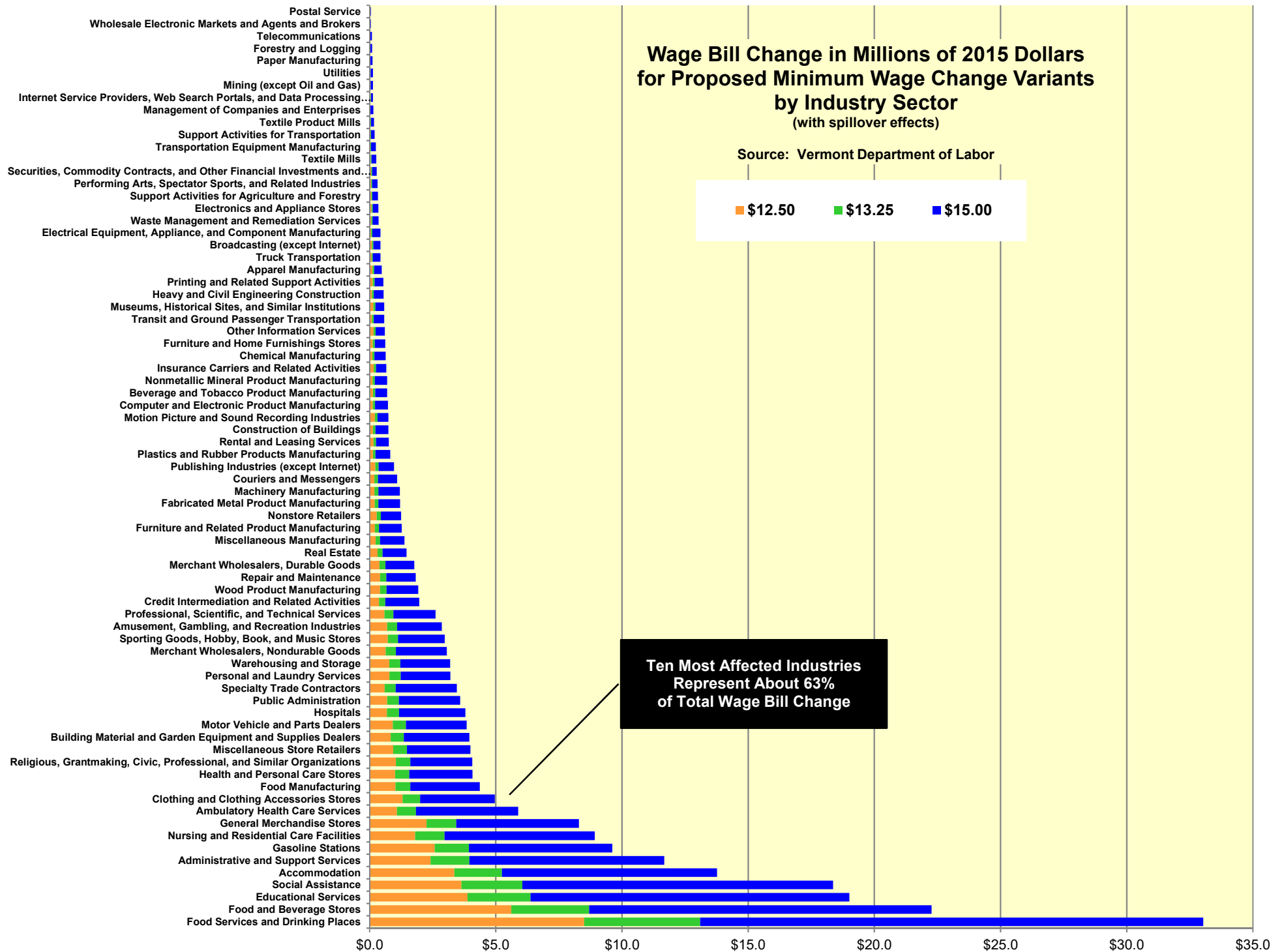
with (grey) and without (red) spillover effects
Source: Vermont Department of Labor



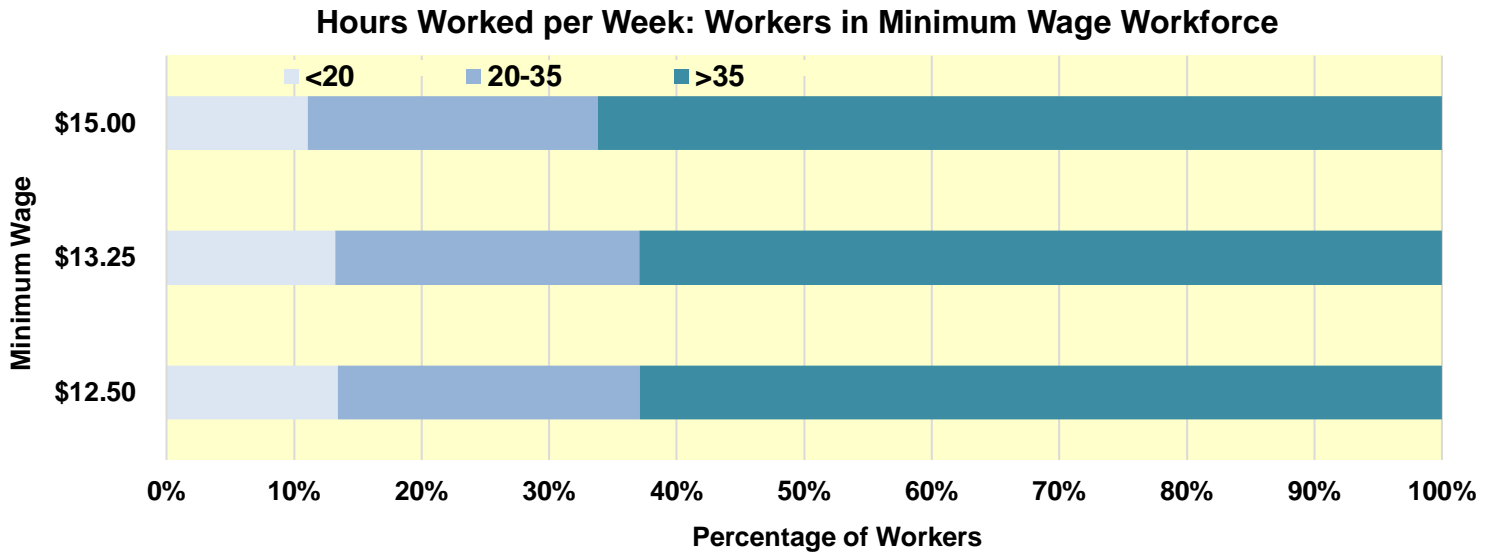
Percent of Total Employment Affected by Proposed Minimum Wage Change to \$12.50/hour in 2022 by Industry Sector

with (grey) and without (red) spillover effects
Source: Vermont Department of Labor

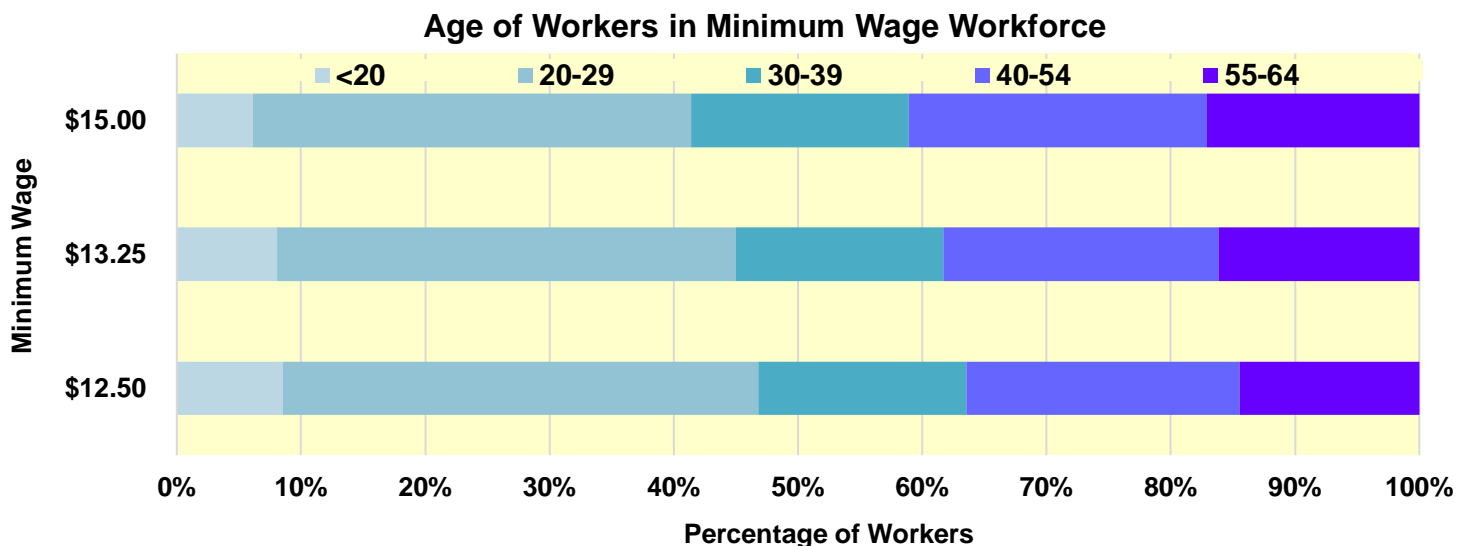




- This strongly suggests that collection of relevant analytic data and ongoing review and analysis of potential cross-border negative impacts could be important prior to and during the period from 2018 to 2022 and beyond. This could be initiated by reviewing existing data on the recent 15 year period of wage divergence between the two states, and developing data and analytic capacities to study this in greater depth.



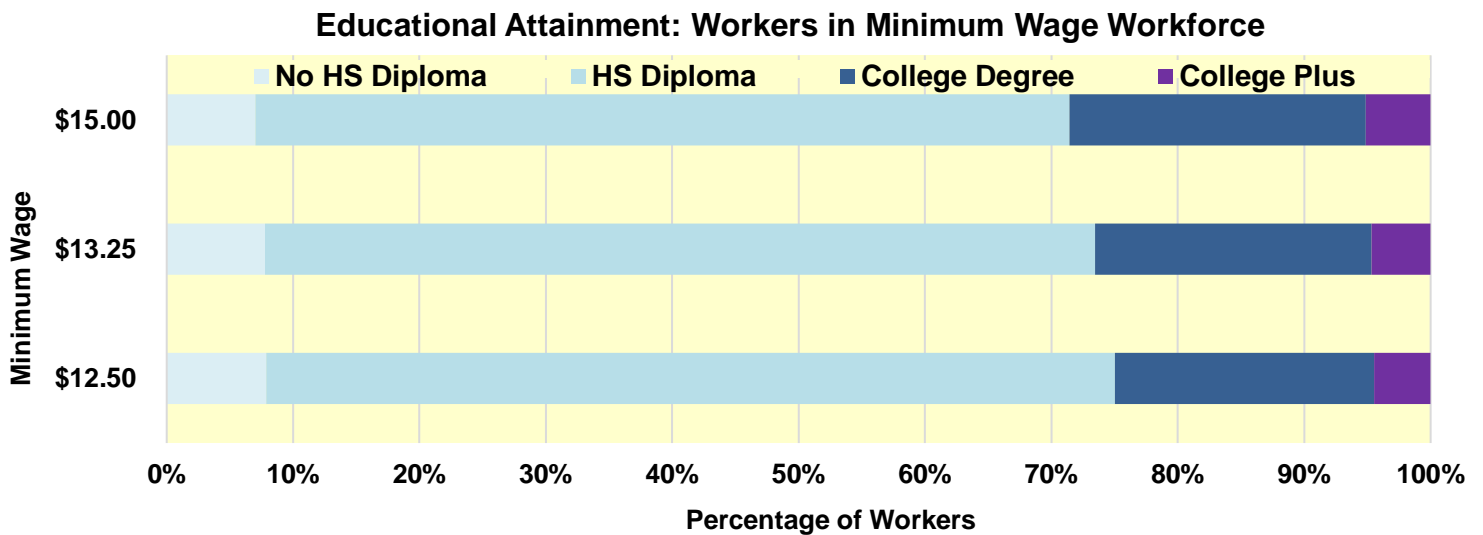
- Of the workers expected to earn \$15/hour in 2022, 44% are male and 56%, female. The share of females is slightly higher at 45% in the lower two wage variants. Per the above chart, about two-thirds of all minimum wage workers are employed in full-time jobs, with slightly higher shares in the \$15/hour variant.¹⁸



- About 42% of all \$15/hour minimum wage workers are the head of a family (a couple or single parent family). 40% of these head-of-family minimum wage workers earn at least half of their family income. 59% of all \$15/hour minimum wage workers are over age 30, with a slightly younger age composition as the wage variant decreases.

¹⁸ Based on ACS data developed for the JFO by Deb Brighton.

- As minimum wage variants increase the minimum wage level, they affect a slightly higher proportion of workers who are older, have more advanced education, and work more hours.¹⁹
- While 48% of all female \$15/hour minimum wage workers are older than 40, only 32% of all male workers are older than 40. Conversely, among \$15/hour minimum wage workers, 49% of all male workers are under the age of 30, while only 36% of all female workers are younger than 30.²⁰
- Across all wage variants, women earning the minimum wage are more highly educated than men. Per the below chart, among all minimum wage workers, as would be expected, higher wage variants contain more highly educated workers than lower variants.

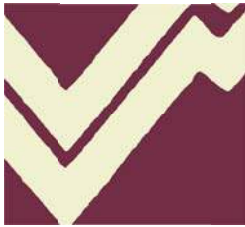


- Additional REMI model output and other details associated with this analysis are available from the Joint Fiscal Office upon request. The data and models developed as a part of this analysis will be available in the event that further Committee work on this issue is requested during the balance of the year.

¹⁹ Ibid.

²⁰ Ibid.

Appendix 6: Kavet, Rockler & Associates, LLC, March 13, 2014 Memorandum



Kavet, Rockler & Associates, LLC

985 Grandview Road
Williamstown, Vermont 05679-9003 U.S.A.
Telephone: 802-433-1360
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E-Mail: tek@kavet.net
Website: www.kavetrockler.com

Memorandum

To: Steve Klein, Legislative Joint Fiscal Office
From: Tom Kavet, Nic Rockler and Deb Brighton
CC: Sara Teachout, Joint Fiscal Office
Date: March 13, 2014
Re: Preliminary Analysis of \$10.00 and \$12.50 Vermont Minimum Wage

OVERVIEW

This review is a preliminary analysis of potential economic impacts associated with increases in the indexed Vermont minimum wage to \$10.00 per hour and \$12.50 per hour, effective January 1, 2015. This analysis is preliminary because source data and models necessary to run more comprehensive analyses require greater elapsed time to acquire, develop and process than is currently available. If more in-depth analysis is desired, a comprehensive study, such as that performed for the Vermont legislature in 1999¹, could be completed within about 2-3 months.

BACKGROUND

The Federal minimum wage was first implemented in October of 1938 as a part of the Fair Labor Standards Act, which eliminated child labor, set maximum workweek hours, fixed overtime work rules, and established a minimum wage of 25 cents per hour for selected industries. In explaining the rationale for the legislation, Franklin Roosevelt emphasized not only the economic purposes of the Act, but also the importance of social equity and elevation of the dignity of work in stating:

"No business which depends for its existence on paying less than living wages to its workers has any right to continue in this country. By living wages, I mean more than a bare subsistence level – I mean the wages of a decent living."

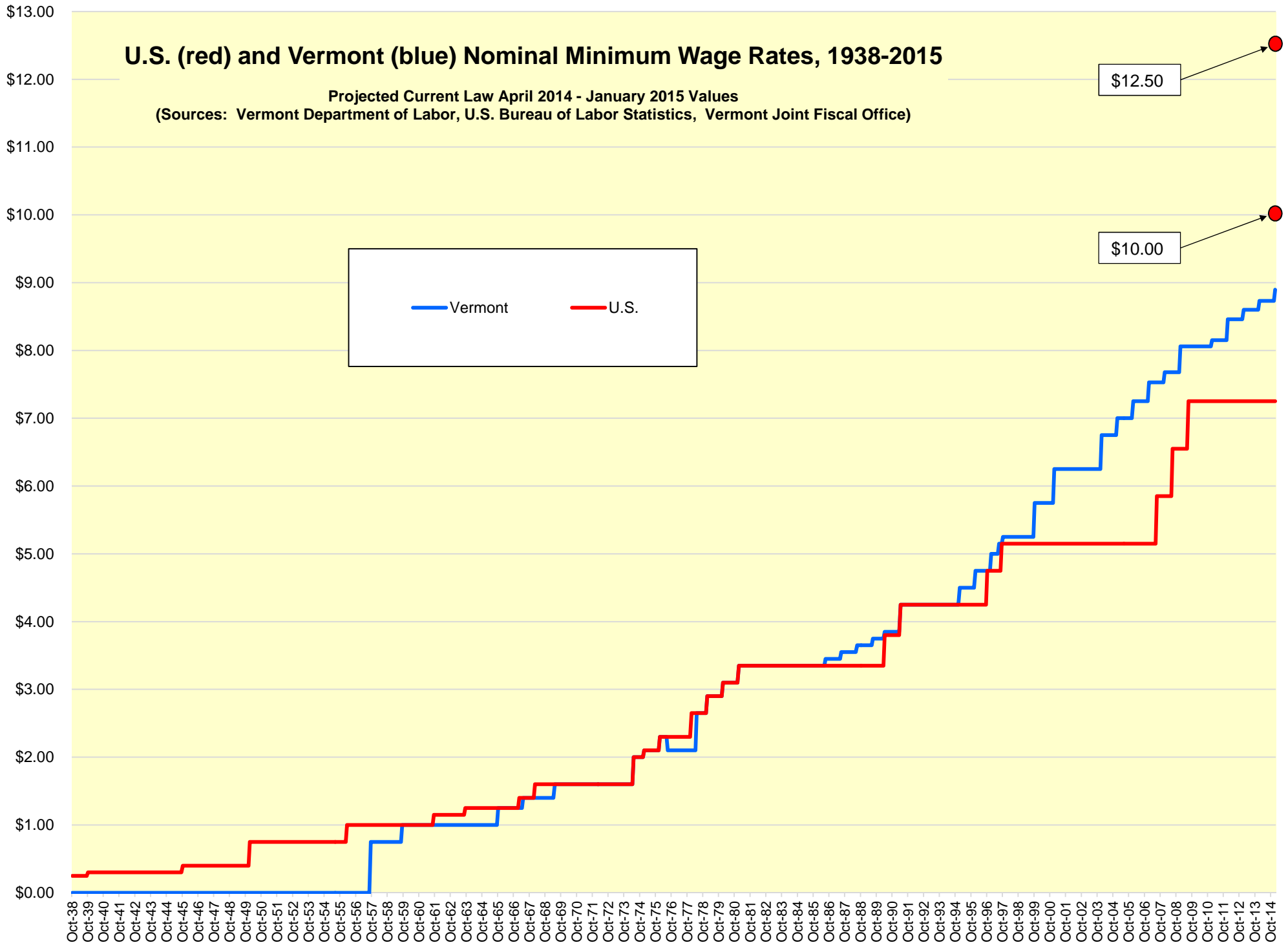
Per the chart on the following page, the first Vermont minimum wage was enacted in September of 1957 and tended to follow the Federal minimum wage until 1986, when it slightly exceeded the Federal rate for a period of about four and a half years. Between 1991

¹ See "Act 21 Research and Analysis in Support of the Livable Income Study Committee," available on the Joint Fiscal Office website at: <http://www.leg.state.vt.us/jfo/archives/reports/1999-11%20Livable%20Income%20Study.pdf>

U.S. (red) and Vermont (blue) Nominal Minimum Wage Rates, 1938-2015

Projected Current Law April 2014 - January 2015 Values

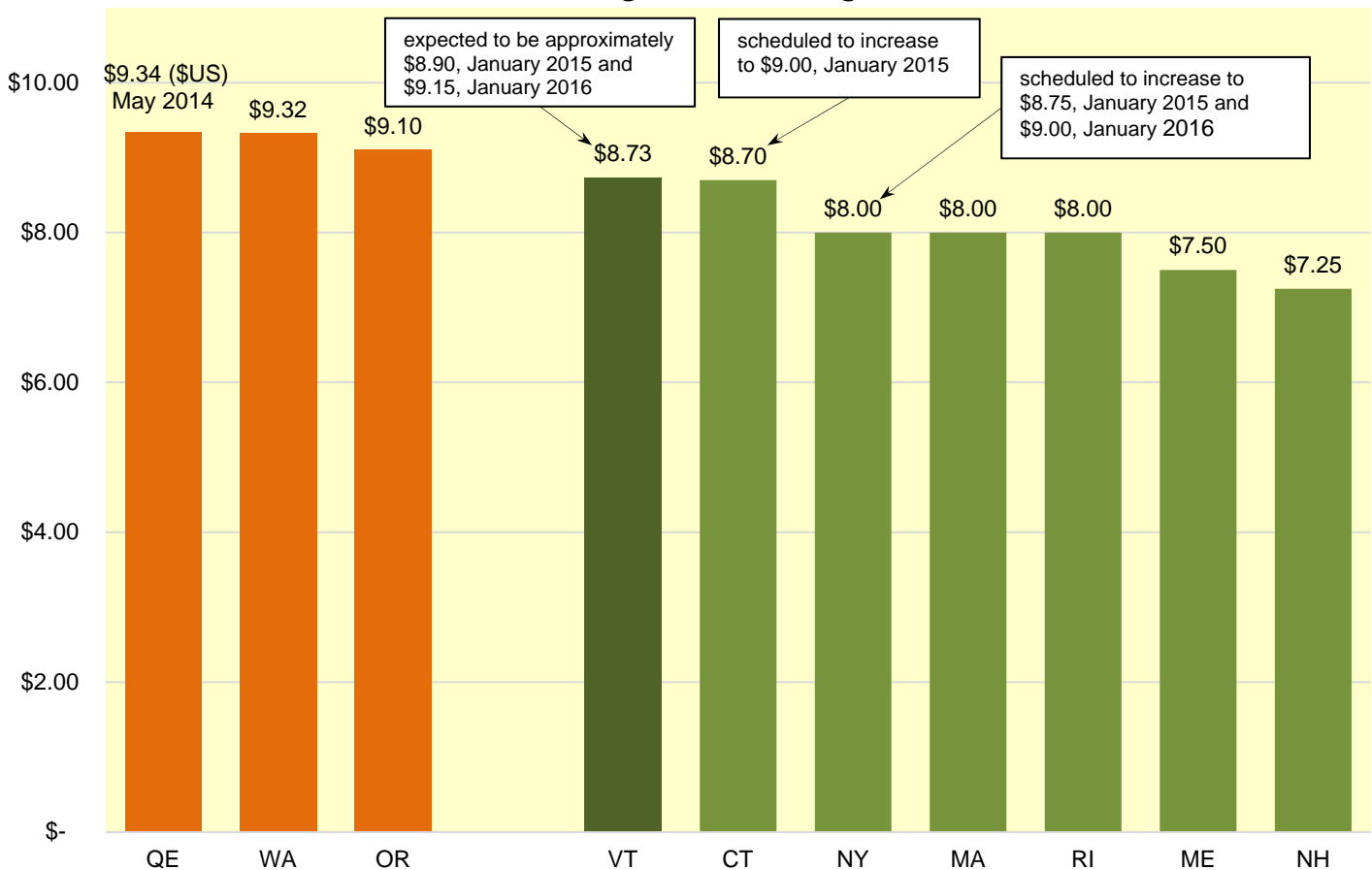
(Sources: Vermont Department of Labor, U.S. Bureau of Labor Statistics, Vermont Joint Fiscal Office)



and 1997, the Federal and Vermont rates were closely aligned, but since 1998, the Vermont rate has consistently exceeded the Federal. Between 1998 and 2014, the Vermont rate has been, on average, 22% above the U.S. and has been as high as 46% above the U.S. rate during a six month period at the start of 2007.

At \$8.73 per hour, Vermont's current minimum wage is 20% above the Federal rate of \$7.25 and is the third highest in the nation, after Washington (\$9.32) and Oregon (\$9.10). As shown in the below chart, Vermont's rate is close to that in Connecticut (currently at \$8.70, but scheduled to increase to \$9.00 effective January of 2015) and New York (currently at \$8.00, but scheduled to increase to \$8.75 in January of 2015 and \$9.00 in January of 2016). The minimum wage in Rhode Island is currently \$8.00 per hour, as also in Massachusetts, where the Senate recently voted to increase the rate to \$9.00 in July of 2014, \$10.00 in 2015 and \$11.00 in 2016. The nominal minimum wage in Quebec is \$10.15 (CAD) or about \$9.16 in U.S. dollars at current exchange rates and is scheduled to rise to \$10.35 (CAD) in May of this year (\$9.34 US). The lowest minimum wage rates in New England are in New Hampshire (at the Federal rate of \$7.25) and Maine (\$7.50).

Vermont's Minimum Wage is Currently the Third Highest in the U.S. and the Highest in New England

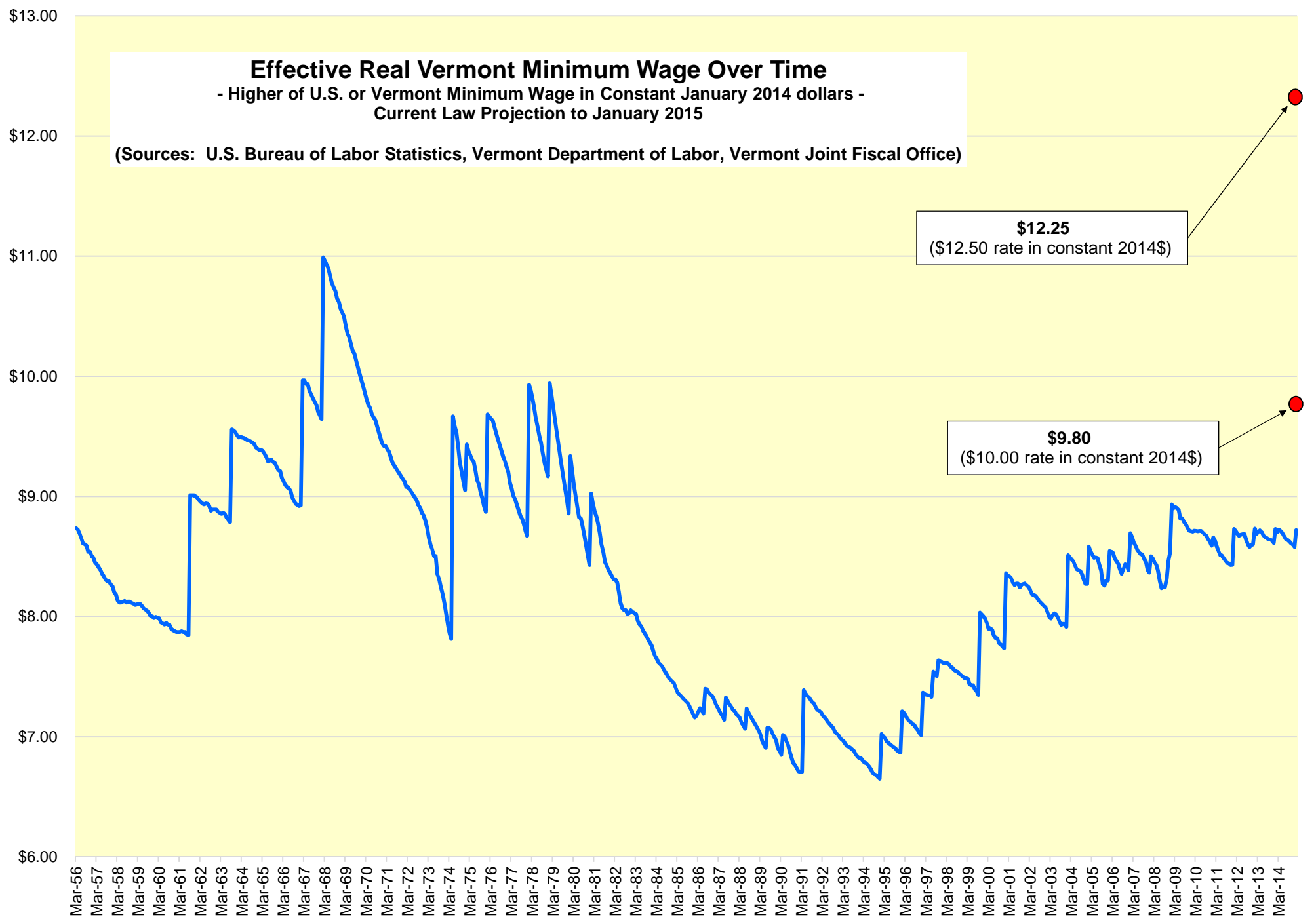


Because the current Vermont minimum wage is indexed to the Consumer Price Index, it is expected to increase to about \$8.90 in 2015, \$9.15 in 2016 and \$9.35 in 2017.

Effective Real Vermont Minimum Wage Over Time

- Higher of U.S. or Vermont Minimum Wage in Constant January 2014 dollars -
Current Law Projection to January 2015

(Sources: U.S. Bureau of Labor Statistics, Vermont Department of Labor, Vermont Joint Fiscal Office)



As illustrated in the chart on the preceding page, on an inflation-adjusted basis, the current Vermont rate is almost identical to the effective rate (the higher of the Federal or Vermont rate) 58 years ago in March of 1956, which was \$8.74 in January 2014 dollars. The highest effective Vermont rate was in February of 1968, at \$11.00 (current 2014 dollar basis). The real effective rate has only been above \$10.00 for a period of 22 months between February of 1968 and November of 1969. The average effective real Vermont minimum wage over the last 60 years has been \$8.31, in January 2014 dollars.

PROFILE OF LOW-WAGE JOBS AND WORKERS IN VERMONT

This analysis relies upon customized data extractions from the Vermont Department of Labor and microdata from the joint U.S. Census Bureau and U.S. Bureau of Labor Statistics Current Population Survey.² These two data sources provide measurements on minimum wage jobs and workers. The DOL data are from the 2012 Occupational Employment Survey and measure jobs by industry, occupation and wage level. The CPS data measure workers and hours worked by wage level, and family characteristics used to estimate public benefit eligibility and expenditures.

The tables and charts on the next page summarize some of the key characteristics of those affected by the two proposed minimum wage changes evaluated herein. For a \$10.00 minimum wage, they indicate about 30,000 jobs are likely to be paying less than \$10 per hour in 2015. There are, however, only about 20,000 workers that are likely to be earning less than \$10.00 per hour in 2015, implying an elevated incidence of part-time positions among the affected jobs and an elevated incidence of multiple jobholders among this group of workers. For a \$12.50 minimum wage, the figures are approximately 78,000 jobs and 53,000 workers.

The data on the following page also show that slightly more than half of all low wage workers (both those earning less than \$12.50 and \$10.00 per hour) earn more than 50% of their family's income. While low wage workers tend to be younger than the average worker, 54% of those earning less than \$10.00 per hour and 65% of those earning less than \$12.50 per hour are older than 30. While a majority of workers under age 22 who earn less than \$12.50 per hour and \$10.00 per hour are part time workers (51% of those under \$12.50 and 53% of those under \$10.00), most low wage workers over 22 years old are full-time (72% of those earning less than \$12.50 and 67% of those earning less than \$10.00 per hour).

These data also reveal that there is a pronounced gender differential among low wage workers, with women disproportionately represented in the lowest wage groups (56% of those earning less than \$10.00 per hour and 55% of those earning less than \$12.50). Of note, this is one of the few metrics that has shown structural improvement since the last detailed analysis of low wage workers in Vermont, performed in 1999. Over the last 15

² This analysis could not have taken place without the generous cooperation of Mat Barewicz, Economic and Labor Market Chief, and Kevin Stapleton, Economic and Labor Market Assistant Chief, at the Vermont Department of Labor, who coordinated DOL data access and customized aggregations by wage category, and Deb Brighton, on behalf of the Joint Fiscal Office, who processed and analyzed pooled CPS microdata for 2011-2013 and generated all public benefit and fiscal impact analyses with Stephanie Barrett of the Joint Fiscal Office. Both datasets were projected to 2015 levels using wage, price and other forecasts from the Joint Fiscal Office.

Vermont Profile of Lower Wage Jobs and Workers - 2015 Estimates

Low Wage Jobs in 2015

31,000 approximate number of private nonfarm covered jobs under \$10.00
11% of Vermont total

78,000 approximate number of private nonfarm covered jobs under \$12.50
27% of Vermont total

Top 6 Industries with Jobs Under \$10.00

34% Retail Trade
29% Accommodations & Food Service
8% Health Care & Social Assistance
8% Educational Services
4% Admin and Waste
3% Manufacturing
86% of all jobs under \$10.00/hr.

Top 6 Industries with Jobs Under \$12.50

26% Retail Trade
20% Accommodations & Food Service
19% Health Care & Social Assistance
9% Educational Services
6% Manufacturing
5% Admin and Waste
85% of all jobs under \$12.50/hr.

Gender Shares Under \$10.00

44% Male
56% Female

Gender Shares Under \$12.50

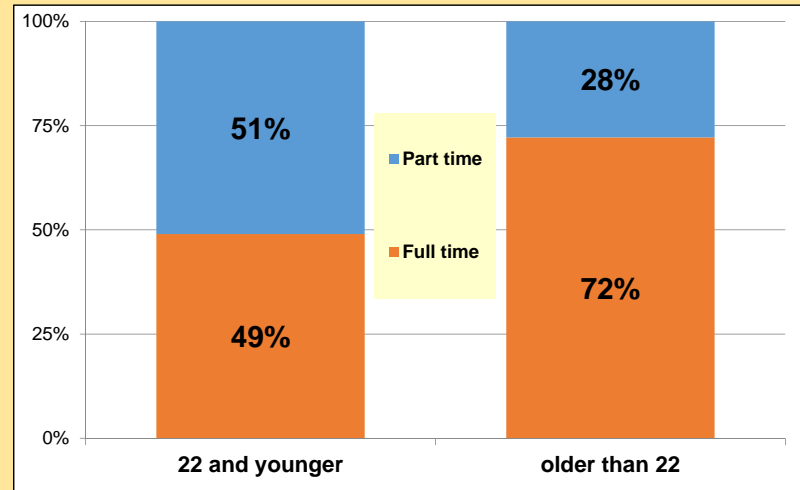
45% Male
55% Female

Low Wage Job Distribution

21% Minimum Wage - \$9.49
31% \$9.50 - \$10.49
24% \$10.50 - \$11.49
24% \$11.50 - \$12.49
100% of all jobs paying less than \$12.50/hr.

For Workers Earning Less than \$12.50,

49% of Age 22 and Younger Workers are Full Time
72% of Workers Older than 22 are Full Time



Of All Workers Earning Less than \$10.00,

52% of earn more than 1/2 of family income

47% are in families with income below \$30,000
11% are in families with income \$30,000-\$40,000
58% are in families with income below \$40,000

23% are under the age of 22
77% are older than 22
54% are older than 30

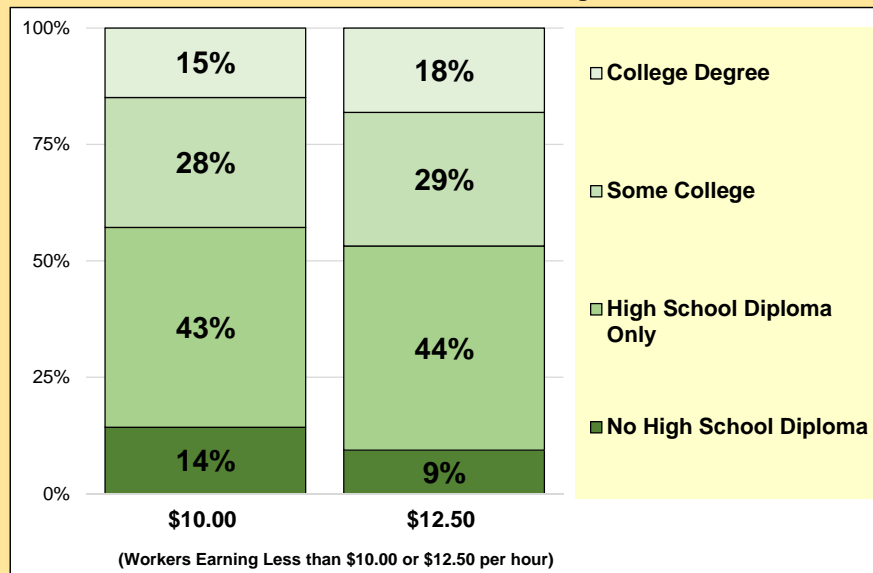
Of All Workers Earning Less than \$12.50,

55% of earn more than 1/2 of family income

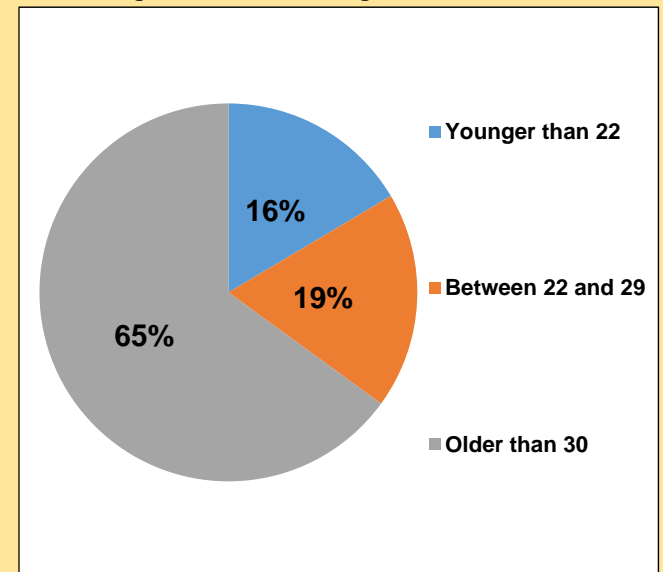
47% are in families with income below \$30,000
10% are in families with income \$30,000-\$40,000
57% are in families with income below \$40,000

16% are under the age of 22
84% are older than 22
65% are older than 30

Educational Attainment of Low Wage Workers



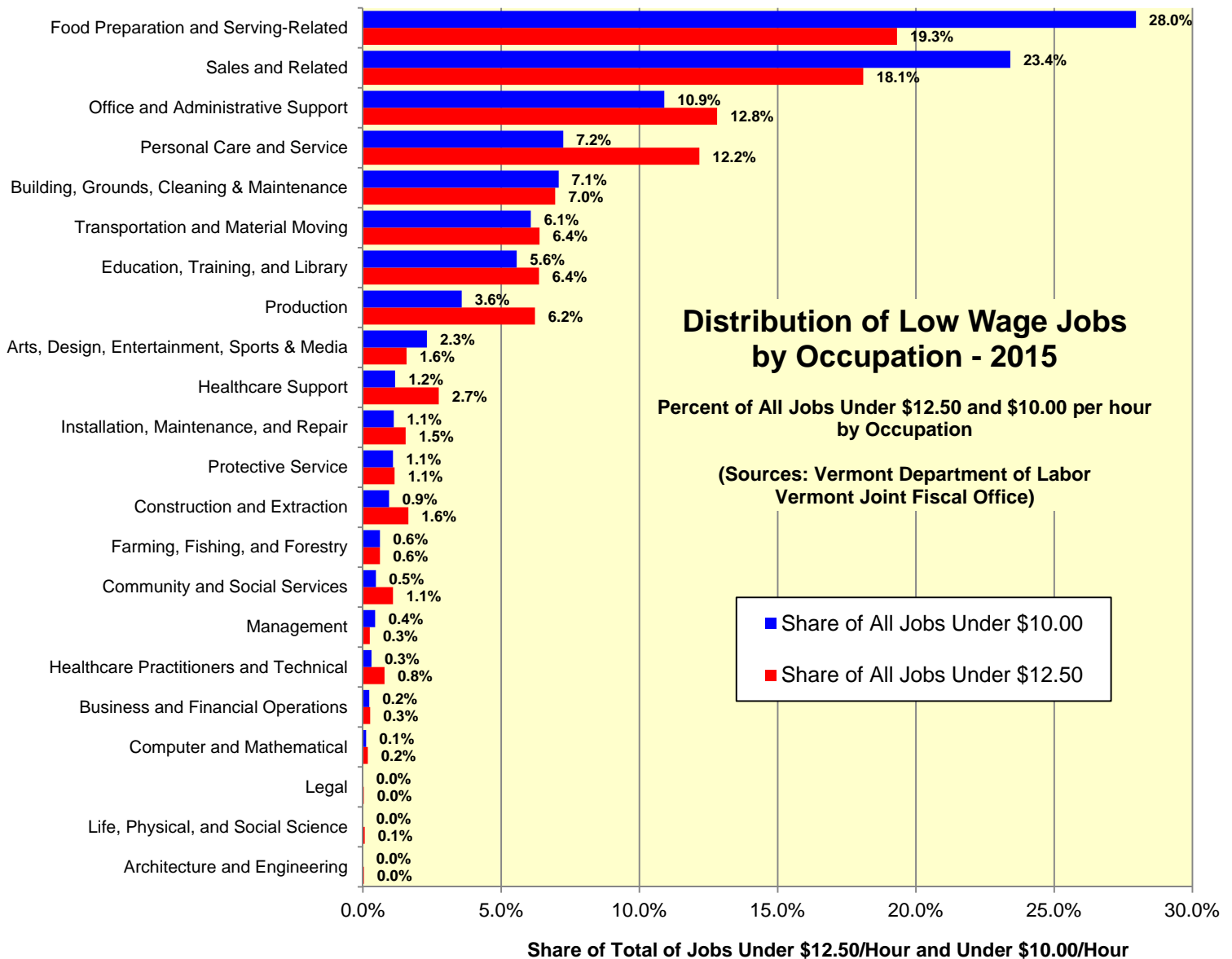
Age of Workers Earning Less than \$12.50



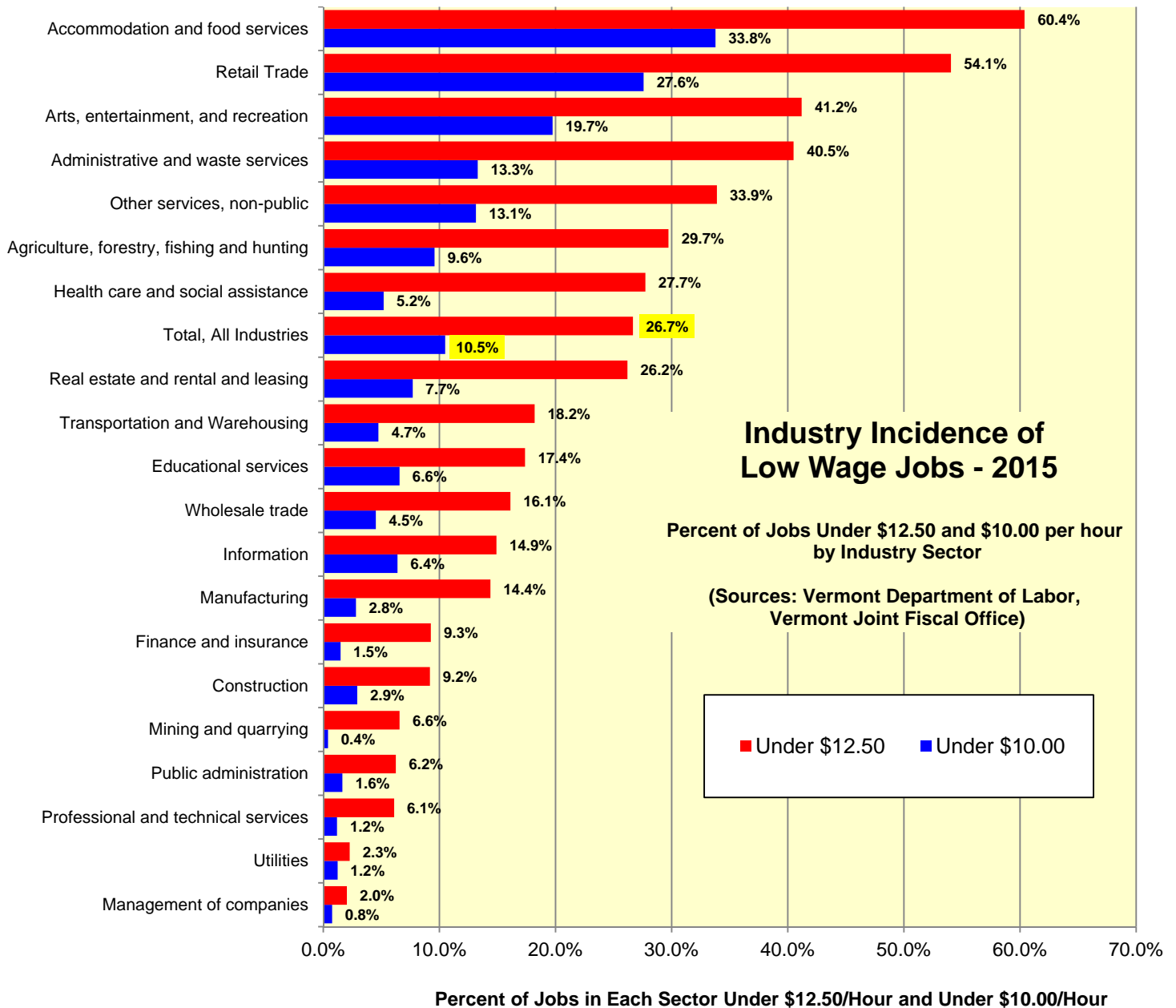
years, the share of low wage Vermont workers who are women has declined from about 61% to about 55%.

The educational attainment of low wage workers continues to be correlated with wage rates, with those not completing high school representing 10% of the workers earning less than \$12.50 an hour and 14% of those earning less than \$10.00. Conversely, those with a college degree comprised 15% of all workers earning less than \$10.00 and 18% of all those earning less than \$12.50 per hour. These figures are roughly comparable with findings in 1999.

Per the chart below, occupational data reveal that most low wage jobs are in food services, sales, clerical and personal service occupations.



A similar concentration of low wage jobs in major industrial sectors is also evident. As shown in the below chart, accommodation and food services, retail trade, arts-entertainment-recreation, administrative services and other non-public service sectors have the highest reliance on low wage workers. More than one-third of all accommodation and food service sector jobs pay less than \$10.00 per hour and more than 60% pay less than \$12.50 per hour.



The industries with the least reliance on low wage jobs include management, utility, professional and technical services, government, mining and construction. Of note, the total share of jobs paying less than \$10.00 per hour in 2015 is expected to be just over 10%, whereas jobs paying less than \$12.50 will comprise nearly 27% of all jobs.

ECONOMIC IMPACTS OF RAISING THE MINIMUM WAGE

Few subjects in the economics profession have been more studied than minimum wage changes. Despite this, few generate as much divergence in professional opinion as expected impacts and policy efficacy associated with such changes.

While the theoretical economic principle underlying most minimum wage analysis is not contested – that raising the price of an input to production, such as labor, will reduce the demand for the input - observed “real world” impacts reveal complications to the theory that have yet to be fully measured and understood. In most of the minimum wage studies performed to date, the expected reduction in demand for labor has either been non-existent or of relatively small magnitude.³ There are many possible reasons for this, including employer responses such as reducing employee hours, reducing benefits, reducing training, wage compression (paying new higher wage workers less), price increases and reduced profit margins – all of which could absorb increased labor costs without reducing job counts – as well as other effects, such as reduced employee turnover, efficiency wage responses from workers, increases in aggregate demand and changes in employment composition.

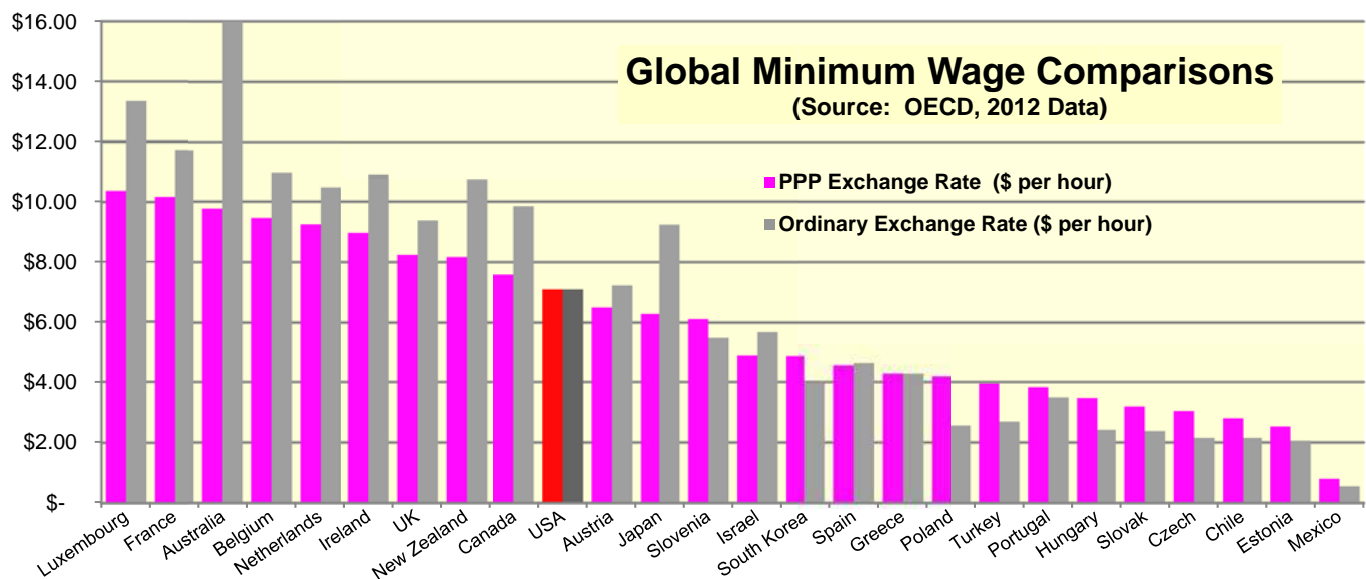
One of the most important reasons that studies to date have not found significant disemployment effects, however, is that virtually all of the minimum wage changes analyzed have been relatively “modest.” As depicted in the chart on page 4, the real U.S. minimum wage declined more than 37% from 1968 to 1995 and has averaged less than \$7.00 per hour (\$6.94 in January 2014 dollars) between 1995 and 2014. For much of this period, it has been below 35% of the average hourly wage of all production and non-supervisory workers and has been below the federal poverty level for a family of two (assuming full-time, year-round work) for almost all of the past 30 years. Despite large percentage changes in the minimum wage at times by the federal government and various states, the rates have generally lagged prevailing wage rates and productivity growth and have affected relatively small shares of the workforce and total wages.

As a result of this, studies on minimum wage impacts have revealed correspondingly minor changes in employment, even among the groups most likely to be affected (poorly educated, younger, lowest wage and female workers). Most economists who point to the disconnect between minimum wage and employment changes are careful to limit their conclusions to

³ See, most prominently, Card, David and Alan Krueger. 1994. “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania.” *American Economic Review*, vol. 48, no. 4, pp. 772-793; Card, David and Alan Krueger. 1995. *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton, NJ: Princeton University Press; Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. “Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties.” *Review of Economics and Statistics*, vol. 92, no. 4, pp. 945-964; Dube, Arindrajit, T. William Lester, and Michael Reich. 2012. “Minimum Wage Shocks, Employment Flows and Labor Market Frictions.” Berkeley, CA: Institute for Research on Labor and Employment. <http://escholarship.org/uc/item/76p927ks>; And, contesting these analyses, most prominently, Neumark, David and William Wascher. 2006. “Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research.” National Bureau of Economic Research Working Paper 12663. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w12663>; Neumark, David and William Wascher. 2008. *Minimum Wages*. Cambridge, MA: The MIT Press; Sabia, Joseph J., Richard V. Burkhauser, and Benjamin Hansen. 2012. “Are the Effects of Minimum Wage Increases Always Small? New Evidence from a Case Study of New York State.” *Industrial and Labor Relations Review*, vol. 65, no. 2, pp. 350-376; and, Hoffman, Saul D. and Diane M. Trace. 2009. “NJ and PA Once Again: What Happened to Employment When the PA–NJ Minimum Wage Differential Disappeared?” *Eastern Economic Journal* 35 (1): 115-128.

“modest”⁴ or “reasonable”⁵ changes in the minimum wage. Few, however, have attempted to define the level at which a minimum wage change would become “immodest.” Jared Bernstein, a senior fellow at the Center on Budget and Policy Priorities and former chief economist to Vice President Biden, has suggested that “moderate” minimum wage increases are those that include “not much more than 10 percent of the workforce in their sweep.” David Card, who was the first to demonstrate that small changes in a state’s minimum wage may have little or no employment effects, stated in an interview with Douglas Clement of the Minneapolis Fed, that his research “doesn’t mean that if we raised the minimum wage to \$20 an hour we wouldn’t have massive problems.”⁶

While a Vermont minimum wage change to \$10.00 per hour in 2015 would represent an increase in the current minimum wage of about 15% (12% above the expected minimum wage of \$8.90 in January of 2015), affect about 10% of the labor force and add about 5% to the total wage bill, an increase to \$12.50 would represent a 43% increase, affect 27% of the labor force and increase total wage payments by 20%. A \$12.50 minimum wage would be more than 34% above the highest state rate in the country (WA) and more than 20% above the highest rate in the world (Luxembourg) on an equivalent purchasing power parity basis. None of the source studies that found little or no employment effects considered an increase of this level or magnitude. An increase to \$12.50 would thus be unprecedented and correspondingly uncertain in its impacts.



⁴ For example, in a widely cited 2013 paper by John Schmitt of the Center on Economic and Policy Research, he states: “This is one of the most studied topics in economics, and the evidence is clear: modest minimum wage increases don’t have much impact on employment...” For the full report, see: <http://www.cepr.net/documents/publications/min-wage-2013-02.pdf>

⁵ Laura D’Andrea Tyson, former Chair of the Council of Economic Advisors under President Clinton and an economics professor at the Haas School of Business at the University of California, “finds no significant effects on employment when the minimum wage increases in reasonable increments.” See: <http://economix.blogs.nytimes.com/2013/12/13/raising-the-minimum-wage-old-shibboleths-new-evidence/>

⁶ For the complete interview, see: http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=31908

As shown in the charts on the following two pages, the impacts of raising the minimum wage will vary by industry sector. Those sectors most affected are characterized by a relatively high reliance on low wage workers (expressed on the x-axis as the percentage of workers earning less than \$10.00 and \$12.50, respectively) and an inability to pass on price increases due to competitive pressures (expressed on the y-axis as a REMI model construct indicating relative external competitive sensitivity).

In order to help quantify ranges of possible economic impacts, we utilized a Vermont State model from Regional Economic Models, Inc. (REMI), as was done in the prior legislative study in 1999. The REMI model represents a standard theoretical economic framework for estimating economic impacts.⁷ As such, it does not fully account for the recent observed effects of low level minimum wage changes. Working with REMI economists, we specified the model to account for these realities and other fiscal effects⁸, including:

- 1) The change in the wage bill by industry, based on DOL hourly wage data, hours worked and estimates of wage spillover effects
- 2) The change in production costs by industry
- 3) Adjustments to wage income and induced effects to consumption
- 4) Suppression of employer provided benefit increases consistent with higher wage income, and
- 5) Incorporation of changes in enrollment in state and federal aid programs associated with wage income changes, including program expenditures and transfer payment changes

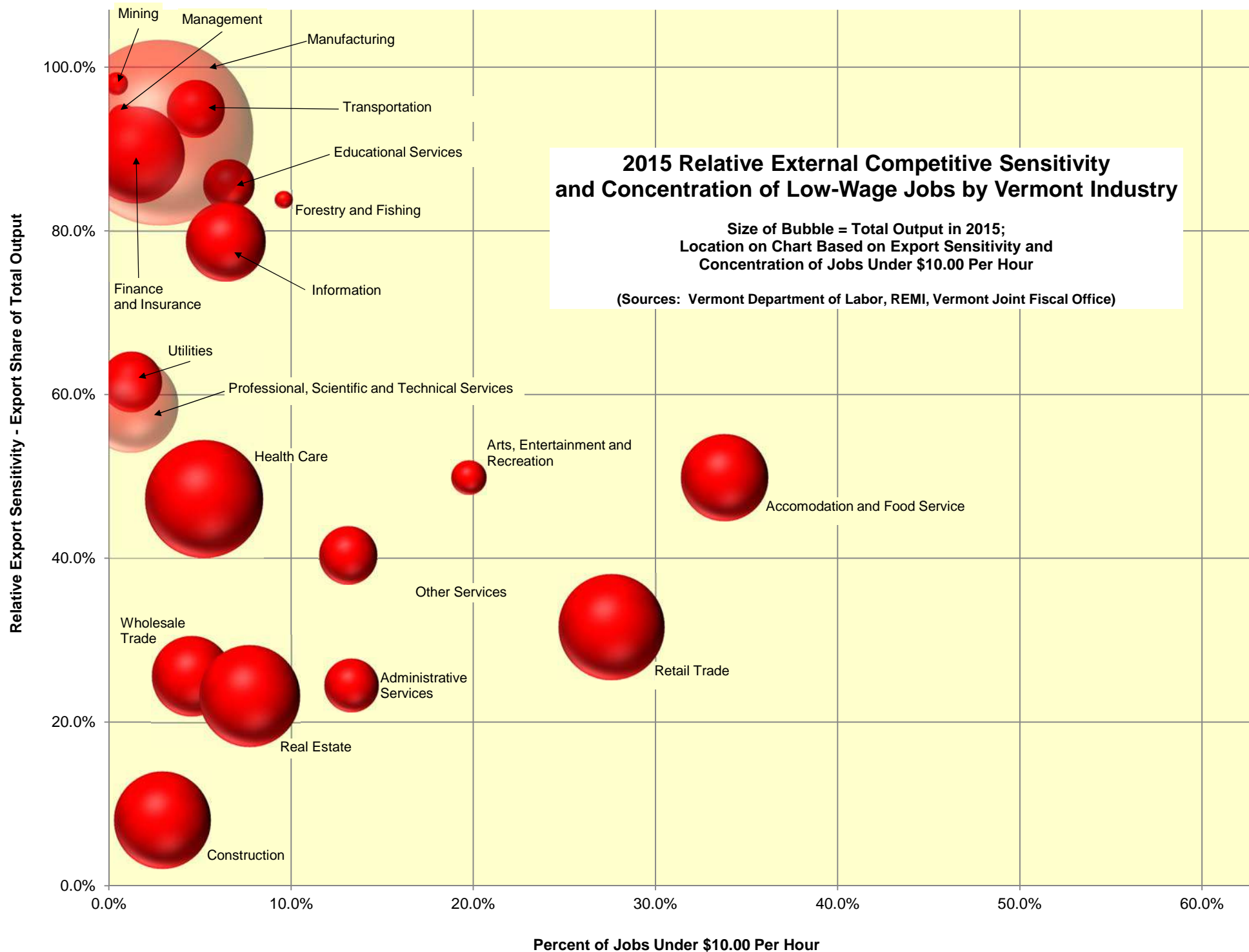
The economic effects of these changes included:

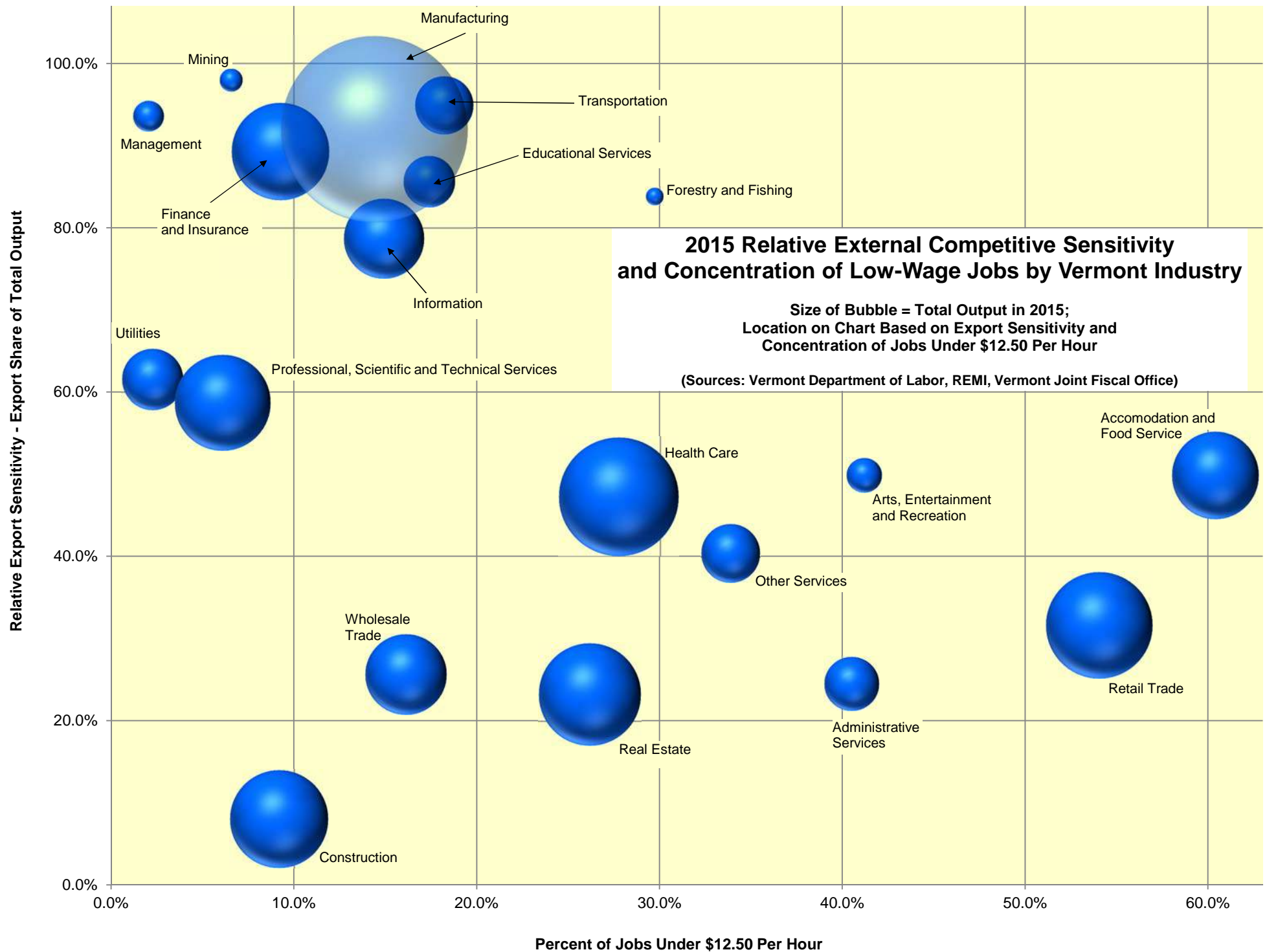
- 1) An increase in aggregate earned income of low wage workers and their families
- 2) A reduction in the number of hours worked and/or the elimination of some low wage jobs
- 3) A reduction in state benefit payments as growing low wage income disqualifies some from program participation
- 4) An increase in State tax payments as taxable income rises
- 5) A reduction in federal transfer payments into the State as growing low wage income disqualifies some from program participation, and
- 6) Increased federal tax payments as taxable income rises

Although further model work is ongoing, preliminary impacts indicate that a \$10.00 minimum wage would result in about 250 fewer jobs (or an equivalent reduction in hours), less than 0.1% of total employment, and aggregate income gains to low wage workers of approximately \$30 million. As some of these workers transition away from State benefits and pay more in taxes, the net fiscal gain to the State is about \$3 million. The reduction in federal transfer payments as a result of lower federal aid participation, however, could result in

⁷ The REMI PI+ model v1.5 is more fully described at: <http://www.remi.com/resources/documentation> For further information regarding model equations, specifications and simulations, please contact the Vermont Joint Fiscal Office.

⁸ Detailed model constructs and REMI model specification inputs are available from the Joint Fiscal Office upon request.





approximately \$5 million in reduced Medicaid, EITC, SNAP (3 Squares) and other payments to the State.

Impacts associated with a \$12.50 minimum wage include job losses of about 3,200 jobs, about 1% of total employment, and aggregate income gains to low wage workers of about \$250 million. As some of these workers transition away from State benefits and pay more in taxes, the net fiscal gain to the State should total about \$20 million. The reduction in federal transfer payments as a result of lower federal aid participation, however, could result in approximately \$35 million in reduced Medicaid, EITC, SNAP (3 Squares) and other payments to the State.

BENEFIT INTERACTIONS AND NET INCOME IMPACTS OF RAISING THE MINIMUM WAGE

The above-mentioned impacts associated with public benefit reductions will reduce government expenditures at both the state and federal levels, but can create substantial unintended negative net income effects for some low wage workers. An example of this is presented in the chart on the following page, in which gains in earned income at wages between about \$9.60 per hour and \$16.80 per hour (assuming full time work) actually result in reductions in net family income, as benefits are withdrawn and taxes increased at levels exceeding the earned income gains. In this situation, the worker would have no incentive for work advancement or the assumption of additional hours and would actually have an incentive to work fewer hours in the event of a minimum wage change to \$10.00 or even \$12.50 per hour.

As shown in the chart on page 16, benefit reductions vary considerably by family configuration. For a single worker with no children, there are no disincentives to work as earned income rises. This is the type of benefit interaction that is optimal. Further work, such as was performed for the legislature in 1999, is required to estimate current benefit reduction flows for all family configurations and recommend possible program changes so as to maintain work incentives as earned income increases.

SUMMARY AND RECOMMENDATIONS

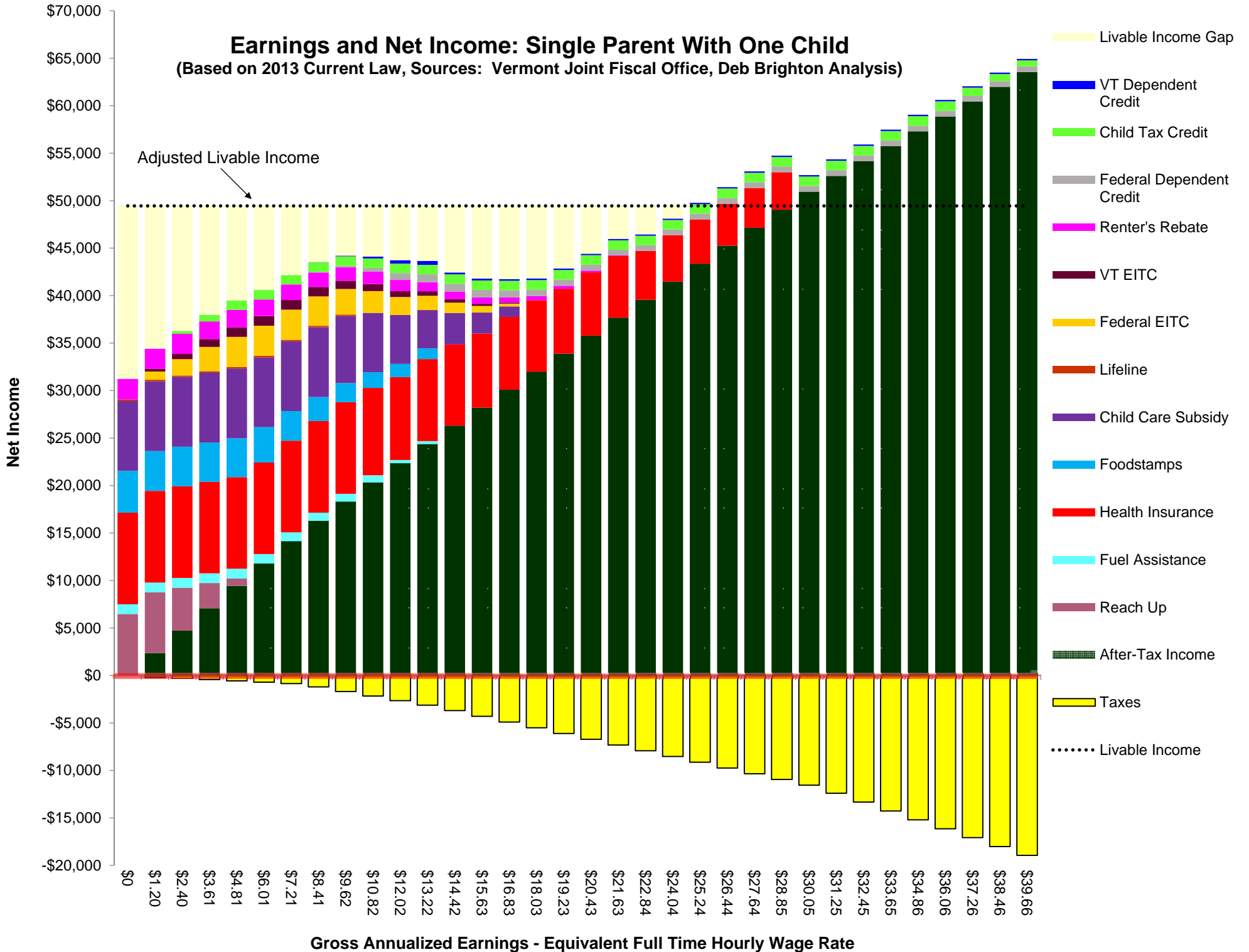
We find that a minimum wage increase to \$10.00 would probably have negligible, if any, negative aggregate economic consequences and could be an important component in advancing some of the lowest income workers towards a livable income. We also find, however, that a \$12.50 minimum wage has serious drawbacks that limit its efficacy in achieving the overall objective of improving the well-being of low-wage, working Vermonters and their families.

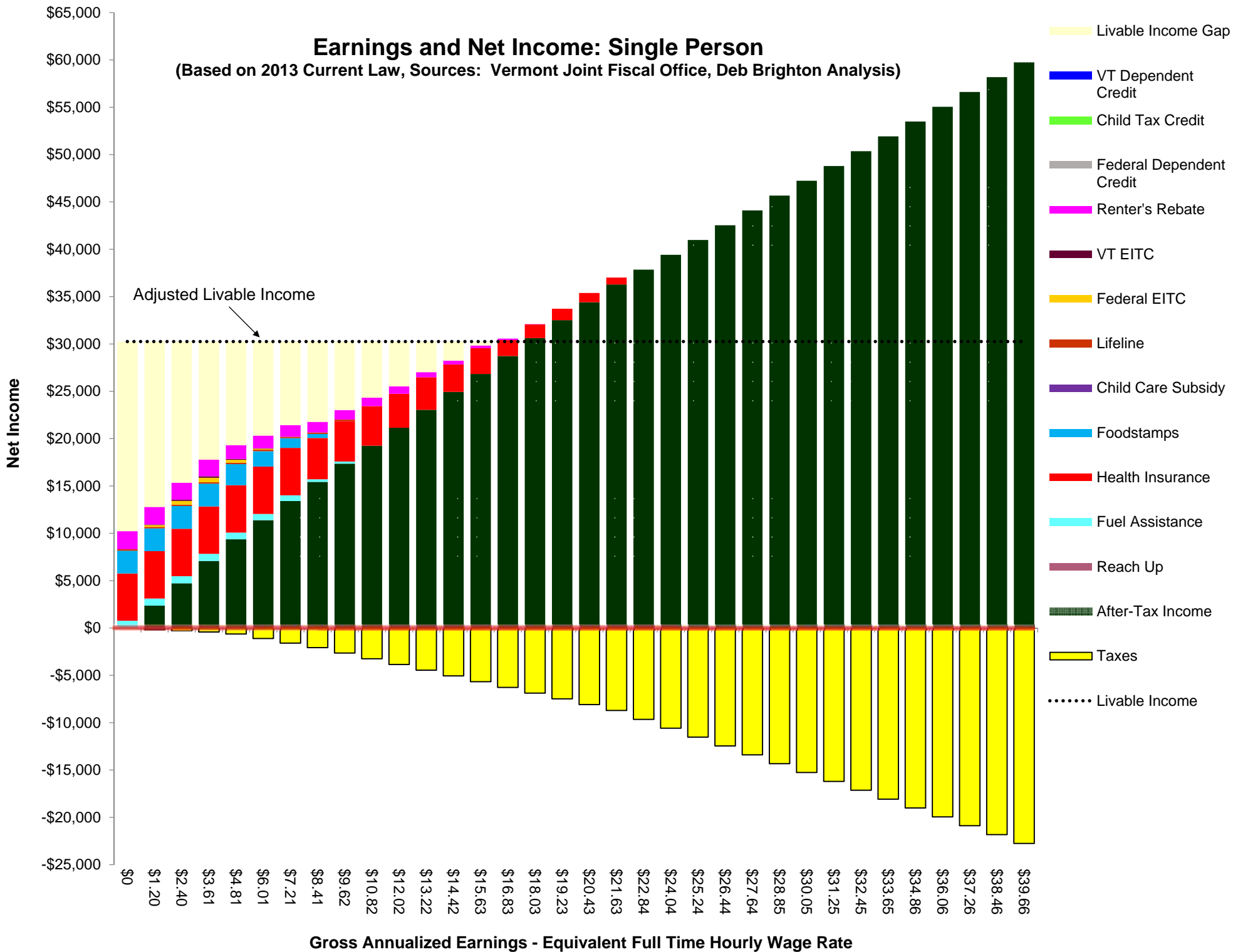
These drawbacks are associated with four important findings and associated recommendations:

FINDING 1: Earned income growth among the lowest income workers can result in precipitous state and federal public benefit reductions, substantially offsetting and in some cases completely negating improvements in net family income from minimum wage

Earnings and Net Income: Single Parent With One Child

(Based on 2013 Current Law, Sources: Vermont Joint Fiscal Office, Deb Brighton Analysis)





changes. Accordingly, these benefit reductions can eliminate incentives to work for many low-wage workers.

RECOMMENDATION 1: A comprehensive analysis of benefit loss interactions with earned income gains is essential so as to adjust public benefit programs wherever possible in order to preserve work incentives at all wage levels, especially those below a livable income.

FINDING 2: Potential reductions in federal transfer payments can generate substantial negative economic impacts, as earned income replaces federal aid.

RECOMMENDATION 2: Specific program options should be explored with federal program administrators and Vermont's Congressional delegation so as to determine whether any redirection of reduced federal transfer payments may be possible.

FINDING 3: Federal (especially) and State income taxes consume a significant proportion of marginal income well below livable income levels. These high marginal tax rates in tandem with public benefit reductions sap work incentives and delay achievement of a livable income.

RECOMMENDATION 3: In tandem with potential minimum wage and benefit program changes, consideration should be given to a mix of State tax changes and benefit programs that can most efficiently maximize low wage workers' incomes and State revenues, minimize public benefit expenditures and preserve incentives to work.

FINDING 4: Minimum wage increases that even approach an average livable wage would result in significantly fewer jobs for low wage workers. A substantial increase in the relative cost of labor will result in a reduction in the amount of labor used. This occurs both from incremental reductions in hours and jobs within firms continuing or beginning operation in the State, and the elimination or relocation out-of-State of other firms. A state can mandate the minimum wage an employer must pay, but it cannot mandate the minimum number of workers an employer hires or the minimum number of hours they work. A small state such as Vermont cannot expect to sustain a dramatic variation with the U.S. minimum wage without counterproductive economic consequences.

RECOMMENDATION 4: Further research is required to better understand the likely maximum beneficial minimum wage level in the State. The 15 year, 20% Vermont average minimum wage differential with that of New Hampshire should be thoroughly studied to determine potential negative and other economic impacts. Based on this analysis, recommendations for an optimal State minimum wage could be advanced. Such analysis would be particularly important if the federal minimum wage is increased in the near future.

Appendix 7: Kavet, Rockler & Associates, LLC, February 8, 2017 Memorandum



Kavet, Rockler & Associates, LLC

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Memorandum

To: Steve Klein, Chief Fiscal Officer, Joint Fiscal Office
From: Tom Kavet
CC: Sara Teachout, JFO
Date: February 8, 2017
Re: Proposed Five Year Minimum Wage Increase to \$15.00/hour in 2022

Background

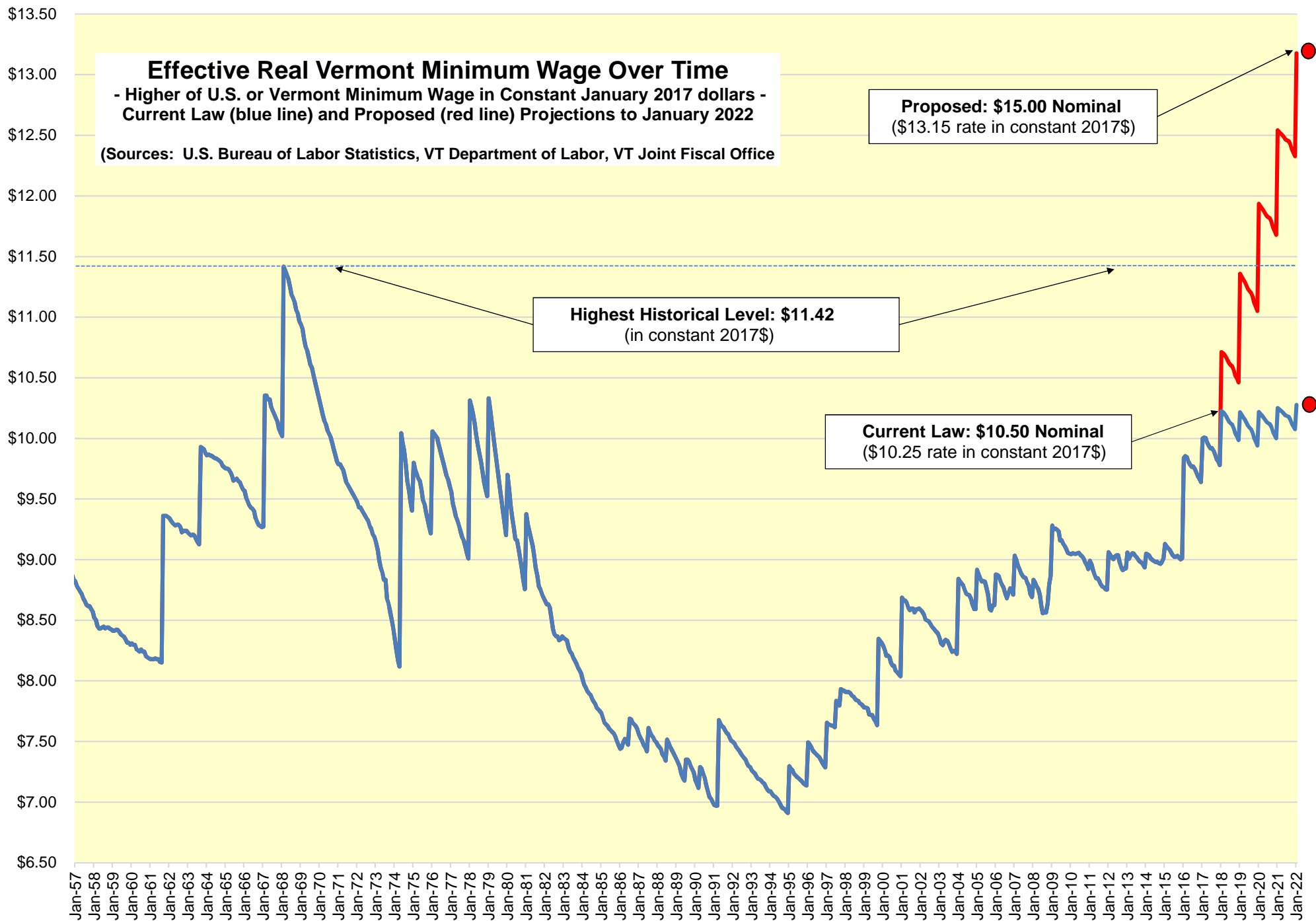
As requested, I have reviewed our prior minimum wage analysis from 2014 (attached as Appendix A), associated with a \$10.00/hour and \$12.50/hour minimum wage change for implementation in 2015, in light of the proposed one dollar per year, five year minimum wage escalation, from \$11.00/hour to \$15.00/hour between 2018 and 2022. The proposed change would supersede the current law increase to \$10.50/hour in 2018 and increases indexed to the smaller of 5% or the inflation rate (as measured by the Consumer Price Index) in subsequent years.

The chart on the following page depicts both the current law and proposed minimum wage in constant (inflation-adjusted) January 2017 dollars, to 2022, based on the most recent consensus forecasts of inflation. In 2017 constant dollars, the \$15.00/hour rate in 2022 would be about \$13.15. The current law level would otherwise be about \$10.25/hour (\$10.50 in 2018, adjusted for inflation each year) in 2017 dollars. Based on the proposed change, the minimum wage would rise to about the same level as its prior all-time high (reached in February of 1968 at \$11.42/hour in 2017 dollars) in 2019, and exceed it in 2020 (at about \$11.94) and every year thereafter (leveling off at a top real rate of \$13.15 in 2022 and beyond).

Limitations and Relevance of Prior Analysis

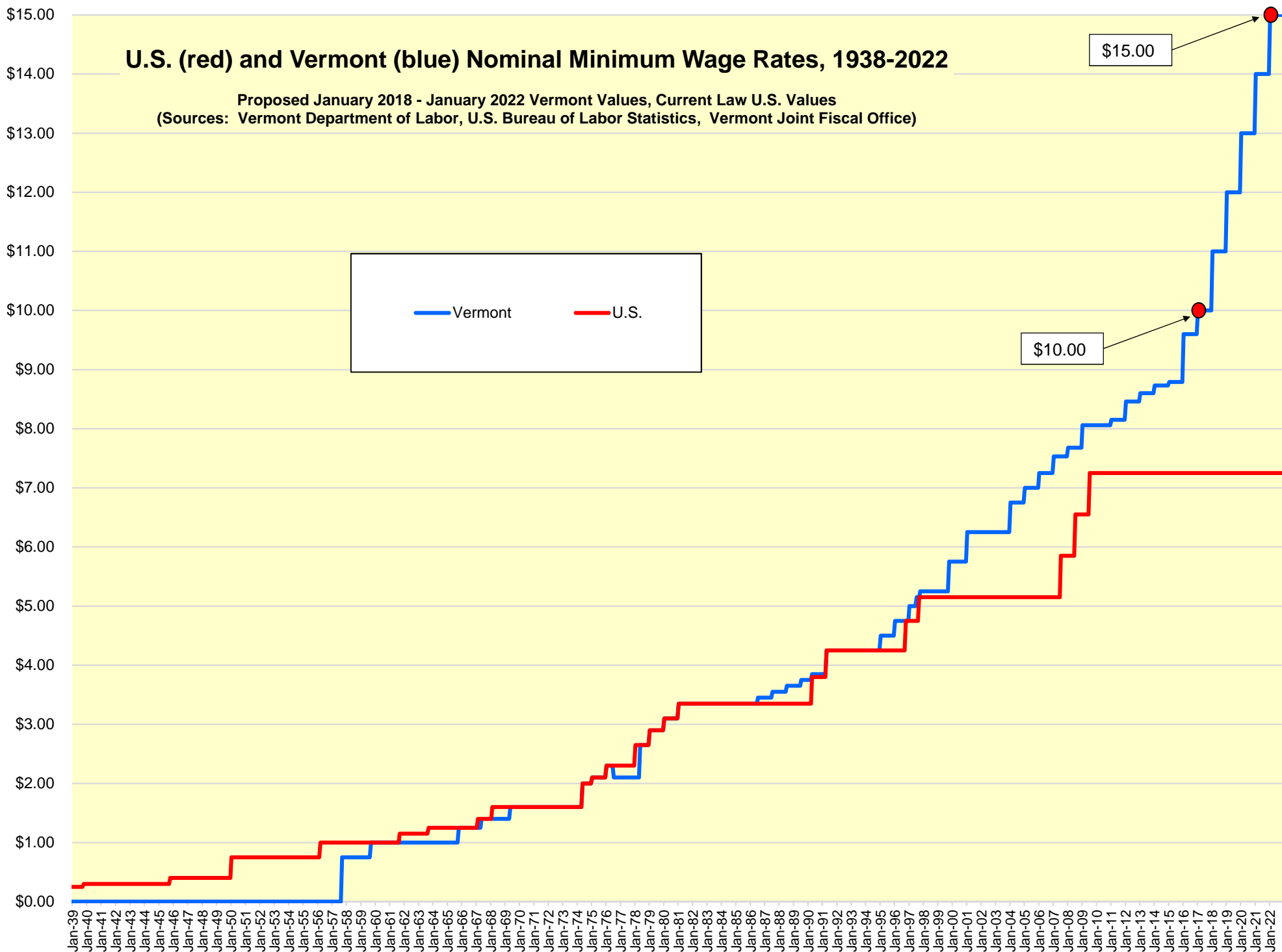
In order to assess the potential economic impacts of the proposed minimum wage change, we have requested supporting data from the Vermont Department of Labor with which to perform initial and more extensive analysis, if desired. The source Labor data is expected to be available by about February 17th, and the processing of these data and subsequent initial analysis completed by mid-March, if desired. While there is no substitute for analysis specific to this proposal, in the interim, there are elements in the prior 2014 analysis that are likely to be relevant to the current proposal and may inform consideration of it.

In general, the potential impacts of the prior analysis of a 2015 increase to \$12.50/hour are more relevant than those pertaining to the \$10.00/hour increase. A \$15.00/hour minimum wage in 2022 is the equivalent of about a \$12.70/hour wage in 2015. Thus, assuming all other variables to be constant, impacts would be expected to be at or slightly exceeding those outlined in the prior study at \$12.50/hour.



U.S. (red) and Vermont (blue) Nominal Minimum Wage Rates, 1938-2022

Proposed January 2018 - January 2022 Vermont Values, Current Law U.S. Values
(Sources: Vermont Department of Labor, U.S. Bureau of Labor Statistics, Vermont Joint Fiscal Office)



Given that there have not been major structural changes in the labor market between 2012 (the year of the Labor Department source data used in the prior analysis) and 2015 (the most recent year available for current analysis), most of the tables and charts showing the distribution of low wage jobs by industry sector and occupation, the profiles of lower wage jobs and workers, impact sensitivity by industry sector, shares of impacted workers, federal and state fiscal impacts, and possible job losses and/or reduction in hours worked, would probably be of similar orders of magnitude to those analyzed at the \$12.50/hour level.

With respect to competitive relative wage conditions, a record 19 states raised their minimum wages in January of 2017, with Massachusetts and Washington raising theirs to \$11.00/hour, just below that of Washington, D.C. at \$11.50/hour, the highest in the nation. Vermont is tied for the sixth highest state rate with Arizona, at \$10.00/hour (see chart on page 5). Quebec's minimum wage in Canadian dollars is now \$10.50/hour, the lowest of any Canadian province, but will go up to \$11.25 CAD in May – the equivalent of about \$8.50 USD at current exchange rates.

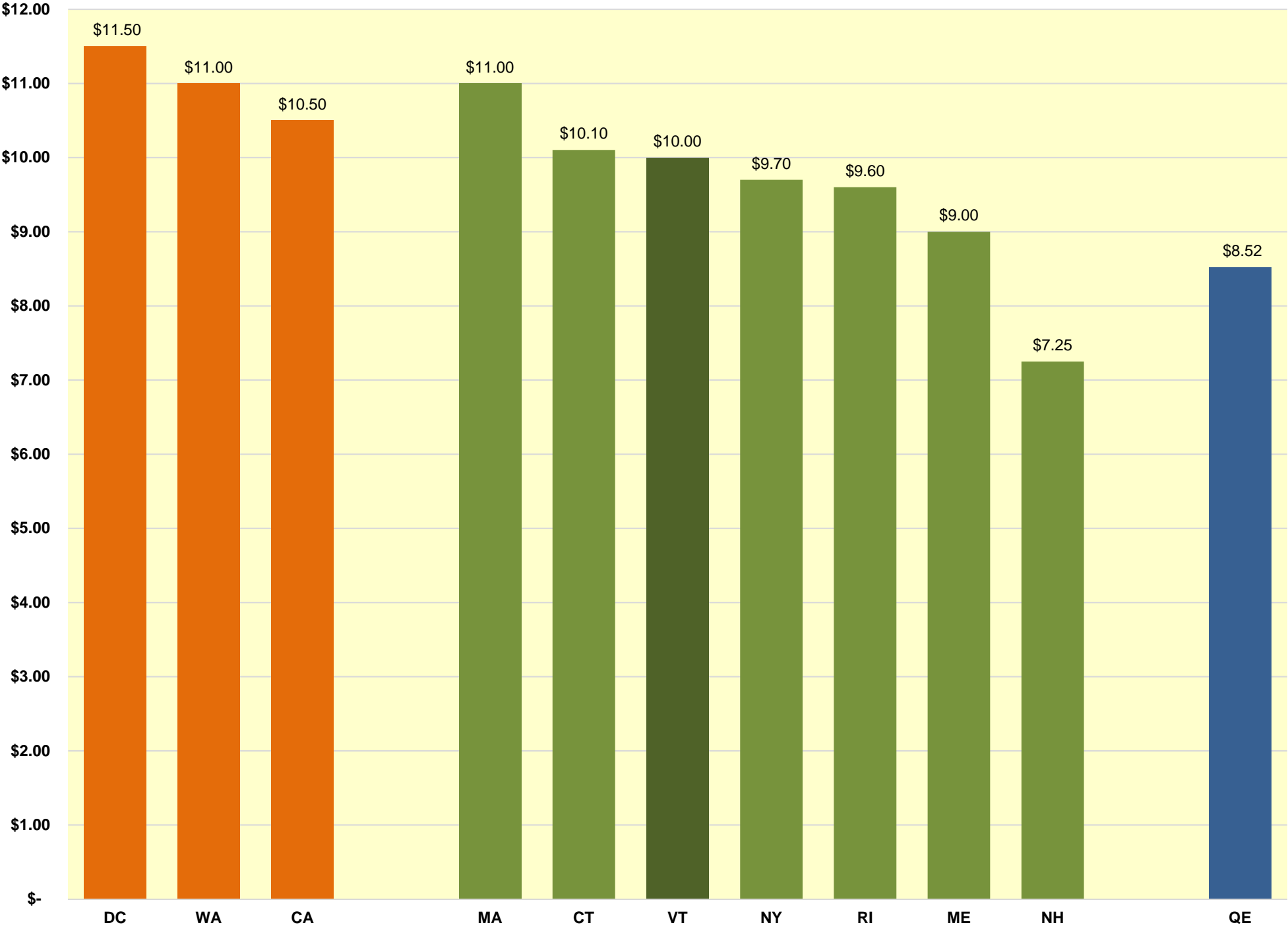
While many states have adopted automatic inflation indexing of their minimum wages, many have also now passed multi-year future wage increases, independent of inflation rates, such as that proposed in Vermont. California has passed a series of minimum wage increases that are almost identical to those proposed in Vermont (ending at \$15.00/hour in 2022). Only the District of Columbia has enacted a minimum wage increase that is higher (at \$15.00/hour two years earlier, in 2020).

States Enacting Phased-In and Future Minimum Wage Rates

State	Highest Future Rate	Year
District of Columbia	\$15.00	2020
California	\$15.00	2022
Washington	\$13.50	2020
Oregon	\$13.50	2022
New York	\$12.50	2021
Maine	\$12.00	2020
Colorado	\$12.00	2020
Arizona	\$12.00	2020
Vermont	\$10.50	2018
Maryland	\$10.10	2018
Hawaii	\$10.10	2018
Michigan	\$9.25	2018

As noted in the prior memo, the pronounced and growing minimum wage rate differential with New Hampshire and other states at or near the Federal minimum wage of \$7.25 represents a potential economic risk that further study could help assess. To this end, Mat Barewicz, Economic and Labor Market Chief at the Vermont Department of Labor, has been in touch with his counterpart in New Hampshire regarding the possible development of comparable source data with which to perform such an analysis. While it is too early to know if this will be possible, the Director of the Economic and Labor Market Information Bureau for New Hampshire provided us with the below table, showing NH employment distributions for 2015 by gender and wage category. While these data are based on American Community Survey (ACS) data and are not as detailed or accurate as the source data we are currently using in Vermont, they give some indication of potential labor market and related societal characteristics that may be associated with persistent minimum wage differentials.

Vermont's Minimum Wage is Currently the 6th Highest in the U.S. and the 3rd Highest in the Region



Hourly Wage Distribution of New Hampshire Workers – 2015

New Hampshire	Percent of Total Employment	Under \$7.00	\$7.00 to \$7.99	\$8.00 to \$8.99	\$9.00 to \$9.99	\$10.00 to \$11.99	\$12.00 to \$14.99	\$15.00 to \$19.99	\$20.00 or more
Total both sexes	100.0%	2.6%	3.1%	7.2%	7.2%	14.9%	14.7%	22.9%	27.5%
Men	48.1%	0.3%	1.3%	2.1%	2.8%	6.2%	6.7%	11.3%	16.7%
Women	51.9%	2.3%	1.5%	4.9%	4.1%	8.7%	8.0%	11.3%	10.8%

Of note, these data suggest there may be more dramatic gender differentials in low wage jobs in New Hampshire than in Vermont, as well as a relatively high percentage of New Hampshire jobs under both the 2015 (at \$9.15) and current (\$10.00) Vermont minimum wages. Based on these data, about 13% of all NH employment in 2015 was under \$9.00/hour and about 20% was under \$10.00/hour. About 68% of the NH workers earning less than \$9.00/hour and 64% of those earning less than \$10.00/hour in 2015 were women. Although more detailed data from other sources would be needed to confirm and compare with Vermont data, further research could reveal existing and likely competitive impacts from this 15 year minimum wage differential.

Summary and Recommendations

Although most of the conclusions drawn in the prior analysis for a \$12.50 wage rate are probably relevant to the current proposal, the implementation of such wage changes over a five year period (i.e., five minimum wage changes in five years) has not previously been modelled for Vermont. Doing so could reveal impacts that differ from a single year change. Competitive impacts could also be more pronounced as the differential between the Federal minimum, currently governing the New Hampshire labor market, and the Vermont rate grows.

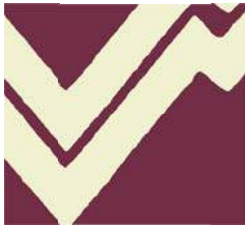
The current proposal would put Vermont at or near the highest state rate in the nation by 2022. As noted in the prior analysis, it would affect a very large share of the labor force, probably in excess of 25% of the employment base, with significant income growth for many and significant disemployment effects (fewer hours worked and fewer jobs) for others. Net fiscal impacts would likely be positive to the State (through reduced State benefit costs and higher taxable income), but with Federal transfer payment losses that could be as much as double the State fiscal gains, without Federal waivers or other policy changes.

The prior analysis of earnings and net income by family configuration at different minimum wage levels, performed by Deb Brighton, is also still relevant. It is my understanding that Deb is in the process of updating this analysis in connection with the proposed minimum wage change. In the prior analysis, many of the steepest disincentives to greater earned income as a result of benefit losses, are experienced at wages between about \$10.00/hour and \$20.00/hour. Thus, the recommendations in the prior analysis would probably all apply to the proposed change – as well as any minimum wage change within this range.

As new data become available, and further analyses developed, these conclusions will likely be updated and refined.

Appendix A

Prior Vermont Minimum Wage Analysis of
March 13, 2014



Kavet, Rockler & Associates, LLC

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Memorandum

To: Steve Klein, Legislative Joint Fiscal Office
From: Tom Kavet, Nic Rockler and Deb Brighton
CC: Sara Teachout, Joint Fiscal Office
Date: March 13, 2014
Re: Preliminary Analysis of \$10.00 and \$12.50 Vermont Minimum Wage

OVERVIEW

This review is a preliminary analysis of potential economic impacts associated with increases in the indexed Vermont minimum wage to \$10.00 per hour and \$12.50 per hour, effective January 1, 2015. This analysis is preliminary because source data and models necessary to run more comprehensive analyses require greater elapsed time to acquire, develop and process than is currently available. If more in-depth analysis is desired, a comprehensive study, such as that performed for the Vermont legislature in 1999¹, could be completed within about 2-3 months.

BACKGROUND

The Federal minimum wage was first implemented in October of 1938 as a part of the Fair Labor Standards Act, which eliminated child labor, set maximum workweek hours, fixed overtime work rules, and established a minimum wage of 25 cents per hour for selected industries. In explaining the rationale for the legislation, Franklin Roosevelt emphasized not only the economic purposes of the Act, but also the importance of social equity and elevation of the dignity of work in stating:

"No business which depends for its existence on paying less than living wages to its workers has any right to continue in this country. By living wages, I mean more than a bare subsistence level – I mean the wages of a decent living."

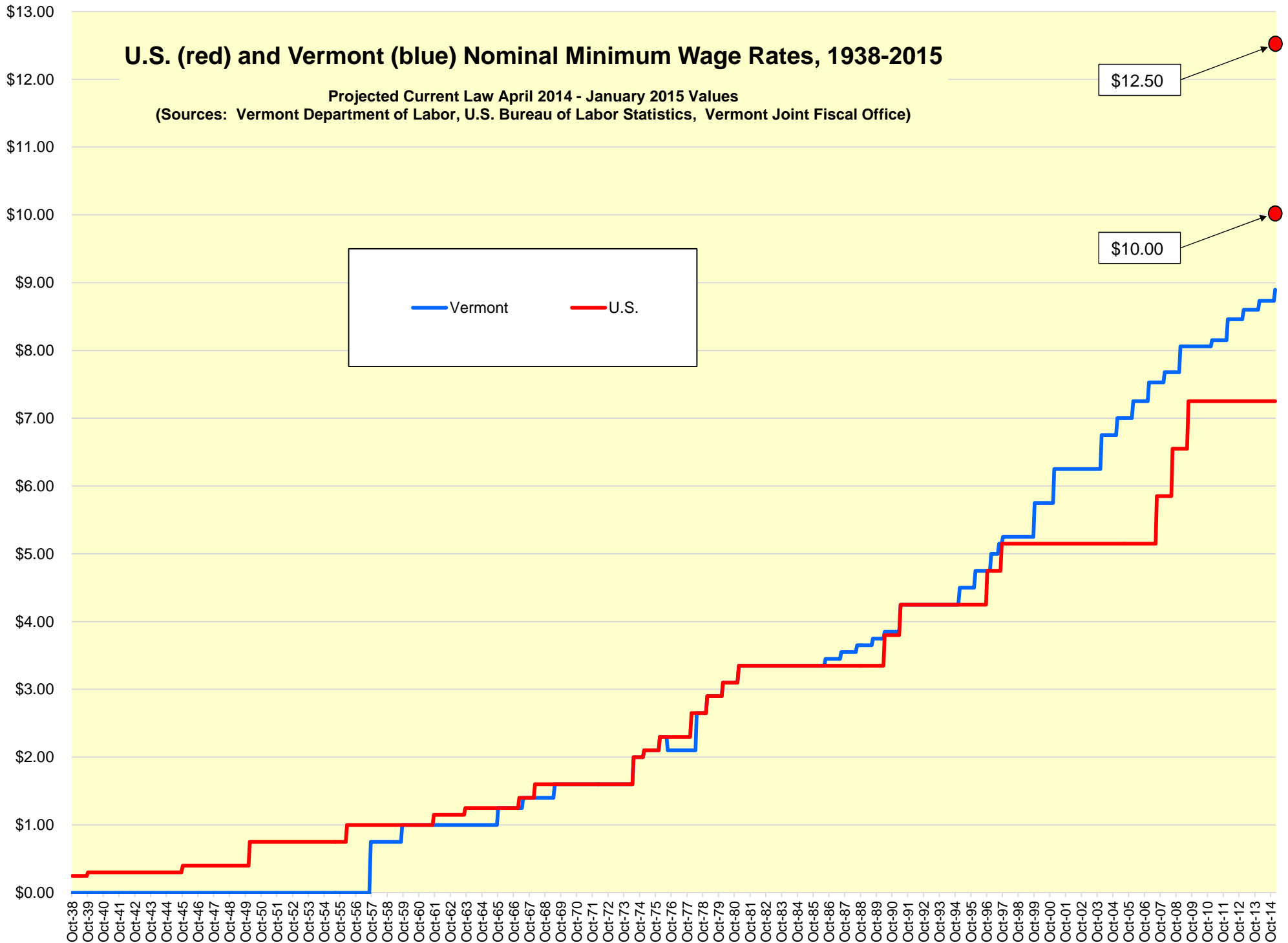
Per the chart on the following page, the first Vermont minimum wage was enacted in September of 1957 and tended to follow the Federal minimum wage until 1986, when it slightly exceeded the Federal rate for a period of about four and a half years. Between 1991

¹ See "Act 21 Research and Analysis in Support of the Livable Income Study Committee," available on the Joint Fiscal Office website at: <http://www.leg.state.vt.us/jfo/archives/reports/1999-11%20Livable%20Income%20Study.pdf>

U.S. (red) and Vermont (blue) Nominal Minimum Wage Rates, 1938-2015

Projected Current Law April 2014 - January 2015 Values

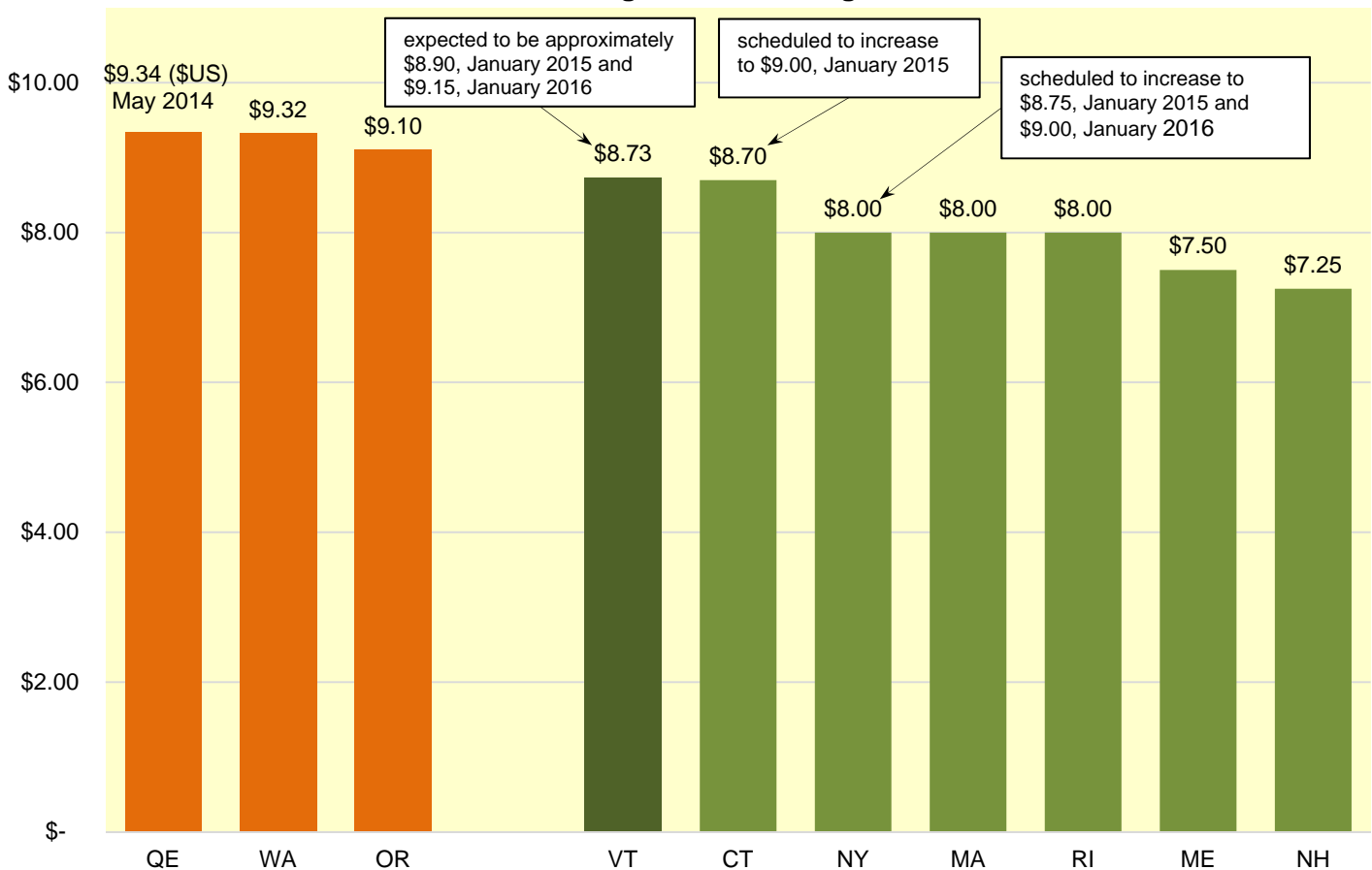
(Sources: Vermont Department of Labor, U.S. Bureau of Labor Statistics, Vermont Joint Fiscal Office)



and 1997, the Federal and Vermont rates were closely aligned, but since 1998, the Vermont rate has consistently exceeded the Federal. Between 1998 and 2014, the Vermont rate has been, on average, 22% above the U.S. and has been as high as 46% above the U.S. rate during a six month period at the start of 2007.

At \$8.73 per hour, Vermont's current minimum wage is 20% above the Federal rate of \$7.25 and is the third highest in the nation, after Washington (\$9.32) and Oregon (\$9.10). As shown in the below chart, Vermont's rate is close to that in Connecticut (currently at \$8.70, but scheduled to increase to \$9.00 effective January of 2015) and New York (currently at \$8.00, but scheduled to increase to \$8.75 in January of 2015 and \$9.00 in January of 2016). The minimum wage in Rhode Island is currently \$8.00 per hour, as also in Massachusetts, where the Senate recently voted to increase the rate to \$9.00 in July of 2014, \$10.00 in 2015 and \$11.00 in 2016. The nominal minimum wage in Quebec is \$10.15 (CAD) or about \$9.16 in U.S. dollars at current exchange rates and is scheduled to rise to \$10.35 (CAD) in May of this year (\$9.34 US). The lowest minimum wage rates in New England are in New Hampshire (at the Federal rate of \$7.25) and Maine (\$7.50).

Vermont's Minimum Wage is Currently the Third Highest in the U.S. and the Highest in New England

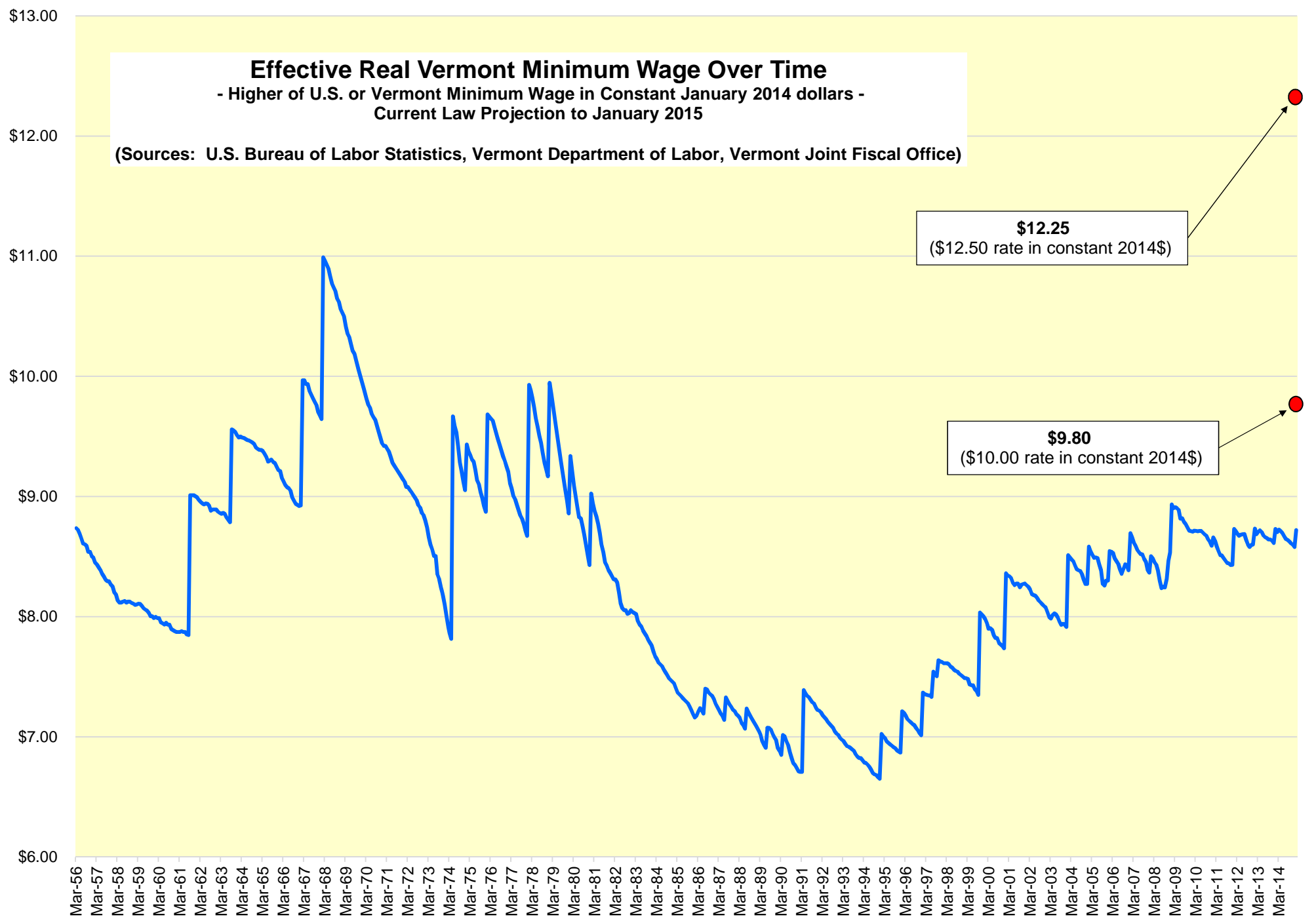


Because the current Vermont minimum wage is indexed to the Consumer Price Index, it is expected to increase to about \$8.90 in 2015, \$9.15 in 2016 and \$9.35 in 2017.

Effective Real Vermont Minimum Wage Over Time

- Higher of U.S. or Vermont Minimum Wage in Constant January 2014 dollars -
Current Law Projection to January 2015

(Sources: U.S. Bureau of Labor Statistics, Vermont Department of Labor, Vermont Joint Fiscal Office)



As illustrated in the chart on the preceding page, on an inflation-adjusted basis, the current Vermont rate is almost identical to the effective rate (the higher of the Federal or Vermont rate) 58 years ago in March of 1956, which was \$8.74 in January 2014 dollars. The highest effective Vermont rate was in February of 1968, at \$11.00 (current 2014 dollar basis). The real effective rate has only been above \$10.00 for a period of 22 months between February of 1968 and November of 1969. The average effective real Vermont minimum wage over the last 60 years has been \$8.31, in January 2014 dollars.

PROFILE OF LOW-WAGE JOBS AND WORKERS IN VERMONT

This analysis relies upon customized data extractions from the Vermont Department of Labor and microdata from the joint U.S. Census Bureau and U.S. Bureau of Labor Statistics Current Population Survey.² These two data sources provide measurements on minimum wage jobs and workers. The DOL data are from the 2012 Occupational Employment Survey and measure jobs by industry, occupation and wage level. The CPS data measure workers and hours worked by wage level, and family characteristics used to estimate public benefit eligibility and expenditures.

The tables and charts on the next page summarize some of the key characteristics of those affected by the two proposed minimum wage changes evaluated herein. For a \$10.00 minimum wage, they indicate about 30,000 jobs are likely to be paying less than \$10 per hour in 2015. There are, however, only about 20,000 workers that are likely to be earning less than \$10.00 per hour in 2015, implying an elevated incidence of part-time positions among the affected jobs and an elevated incidence of multiple jobholders among this group of workers. For a \$12.50 minimum wage, the figures are approximately 78,000 jobs and 53,000 workers.

The data on the following page also show that slightly more than half of all low wage workers (both those earning less than \$12.50 and \$10.00 per hour) earn more than 50% of their family's income. While low wage workers tend to be younger than the average worker, 54% of those earning less than \$10.00 per hour and 65% of those earning less than \$12.50 per hour are older than 30. While a majority of workers under age 22 who earn less than \$12.50 per hour and \$10.00 per hour are part time workers (51% of those under \$12.50 and 53% of those under \$10.00), most low wage workers over 22 years old are full-time (72% of those earning less than \$12.50 and 67% of those earning less than \$10.00 per hour).

These data also reveal that there is a pronounced gender differential among low wage workers, with women disproportionately represented in the lowest wage groups (56% of those earning less than \$10.00 per hour and 55% of those earning less than \$12.50). Of note, this is one of the few metrics that has shown structural improvement since the last detailed analysis of low wage workers in Vermont, performed in 1999. Over the last 15

² This analysis could not have taken place without the generous cooperation of Mat Barewicz, Economic and Labor Market Chief, and Kevin Stapleton, Economic and Labor Market Assistant Chief, at the Vermont Department of Labor, who coordinated DOL data access and customized aggregations by wage category, and Deb Brighton, on behalf of the Joint Fiscal Office, who processed and analyzed pooled CPS microdata for 2011-2013 and generated all public benefit and fiscal impact analyses with Stephanie Barrett of the Joint Fiscal Office. Both datasets were projected to 2015 levels using wage, price and other forecasts from the Joint Fiscal Office.

Vermont Profile of Lower Wage Jobs and Workers - 2015 Estimates

Low Wage Jobs in 2015

31,000 approximate number of private nonfarm covered jobs under \$10.00
11% of Vermont total

78,000 approximate number of private nonfarm covered jobs under \$12.50
27% of Vermont total

Top 6 Industries with Jobs Under \$10.00

34% Retail Trade
29% Accommodations & Food Service
8% Health Care & Social Assistance
8% Educational Services
4% Admin and Waste
3% Manufacturing
86% of all jobs under \$10.00/hr.

Top 6 Industries with Jobs Under \$12.50

26% Retail Trade
20% Accommodations & Food Service
19% Health Care & Social Assistance
9% Educational Services
6% Manufacturing
5% Admin and Waste
85% of all jobs under \$12.50/hr.

Gender Shares Under \$10.00

44% Male
56% Female

Gender Shares Under \$12.50

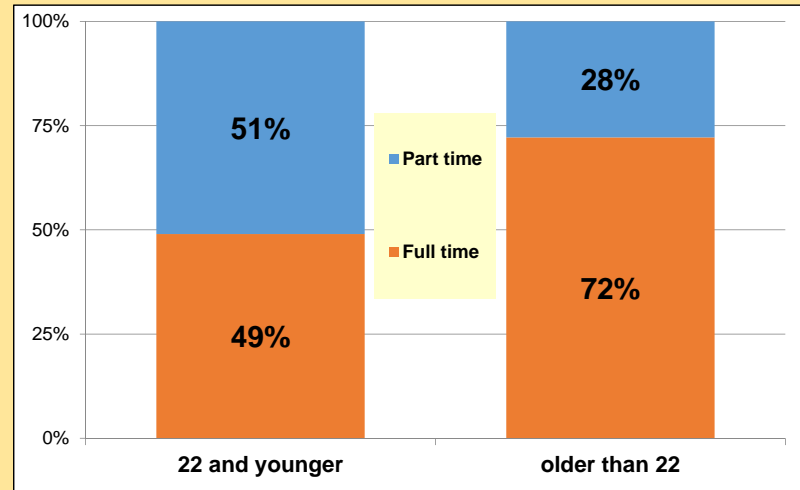
45% Male
55% Female

Low Wage Job Distribution

21% Minimum Wage - \$9.49
31% \$9.50 - \$10.49
24% \$10.50 - \$11.49
24% \$11.50 - \$12.49
100% of all jobs paying less than \$12.50/hr.

For Workers Earning Less than \$12.50,

49% of Age 22 and Younger Workers are Full Time
72% of Workers Older than 22 are Full Time



Of All Workers Earning Less than \$10.00,

52% of earn more than 1/2 of family income

47% are in families with income below \$30,000
11% are in families with income \$30,000-\$40,000
58% are in families with income below \$40,000

23% are under the age of 22
77% are older than 22
54% are older than 30

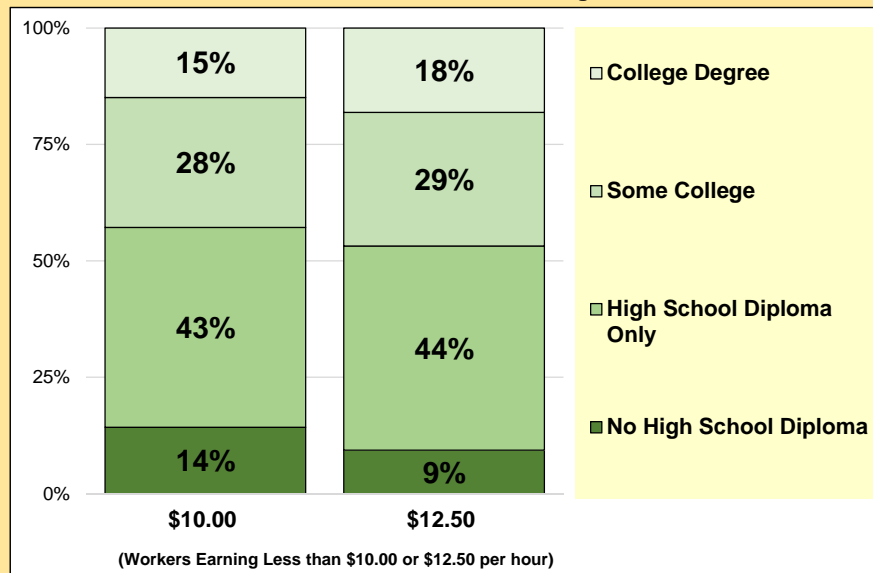
Of All Workers Earning Less than \$12.50,

55% of earn more than 1/2 of family income

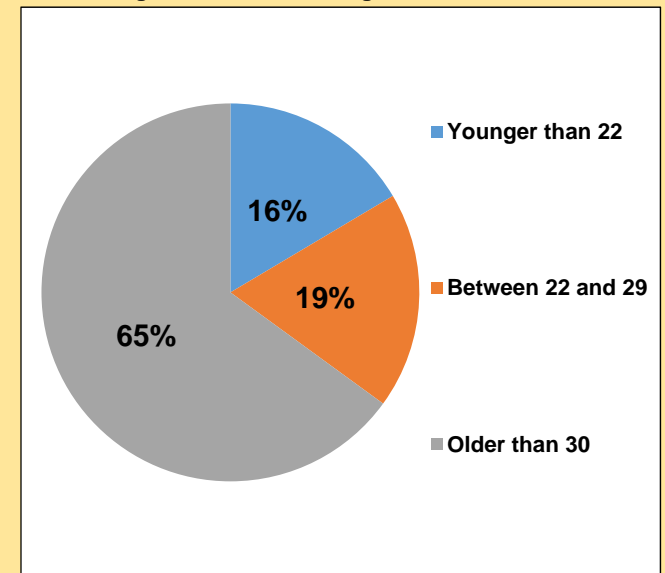
47% are in families with income below \$30,000
10% are in families with income \$30,000-\$40,000
57% are in families with income below \$40,000

16% are under the age of 22
84% are older than 22
65% are older than 30

Educational Attainment of Low Wage Workers



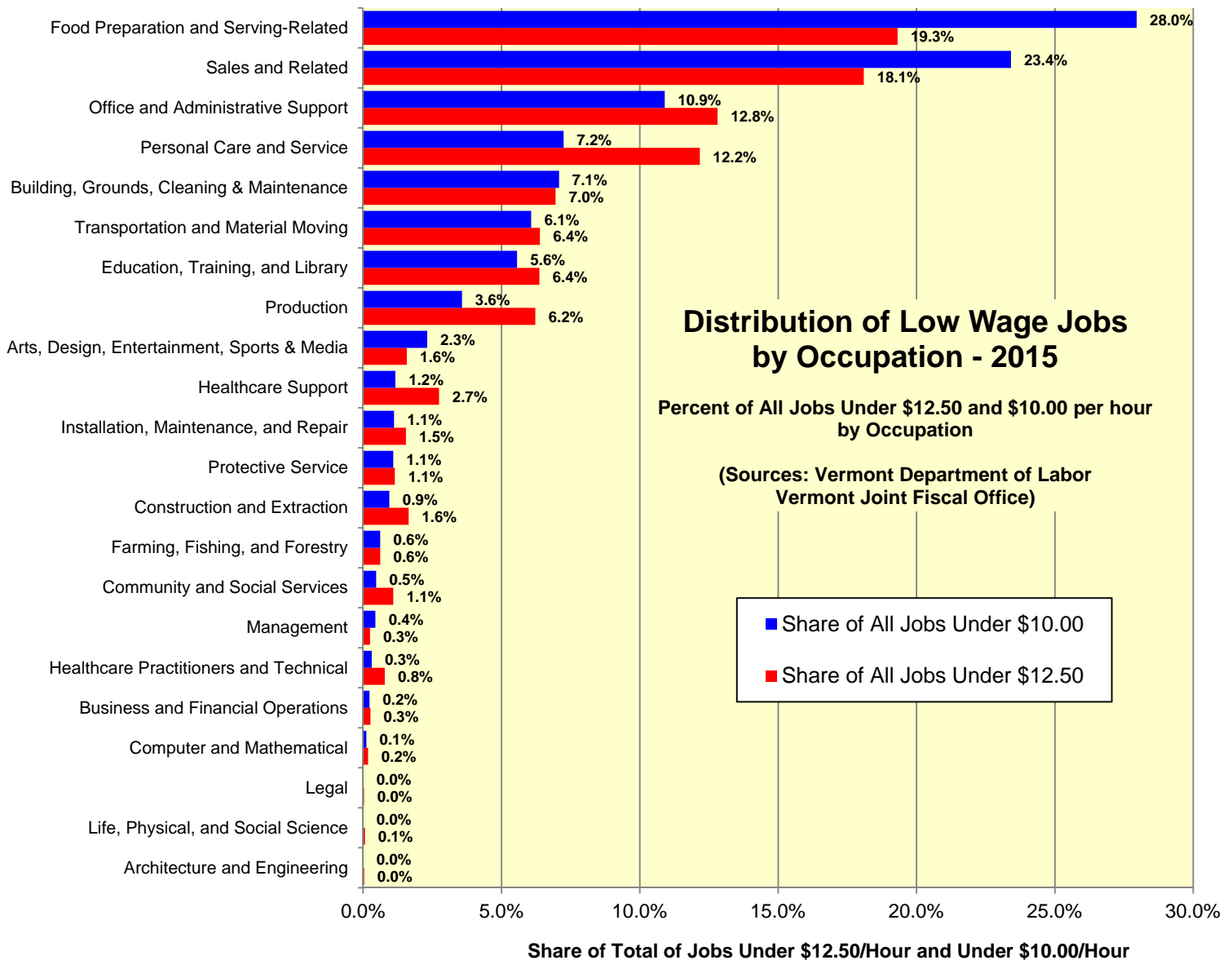
Age of Workers Earning Less than \$12.50



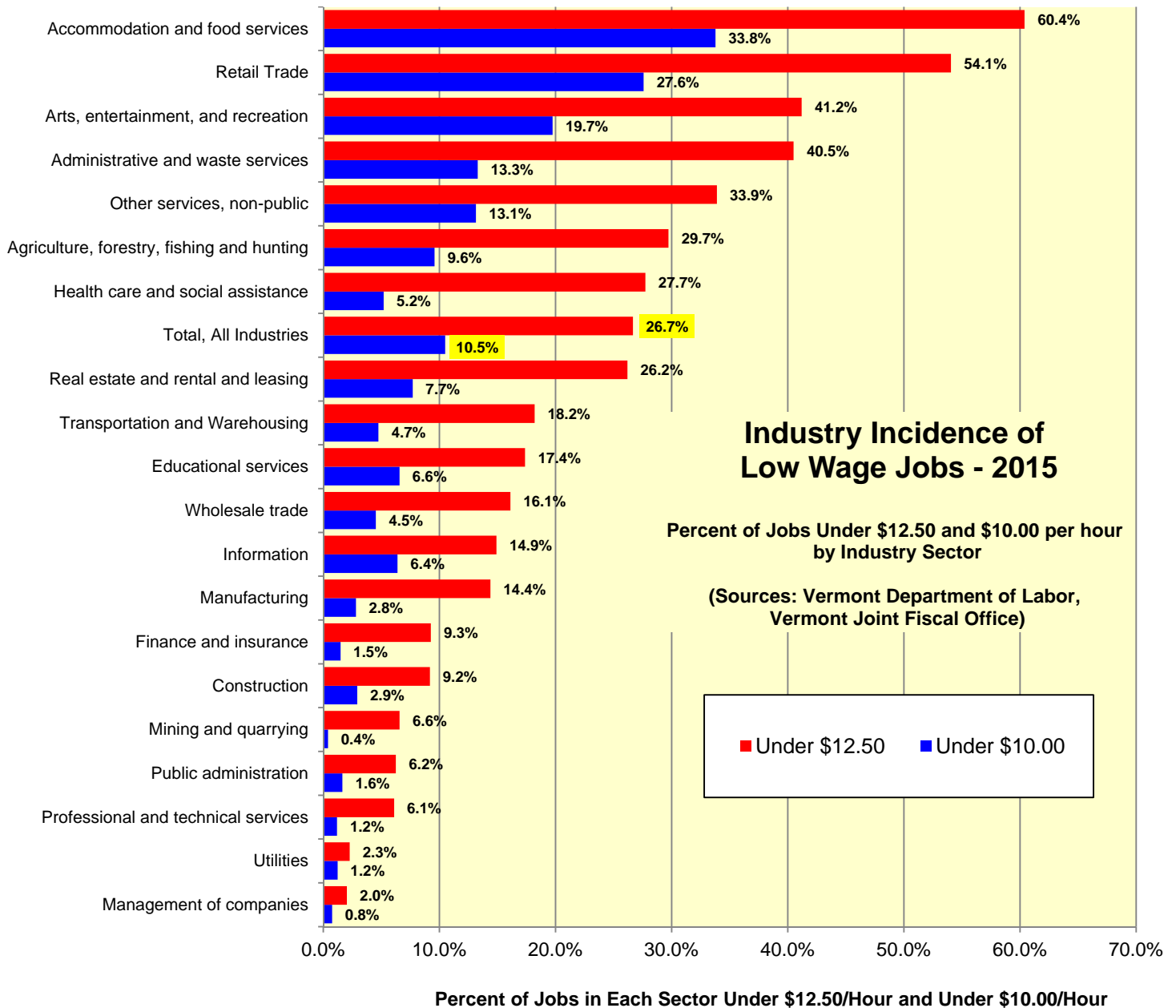
years, the share of low wage Vermont workers who are women has declined from about 61% to about 55%.

The educational attainment of low wage workers continues to be correlated with wage rates, with those not completing high school representing 10% of the workers earning less than \$12.50 an hour and 14% of those earning less than \$10.00. Conversely, those with a college degree comprised 15% of all workers earning less than \$10.00 and 18% of all those earning less than \$12.50 per hour. These figures are roughly comparable with findings in 1999.

Per the chart below, occupational data reveal that most low wage jobs are in food services, sales, clerical and personal service occupations.



A similar concentration of low wage jobs in major industrial sectors is also evident. As shown in the below chart, accommodation and food services, retail trade, arts-entertainment-recreation, administrative services and other non-public service sectors have the highest reliance on low wage workers. More than one-third of all accommodation and food service sector jobs pay less than \$10.00 per hour and more than 60% pay less than \$12.50 per hour.



The industries with the least reliance on low wage jobs include management, utility, professional and technical services, government, mining and construction. Of note, the total share of jobs paying less than \$10.00 per hour in 2015 is expected to be just over 10%, whereas jobs paying less than \$12.50 will comprise nearly 27% of all jobs.

ECONOMIC IMPACTS OF RAISING THE MINIMUM WAGE

Few subjects in the economics profession have been more studied than minimum wage changes. Despite this, few generate as much divergence in professional opinion as expected impacts and policy efficacy associated with such changes.

While the theoretical economic principle underlying most minimum wage analysis is not contested – that raising the price of an input to production, such as labor, will reduce the demand for the input - observed “real world” impacts reveal complications to the theory that have yet to be fully measured and understood. In most of the minimum wage studies performed to date, the expected reduction in demand for labor has either been non-existent or of relatively small magnitude.³ There are many possible reasons for this, including employer responses such as reducing employee hours, reducing benefits, reducing training, wage compression (paying new higher wage workers less), price increases and reduced profit margins – all of which could absorb increased labor costs without reducing job counts – as well as other effects, such as reduced employee turnover, efficiency wage responses from workers, increases in aggregate demand and changes in employment composition.

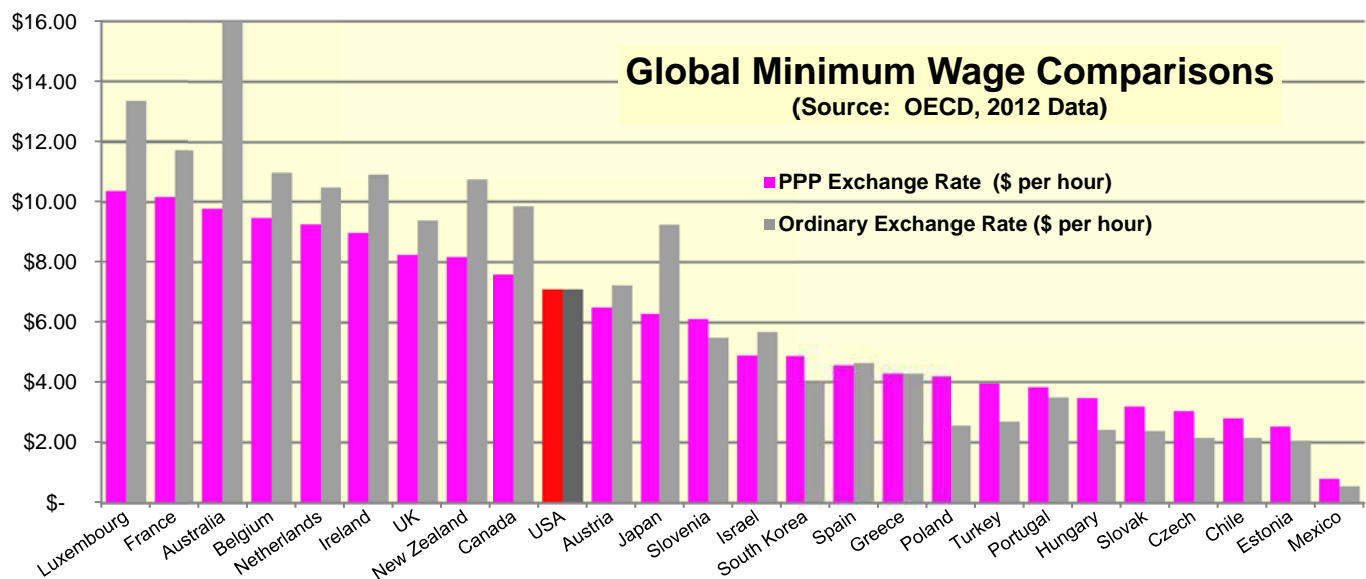
One of the most important reasons that studies to date have not found significant disemployment effects, however, is that virtually all of the minimum wage changes analyzed have been relatively “modest.” As depicted in the chart on page 4, the real U.S. minimum wage declined more than 37% from 1968 to 1995 and has averaged less than \$7.00 per hour (\$6.94 in January 2014 dollars) between 1995 and 2014. For much of this period, it has been below 35% of the average hourly wage of all production and non-supervisory workers and has been below the federal poverty level for a family of two (assuming full-time, year-round work) for almost all of the past 30 years. Despite large percentage changes in the minimum wage at times by the federal government and various states, the rates have generally lagged prevailing wage rates and productivity growth and have affected relatively small shares of the workforce and total wages.

As a result of this, studies on minimum wage impacts have revealed correspondingly minor changes in employment, even among the groups most likely to be affected (poorly educated, younger, lowest wage and female workers). Most economists who point to the disconnect between minimum wage and employment changes are careful to limit their conclusions to

³ See, most prominently, Card, David and Alan Krueger. 1994. “Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania.” *American Economic Review*, vol. 48, no. 4, pp. 772-793; Card, David and Alan Krueger. 1995. *Myth and Measurement: The New Economics of the Minimum Wage*. Princeton, NJ: Princeton University Press; Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. “Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties.” *Review of Economics and Statistics*, vol. 92, no. 4, pp. 945-964; Dube, Arindrajit, T. William Lester, and Michael Reich. 2012. “Minimum Wage Shocks, Employment Flows and Labor Market Frictions.” Berkeley, CA: Institute for Research on Labor and Employment. <http://escholarship.org/uc/item/76p927ks>; And, contesting these analyses, most prominently, Neumark, David and William Wascher. 2006. “Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research.” National Bureau of Economic Research Working Paper 12663. Cambridge, MA: National Bureau of Economic Research. <http://www.nber.org/papers/w12663>; Neumark, David and William Wascher. 2008. *Minimum Wages*. Cambridge, MA: The MIT Press; Sabia, Joseph J., Richard V. Burkhauser, and Benjamin Hansen. 2012. “Are the Effects of Minimum Wage Increases Always Small? New Evidence from a Case Study of New York State.” *Industrial and Labor Relations Review*, vol. 65, no. 2, pp. 350-376; and, Hoffman, Saul D. and Diane M. Trace. 2009. “NJ and PA Once Again: What Happened to Employment When the PA–NJ Minimum Wage Differential Disappeared?” *Eastern Economic Journal* 35 (1): 115-128.

“modest”⁴ or “reasonable”⁵ changes in the minimum wage. Few, however, have attempted to define the level at which a minimum wage change would become “immodest.” Jared Bernstein, a senior fellow at the Center on Budget and Policy Priorities and former chief economist to Vice President Biden, has suggested that “moderate” minimum wage increases are those that include “not much more than 10 percent of the workforce in their sweep.” David Card, who was the first to demonstrate that small changes in a state’s minimum wage may have little or no employment effects, stated in an interview with Douglas Clement of the Minneapolis Fed, that his research “doesn’t mean that if we raised the minimum wage to \$20 an hour we wouldn’t have massive problems.”⁶

While a Vermont minimum wage change to \$10.00 per hour in 2015 would represent an increase in the current minimum wage of about 15% (12% above the expected minimum wage of \$8.90 in January of 2015), affect about 10% of the labor force and add about 5% to the total wage bill, an increase to \$12.50 would represent a 43% increase, affect 27% of the labor force and increase total wage payments by 20%. A \$12.50 minimum wage would be more than 34% above the highest state rate in the country (WA) and more than 20% above the highest rate in the world (Luxembourg) on an equivalent purchasing power parity basis. None of the source studies that found little or no employment effects considered an increase of this level or magnitude. An increase to \$12.50 would thus be unprecedented and correspondingly uncertain in its impacts.



⁴ For example, in a widely cited 2013 paper by John Schmitt of the Center on Economic and Policy Research, he states: “This is one of the most studied topics in economics, and the evidence is clear: modest minimum wage increases don’t have much impact on employment...” For the full report, see: <http://www.cepr.net/documents/publications/min-wage-2013-02.pdf>

⁵ Laura D’Andrea Tyson, former Chair of the Council of Economic Advisors under President Clinton and an economics professor at the Haas School of Business at the University of California, “finds no significant effects on employment when the minimum wage increases in reasonable increments.” See: <http://economix.blogs.nytimes.com/2013/12/13/raising-the-minimum-wage-old-shibboleths-new-evidence/>

⁶ For the complete interview, see: http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=31908

As shown in the charts on the following two pages, the impacts of raising the minimum wage will vary by industry sector. Those sectors most affected are characterized by a relatively high reliance on low wage workers (expressed on the x-axis as the percentage of workers earning less than \$10.00 and \$12.50, respectively) and an inability to pass on price increases due to competitive pressures (expressed on the y-axis as a REMI model construct indicating relative external competitive sensitivity).

In order to help quantify ranges of possible economic impacts, we utilized a Vermont State model from Regional Economic Models, Inc. (REMI), as was done in the prior legislative study in 1999. The REMI model represents a standard theoretical economic framework for estimating economic impacts.⁷ As such, it does not fully account for the recent observed effects of low level minimum wage changes. Working with REMI economists, we specified the model to account for these realities and other fiscal effects⁸, including:

- 1) The change in the wage bill by industry, based on DOL hourly wage data, hours worked and estimates of wage spillover effects
- 2) The change in production costs by industry
- 3) Adjustments to wage income and induced effects to consumption
- 4) Suppression of employer provided benefit increases consistent with higher wage income, and
- 5) Incorporation of changes in enrollment in state and federal aid programs associated with wage income changes, including program expenditures and transfer payment changes

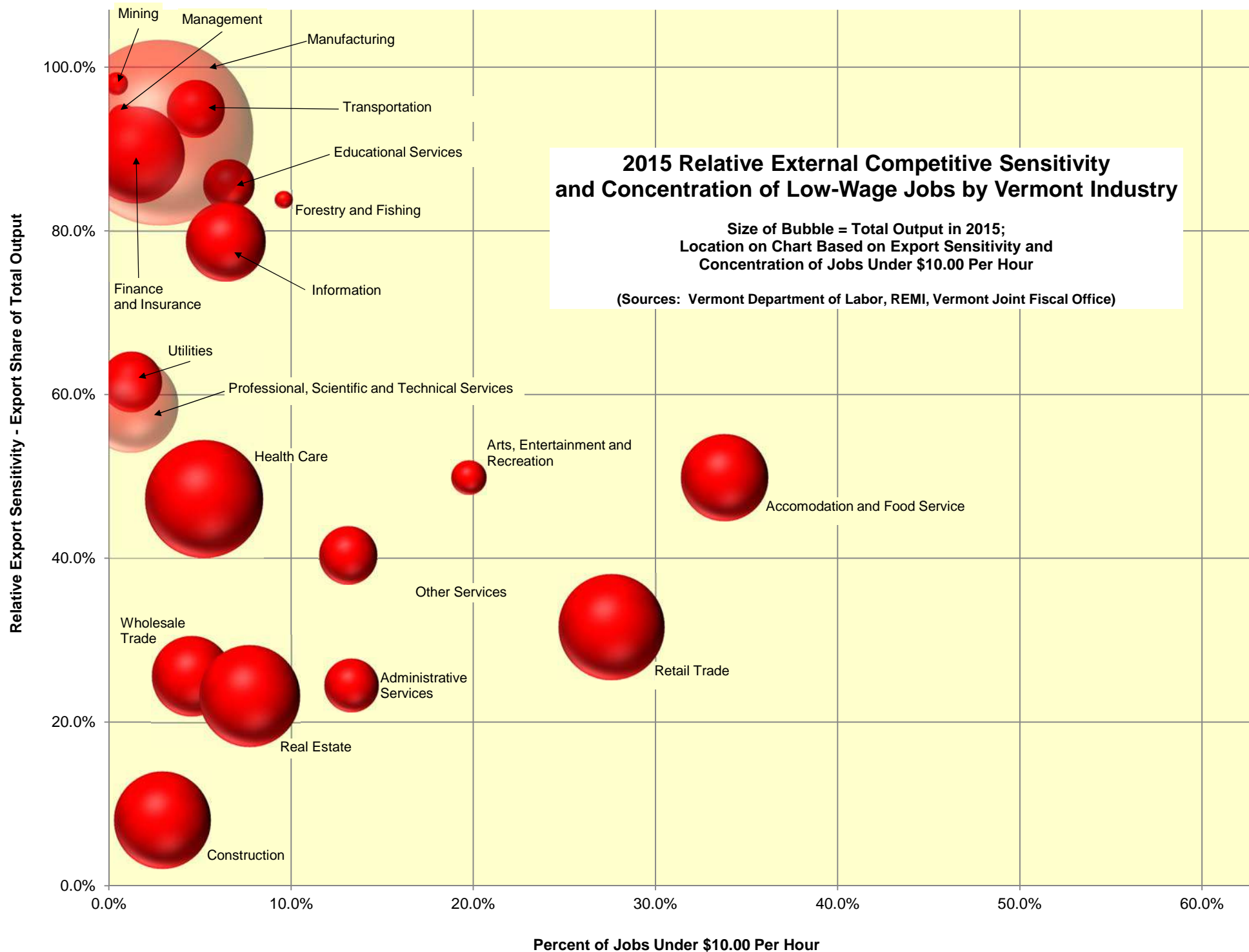
The economic effects of these changes included:

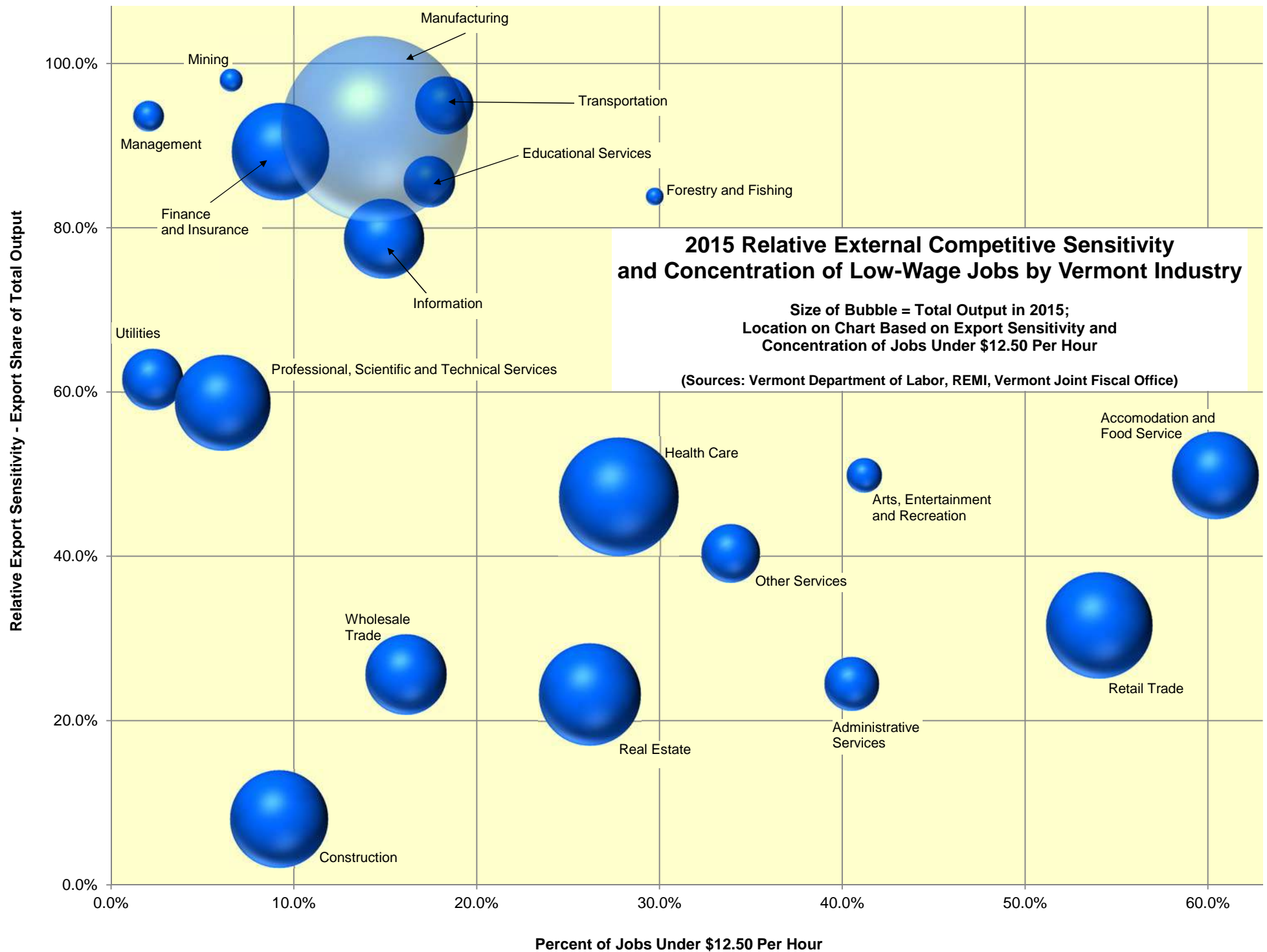
- 1) An increase in aggregate earned income of low wage workers and their families
- 2) A reduction in the number of hours worked and/or the elimination of some low wage jobs
- 3) A reduction in state benefit payments as growing low wage income disqualifies some from program participation
- 4) An increase in State tax payments as taxable income rises
- 5) A reduction in federal transfer payments into the State as growing low wage income disqualifies some from program participation, and
- 6) Increased federal tax payments as taxable income rises

Although further model work is ongoing, preliminary impacts indicate that a \$10.00 minimum wage would result in about 250 fewer jobs (or an equivalent reduction in hours), less than 0.1% of total employment, and aggregate income gains to low wage workers of approximately \$30 million. As some of these workers transition away from State benefits and pay more in taxes, the net fiscal gain to the State is about \$3 million. The reduction in federal transfer payments as a result of lower federal aid participation, however, could result in

⁷ The REMI PI+ model v1.5 is more fully described at: <http://www.remi.com/resources/documentation> For further information regarding model equations, specifications and simulations, please contact the Vermont Joint Fiscal Office.

⁸ Detailed model constructs and REMI model specification inputs are available from the Joint Fiscal Office upon request.





approximately \$5 million in reduced Medicaid, EITC, SNAP (3 Squares) and other payments to the State.

Impacts associated with a \$12.50 minimum wage include job losses of about 3,200 jobs, about 1% of total employment, and aggregate income gains to low wage workers of about \$250 million. As some of these workers transition away from State benefits and pay more in taxes, the net fiscal gain to the State should total about \$20 million. The reduction in federal transfer payments as a result of lower federal aid participation, however, could result in approximately \$35 million in reduced Medicaid, EITC, SNAP (3 Squares) and other payments to the State.

BENEFIT INTERACTIONS AND NET INCOME IMPACTS OF RAISING THE MINIMUM WAGE

The above-mentioned impacts associated with public benefit reductions will reduce government expenditures at both the state and federal levels, but can create substantial unintended negative net income effects for some low wage workers. An example of this is presented in the chart on the following page, in which gains in earned income at wages between about \$9.60 per hour and \$16.80 per hour (assuming full time work) actually result in reductions in net family income, as benefits are withdrawn and taxes increased at levels exceeding the earned income gains. In this situation, the worker would have no incentive for work advancement or the assumption of additional hours and would actually have an incentive to work fewer hours in the event of a minimum wage change to \$10.00 or even \$12.50 per hour.

As shown in the chart on page 16, benefit reductions vary considerably by family configuration. For a single worker with no children, there are no disincentives to work as earned income rises. This is the type of benefit interaction that is optimal. Further work, such as was performed for the legislature in 1999, is required to estimate current benefit reduction flows for all family configurations and recommend possible program changes so as to maintain work incentives as earned income increases.

SUMMARY AND RECOMMENDATIONS

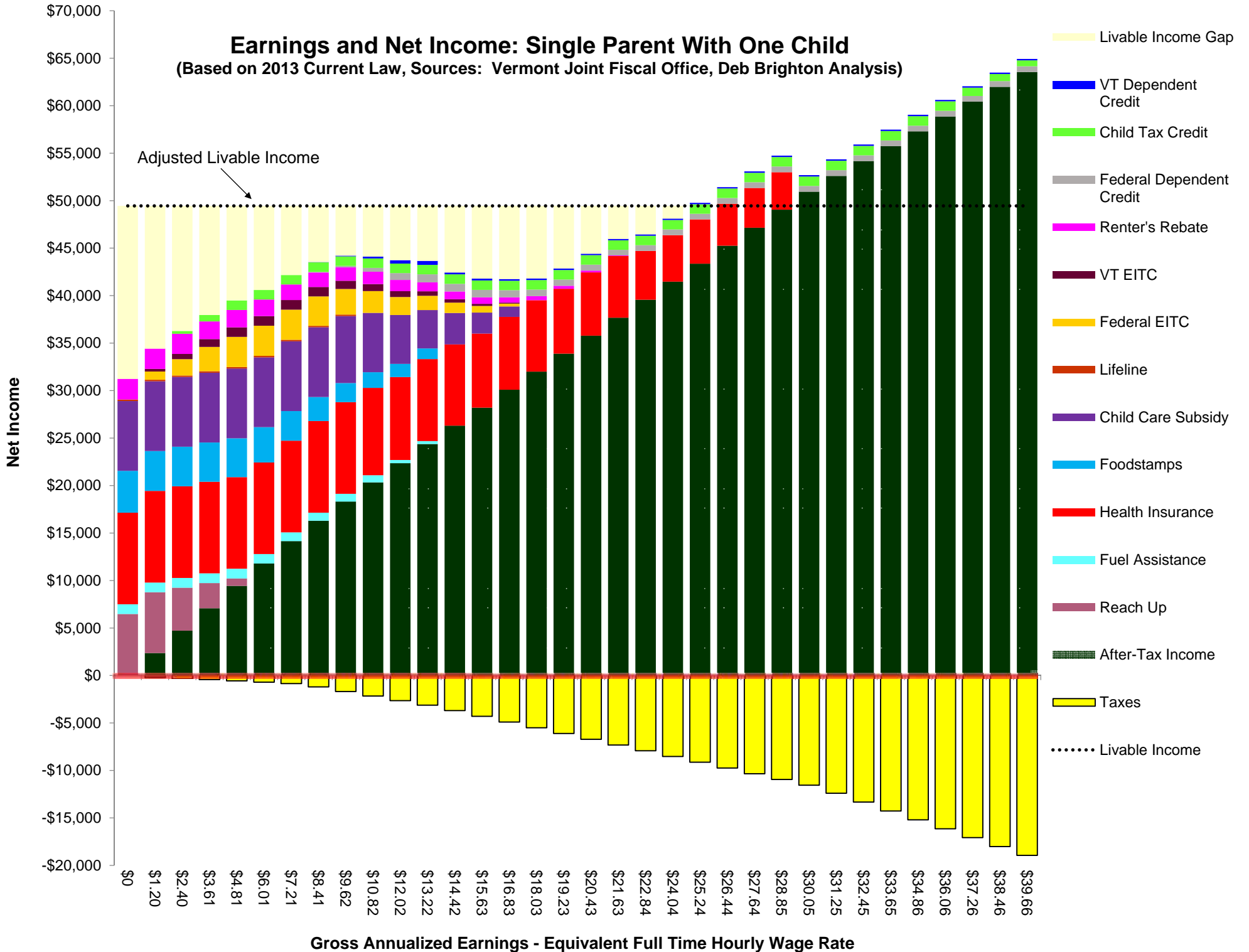
We find that a minimum wage increase to \$10.00 would probably have negligible, if any, negative aggregate economic consequences and could be an important component in advancing some of the lowest income workers towards a livable income. We also find, however, that a \$12.50 minimum wage has serious drawbacks that limit its efficacy in achieving the overall objective of improving the well-being of low-wage, working Vermonters and their families.

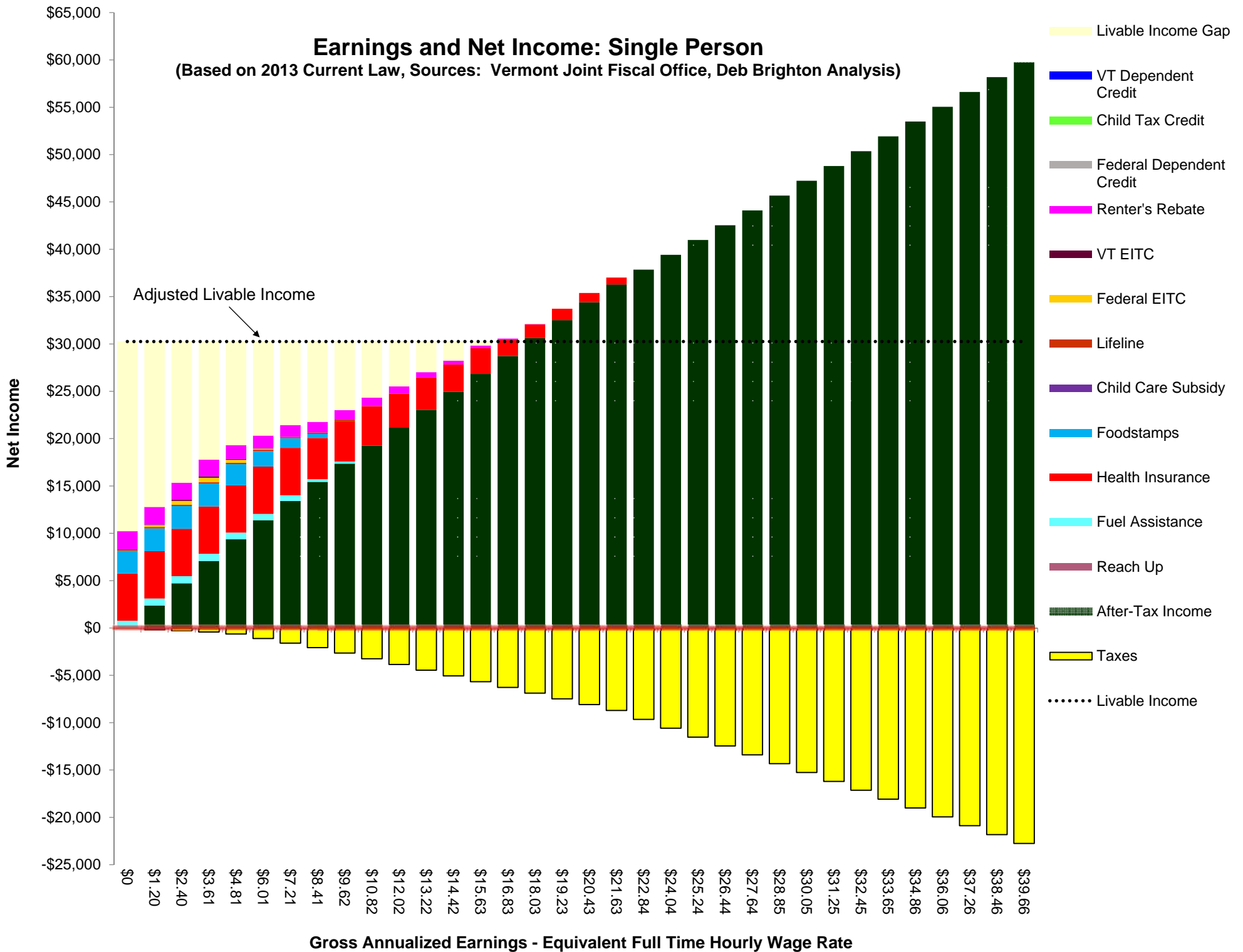
These drawbacks are associated with four important findings and associated recommendations:

FINDING 1: Earned income growth among the lowest income workers can result in precipitous state and federal public benefit reductions, substantially offsetting and in some cases completely negating improvements in net family income from minimum wage

Earnings and Net Income: Single Parent With One Child

(Based on 2013 Current Law, Sources: Vermont Joint Fiscal Office, Deb Brighton Analysis)





changes. Accordingly, these benefit reductions can eliminate incentives to work for many low-wage workers.

RECOMMENDATION 1: A comprehensive analysis of benefit loss interactions with earned income gains is essential so as to adjust public benefit programs wherever possible in order to preserve work incentives at all wage levels, especially those below a livable income.

FINDING 2: Potential reductions in federal transfer payments can generate substantial negative economic impacts, as earned income replaces federal aid.

RECOMMENDATION 2: Specific program options should be explored with federal program administrators and Vermont's Congressional delegation so as to determine whether any redirection of reduced federal transfer payments may be possible.

FINDING 3: Federal (especially) and State income taxes consume a significant proportion of marginal income well below livable income levels. These high marginal tax rates in tandem with public benefit reductions sap work incentives and delay achievement of a livable income.

RECOMMENDATION 3: In tandem with potential minimum wage and benefit program changes, consideration should be given to a mix of State tax changes and benefit programs that can most efficiently maximize low wage workers' incomes and State revenues, minimize public benefit expenditures and preserve incentives to work.

FINDING 4: Minimum wage increases that even approach an average livable wage would result in significantly fewer jobs for low wage workers. A substantial increase in the relative cost of labor will result in a reduction in the amount of labor used. This occurs both from incremental reductions in hours and jobs within firms continuing or beginning operation in the State, and the elimination or relocation out-of-State of other firms. A state can mandate the minimum wage an employer must pay, but it cannot mandate the minimum number of workers an employer hires or the minimum number of hours they work. A small state such as Vermont cannot expect to sustain a dramatic variation with the U.S. minimum wage without counterproductive economic consequences.

RECOMMENDATION 4: Further research is required to better understand the likely maximum beneficial minimum wage level in the State. The 15 year, 20% Vermont average minimum wage differential with that of New Hampshire should be thoroughly studied to determine potential negative and other economic impacts. Based on this analysis, recommendations for an optimal State minimum wage could be advanced. Such analysis would be particularly important if the federal minimum wage is increased in the near future.

Appendix 8: Cooper, David: “Understanding the Needs for Higher Wage Standards”

Understanding the Need for Higher Wage Standards

Presentation to the VT Minimum Wage Study
Commission

September 6, 2017

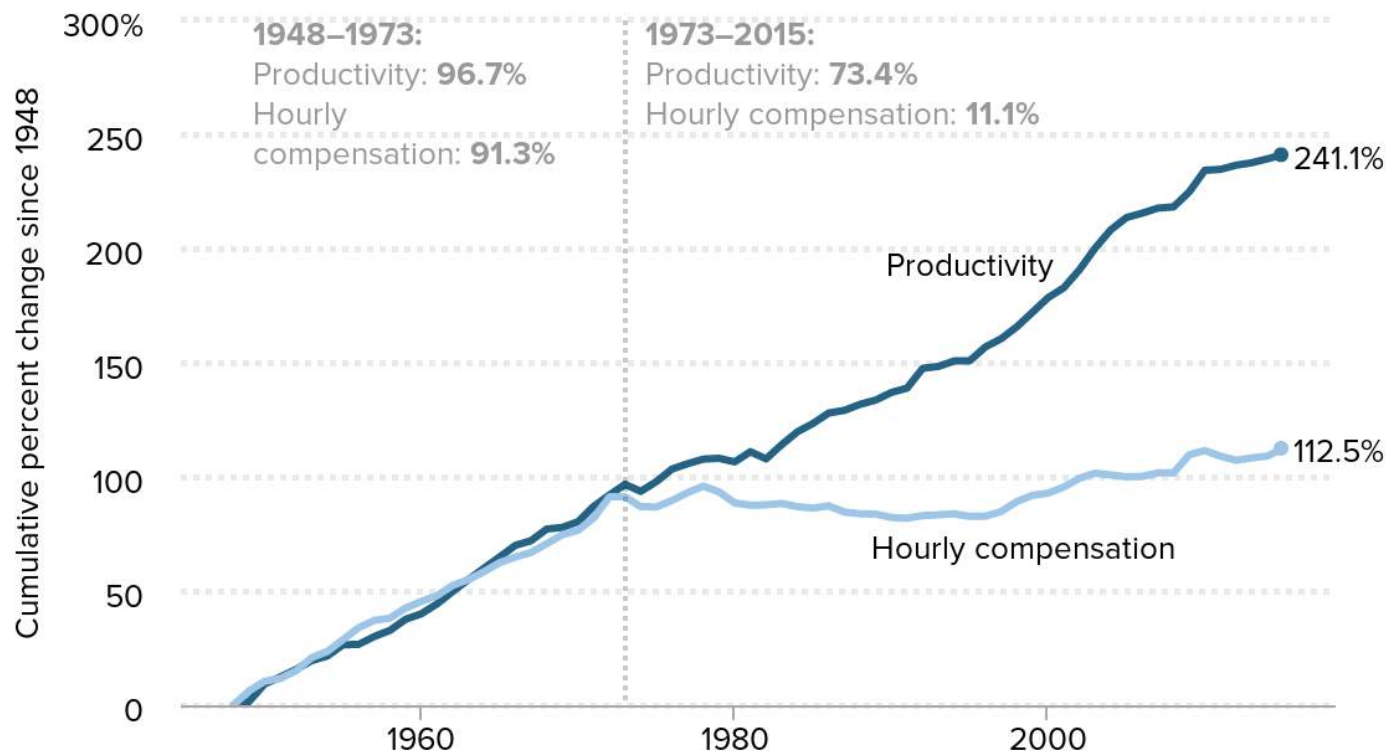
David Cooper
Senior Economic Analyst

Outline

1. The historical context
2. How to evaluate the level of the minimum wage: standard-of-living measures & relative measures
3. Why minimum wage policy is particularly important in Vermont
4. What the research literature says about the impact of higher minimum wages
5. Why going beyond the research is okay and how to deal with uncertainty

Stagnant pay is the primary U.S. economic challenge

Disconnect between productivity and a typical worker's compensation, 1948–2015



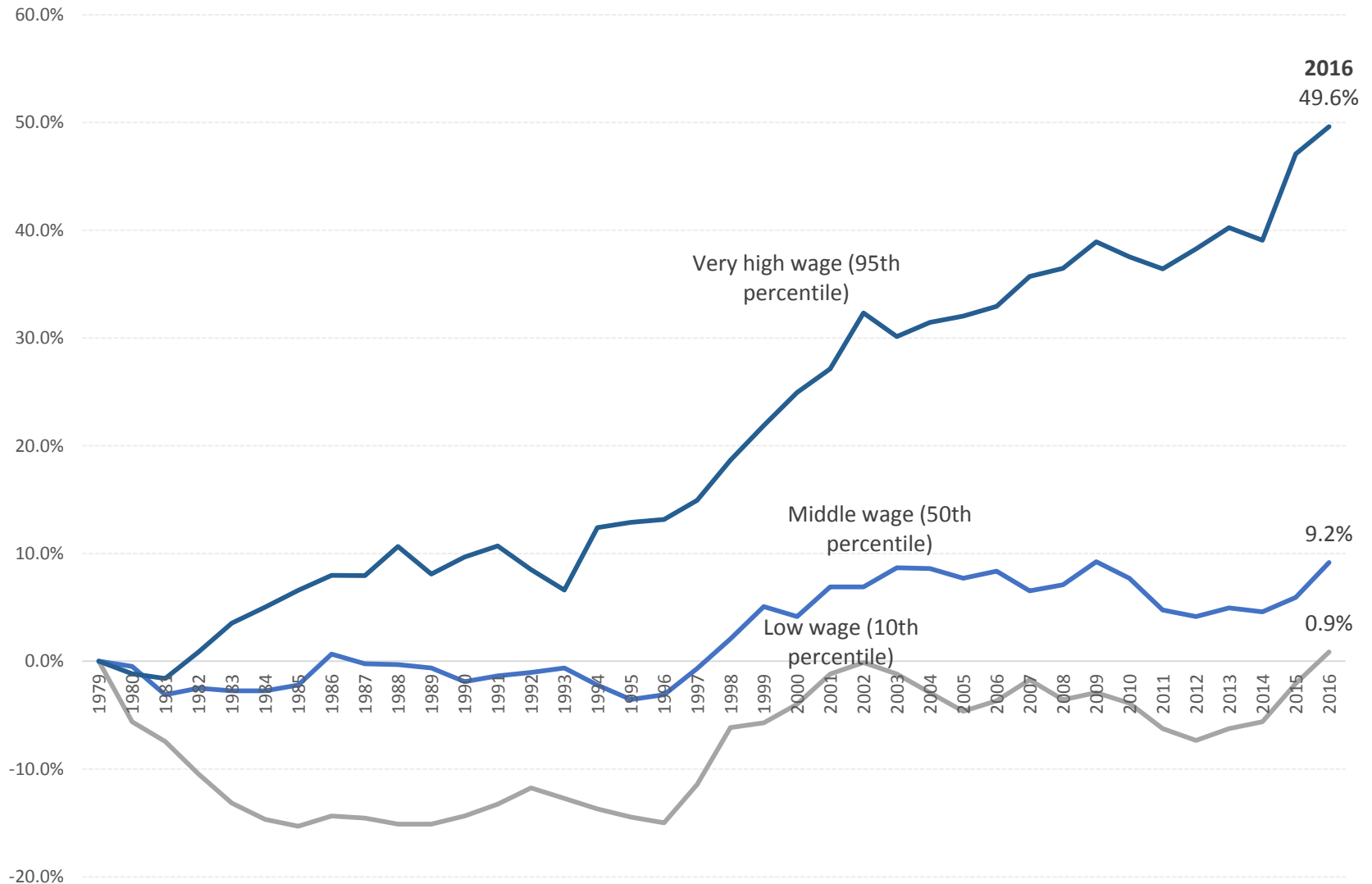
Note: Data are for average hourly compensation of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services minus depreciation per hour worked.

Source: EPI analysis of data from the BEA and BLS (see technical appendix of *Understanding the Historic Divergence Between Productivity and a Typical Worker's Pay* for more detailed information)

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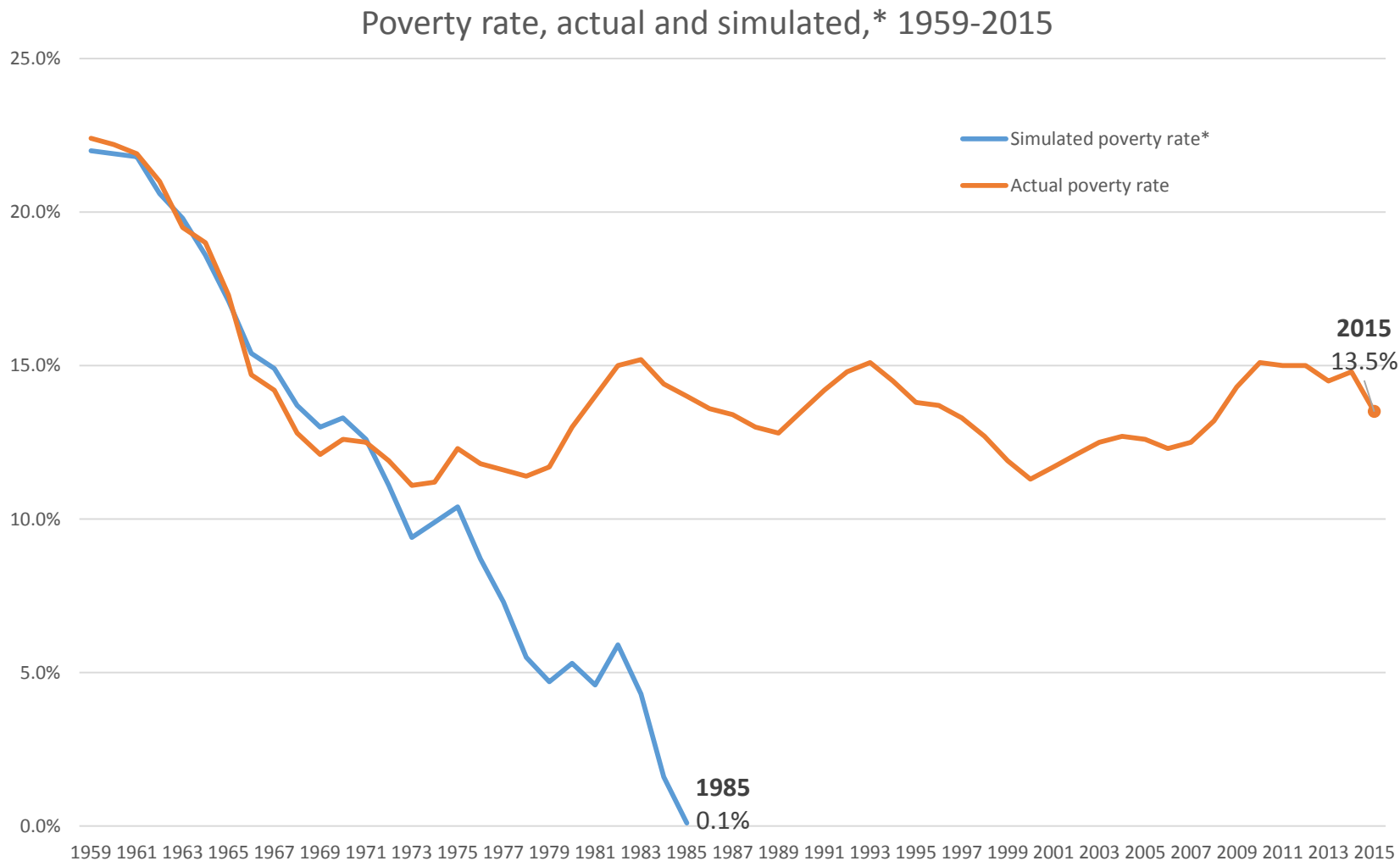
Since 1979, wages have been flat or falling for low & middle-wage workers

Cumulative change in real hourly wages of all workers, by wage percentile, 1979-2016



Source: EPI analysis of Current Population Survey Outgoing Rotation Group microdata, 1979-2015

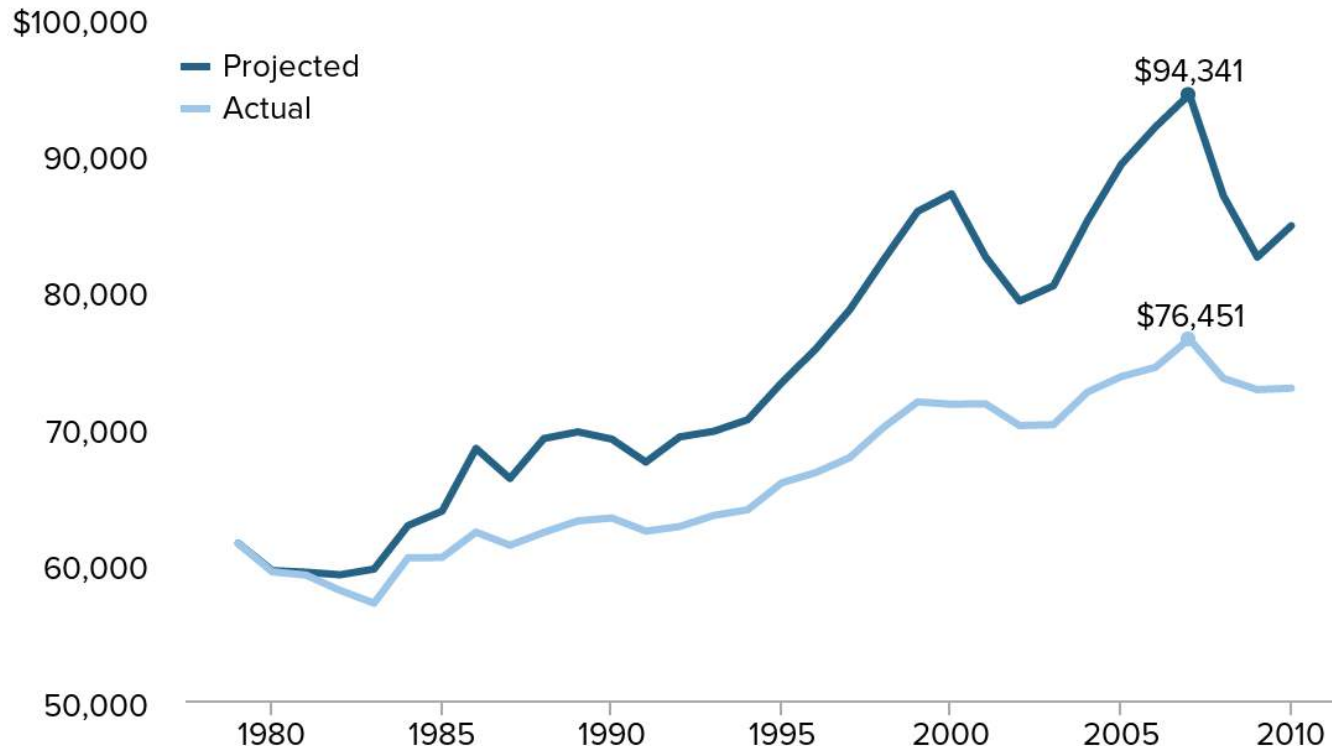
Progress against poverty stalled



*Simulated poverty rate is based on a model of the statistical relationship between growth in per capita GDP and poverty that prevailed between 1959 and 1973.

Middle class living standards are far lower than they could have been

Household income of the broad middle class, actual and projected assuming it grew at overall average rate, 1979–2010



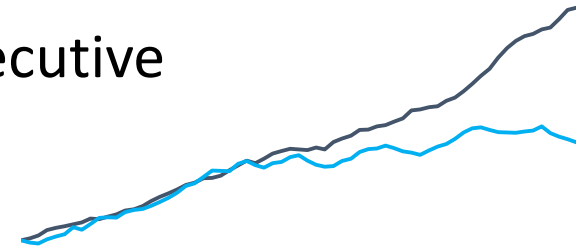
Note: Data show average income of 20th–80th percentile.

Source: Authors' analysis of Congressional Budget Office (2013)

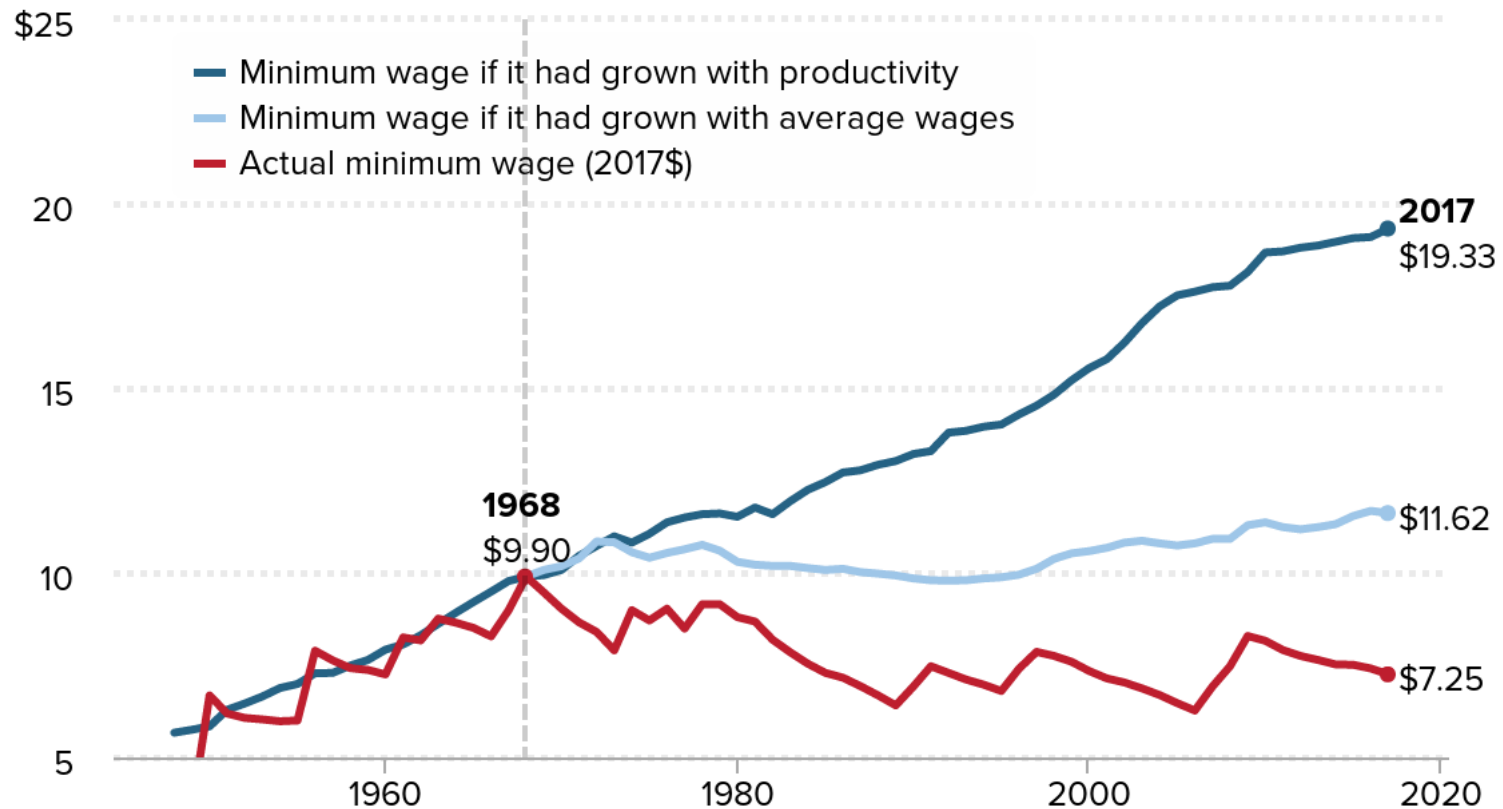
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Why the breakdown between productivity and wages?

- “Globalization” = exposure to global manufacturing competition without protections for domestic workers
- Decline of unionization/collective bargaining
- Too many periods of high unemployment, in part due to Fed prioritizing low inflation, over full employment
- Rise of financial sector & explosion of executive compensation
- **Labor policy actions/inaction that reduced worker bargaining power (e.g., erosion of the minimum wage)**



The federal minimum wage would be much higher if it had kept up with a growing economy



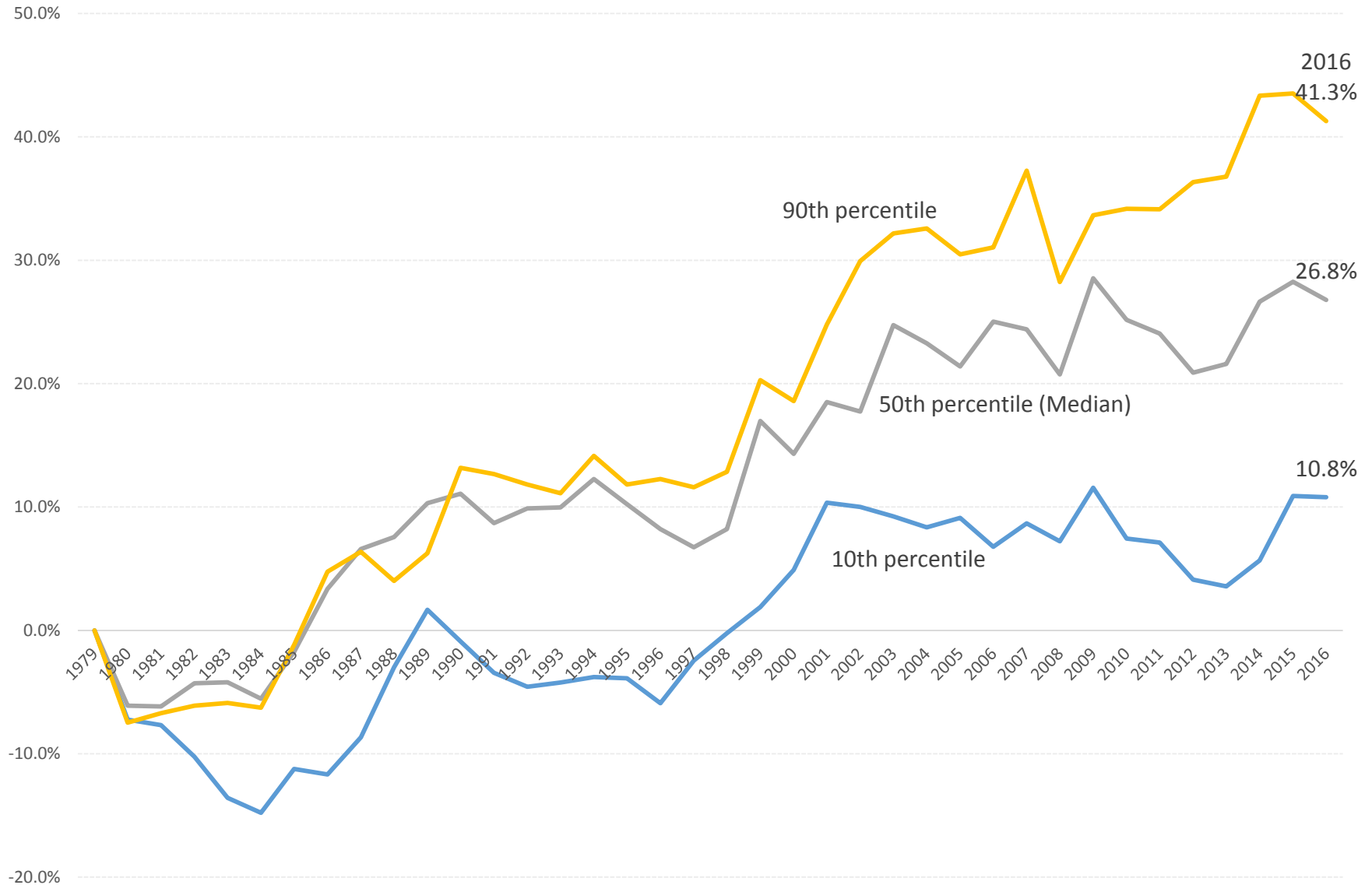
Note: Growth in average wages measures average wages of production workers. Inflation measured using the CPI-U-RS and the CPI projection for 2017 from CBO (2017). Productivity is measured as total economy productivity net depreciation.

Source: EPI analysis of the Fair Labor Standards Act and amendments. Total economy productivity data from the Bureau of Labor Statistics Labor Productivity and Costs program. Average hourly wages of production nonsupervisory workers from the Bureau of Labor Statistics Current Employment Statistics.








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VT wage growth better than US; still flat at bottom since 2000

Cumulative change in real hourly wages in VT by percentile, 1979-2016

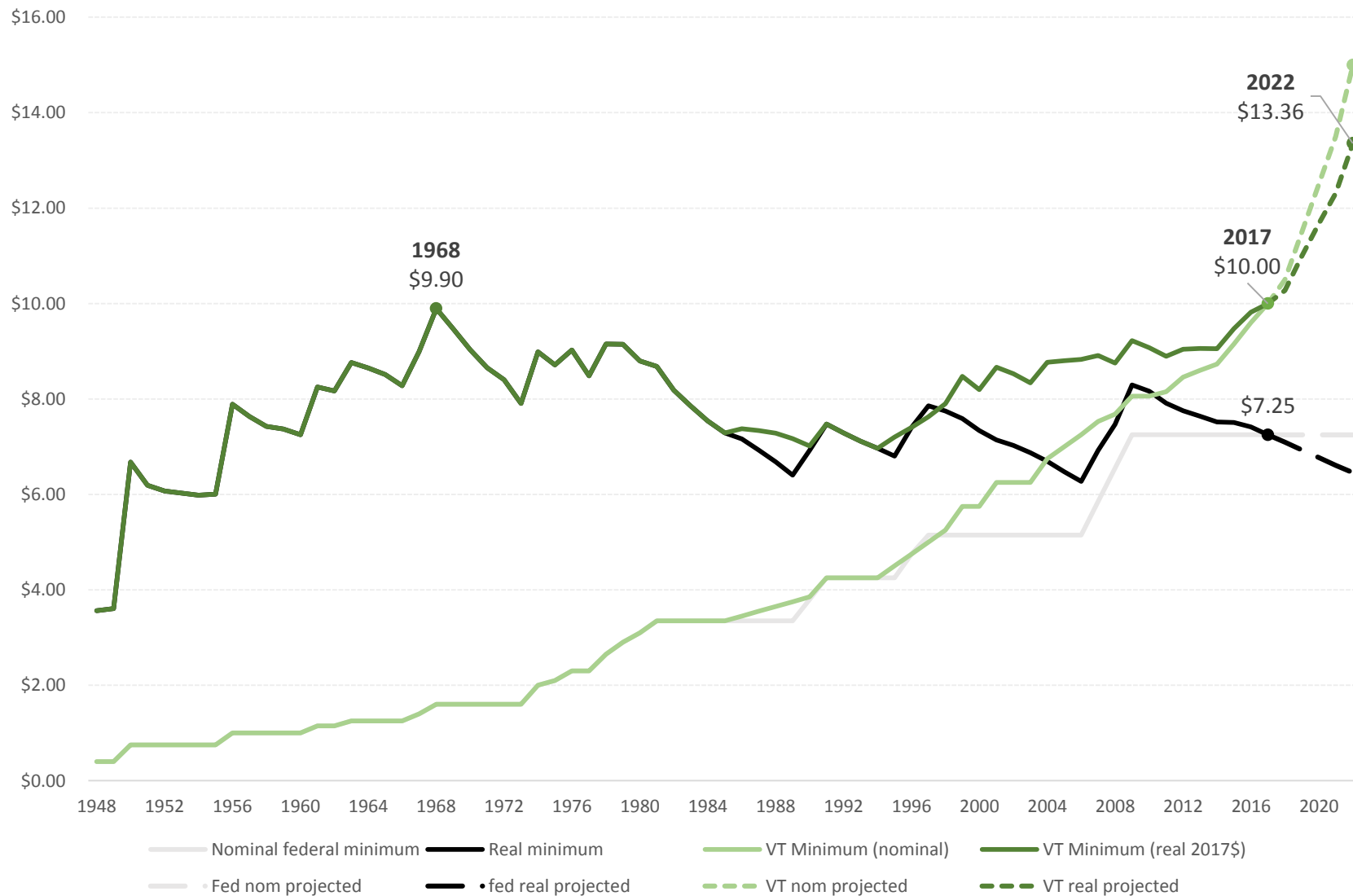


A modest, but adequate standard of living in VT requires more than \$15/hour today

MONTHLY COSTS			
	1 adult <i>and</i> no children Rural Vermont	1 adult <i>and</i> 1 child Rural Vermont	2 adults <i>and</i> 2 children Rural Vermont
 HOUSING	\$609	\$835	\$835
 FOOD	\$271	\$399	\$782
 CHILD CARE	\$0	\$612	\$1,015
 TRANSPORTATION	\$570	\$575	\$723
 HEALTH CARE	\$401	\$741	\$1,130
 OTHER NECESSITIES	\$425	\$596	\$781
 TAXES	\$439	\$699	\$667
Monthly Total	\$2,715	\$4,457	\$5,933
Annual Total	<u>\$32,574</u>	<u>\$53,488</u>	<u>\$71,197</u>
Full-time hourly wage	\$15.66	\$25.71	\$17.11

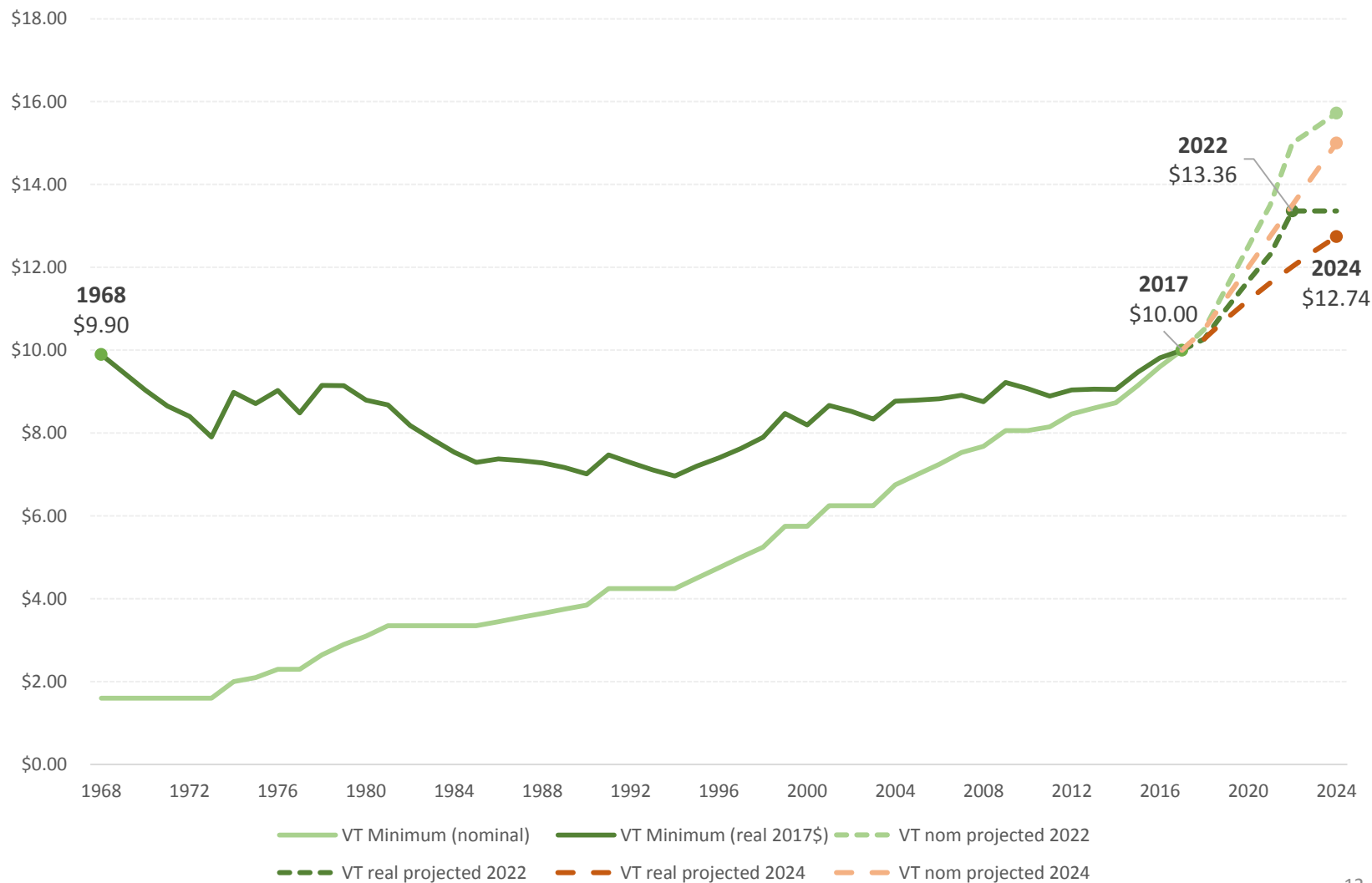
Standard-of-living measures of the minimum wage

Nominal and real (2017\$) value of the federal and Vermont minimum wages, 1948-2017, and projected under an increase to \$15 by 2022



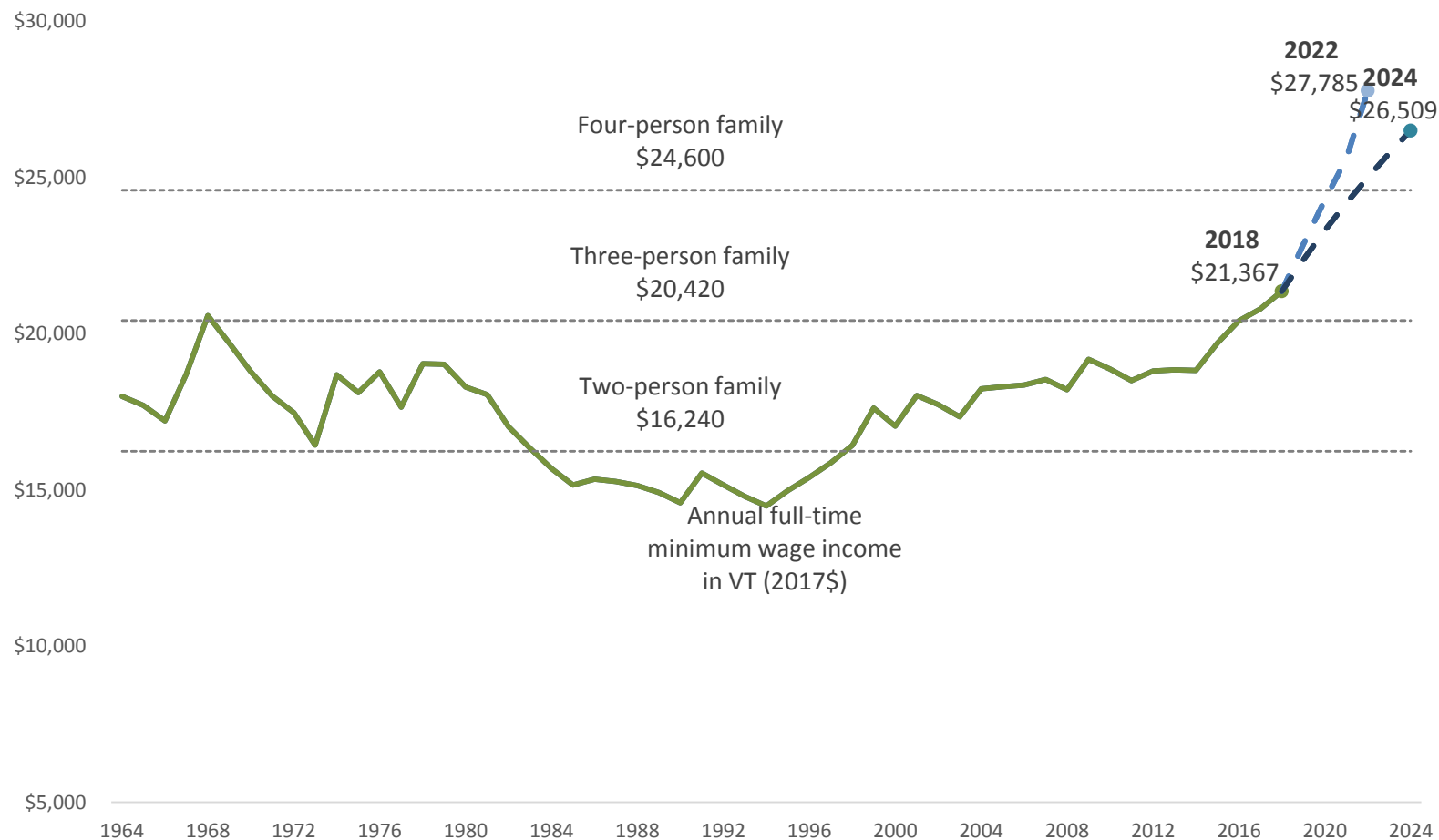
Standard-of-living measures of the minimum wage

Nominal and real (2017\$) value of the Vermont minimum wage, 1968-2017, and projected under increases to \$15 by 2022 and 2024



At \$15 in 2022-2024, the Vermont minimum wage would no longer be a poverty wage

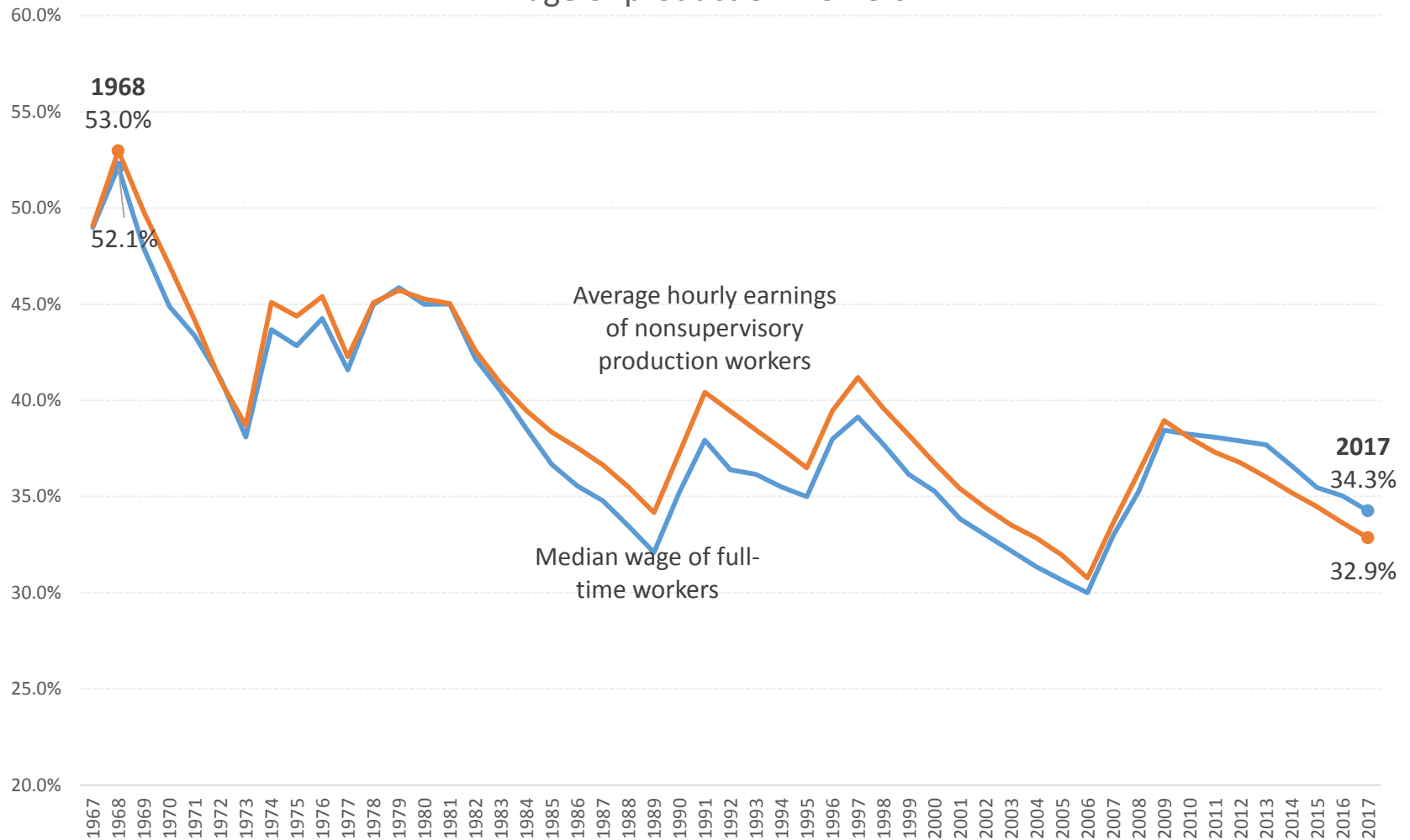
Annual wage income for a full-time VT minimum-wage worker, compared with various poverty thresholds, 1964-2017 and 2018-2024 (projected)



Note: Inflation measured using the CPI-U-RS. Inflation projections calculated using CBO (2017).

Minimum wage today is much farther away from “middle class” wages

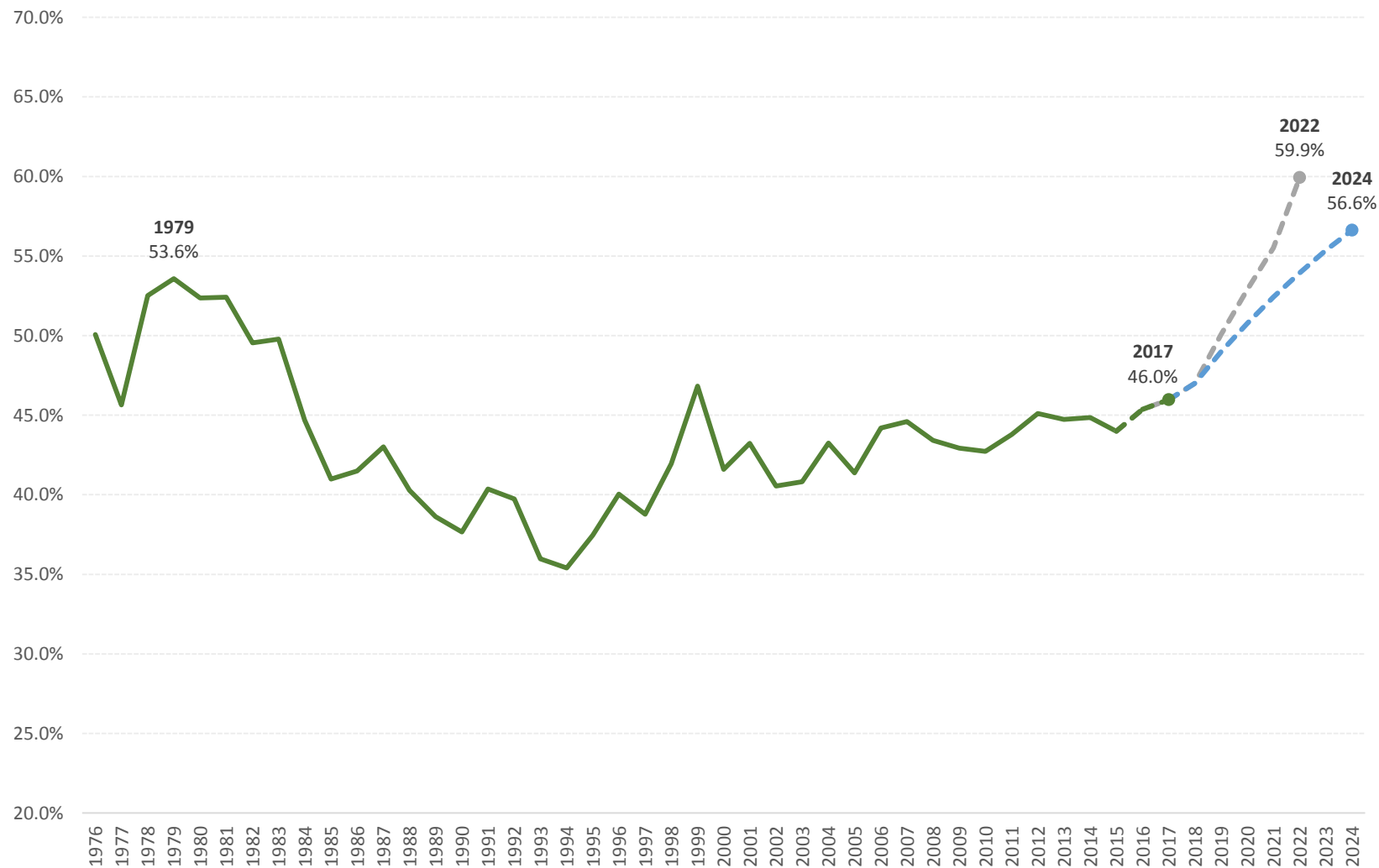
Federal minimum wage as a percentage of the median wage and average wage of production workers



Source: EPI analysis of Current Population Survey Annual Social and Economic Supplement microdata, Bureau of Labor Statistics average hourly earnings of production nonsupervisory workers data

\$15 in 2022/24 would bring low-wage jobs closer to middle wage jobs

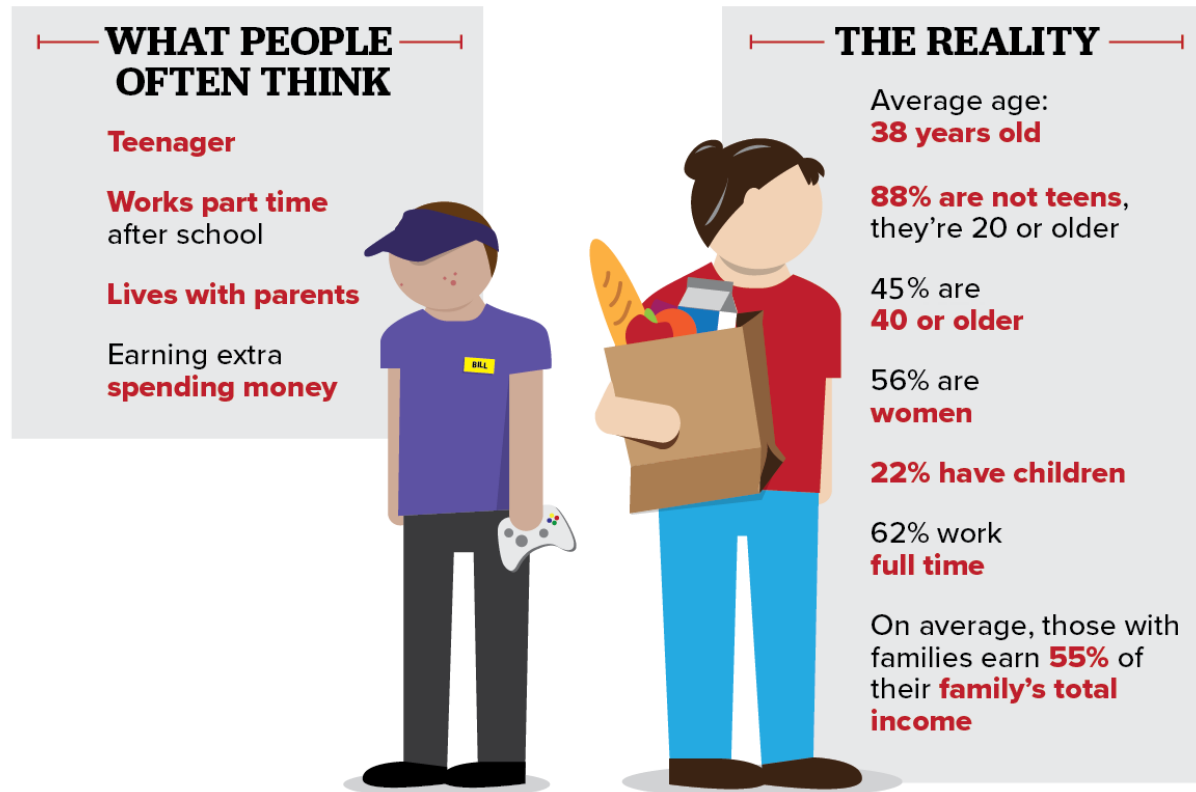
Vermont minimum wage as a percentage of the VT median wage, 1979-2016 and projected 2017-2024 (assuming 0.5% real median wage growth)



Source: EPI analysis of Current Population Survey Annual Social and Economic Supplement microdata

Minimum wage policy is particularly important in Vermont

Who benefits from a higher minimum wage in Vermont?

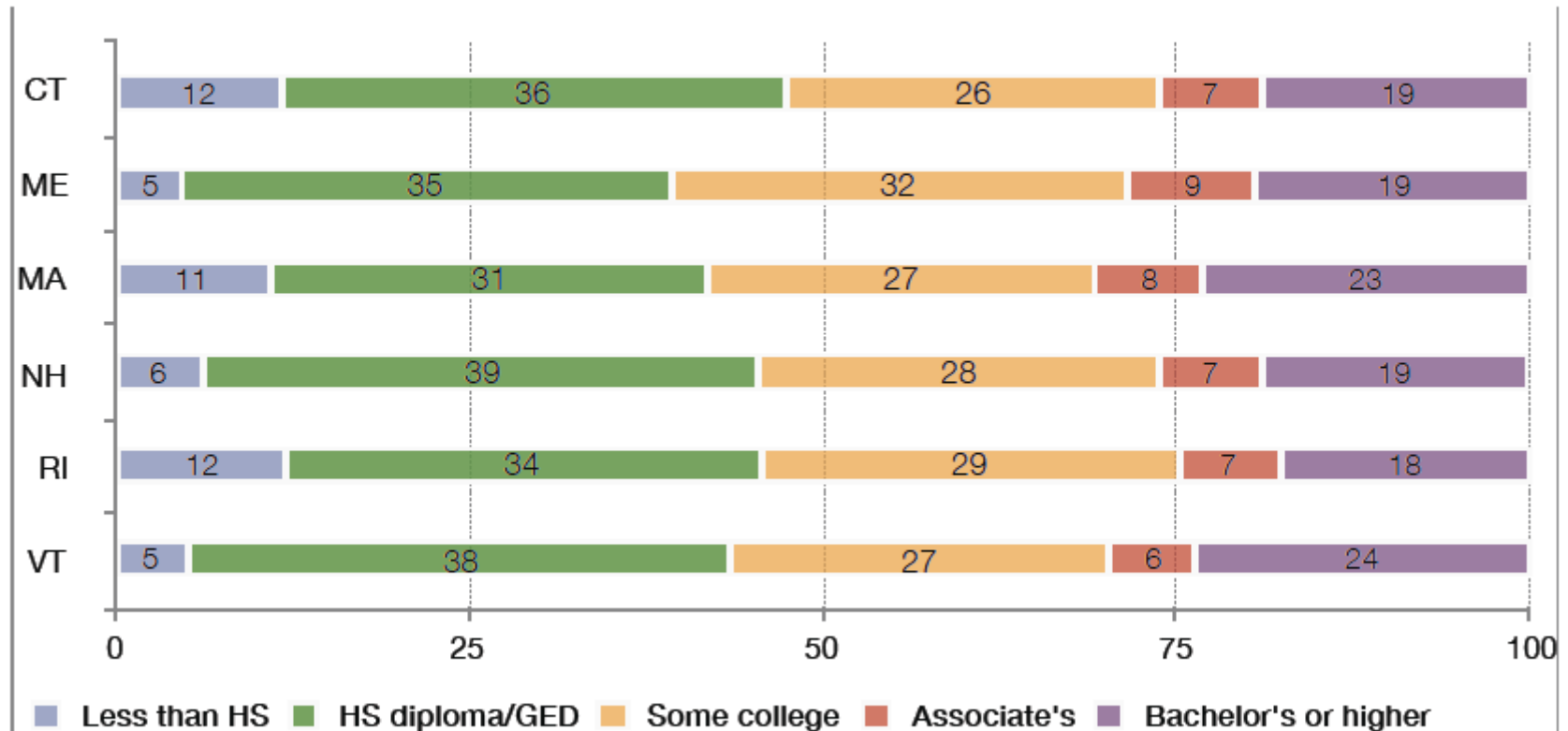


Statistics describe civilian workers, ages 16+, that would be affected by an increase in the Vermont minimum wage to \$15 by 2022.

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Affected workers in VT are more likely to have bachelors degrees than elsewhere in New England

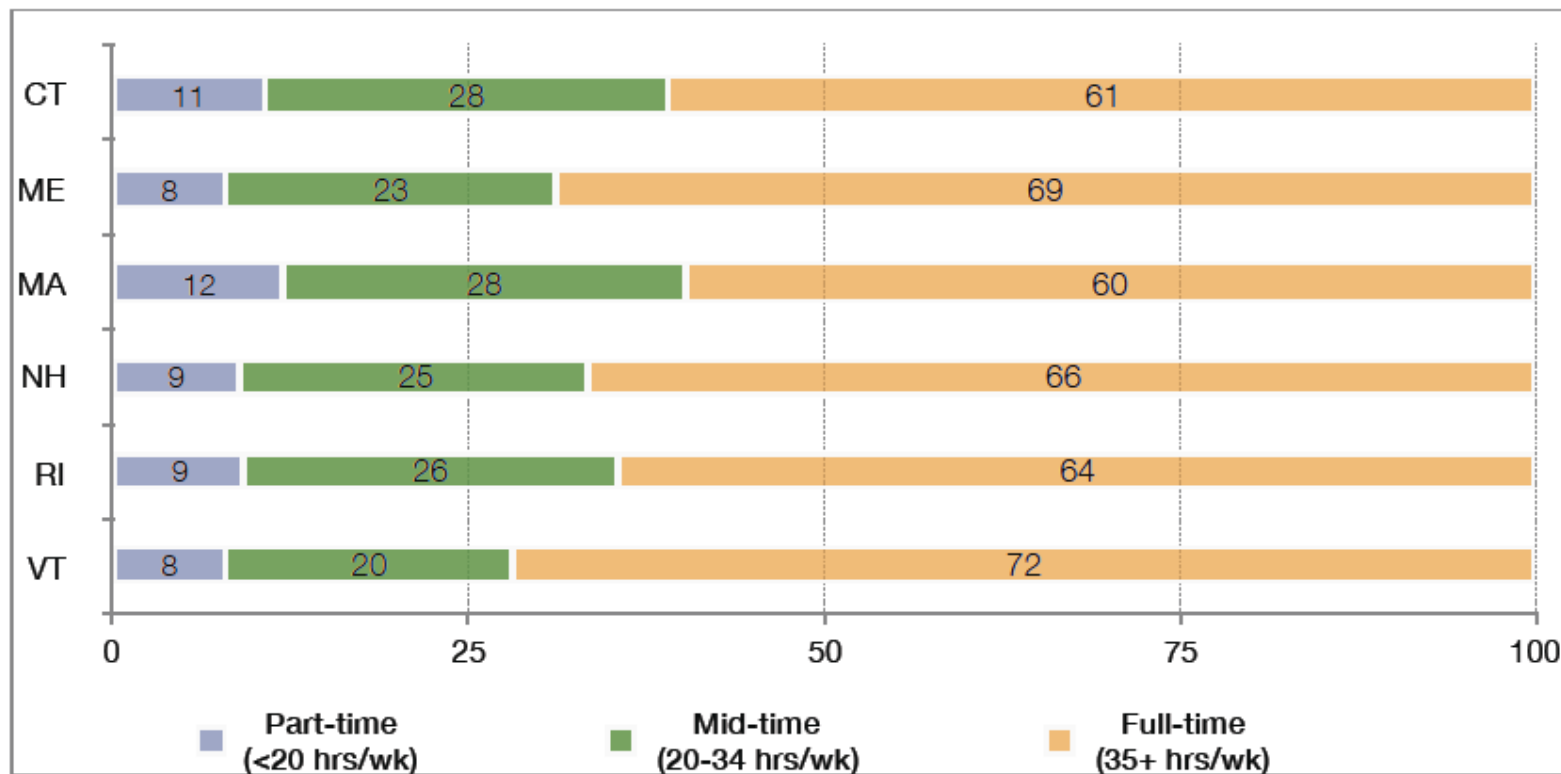
Figure 3: Educational Attainment of the Sub-\$15 Workforce



Source: Chaddha, Anmol. 2016. "A \$15 Minimum Wage in New England: Who would be affected?" Federal Reserve Bank of Boston. <https://www.bostonfed.org/-/media/Documents/Community%20Development%20Issue%20Briefs/cdbrief42016.pdf>

Affected workers in VT are more likely to work full time than elsewhere in New England

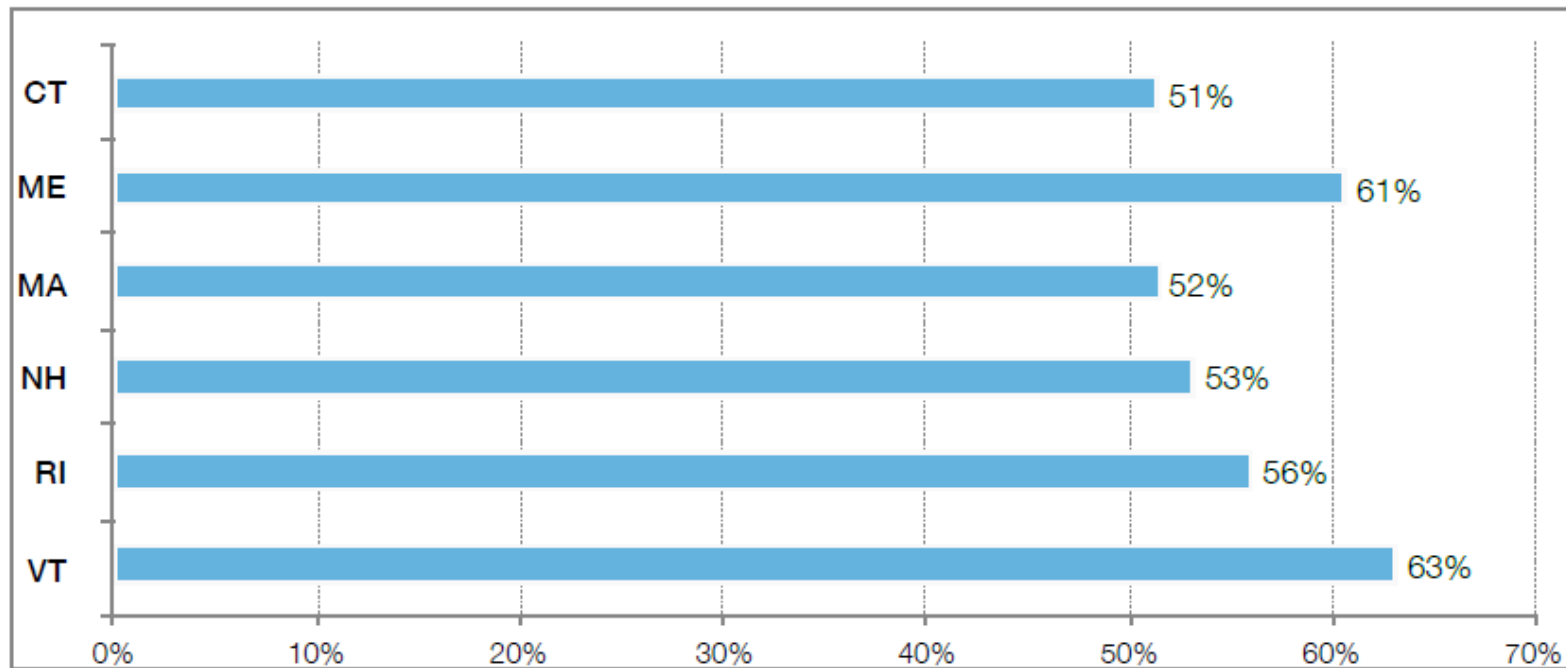
Figure 7: Full-Time and Part-Time Workers in the Sub-\$15 Workforce



Source: Chaddha, Anmol. 2016. "A \$15 Minimum Wage in New England: Who would be affected?" Federal Reserve Bank of Boston. <https://www.bostonfed.org/-/media/Documents/Community%20Development%20Issue%20Briefs/cdbrief42016.pdf>

Affected workers in VT earn a larger share of their family income than elsewhere in New England

Figure 5: Average Share of Total Family Income Provided by Worker Making Under \$15/Hour



Source: Chaddha, Anmol. 2016. "A \$15 Minimum Wage in New England: Who would be affected?" Federal Reserve Bank of Boston. <https://www.bostonfed.org/-/media/Documents/Community%20Development%20Issue%20Briefs/cdbrief42016.pdf>

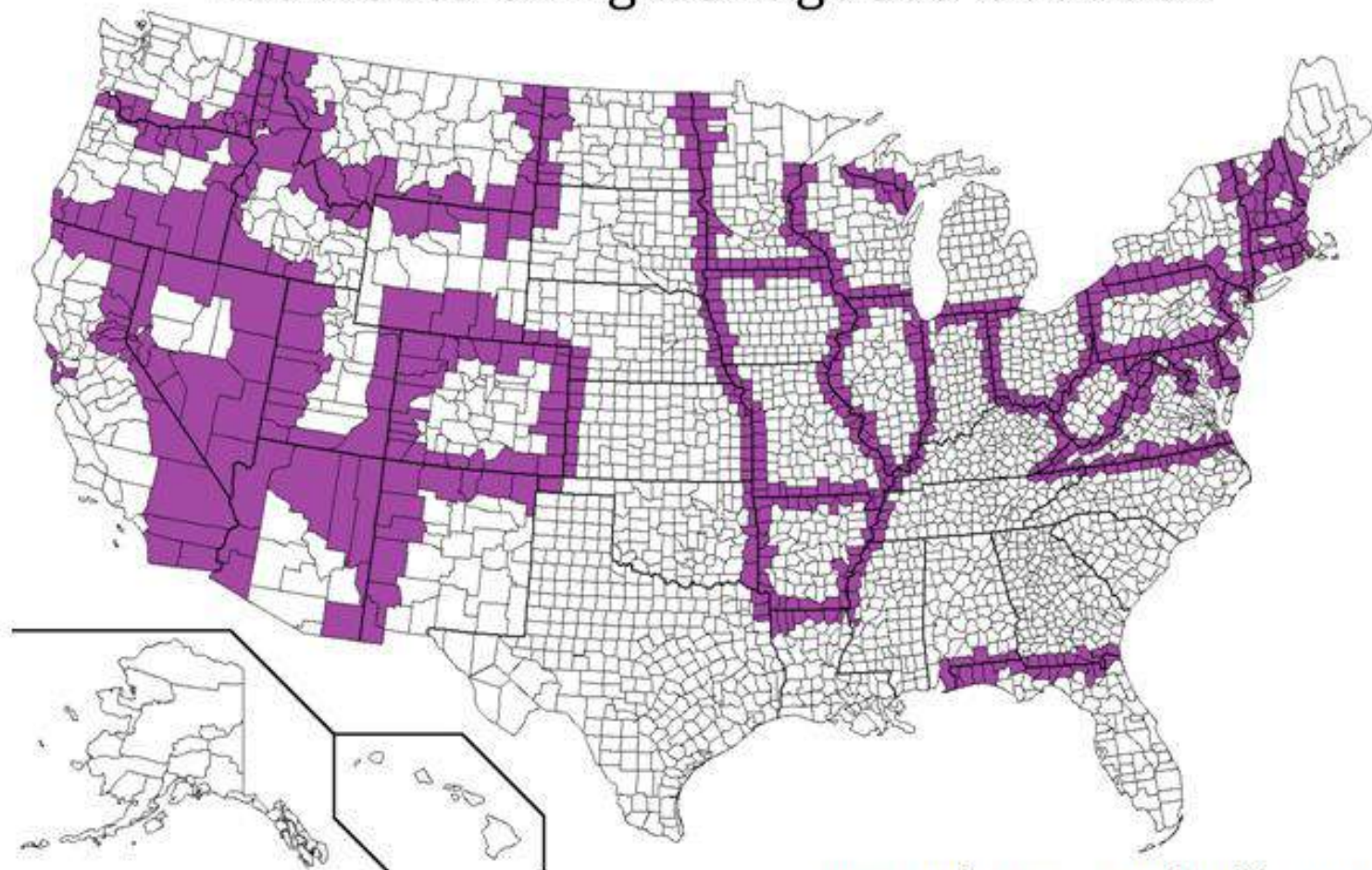
Research on the minimum wage and employment

- Early research 1970s & 1980s – it was thought that higher national minimum wage reduced employment
- 1990s – Many U.S. states set minimum wages above national minimum wage
- Card & Krueger (1995) *Myth and Measurement* – examined minimum wage increase along New Jersey border
 - Employment grew more in NJ border counties than in PA after minimum wage increase



The best research: cross-border comparisons

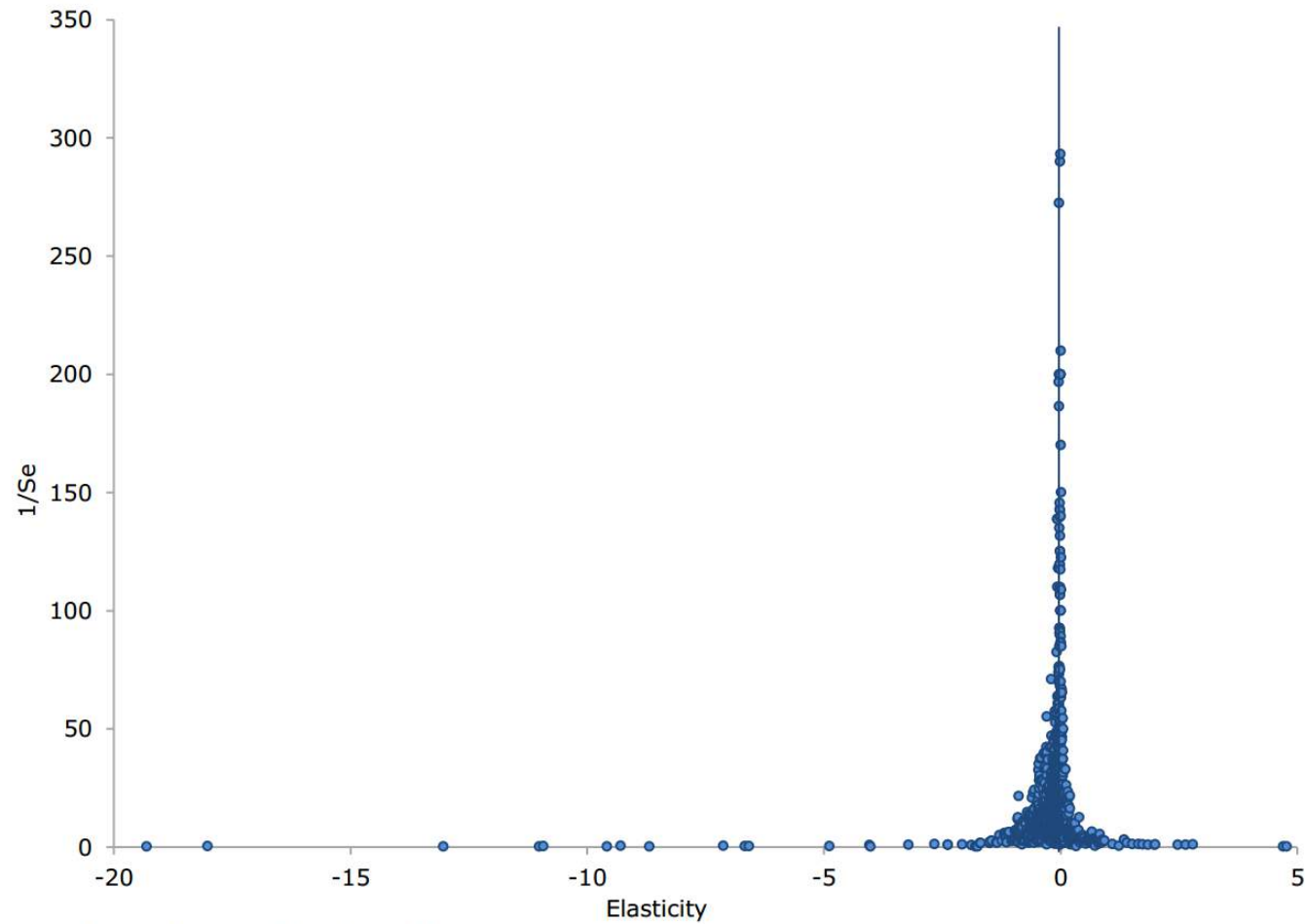
Minimum Wage Effects Across State Borders:
Estimates Using Contiguous Counties



Source: Dube, Lester, and Reich 2010

Meta-studies: Moderate increases in the minimum wage have “little to no effect on employment”

Trimmed Funnel Graph of Estimated Minimum-Wage Effects (n = 1,492)



Source: Doucouliagos and Stanley (2009).

Why no negative effect on jobs?

- Schmitt, John (2013) “Why Does the Minimum Wage Have No Discernible Effect on Employment?”

Channels of adjustment:

1. Reduction in turnover costs (+10% MW → -2.2% in turnover)
2. Improved productivity & efficiency
3. Wage compression
4. Small price increases (+10% MW → 0.3%-1.5%)
5. Increased consumer demand generated by increase to worker spending power

Why policymakers should be bold

- Today's low-wage workers earn less per hour than their counterparts did 50 years ago, but productivity has since nearly doubled
- Past minimum wage increases have been modest and too infrequent, leaving millions earning less than they should be and many without sufficient earnings to afford their basic needs.
- Failures to raise the minimum wage adequately are directly responsible for rising wage inequality between the bottom and the middle class, especially for women

Why policymakers should be bold (cont.)

- \$15 in 2022/24 would finally set the minimum higher than its previous peak in 1968, by roughly 30% in buying power
- Research confirms that modest increases in the minimum wage have caused no negative effects --- this justifies supporting a bolder increase.
- Without bolder increases, we are unlikely to ever achieve a wage floor that affords a decent quality of life
- Claims about “job loss” are misleading – what matters is effects on annual income

Claims about “job loss” are misleading

- Concerns about “job loss” are really a concern about changes to “total hours of work”
 - In low-wage labor markets, workers are constantly moving in and out of jobs
 - Employers have several margins of adjustment when facing higher labor costs
 - Workers with fewer hours may be working fewer hours per week or fewer weeks per year
- If total hours of work do fall, some workers who work less can still come out ahead with higher total annual income
- Even pessimistic analyses almost always show that the potential benefits (in terms of annual wage increases for all low-wage workers) far outweigh any potential losses

How other states have dealt with uncertainty around \$15 – New York



- Scheduled increases for Upstate Region to \$12.50 by 2021 (Dec 31, 2020)
- Thereafter, annual increases determined by October, by the director of the budget and commissioner of labor, based on:
 - Rate of inflation (CPI-U) over preceding 12 months;
 - Rate of state personal income growth over preceding calendar year; or
 - Rate of wage growth.
- Ambiguous how these indices are to be applied
- State officials effectively have discretion to determine increase schedule

Possible Upstate New York minimum wage schedules, linked to different series

Year	Scheduled minimum wage	Future increases linked to projected:		
		Inflation (CPI-U)	Per capita personal income	Median wage growth
2017	\$9.70			
2018	\$10.40			
2019	\$11.10			
2020	\$11.80			
2021	\$12.50	\$12.50	\$12.50	\$12.50
2022		\$12.80	\$12.90	\$12.85
2023		\$13.11	\$13.33	\$13.21
2024		\$13.42	\$13.78	\$13.58
2025		\$13.74	\$14.24	\$13.95
2026		\$14.07	\$14.72	\$14.34
2027		\$14.40	\$15.00	\$14.74
2028		\$14.75		\$15.00
2029		\$15.00		

Source: New York State minimum wage law; inflation projections from the CBO's August 2017 projections for the CPI-U; per capital personal income projected at the average growth rate from 2000-2015 in New York from the BEA; median wage growth projected at the average nominal growth rate from 2000-2015 for full-time, full-year workers from EPI analysis of the Current Population Survey Annual Social and Economic Supplement.

How other states have dealt with uncertainty around \$15 – California



- Scheduled increases to \$15.00 by Jan 1, 2022 (employers with fewer than 26 employees have 1 extra year to comply)
- By July 28th of any year leading up to \$15, governor may pause the scheduled increases for one year if:
 - A) State total nonfarm employment declines April to June; or
 - B) State total nonfarm employment declines January to June;

AND

 - C) State retail sales tax receipts over preceding July 1 to June 30 were smaller than over the same period, one year prior
- Governor may pause increases up to two times

Conclusion

- Lawmakers are right to consider bolder minimum wage increases than have been done before in order to undo decades of damage to low-wage workers
- Minimum wage policy is particularly important in Vermont, as affected workers are typically full-time, prime-age bread winners
- Research confirms that modest increases in the minimum wage have caused no negative effects -- this justifies supporting a bolder increase.
- Claims that there will be job losses mischaracterize any costs and ignore the fact that the potential benefits far outweigh the potential costs
- Increases can be structured with flexibility to adjust for changes in economic conditions

For more information

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Appendix 9: Comparing the Vermont Minimum Wage to Other Measures, 1959–2016

Comparing the Vermont Minimum Wage to Other Measures, 1959-2016

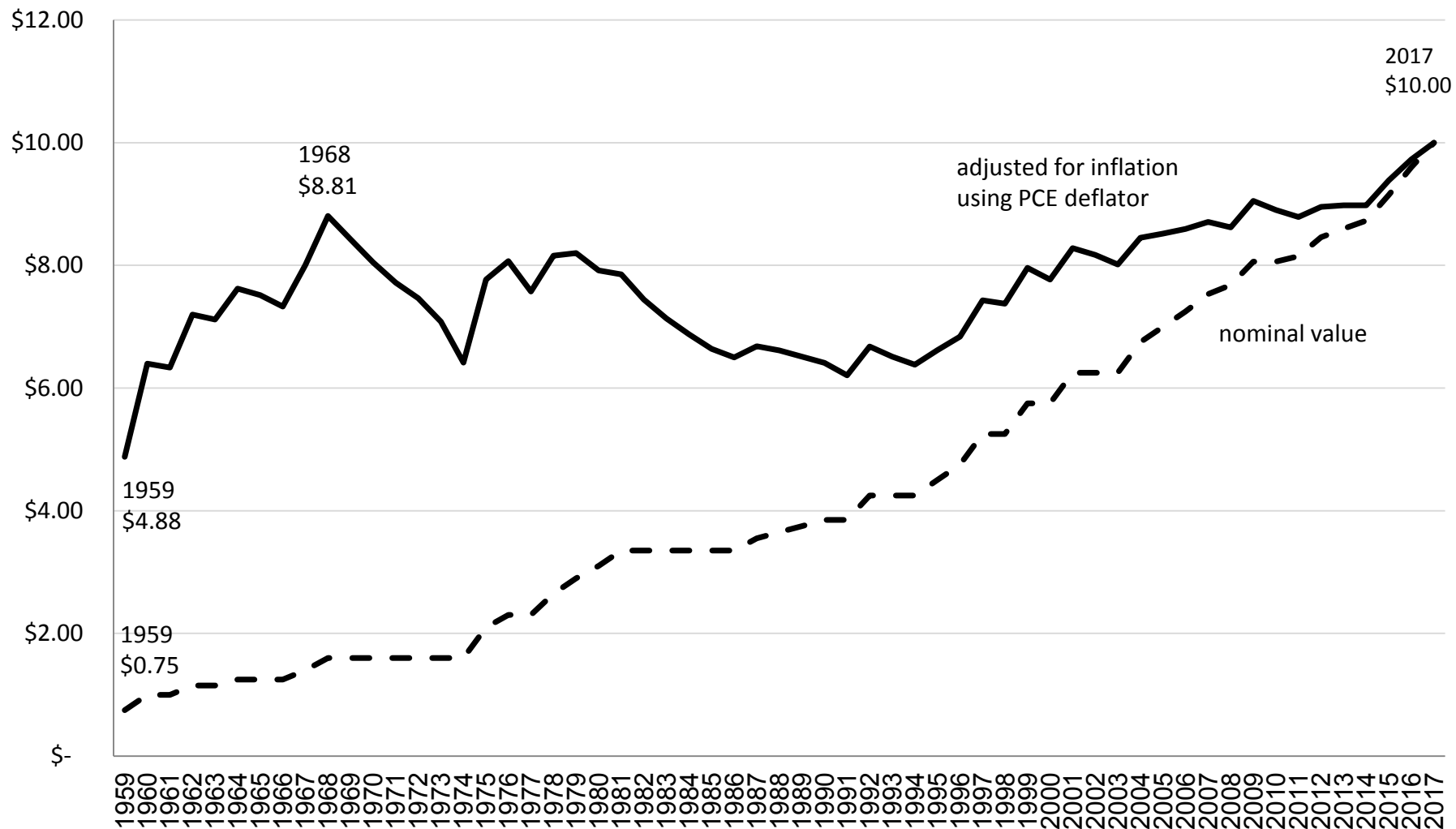
Joyce Manchester

Joint Fiscal Office

September 6, 2017

	Years When Data Are Available
VT minimum wage	1938-2017
Consumer Price Index (CPI)	1913-2016
Personal Consumption Expenditure (PCE) deflator	1959-2016
Nonfarm business productivity growth	1947-2016
U.S. Gross Domestic Product (GDP) per capita	1947-2016
VT personal income per capita	1929-2016
Vermont's livable wage	1998-2016
Vermont's hourly wage 10 th , 25 th , 50 th , 75 th , 90 th percentile	2004-2016

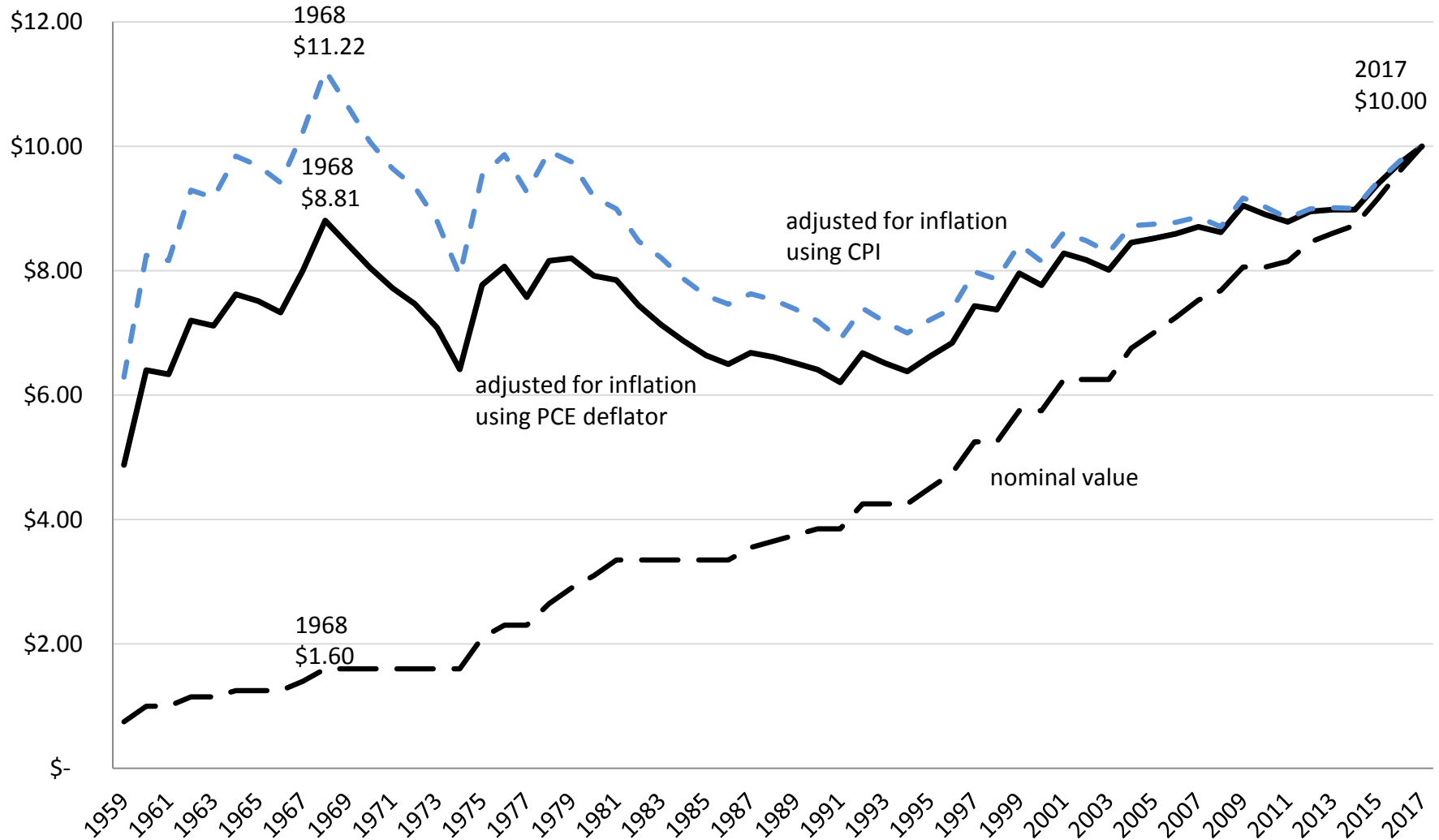
Vermont's Minimum Wage, Nominal and Inflation-Adjusted (PCE), 1959-2017



Sources: VT minimum wage as set in Vermont statute;

Adjusted for inflation using the Personal Consumption Expenditure (PCE) deflator, U.S. Department of Commerce, Bureau of Economic Analysis

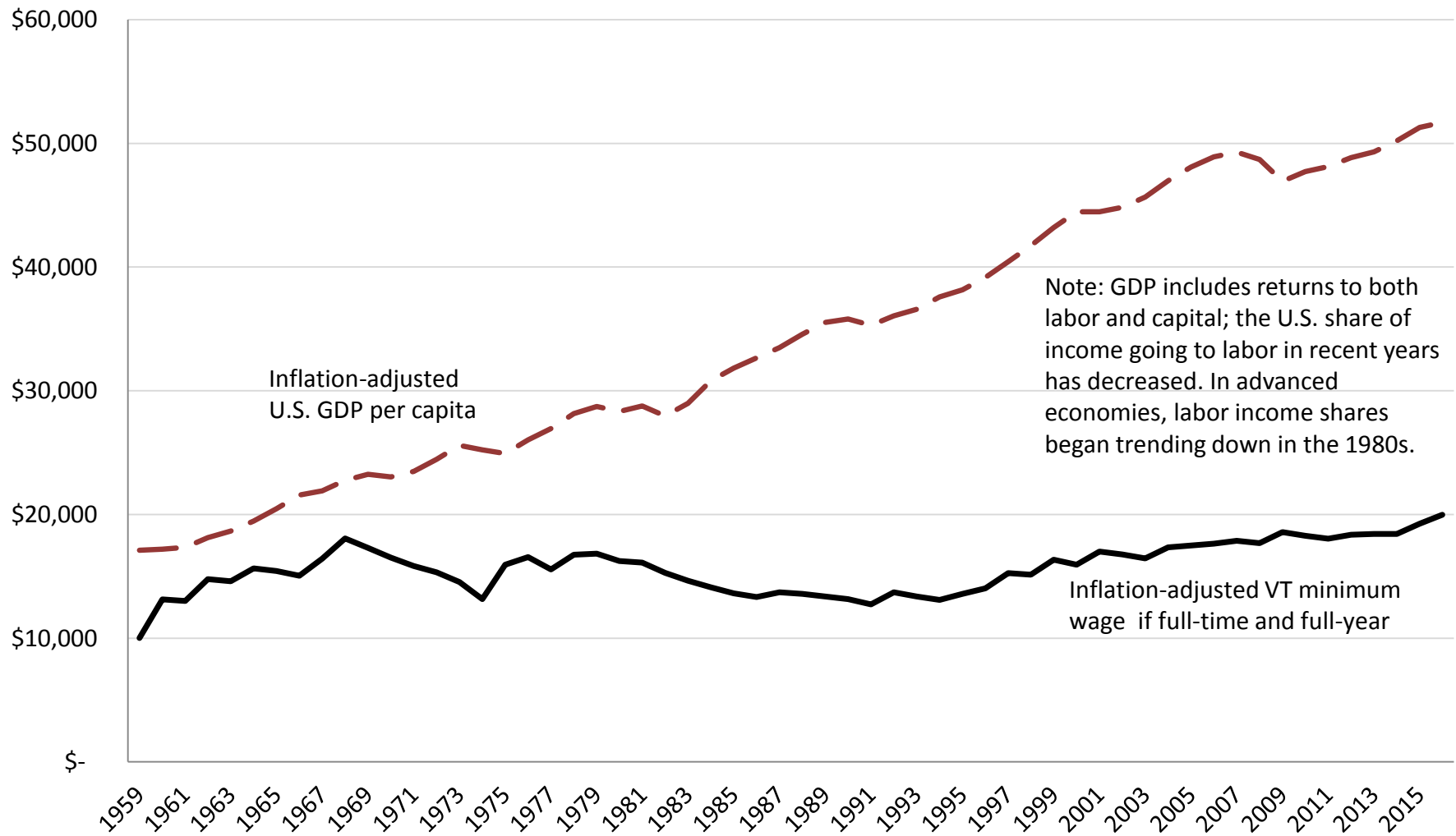
VT Minimum Wage, Nominal Value and Adjusted for Inflation using the PCE deflator and the CPI, 1959-2017



Sources: VT minimum wage as set in Vermont statute;

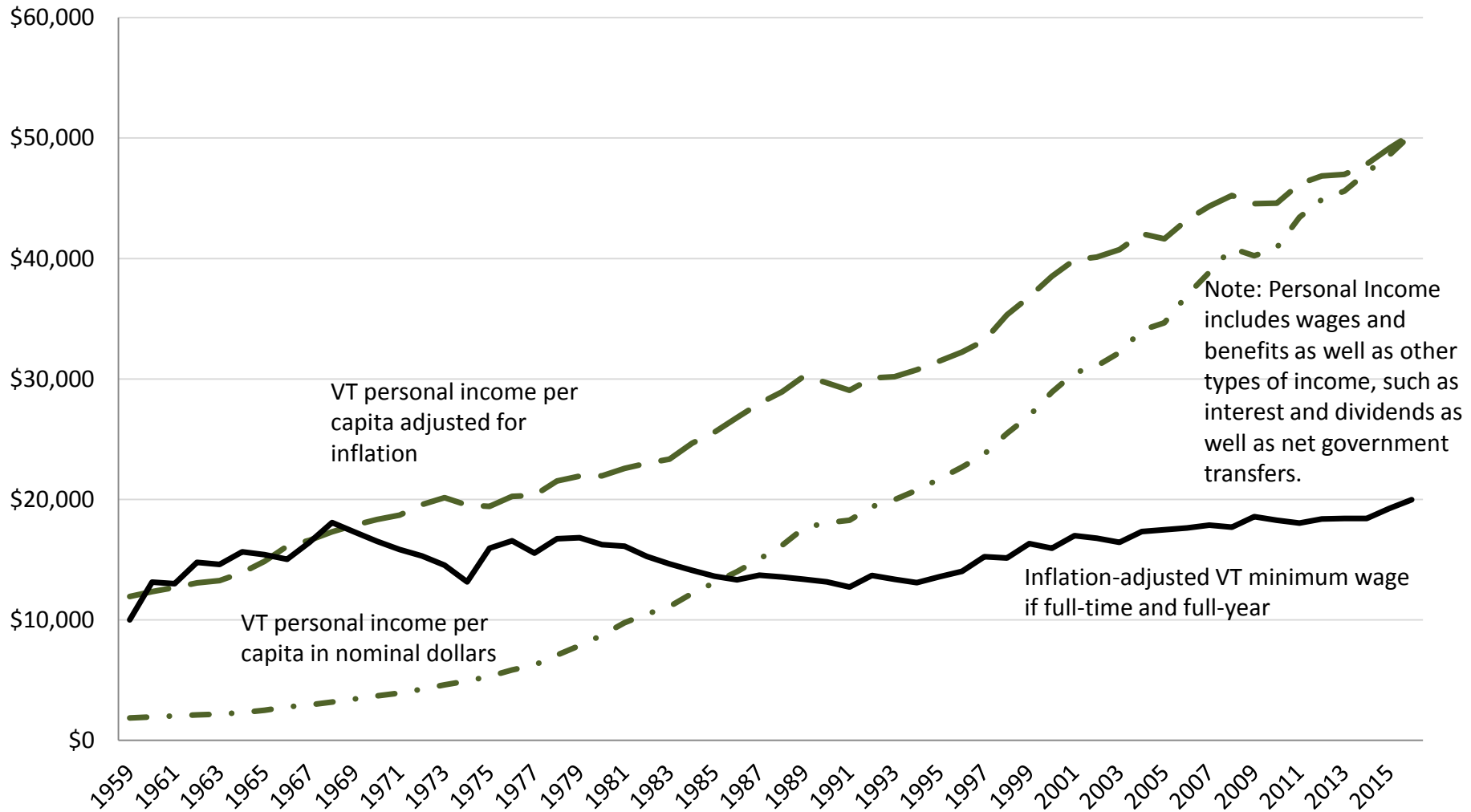
Adjusted for inflation using the Personal Consumption Expenditure (PCE) deflator, U.S. Department of Commerce, Bureau of Economic Analysis; and using the Consumer Price Index (CPI), U.S. Department of Labor, Bureau of Labor Statistics

Inflation-Adjusted U.S. GDP Per Capita and VT Minimum Wage if Work Full-Time and Full-Year, 1959-2016



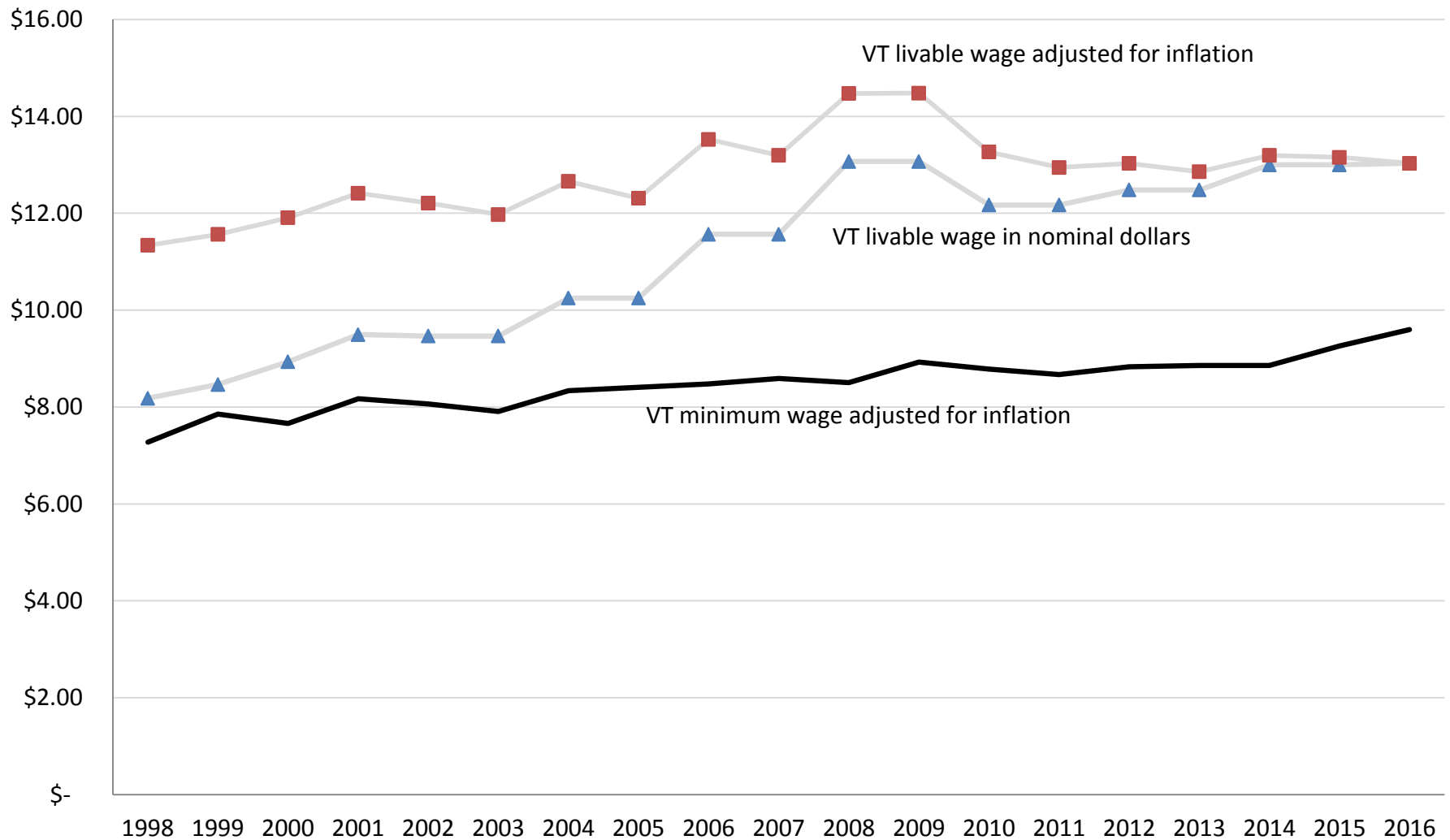
Sources: U.S. Inflation-Adjusted GDP Per Capita, U.S. Department of Commerce, Bureau of Economic Analysis;
VT minimum wage as set in Vermont statute, assumes work 2080 hours per year; adjusted for inflation using the Personal Consumption Expenditure deflator, U.S. Department of Commerce, Bureau of Economic Analysis

Vermont Personal Income Per Capita, Nominal and Inflation-Adjusted, and the Inflation-Adjusted VT Minimum Wage if Full-Time and Full-Year, 1959-2016



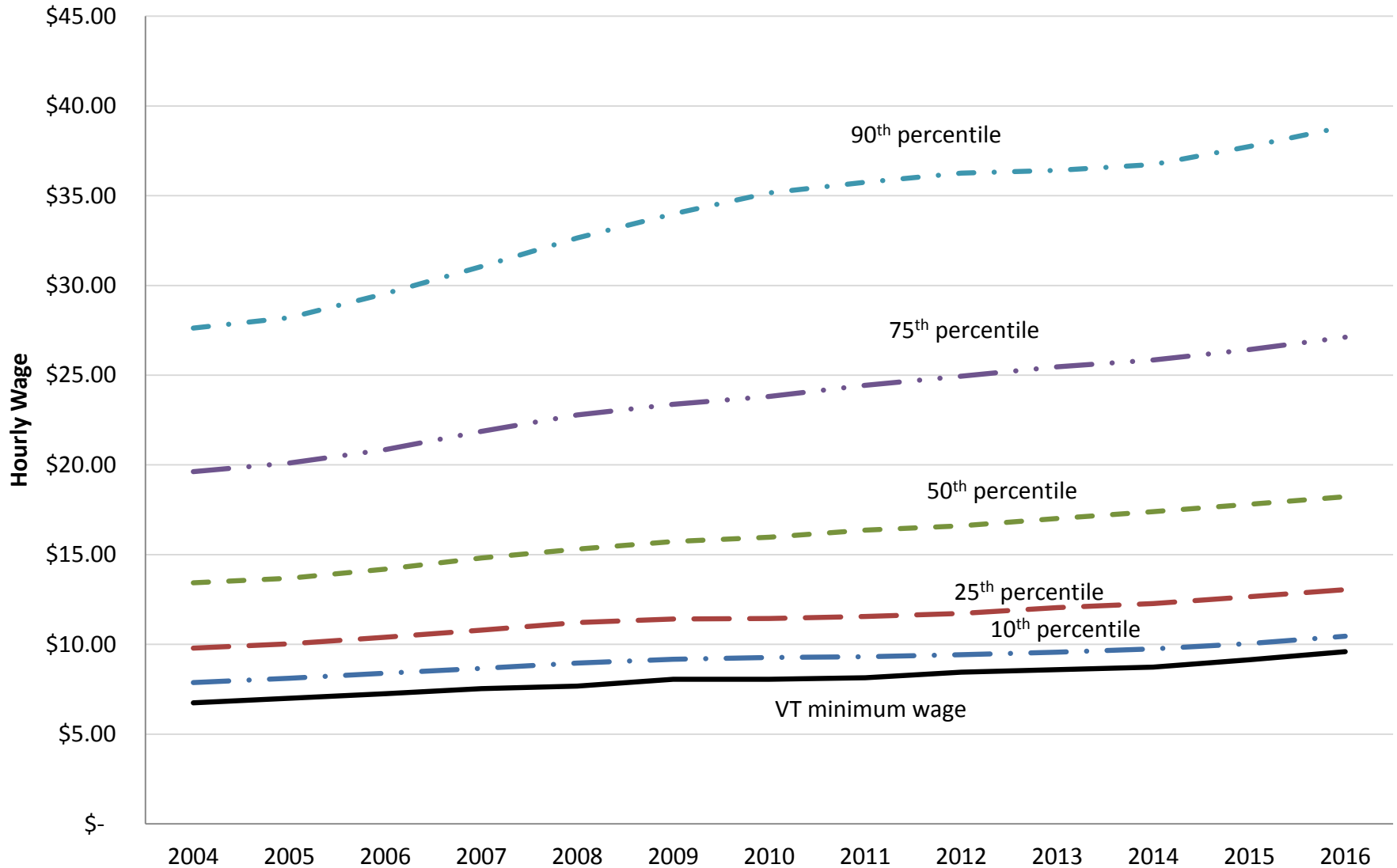
Sources: Vermont Personal Income Per Capita, U.S. Department of Commerce, Bureau of Economic Analysis
 Adjusted for inflation using the Personal Consumption Expenditure deflator, U.S. Department of Commerce, Bureau of Economic Analysis
 VT minimum wage as set in Vermont statute

Vermont's Livable Wage, Nominal and Inflation-Adjusted Values, and Vermont Minimum Wage, Adjusted for Inflation, 1998 - 2016



Sources: Vermont Joint Fiscal Office, Basic Needs Budgets and the Livable Wage, various years, available on the JFO website;
VT minimum wage as set in Vermont statute;
Adjusted for inflation using the Personal Consumption Expenditure deflator, U.S. Department of Commerce, Bureau of Economic Analysis

Vermont Wage Distribution and the VT Minimum Wage, nominal dollars, 2004-2016



Sources: Vermont Hourly Wage Distribution from the Occupational Employment Statistics Survey, All Industries and Occupations, available on the website of the Vermont Department of Labor, Economic & Labor Market Information, <http://www.vtlmi.info/oessummary.htm>
VT minimum wage as set in Vermont statute

	Compound Annual Growth Rate	
	Nominal	Inflation-adjusted (PCE)
	1959-2016	
VT minimum wage	4.6%	1.3%
U.S. Consumer Price Index (CPI)	3.8%	
U.S. Personal Consumption Expenditure (PCE) deflator	3.4%	
U.S. Nonfarm business productivity growth		2.0%
U.S. GDP per capita	5.4%	2.0%
VT personal income per capita	6.0%	2.6%
	1998-2016	
VT minimum wage	3.4%	1.6%
Personal Consumption Expenditure (PCE) deflator	1.8%	
Vermont's livable wage	2.6%	0.8%
	2004-2016	
VT minimum wage	3.0%	1.2%
Personal Consumption Expenditure (PCE) deflator	1.8%	
Vermont hourly wage, 10th percentile	2.4%	0.6%
Vermont hourly wage, 25th percentile	2.4%	0.6%
Vermont hourly wage, 50th percentile	2.6%	0.8%
Vermont hourly wage, 75th percentile	2.7%	0.9%
Vermont hourly wage, 90th percentile	2.9%	1.1%

Appendix 10: Minimum Wage Increases in Other States

Minimum Wage Increases in Other States



SEPTEMBER 6, 2017

**PREPARED BY:
DAMIEN LEONARD, LEGISLATIVE COUNCIL**

Outline of Presentation



- Comparison of Minimum Wage Increases Between Selected States and Washington, DC
- CPI-U vs. CPI-W
- Comparison of Minimum Wage Increases Across New England

Side-by-Side Comparison of Minimum Wage Increases Between Selected States and Washington, DC



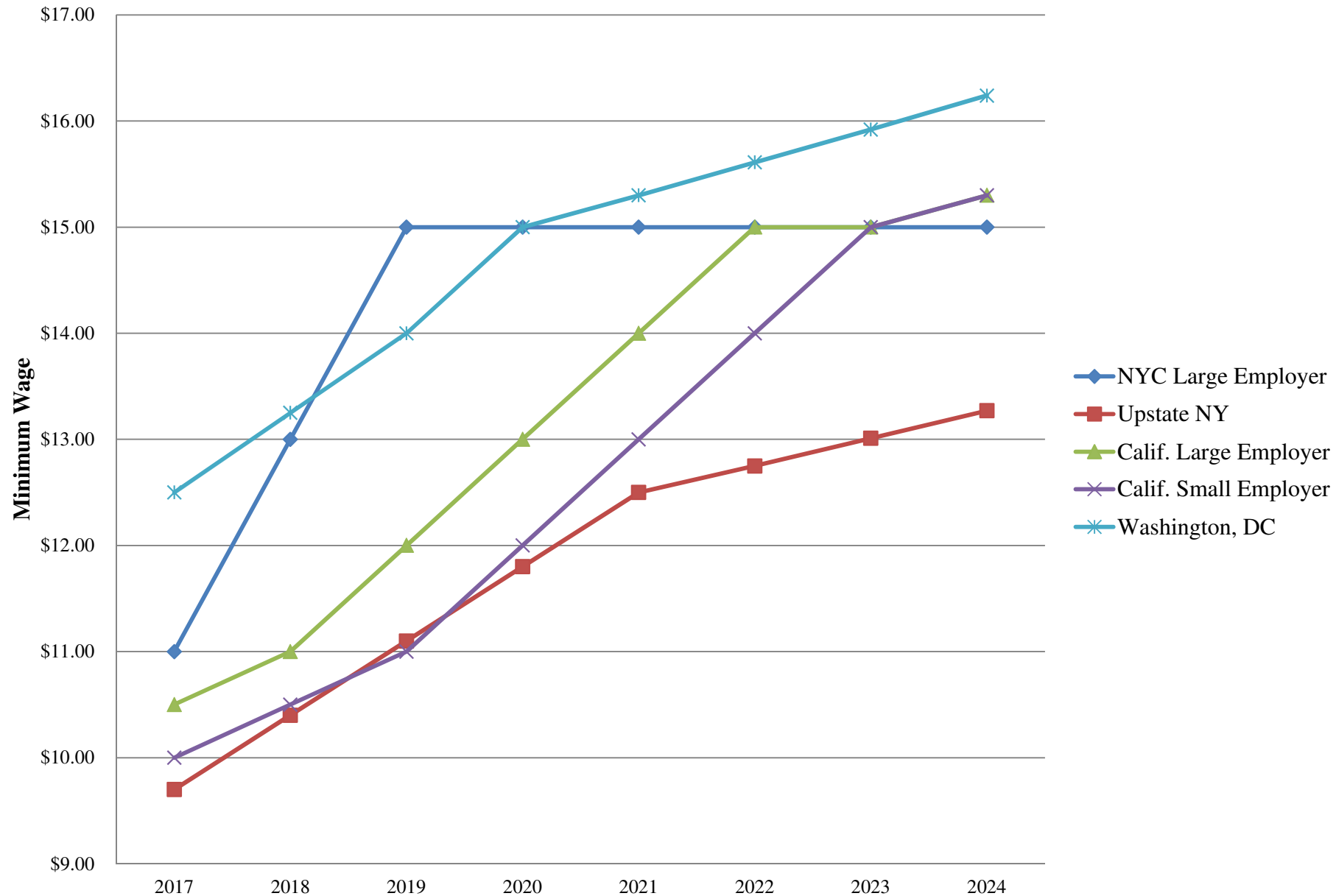
Year	New York	California	Washington, D.C.	Oregon	Washington	Arizona	Colorado	Maine
2017	NYC \geq 11: \$11.00 NYC \leq 10: \$10.50 Downstate NY: \$10.00 Upstate NY: \$9.70	\geq 26: \$10.50 \leq 25: \$10.00	\$11.50/\$12.50	Standard: \$9.75/\$10.25 Portland: \$9.75/\$11.25 Non-urban: \$9.50/\$10.00	\$11.00	\$10.00	\$9.30	\$9.00
2018	NYC \geq 11: \$13.00 NYC \leq 10: \$12.00 Downstate NY: \$11.00 Upstate NY: \$10.40	\geq 26: \$11.00 \leq 25: \$10.50	\$12.50/\$13.25	Standard: \$10.25/\$10.75 Portland: \$11.25/\$12.00 Non-urban: \$10.00/\$10.50	\$11.50	\$10.50	\$10.20	\$10.00
2019	NYC \geq 11: \$15.00 NYC \leq 10: \$13.50 Downstate NY: \$12.00 Upstate NY: \$11.10	\geq 26: \$12.00 \leq 25: \$11.00	\$13.25/\$14.00	Standard: \$10.75/\$11.25 Portland: \$12.00/\$12.50 Non-urban: \$10.50/\$11.00	\$12.00	\$11.00	\$11.10	\$11.00
2020	NYC \geq 11: \$15.00 NYC \leq 10: \$15.00 Downstate NY: \$13.00 Upstate NY: \$11.80	\geq 26: \$13.00 \leq 25: \$12.00	\$14.00/\$15.00	Standard: \$11.25/\$12.00 Portland: \$12.50/\$13.25 Non-urban: \$11.00/\$11.50	\$13.50	\$12.00	\$12.00	\$12.00

Side-by-Side Comparison of Minimum Wage Increases Between Selected States and Washington, DC

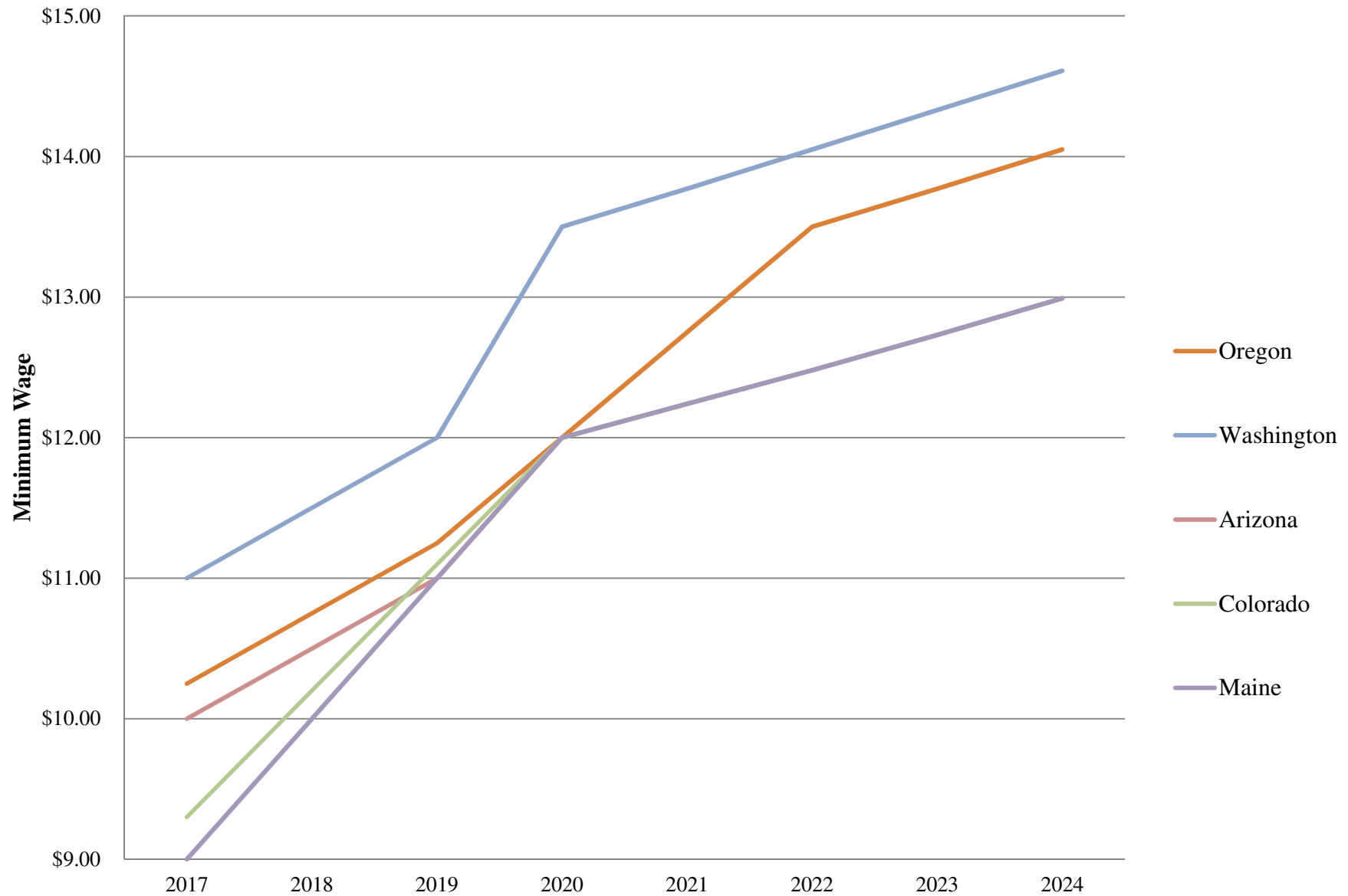


Year	New York	California	Washington, D.C.	Oregon	Washington	Arizona	Colorado	Maine
2021	NYC ≥ 11 : \$15.00 NYC ≤ 10 : \$15.00 Downstate NY: \$14.00 Upstate NY: \$12.50	≥ 26 : \$14.00 ≤ 25 : \$13.00	\$15.00/Increased by CPI-U	Standard: \$12.00/\$12.75 Portland: \$13.25/\$14.00 Non-urban: \$11.50/\$12.00	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W
2022	NYC ≥ 11 : \$15.00 NYC ≤ 10 : \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percentage determined by Director of Budget until it reaches \$15.00.	≥ 26 : \$15.00 ≤ 25 : \$14.00	Increased by CPI-U	Standard: \$12.75/\$13.50 Portland: \$14.00/\$14.75 Non-urban: \$12.00/\$12.50	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W
2023	NYC ≥ 11 : \$15.00 NYC ≤ 10 : \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percent determined by Director of Budget until it reaches \$15.00.	≥ 26 : \$15.00 ≤ 25 : \$15.00	Increased by CPI-U	Standard: Increased by CPI-U Portland: \$1.25 more than standard wage. Non-urban: \$1.00 less than standard wage.	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W
2024	NYC ≥ 11 : \$15.00 NYC ≤ 10 : \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percent determined by Director of Budget until it reaches \$15.00.	≥ 26 : Increased by CPI or 3.5%. ≤ 25 : Increased by CPI or 3.5%.	Increased by CPI-U	Standard: Increased by CPI-U Portland: \$1.25 more than standard wage. Non-urban: \$1.00 less than standard wage.	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W

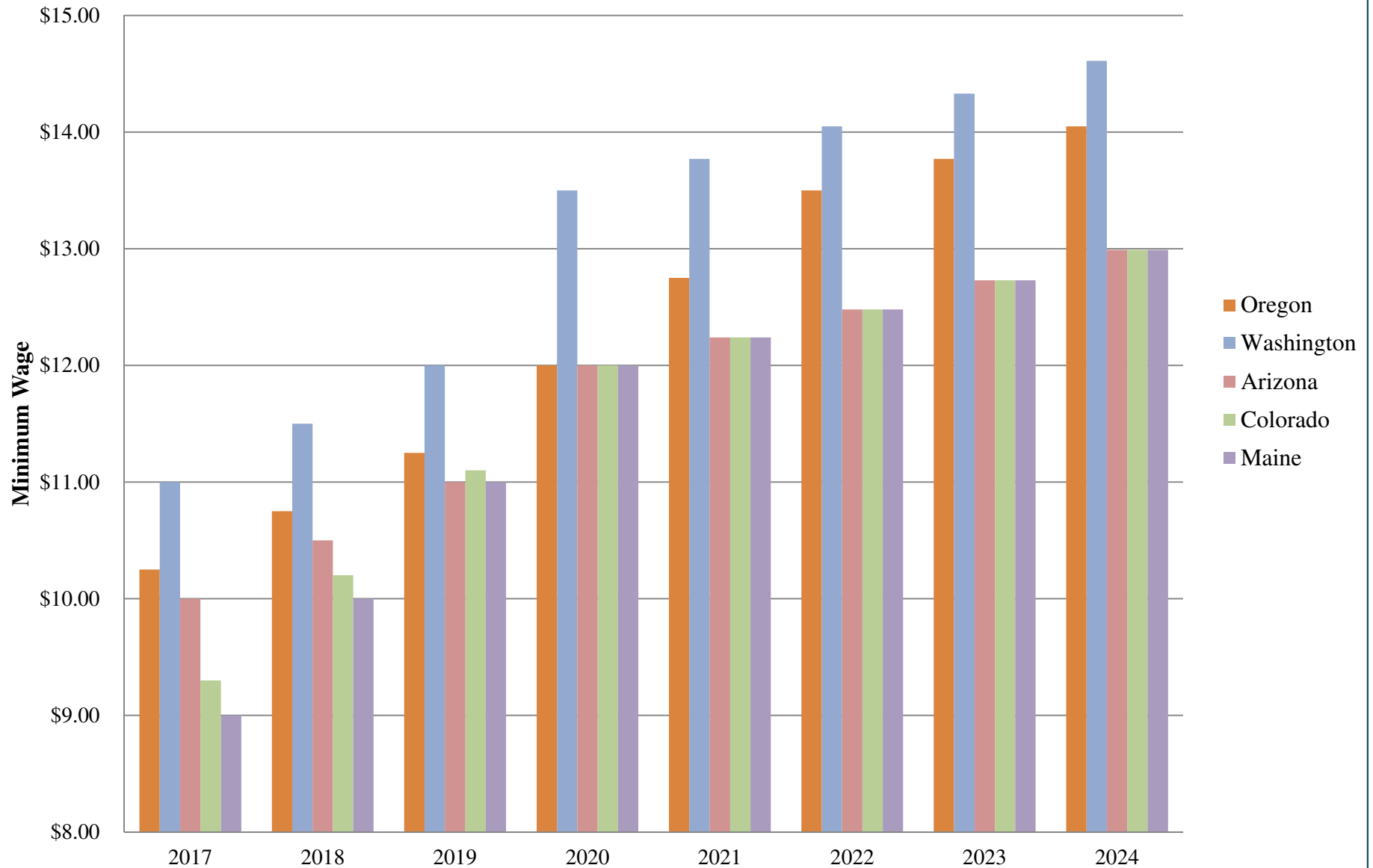
Comparison of Minimum Wage Increases in New York, California, and Washington, DC



Comparison of Minimum Wage Increases in Oregon, Washington, Arizona, Colorado, and Maine



Comparison of Minimum Wage Increases in Oregon, Washington, Arizona, Colorado, and Maine (Alternative View)



CPI-U vs. CPI-W



- The Consumer Price Index (CPI) is a measure of the average change over time in prices paid by urban consumers for a market basket of consumer goods and services.
- CPI tracks the spending patterns of two population groups:
 - all urban consumers (CPI-U); and
 - urban wage earners and clerical workers (CPI-W).
- Changes in both indexes over the long-term tend to be similar.

CPI-U vs. CPI-W



- CPI-U represents about 89% of the U.S. population and is based on the expenditures of all families living in urban areas.
- CPI-U is based on the expenditures of almost all residents of urban or metropolitan areas, including individuals that are:
 - professionals;
 - wage-earners;
 - self-employed;
 - poor;
 - unemployed; and
 - retired.
- CPI-U does not include the expenditures of:
 - individuals living in rural nonmetropolitan areas;
 - farm families;
 - individuals in the Armed Forces; and
 - individuals in institutions, such as prisons and mental hospitals.

CPI-U vs. CPI-W



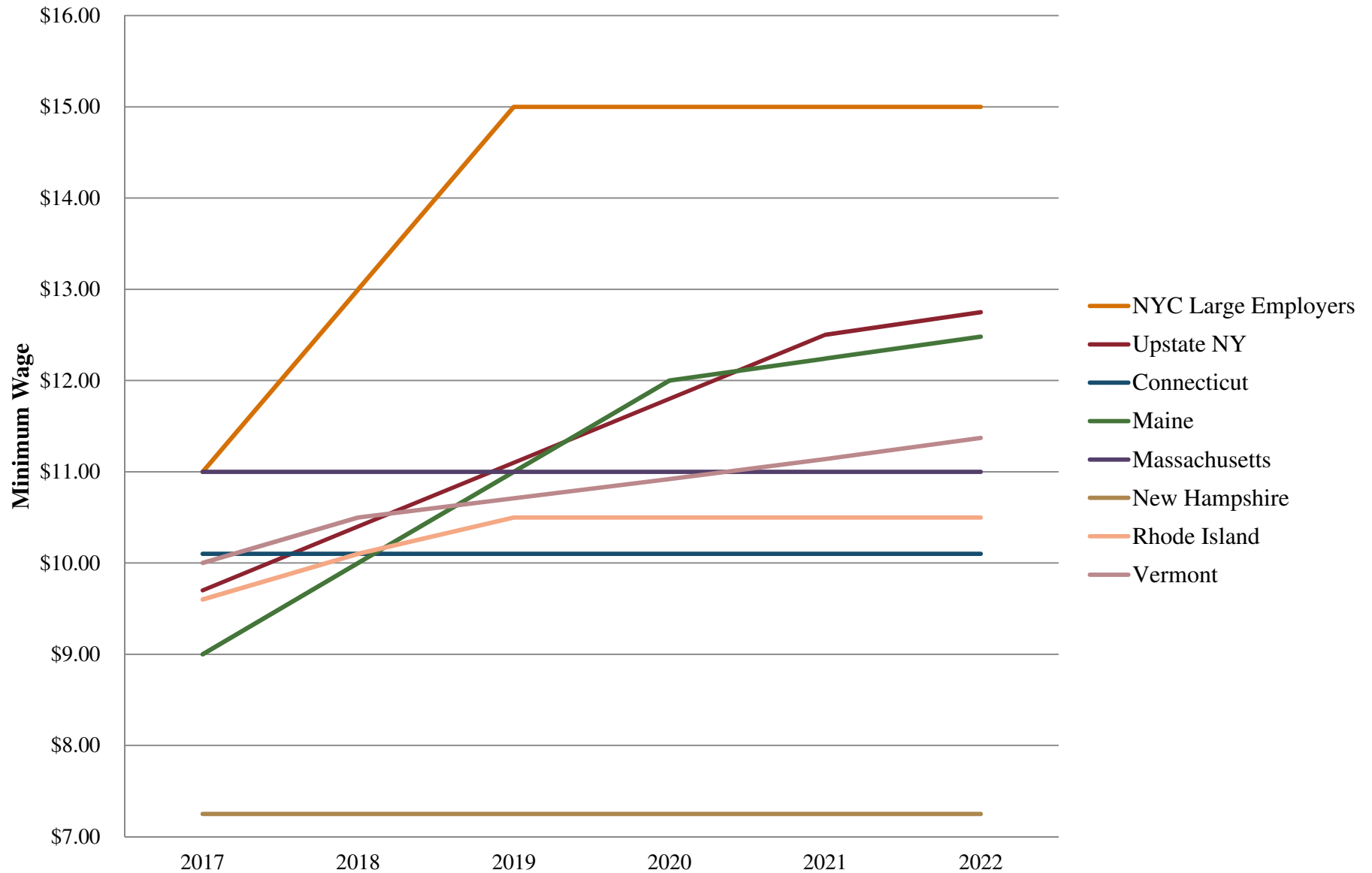
- CPI-W is a subset of CPI-U that represents about 28% of the U.S. population and is based on the expenditures of families living in urban areas who meet the following requirements :
 - more than one-half of the household's income must come from clerical or wage occupations; and
 - at least one of the household's earners must have been employed for at least 37 weeks during the previous 12 months.

COMPARISON OF MINIMUM WAGE INCREASES IN NEW ENGLAND AND NEW YORK STATE

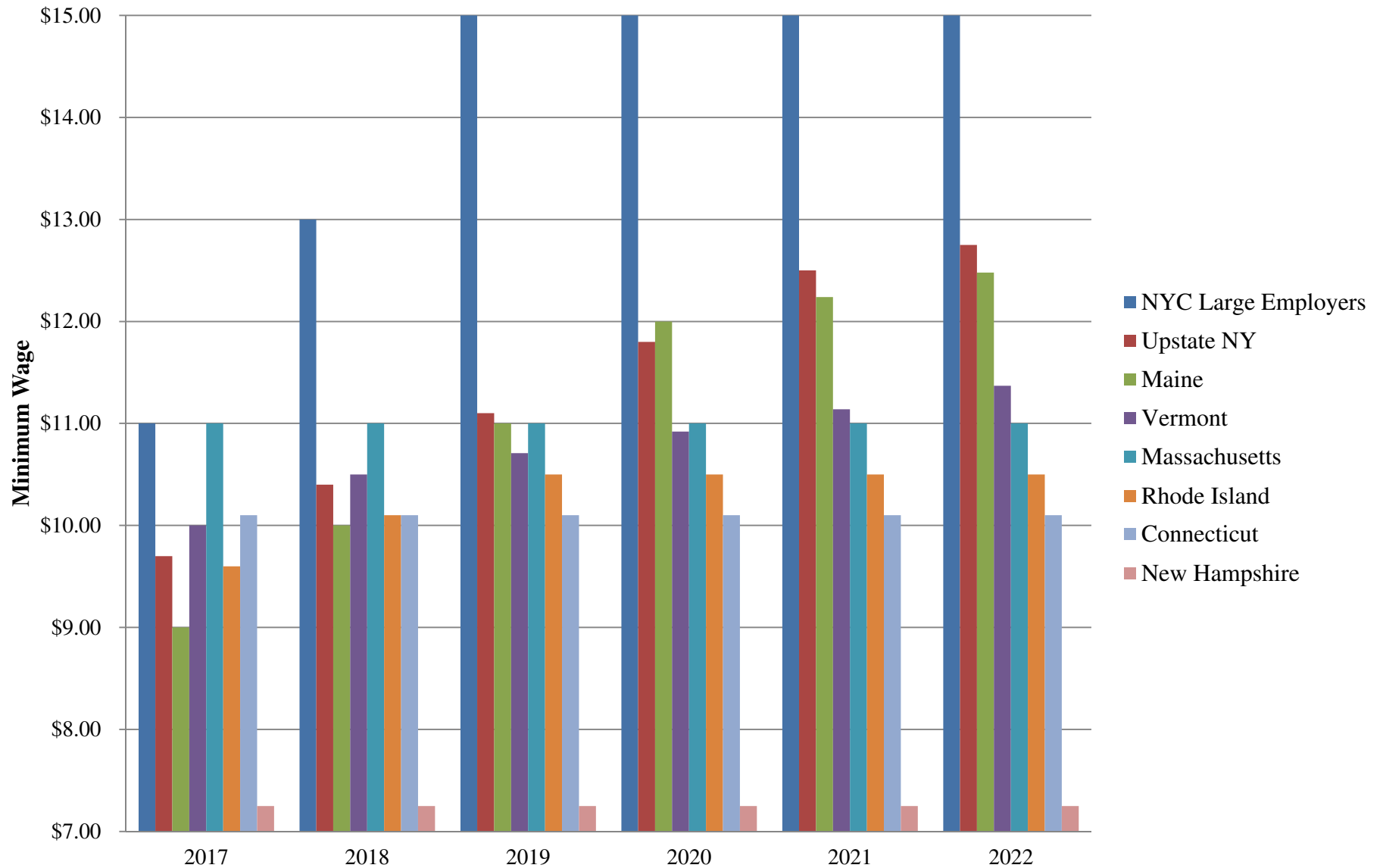


Year	New York	Connecticut	Maine	Massachusetts	New Hampshire	Rhode Island	Vermont
2017	NYC \geq 11: \$11.00 NYC \leq 10: \$10.50 Downstate NY: \$10.00 Upstate NY: \$9.70	\$10.10	\$9.00	\$11.00	\$7.25	\$9.60	\$10.00
2018	NYC \geq 11: \$13.00 NYC \leq 10: \$12.00 Downstate NY: \$11.00 Upstate NY: \$10.40	\$10.10	\$10.00	\$11.00	\$7.25	\$10.10	\$10.50
2019	NYC \geq 11: \$15.00 NYC \leq 10: \$13.50 Downstate NY: \$12.00 Upstate NY: \$11.10	\$10.10	\$11.00	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less
2020	NYC \geq 11: \$15.00 NYC \leq 10: \$15.00 Downstate NY: \$13.00 Upstate NY: \$11.80	\$10.10	\$12.00	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less
2021	NYC \geq 11: \$15.00 NYC \leq 10: \$15.00 Downstate NY: \$14.00 Upstate NY: \$12.50	\$10.10	Increased by CPI-W	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less
2022	NYC \geq 11: \$15.00 NYC \leq 10: \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percentage determined by Director of Budget until it reaches \$15.00.	\$10.10	Increased by CPI-W	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less

COMPARISON OF MINIMUM WAGE INCREASES IN NEW ENGLAND AND NEW YORK STATE



COMPARISON OF MINIMUM WAGE INCREASES IN NEW ENGLAND AND NEW YORK STATE





Any Questions?

SIDE-BY-SIDE OF MINIMUM WAGE INCREASES BY STATE

Prepared By: Damien Leonard, Esq.

Office of Legislative Council

August 30, 2017

Year	New York ^{i ii}	California ⁱⁱⁱ	Washington, D.C. ^{iv}	Oregon ^v	Washington	Arizona	Colorado	Maine
2017	NYC ≥11: \$11.00 NYC ≤10: \$10.50 Downstate NY: \$10.00 Upstate NY: \$9.70	≥26: \$10.50 ≤25: \$10.00	\$11.50/\$12.50	Standard: \$9.75/\$10.25 Portland: \$9.75/\$11.25 Non-urban: \$9.50/\$10.00	\$11.00	\$10.00	\$9.30	\$9.00
2018	NYC ≥11: \$13.00 NYC ≤10: \$12.00 Downstate NY: \$11.00 Upstate NY: \$10.40	≥26: \$11.00 ≤25: \$10.50	\$12.50/\$13.25	Standard: \$10.25/\$10.75 Portland: \$11.25/\$12.00 Non-urban: \$10.00/\$10.50	\$11.50	\$10.50	\$10.20	\$10.00
2019	NYC ≥11: \$15.00 NYC ≤10: \$13.50 Downstate NY: \$12.00 Upstate NY: \$11.10	≥26: \$12.00 ≤25: \$11.00	\$13.25/\$14.00	Standard: \$10.75/\$11.25 Portland: \$12.00/\$12.50 Non-urban: \$10.50/\$11.00	\$12.00	\$11.00	\$11.10	\$11.00
2020	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$13.00 Upstate NY: \$11.80	≥26: \$13.00 ≤25: \$12.00	\$14.00/\$15.00	Standard: \$11.25/\$12.00 Portland: \$12.50/\$13.25 Non-urban: \$11.00/\$11.50	\$13.50	\$12.00	\$12.00	\$12.00
2021	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$14.00 Upstate NY: \$12.50	≥26: \$14.00 ≤25: \$13.00	\$15.00/Increased by CPI-U	Standard: \$12.00/\$12.75 Portland: \$13.25/\$14.00 Non-urban: \$11.50/\$12.00	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W
2022	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percentage determined by Director of Budget until it reaches \$15.00.	≥26: \$15.00 ≤25: \$14.00	Increased by CPI-U	Standard: \$12.75/\$13.50 Portland: \$14.00/\$14.75 Non-urban: \$12.00/\$12.50	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W
2023	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percent determined by Director of Budget until it reaches \$15.00.	≥26: \$15.00 ≤25: \$15.00	Increased by CPI-U	Standard: Increased by CPI-U Portland: \$1.25 more than standard wage. Non-urban: \$1.00 less than standard wage.	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W
2024	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percent determined by Director of Budget until it reaches \$15.00.	≥26: Increased by CPI or 3.5%, whichever is less. ≤25: Increased by CPI or 3.5%, whichever is less.	Increased by CPI-U	Standard: Increased by CPI-U Portland: \$1.25 more than standard wage. Non-urban: \$1.00 less than standard wage.	Increased by CPI-W	Increased by CPI-U	Increased by CPI	Increased by CPI-W

SIDE-BY-SIDE OF MINIMUM WAGE INCREASES BY STATE

Prepared By: Damien Leonard, Esq.

Office of Legislative Council

August 30, 2017

ⁱ On or after January 1, 2019, and each succeeding January 1 until the minimum wage reaches \$15.00/hour in all regions of New York State, the Division of Budget will analyze the state of the economy in each region and the effect of the minimum wage increases to determine whether there should be a temporary suspension or delay in any of the scheduled increases. The Division of Budget will issue a report and recommendation to the Commissioner of Labor, who must take action to either accept or reject the report and recommendations within 45 days after receiving them.

ⁱⁱ Starting with December 31, 2021, the annual increases for upstate NY will be based on percentage increases determined by the Director of the Division of Budget, based on economic indices, including the Consumer Price Index, the rate of state personal income growth, and/or wage growth. They will be published by the Commissioner of Labor on or before October 1 of each year, and will continue until the wage for upstate NY reaches \$15/hour.

ⁱⁱⁱ Pursuant to CA Labor Code § 1182.12(d), the Director of Finance is required to make a determination and certify to the Governor and Legislature whether certain employment and tax conditions have been met, as well as whether the state General Fund would be in a deficit in the current fiscal year, or in either of the following two fiscal years. If a combination of the employment and tax conditions are met, or if the Director determines that the General Fund would be in deficit, the Governor may temporarily suspend the scheduled minimum wage increases for one year. The Governor may suspend the minimum wage increases no more than two times.

^{iv} Washington, D.C.'s annual period for each minimum wage is from July 1 through June 30, so the minimum wage is represented as (amount through June 30)/(amount from July 1).

^v Oregon's annual period for each minimum wage is from July 1 through June 30, so the minimum wage is represented as (amount through June 30)/(amount from July 1).

SIDE-BY-SIDE OF MINIMUM WAGE INCREASES IN NEW ENGLAND AND NEW YORK BY STATE

Prepared By: Damien Leonard, Esq.

Office of Legislative Council

August 30, 2017

Year	New York ^{i ii}	Connecticut ⁱⁱⁱ	Maine	Massachusetts ^{iv}	New Hampshire ^v	Rhode Island	Vermont
2017	NYC ≥11: \$11.00 NYC ≤10: \$10.50 Downstate NY: \$10.00 Upstate NY: \$9.70	\$10.10	\$9.00	\$11.00	\$7.25	\$9.60	\$10.00
2018	NYC ≥11: \$13.00 NYC ≤10: \$12.00 Downstate NY: \$11.00 Upstate NY: \$10.40	\$10.10	\$10.00	\$11.00	\$7.25	\$10.10	\$10.50
2019	NYC ≥11: \$15.00 NYC ≤10: \$13.50 Downstate NY: \$12.00 Upstate NY: \$11.10	\$10.10	\$11.00	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less
2020	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$13.00 Upstate NY: \$11.80	\$10.10	\$12.00	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less
2021	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$14.00 Upstate NY: \$12.50	\$10.10	Increased by CPI-W	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less
2022	NYC ≥11: \$15.00 NYC ≤10: \$15.00 Downstate NY: \$15.00 Upstate NY: Increased by percentage determined by Director of Budget until it reaches \$15.00.	\$10.10	Increased by CPI-W	\$11.00	\$7.25	\$10.50	Increased by CPI-U or 5%, whichever is less

ⁱ On or after January 1, 2019, and each succeeding January 1 until the minimum wage reaches \$15.00/hour in all regions of New York State, the Division of Budget will analyze the state of the economy in each region and the effect of the minimum wage increases to determine whether there should be a temporary suspension or delay in any of the scheduled increases. The Division of Budget will issue a report and recommendation to the Commissioner of Labor, who must take action to either accept or reject the report and recommendations within 45 days after receiving them.

ⁱⁱ Starting with December 31, 2021, the annual increases for upstate NY will be based on percentage increases determined by the Director of the Division of Budget, based on economic indices, including the Consumer Price Index, the rate of state personal income growth, and/or wage growth. They will be published by the Commissioner of Labor on or before October 1 of each year, and will continue until the wage for upstate NY reaches \$15/hour.

ⁱⁱⁱ CGSA § 31-58 provides that, if the federal minimum wage equals or becomes higher than the Connecticut minimum, the Connecticut minimum wage rate will increase to 0.5% above the federal minimum wage.

^{iv} MGLA 151 § 1 provides that, if the federal minimum wage equals or becomes higher than the Massachusetts minimum, the Massachusetts minimum wage rate will increase to \$0.50 above the federal minimum wage.

^v NH R.S.A. § 279:21 provides that New Hampshire's minimum wage is equal to the federal minimum wage. Thus, if the federal minimum wage is increased above \$7.25/hour, New Hampshire's minimum wage would increase to the new federal rate.

**Appendix 11: Massachusetts Ballot Initiative: Initiative Petition for a Law Raising the
Minimum Wage**

Initiative Petition for a Law Raising the Minimum Wage

Be it enacted by the People, and by their authority:

SECTION 1. Section 1 of chapter 151 of the General Laws is hereby amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$12.00

SECTION 2. Said section 1 of said chapter 151 is hereby further amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$13.00

SECTION 3. Said section 1 of said chapter 151 is hereby further amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$14.00

SECTION 4. Said section 1 of said chapter 151 is hereby further amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$15.00

SECTION 5. Section 1 of said chapter 151 is hereby further amended by inserting, before the last sentence thereof, the following sentences:-

Beginning in September 2022 and in September of each year thereafter, the commissioner shall adjust the current minimum wage then in effect and the current minimum cash wage then in effect that must be paid tipped employees under section 7 of this chapter based upon the increase, if any, in the cost of living. The increase in the cost of living shall be calculated to reflect the twelve-month percentage increase, if any, in the Consumer Price Index for all Urban Consumers, U.S. City Average, All Items (or a successor index, if any) as published by the Bureau of Labor Statistics of the United States Department of Labor, using the most recent twelve-month period for which data is available at the time that the calculation is made. The commissioner shall round the adjusted wage rates to the nearest five cents and announce them by October 1 of each year, and they shall become effective on January 1 of the following year.

SECTION 6. Chapter 151 is hereby further amended by inserting, after section 2B, the following section:-

Section 2C. Notwithstanding section 17 of chapter 15D or any general or special law to the contrary, the department of early education and care shall be deemed the employer of family child care providers, as defined by section 17(a) of chapter 15D, and family child care providers shall be deemed employed persons, for purposes of this chapter. Notwithstanding any general or special law to the contrary, the attorney general of the commonwealth shall determine the minimum rates to be paid by the department of early education and care to family child care providers and promulgate any regulations necessary for purposes of determining the minimum rates in order that the rates are substantially equivalent to the minimum wage provisions set forth in section 1 of this chapter.

SECTION 7. Section 7 of said chapter 151 is hereby amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:-
\$5.05

SECTION 8. Said Section 7 of said chapter 151 is hereby further amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:- 6.35

SECTION 9. Said Section 7 of said chapter 151 is hereby further amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:- \$7.65

SECTION 10. Said Section 7 of said chapter 151 is hereby further amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:- \$9.00

SECTION 11. Sections 1 and 7 shall take effect January 1, 2019.

SECTION 12. Sections 2 and 8 shall take effect January 1, 2020.

SECTION 13. Sections 3 and 9 shall take effect January 1, 2021.

SECTION 14. Sections 4, 5, and 10 shall take effect January 1, 2022.

SECTION 15. If any provision of this act or application thereof to any person or circumstance is judged invalid, the invalidity shall not affect other provisions or applications of the act that can be given effect without the invalid provision or application, and to this end the provisions of this act are declared severable.

Signatories:

Elizabeth A Warren	24 Linnaean Street, Cambridge, MA 02138
Tyrek D Lee Sr.	24 Blue Ledge Terrace, Boston, MA 02131
Heidy Abreu	39 Kamuda Street, Springfield, MA 01151
Martha Mikal Assefa	16 Alden Street, Worcester, MA 01610
Darius Cephas	786 Blue Hill Avenue #201, Boston, MA 02124
Ashley Delva	19 Jones Avenue Unit #1, Boston, MA 02124
Angele L. Errie	44 Laurie Avenue, Boston, MA 02132
Katrina J. Jazayeri	25 ½ Boston Street, Somerville, MA 02143
Maria L. Rodriguez	253 Fernbank Road Apt 6, Springfield, MA 01129
Margaret Sylvester	12 Granite Avenue, New Bedford, MA 02740

Alternates:

Renee M. Ledbetter	119 Rounds Street, New Bedford, MA 02740
Dorothy Lopes	2 Howland Terrace, New Bedford, MA 02740
Deborah L. Frontierro	216 Washington Street, Gloucester, MA
Bethany Ann Fauteux	36 Dewolf Street, New Bedford, MA 02740
Christine E. Lavault	14 Spring Street, Fairhaven, MA 02719

Appendix 12: Summary of New York State Wage Determination Procedures

Process for Determination of Increased Minimum Wage for Upstate New York:

- Beginning on December 31, 2021 and each succeeding year the minimum wage for upstate New York will be increased by a percentage determined by the Director of the Budget in consultation with the Commissioner of Labor, with the result rounded to the nearest five cents. The wage can be increased to a maximum amount of \$15.00.
- The percentage increase will be based on indices including, but not limited to:
 - the rate of inflation for the most recent 12-month period ending June of that year based on the seasonally unadjusted, national CPI-U, or successor index;
 - the rate of state personal income growth for the prior calendar year, or successor index; or
 - wage growth.
- The new wage will be published by the Commissioner of Labor by October 1 of each year.

Process for Determination Regarding Whether to Delay a Wage Increase in New York:

- On or after January 1, 2019, and each succeeding January 1 until the minimum wage reaches \$15.00 per hour in all regions of New York State, the Division of Budget will analyze the state of the economy in each region and the effect of the minimum wage increases to determine whether there should be a temporary suspension or delay in any of the scheduled increases.
- In conducting its analysis, the Division is required to consult with:
 - the New York Department of Labor and its Division of Research and Statistics;
 - the U.S. Department of Labor;
 - the Federal Reserve Bank of New York; and
 - other economic experts.
- In conducting its analysis, the Division of Budget will reference well-established economic indices and accepted economic factors, including the amount sufficient to provide adequate maintenance and to protect health, the value of the work performed, and the wages paid in New York State for work of like or comparable character, to justify and explain its determination of whether scheduled increases in the minimum wage shall continue up to and including \$15.00.
- The Division of Budget will issue a report and recommendation to the Commissioner of Labor, who shall take the following action on that report and recommendation:
 - Within five days of receiving the report and recommendation, the Commissioner shall publish a notice of it in at least 10 newspapers of general circulation in the state.
 - Any objections to the report and recommendations must be filed with the Commissioner within 15 days after publication.
 - The Commissioner may order oral argument on five days' notice to the persons who have filed objections to the report and recommendations.
 - Regardless of whether oral argument is scheduled, the Commissioner must issue an order accepting or rejecting the report and recommendations within 45 days after receipt. The Commissioner may modify any recommended regulations in the report and recommendations.
 - The Commissioner's order will become effective 30 days after notice of it is published in at least 10 newspapers of general circulation in the state.
 - During the 45 day period, the Commissioner may confer with the Division of Budget, and the Division may make changes to its report and recommendations. In addition, the Commissioner may remand the matter to the Division for further proceeding within the 45 day period.

Appendix 13: Manchester, Joyce, “Preliminary Summary Review: Two Studies on the Effects of Raising the Minimum Wage to \$13 per Hour in Seattle”

Vermont Legislative Joint Fiscal Office

One Baldwin Street • Montpelier, VT 05633-5701 • (802) 828-2295 • Fax: (802) 828-2483

ISSUE BRIEF

Date: July 13, 2017

Prepared by: Joyce Manchester

Preliminary Summary Review: Two Studies on the Effects of Raising the Minimum Wage to \$13 per Hour in Seattle

Summary

Two new studies of the effects of raising the minimum wage to \$13 per hour in Seattle, both released in June 2017 but using different data and different approaches, find conflicting results. One study, from the University of California at Berkeley, finds no adverse effect on employment but positive effects on wages, in line with numerous studies before it. The other, from the University of Washington, finds reductions in hours worked by low-income workers that are large enough to cause a reduction in earnings of low-income workers.

Background

- On April 1, 2015, Seattle raised its minimum wages from the statewide \$9.47 to \$10 or \$11, depending upon business size, presence of tipped workers and employer provision of health insurance.
- The second phase began on January 1, 2016, further raising the minimum to four different levels, ranging from \$10.50 to \$13, again depending upon employer size, presence of tipped workers and provision of health insurance.
- The final phase raised the minimum wage for large employers to \$15 on January 1, 2017.
- Two recent studies looked at the effect on employment and wages of low-income workers in Seattle after 9 months at the \$13 minimum wage: the UC Berkeley study¹ and the University of Washington (UW) study.²

Different Findings

- The UC Berkeley study, based on workers in the food service industry, finds that minimum wages in Seattle up to \$13 per hour raised wages for low-paid workers **without causing**

¹ “Seattle’s Minimum Wage Experience 2015-16” Michael Reich, Sylvia Allegretto, and Anna Godoey, June 2017; available at <http://irle.berkeley.edu/files/2017/Seattles-Minimum-Wage-Experiences-2015-16.pdf>

² “Minimum Wage Increases, Wages, and Low-Wage Employment: Evidence from Seattle,” National Bureau of Economic Research (NBER) Working Paper #23532, released June 26, 2017; Ekaterina Jardim, Mark C. Long, Robert Plotnick, Emma van Inwegen, Jacob Vigdor, and Hilary Wething; available at <https://evans.uw.edu/sites/default/files/NBER%20Working%20Paper.pdf>

disemployment. Each 10 percent minimum wage increase in Seattle raised pay by nearly 1 percent in food services overall and by 2.3 percent in limited-service restaurants.³

- The UW study, based on all low-skilled workers in Seattle (those earning under \$19 per hour) finds that **hours worked by low-skilled workers fell by 9.4 percent** during the three quarters when the minimum wage was \$13 per hour, resulting in a loss of 3.5 million hours worked per calendar quarter. Alternative estimates show the number of low-wage jobs declined by 6.8 percent, which represents a loss of more than 5,000 jobs.
 - The study finds that “total payroll fell for [low-wage] jobs, implying that the minimum wage ordinance lowered low-wage employees’ earnings by an average of \$125 per month in 2016.”

Why the Different Findings?

- The UC Berkeley study, like many previous studies, used data on total earnings by industry. To identify low-wage workers, the Berkeley researchers focused on the food service industry. But some higher-paid workers are included in the data on earnings for the food service industry, diluting the focus on low-wage workers.
- The UW study uses data on both hours worked and earnings of low-wage workers. The State of Washington is one of only four states that collect data on hours worked for each employee, allowing researchers to identify jobs that pay low wages and workers who earn low wages.
 - Employers in the State of Washington are required to report actual hours worked per quarter by employees who are paid by the hour, and to report either actual hours worked or 40 hours per week for salaried workers.⁴ The unique dataset allows measuring the average wage paid to each worker in each quarter. The hourly wage rate is total quarterly earnings divided by quarterly hours worked.

Methodological Issues Regarding the Two Studies

1. The UC Berkeley Study

- The UC Berkeley study, like many studies before it, uses aggregate data on a slice of the labor force that is thought to represent low-wage workers.
 - Food service workers, retail workers, and teenagers are typically used as a proxy for low-wage workers in those studies. In a high-growth labor market where

³ Limited service restaurants are establishments in which patrons generally order or select items and pay before eating.

⁴ The State of Washington collects hours worked because eligibility for unemployment benefits is determined in part by an hours-worked test.

employment is generally rising over time, it is essential to examine low-wage workers who are most directly affected by the wage hike.⁵

- UC Berkeley researchers did not have access to data on hours worked and thus could not identify low-wage workers who would likely be most affected by the increased minimum wage to see how their employment changed over time. Instead, they examined earnings in the food service industry before and after the wage increase in Seattle relative to a “synthetic control” group made up of counties with similar characteristics in a number of states. That approach was considered a major step forward a few years ago.
- The UC Berkeley study’s comparison to the synthetic control group represents one estimate of how the change in the minimum wage affected employment. Whether the synthetic control group effectively represents a similar high-growth economy relative to that of Seattle is open to debate.

2. The UW Study

- Several think tanks have critiqued the UW study and find the results to be “out of step” with previous studies.⁶ The study has not yet received peer review. Specific concerns are described below.
- The UW study excluded multi-site employers that employ a large segment of employees because the data do not allow differentiating workers inside city limits from those outside. Single-site businesses may react differently than larger multi-site employers; survey evidence, however, indicates that multi-site employers were if anything more likely to report staffing reductions following the minimum wage increase.
- The UW study found a decline in hours worked for low-wage workers, but the booming labor market in Seattle might have caused employers to increase wages for those workers, leading to a decline in low-paid jobs but an increase in higher-paid jobs. As noted in the UW study, substantial growth did occur in jobs paying more than \$19 per hour.⁷
- A minimum-wage law for a city means that employers can more easily focus their hiring outside the city to avoid the law. The UW study tried to look for signs of such shifting in the areas of King County outside the city, but it's hard to analyze such shifts. A state-level or federal-level rise in the minimum wage law, except in border areas, may not be as susceptible to such shifts.

⁵ For example, see “Dueling Studies of Seattle’s Minimum Wage Hike: A Reader’s Guide,” Ben Gitis, American Action Forum, July 6, 2017; <https://www.americanactionforum.org/research/dueling-studies-seattles-minimum-wage-hike-readers-guide/>

⁶ For example, see “Five Flaws in a New Analysis of Seattle’s Minimum Wage,” Rachel West, Center for American Progress, June 28, 2017; https://www.nytimes.com/?WT.z_jog=1&hF=t&vS=undefined

⁷ See Table 3, p. 45, of the UW Study.

- The new results from UW differ from much of the previous research on the minimum wage; many past studies, based on increases from lower wage levels, found that the benefits of increased minimum wages for low-wage workers exceed the costs in terms of reduced employment.
- On the other hand, some well-respected economists point to the UW study as being carefully done, using the best data available, and employing several different comparison groups rather than relying on just one approach.
 - "This strikes me as a study that is likely to influence people," said David Autor, Ford Professor of Economics at the Massachusetts Institute of Technology who was not involved in the research. He called the work "very credible" and "sufficiently compelling in its design and statistical power that it can change minds."⁸
 - The UW researchers compared effects in Seattle to several comparison groups. They looked at the rest of King County that surrounds Seattle, three other counties that surround King County but do not actually border Seattle, and other counties across the state that are weighted to build a synthetic control comparison group. Methods used to build the synthetic control group were similar to those used by the UC Berkeley researchers. In addition, the UW researchers restricted their analysis to the restaurant industry as was done in the UC Berkeley study and again confirmed their findings. None of the comparison groups is perfect, but the different comparisons offer a reasonable range of outcomes.

Caveats Relevant to Both Studies

- Seattle's unemployment rate was just 3.1 percent during the three quarters of 2016 during which the minimum wage was \$13/hour. The effects of a minimum wage are likely to be different in a place where the unemployment rate is substantially higher.
- Seattle already had in place the nation's highest state minimum wage at \$11/hour, and then raised it substantially higher. A previous study by the UW group, using the same methodology but looking only at the minimum wage increase to \$11/hour in 2015, found much smaller effects in accordance with the UC Berkeley study and others. One possible interpretation of these findings is that moderate raises in the minimum wage have smaller effects on hours worked, but pushing substantially higher will have a noticeably negative effect.
- The state-level data don't cover earnings for independent contractors or in the "informal" off-the-books sector of the economy.

⁸ Wonkblog by Max Ehrenfreund, Washington Post, June 26, 2017; available at https://www.washingtonpost.com/news/wonk/wp/2017/06/26/new-study-casts-doubt-on-whether-a-15-minimum-wage-really-helps-workers/?utm_term=.88b03b1cf911

- Changes in the minimum wage at the state or federal level are likely to have a different effect.
- Future studies will gather more evidence on the effects of Seattle's ultimate increase to \$15 per hour to help bridge the gap between the findings of the two studies.

Takeaways

- Mixed reactions from think tanks and economists to the two studies, and in particular to the new results from the UW study, suggest that the jury is still out on the effects on low-wage workers in Seattle of raising the minimum wage from a relatively high level of \$11 to the even higher level of \$13.
- However, the possibility of adverse effects for low-wage workers from raising the minimum wage to levels higher than have been seen previously in the United States suggests proceeding cautiously.

Considerations for Vermont

- As Vermont considers increasing its minimum wage, it might also consider setting up a process for evaluating the effects of such a change.
- For example, the availability of data on actual hours worked per job together with quarterly earnings per job made the UW study possible. To enable a similar evaluation of changes in Vermont's minimum wage going forward, Vermont might want to require employers to report actual hours worked per job.

A Sampling of Additional Articles and Commentaries on the Two Studies

<https://cei.org/blog/seattle-minimum-wage-hike-shrinks-workers%E2%80%99-incomes>

<http://conversableeconomist.blogspot.com/2017/06/higher-local-minimum-wages-updating.html?m=1>

<https://www.economist.com/news/finance-and-economics/21724802-two-studies-their-impact-seattle-reach-opposite-conclusions-economists-argue>

<http://www.epi.org/publication/the-high-road-seattle-labor-market-and-the-effects-of-the-minimum-wage-increase-data-limitations-and-methodological-problems-bias-new-analysis-of-seattles-minimum-wage-incr/>

<https://fivethirtyeight.com/features/seattles-minimum-wage-hike-may-have-gone-too-far/>

<http://www.motherjones.com/kevin-drum/2017/06/new-seattle-study-suggests-ideal-minimum-wage-of-about-12/>

<https://www.nytimes.com/2017/06/26/business/economy/seattle-minimum-wage.html>

<http://www.weeklystandard.com/study-seattle-minimum-wage-increase-reduced-low-wage-income/article/2008628>

Appendix 14: Vermont Minimum Wage Bills Introduced in 2017

S.40

Introduced by Senators Sirotkin, Ingram, Ayer, Balint, Baruth, Brooks,
Clarkson, Cummings, Lyons, MacDonald, McCormack,
Pearson, Pollina, and White

Referred to Committee on

Date:

Subject: Labor; employment practices; minimum wages

Statement of purpose of bill as introduced: This bill proposes to increase the
minimum wage so that it reaches \$15.00 per hour by January 1, 2022.

An act relating to increasing the minimum wage

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. 21 V.S.A. § 384 is amended to read:

§ 384. EMPLOYMENT; WAGES

(a)(1) An employer shall not employ any employee at a rate of less than
~~\$9.15. Beginning January 1, 2016, an employer shall not employ any~~
~~employee at a rate of less than \$9.60. Beginning January 1, 2017, an employer~~
~~shall not employ any employee at a rate of less than \$10.00. Beginning on~~
January 1, 2018, an employer shall not employ any employee at a rate of less
than \$10.50, ~~and beginning~~. Beginning on January 1, 2019, an employer shall
not employ any employee at a rate of less than \$11.50. Beginning on

1 January 1, 2020, an employer shall not employ any employee at a rate of less
2 than \$12.50. Beginning on January 1, 2021, an employer shall not employ any
3 employee at a rate of less than \$13.50. Beginning on January 1, 2022, an
4 employer shall not employ any employee at a rate of less than \$15.00, and on
5 each subsequent January 1, the minimum wage rate shall be increased by five
6 percent or the percentage increase of the Consumer Price Index, CPI-U, U.S.
7 city average, not seasonally adjusted, or successor index, as calculated by the
8 U.S. Department of Labor or successor agency for the 12 months preceding the
9 previous September 1, whichever is smaller, but in no event shall the minimum
10 wage be decreased. The minimum wage shall be rounded off to the nearest
11 \$0.01.

12 (2) An employer in the hotel, motel, tourist place, and restaurant
13 industry shall not employ a service or tipped employee at a basic wage rate less
14 than one-half the minimum wage established pursuant to subdivision (1) of this
15 subsection. As used in this subsection, “a service or tipped employee” means
16 an employee of a hotel, motel, tourist place, or restaurant who customarily and
17 regularly receives more than \$120.00 per month in tips for direct and personal
18 customer service.

19 (3) If the minimum wage rate established by the U.S. government is
20 greater than the rate established for Vermont for any year, the minimum wage
21 rate for that year shall be the rate established by the U.S. government.

- 1 * * *
- 2 Sec. 2. EFFECTIVE DATE
- 3 This act shall take effect on July 1, 2017.

1 H.64

2 Introduced by Representative Poirier of Barre City

3 Referred to Committee on

4 Date:

5 Subject: Labor; employment practices; minimum wages

6 Statement of purpose of bill as introduced: This bill proposes to increase the
7 minimum wage to \$11.66 by January 1, 2018; to \$13.32 by January 1, 2019;
8 and to \$15.00 per hour by January 1, 2020.

9 An act relating to increasing the minimum wage

10 It is hereby enacted by the General Assembly of the State of Vermont:

11 Sec. 1. 21 V.S.A. § 384 is amended to read:

12 § 384. EMPLOYMENT; WAGES

13 (a)(1) An employer shall not employ any employee at a rate of less than

14 ~~\$9.15. Beginning on January 1, 2016, an employer shall not employ any~~

15 ~~employee at a rate of less than \$9.60. Beginning on January 1, 2017, an~~

16 ~~employer shall not employ any employee at a rate of less than \$10.00.~~

17 Beginning on January 1, 2018, an employer shall not employ any employee at

18 a rate of less than ~~\$10.50, and beginning~~ \$11.66. Beginning on January 1,

19 2019, an employer shall not employ any employee at a rate of less than \$13.32.

20 Beginning on January 1, 2020, an employer shall not employ any employee at

1 a rate of less than \$15.00, and on each subsequent January 1, the minimum
2 wage rate shall be increased by five percent or the percentage increase of the
3 Consumer Price Index, CPI-U, U.S. city average, not seasonally adjusted, or
4 successor index, as calculated by the U.S. Department of Labor or successor
5 agency for the 12 months preceding the previous September 1, whichever is
6 smaller, but in no event shall the minimum wage be decreased. The minimum
7 wage shall be rounded off to the nearest \$0.01.

8 (2) An employer in the hotel, motel, tourist place, and restaurant
9 industry shall not employ a service or tipped employee at a basic wage rate less
10 than one-half the minimum wage established pursuant to subdivision (1) of this
11 subsection. As used in this subsection, "a service or tipped employee" means
12 an employee of a hotel, motel, tourist place, or restaurant who customarily and
13 regularly receives more than \$120.00 per month in tips for direct and personal
14 customer service.

15 (3) If the minimum wage rate established by the U.S. government is
16 greater than the rate established for Vermont for any year, the minimum wage
17 rate for that year shall be the rate established by the U.S. government.

18 * * *

19 Sec. 2. EFFECTIVE DATE

20 This act shall take effect on July 1, 2017.

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H.93

Introduced by Representatives McCormack of Burlington, Ancel of Calais,
Bartholomew of Hartland, Bissonnette of Winooski, Botzow of
Pownal, Burke of Brattleboro, Carr of Brandon,
Chesnut-Tangerman of Middletown Springs, Christie of
Hartford, Cina of Burlington, Colburn of Burlington,
Copeland-Hanzas of Bradford, Deen of Westminster, Donovan
of Burlington, Dunn of Essex, Fields of Bennington, Gonzalez
of Winooski, Grad of Moretown, Haas of Rochester, Hill of
Wolcott, Howard of Rutland City, Jessup of Middlesex, Joseph
of North Hero, Kitzmiller of Montpelier, Krowinski of
Burlington, Lippert of Hinesburg, Long of Newfane, Lucke of
Hartford, Macaig of Williston, McCullough of Williston, Miller
of Shaftsbury, Morris of Bennington, Mrowicki of Putney,
O’Sullivan of Burlington, Poirier of Barre City, Rachelson of
Burlington, Sharpe of Bristol, Sheldon of Middlebury, Stevens
of Waterbury, Stuart of Brattleboro, Sullivan of Burlington, Till
of Jericho, Toleno of Brattleboro, Townsend of South
Burlington, Troiano of Stannard, Walz of Barre City, Weed of
Enosburgh, Wood of Waterbury, Yacovone of Morristown, and
Yantachka of Charlotte

1 Referred to Committee on

2 Date:

3 Subject: Labor; employment practices; minimum wages

4 Statement of purpose of bill as introduced: This bill proposes to increase the
5 minimum wage to \$11.50 by January 1, 2019; to \$12.50 by January 1, 2020; to
6 \$13.50 by January 1, 2021; and to \$15.00 per hour by January 1, 2022.

7 An act relating to increasing the minimum wage

8 It is hereby enacted by the General Assembly of the State of Vermont:

9 Sec. 1. 21 V.S.A. § 384 is amended to read:

10 § 384. EMPLOYMENT; WAGES

11 (a)(1) An employer shall not employ any employee at a rate of less than

12 ~~\$9.15. Beginning on January 1, 2016, an employer shall not employ any~~

13 ~~employee at a rate of less than \$9.60. Beginning on January 1, 2017, an~~

14 ~~employer shall not employ any employee at a rate of less than \$10.00.~~

15 Beginning on January 1, 2018, an employer shall not employ any employee at

16 a rate of less than \$10.50, ~~and beginning~~. Beginning on January 1, 2019, an

17 employer shall not employ any employee at a rate of less than \$11.50.

18 Beginning on January 1, 2020, an employer shall not employ any employee at

19 a rate of less than \$12.50. Beginning on January 1, 2021, an employer shall

20 not employ any employee at a rate of less than \$13.50. Beginning on

1 January 1, 2022, an employer shall not employ any employee at a rate of less
2 than \$15.00, and on each subsequent January 1, the minimum wage rate shall
3 be increased by five percent or the percentage increase of the Consumer Price
4 Index, CPI-U, U.S. city average, not seasonally adjusted, or successor index, as
5 calculated by the U.S. Department of Labor or successor agency for the 12
6 months preceding the previous September 1, whichever is smaller, but in no
7 event shall the minimum wage be decreased. The minimum wage shall be
8 rounded off to the nearest \$0.01.

9 (2) An employer in the hotel, motel, tourist place, and restaurant
10 industry shall not employ a service or tipped employee at a basic wage rate less
11 than one-half the minimum wage established pursuant to subdivision (1) of this
12 subsection. As used in this subsection, “a service or tipped employee” means
13 an employee of a hotel, motel, tourist place, or restaurant who customarily and
14 regularly receives more than \$120.00 per month in tips for direct and personal
15 customer service.

16 (3) If the minimum wage rate established by the U.S. government is
17 greater than the rate established for Vermont for any year, the minimum wage
18 rate for that year shall be the rate established by the U.S. government.

19 * * *

20 Sec. 2. EFFECTIVE DATE

21 This act shall take effect on July 1, 2017.

H.302

Introduced by Representative McFaun of Barre Town

Referred to Committee on

Date:

Subject: Labor; employment; minimum wages

Statement of purpose of bill as introduced: This bill proposes to increase the minimum wage to \$15.00 per hour by January 1, 2026.

An act relating to increasing the minimum wage

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. 21 V.S.A. § 384 is amended to read:

§ 384. EMPLOYMENT; WAGES

(a)(1) An employer shall not employ any employee at a rate of less than ~~\$9.15. Beginning on January 1, 2016, an employer shall not employ any employee at a rate of less than \$9.60. Beginning on January 1, 2017, an employer shall not employ any employee at a rate of less than:~~

(A) \$10.00;

(B) ~~Beginning~~ beginning on January 1, 2018, an employer shall not employ any employee at a rate of less than ~~\$10.50, and \$11.00;~~

(C) beginning on January 1, 2019, ~~and on each subsequent January 1,~~ the prior minimum wage rate shall be increased by five percent or the

1 percentage increase of the Consumer Price Index, ~~CPI U, U.S. city average,~~
2 ~~not seasonally adjusted, or successor index, as calculated by the U.S.~~
3 ~~Department of Labor or successor agency for the 12 months preceding the~~
4 ~~previous September 1, whichever is smaller, but in no event shall the minimum~~
5 ~~wage be decreased;~~

6 (D) beginning on January 1, 2020, \$12.00 or the prior minimum
7 wage rate increased by the percentage increase of the Consumer Price Index,
8 whichever is larger;

9 (E) beginning on January 1, 2021, the prior minimum wage rate
10 increased by five percent or the percentage increase of the Consumer Price
11 Index, whichever is smaller;

12 (F) beginning on January 1, 2022, \$13.00 or the prior minimum wage
13 rate increased by the percentage increase of the Consumer Price Index,
14 whichever is larger;

15 (G) beginning on January 1, 2023, the prior minimum wage rate
16 increased by five percent or the percentage increase of the Consumer Price
17 Index, whichever is smaller;

18 (H) beginning on January 1, 2024, \$14.00 or the prior minimum
19 wage rate increased by the percentage increase of the Consumer Price Index,
20 whichever is larger;

1 (I) beginning on January 1, 2025, the prior minimum wage rate
2 increased by five percent or the percentage increase of the Consumer Price
3 Index, whichever is smaller;

4 (J) beginning on January 1, 2026, \$15.00 or the prior minimum wage
5 rate increased by the percentage increase of the Consumer Price Index,
6 whichever is larger; and

7 (K) on each subsequent January 1, the prior minimum wage rate
8 increased by five percent or the percentage increase of the Consumer Price
9 Index, whichever is smaller.

10 (2)(A) The minimum wage shall be rounded off to the nearest \$0.01.

11 (B) In no event shall the minimum wage rate be decreased.

12 (3) An employer in the hotel, motel, tourist place, and restaurant
13 industry shall not employ a service or tipped employee at a basic wage rate less
14 than one-half the minimum wage. As used in this subsection, “a service or
15 tipped employee” means an employee of a hotel, motel, tourist place, or
16 restaurant who customarily and regularly receives more than \$120.00 per
17 month in tips for direct and personal customer service.

18 (4) If the minimum wage rate established by the U.S. government is
19 greater than the rate established for Vermont for any year, the minimum wage
20 rate for that year shall be the rate established by the U.S. government.

5 * * *

7 This act shall take effect on July 1, 2017.

H.313

Introduced by Representatives Sullivan of Burlington, McCormack of
Burlington, and Townsend of South Burlington

Referred to Committee on

Date:

Subject: Labor; employment practices; minimum wages

Statement of purpose of bill as introduced: This bill proposes to increase the
minimum wage and tipped minimum wage to \$15.00 per hour by 2022.

An act relating to increasing the minimum wage and tipped minimum wage

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. 21 V.S.A. § 384 is amended to read:

§ 384. EMPLOYMENT; WAGES

(a)(1) An employer shall not employ any employee at a rate of less than
~~\$9.15. Beginning on January 1, 2016, an employer shall not employ any~~
~~employee at a rate of less than \$9.60. Beginning on January 1, 2017, an~~
~~employer shall not employ any employee at a rate of less than:~~

(A) \$10.00.

(B) Beginning on January 1, 2018, ~~an employer shall not employ any~~
~~employee at a rate of less than \$10.50, and,~~

(C) ~~beginning~~ Beginning on January 1, 2019 ~~and,~~ \$11.50.

1 (D) Beginning on January 1, 2020, \$12.50.

2 (E) Beginning on January 1, 2021, \$13.50.

3 (F) Beginning on January 1, 2022, \$15.00.

4 (G) ~~on~~ On each subsequent January 1, the prior minimum wage rate
5 ~~shall be~~ increased by five percent or the percentage increase of the Consumer
6 Price Index, CPI-U, U.S. city average, not seasonally adjusted, or successor
7 index, as calculated by the U.S. Department of Labor or successor agency for
8 the 12 months preceding the previous September 1, whichever is smaller, ~~but~~
9 ~~in.~~ In no event shall the minimum wage be decreased. The minimum wage
10 shall be rounded off to the nearest \$0.01.

11 (2)(A) An employer in the hotel, motel, tourist place, and restaurant
12 industry shall not employ a service or tipped employee at a basic wage rate of
13 less than ~~one half the minimum wage;~~

14 (i) \$5.00;

15 (ii) beginning on January 1, 2019, \$7.50;

16 (iii) beginning on January 1, 2020, \$10.00;

17 (iv) beginning on January 1, 2021, \$12.50; and

18 (v) beginning on January 1, 2022, the minimum wage established
19 pursuant to subdivision (1) of this subsection.

20 (B) As used in this ~~subsection~~ subdivision, “a service or tipped
21 employee” means an employee of a hotel, motel, tourist place, or restaurant

(3) If the minimum wage rate established by the U.S. government is greater than the rate established for Vermont pursuant to either subdivision (1) or (2) of this subsection for any year, the minimum wage rate for that year pursuant to that subdivision shall be the rate established by the U.S. government.

* * *

This act shall take effect on July 1, 2017.

Appendix 15: Leonard, Damien, “Memorandum Regarding Minimum Wage Initiatives in New Hampshire and Massachusetts, and the Fiscal Off-Ramp in California’s Minimum Wage Law”



STATE OF VERMONT
OFFICE OF LEGISLATIVE COUNCIL

MEMORANDUM

To: Minimum Wage and Benefits Cliff Study Committee
From: Damien Leonard
Date: September 21, 2017
Subject: Minimum Wage Initiatives in New Hampshire and Massachusetts, and the Fiscal Off-Ramp in California's Minimum Wage Law

Questions Presented

During its last meeting, the Study Committee asked me to look into the status of various initiatives to raise the minimum wage in New Hampshire and Massachusetts, and to find out more about how the fiscal "off-ramp" in California's minimum wage law functions and why it was adopted.

Minimum Wage Initiatives in New Hampshire and Massachusetts

New Hampshire:

Two bills to raise New Hampshire's minimum wage were proposed during this legislative session. However, both bills died without advancing out of the chamber in which they originated.

- SB.83 would have raised the minimum wage to \$12.00 by September 1, 2018. A copy of that bill is posted to the Committee's web page, and additional information regarding that bill is available at:
http://www.gencourt.state.nh.us/bill_status/Results.aspx?q=1&txtsessionyear=2017
- HB.115 would have raised the minimum wage to \$12.00 by January 1, 2019 and then annually increased it based on the CPI, created a training wage of \$8.50 for 16- and 17-year-old workers in their first three months of employment, and increased the tipped minimum wage from 45% to 60% of the minimum wage. A copy of that bill is

posted to the Committee's web page, and additional information regarding that bill is available at:

http://www.gencourt.state.nh.us/bill_status/Results.aspx?q=1&txtsessionyear=2017.

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Massachusetts:

At present, a group called Raise Up Massachusetts is collecting signatures for a ballot initiative that would raise the minimum wage to \$15.00 and the tipped minimum wage to \$9.00 by 2022, and after that would annually increase those wages based on the CPI. A copy of the proposed ballot text is posted on the Committee's web page, and more information on the ballot initiative is available at:

<http://raiseupma.org/campaigns/the-fight-for-15/>.

I spoke with Patrick Prendergast, the staff director for Rep. Paul Brodeur, the House Chair of the Joint Committee on Labor and Workforce Development. My understanding is that because of the effort to place the raise the minimum wage through a ballot initiative, the Massachusetts Legislature is taking up the various introduced minimum wage bills for consideration. To that end, on Tuesday, September 19, the Joint Committee held a hearing to consider seven different minimum wage bills, including two that would raise the minimum wage and tipped minimum wage in a similar manner to the ballot initiative. Those two bills, S.1004 and H.2365, are posted on the Committee's web page. More information on that hearing, including links to the other bills, is available at: <https://malegislature.gov/Events/Hearings/Detail/2731>.

I am expecting to receive some additional materials that the Joint Committee has been reviewing, and I will post them to the Committee's web page after I receive them.

The Fiscal “Off-Ramp” in California’s Minimum Wage Law

I spoke with Luke Reidenbach, a staff analyst for the Assembly Appropriations Committee, where the off-ramp provisions were added to California's minimum wage bill, as well as several staff members of the California Department of Finance.

Based on my conversations, my understanding is that the off-ramps were requested by Governor Brown, who was particularly concerned about the impact of raising the minimum wage on the state's budget if California entered a recession while the scheduled wage increases were occurring. In addition, the off-ramp provisions provided a significant difference from a proposed ballot initiative, which had no provision for pausing minimum wage increases, and may have helped gain support for the bill from some moderate members of the legislature.

My understanding is that a regional model like New York's and Oregon's was discussed as an alternative method for cushioning the potential impact of the minimum wage increases on the state's economy, but that agreement could not be reached on how to split the state into different wage regions.

With respect to the fiscal off-ramp from California's minimum wage law, as you will remember, each July 28 until the minimum wage reaches \$15.00, the Director of Finance is required to determine and certify to the Governor and the Legislature whether the General Fund would be in deficit in the current fiscal year or either of the two following fiscal years when taking into account the current minimum wage and the next scheduled increase. This is in addition to another set of certifications related to whether there is a decrease in nonfarm employment and sales tax revenues. In both instances, if the Director of Finance determines that specific conditions showing a decline in the state's economic situation are present, the Governor may invoke the relevant off-ramp provision and pause the scheduled increases in the minimum wage for one year.

Under the fiscal off-ramp provision, a deficit is defined as a negative balance in the Special Fund for Economic Uncertainties that exceeds 1% of the projected revenues and transfers accruing to the General Fund for that fiscal year. The Special Fund for Economic Uncertainties is the California General Fund's reserve fund. It is funded by transfers from the General Fund and excess General Fund revenues, and is used to plug deficits when expenditures from the General Fund exceed revenues. The annual certification is based on the Department of Finance's forecast for revenues and expenditures for the current and next two fiscal years, taking into account the next scheduled minimum wage increase.

In summary, California's fiscal off-ramp can be triggered if the General Fund is unable to support the minimum wage increase because expenditures are projected to exceed revenues to an extent that the Special Fund will be drained and reach a negative balance equal to 1% of the total revenues and transfers that will accrue to the General Fund in that particular fiscal year. Typically, this would be a projected negative Special Fund balance of roughly \$1.2–1.4 billion.

I have requested a copy of this year's certification by the Director of Finance, and I will post it to the Committee's web page when I receive it.

Initiative Petition for a Law Raising the Minimum Wage

Be it enacted by the People, and by their authority:

SECTION 1. Section 1 of chapter 151 of the General Laws is hereby amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$12.00

SECTION 2. Said section 1 of said chapter 151 is hereby further amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$13.00

SECTION 3. Said section 1 of said chapter 151 is hereby further amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$14.00

SECTION 4. Said section 1 of said chapter 151 is hereby further amended by striking out the wage rate specified in the second sentence of the section and inserting in place thereof the following rate:- \$15.00

SECTION 5. Section 1 of said chapter 151 is hereby further amended by inserting, before the last sentence thereof, the following sentences:-

Beginning in September 2022 and in September of each year thereafter, the commissioner shall adjust the current minimum wage then in effect and the current minimum cash wage then in effect that must be paid tipped employees under section 7 of this chapter based upon the increase, if any, in the cost of living. The increase in the cost of living shall be calculated to reflect the twelve-month percentage increase, if any, in the Consumer Price Index for all Urban Consumers, U.S. City Average, All Items (or a successor index, if any) as published by the Bureau of Labor Statistics of the United States Department of Labor, using the most recent twelve-month period for which data is available at the time that the calculation is made. The commissioner shall round the adjusted wage rates to the nearest five cents and announce them by October 1 of each year, and they shall become effective on January 1 of the following year.

SECTION 6. Chapter 151 is hereby further amended by inserting, after section 2B, the following section:-

Section 2C. Notwithstanding section 17 of chapter 15D or any general or special law to the contrary, the department of early education and care shall be deemed the employer of family child care providers, as defined by section 17(a) of chapter 15D, and family child care providers shall be deemed employed persons, for purposes of this chapter. Notwithstanding any general or special law to the contrary, the attorney general of the commonwealth shall determine the minimum rates to be paid by the department of early education and care to family child care providers and promulgate any regulations necessary for purposes of determining the minimum rates in order that the rates are substantially equivalent to the minimum wage provisions set forth in section 1 of this chapter.

SECTION 7. Section 7 of said chapter 151 is hereby amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:-
\$5.05

SECTION 8. Said Section 7 of said chapter 151 is hereby further amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:- 6.35

SECTION 9. Said Section 7 of said chapter 151 is hereby further amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:- \$7.65

SECTION 10. Said Section 7 of said chapter 151 is hereby further amended by striking out the cash wage specified in clause (1) of the third paragraph and inserting in place thereof the following figure:- \$9.00

SECTION 11. Sections 1 and 7 shall take effect January 1, 2019.

SECTION 12. Sections 2 and 8 shall take effect January 1, 2020.

SECTION 13. Sections 3 and 9 shall take effect January 1, 2021.

SECTION 14. Sections 4, 5, and 10 shall take effect January 1, 2022.

SECTION 15. If any provision of this act or application thereof to any person or circumstance is judged invalid, the invalidity shall not affect other provisions or applications of the act that can be given effect without the invalid provision or application, and to this end the provisions of this act are declared severable.

Signatories:

Elizabeth A Warren	24 Linnaean Street, Cambridge, MA 02138
Tyrek D Lee Sr.	24 Blue Ledge Terrace, Boston, MA 02131
Heidy Abreu	39 Kamuda Street, Springfield, MA 01151
Martha Mikal Assefa	16 Alden Street, Worcester, MA 01610
Darius Cephas	786 Blue Hill Avenue #201, Boston, MA 02124
Ashley Delva	19 Jones Avenue Unit #1, Boston, MA 02124
Angele L. Errie	44 Laurie Avenue, Boston, MA 02132
Katrina J. Jazayeri	25 ½ Boston Street, Somerville, MA 02143
Maria L. Rodriguez	253 Fernbank Road Apt 6, Springfield, MA 01129
Margaret Sylvester	12 Granite Avenue, New Bedford, MA 02740

Alternates:

Renee M. Ledbetter	119 Rounds Street, New Bedford, MA 02740
Dorothy Lopes	2 Howland Terrace, New Bedford, MA 02740
Deborah L. Frontierro	216 Washington Street, Gloucester, MA
Bethany Ann Fauteux	36 Dewolf Street, New Bedford, MA 02740
Christine E. Lavault	14 Spring Street, Fairhaven, MA 02719

HOUSE No. 2365**The Commonwealth of Massachusetts**

PRESENTED BY:

Daniel M. Donahue

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act to improve the Commonwealth's economy with a strong minimum wage and a strong tipped minimum wage.

PETITION OF:

NAME:	DISTRICT/ADDRESS:
<i>Daniel M. Donahue</i>	<i>16th Worcester</i>
<i>Brian M. Ashe</i>	<i>2nd Hampden</i>
<i>Cory Atkins</i>	<i>14th Middlesex</i>
<i>Ruth B. Balser</i>	<i>12th Middlesex</i>
<i>Christine P. Barber</i>	<i>34th Middlesex</i>
<i>Michael J. Barrett</i>	<i>Third Middlesex</i>
<i>Jennifer E. Benson</i>	<i>37th Middlesex</i>
<i>Antonio F. D. Cabral</i>	<i>13th Bristol</i>
<i>Daniel Cahill</i>	<i>10th Essex</i>
<i>Evandro C. Carvalho</i>	<i>5th Suffolk</i>
<i>Gerard Cassidy</i>	<i>9th Plymouth</i>
<i>Sonia Chang-Diaz</i>	<i>Second Suffolk</i>
<i>Nick Collins</i>	<i>4th Suffolk</i>
<i>Mike Connolly</i>	<i>26th Middlesex</i>
<i>Brendan P. Crighton</i>	<i>11th Essex</i>
<i>Claire D. Cronin</i>	<i>11th Plymouth</i>
<i>Daniel Cullinane</i>	<i>12th Suffolk</i>

<i>Josh S. Cutler</i>	<i>6th Plymouth</i>
<i>Julian Cyr</i>	<i>Cape and Islands</i>
<i>Marjorie C. Decker</i>	<i>25th Middlesex</i>
<i>Paul J. Donato</i>	<i>35th Middlesex</i>
<i>William Driscoll</i>	<i>7th Norfolk</i>
<i>Michelle M. DuBois</i>	<i>10th Plymouth</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>
<i>Tricia Farley-Bouvier</i>	<i>3rd Berkshire</i>
<i>Dylan Fernandes</i>	<i>Barnstable, Dukes and Nantucket</i>
<i>Michael J. Finn</i>	<i>6th Hampden</i>
<i>Linda Dorcena Forry</i>	<i>First Suffolk</i>
<i>Sean Garballey</i>	<i>23rd Middlesex</i>
<i>Denise C. Garlick</i>	<i>13th Norfolk</i>
<i>Carmine L. Gentile</i>	<i>13th Middlesex</i>
<i>Solomon Goldstein-Rose</i>	<i>3rd Hampshire</i>
<i>Carlos González</i>	<i>10th Hampden</i>
<i>Stephan Hay</i>	<i>3rd Worcester</i>
<i>Jonathan Hecht</i>	<i>29th Middlesex</i>
<i>Natalie Higgins</i>	<i>4th Worcester</i>
<i>Kate Hogan</i>	<i>3rd Middlesex</i>
<i>Kevin G. Honan</i>	<i>17th Suffolk</i>
<i>Daniel J. Hunt</i>	<i>13th Suffolk</i>
<i>Patricia D. Jehlen</i>	<i>Second Middlesex</i>
<i>Louis L. Kafka</i>	<i>8th Norfolk</i>
<i>Jay R. Kaufman</i>	<i>15th Middlesex</i>
<i>Mary S. Keefe</i>	<i>15th Worcester</i>
<i>Kay Khan</i>	<i>11th Middlesex</i>
<i>Peter V. Kocot</i>	<i>1st Hampshire</i>
<i>Robert M. Koczera</i>	<i>11th Bristol</i>
<i>Stephen Kulik</i>	<i>1st Franklin</i>
<i>John J. Lawn, Jr.</i>	<i>10th Middlesex</i>
<i>Jack Lewis</i>	<i>7th Middlesex</i>
<i>Jason M. Lewis</i>	<i>Fifth Middlesex</i>
<i>David Paul Linsky</i>	<i>5th Middlesex</i>
<i>Barbara A. L'Italien</i>	<i>Second Essex and Middlesex</i>
<i>Jay D. Livingstone</i>	<i>8th Suffolk</i>
<i>Adrian Madaro</i>	<i>1st Suffolk</i>
<i>John J. Mahoney</i>	<i>13th Worcester</i>
<i>Elizabeth A. Malia</i>	<i>11th Suffolk</i>

<i>Paul W. Mark</i>	<i>2nd Berkshire</i>
<i>Juana Matias</i>	<i>16th Essex</i>
<i>Joseph W. McGonagle, Jr.</i>	<i>28th Middlesex</i>
<i>Joan Meschino</i>	<i>3rd Plymouth</i>
<i>James R. Miceli</i>	<i>19th Middlesex</i>
<i>Frank A. Moran</i>	<i>17th Essex</i>
<i>Brian Murray</i>	<i>10th Worcester</i>
<i>James J. O'Day</i>	<i>14th Worcester</i>
<i>Smitty Pignatelli</i>	<i>4th Berkshire</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>
<i>David M. Rogers</i>	<i>24th Middlesex</i>
<i>Byron Rushing</i>	<i>9th Suffolk</i>
<i>Daniel J. Ryan</i>	<i>2nd Suffolk</i>
<i>Alan Silvia</i>	<i>7th Bristol</i>
<i>Frank I. Smizik</i>	<i>15th Norfolk</i>
<i>Thomas M. Stanley</i>	<i>9th Middlesex</i>
<i>José F. Tosado</i>	<i>9th Hampden</i>
<i>Chynah Tyler</i>	<i>7th Suffolk</i>
<i>Steven Ultrino</i>	<i>33rd Middlesex</i>
<i>Chris Walsh</i>	<i>6th Middlesex</i>
<i>Bud Williams</i>	<i>11th Hampden</i>

HOUSE No. 2365

By Mr. Donahue of Worcester, a petition (accompanied by bill, House, No. 2365) of Daniel M. Donahue and others relative to the tipped minimum wage. Labor and Workforce Development.

The Commonwealth of Massachusetts

In the One Hundred and Ninetieth General Court
(2017-2018)

An Act to improve the Commonwealth's economy with a strong minimum wage and a strong tipped minimum wage.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Section 1 of chapter 151 of the General Laws, as appearing in the 2014
2 Official Edition, is hereby amended by striking, in line 1, the word "It", and replacing it with the
3 following words:-

4 Notwithstanding the provisions of section 27C of chapter 29 or any other general or
5 special law to the contrary, it

6 SECTION 2. Said section 1 of chapter 151 of the General Laws, is hereby further
7 amended by inserting, in line 1, before the word "employer", the following words:-

8 public or private

9 SECTION 3. Said section 1 of chapter 151 of the General Laws, is hereby further
10 amended by striking out, in line 5, the figure "11.00" and inserting in place thereof the following
11 figure: -12.00.

SECTION 4. Said section 1 of chapter 151 is hereby further amended by inserting, in line 5, after the word “hour”, the following words:-

as of January 1, 2018; \$13.00 per hour as of January 1, 2019; \$14.00 per hour as of January 1, 2020; and \$15.00 per hour as of January 1, 2021.

SECTION 5. Said section 1 of chapter 151 is hereby further amended by inserting, in line 10 after the word “nine.”, the following sentences:-

On January 1, 2022 and each January 1st thereafter, the minimum wage rate that is currently conclusively presumed to be oppressive and unreasonable under this section shall be increased by the increase, if any, in the cost of living. The increase in the cost of living shall be measured by the percentage increase, if any, as of August of the previous year over the level as of August of the year preceding that of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), or its successor index as published by the U.S. Department of Labor or its successor agency, with the amount of the minimum wage increase rounded up to the nearest multiple of five cents.

SECTION 6. Chapter 151 is hereby further amended by inserting, after section 2B, the following section:-

Section 2C. Notwithstanding section 17 of chapter 15D or any general or special law to the contrary, the department of early education and care shall be deemed the employer of family childcare providers, as defined by section 17(a) of chapter 15D, and family childcare providers shall be deemed employed persons, for purposes of this chapter. Notwithstanding any general or special law to the contrary, the attorney general of the commonwealth shall determine the minimum rates to be paid by the department of early education and care to family childcare

providers, and promulgate any regulations necessary for purposes of determining the minimum rates, in order that the rates are substantially equivalent to the minimum wage provisions set forth in section 1 of this chapter.

SECTION 7. Section 7 of chapter 151 of the General Laws, is hereby amended by striking the third paragraph and inserting in place thereof the following:-

In determining the wage an employer is required to pay a tipped employee, the amount paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such employee which for purposes of such determination shall be not less than \$5.25; and (2) an additional amount on account of the tips received by such employee which amount is equal to the difference between the wage specified in clause (1) and the wage in effect under section 1. The additional amount on account of tips may not exceed the value of the tips actually received by an employee. This paragraph shall not apply with respect to any tipped employee unless such employee has been informed by the employer of the provisions of this paragraph, and all tips received by such employee have been retained by the employee, except that this paragraph shall not be construed to prohibit the pooling of tips among employees who customarily and regularly receive tips.

SECTION 8. Section 7 of chapter 151 of the General Laws, is hereby amended by striking the third paragraph and inserting in place thereof the following:-

In determining the wage an employer is required to pay a tipped employee, the amount paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such employee which for purposes of such determination shall be not less than \$6.75; and (2) an additional amount on account of the tips received by such employee which amount is equal to the

56 difference between the wage specified in clause (1) and the wage in effect under section 1. The
57 additional amount on account of tips may not exceed the value of the tips actually received by an
58 employee. This paragraph shall not apply with respect to any tipped employee unless such
59 employee has been informed by the employer of the provisions of this paragraph, and all tips
60 received by such employee have been retained by the employee, except that this paragraph shall
61 not be construed to prohibit the pooling of tips among employees who customarily and regularly
62 receive tips.

63 SECTION 9. Section 7 of chapter 151 of the General Laws, is hereby amended by
64 striking the third paragraph and inserting in place thereof the following:-

65 In determining the wage an employer is required to pay a tipped employee, the amount
66 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
67 employee which for purposes of such determination shall be not less than \$8.25; and (2) an
68 additional amount on account of the tips received by such employee which amount is equal to the
69 difference between the wage specified in clause (1) and the wage in effect under section 1. The
70 additional amount on account of tips may not exceed the value of the tips actually received by an
71 employee. This paragraph shall not apply with respect to any tipped employee unless such
72 employee has been informed by the employer of the provisions of this paragraph, and all tips
73 received by such employee have been retained by the employee, except that this paragraph shall
74 not be construed to prohibit the pooling of tips among employees who customarily and regularly
75 receive tips.

76 SECTION 10. Section 7 of chapter 151 of the General Laws, is hereby amended by
77 striking the third paragraph and inserting in place thereof the following:-

78 In determining the wage an employer is required to pay a tipped employee, the amount
79 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
80 employee which for purposes of such determination shall be not less than \$9.75; and (2) an
81 additional amount on account of the tips received by such employee which amount is equal to the
82 difference between the wage specified in clause (1) and the wage in effect under section 1. The
83 additional amount on account of tips may not exceed the value of the tips actually received by an
84 employee. This paragraph shall not apply with respect to any tipped employee unless such
85 employee has been informed by the employer of the provisions of this paragraph, and all tips
86 received by such employee have been retained by the employee, except that this paragraph shall
87 not be construed to prohibit the pooling of tips among employees who customarily and regularly
88 receive tips.

89 SECTION 11. Section 7 of chapter 151 of the General Laws, is hereby amended by
90 striking the third paragraph and inserting in place thereof the following:-

91 In determining the wage an employer is required to pay a tipped employee, the amount
92 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
93 employee which for purposes of such determination shall be not less than \$11.25; and (2) an
94 additional amount on account of the tips received by such employee which amount is equal to the
95 difference between the wage specified in clause (1) and the wage in effect under section 1. The
96 additional amount on account of tips may not exceed the value of the tips actually received by an
97 employee. This paragraph shall not apply with respect to any tipped employee unless such
98 employee has been informed by the employer of the provisions of this paragraph, and all tips
99 received by such employee have been retained by the employee, except that this paragraph shall

100 not be construed to prohibit the pooling of tips among employees who customarily and regularly
101 receive tips.

102 SECTION 12. Section 7 of chapter 151 of the General Laws, is hereby amended by
103 striking the third paragraph and inserting in place thereof the following:-

104 In determining the wage an employer is required to pay a tipped employee, the amount
105 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
106 employee which for purposes of such determination shall be not less than \$12.75; and (2) an
107 additional amount on account of the tips received by such employee which amount is equal to the
108 difference between the wage specified in clause (1) and the wage in effect under section 1. The
109 additional amount on account of tips may not exceed the value of the tips actually received by an
110 employee. This paragraph shall not apply with respect to any tipped employee unless such
111 employee has been informed by the employer of the provisions of this paragraph, and all tips
112 received by such employee have been retained by the employee, except that this paragraph shall
113 not be construed to prohibit the pooling of tips among employees who customarily and regularly
114 receive tips.

115 SECTION 13. Section 7 of chapter 151 of the General Laws, is hereby amended by
116 striking the third paragraph and inserting in place thereof the following:-

117 In determining the wage an employer is required to pay a tipped employee, the amount
118 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
119 employee which for purposes of such determination shall be not less than \$14.25; and (2) an
120 additional amount on account of the tips received by such employee which amount is equal to the
121 difference between the wage specified in clause (1) and the wage in effect under section 1. The

122 additional amount on account of tips may not exceed the value of the tips actually received by an
123 employee. This paragraph shall not apply with respect to any tipped employee unless such
124 employee has been informed by the employer of the provisions of this paragraph, and all tips
125 received by such employee have been retained by the employee, except that this paragraph shall
126 not be construed to prohibit the pooling of tips among employees who customarily and regularly
127 receive tips.

128 SECTION 14. Section 7 of chapter 151 of the General Laws, is hereby amended by
129 striking the third paragraph and inserting in place thereof the following:-

130 In determining the wage an employer is required to pay a tipped employee, the amount
131 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
132 employee which for purposes of such determination shall be not less than \$15.75; and (2) an
133 additional amount on account of the tips received by such employee which amount is equal to the
134 difference between the wage specified in clause (1) and the wage in effect under section 1. The
135 additional amount on account of tips may not exceed the value of the tips actually received by an
136 employee. This paragraph shall not apply with respect to any tipped employee unless such
137 employee has been informed by the employer of the provisions of this paragraph, and all tips
138 received by such employee have been retained by the employee, except that this paragraph shall
139 not be construed to prohibit the pooling of tips among employees who customarily and regularly
140 receive tips.

141 SECTION 15. Section 7 of chapter 151 of the General Laws, is hereby amended by
142 striking the third paragraph and inserting in place thereof the following:-

143 In determining the wage an employer is required to pay a tipped employee, the amount
144 paid to such employee by the employer shall be an amount equal to not less than the wage in
145 effect under section 1.

146 SECTION 16. Sections 1, 2, 3, 4, 5, 6 and 7 shall take effect on January 1, 2018.

147 SECTION 17. Section 8 shall take effect on January 1, 2019.

148 SECTION 18. Section 9 shall take effect on January 1, 2020.

149 SECTION 19. Section 10 shall take effect on January 1, 2021.

150 SECTION 20. Section 11 shall take effect on January 1, 2022.

151 SECTION 21. Section 12 shall take effect on January 1, 2023.

152 SECTION 22. Section 13 shall take effect on January 1, 2024.

153 SECTION 23. Section 14 shall take effect on January 1, 2025.

154 SECTION 24. Section 15 shall take effect on January 1, 2026.

SENATE No. 1004**The Commonwealth of Massachusetts**

PRESENTED BY:

Kenneth J. Donnelly

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act to improve the Commonwealth's economy with a strong minimum wage and a strong tipped minimum wage.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	
<i>Kenneth J. Donnelly</i>	<i>Fourth Middlesex</i>	
<i>James R. Miceli</i>	<i>19th Middlesex</i>	<i>1/26/2017</i>
<i>Jack Lewis</i>	<i>7th Middlesex</i>	<i>1/26/2017</i>
<i>Sal N. DiDomenico</i>	<i>Middlesex and Suffolk</i>	<i>1/26/2017</i>
<i>Michael J. Barrett</i>	<i>Third Middlesex</i>	<i>1/26/2017</i>
<i>Michael D. Brady</i>	<i>Second Plymouth and Bristol</i>	<i>1/26/2017</i>
<i>Marjorie C. Decker</i>	<i>25th Middlesex</i>	<i>1/26/2017</i>
<i>Jason M. Lewis</i>	<i>Fifth Middlesex</i>	<i>1/26/2017</i>
<i>Carmine L. Gentile</i>	<i>13th Middlesex</i>	<i>1/26/2017</i>
<i>Thomas M. McGee</i>	<i>Third Essex</i>	<i>1/26/2017</i>
<i>Byron Rushing</i>	<i>9th Suffolk</i>	<i>1/26/2017</i>
<i>Barbara A. L'Italien</i>	<i>Second Essex and Middlesex</i>	<i>1/26/2017</i>
<i>Steven Ultrino</i>	<i>33rd Middlesex</i>	<i>1/26/2017</i>
<i>José F. Tosado</i>	<i>9th Hampden</i>	<i>1/26/2017</i>
<i>William N. Brownsberger</i>	<i>Second Suffolk and Middlesex</i>	<i>1/26/2017</i>
<i>Mark C. Montigny</i>	<i>Second Bristol and Plymouth</i>	<i>1/26/2017</i>
<i>Evandro C. Carvalho</i>	<i>5th Suffolk</i>	<i>1/26/2017</i>

<i>Thomas M. Stanley</i>	<i>9th Middlesex</i>	<i>1/26/2017</i>
<i>Cynthia S. Creem</i>	<i>First Middlesex and Norfolk</i>	<i>1/27/2017</i>
<i>Patricia D. Jehlen</i>	<i>Second Middlesex</i>	<i>1/27/2017</i>
<i>John J. Lawn, Jr.</i>	<i>10th Middlesex</i>	<i>1/27/2017</i>
<i>Daniel J. Ryan</i>	<i>2nd Suffolk</i>	<i>1/30/2017</i>
<i>Denise Provost</i>	<i>27th Middlesex</i>	<i>1/30/2017</i>
<i>Harriette L. Chandler</i>	<i>First Worcester</i>	<i>1/30/2017</i>
<i>Thomas J. Calter</i>	<i>12th Plymouth</i>	<i>1/31/2017</i>
<i>Jay R. Kaufman</i>	<i>15th Middlesex</i>	<i>1/31/2017</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>	<i>1/31/2017</i>
<i>Kay Khan</i>	<i>11th Middlesex</i>	<i>1/31/2017</i>
<i>John F. Keenan</i>	<i>Norfolk and Plymouth</i>	<i>2/1/2017</i>
<i>Mike Connolly</i>	<i>26th Middlesex</i>	<i>2/1/2017</i>
<i>Juana Matias</i>	<i>16th Essex</i>	<i>2/1/2017</i>
<i>Walter F. Timilty</i>	<i>Norfolk, Bristol and Plymouth</i>	<i>2/2/2017</i>
<i>Tricia Farley-Bouvier</i>	<i>3rd Berkshire</i>	<i>2/2/2017</i>
<i>Mary S. Keefe</i>	<i>15th Worcester</i>	<i>2/2/2017</i>
<i>Sonia Chang-Diaz</i>	<i>Second Suffolk</i>	<i>2/2/2017</i>
<i>Adam G. Hinds</i>	<i>Berkshire, Hampshire, Franklin and Hampden</i>	<i>2/2/2017</i>
<i>Julian Cyr</i>	<i>Cape and Islands</i>	<i>2/3/2017</i>
<i>Michael O. Moore</i>	<i>Second Worcester</i>	<i>2/3/2017</i>
<i>Linda Dorcena Forry</i>	<i>First Suffolk</i>	<i>2/3/2017</i>
<i>James T. Welch</i>	<i>Hampden</i>	<i>2/3/2017</i>
<i>Eric P. Lesser</i>	<i>First Hampden and Hampshire</i>	<i>2/3/2017</i>
<i>Brian Murray</i>	<i>10th Worcester</i>	<i>2/3/2017</i>
<i>Elizabeth A. Malia</i>	<i>11th Suffolk</i>	<i>2/3/2017</i>
<i>Michelle M. DuBois</i>	<i>10th Plymouth</i>	<i>2/3/2017</i>
<i>David M. Rogers</i>	<i>24th Middlesex</i>	<i>2/3/2017</i>
<i>Chris Walsh</i>	<i>6th Middlesex</i>	<i>2/3/2017</i>

SENATE No. 1004

By Mr. Donnelly, a petition (accompanied by bill, Senate, No. 1004) of Kenneth J. Donnelly, James R. Miceli, Jack Lewis, Sal N. DiDomenico and other members of the General Court for legislation to improve the Commonwealth's economy with a strong minimum wage and a strong tipped minimum wage. Labor and Workforce Development.

The Commonwealth of Massachusetts

In the One Hundred and Ninetieth General Court
(2017-2018)

An Act to improve the Commonwealth's economy with a strong minimum wage and a strong tipped minimum wage.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Section 1 of chapter 151 of the General Laws, as appearing in the 2014
2 Official Edition, is hereby amended by striking out the word "It", in line 27, and inserting in
3 place thereof the following words:- Notwithstanding the provisions of section 27C of chapter 29
4 or any other general or special law to the contrary, it.

5 SECTION 2. Said section 1 of said chapter 151, as so appearing, is hereby further
6 amended by inserting before the word "employer", in line 28, the following words:- public or
7 private.

8 SECTION 3. Said section 1 of said chapter 151, as so appearing, is hereby further
9 amended by striking out the figure "11.00", in line 32, and inserting in place thereof the
10 following figure:- 12.00.

SECTION 4. Said section 1 of said chapter 151, as so appearing, is hereby further amended by inserting after the word “hour”, in line 32, the following words:- as of January 1, 2018; \$13.00 per hour as of January 1, 2019; \$14.00 per hour as of January 1, 2020; and \$15.00 per hour as of January 1, 2021.

SECTION 5. Said section 1 of said chapter 151, as so appearing, is hereby further amended by inserting after the word “nine.”, in line 37, the following sentences:-

On January 1, 2022, and each January 1st thereafter, the minimum wage rate that is currently conclusively presumed to be oppressive and unreasonable under this section shall be increased by the increase, if any, in the cost of living. The increase in the cost of living shall be measured by the percentage increase, if any, as of August of the previous year over the level as of August of the year preceding that of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), or its successor index as published by the U.S. Department of Labor or its successor agency, with the amount of the minimum wage increase rounded up to the nearest multiple of 5 cents.

SECTION 6. Said chapter 151 is hereby further amended by inserting after section 2B the following section:-

Section 2C. Notwithstanding section 17 of chapter 15D or any general or special law to the contrary, the department of early education and care shall be deemed the employer of family childcare providers, as defined by section 17(a) of chapter 15D, and family childcare providers shall be deemed employed persons, for purposes of this chapter. Notwithstanding any general or special law to the contrary, the attorney general of the commonwealth shall determine the minimum rates to be paid by the department of early education and care to family childcare

providers, and promulgate any regulations necessary for purposes of determining the minimum rates, in order that the rates are substantially equivalent to the minimum wage provisions set forth in section 1 of this chapter.

SECTION 7. Section 7 of said chapter 151, as so appearing, is hereby amended by striking the third paragraph and inserting in place thereof the following paragraph:-

In determining the wage an employer is required to pay a tipped employee, the amount paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such employee which for purposes of such determination shall be not less than \$5.25; and (2) an additional amount on account of the tips received by such employee which amount is equal to the difference between the wage specified in clause (1) and the wage in effect under section 1. The additional amount on account of tips may not exceed the value of the tips actually received by an employee. This paragraph shall not apply with respect to any tipped employee unless such employee has been informed by the employer of the provisions of this paragraph, and all tips received by such employee have been retained by the employee, except that this paragraph shall not be construed to prohibit the pooling of tips among employees who customarily and regularly receive tips.

SECTION 8. Said section 7 of said chapter 151, as so appearing, is hereby amended by striking the third paragraph and inserting in place thereof the following paragraph:-

In determining the wage an employer is required to pay a tipped employee, the amount paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such employee which for purposes of such determination shall be not less than \$6.75; and (2) an additional amount on account of the tips received by such employee which amount is equal to the

55 difference between the wage specified in clause (1) and the wage in effect under section 1. The
56 additional amount on account of tips may not exceed the value of the tips actually received by an
57 employee. This paragraph shall not apply with respect to any tipped employee unless such
58 employee has been informed by the employer of the provisions of this paragraph, and all tips
59 received by such employee have been retained by the employee, except that this paragraph shall
60 not be construed to prohibit the pooling of tips among employees who customarily and regularly
61 receive tips.

62 SECTION 9. Said section 7 of said chapter 151, as so appearing, is hereby amended by
63 striking the third paragraph and inserting in place thereof the following paragraph:-

64 In determining the wage an employer is required to pay a tipped employee, the amount
65 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
66 employee which for purposes of such determination shall be not less than \$8.25; and (2) an
67 additional amount on account of the tips received by such employee which amount is equal to the
68 difference between the wage specified in clause (1) and the wage in effect under section 1. The
69 additional amount on account of tips may not exceed the value of the tips actually received by an
70 employee. This paragraph shall not apply with respect to any tipped employee unless such
71 employee has been informed by the employer of the provisions of this paragraph, and all tips
72 received by such employee have been retained by the employee, except that this paragraph shall
73 not be construed to prohibit the pooling of tips among employees who customarily and regularly
74 receive tips.

75 SECTION 10. Said section 7 of said chapter 151, as so appearing, is hereby amended by
76 striking the third paragraph and inserting in place thereof the following paragraph:-

77 In determining the wage an employer is required to pay a tipped employee, the amount
78 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
79 employee which for purposes of such determination shall be not less than \$9.75; and (2) an
80 additional amount on account of the tips received by such employee which amount is equal to the
81 difference between the wage specified in clause (1) and the wage in effect under section 1. The
82 additional amount on account of tips may not exceed the value of the tips actually received by an
83 employee. This paragraph shall not apply with respect to any tipped employee unless such
84 employee has been informed by the employer of the provisions of this paragraph, and all tips
85 received by such employee have been retained by the employee, except that this paragraph shall
86 not be construed to prohibit the pooling of tips among employees who customarily and regularly
87 receive tips.

88 SECTION 11. Said section 7 of said chapter 151, as so appearing, is hereby amended by
89 striking the third paragraph and inserting in place thereof the following paragraph:-

90 In determining the wage an employer is required to pay a tipped employee, the amount
91 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
92 employee which for purposes of such determination shall be not less than \$11.25; and (2) an
93 additional amount on account of the tips received by such employee which amount is equal to the
94 difference between the wage specified in clause (1) and the wage in effect under section 1. The
95 additional amount on account of tips may not exceed the value of the tips actually received by an
96 employee. This paragraph shall not apply with respect to any tipped employee unless such
97 employee has been informed by the employer of the provisions of this paragraph, and all tips
98 received by such employee have been retained by the employee, except that this paragraph shall

not be construed to prohibit the pooling of tips among employees who customarily and regularly receive tips.

SECTION 12. Said section 7 of said chapter 151, as so appearing, is hereby amended by striking the third paragraph and inserting in place thereof the following paragraph:-

In determining the wage an employer is required to pay a tipped employee, the amount paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such employee which for purposes of such determination shall be not less than \$12.75; and (2) an additional amount on account of the tips received by such employee which amount is equal to the difference between the wage specified in clause (1) and the wage in effect under section 1. The additional amount on account of tips may not exceed the value of the tips actually received by an employee. This paragraph shall not apply with respect to any tipped employee unless such employee has been informed by the employer of the provisions of this paragraph, and all tips received by such employee have been retained by the employee, except that this paragraph shall not be construed to prohibit the pooling of tips among employees who customarily and regularly receive tips.

SECTION 13. Said section 7 of said chapter 151, as so appearing, is hereby amended by striking the third paragraph and inserting in place thereof the following paragraph:-

In determining the wage an employer is required to pay a tipped employee, the amount paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such employee which for purposes of such determination shall be not less than \$14.25; and (2) an additional amount on account of the tips received by such employee which amount is equal to the difference between the wage specified in clause (1) and the wage in effect under section 1. The

121 additional amount on account of tips may not exceed the value of the tips actually received by an
122 employee. This paragraph shall not apply with respect to any tipped employee unless such
123 employee has been informed by the employer of the provisions of this paragraph, and all tips
124 received by such employee have been retained by the employee, except that this paragraph shall
125 not be construed to prohibit the pooling of tips among employees who customarily and regularly
126 receive tips.

127 SECTION 14. Said section 7 of said chapter 151, as so appearing, is hereby amended by
128 striking the third paragraph and inserting in place thereof the following paragraph:-

129 In determining the wage an employer is required to pay a tipped employee, the amount
130 paid to such employee by the employer shall be an amount equal to: (1) the cash wage paid such
131 employee which for purposes of such determination shall be not less than \$15.75; and (2) an
132 additional amount on account of the tips received by such employee which amount is equal to the
133 difference between the wage specified in clause (1) and the wage in effect under section 1. The
134 additional amount on account of tips may not exceed the value of the tips actually received by an
135 employee. This paragraph shall not apply with respect to any tipped employee unless such
136 employee has been informed by the employer of the provisions of this paragraph, and all tips
137 received by such employee have been retained by the employee, except that this paragraph shall
138 not be construed to prohibit the pooling of tips among employees who customarily and regularly
139 receive tips.

140 SECTION 15. Said section 7 of said chapter 151, as so appearing, is hereby amended by
141 striking the third paragraph and inserting in place thereof the following paragraph:-

142 In determining the wage an employer is required to pay a tipped employee, the amount
143 paid to such employee by the employer shall be an amount equal to not less than the wage in
144 effect under section 1.

145 SECTION 16. Sections 1, 2, 3, 4, 5, 6 and 7 shall take effect on January 1, 2018.

146 SECTION 17. Section 8 shall take effect on January 1, 2019.

147 SECTION 18. Section 9 shall take effect on January 1, 2020.

148 SECTION 19. Section 10 shall take effect on January 1, 2021.

149 SECTION 20. Section 11 shall take effect on January 1, 2022.

150 SECTION 21. Section 12 shall take effect on January 1, 2023.

151 SECTION 22. Section 13 shall take effect on January 1, 2024.

152 SECTION 23. Section 14 shall take effect on January 1, 2025.

153 SECTION 24. Section 15 shall take effect on January 1, 2026.

HB 115-FN - AS INTRODUCED

2017 SESSION

17-0001

06/01

HOUSE BILL ***115-FN***

AN ACT establishing a state minimum wage and providing for adjustments to the minimum wage.

SPONSORS: Rep. D. Ley, Ches. 9; Rep. H. Moffett, Merr. 9; Rep. Pearson, Ches. 16; Rep. Cilley, Straf. 4; Rep. Horrigan, Straf. 6; Rep. Berch, Ches. 1

COMMITTEE: Labor, Industrial and Rehabilitative Services

ANALYSIS

This bill establishes a state minimum hourly wage and provides for annual readjustment of the minimum wage.

This bill also establishes a training wage for employees under the age of 18 years.

Explanation: Matter added to current law appears in ***bold italics***.
 Matter removed from current law appears ~~[in brackets and struck through]~~
 Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Seventeen

AN ACT establishing a state minimum wage and providing for adjustments to the minimum wage.

Be it Enacted by the Senate and House of Representatives in General Court convened:

- 1 1 Minimum Hourly Rate. Amend the introductory paragraph of RSA 279:21 to read as follows:
- 2 279:21 Minimum Hourly Rate. Unless otherwise provided by statute, no person[, ~~firm, or~~
- 3 ~~corporation~~] shall employ any employee at an hourly rate lower than **\$9.50 or** that set forth in the
- 4 federal minimum wage law, as amended, ***whichever is higher***.
- 5 Tipped employees of a restaurant, hotel, motel, inn or cabin, or ballroom who customarily and
- 6 regularly receive more than \$30 a month in tips directly from the customers will receive a base rate
- 7 from the employer of not less than [45] **60** percent of the applicable minimum wage. If an employee
- 8 shows to the satisfaction of the commissioner that the actual amount of wages received at the end of
- 9 each pay period did not equal the minimum wage for all hours worked, the employer shall pay the
- 10 employee the difference to guarantee the applicable minimum wage. The limitations imposed
- 11 hereby shall be subject to the following exceptions:
- 12 2 New Paragraph; Minimum Hourly Rate; Training Wage. Amend RSA 279:21 by inserting
- 13 after paragraph VIII the following new paragraph:
- 14 IX. A training hourly rate which shall be one dollar per hour less than the full minimum
- 15 wage but no lower than \$8.50 may be paid to those newly-hired employees who are 16 or 17 years
- 16 old for the first 3 months of employment by a specific employer. After 3 calendar months of
- 17 employment with such employer, or upon reaching the age of 18, such employee shall receive the
- 18 full minimum wage.
- 19 3 Minimum Hourly Rate The introductory paragraph of RSA 279:21 is repealed and reenacted
- 20 to read as follows:
- 21 279:21 Minimum Hourly Rate. Unless otherwise provided by statute, no person shall employ
- 22 any employee at an hourly rate lower than \$12 or that set forth in the federal minimum wage law,
- 23 as amended, ***whichever is higher***.
- 24 Tipped employees of a restaurant, hotel, motel, inn or cabin, or ballroom who customarily and
- 25 regularly receive more than \$30 a month in tips directly from the customers will receive a base rate
- 26 from the employer of not less than 60 percent of the applicable minimum wage. If an employee
- 27 shows to the satisfaction of the commissioner that the actual amount of wages received at the end of
- 28 each pay period did not equal the minimum wage for all hours worked, the employer shall pay the
- 29 employee the difference to guarantee the applicable minimum wage. The limitations imposed
- 30 hereby shall be subject to the following exceptions:

1 4 Minimum Hourly Rate; Annual Adjustment. The introductory paragraph of RSA 279:21 is
2 repealed and reenacted to read as follows:

3 279:21 Minimum Hourly Rate. Unless otherwise provided by statute, no person shall employ
4 any employee at an hourly rate lower than \$12 or that set forth in the federal minimum wage law,
5 as amended, whichever is higher. The minimum hourly rate shall be adjusted on January 1, 2020
6 and on January 1 of successive years by the increase in the cost of living according to the Northeast
7 Consumer Price Index as determined by the Bureau of Labor Statistics. No decrease in the
8 minimum hourly rate shall be permitted.

9 Tipped employees of a restaurant, hotel, motel, inn or cabin, or ballroom who customarily and
10 regularly receive more than \$30 a month in tips directly from the customers will receive a base rate
11 from the employer of not less than 60 percent of the applicable minimum wage. If an employee
12 shows to the satisfaction of the commissioner that the actual amount of wages received at the end of
13 each pay period did not equal the minimum wage for all hours worked, the employer shall pay the
14 employee the difference to guarantee the applicable minimum wage. The limitations imposed
15 hereby shall be subject to the following exceptions:

16 5 Effective Date.

17 I. Section 3 of this act shall take effect January 1, 2019.

18 II. Section 4 of this act shall take effect January 1, 2020.

19 III. The remainder of this act shall take effect January 1, 2018.

**HB 115-FN- FISCAL NOTE
AS INTRODUCED**

AN ACT establishing a state minimum wage and providing for adjustments to the minimum wage.

FISCAL IMPACT: ☒ State ☒ County ☒ Local ☐ None

STATE:	Estimated Increase / (Decrease)			
	FY 2018	FY 2019	FY 2020	FY 2021
Appropriation	\$0	\$0	\$0	\$0
Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase
Funding Source:	<input checked="" type="checkbox"/> General	<input type="checkbox"/> Education	<input checked="" type="checkbox"/> Highway	<input checked="" type="checkbox"/> Multiple Sources

COUNTY:

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

LOCAL:

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

METHODOLOGY:

This bill as introduced increases the minimum hourly wage from \$7.25 an hour to \$9.50 per hour on January 1, 2018, to \$12.00 per hour on January 1, 2019, and on January 1, 2020 and each year thereafter, by the increase in the cost of living according to the Northeast Consumer Price Index as determined by the Bureau of Labor Statistics.

The Department of Administrative Services states this bill will have no impact in FY 2018 because \$9.50 is less than the lowest hourly rate paid to state employees. For FY 2019 the Department assumes there are 115 full time and 415 part time employees earning an average wage of \$10.57 an hour, which will increase to \$12 per hour effective January 1, 2019. For FY 2020 and FY 2021 the Department projects a 1% growth rate per year. Including increased employer contributions to FICA, Medicare and Retirement, the Department projects the following costs per fiscal year across multiple funding sources:

FY 2018	FY 2019	FY 2020	FY2021
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\$0	\$561,782	\$1,129,182	\$1,140,474

The New Hampshire Association of Counties states the impact of the bill can't be determined at this time but there would be increased cost to Social Security and Retirement as well as possible increased wages for the large majority of their workforce currently earning above the minimum wage.

The New Hampshire Municipal Association states without checking with all 234 municipalities, it is impossible to know how many employees would be affected or what the amounts of increases would be. Based on the available information, the impact on municipal expenditures would be minimal. There should be no effect on municipal revenues.

This bill makes changes to the minimum wage law contained in RSA 179 which may result in an increase in penalty actions contained in RSA 179:28. As a result this bill may have an impact on the New Hampshire judicial and correctional systems. There is no method to determine how many charges would be brought as a result of the changes contained in this bill to determine the fiscal impact on expenditures. However, the entities impacted have provided the potential costs associated with these penalties below.

Judicial Branch	FY 2018	FY 2019
Class B Misdemeanor	\$49	\$50
Class A Misdemeanor	\$71	\$72
Routine Criminal Felony Case	\$451	\$456
Appeals	Varies	Varies
It should be noted average case cost estimates for FY 2018 and FY 2019 are based on data that is more than ten years old and does not reflect changes to the courts over that same period of time or the impact these changes may have on processing the various case types. An unspecified misdemeanor can be either class A or class B, with the presumption being a class B misdemeanor.		
Judicial Council		
Public Defender Program	Has contract with State to provide services.	Has contract with State to provide services.
Contract Attorney – Felony	\$756/Case	\$756/Case
Contract Attorney – Misdemeanor	\$275/Case	\$275/Case*
Assigned Counsel – Felony	\$60/Hour up to \$4,100	\$60/Hour up to \$4,100
Assigned Counsel – Misdemeanor	\$60/Hour up to \$1,400	\$60/Hour up to \$1,400
It should be noted that a person needs to be found indigent and have the potential of being incarcerated to be eligible for indigent defense services. The majority of indigent cases (approximately 85%) are handled		

by the public defender program, with the remaining cases going to contract attorneys (14%) or assigned counsel (1%).

** The Council's budget request for the FY 2018-19 biennium includes an increase to \$300 per case for contract attorney misdemeanor cases.*

Department of Corrections		
FY 2016 Average Cost of Incarcerating an Individual	\$35,832	\$35,832
FY 2016 Average Cost of Supervising an Individual on Parole/Probation	\$573	\$573
NH Association of Counties		
County Prosecution Costs	Indeterminable	Indeterminable
Estimated Average Daily Cost of Incarcerating an Individual	\$85 to \$110	\$85 to \$110

Many offenses are prosecuted by local and county prosecutors. When the Department of Justice has prosecutorial responsibility or is involved in an appeal, the Department would likely absorb the cost within its existing budget. If the Department needs to prosecute significantly more cases or handle more appeals, then costs may increase by an indeterminable amount.

AGENCIES CONTACTED:

The Department of Administrative Services, Judicial Branch, New Hampshire Association of Counties and New Hampshire Municipal Association

SB 83-FN-LOCAL - AS INTRODUCED

2017 SESSION

17-0849

06/10

SENATE BILL ***83-FN-LOCAL***

AN ACT relative to the state minimum wage.

SPONSORS: Sen. Soucy, Dist 18; Sen. Woodburn, Dist 1; Sen. D'Allesandro, Dist 20; Sen. Fuller Clark, Dist 21; Sen. Lasky, Dist 13; Sen. Watters, Dist 4; Sen. Hennessey, Dist 5; Sen. Kahn, Dist 10; Sen. Feltes, Dist 15

COMMITTEE: Commerce

ANALYSIS

This bill establishes a state minimum wage.

Explanation: Matter added to current law appears in ***bold italics***.
 Matter removed from current law appears ~~[in brackets and struck through]~~
 Matter which is either (a) all new or (b) repealed and reenacted appears in regular type.

STATE OF NEW HAMPSHIRE

In the Year of Our Lord Two Thousand Seventeen

AN ACT relative to the state minimum wage.

Be it Enacted by the Senate and House of Representatives in General Court convened:

1 1 Minimum Hourly Rate; 2017. Amend the introductory paragraph of RSA 276:21 to read as
2 follows:

3 279:21 Minimum Hourly Rate. Unless otherwise provided by statute, no person~~[, firm, or~~
4 ~~corporation]~~ shall employ any employee at an hourly rate lower than **\$8.50 or** that set forth in the
5 federal minimum wage law, as amended. Tipped employees of a restaurant, hotel, motel, inn or
6 cabin, or ballroom who customarily and regularly receive more than \$30 a month in tips directly
7 from the customers will receive a base rate from the employer of not less than 45 percent of the
8 applicable minimum wage. If an employee shows to the satisfaction of the commissioner that the
9 actual amount of wages received at the end of each pay period did not equal the minimum wage for
10 all hours worked, the employer shall pay the employee the difference to guarantee the applicable
11 minimum wage. The limitations imposed hereby shall be subject to the following exceptions:

12 2 Minimum Hourly Rate; March 1, 2018 Version. The introductory paragraph of RSA 279:21 is
13 repealed and reenacted to read as follows:

14 279:21 Minimum Hourly Rate. Unless otherwise provided by statute, no person shall employ
15 any employee at an hourly rate lower than \$10.00 or that set forth in the federal minimum wage
16 law, as amended. Tipped employees of a restaurant, hotel, motel, inn or cabin, or ballroom who
17 customarily and regularly receive more than \$30 a month in tips directly from the customers will
18 receive a base rate from the employer of not less than 45 percent of the applicable minimum wage.
19 If an employee shows to the satisfaction of the commissioner that the actual amount of wages
20 received at the end of each pay period did not equal the minimum wage for all hours worked, the
21 employer shall pay the employee the difference to guarantee the applicable minimum wage. The
22 limitations imposed hereby shall be subject to the following exceptions:

23 3 Minimum Hourly Rate; September 1, 2018 Rate. The introductory paragraph of RSA 279:21
24 is repealed and reenacted to read as follows:

25 279:21 Minimum Hourly Rate. Unless otherwise provided by statute, no person shall employ
26 any employee at an hourly rate lower than \$12.00 or that set forth in the federal minimum wage
27 law, as amended. Tipped employees of a restaurant, hotel, motel, inn or cabin, or ballroom who
28 customarily and regularly receive more than \$30 a month in tips directly from the customers will
29 receive a base rate from the employer of not less than 45 percent of the applicable minimum wage.
30 If an employee shows to the satisfaction of the commissioner that the actual amount of wages
31 received at the end of each pay period did not equal the minimum wage for all hours worked, the

SB 83-FN-LOCAL - AS INTRODUCED

- Page 2 -

1 employer shall pay the employee the difference to guarantee the applicable minimum wage. The
2 limitations imposed hereby shall be subject to the following exceptions:

3 4 Effective Date.

4 I. Section 2 of this act shall take effect March 1, 2018.

5 II. Section 3 of this act shall take effect September 1, 2018.

6 III. The remainder of this act shall take effect September 1, 2017.

**SB 83-FN-LOCAL- FISCAL NOTE
AS INTRODUCED**

AN ACT relative to the state minimum wage.

FISCAL IMPACT: ☒ State ☒ County ☒ Local ☐ None

STATE:	Estimated Increase / (Decrease)			
	FY 2018	FY 2019	FY 2020	FY 2021
Appropriation	\$0	\$0	\$0	\$0
Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase
Funding Source:	<input checked="" type="checkbox"/> General	<input type="checkbox"/> Education	<input checked="" type="checkbox"/> Highway	<input checked="" type="checkbox"/> Other

COUNTY:

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

LOCAL:

Revenue	\$0	\$0	\$0	\$0
Expenditures	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase	Indeterminable Increase

METHODOLOGY:

This bill increases the minimum hourly wage from \$7.25 an hour to \$8.50 per hour on September 1, 2017, to \$10.00 per hour on March 1, 2018, and to \$12.00 an hour on September 1, 2018. The Department of Administrative Services compared the proposed minimum hourly wage rates to the lowest pay grade in the State classified pay schedule (Labor Grade 1, step 1 = \$10.57 per hour). The proposed minimum hourly wage increase to \$8.50 on September 1, 2017 and \$10.00 in March 1, 2018 would not impact the State since these rates are lower than \$10.57 per hour. The Department determined that there are 115 full-time and 415 part-time employees currently earning less than \$12.00 per hour. The Department is not able to determine the fiscal impact of the proposed increase to \$12.00 on September 1, 2018 because:

- The distribution of salaries below \$12.00 per hour is not readily available; some employees may earn the minimum while others earn closer to \$12.00.
- The Department notes any cost of living increases negotiated through collective bargaining would lessen the difference between the minimum wage in statute and the lowest classified pay grade.

The potential impact to the Judicial Branch would come from the existing RSA 279:28, II, which makes it a misdemeanor for a natural person and a felony for any other person to pay or agree to pay an employee less than the applicable state minimum wage. The Branch does not have information on the potential number of additional misdemeanor or felony prosecutions that may result from the bill, but provided information on the average costs to process such cases in the trial courts below.

Judicial Branch	FY 2018	FY 2019
Class B Misdemeanor	\$49	\$50
Class A Misdemeanor	\$71	\$72
Routine Criminal Felony Case	\$451	\$456
Appeals	Varies	Varies
It should be noted average case cost estimates for FY 2018 and FY 2019 are based on data that is more than ten years old and does not reflect changes to the courts over that same period of time or the impact these changes may have on processing the various case types. An unspecified misdemeanor can be either class A or class B, with the presumption being a class B misdemeanor.		

The New Hampshire Municipal Association states, without contacting the 234 municipalities, it does not have information on the number of employees that would be effected or what the amounts of increases would be, but the Association believes the impact on municipal expenditures would be minimal.

The New Hampshire Association of Counties indicates the bill could have an indeterminable impact on county expenditures.

AGENCIES CONTACTED:

Department of Administrative Services, Judicial Branch, New Hampshire Association of Counties and New Hampshire Municipal Association

**Appendix 16: Assessment of Budgetary Impact on Addison Northwest Supervisory Union
from an Increase in the Minimum Wage to \$15.00 in 2018**

Addison Northwest School District, Hourly Wages below \$15.00/hour in 2018 and Potential Impact								
1 Earning	2 Pay Type	3 Hrly Rate	4 What If	5 Difference	6 Days	7 Hours Per Day	8 Potential Impact	
Admin-4 Se	REGULAR	\$ 12.96	\$ 15.00	\$ 2.04	185	7	\$ 2,641.80	
CN Staff	REGULAR	\$ 11.66	\$ 15.00	\$ 3.34	185	7	\$ 4,325.30	
CN Staff	REGULAR	\$ 12.35	\$ 15.00	\$ 2.65	185	7	\$ 3,431.75	
CN Staff	REGULAR	\$ 12.35	\$ 15.00	\$ 2.65	185	7	\$ 3,431.75	
CN Staff	REGULAR	\$ 13.08	\$ 15.00	\$ 1.92	185	7	\$ 2,486.40	
CN Staff	REGULAR	\$ 13.08	\$ 15.00	\$ 1.92	185	7	\$ 2,486.40	
CN Staff	REGULAR	\$ 14.68	\$ 15.00	\$ 0.32	260	8	\$ 665.60	
Cust-2	REGULAR	\$ 13.34	\$ 15.00	\$ 1.66	260	8	\$ 3,452.80	
Cust-4	REGULAR	\$ 12.28	\$ 15.00	\$ 2.72	260	8	\$ 5,657.60	
Cust-5	REGULAR	\$ 12.24	\$ 15.00	\$ 2.76	260	8	\$ 5,740.80	
Cust-5	REGULAR	\$ 12.28	\$ 15.00	\$ 2.72	260	8	\$ 5,657.60	
Cust-5	REGULAR	\$ 12.28	\$ 15.00	\$ 2.72	260	8	\$ 5,657.60	
Cust-5	REGULAR	\$ 12.96	\$ 15.00	\$ 2.04	260	8	\$ 4,243.20	
Dinner	REGULAR	\$ 12.00	\$ 15.00	\$ 3.00	185	7	\$ 3,885.00	
Dinner	REGULAR	\$ 14.98	\$ 15.00	\$ 0.02	185	7	\$ 25.90	
SPED Para	REGULAR	\$ 11.66	\$ 15.00	\$ 3.34	185	7	\$ 4,325.30	
SPED Para	REGULAR	\$ 12.24	\$ 15.00	\$ 2.76	185	7	\$ 3,574.20	
SPED Para	REGULAR	\$ 12.71	\$ 15.00	\$ 2.29	185	7	\$ 2,965.55	
SPED Para	REGULAR	\$ 13.91	\$ 15.00	\$ 1.09	185	7	\$ 1,411.55	
SPED Para	REGULAR	\$ 13.91	\$ 15.00	\$ 1.09	185	7	\$ 1,411.55	
SPED Para	REGULAR	\$ 14.13	\$ 15.00	\$ 0.87	185	7	\$ 1,126.65	
SPED Para	REGULAR	\$ 14.32	\$ 15.00	\$ 0.68	185	7	\$ 880.60	
SPED Para	REGULAR	\$ 14.55	\$ 15.00	\$ 0.45	185	7	\$ 582.75	
SPED Para	REGULAR	\$ 14.98	\$ 15.00	\$ 0.02	185	7	\$ 25.90	
SPED Para	REGULAR	\$ 14.98	\$ 15.00	\$ 0.02	185	7	\$ 25.90	
Thun Staff	REGULAR	\$ 10.00	\$ 15.00	\$ 5.00	185	7	\$ 6,475.00	
							\$ 76,594.45	

Note: The above potential impact assumes that the minimum wage would be raised to \$15.00 in 2018. A minimum wage of \$15.00 in 2018 is the equivalent of \$13.61 in 2022 in 2018 dollars. Using the difference between the current wage and \$13.61 suggests the difference in pay would be about \$33,000.00. The overall budget of the Addison NW Supervisory Union is above \$21 million.