How Purchasing Power Has Changed Since 1996:

A Report for the Vermont Association of Justice

by Arthur Woolf, Ph.D. February 7, 2020 Current Vermont law allows insurance companies to offer a minimum bodily injury insurance amount of \$25,000. That minimum has not changed since 1996. Over that same time period, overall prices have increased. This brief looks at how prices and other economic monetary indicators have changed since 1996 and what the equivalent of \$25,000 in 1996 would be today.

Table 1 Selected Price and Other Economic Changes Since 1996						
	<u>1996</u>	<u>2019</u>	<u>Chg</u>	<u>Source</u>		
Cable TV services (Index value US)	44.3	100.0	125.7%	US BLS		
Movie ticket (US)	\$4.42	\$9.16	107.2%	NATO		
Median married couple income (VT)	\$42,300	\$89,939	112.6%	VT Tax Dept		
Gallon of gasoline (New England)	\$1.32	\$2.62	98.5%	US EIA		
Median household Income (VT)	\$35,028	\$60,076	71.5%	Census		
Residential electricity price/kwh (VT)	\$10.99	\$18.02	64.0%	US EIA		
Retail price/gallon maple syrup (VT)	\$28.30	\$45.30	60.1%	USDA		
5 pounds white flour (US)	\$1.44	\$2.21	53.5%	US BLS		
Chicken (Index value US)	66.7	100.0	49.9%	US BLS		
Toyota Camry 4 cyl (US)	\$17,268	\$24,425	41.4%	Autotrader		
Bodily Injury cap (VT)	\$25,000	\$25,000	0.0%			
Women's apparel (Index value US)	113.8	100.0	-12.1%	US BLS		
Men's apparel (Index value US)	115.0	100.0	-13.0%	US BLS		
Television (Index value US)	4,056.6	100.0	-97.5%	US BLS		

Table 1 shows a selected list of a variety of goods, services, and economic variables and their prices (or index values) in 1996 and 2019.

The prices of some items, such as cable television services and movie tickets, have more than doubled over that period. A gallon of gas has nearly doubled in price over the past 25 years.

Some prices have increased by a lot less than those, as shown in the table, and some prices, including men's and women's apparel, have fallen. When the U.S. government calculates prices of a broad category of goods, statisticians account for quality improvements. While the quality of a 5-pound bag of flour or a gallon of gas or hasn't changed much, if at all, the quality of other goods, such as televisions and other electronics, have improved dramatically, resulting in a quality-adjusted price decline of TVs of more than 97%.

Vermont median family income has also more than doubled and household income has increased by 71.5%. These income increases have allowed Vermonters to pay for the increased price of some items, but also mean they are better off if their incomes have grown faster than the average prices they pay for goods and services.

Table 1 shows only a very few goods and services. People buy literally thousands of items each year.¹ To examine how much overall, or the average prices, in an economy have changed, there are a variety of different measures to use. The most common is the Consumer Price Index, or CPI. There is no Vermont or New England CPI, so the numbers reported here are for the nation. The U.S. CPI has increased by 63.7% since 1996, which means the average price level in the economy has increased by that much between 1996 and 2019.

The state-imposed minimum bodily injury insurance level has remained unchanged over that period.

Table 1 also reports that the median household income in Vermont has increased by 71.5%, which means incomes have grown by more than prices, on average.² Median married couple family income has increased by 105.5%, which means married couples' incomes have increased much more than overall inflation.³

Table 2							
Measures of Overall Inflation							
			Percent				
	<u>1996</u>	<u>2019</u>	<u>Chg</u>	<u>Source</u>			
CPI Inflation	61.1	100	63.7%	US BLS			
Personal Consumption Expenditure Deflator	69.2	100	44.5%	BEA			
Medical CPI	45.8	100	118.3%	US BLS			

The Federal Reserve, tasked with keeping inflation in check, uses a different measure of inflation—the personal consumption expenditure (PCE) deflator. It differs from the CPI for a variety of technical reasons, but it has increased by less than the CPI over the past 23 years.

Because bodily injury compensation relates to injuries, which involves medical care, Table 2 also shows the increase in overall medical inflation as measured by the CPI. The average price of medical goods and services, which includes hospitalization, physician costs, pharmaceuticals, and other medical-related items, has increased much faster than either overall CPI or the PCE deflator, nearly double overall inflation and nearly three times faster than PCE measured inflation.

¹ Statisticians at the BLS look at the prices of more than 80,000 items each month when they calculate the CPI. ² Median household income here is from 1996 to 2018. We do not yet know 2019 median income from the Census Bureau. Households are defined as any person or group of people living in a housing unit.

³ The 2019 value of median married couple family income is estimated by the author. Married couples are defined as those filing Vermont income tax returns with filing status married filing jointly.

Table 3 reports the amount of minimum bodily insurance that would be required if the amount had increased each year since 1996 by different measures of inflation.

Table 3 \$25,000 Equivalent in 2019 At					
Overall CPI Inflation	\$40,917				
PCE Inflation	\$36,127				
Medical CPI Inflation	\$54,585				

Based on the increases in these measures of inflation, increasing the minimum bodily injury amount from \$25,000 based on overall CPI inflation would put the minimum at \$40,917 in 2019; increasing it at the PCE inflation measure would require a minimum of \$36,127, and if the \$25,000 minimum had increased each year at the overall rate of medical inflation, the minimum today would be \$54,585.