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2 April 2018

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State and local government - US

Aging states face less dynamic economies, lower revenue growth

Aging populations can lead to a stagnant economy and weak tax revenue growth for state and local governments. Maine (Aa2 stable), New Hampshire (Aa1 stable), Vermont (Aaa stable) and West Virginia (Aa2 stable) — the four oldest states by median age — have below average employment growth and will experience slower revenue growth than younger states over the next decade. Florida (Aa1 stable), the fifth oldest state, bucks those trends: it benefits from strong population growth, especially of working-age people, which mitigates many of the challenges of having a higher concentration of people over the age of 65.

» **Aging populations lead to less dynamic economies.** A decline in working-age people deters companies from relocating to aging states, which in turn discourages working-age people from moving to the state. As a result, state and local governments with fewer working-age people have less desirable business environments and experience slower rates of employment growth.

» **Aging populations can strain state and local government finances.** Many retired people have lower taxable incomes and spend less, which slows states' main revenue sources of income and sales taxes. For local governments, property tax revenue growth can stagnate because people over the age of 65 tend not to buy new homes and new companies are usually not moving to the area to drive population growth and home purchases.

» **In Florida, the challenges of having a high proportion of the population over the age of 65 are largely mitigated by strong population growth that drives residential development and sales tax growth.** The state's robust economic growth results from positive migration trends, including the movement of financially secure retirees from other states. Although Florida historically has had a higher concentration of people over the age of 65 compared to other states, it benefits from immigration and growth of its working age population.

» **State and local governments can make policy decisions to mitigate the credit negative effects of population aging.** State and local governments across the country will face aging populations in the future, but policy decisions can lessen the negative economic and fiscal effects that result from population aging.

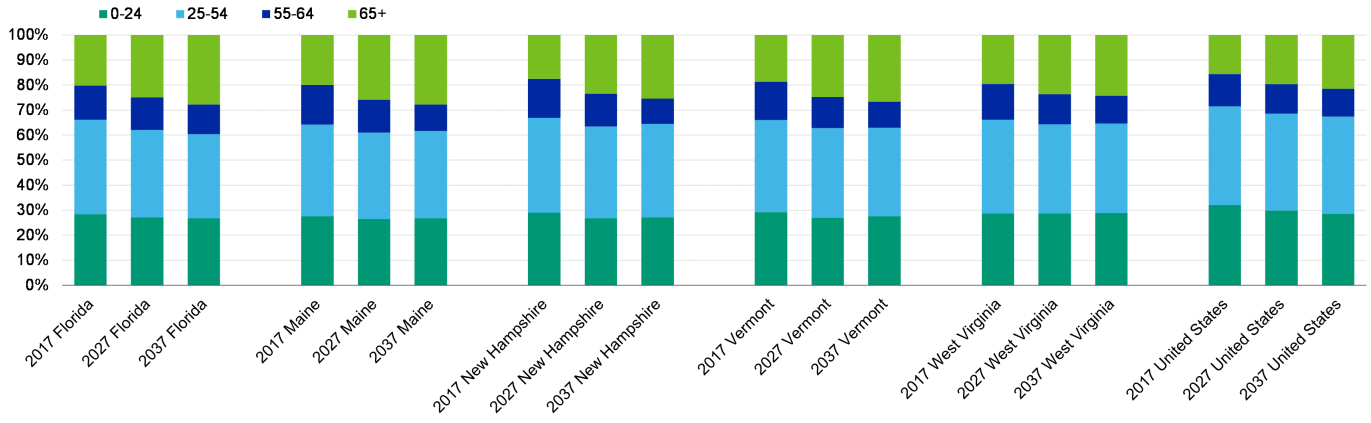
Aging populations lead to less dynamic economies

States with a high proportion of their populations aged 65 years and over and declining working age populations face challenges in growing their economies. A less dynamic economy results in difficulties growing tax revenues and supporting liabilities over the long term. High median age can come about in three ways: through aging of the existing population, outmigration of younger residents, or in-migration of older residents. In the five states with the highest median ages[1], the first two causes are associated with economic stagnation, while the last can help drive economic growth. By 2027, Moody's Analytics projects that Maine, New Hampshire, Vermont, West Virginia and Florida will all have more than 23% of their populations aged 65 years or older, the highest proportions among the 50 states (see Exhibit 1).

Exhibit 1

Working age population will shrink as population over 65 grows in the five oldest states

Proportion of population by age



Prime working age population is people 25 to 54 years old.
Sources: US Census Bureau, Moody's Analytics

With the exception of Florida, the prime working age populations — people 25 to 54 years old — in these states have all declined since 2000. From 2000-16, the prime working age populations in Vermont, Maine, West Virginia and New Hampshire declined by 15.4%, 11.5%, 11.1% and 9.3%, respectively. By comparison, the prime working age population in the US grew by 4.0% over the same period.[2]

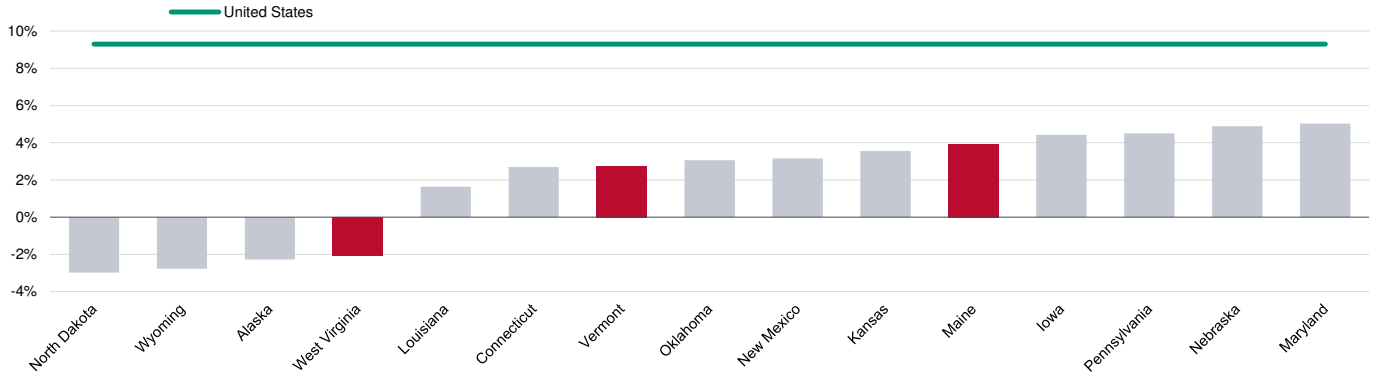
The rate of business formation is a key indicator of the health of a state's business environment. As populations age and working age populations decline, fewer businesses form, indicating a less favorable business environment. Businesses tend to prefer areas with a larger pool of working-age people to recruit talent from. On average, in 2016, the rate of new private sector business formations in the oldest states lagged the national rate of 3.1%; new businesses formed in Maine, New Hampshire, Vermont and West Virginia at rates of 2.8%, 2.8%, 2.5% and 2.3%, respectively.[3]

A less desirable business environment leads to weaker employment growth compared to states with more working-age people. West Virginia, Vermont and Maine are among the 15 weakest states in terms of employment growth in the last five years. Demographic challenges have led to below-average job growth in these states, which are in the same company as states that have suffered employment losses because of contraction in the energy sector (see Exhibit 2). Employment growth in the past five years for the four oldest states was all below the nation's growth rate of 9.3% (see Appendix).

Exhibit 2

West Virginia, Vermont and Maine among the 15 weakest states in terms of employment growth

Five-year employment growth from January 2013 to January 2018



Source: US Bureau of Labor Statistics

In West Virginia, Maine, New Hampshire and Vermont, aging populations are associated with stagnant regional and local economies

The economic impact of aging populations is also evident at the local level, as the areas of Maine, New Hampshire and Vermont with the highest median ages significantly lag statewide averages in population, employment and GDP growth (see Exhibit 3).

In Maine, New Hampshire and Vermont, the three northeastern states that top the list of highest median age, many of the oldest counties are in coastal areas with significant seasonal populations or remote, rural regions with low population densities. In many cases, residents ready to retire have aged in place as working-age residents have left for more economically vibrant urban areas. The concentrations of people over the age of 65 in the regions they left behind are growing at a more rapid pace than the rest of the state on average, a trend that Moody's Analytics projects to continue and an indication that the disparities in growth we see today may accelerate in the future.

Exhibit 3

Connection between weak growth and older populations also visible at the local level

Metrics for three oldest counties by median age in Maine, New Hampshire and Vermont

Region	Median age (2016)	Percent of population 65 and over (2016)	Five-year population CAGR	Five-year job CAGR	Five-year GDP CAGR
Lincoln County, Maine	50.1	25.1%	0.0%	0.6%	0.8%
Piscataquis County, Maine	50.0	23.5%	-0.6%	-0.1%	0.1%
Hancock County, Maine	47.9	21.4%	0.0%	0.4%	0.5%
Maine - Oldest Counties Average	**49.3**	**23.3%**	**-0.2%**	**0.3%**	**0.4%**
Maine - Statewide	**44.6**	**19.4%**	**0.1%**	**0.8%**	**0.7%**
Carroll County, New Hampshire	50.9	24.2%	0.2%	0.3%	-0.6%
Coos County, New Hampshire	47.9	21.5%	-0.2%	-0.8%	-0.8%
Belknap County, New Hampshire	46.5	19.6%	0.2%	0.7%	0.7%
New Hampshire - Oldest Counties Average	**48.4**	**21.8%**	**0.0%**	**0.1%**	**-0.2%**
New Hampshire - Statewide	**43.0**	**17.0%**	**0.3%**	**1.3%**	**1.4%**
Essex County, Vermont	49.2	22.8%	0.0%	-0.5%	-2.5%
Grand Isle County, Vermont	47.4	17.2%	0.1%	0.4%	-1.6%
Windsor County, Vermont	47.1	20.7%	-0.4%	0.5%	-0.6%
Vermont - Oldest Counties Average	**47.9**	**20.2%**	**-0.1%**	**0.1%**	**-1.6%**
Vermont - Statewide	**42.7**	**18.1%**	**-0.1%**	**0.8%**	**0.3%**
US	**37.9**	**15.2%**	**0.7%**	**1.8%**	**2.0%**

Hancock County, ME is rated Aa2; Belknap County, NH is rated A1 negative.

Oldest counties average is calculated for the three oldest counties by median age in each state.

CAGR stands for compound annual growth rate. Five-year CAGRs are from 2011-16, except for population which is from 2012-17.

Sources: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, US Bureau of Labor Statistics, US Bureau of Economic Analysis, Moody's Analytics

West Virginia's three oldest counties have experienced similar trends of population loss (see Exhibit 4). However, strong tourism in and around Pocahontas and Tucker Counties' ski resorts and natural features have buoyed the economic fortunes of those counties and driven a relatively high rate of employment and GDP growth among the state's three oldest counties, all of which are in or near the state's mountainous national forests. Nevertheless, the proportion of residents over 65 years old in each of West Virginia's oldest counties is projected to nearly double over the next 30 years, muting the economic growth forecast.[4]

Exhibit 4

In West Virginia, tourism has buoyed some of the oldest counties despite population loss

Metrics for three oldest counties by median age in West Virginia

Region	Median age (2016)	Percent of population 65 and over (2016)	Five-year population CAGR	Five-year job CAGR	Five-year GDP CAGR
Pendleton County, West Virginia	49.6	24.8%	-1.3%	-1.8%	-1.7%
Pocahontas County, West Virginia	48.3	22.3%	-0.6%	-0.3%	0.8%
Tucker County, West Virginia	47.9	22.6%	-0.6%	2.5%	3.2%
West Virginia - Oldest Counties Average	**48.6**	**23.2%**	**-0.8%**	**0.1%**	**0.8%**
West Virginia - Statewide	**42.2**	**18.8%**	**-0.4%**	**-0.2%**	**-0.2%**
US	**37.9**	**15.2%**	**0.7%**	**1.8%**	**2.0%**

Oldest counties average is calculated for the three oldest counties by median age in West Virginia.
CAGR stands for compound annual growth rate. Five-year CAGRs are from 2011-16, except for population which is from 2012-17.
Sources: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, US Bureau of Labor Statistics, US Bureau of Economic Analysis, Moody's Analytics

The oldest counties across the US have significantly less dynamic economic growth

While Maine, New Hampshire, Vermont, West Virginia and Florida are the states as a whole with the highest median ages, parts of other states are substantially older. A survey of the oldest counties with populations over 5,000 in the other 45 states shows a five-year pattern of weak population, employment and GDP growth compared to the rest of the US (see Exhibit 5).

Exhibit 5

With few exceptions, the oldest counties in the US are losing population and experiencing slow economic growth

Metrics for 10 oldest counties by median age in the US (excluding Florida) with populations over 5,000

Region	Median Age (2016)	Percent of population 65 and over (2016)	Five-year population CAGR	Five-year job CAGR	Five-year GDP CAGR
Alcona County, Michigan	57.4	34.5%	-0.4%	1.0%	2.3%
Ontonagon County, Michigan	56.6	31.7%	-1.7%	-2.2%	-2.8%
Llano County, Texas	56.4	34.3%	2.0%	1.2%	4.7%
Lancaster County, Virginia	56.4	34.9%	-0.6%	-0.2%	-1.9%
Jefferson County, Washington	56.2	31.6%	1.0%	-0.2%	2.0%
Sierra County, New Mexico	56.0	34.6%	-1.3%	0.2%	1.7%
Northumberland County, Virginia	55.5	33.9%	-0.2%	0.4%	-1.7%
La Paz County, Arizona	55.1	36.1%	0.1%	2.0%	-1.6%
Curry County, Oregon	55.1	31.6%	0.4%	1.3%	2.9%
San Juan County, Washington	55.1	29.5%	1.1%	1.6%	4.4%
Average of 10 Oldest Counties	**56.0**	**33.3%**	**0.0%**	**0.5%**	**1.0%**
US	**37.9**	**15.2%**	**0.7%**	**1.8%**	**2.0%**

Northumberland County, VA is rated Aa3; San Juan County, WA is rated Aa2.
CAGR stands for compound annual growth rate. Five-year CAGRs are from 2011-16, except for population which is from 2012-17.
Sources: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, US Bureau of Labor Statistics, US Bureau of Economic Analysis, Moody's Analytics

Aging populations can strain state and local government finances

Revenue growth in the oldest states is slower than the national average because of the less robust economy that typically surrounds an older population (see Exhibit 6). In comparison to total state tax revenue growth in the four oldest states, which ranged from a compound annual growth rate (CAGR) of -0.6% to 2.9% between 2011 and 2016, taxes in Utah (Aaa stable), which had the lowest median age of 30.8 years in 2016, grew by a CAGR of 5.2%.[5]

Exhibit 6

Tax revenue growth is typically weaker than the national median in older states

Five-year compound annual growth rates from 2011-16

State	Total state tax revenue growth	Personal income tax revenue growth	Sales tax revenue growth
Maine	2.4%	0.9%	6.5%
New Hampshire	2.9%	NA	NA
Vermont	2.7%	5.0%	2.0%
West Virginia	-0.6%	2.0%	1.3%
50-State Median	**3.5%**	**4.7%**	**3.8%**

New Hampshire does not levy a personal income tax or sales tax.
Total state tax revenue decline in West Virginia is related to energy sector contraction in the state.
Source: The Nelson A. Rockefeller Institute of Government

Maine enacted individual income tax cuts in 2011 and 2015, which reduced the top income bracket's tax rate to 7.15% in 2016 from 8.5% in 2012. These tax cuts drove weak personal income tax growth in the state from 2011-16. Maine had strong sales tax revenue growth between 2011-16 compared to the 50-state median. However, in October 2013, the state increased the general sales tax rate to 5.5% from 5.0% and the meals and lodging tax rates to 8.0% from 7.0%. The lodging tax rate increased again in January 2016 to 9.0%. These rate increases drove tax growth in Maine between 2011-16. While Maine's ability to implement tax rate increases is credit positive, states with growing concentrations of people over the age of 65 face a challenge in increasing tax rates because many retired people rely on fixed incomes. Given a fixed income, residents in aging states may be less willing to support tax increases.

With slower than average revenue growth, aging states will struggle to service growing pension liabilities. Moody's adjusted net pension liabilities (ANPL) in fiscal 2016 for Maine, West Virginia and Vermont were all above the 50-state median of 82.2% of own-source governmental revenues at 145%, 142% and 113%, respectively. Liability growth that outpaces revenue growth will also strain finances in aging states.

Property value growth is weak for the oldest local governments

For local governments, which collect revenue primarily through property taxes, high median age is associated not just with weak overall economic vitality but with low property value growth. Absent property tax increases, low property value growth translates to slow property tax revenue growth.

In New Hampshire, the three oldest counties' 1.1% average equalized tax base CAGR over the last five years lagged the 1.6% county average in the state, while Maine's three oldest counties shrank by an average 1.0% annually relative to a -0.2% decline statewide.

We rate two counties among the rest of the country's oldest. Over five years, the tax base in Northumberland County, Virginia (Aa3) shrank at a -1.4% CAGR, while in San Juan County, Washington (Aa2), the tax base shrank at a -4.6% CAGR.

While local governments generally have some latitude to set their own tax levies, weak tax base growth requires raising the tax rate per dollar of assessed value, which can run into opposition at the local level — particularly among residents living on fixed incomes.

New Hampshire counties face growing expenditures to fund county nursing homes

While an aging population primarily affects local government finances on the revenue side — through weak tax base growth and limited flexibility to raise tax rates — some local governments are responsible for services directly related to the age of their residents. Local governments that operate and maintain senior centers, nursing homes or assisted living facilities will face challenges in controlling costs as the number of residents served by those facilities rises.

A central function of New Hampshire's counties is the provision of nursing home and assisted living services to residents. Counties charge users for these services, and users pay through a combination of Medicare, Medicaid and personal funds. When these charges do not cover the cost of operations, counties levy additional taxes to cover the shortfall and subsidize operations.

We rate six of New Hampshire's 10 counties, one of which, Belknap County (A1 negative), is among the state's three oldest counties by median age. In Belknap County, where the median age was 46.5 in 2016, the proportion of expenditures that went toward providing nursing home services grew at a 1.3% CAGR over the five years between 2011-16, and accounted for a substantial 64.6% of expenditures in 2016.

In the other five New Hampshire counties that we rate, among which the average median age was 41.6 in 2016, the proportion of expenditures that went toward providing the same services declined by a 0.2% CAGR during the same period and accounted for a still sizable 57.7% of expenditures in 2016. By contrast, the proportion of expenditures that went toward corrections, New Hampshire counties' other major service, grew by a 1.1% CAGR over the same period.

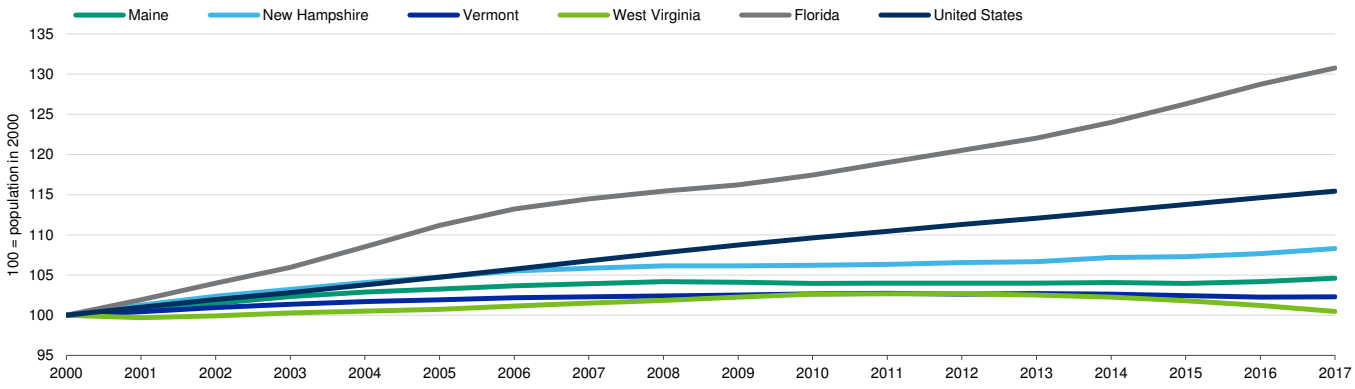
The challenges of having an older population are mitigated by strong population growth in Florida

Despite having the highest proportion of its population aged 65 years or older among the 50 states, Florida has experienced robust economic growth. Of the five oldest states, Florida had the strongest population growth since 2000 (see Exhibit 7). As a result, total state tax revenues in Florida grew at a CAGR of 3.8% from 2011-16, much stronger growth than in Maine, New Hampshire, Vermont and West Virginia.[6] Furthermore, Florida's real GDP grew at a CAGR of 2.4% over the same period, which is also much healthier than the real GDP growth rates in the other four oldest states, ranging from -0.2% to 1.4%.[7]

Exhibit 7

Of the five oldest states by median age, Florida has the strongest population growth

Population scaled to population in 2000



Source: US Census Bureau

Florida benefits from the relocation of financially secure retirees from other states as well as high immigration compared to the rest of the nation, mainly from nearby Caribbean countries. School districts across the state benefit from tax revenue gained from retirees who do not use school resources, though some districts are still pressured by burgeoning immigration of school-aged children.

Florida defies the trend of a shrinking working age population in older states, largely because of immigration. In stark contrast to the prime working age population declines in Maine, New Hampshire, Vermont and West Virginia, Florida's prime working age population

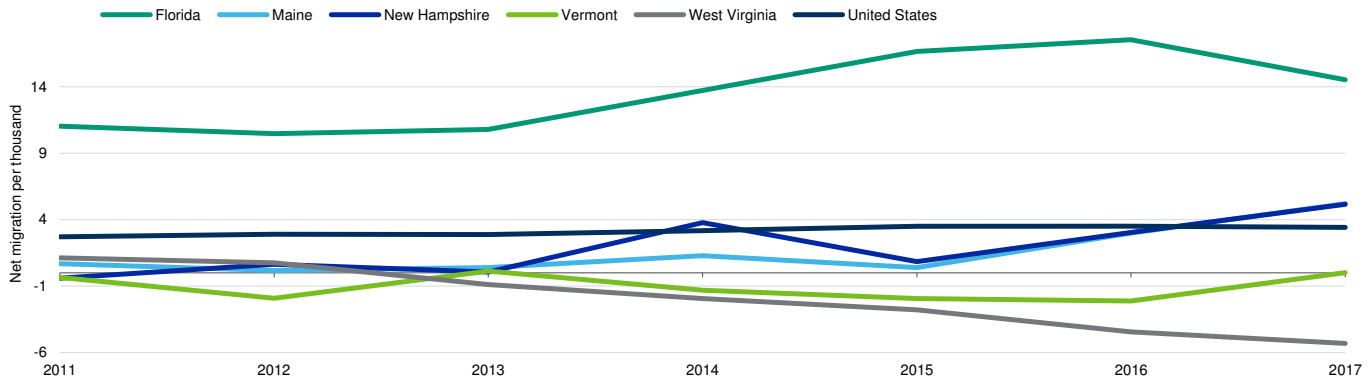
grew by 18.6% from 2000-16.[8] Not only are retirees moving to the state, but so are working-age people who drive economic and employment growth. Florida's total nonfarm employment grew by 15.9% in the last five years, well above the national rate of 9.3%.[9] Furthermore, Florida's healthy business environment is demonstrated by its strong 3.7% average rate of new private sector business formations in 2016, compared to the nation's rate of 3.1%.[10]

Migration trends in Florida are very strong. The state had the third-highest net migration per thousand in 2017 at 14.5 people, which is much higher than net migration in the other four oldest states (see Exhibit 8). However, migration trends have improved in Maine and New Hampshire for the last two years, which is positive for these states. If migration trends continue to improve in these two states, they could benefit from the influx of retirees and immigrants in a similar way Florida benefits from strong net migration.

Exhibit 8

Improving migration trends will mitigate challenges of having an older population

Net migration per thousand



Source: US Census Bureau

In-migration of retirees has contributed to growth for some Florida counties

While aging populations can still present a credit risk on the local level, some of Florida's oldest counties are a microcosm of the state: by using climate, location and amenities to draw wealthy and middle-income retirees, they outpace the rest of the state in our measures of economic vitality.

Florida's three oldest counties by median age are more than 10 years older than the state and have a significantly higher percentage of the population aged 65 years or older (see Exhibit 9). However, unlike the four other states among the top five oldest in the US, strong population growth points to in-migration of older residents as the primary demographic driver. The trends are exemplified by Sumter County (Aa2), where the Villages, a master-planned retirement community and census-designated place, has driven growth in Sumter County's over-65 population to approximately 70,000 in 2016 from approximately 15,000 in 2000. The county's full value grew at an extremely rapid 14.3% CAGR between 2011-16, boosting the county's primary revenue source.

Exhibit 9

In some Florida counties, in-migration of retirees contributes to strong economic growth

Metrics for three oldest counties by median age in Florida

Region	Rating	Median age (2016)	Percent of population 65 and over (2016)	Five-year population CAGR	Five-year job CAGR	Five-year GDP CAGR
Sumter County, Florida	Aa2	66.0	53.1%	4.2%	4.9%	4.7%
Charlotte County, Florida	Aa2	57.7	37.6%	2.3%	2.9%	3.1%
Citrus County, Florida	Aa3*	55.7	35.1%	0.9%	0.9%	-1.4%
Florida - Oldest Counties Average		**59.8**	**41.9%**	**2.5%**	**2.9%**	**2.1%**
Florida - Statewide		**42.1**	**19.9%**	**1.6%**	**3.0%**	**2.4%**
US		**37.9**	**15.2%**	**0.7%**	**1.8%**	**2.0%**

*Citrus County, Florida's rating is a revenue-backed rating.

Oldest counties average is calculated for the three oldest counties by median age in Florida.

CAGR stands for compound annual growth rate. Five-year CAGRs are from 2011-16, except for population which is from 2012-17.

Sources: US Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, US Bureau of Labor Statistics, US Bureau of Economic Analysis, Moody's Analytics

While the Villages is an extreme example — and adjacent Citrus County's weak growth does indicate that high median age can be a risk to economic vitality, even in Florida — many Florida municipalities continue to benefit from the in-migration of retirees from other states.

State and local governments can make policy decisions to mitigate the negative credit effects of population aging

Many state and local governments face aging populations, and policy decisions made today can lessen the negative economic and fiscal effects of having a high proportion of the population over the age of 65. In 10 years, over half of all states are projected to have greater than 20% of their populations aged 65 years or older.[11] In 2017, only two states — Florida and Maine — had over 20% of their populations aged 65 years or over. Therefore, many states will face similar challenges of slowing economic and revenue growth because of population aging over the next decade.

To the extent that governments can take policy actions to improve labor force participation rates and restructure revenues to match expenses, the effects of aging on economic growth can be partially mitigated. The Brookings Institution suggests two solutions to this demographic challenge that are focused on work. First, the encouragement of phased-in retirement, including allowing people to work fewer hours and remain in the labor force longer as they age, would result in continued tax revenues from non-fixed incomes, a positive for fiscal stability. Second, governments can promote volunteer work among retired people, which the Brookings Institution notes as having many social benefits and contributes to the economy.

Demographic change will also create opportunities and will have credit positive effects for "silver" industries that cater to a larger share of aging populations, such as pharmaceuticals and biotechnology, leisure and travel, and retirement real estate. People aged 65 years and older will drive a higher proportion of consumer spending in the future as this population segment increases. States that can support the growth of silver industries will benefit from growing demand for these goods and services.

Healthcare sector stands to benefit from aging populations

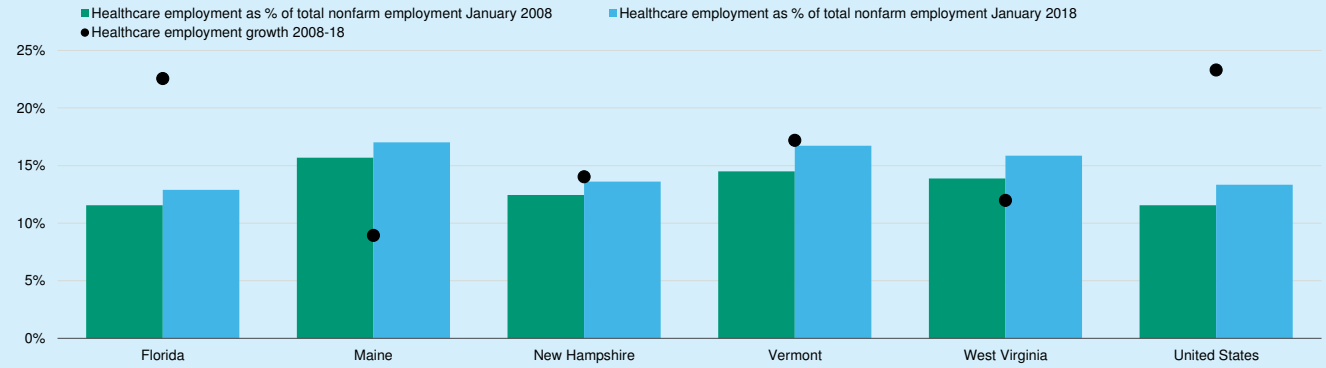
Aging populations will generate increased demand for healthcare services, driving related job growth in states with older average employment, a credit positive for those states. Because Medicare is the primary insurance for people aged 65 years or over, and is funded by the federal government, states will not need to fund growing healthcare costs for this population. Although some people over 65 may also qualify for Medicaid, most healthcare costs for this age cohort are not borne by the state. However, in Maine, dual eligible beneficiaries (people who qualify for both Medicare and Medicaid) accounted for 38% of total Medicare enrollees in fiscal 2011, which is the highest proportion among the 50 states. For the US as a whole, 21% of total Medicare enrollees were dual eligible beneficiaries in the same year.[12]

Although an older population tends to support higher healthcare utilization and employment, higher than average exposure to Medicare tends to be credit negative for hospitals. While Medicare reimbursement varies by geography and type of service, hospitals typically lose money on Medicare patients given significantly lower reimbursement relative to commercial insurers.

The five oldest states are more heavily reliant on healthcare employment compared to the nation as a whole (see Exhibit 10). While dependence on the healthcare sector for employment has grown in the past 10 years for all five of the oldest states, the rate of healthcare employment growth in these states has lagged the national growth rate. This lag in healthcare employment growth, especially in Maine, New Hampshire, Vermont and West Virginia, points to the declining working age populations in these states.

Exhibit 10

Healthcare employment growing in the oldest states, but lags nation's pace



Source: US Bureau of Labor Statistics

Appendix: key metrics for five oldest states by median age

Exhibit 11

Metric	Maine	New Hampshire	Vermont	West Virgina	Florida	US
Median age (2016)	44.6	43.0	42.7	42.2	42.1	37.9
Percent of population 65+ (2017)	20.0%	17.5%	18.6%	19.6%	20.3%	15.6%
Percent of population 65+ (2027)	25.9%	23.5%	24.8%	23.7%	25.0%	19.7%
Prime working age population growth (2000-16)	-11.5%	-9.3%	-15.4%	-11.1%	18.6%	4.0%
Total population growth (2000-17)	4.6%	8.3%	2.3%	0.5%	30.8%	15.4%
Employment growth (2013-18)	3.9%	6.9%	2.8%	-2.1%	15.9%	9.3%
Average rate of business formation (2016)	2.8%	2.8%	2.5%	2.3%	3.7%	3.1%
Total state tax revenue CAGR (2011-16)	2.4%	2.9%	2.7%	-0.6%	3.8%	3.5%
Real GDP CAGR (2011-16)	0.7%	1.4%	0.3%	-0.2%	2.4%	2.0%

Percent of population 65+ are Moody's Analytics estimated and forecasted figures based on US Census Bureau population estimates and projections.
Prime working age population is people 25-54 years old.
Average rate of business formation is the average of the four quarters in 2016 of new private establishment formations as a percentage of the average of the total number of establishments in the state in the previous and current quarter.
Employment growth is measured from January 2013 to January 2018.
CAGR stands for compound annual growth rate.
All figures for the US are for the nation as a whole, except for total state tax revenue CAGR, which is the 50-state median.
Sources: US Census Bureau, Moody's Analytics, US Bureau of Labor Statistics, The Nelson A. Rockefeller Institute of Government, US Bureau of Economic Analysis

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» State Government - US: Medians - Moderate Adjusted Net Pension Liability Growth in 2016 Precedes Spike in 2017, September 2017

Outlook:

» States - US: 2018 outlook stable as modest revenue growth continues, December 2017

» Local government - US: 2018 outlook stable as tax revenue grows slowly; pressures intensify for some issuers, December 2017

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Endnotes

1 Maine, New Hampshire, Vermont, West Virginia, and Florida had median ages of 44.6, 43, 42.7, 42.2, and 42.1 years old in 2016 based on US Census Bureau population estimates. The median age in the US in 2016 was 37.9 years old.

2 Population data from the US Census Bureau.

3 Private sector business formation data from the US Bureau of Labor Statistics. The rate of new private sector business formations is seasonally adjusted and measures new private establishment formations as a percentage of the average of the total number of establishments in the state in the previous and current quarter.

4 Moody's Analytics forecasts based on US Census Bureau population estimates.

5 Median age data from the US Census Bureau. Revenue data from The Nelson A. Rockefeller Institute of Government. Revenue data is based on the calendar year. Compound annual growth rates are calculated from 2011-16, which represent years of economic expansion.

6 The Nelson A. Rockefeller Institute of Government.

7 US Bureau of Economic Analysis.

8 US Census Bureau.

9 US Bureau of Labor Statistics. Employment growth rate is measured from January 2013 to January 2018.

10 US Bureau of Labor Statistics.

11 Projections based on Moody's Analytics forecasts.

12 Dual eligible beneficiaries as a percent of total Medicare enrollees is based on most recent data available from The Henry J. Kaiser Family Foundation.

REPORT NUMBER 1112073

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