

**Vermont's Changing Demographics:  
A Brief Examination of their Magnitude and  
Economic and Fiscal Implications**

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**By**

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## Introduction

Over the next two and a half decades, Vermont will experience unprecedented demographic changes that will have significant impacts on the state's businesses, schools, and government. By 2030, the number of people over 65 will double, but the number of working-age Vermonters will remain unchanged from current levels. Vermont businesses will find it increasingly difficult to find and attract sufficient numbers of workers to satisfy their needs. With fewer taxpaying workers, state and local governments will see slower growth in tax revenues. At the same time, demands for governmental services for the larger number of elderly Vermonters will grow. This report briefly examines these issues and provides a framework for examining the impact of these demographic changes.

The report finds:

- Vermont's population will increase by 90,000 over the next 25 years.
- The entire population increase will be accounted for by an increase in the number of Vermonters over 65. The number of Vermonters over 65 will double by 2030.
- The working age population in Vermont, those between 21 and 64, will rise slightly over the next ten years and then decline. By 2030, there will be fewer working-age Vermonters than there are today. This presents clear challenges to firms and organizations throughout the state as they look for qualified workers to fill their job needs.
- The number of young Vermonters, including students in Vermont elementary and high schools, has been shrinking and will continue to fall. By 2015 there will be 15 percent fewer Vermonters under the age of 20 than there were in 2000.
- Today there are five working-age Vermonters for every one over the age of 65. By 2030, there will be only two working-age Vermonters for each senior citizen.
- Given these demographic forecasts, projections of tax revenues available to all levels of government suggest that if nothing is done, government spending on only two components, K-12 education and human services, will absorb all of the revenues available to government by 2030. There will be no revenues available to support any other governmental functions.
- Vermont and its state and local governments can adapt to these new demographic realities and the associated economic and fiscal changes by either raising taxes, cutting spending, or undertaking policies that lead to faster demographic and economic growth than the baseline projections imply.

## I. Future Population Contours of Vermont

The state's total population will increase by about 15% over the next 25 years, rising from the current level of 620,000 to 710,000 by 2030. This section breaks the total population growth into three components: working age Vermonters, young Vermonters, and old Vermonters.

### A. Decrease in Working Age Vermonters

The number of working-age Vermonters, those between 21 and 64, will increase over the next ten years, but the increase will be small. Today, about 380,000 Vermonters are in that age bracket and by 2015, just over 400,000 Vermonters will be in their prime working age years. That's an increase of only 6% over the next decade, or less than one half of one percent per year. As Figure 1 shows, after 2015 the number of working age Vermonters will begin falling. By 2025, there will be the same number of working age Vermonters as there are today and by 2030 there will be fewer than today. Vermont's businesses, governments, and non-profit organizations will face unprecedented challenges finding workers to fill their needs.

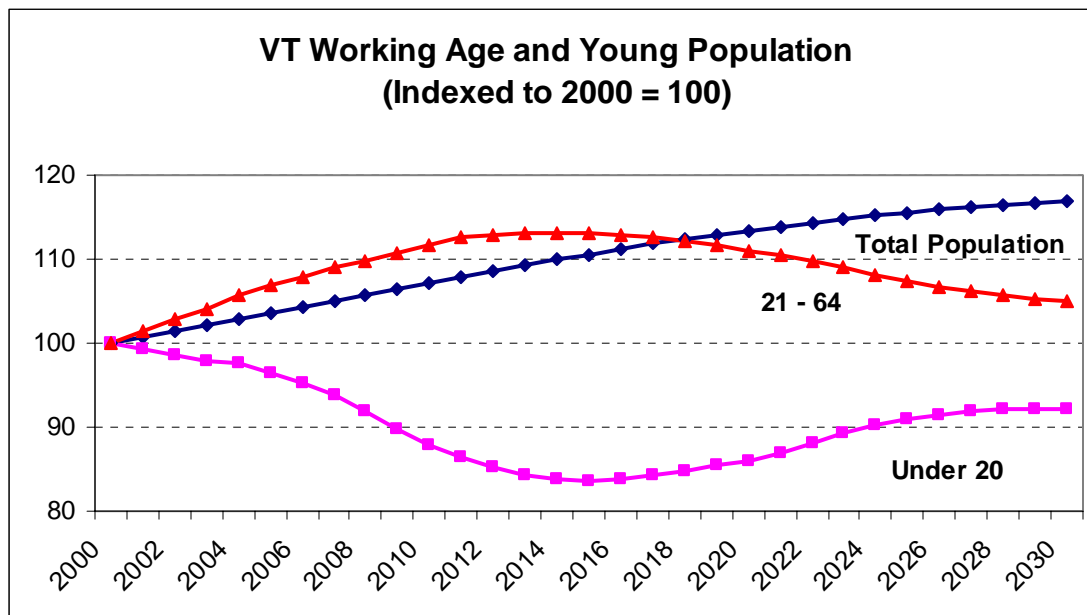


Figure 1

### B. Decrease in Young Vermonters

Figure 1 also shows that the number of Vermonters less than 20 years old has been falling for some time, and by the middle of the next decade there will be 10,000 fewer young Vermonters than there are today. That number will then slowly rise but even by 2030, there will be less than there are today. Vermont's schools will have to adjust to the

declining enrollments and to the permanently smaller number of students enrolled in schools.

### *C. Dramatic Increase in Older Vermonters*

The most dramatic change, shown on a separate graph (Figure 2) because the magnitude is so great, is the doubling of the number of Vermonters over the age of 65. Today, 80,000 Vermonters are over the age of 65. In ten years, that number will increase to 115,000. By 2030, 175,000 Vermonters, one in four people living in the state, will be over 65. That represents more than a doubling in the next 25 years.

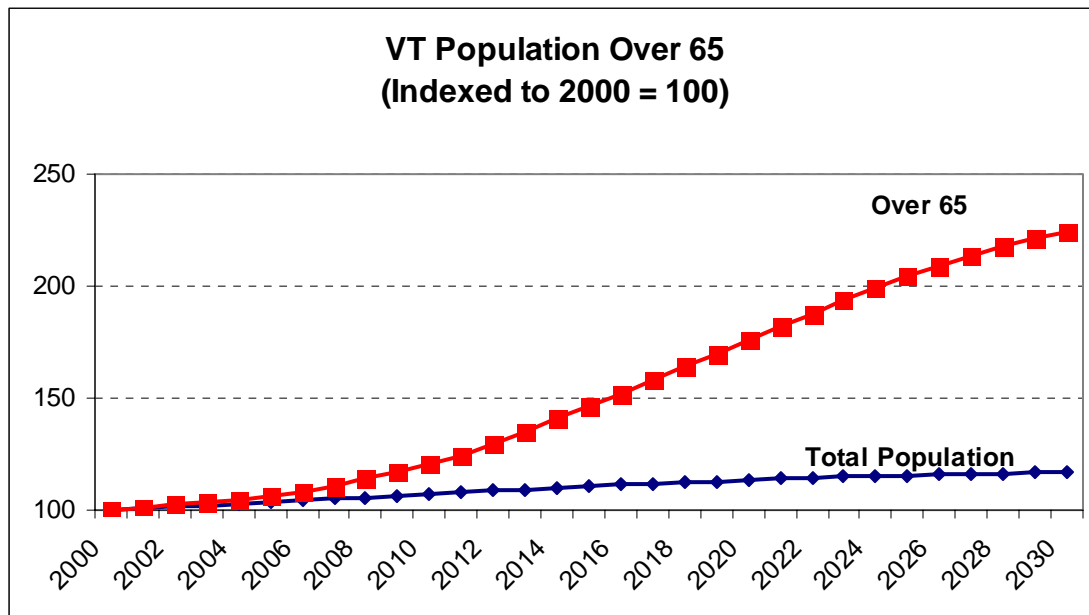


Figure 2

## II. Dependency Ratios

A dependency ratio measures the relative numbers of people in different age groups by examining the number of people in a society that are dependent on the people working. A society's dependency ratio is worth examining because it tells us, ultimately, how much of an average worker's income needs to be transferred to non-workers in order to support them.

Non-working Vermonters are supported financially by either their families, by state and local government programs, by the federal government, or by some combination of those three. The non-working population is primarily composed of those who are too young to work or those who are retired and do not work. Young non-workers, especially children, are supported by their families and by taxpayer-funded education. Most of the taxes used to fund education come from state and local sources.

Older Vermonters are supported by the savings and pensions they have accumulated during their working years and by Social Security and Medicare, which are federally funded. However, the State of Vermont pays for some nursing home care for the elderly through the Medicaid program's services for low-income elderly Vermonters.

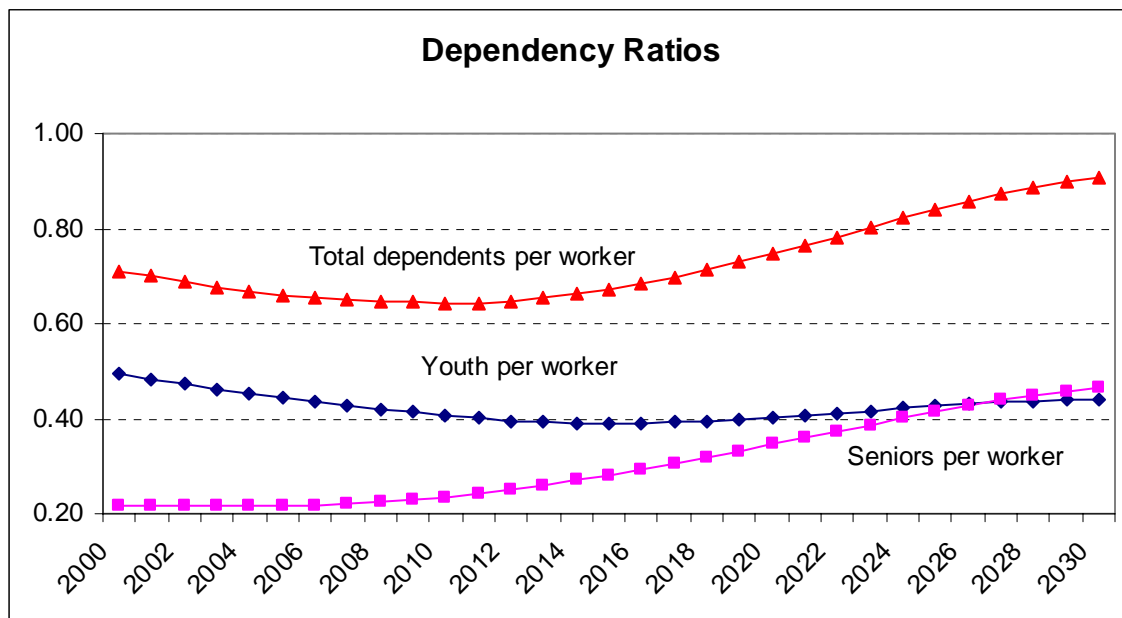


Figure 3

Figure 3 shows that currently for every two young Vermonters, there is one working-age Vermonter (the ratio of young Vermonters to working-age Vermonters is 0.5 to 1). That

dependency ratio will decline over the next ten years, meaning that there will be fewer young Vermonters supported by each working age Vermonter. That support can come from either their own resources (parents providing for their children) or through the tax system for education, but the youth dependency ratio will then begin to increase slowly.

Today, there are five working-age Vermonters for every Vermonter over the age of 65. That ratio will be fairly constant for the next five years, but will then begin to increase. By 2020, there will be only three working age Vermonters for each senior citizen and by 2030 only two.

Combine the number of young and old Vermonters and consider that most do not work. Today, there are 0.7 dependents (youth and seniors) for every working age Vermonter. We are currently in a “demographic sweet spot” and will be for the next seven or eight years, as the total dependency ratio will fall slightly. But after 2012, the total number of people dependent on each working age Vermonter will rise, and by 2030, the number of dependents will be almost equal to the number of working age Vermonters. Nearly all of the increase in the dependency ratio will be accounted for by the increasing number of senior citizens in the state.

These young and old Vermonters are, in part, cared for by programs funded by state and local taxes. A rising dependency ratio, therefore, means fewer working Vermonters will be paying taxes to support the larger numbers of non working, young and old Vermonters.

How Vermonters pay for these dependents will be one of the biggest challenges facing the State of Vermont and its residents over the next two decades.

### **III. Fiscal Impacts of Demographic Changes**

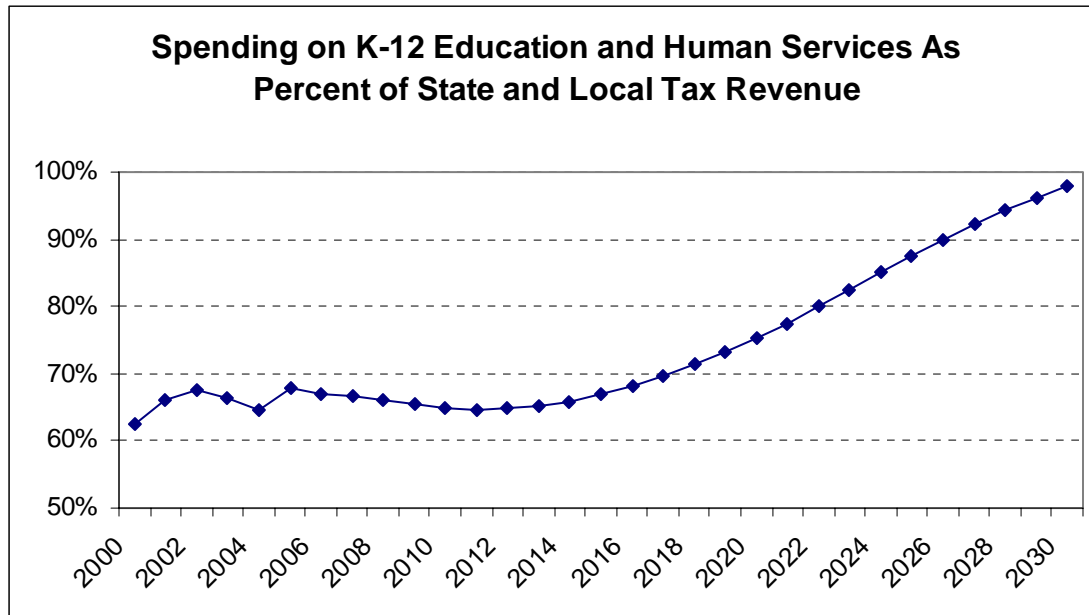
These demographic changes have significant fiscal impacts for state and local governments. Consider the two largest expenditure items for state and local governments, education and human services. K-12 education and human services include a wide array of social welfare and health care programs and corrections. The future decline in the number of school-aged children could mean a reduction in education spending, although in past decades per pupil education spending in Vermont has far outstripped inflation. It could also mean reductions in social service spending needs for children. The future could also see a slowdown in corrections spending since a majority of incarcerated Vermonters are under the age of 40 and there will be fewer Vermonters under the age of 40.

On the other hand, the doubling of the number of senior citizens will likely mean a big increase in the costs of any programs that target seniors. The most significant of these are state Medicaid expenditures which pay for nursing home care for low income senior citizens. There are also reasons to expect that the state will pass new laws providing more benefits to senior citizens. The major reason is that older Vermonters are more likely to vote than younger voters and there will be many older Vermonters in coming years. Politicians respond to their constituents' desires and those desires will increasingly be for programs that benefit older Vermonters.

What will this mean for taxes and spending in Vermont? Forecasting taxes or expenditures decades into the future is a speculative exercise at best. We can make plausible assumptions about state and local tax revenue growth and spending on K-12 education and state human service spending over the next 25 years to give us a rough estimate of how the increase in the state's dependency ratio will be reflected in taxes and spending. Figure 4 shows that spending on these two programs alone will absorb just about every dollar of projected tax revenues. This would leave nothing available for any other state or local government program, including roads, housing, the environment, recreation, community development, agriculture, courts, government administration, VSAC, or higher education.

Economist Herb Stein once said that if something can't go on forever, it will stop. Clearly, the trend illustrated in the graph above will not come to fruition. Either taxes will go up faster than we expect or spending will not rise as fast. Spending may not go up as fast as forecasted here but, given the demographic changes that Vermont will undergo, it is very likely that the state will be under increasing pressure to spend more on senior citizens, if for no other reason than there will be twice as many as there are today.

On the revenue side, taxes could rise faster than the forecast because of legislated tax increases; however, Vermont already has one of the highest tax burdens of any state, so that is not likely to happen. Tax revenues can also rise because of more economic activity in the state due to higher productivity levels of the workforce or an increase in the number of workers.



**Figure 4**

One solution to the problems outlined here is for Vermont's economy to grow faster than the demographic projections suggest it will. The next section suggests some ways to think about how that might be accomplished.



#### **IV. How Will Vermont Cope?**

Based on the projections in Figure 4, state and local governments will have to make some very difficult and painful choices in the coming two decades. At the same time, Vermont's private-sector firms, non-profits, and other organizations will find it very difficult to expand their employment. In a worse case scenario, firms will either leave the state or expand outside of Vermont. State and local governments will have to dramatically increase taxes or drastically cut services.

There is another choice. If the state's economy grows faster, tax revenues will grow faster. And if the economy grows faster because of more workers--especially if there are more highly-paid workers--that will mitigate the future demographic impacts that are outlined in this report.

One solution, then, to these demographic and fiscal problems is to foster more economic growth and development in the state. How can that happen? In the long term, Vermont needs to capitalize on the assets of the state and its existing infrastructure. It also needs to recognize the state's liabilities that inhibit economic growth. Some of the state's liabilities, such as weather and climate, are beyond the control of state policymakers. Others are amenable to change. One immediate recommendation would be for state and local policymakers, the business community, and others to focus on what they believe are the strengths and weaknesses of the state and how the state can lessen the limitations to economic growth and capitalize on the state's assets.

#### **V. Conclusions**

Vermont's demographic future is fairly clear. The state will see a very large increase in the number of people over the age of 65 and almost no change in the number of working age Vermonters. That means that the state's tax base will grow more slowly than it has in past decades. Local and state governments will find it increasingly difficult to find the tax revenues needed to pay for current government services and will also be under increasing pressure to provide additional services to the large number of elderly Vermonters.

State policymakers will have three basic choices. One is to increase taxes significantly to a level Vermonters have, heretofore, not experienced. That could have significant impacts on the economy of the state. The second is to cut the growth in current expenditure programs and resist the political pressures to enact new programs, especially high cost programs for the elderly. The third is to enhance the economy of the state so that additional tax revenues can be brought in to finance these growing costs. None of these choices will be easy to implement. But the problems faced by the State of Vermont are clear and they will loom larger each year that nothing is done.