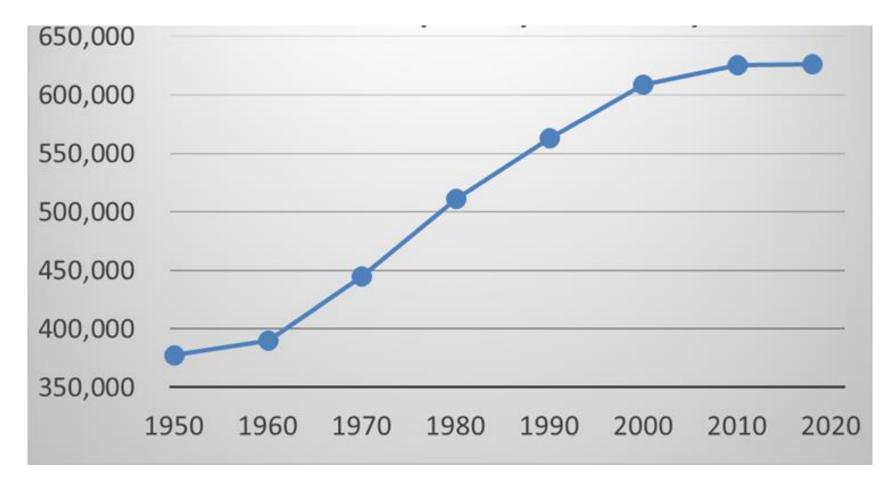
Population Changes and Vermont State Revenue

PRESENTATION TO SENATE FINANCE COMMITTEE JANUARY 10, 2020

SEAN SHEEHAN, STAFF DIRECTOR, TAX STRUCTURE COMMISSION

After decades of growth, Vermont's total population has barely changed over the last dozen years

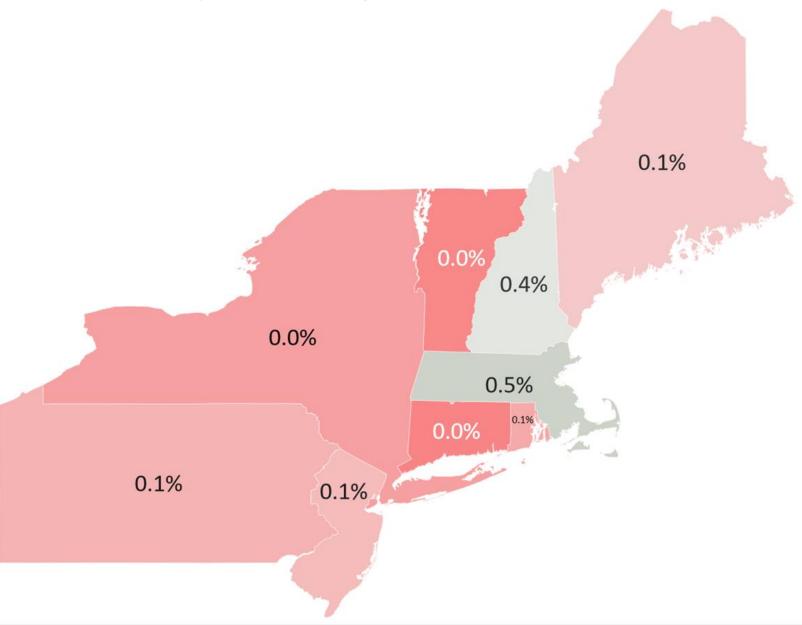


Source: U.S. Census decennial census (1950-2010) and American Community Survey estimate (2019)

The entire Northeast has only grown an estimated 0.1%/year since 2010

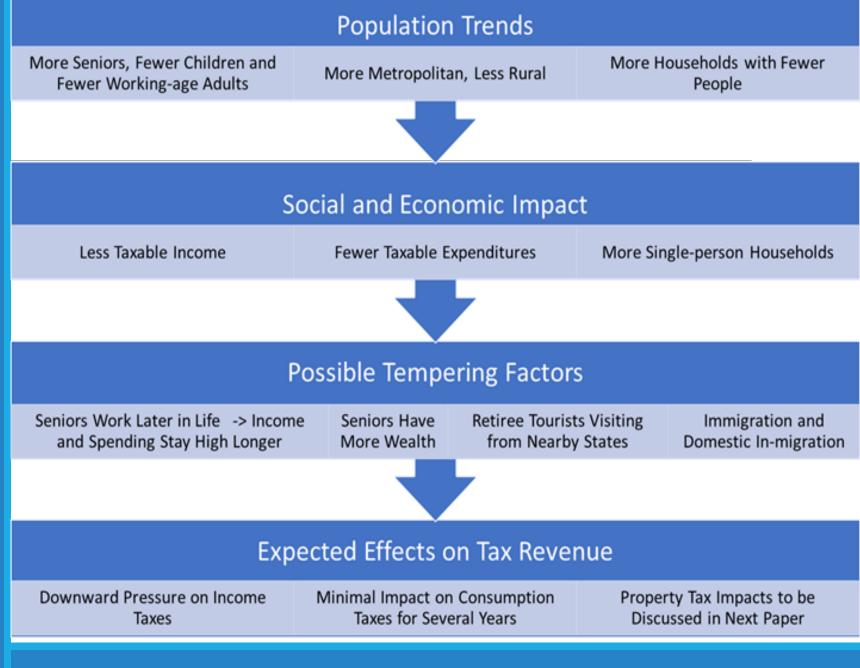
Average Annual Growth Rate by Census Region, 2010-2019	
Northeast	0.1%
Midwest	0.2%
South	1.0%
West	0.9%

Northeast Population Average Annual Growth Rate, 2010-2019



But within that lack of change in total population lie three trends that will impact how we earn, spend, live... and raise revenue.

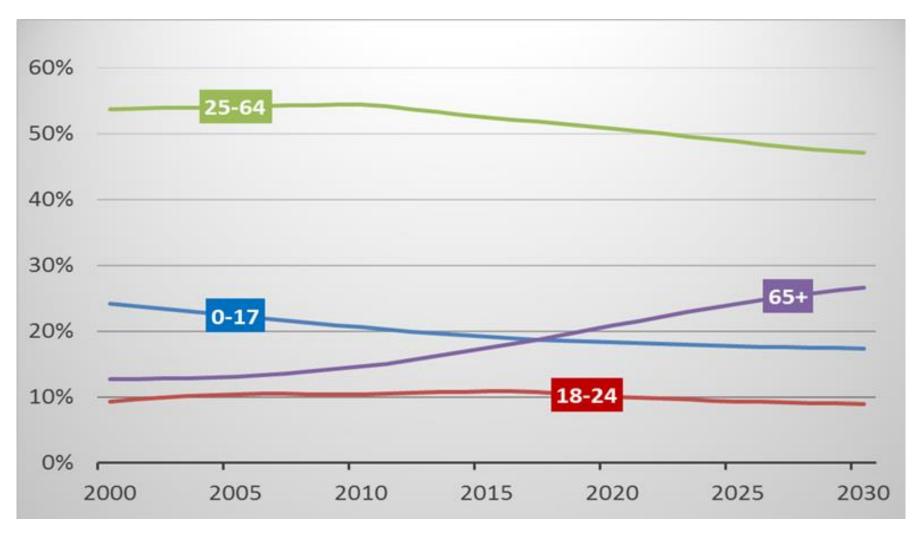
Presentation Overview



More Seniors, Fewer Children, and Fewer Working-age Adults

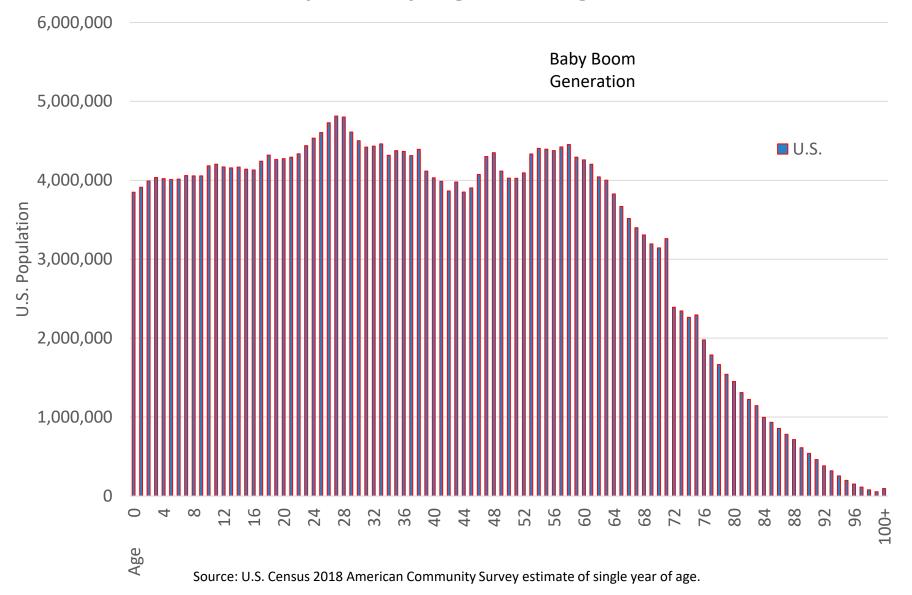
TREND #1

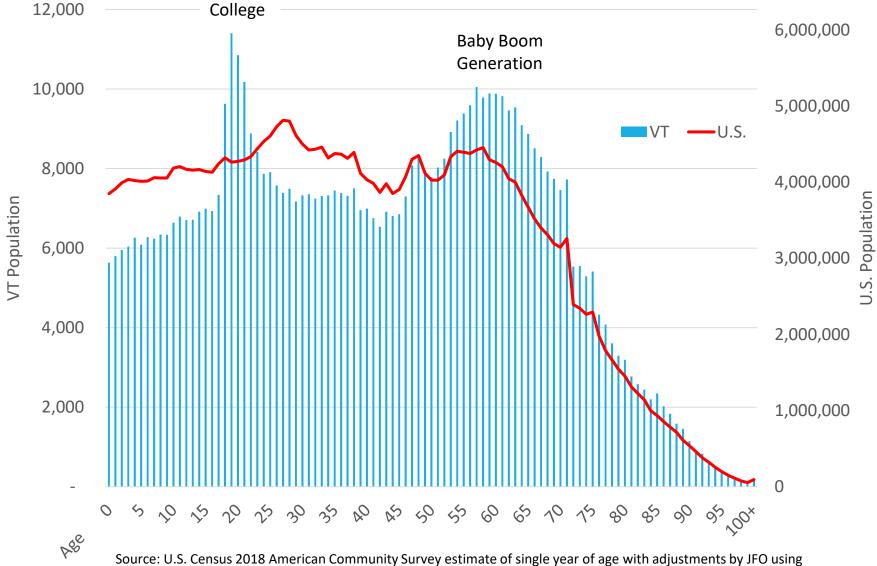
Share of Vermont Population by Age Group



Source: U.S. Census decennial census and estimates and Vermont consensus Administration and Legislative Joint Fiscal Office projections

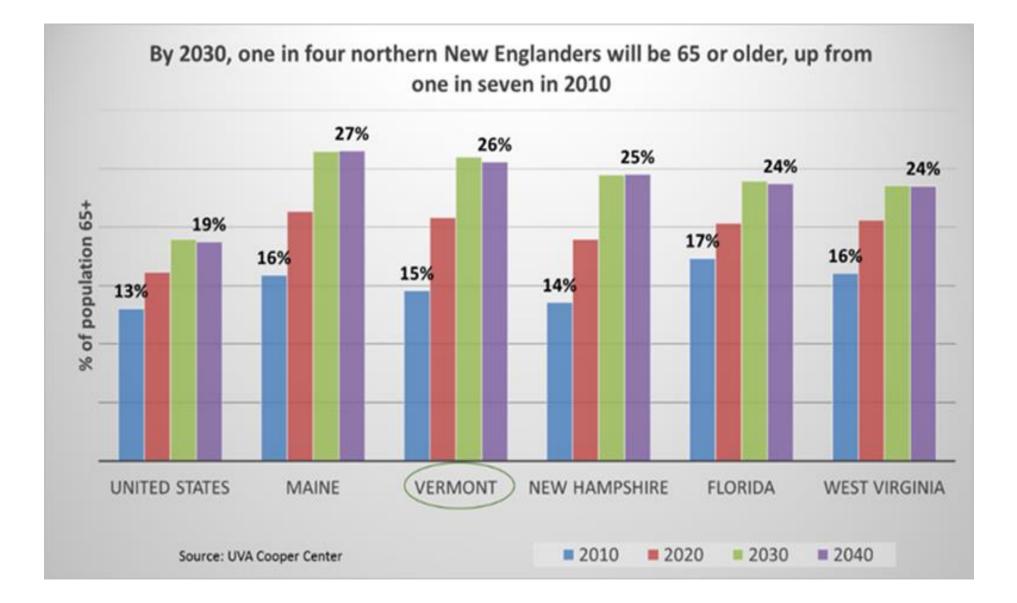
U.S. Population by Single Year of Age, 2018





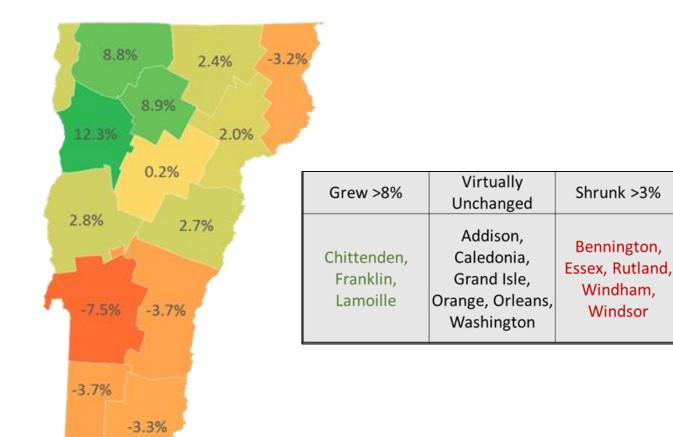
Vermont's Population by Single Year of Age vs. U.S., 2018

2010 proportions of single year of age for VT ages 85 through 100+.

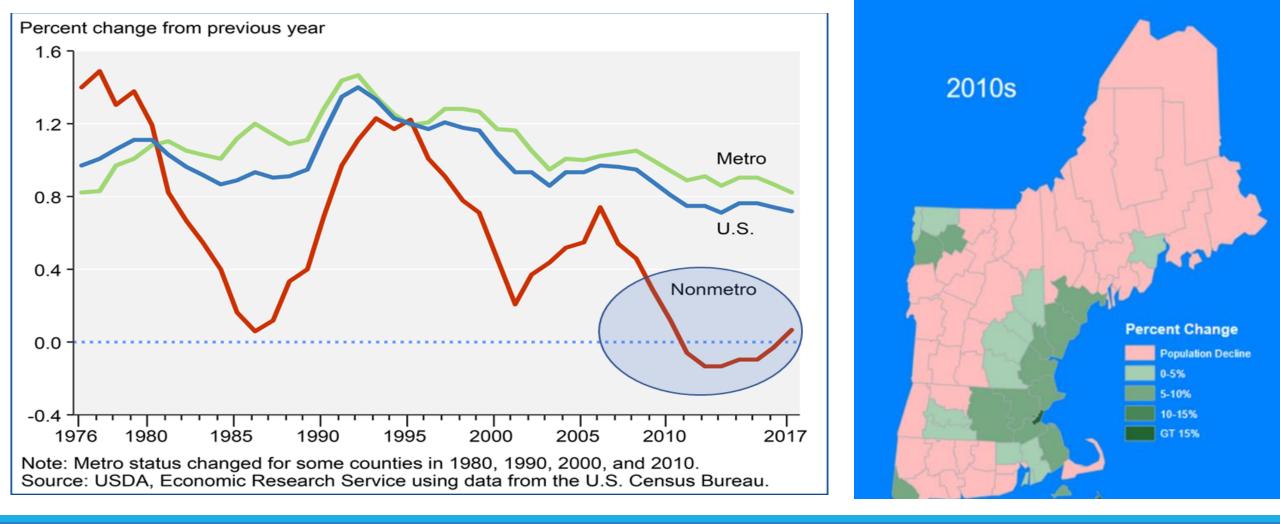


More Metropolitan, Less Rural

TREND #2



Change in County Population from 2000 to 2018



Vermont's population shift into its metro area is consistent with regional and national trends. As the nation's two most rural states, Maine and Vermont are particularly impacted.

Graph on left from USDA using data from U.S. Census. Graph on right from Peter Nelson of Middlebury College using data from U.S. Census on population change, 2010-2017.

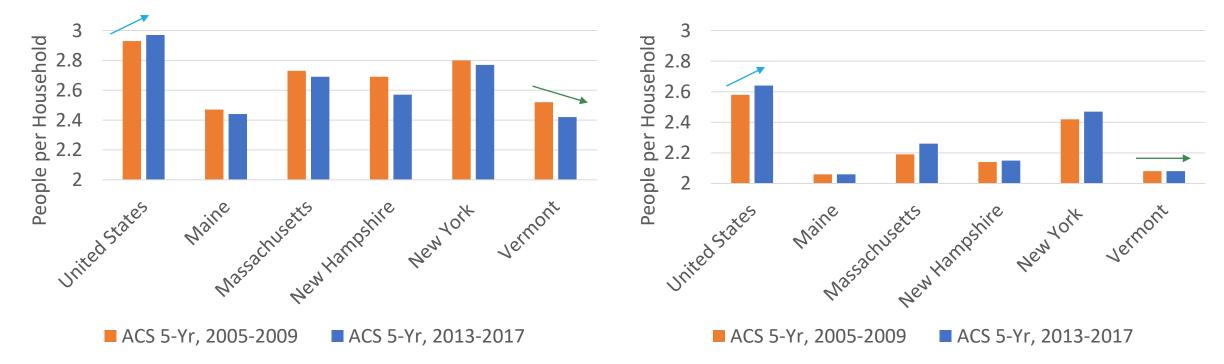
More Households with Fewer People

TREND #3

The average Vermont household has fewer members than it did a decade ago, countering a national trend. Vermont's trend has been driven by a decrease in members per owner-occupied household.

Average Size of Owner-Occupied Households

Average Size of Renter Households

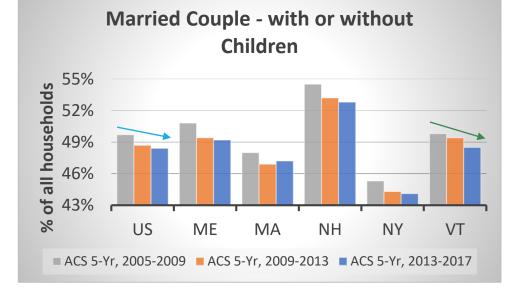


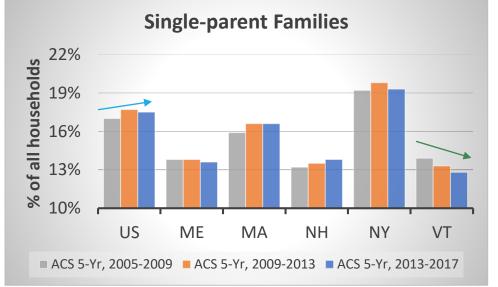
Source: Five-year data from U.S. Census 2009 and 2017 American Community Survey (ACS), data from 2005-2009 and 2013-2017

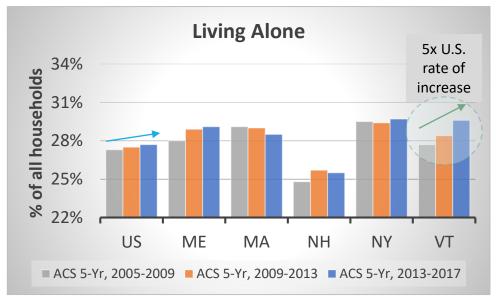
The average Vermont household is five percent smaller than it was in 2000 and is statistically tied with Maine and North Dakota as the smallest in the nation.

Source: U.S. Census

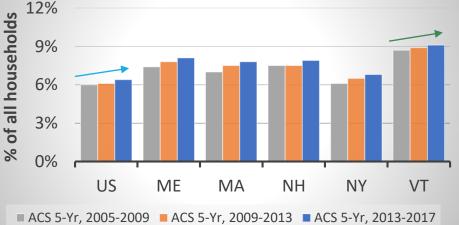
Composition of All Households (Owner-occupied and Renter)





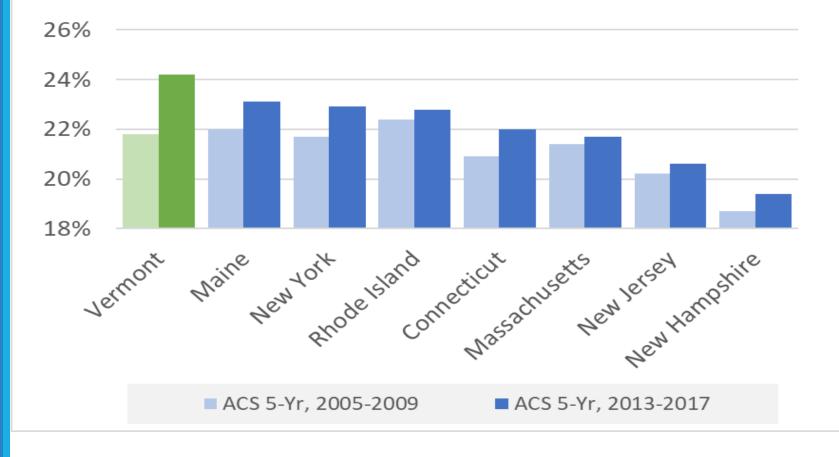






Owner-occupied households are more likely to be one-person in Vermont than in any other state in the Northeast

One-person households as % of all owneroccupied households



Impacts

Vermont's three largest sources of state revenue:

• **Personal Income Tax** is the largest source of revenue in Vermont, accounting for nearly two-thirds of General Fund dollars.

• **Consumption Taxes** support both the Education Fund (100% of Sales and Use and 25% of Meals and Rooms revenue) and General Fund (75% of Meals and Rooms).

• Education Property Tax accounts for two-thirds of Education Fund dollars, with nonhomestead property taxes accounting for 41% of the Fund's revenue and the homestead education tax accounting for 26%.

We expect all three sources to be impacted by demographic trends. Last month's paper (and this presentation) explores the impact on income and consumption tax revenue. A subsequent paper on the state's education finance system will discuss the impact on property taxes.

Income Tax

Income tax revenue faces downward pressure due to:

- 1) Fewer workers;
- 2) Lower incomes in retirement and early working years;
- 3) Seniors' income less likely to be taxable.

Fewer workers

"[W]orking age populations are projected to decline approximately 0.5% between 2017 and 2026. This trend will strain economic growth....with knock-on implications for revenue growth prospects"

-- Fitch Ratings, 2018

Last decade, Vermont benefited from a large increase in workers in the midst of their peak earning years

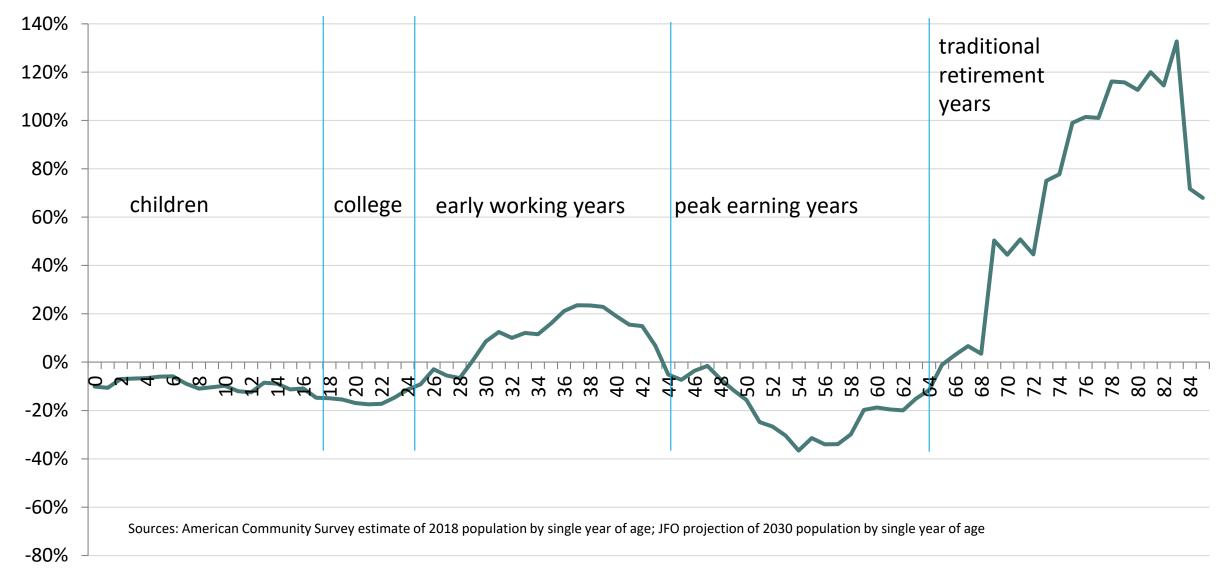


1/10/2020

Percentage change in population by single year of age, 2000-2015

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Over the next decade, Vermont will see a decrease of peak earners and increase of retirees and workers in their early years



^{1/10/2020} Projected percentage change in population by single year of age, 2015-2030

Lower incomes in retirement and early working years.

- Younger baby boomers (age 55-64) are the largest age group in the state - they account for more than a fifth of tax returns and more than a quarter of all income tax dollars.
- Vermonters age 45-65 pay the most income tax relative to population size.
- As baby boomers transition into retirement and paying less income tax, the smaller generation that follows can be expected to not cover the full gap, creating downward pressure on income tax revenue.

Proportion of Vermont population, tax returns, and taxes paid, 2018



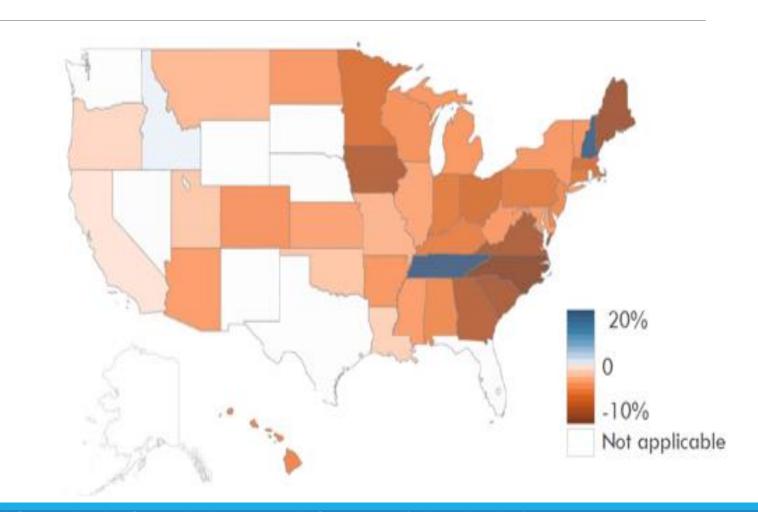
Source: 2018 estimated income tax by age group, residents only, using Chainbridge model. Population from U.S. Census estimates. VERMONT TAX STRUCTURE COMMISSION 25

1/10/2020

A 2013 report by the Federal Reserve Bank of Kansas City projected that demographic change would lead Vermont's per capita income tax revenue to fall 4% by 2030.

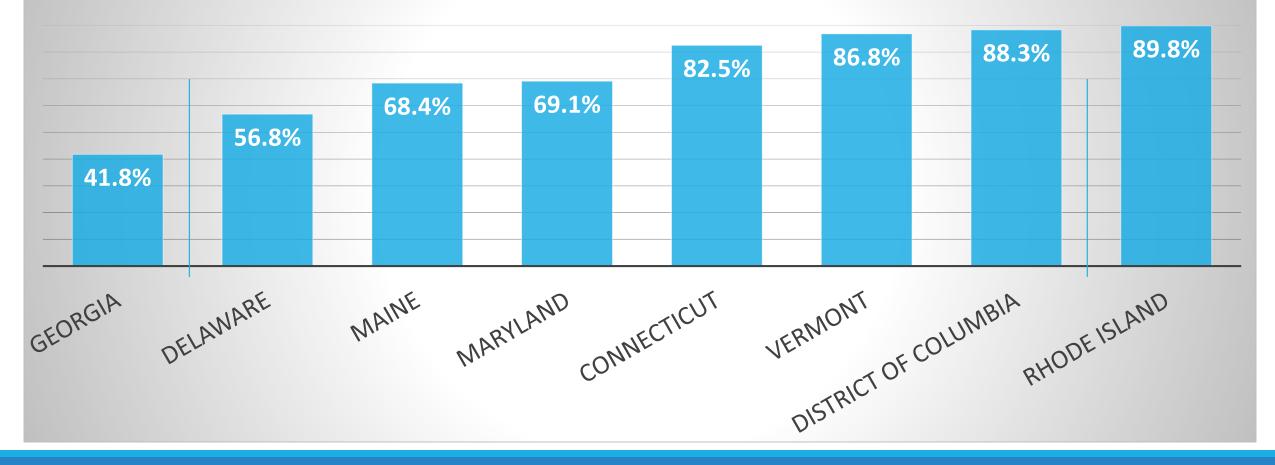
Several less aged states, particularly those with extensive tax breaks for retirement income, projected larger drops.

Projected change in income tax per capita, 2011-2030



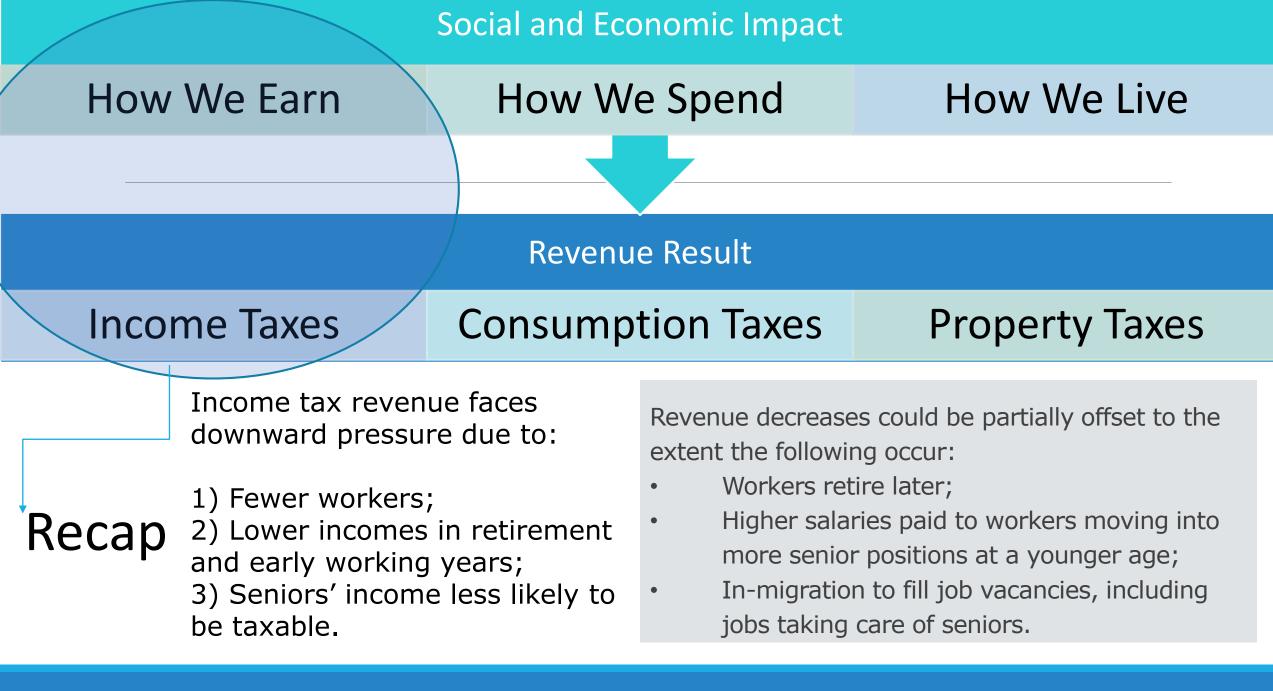
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Elderly Income Tax Liability as Percent of Non-Elderly Liability in 2013



As of 2013, depending on the state, seniors could pay as little as 42% of the income tax they would have paid on the same income as a non-senior (in Georgia), or nearly 90% (in Rhode Island). Seniors in six states had less than 50% of the liability of non-seniors, while seniors in ten states (plus the District of Columbia) paid over 80%.

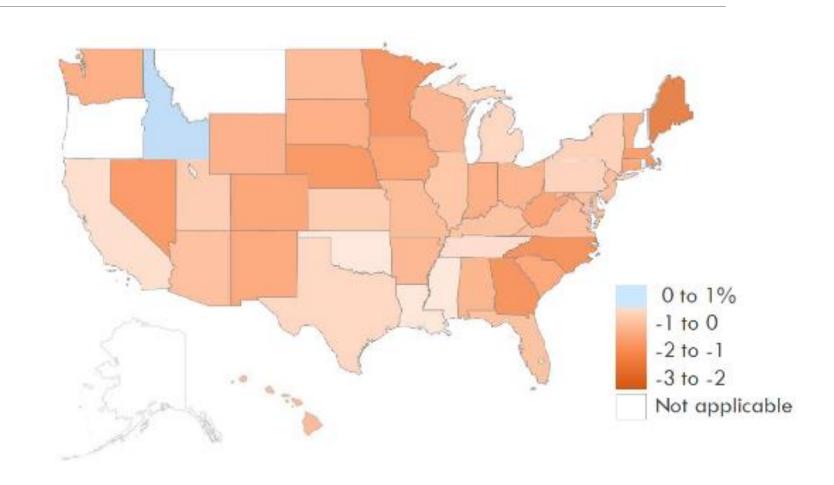
Source: "Protecting the Vulnerable or Ripe for Reform, State Income Tax Breaks for the Elderly: Then and Now," Brewer, Ben, Karen Smith Conway, and Jonathan C. Rork, Public Finance Review, Vol. 45, No. 4. VERMONT TAX STRUCTURE COMMISSION 27



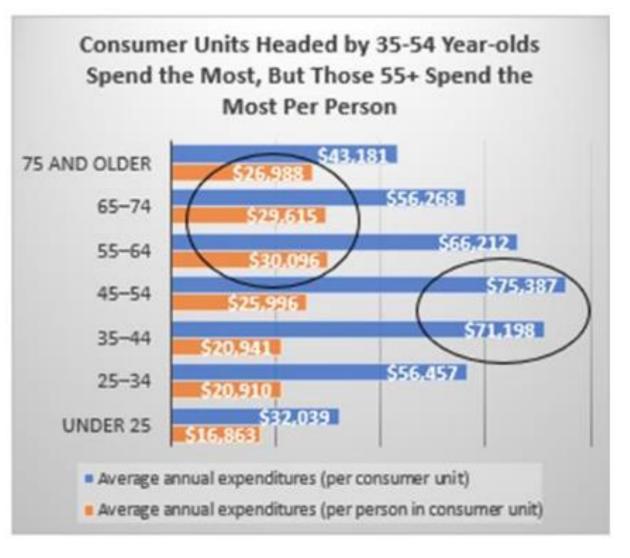
Consumption Taxes

The same 2013 report by the Federal Reserve Bank of Kansas City projected that demographic change would lead Vermont's per capita sales tax revenue to fall ~1.5% by 2030.

Projected change in sales tax per capita, 2011-2030



U.S. Spending by Age Group, 2018

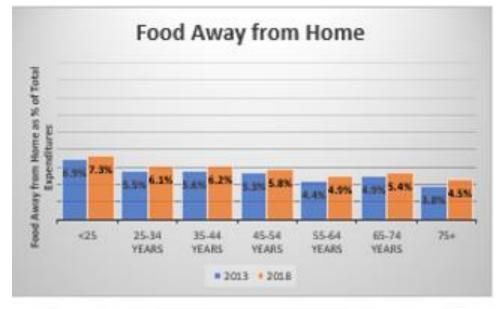


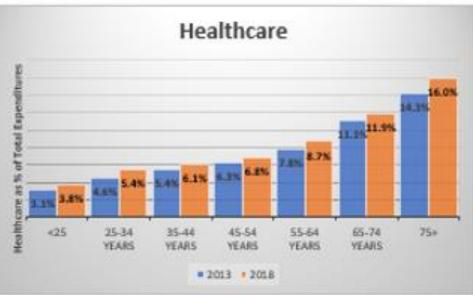
Source: Bureau of Labor Statistics Consumer Expenditure Survey, 2018

Consumption tax revenue faces downward pressure due to:

1) Lower overall income (fewer peak earners) leads to lower overall spending

Proportion of Age Groups' Spending on Select Categories





Consumption tax revenue faces downward pressure due to:

1) Lower overall income (fewer peak earners) leads to lower overall spending

2) Seniors' spending typically shifts from goods (generally taxable) to services (mostly not taxable)

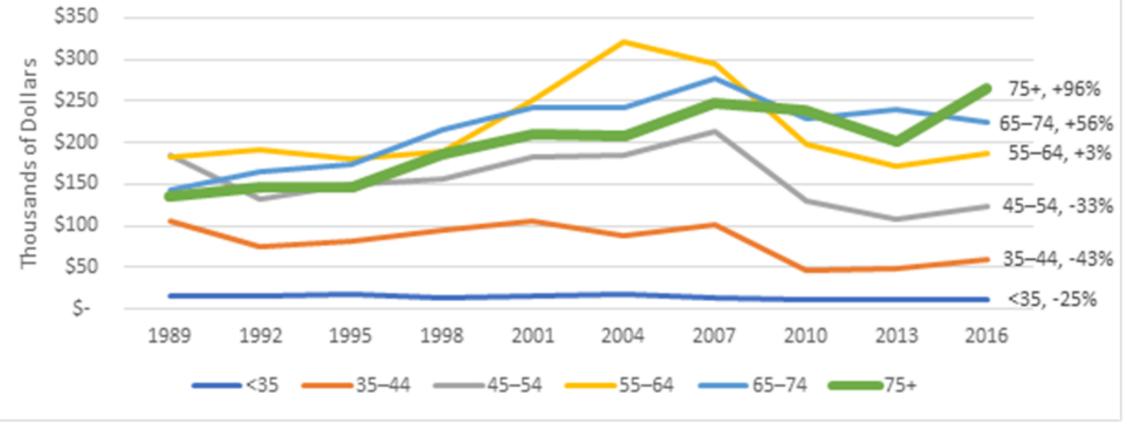
Source: Bureau of Labor Statistics Consumer Expenditure Survey, 2018

Revenue decreases could be offset for several years to the extent...

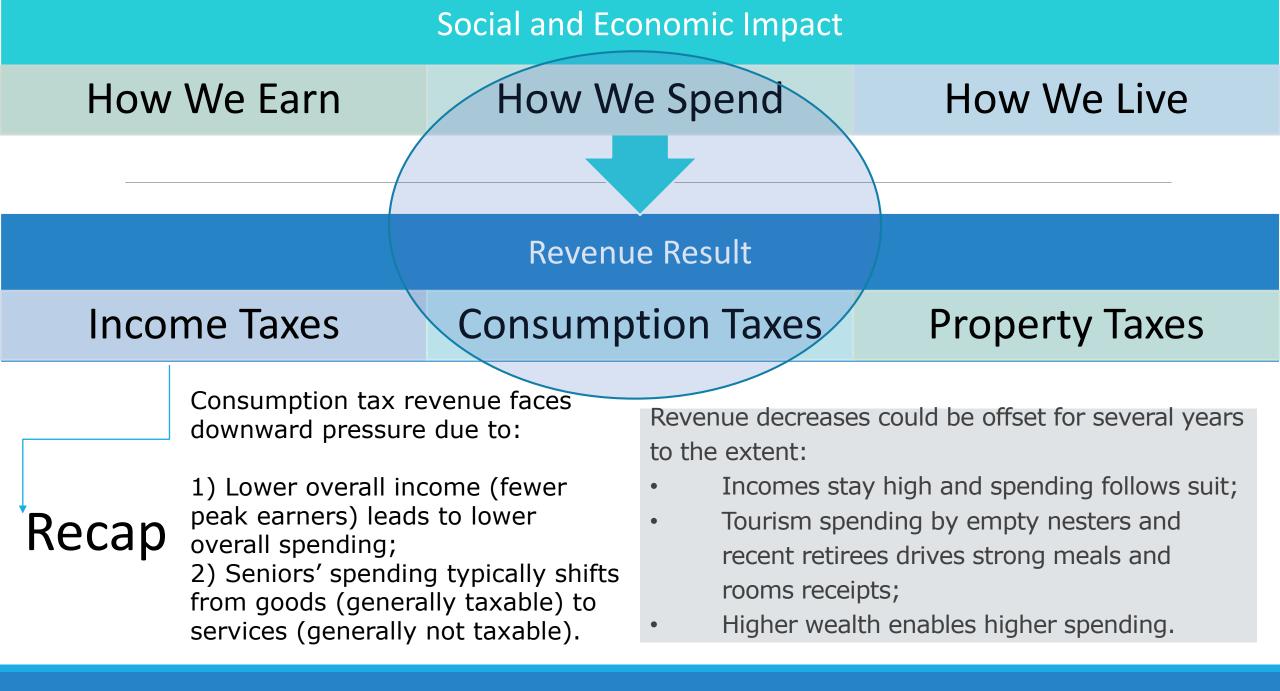
- 1. Incomes stay high due to older workers retiring later and younger workers being promoted earlier, and then spending follows suit
- 2. Tourism spending increases
 - Vermont's Agency of Commerce and Community Development estimates that out-ofstate visitors account for roughly 50 percent of meals and over 95 percent rooms
 - Empty nesters and recent retirees from northeastern states are an important source of tourism for northern New England
- 3. Higher wealth enables higher spending

Higher wealth: The typical family headed by a 75+ year-old has more wealth than any other age cohort and nearly twice as much wealth as a 75+ family in 1989

U.S. Family Median Net Worth by Age Group Inflation-adjusted (2016 dollars) with % change from 1989 to 2016



Source: Federal Reserve Survey of Consumer Finances

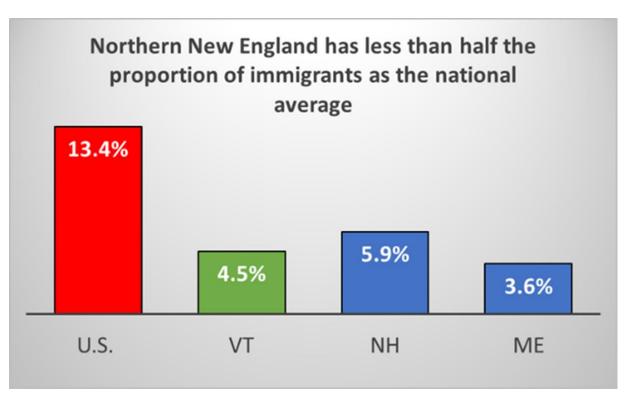


Conclusion

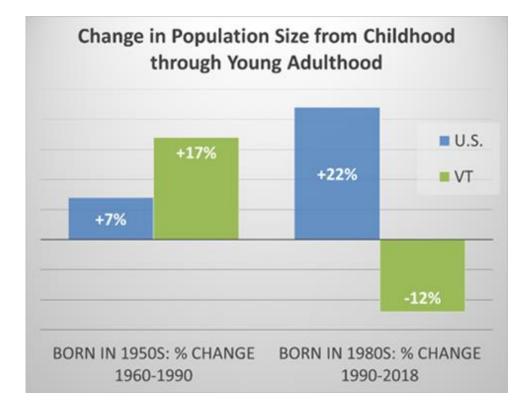
The Wildcards

- Trends Can and Do Change
- Housing A Population Constraint or Impending Boom?
- In-migration Both Domestic and International

Immigration



Young adult migration



Findings

1) Vermont attracted a lot of baby boomers. As baby boomers age, Vermont gains seniors and loses working age adults and children.

2) Vermonters are shifting toward its one metropolitan area and away from rural areas.

3) More households with fewer people result in household growth without population growth.

4) Population changes will put downward pressure on personal income tax.

5) Relative to other states, Vermont's tax structure provides more income tax stability.

6) Population changes will likely have minimal impact on consumption tax for several years.

7) Trends can and do change. Of the trends outlined in this paper, "More Seniors" seems the least likely to reverse course in the coming decade.

8) In-migration, both domestic and international, is crucial for maintaining population stability, achieving generational balance, and addressing workforce shortages...which will then benefit the State's revenue system.

Population Changes and Vermont State Revenue

Executive Summary – Full Report

Tax Structure Commission website:

https://ljfo.vermont.gov/committees-and-studies/tax-structure-commission